City of West Linn
Planning & Development • 22500 Salamo Rd #1000 • West Linn, Oregon 97068
Telephone 503.656-3535 • westlinnoregon.gov

DEVELOPMENT REVIEW APPLICATION

For Office Use Only			
STAFF CONTACT: Chris Myers	PROJECT NO(S).: DR-25-04/LLA-25-02		PRE-APPLICATION NO.: PA_25-20
NON-REFUNDABLE FEE(S): $1,200	REFUNDABLE DEPOSIT(S): $4,500	TOTAL: $5,700	

Type of Review (Please check all that apply):

- ☐ Annexation (ANX)
- ☐ Appeal (AP)
- ☐ CDC Amendment (CDC)
- ☐ Code Interpretation (MISC)
- ☐ Conditional Use (CUP)
- ☑ Design Review (DR
- ☐ Tree Easement Vacation (MISC)
- ☐ Expediated Land Division (ELD)
- ☐ Extension of Approval (EXT)
- ☐ Final Plat (FP) Related File #_____
- ☐ Flood Management Area (FMA)
- ☐ Historic Review (HDR)
- ☑ Lot Line Adjustment (LLA)
- ☐ Minor Partition (MIP)
- ☐ Modification of Approval (MOD)
- ☐ Non-Conforming Lots, Uses & Structures
- ☐ Planned Unit Development (PUD)
- ☐ Street Vacation
- ☐ Subdivision (SUB)
- ☐ Temporary Uses (MISC)
- ☐ Time Extension (EXT)
- ☐ Right of Way Vacation (VAC)
- ☐ Variance (VAR)
- ☐ Water Resource Area Protection/Single Lot (WAP)
- ☐ Water Resource Area Protection/Wetland (WAP)
- ☐ Willamette & Tualatin River Greenway (WRG)
- ☐ Zone Change (ZC)

Pre-Application, Home Occupation, Sidewalk Use, Addressing, and Sign applications require different forms, available on the website.

Site Location/Address: 2410, 2422, and 2444 Tannler Drive

Assessor's Map No.: 21E35C
Tax Lot(s): 00100, 00102, and 00200
Total Land Area: 11.41 Acres

Brief Description of Proposal:
Proposal to construct ~320 multi-family dwelling units with some ground floor commercial adjacent to Tannler Drive. The request also includes a proposal to adjust the lot lines for the three existing parcels.

Applicant Name*: Mill Creek Residential Trust, Attn: Chad Encinas
Address: 720 Washington Street, STE 720
City State Zip: Portland, OR 97205
Phone: Please contact consultant
Email: cencinas@mctrust.com

Owner Name (required): Tannler Holdings, LLC
Address: 1800 Blankenship Road, STE 325
City State Zip: West Linn, OR 97068
Phone: 503-807-8852
Email: jeff@parkerdev.com

Consultant Name: HHPR, Inc. Attn: Brad Kilby, AICP
Address: 205 SE Spokane Street, STE 100
City State Zip: Portland, OR 97202
Phone: 503-221-1131
Email: bradk@hhpr.com

1. Application fees are non-refundable (excluding deposit). Applications with deposits will be billed monthly for time and materials above the initial deposit. ***The applicant is financially responsible for all application costs.***
2. All information provided with the application is considered a public record and subject to disclosure.
3. The owner/applicant or their representative should attend all public hearings related to the application.
4. A decision may be reversed on appeal. The decision will become effective once the appeal period has expired.
5. Submit this form, application narrative, and all supporting documents as a single PDF through the web page: https://westlinnoregon.gov/planning/submit-land-use-application.

The undersigned property owner authorizes the application and grants city staff the right of entry onto the property to review the application. The applicant and owner affirm that the information provided in this application is true and correct. Applications with deposits will be billed monthly for time and materials incurred above the initial deposit. The applicant agrees to pay additional billable charges.

Applicant's signature — Date: 9/18/25

Owner's signature ***(required)*** — Date: 9/10/2025

Tannler Development
Land Use Application Narrative & Findings Document

Class II Design Review, Property Line Adjustment, Mandatory Adjustments under SB 1537

PROPERTY OWNER:	Tannler Holdings, LLC 1800 Blankenship Road, Suite 325 West Linn, OR 97068
APPLICANT:	Chad Encinas Vice President – Development Mill Creek Residential Trust 720 SW Washington, STE 720 Portland, OR 97205 cencinas@mctrust.com
LAND USE PLANNER/CONTACT:	Brad Kilby, AICP Harper Houf Peterson Righellis, Inc. 205 SE Spokane Street, Suite 200 Portland, OR 97202 (503) 221-1131 bradk@hhpr.com
SITE ADDRESS:	2410, 2422, and 2444 Tannler Drive
TAX MAP:	21E35C
TAX LOTS:	00100, 00102, and 00200
ZONING DESIGNATION:	OBC (Office Business Center)
COMPREHENSIVE PLAN DESIGNATION:	Commercial
SUMMARY OF REQUEST:	The property owner proposes to develop the project site with a mixed-use development, including multi-family residential units and ground floor commercial space. Additional site improvements, including landscaping, utilities, parking and vehicle access, and pedestrian circulation are also proposed on site.
DATE:	September 18, 2025

Project Team

CIVIL ENGINEER:	Ryan Mosher, PE Harper Houf Peterson Righellis, Inc 530 Center Street NE, Suite 240 Salem, OR 97301 (503) 365-1131 ryanm@hhpr.com
ARCHITECT:	Lloyd Hill, AIA Hill Architects, P.C. 1750 Blankenship Road, Suite 200 West Linn, OR 97068 (503) 305-8033 lloyd.hill@hillarchitects.com
ATTORNEY:	Christe Carlson White Radler White Parks Alexander, LLP 111 SW Columbia Street, STE 700 Portland, OR 97201 (971) 634-0200 cwhite@radlerwhite.com
Traffic Engineer:	Julia Kuhn, PE Kittelson & Associates 851 SW 6th Avenue, Suite 600 Portland, OR 97204 (503) 228-5230 jkuhn@Kittelson.com
Geotechnical Engineer:	Najib A. Kalas, PE or Brett A. Shipton, PE, GE Columbia West Engineering, Inc. 8880 SW Nimbus Avenue, STE. A Beaverton, OR 97008 (971) 384-1666 nkalas@columbia-west.com bshipton@columbia-west.com

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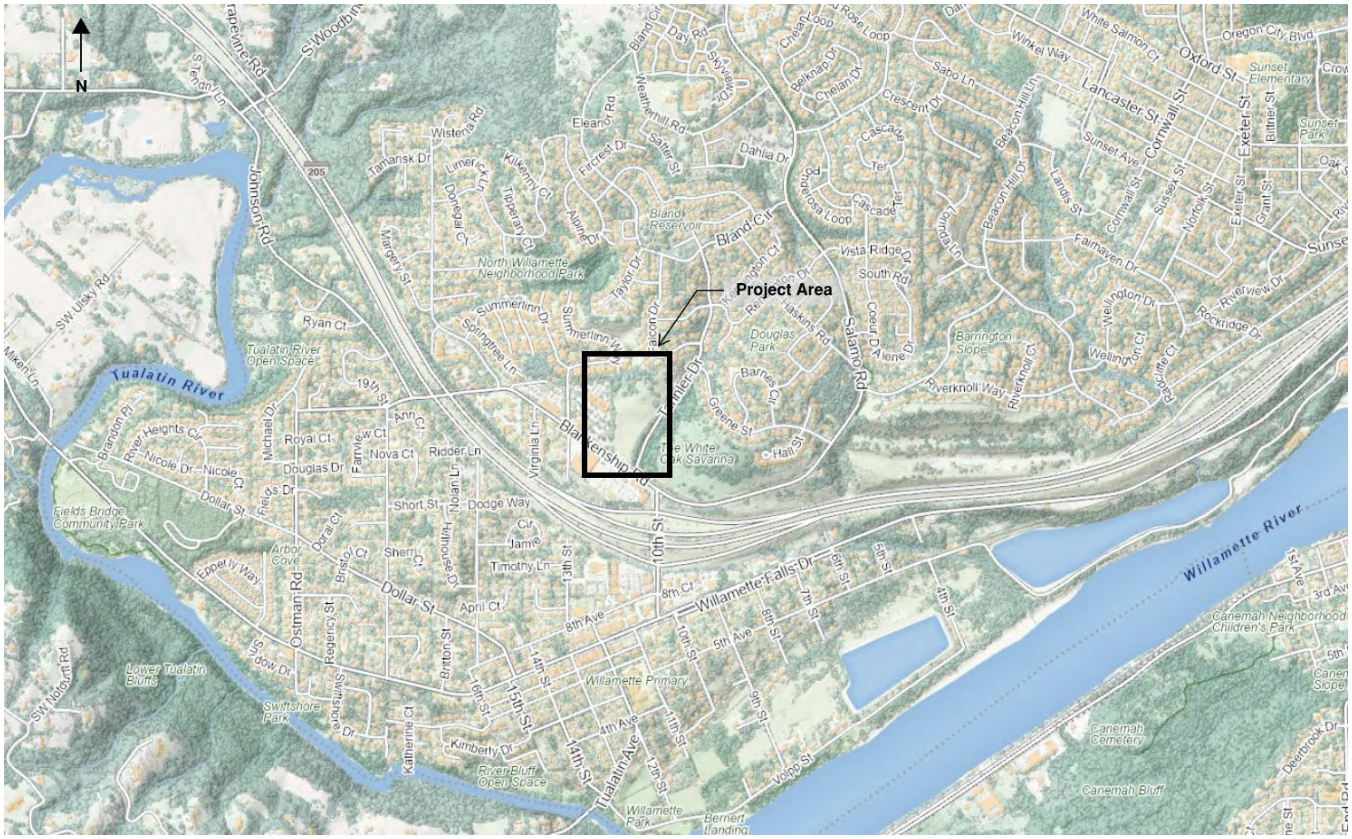
I. PROJECT OVERVIEW

BACKGROUND INFORMATION

The project site is located at 2410 to 2444 Tannler Road in the City of West Linn, is made up of three parcels, and is zoned office business center (OBC) on the City's Zoning Map. The site is approximately 11.36 acres in size and is located northwest of the intersection of Tannler Drive and Blankenship Rd. Tannler Drive is located along the east boundary of the site and Blankenship Rd. is located along the southern boundary of the site. The site slopes from north to south, is undeveloped, and is covered with grass, brush, volunteer trees, with a large grove of trees on the north side of the site. Slopes on the site range between 12 and 17 percent.

VICINITY MAP



PROPOSED IMPROVEMENTS

The applicant is proposing to construct a mixed-use development that will consist of 320 units in ten multi-family residential buildings, garages, a clubhouse, accessory uses, and approximately 10,520 square feet of commercial mixed-use space on the ground floor. The multi-family residential units will range in size from studio to three-bedroom units.

The proposed mixed-use development project's driveway and walkway system will connect with the driveways and parking area of the Willamette 205 office development to the west. A reciprocal access agreement has been recorded between these properties. The driveways and sidewalks of the Willamette 205 office development will

provide for a pedestrian and vehicular connection between the proposed Tannler Drive Mixed-Use project to Blankenship Road.

In addition to the mixed-use development, the property owner will also request a property line adjustment to consolidate the property into a single lot.

SITE MAP

REQUESTED REVIEWS

The applicant is requesting the following reviews:

- Type II Design Review
- Property Line Adjustment
- Five mandatory adjustments are requested for this development under SB 1537 as follows and as listed in SB 1537:
    - An adjustment for an individual development project, common area, open space or area that must be landscaped on the same lot or parcel as proposed housing.

- An adjustment to requirements for balconies and porches
- An adjustment to building height maximums.
- An adjustment to prohibitions on ground floors of mixed use buildings against residential uses except for one face of the building facing the street and within 20 feet of the street or nonresidential active uses that support the residential uses of the building.
- An adjustment to building orientation requirements, not including transit street orientation requirements.

II. RESPONSE TO APPLICABLE DEVELOPMENT AND CODE STANDARDS OF THE WEST LINN COMMUNITY DEVELOPMENT CODE

Note: Responses to all applicable development standards are included below. Sections that are not applicable or do not require a response may be omitted from the narrative text.

CHAPTER 21: OFFICE BUSINESS CENTER, OBC

SECTION 21.050: USES AND DEVELOPMENT PERMITTED UNDER PRESCRIBED CONDITIONS

The following uses are allowed in this zone under prescribed conditions:

1. *Animal sales and services: veterinary (small animals) as prescribed with no exterior runs or storage.*
2. *Multiple-family units only above the first floor of the structure, as a mixed use in conjunction with commercial development that utilizes the entire first floor.*
3. *Signs, subject to the provisions of Chapter 52 CDC.*
4. *Temporary use, subject to the provisions of Chapter 35 CDC.*
5. *Home occupation, subject to provisions of Chapter 37 CDC.*
6. *Wireless communication facilities, subject to the provisions of Chapter 57 CDC.*
7. *Eating and drinking establishments that do not constitute more than 20 percent of the total floor area of the building in which it is located.*

Response: The applicant is proposing a mixed-use development that will include multi-family residential units above commercial spaces. This is a permitted use listed in section 21.050(2) above. Because the development will not provide commercial use on the entire first floor of the structures, this application includes a request for a mandatory adjustment under Section 38 of Senate Bill 1537 which is effective and applies to all qualifying development applications in the City of West Linn. Conformance with the applicable approval criteria for mandatory adjustments under SB 1537are addressed below and demonstrates that the proposed development complies with those adopted and effective criteria.

SECTION 21.060: CONDITIONAL USES

The following uses are conditional uses which may be allowed in this zone subject to the provisions of Chapter 60 CDC, Conditional Use:

1. *Certified child care center.*
2. *Convenience sales and personal services.*
3. *Food and beverage retail sales.*
4. *Heliports.*
5. *Research services.*
6. *Repealed by Ord. 1622.*
7. *Utilities, major.*

8. *Vehicle fuel sales.*
9. *All single-family homes, which were non-conforming structures and were damaged, whereby the cost of rebuilding the damaged portions would exceed 50 percent of the then current replacement cost of the entire building. Determination of rebuilding costs shall be per CDC 66.070(A).*
10. *Postal services.*
11. *Public safety facilities.*
12. *Public support facilities.*
13. *Transportation facilities (Type II). See CDC 60.090 for additional approval criteria.*

Response: There are no proposed conditional uses associated with this request.

SECTION 21.070: DIMENSIONAL REQUIREMENTS, USES PERMITTED OUTRIGHT AND USES PERMITTED UNDER PRESCRIBED CONDITIONS

A. *Except as may be otherwise provided by the provisions of this code, the following are requirements for uses within this zone:*
   1. *The minimum front lot line length or the minimum lot width at the front lot line shall be 35 feet.*
   2. *The average minimum lot width shall be 35 feet.*

Response: After the proposed property line adjustment, there will be 1 lot. As proposed, the consolidated lot will continue to exceed these requirements.

   3. *Repealed by Ord. 1622.*
   4. *The yard dimensions or building setback area from the lot line shall be:*
      a. *Interior side yard, a minimum of seven and one-half feet.*
      b. *Side yard abutting a street, no minimum.*
      c. *Rear yard, a minimum of 25 feet.*
      d. *Front yard, no minimum and a 20-foot maximum. The front setback area between the street and the building line shall consist of landscaping or a combination of non-vehicular hardscape areas (covered with impervious surfaces) and landscaped areas. If there are not street trees within the public right-of-way, the front setback area shall include such trees per the requirements of the City Arborist.*

Response: The site is 11.36 acres and the proposed buildings are generally oriented so that the longer facades are on an east/west axis. The preliminary plans provided with this application demonstrate that these yard dimensions will be satisfied and the proposed buildings will meet or exceed the prescribed setbacks within the zone.

   5. *The maximum lot coverage shall be 50 percent.*

Response: Section 02.030 defines lot coverage as, "The area covered by a building or buildings, expressed as a percentage of the total land area. For residential uses, these buildings shall include the principal residence or house, any accessory dwelling unit, and accessory structures requiring a building permit." The project site has 150,974 square feet of building coverage, or approximately 31.7 percent of the project site.

6. *The maximum building height shall be two and one-half stories or 35 feet for any structure located within 50 feet of a low or medium density residential zone and three and one-half stories or 45 feet for any structure located 50 feet or more from a low or medium density residential area.*

Response: The properties located along the northernmost property line are zoned Single-family Residential detached (R-15) and Single-family and Multiple-family. Property to the east is zoned for open space preservation, property to the west is zoned Office Business Commercial, and property to the south is zoned General Commercial as shown in the following image.

Therefore, structures located within 50 feet of the northernmost property line are subject to the 35-foot height requirement. All other buildings would be subject to the 45-foot height requirement. However, a mandatory adjustment to the building height maximums permitted under SB1537 is included with this application to allow an additional 20% of height for the site. As proposed, buildings located within 50 feet of the northernmost property line are single-story carports and garages. As shown below, this request for a mandatory building height adjustment meets all of the approval criteria for a mandatory SB 1537 adjustment.

B. *The requirements of subsections (A)(1) through (4) of this section may be modified for developments under the planned unit development provisions of Chapter 24 CDC.*

Response: A planned unit development is not being requested with this application.

SECTION 21.080: DIMENSIONAL REQUIREMENTS, CONDITIONAL USES

Except as may otherwise be established by this code, the appropriate lot or parcel size for a conditional use shall be determined by the approval authority at the time of consideration of the application based upon criteria set forth in CDC 60.070(A) and (B).

Response: No conditional uses are proposed with this development. As stated earlier, the applicant is proposing a mixed-use development that will include multi-family residential units above commercial spaces. This is a permitted use in the zone as listed in section 21.050(2)

SECTION 21.090: OTHER APPLICABLE DEVELOPMENT STANDARDS

A. *The following standards apply to all development including permitted uses:*
   1. *Chapter 34 CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses.*

2. *Chapter 35 CDC, Temporary Structures and Uses.*
3. *Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.*
4. *Chapter 41 CDC, Building Height, Structures on Steep Lots, Exceptions.*
5. *Chapter 42 CDC, Clear Vision Areas.*
6. *Chapter 44 CDC, Fences.*
7. *Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas.*
8. *Chapter 48 CDC, Access, Egress and Circulation.*
9. *Chapter 52 CDC, Signs.*
10. *Chapter 54 CDC, Landscaping.*

B. *The provisions of Chapter 55 CDC, Design Review, apply to all uses except detached single-family dwellings.*

Response: Given the size of the property and the proposed layout of the proposal, it is feasible for the development to satisfy all of the applicable standards of the Development Code as discussed throughout this narrative and demonstrated in the attached plans. Each of these criteria are discussed below.

CHAPTER 38: ADDITIONAL YARD AREA REQUIRED; EXCEPTIONS TO YARD REQUIREMENTS; STORAGE IN YARDS; PROJECTIONS INTO YARDS

CHAPTER 42: CLEAR VISION AREAS

SECTION 42.020: CLEAR VISION AREAS REQUIRED, USES PROHIBITED

A. *A clear vision area shall be maintained on the corners of all property adjacent to an intersection as provided by CDC 42.040 and 42.050.*

B. *A clear vision area shall contain no planting, fence, wall, structure or temporary or permanent obstruction (except for an occasional utility pole or tree) exceeding three feet in height, measured from the top of the curb, or, where no curb exists, from the street centerline grade, except that trees exceeding this height may be located in this area, provided all branches below eight feet are removed.*

Response: The proposed design has been prepared by a professional and licensed engineer in concert with a licensed landscape architect. As shown on the attached site plan, all clear vision area standards can be accommodated on the site and no improvements will be installed in the areas listed under Subsection (B). Compliance with the clear vision standards will be further demonstrated in final design drawings provided for the development, but given the size of the site and the proposed setbacks it is feasible for the development to satisfy these requirements.

SECTION 42.030: EXCEPTIONS

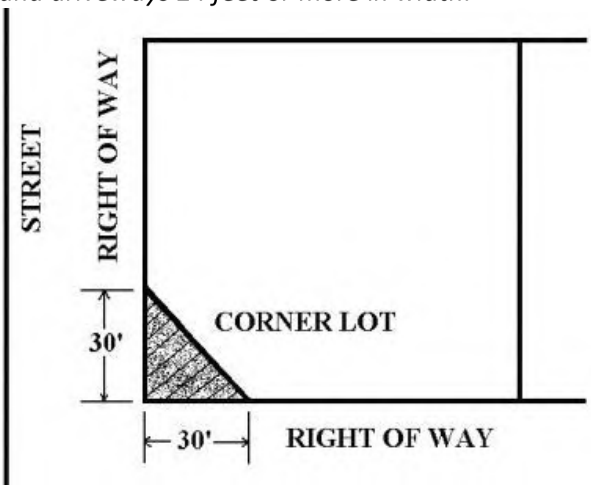
The following described area in Willamette shall be exempt from the provisions of this chapter. The units of land zoned General Commercial which abut Willamette Falls Drive, located between 10th and 16th Streets. Beginning at the intersection of Willamette Falls Drive and 11th Street on 7th Avenue to 16th Street; on 16th Street to 9th Avenue; on 9th Avenue to 14th Street to the Tualatin River; following the Tualatin River and Willamette River to 12th Street; on 12th Street to 4th Avenue; on 4th Avenue to 11th Street; on 11th Street to Willamette Falls Drive. This described area does not include the northerly side of Willamette Falls Drive.

Response: The subject site is not located within any of the areas described above; therefore, these exemptions do not apply and the development is subject to the provisions of this chapter. As proposed, this narrative and the accompanying plans illustrate that the proposed development complies with these provisions.

SECTION 42.040: COMPUTATION; STREET AND ACCESSWAY 24 FEET OR MORE IN WIDTH

The clear vision area for all street intersections and street and accessway intersections (accessways having 24 feet or more in width) shall be that triangular area formed by the right-of-way or property lines along such lots and a straight line joining the right-of-way or property line at points which are 30 feet distant from the intersection of the right-of-way line and measured along such lines.

Clear vision area for corner lots and driveways 24 feet or more in width:

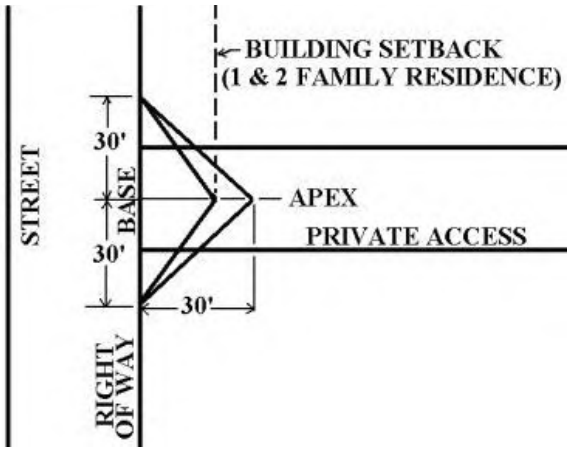


Response: Compliance with the clear vision standards will be demonstrated in final design documents provided for the development but given the size of the site and the proposed setbacks it is feasible for the development to satisfy these requirements.

SECTION 42.050: COMPUTATION; ACCESSWAY LESS THAN 24 FEET IN WIDTH

The clear vision area for street and accessway intersections (accessways having less than 24 feet in width) shall be that triangular area whose base extends 30 feet along the street right-of-way line in both directions from the centerline of the accessway at the front setback line of a single-family and two-family residence, and 30 feet back from the property line on all other types of uses.

Clear vision area for corner lots and driveways less than 24 feet in width:



Response: Compliance with the clear vision standards will be demonstrated in final design documents provided for the development but given the size of the site and the proposed setbacks it is feasible for the development to satisfy these requirements.

CHAPTER 44: FENCES

SECTION 44.020: SIGHT-OBSCURING FENCE; SETBACK AND HEIGHT LIMITATIONS

A. A sight- or non-sight-obscuring fence may be located on the property line or in a yard setback area subject to the following:

1. The fence is located within:

a. A required front yard area, and it does not exceed three feet, except pillars and driveway entry features subject to the requirements of Chapter 42 CDC, Clear Vision Areas, and approval by the Planning Director;

b. A required side yard which abuts a street and it is within that portion of the side yard which is also part of the front yard setback area and it does not exceed three feet;

c. A required side yard which abuts a street and it is within that portion of the side yard which is not also a portion of the front yard setback area and it does not exceed six feet provided the provisions of Chapter 42 CDC are met;

d. A required rear yard which abuts a street and it does not exceed six feet; or

e. A required side yard area which does not abut a street or a rear yard and it does not exceed six feet.

Response: Currently, the only location where fencing is anticipated is around the pool associated with the Community Building (building 12). There is no proposed fencing on the property line or within a yard setback area. These standards are therefore satisfied by this development.

B. Fence or wall on a retaining wall. When a fence is built on a retaining wall or an artificial berm, the following standards shall apply:

1. When the retaining wall or artificial berm is 30 inches or less in height from finished grade, the maximum fence or wall height on top of the retaining wall shall be six feet.

2. When the retaining wall or earth berm is greater than 30 inches in height, the combined height of the retaining wall and fence or wall from finished grade shall not exceed eight and one-half feet.

3. Fences or walls located on top of retaining walls or earth berms in excess of 30 inches above finished grade may exceed the total allowed combined height of eight and one-half feet; provided, that the

fence or wall is located a minimum of two feet from the retaining wall and the fence or wall height shall not exceed six feet.

Response: These standards are noted by the design team and any proposed walls will be designed to satisfy these requirements and illustrated in the final design drawings.

SECTION 44.030: SCREENING OF OUTDOOR STORAGE

A. *All service, repair, and storage activities carried on in connection with any commercial, business or industrial activity and not conducted within an enclosed building shall be screened from view of all adjacent properties and adjacent streets by a sight-obscuring fence.*
B. *The sight-obscuring fence shall be in accordance with provisions of Chapter 42 CDC, Clear Vision Areas, and shall be subject to the provisions of Chapter 55 CDC, Design Review.*

Response: The only proposed outdoor storage within the development will be the on-site trash enclosures. These facilities are illustrated on the attached site plan and are interior to the site. The proposed enclosures will be designed to meet these standards as required. Compliance with these standards will be provided in the final design plans.

SECTION 44.040: LANDSCAPING

Landscaping which is located on the fence line and which impairs sight vision shall not be located within the clear vision area as provided in Chapter 42 CDC.

Response: The landscape plan is being prepared by a professional and licensed landscape architect. As stated previously, compliance with the clear vision standards will be demonstrated in final design documents provided for the development, but given the size of the site and the proposed setbacks it is feasible for the development to satisfy these requirements. Any landscaping proposed in those areas will be limited to low lying landscape or trees which have been pruned in accordance with the standards for trees within clear vision areas.

SECTION 44.050: STANDARDS FOR CONSTRUCTION

A. *The structural side of the fence should face the owner's property; and*
B. *The sides of the fence abutting adjoining properties and the street shall be maintained.*

Response:. Currently there is no fencing proposed at the property line, however, if the applicant subsequently decides to install fencing, compliance with these standards will be provided in the final design documents as required.

CHAPTER 46: OFF-STREET PARKING, LOADING AND RESERVOIR AREAS

SECTION 46.020: APPLICABILITY AND GENERAL PROVISIONS

A. *At the time a structure is erected or enlarged, or the use of a structure or unit of land is changed within any zone, loading areas and reservoir areas shall be provided in accordance with the requirements of this chapter unless other requirements are otherwise established as a part of the development approval process.*
B. *The provision and maintenance of off-street parking and loading spaces are the continuing obligation of the property owner.*

C. *No building or other permit shall be issued until plans are approved that show the property that is and will remain available for exclusive use as loading space as required by this chapter.*
D. *Parking spaces and loading areas shall be improved to the standards contained in this chapter and shall be available for use at the time of the final building inspection except as provided in CDC 46.150.*

Response: Compliance with the off-street parking and loading standards is discussed below based on the existing design and will be demonstrated in final design documents provided for the development. The design team is aware of these requirements and given the size of the site and the proposed design of the development, it is feasible to satisfy these requirements.

SECTION 46.040: APPROVAL STANDARDS

Approval shall be based on the standards set forth in this chapter and Chapter 48 CDC, Access, Egress, and Circulation; Chapter 52 CDC, Signs; and Chapter 54 CDC, Landscaping.

Response: Compliance with the applicable approval standards are discussed throughout this narrative and demonstrated in the accompanying plans.

SECTION 46.050: JOINT USE OF A PARKING AREA

A. *Joint use of parking spaces may occur where two or more uses on the same or separate sites are able to share the same parking spaces because their parking demands occur at different times. Joint use of parking spaces on separate sites shall submit the following documentation as part of a building or zoning permit application or land use review:*
   1. *The names and addresses of the owners or tenants that are sharing the parking and the uses at those locations.*
   2. *The location and number of parking spaces that are being shared.*
   3. *A legal instrument that guarantees access to the parking for the shared spaces.*

Response: The proposal does not anticipate needing to share parking with any other uses. If it is subsequently determined that shared parking is necessary, compliance with these standards will be provided with the building permit application.

SECTION 46.060: STORAGE IN PARKING AND LOADING AREAS PROHIBITED

Parking spaces shall be available for the parking of passenger automobiles of residents, customers, patrons and employees only, and the parking spaces shall not be used for storage of vehicles or materials or for the parking of trucks connected with the business or use with the exception of small (under one-ton) delivery trucks or cars.

Response: There is no anticipated need to utilize the proposed on-site parking and loading areas for storage. This standard is not applicable to the proposed development.

SECTION 46.070: MAXIMUM DISTANCE ALLOWED BETWEEN PARKING AREA AND USE

A. *Off-street parking spaces for single-family dwellings shall be located on the same lot with the dwelling.*

Response: There are no proposed single-family dwellings associated with this request; therefore, this standard is not applicable.

B. *Parking areas must provide the following, wherever applicable:*

1. *Employee parking areas for carpools and vanpools shall be located closer to the entryway to the building than general employee parking.*
2. *Stacked or valet parking is allowed if an attendant is present to move vehicles. If stacked parking is used for parking spaces, the applicant shall ensure that an attendant will always be present when the lot is in operation. The requirements for maximum spaces and all parking area development standards continue to apply for stacked parking.*
3. *All disabled parking shall be placed closest to building entrances than all other parking. Appropriate ADA curb cuts and ramps to go from the parking lot to the ADA-accessible entrance shall be provided unless exempted by ADA code.*
4. *Parking for cottage clusters may be further than 200 feet, if a pedestrian pathway is provided with the following conditions: […]*

Response: The design team is aware of these requirements. There is no proposed stacked or valet parking, employee parking areas for carpools or vanpools. Compliance with the applicable standards of this section will be demonstrated in the final design drawings.

SECTION 46.090: OFF-STREET PARKING SPACE REQUIREMENTS

A. Maximum parking. Parking spaces shall not exceed the following amounts:

Land Use	Maximum Spaces (spaces per 1,000 sq. ft. of gross leasable area unless otherwise stated)
Multifamily studio unit (spaces per unit)	1.2
Multifamily non-studio (spaces per unit)	2.0
General office (includes office park, "flex-space," government office and misc. services)	3.0
Warehouse (gross square feet; parking ratios apply to warehouses 150,000 gsf or greater)	0.4
Schools: college/university & high school (spaces/# of students and staff)	0.3
Tennis/racquetball court	1.3
Sports club/recreation facilities	4.8
Retail/commercial, including shopping centers	4.6
Bank with drive-in	3.0
Movie theater	0.4
Fast food with drive-through	11.0
Other restaurants	11.0
Place of worship (spaces/seats)	0.6
Medical/dental clinic	4.4
Other commercial uses	5.0

Response: The development is not required to provide a minimum amount of parking but is subject to a maximum limit as illustrated above. As proposed, the unit mix within the proposed multi-family portion of the property

includes 20 studios and 300 non-studios. For this portion of the development, a maximum of 624 spaces are allowed to be provided. There is also 10,520 square feet of proposed flex retail commercial space. This portion of the development is allowed to provide no more than 48 parking spaces. As proposed, the development would provide 384 parking spaces which does not exceed the maximum number of spaces prescribed in the table above.

1. *For and uses with more than 65,000 square feet of floor area, surface parking may not consist of more area than the floor area of the building.*
2. *Non-surface parking, such as tuck-under parking, underground and subsurface parking, and parking structures may be exempted from the calculations in this section.*
3. *For land uses not listed in the table above, maximum parking will be calculated based on the most similar land use in the table.*

Response: All of the proposed parking will be surface parking and subject to these requirements. The proposed floor area of the buildings is 305,000 square feet, and the proposed surface parking area is 131,343 square feet. As proposed, the development complies with these requirements.

B. *For office, industrial, and public uses where there are more than 20 parking spaces for employees on the site, at least 10 percent of the employee parking spaces shall be reserved for carpool use before 9:00 a.m. on weekdays. The spaces will be the closest to the building entrance, except for any disabled parking and those signed for exclusive customer use. The carpool/vanpool spaces shall be clearly marked "Reserved – Carpool/Vanpool Before 9:00 a.m."*

Response: The proposed mixed-use portion of the property is 10,520 square feet. Parking is provided on-street and in the parking areas between buildings 9 and 10. The applicant does not anticipate a need for more than 20 employee parking spaces associated with the proposed commercial uses. All of the disabled parking and customer use parking spaces will be marked accordingly. Compliance with these requirements will be provided with the final design drawings.

C. *Existing developments along transit streets or near transit stops may redevelop the existing parking spaces to provide transit-oriented facilities, including bus pullouts, bus stops and shelters, park and ride stations, and other similar facilities.*

Response: This will be a new development. This standard is not applicable.

SECTION 46.110: RESERVOIR AREAS REQUIRED FOR DRIVE-IN USES

Response: There are no drive-in uses proposed with this development. These standards are not applicable.

SECTION 46.120: DRIVEWAYS REQUIRED ON SITE

Any school or meeting place which is designed to accommodate more than 35 people at one time shall provide a 15-foot wide driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers. Depending on functional requirements, the width may be increased with Planning Director approval.

Response: The proposed development does not include a school or meeting place designed to accommodate more than 35 people at one time. This standard is not applicable.

SECTION 46.130: OFF-STREET LOADING SPACES

Buildings or structures to be built or substantially altered, which receive and distribute material or merchandise by truck, shall provide and maintain off-street loading and maneuvering space. The dimensional standard for loading spaces is a minimum of 14 feet wide by 20 feet long or proportionate to accommodate the size of delivery trucks that typically serve the proposed use as follows:

	Gross Floor Area	
Land Use	At Which First Berth Is Required	At Which Second Berth Is Required
Industrial:		
Manufacturing	5,000 sq. ft.	40,000 sq. ft.
Warehouse	5,000	40,000
Storage	10,000	100,000
Commercial:		
Wholesale	10,000	40,000
Retail	10,000	20,000
Service establishments	10,000	40,000
Comm. recreational (incl. bowling alley)	10,000	100,000
Restaurants	5,000	25,000
Laundry	10,000	25,000
Office building	10,000	100,000
Hotel	10,000	100,000
Institutional:		
Schools	10,000	100,000
Hospitals	10,000	100,000
Other care facilities	10,000	100,000
Public buildings:		
Terminals	5,000	40,000
Auditoriums	10,000	100,000
Arenas	10,000	100,000
Funeral homes	10,000	100,000

Response: The proposed development would provide approximately 10,520 square feet of flex retail/commercial space, but that floor area is anticipated to be divided amongst several businesses. The off-street loading proposed

for this development would be located within the off-street parking provided between buildings 9 and 10 south of the Tannler Drive realignment. This approach would eliminate underutilized dead space that hinders the mixed-use developments economic viability. Prioritizing large off-street loading areas over public space degrades urban aesthetics and walkability. A more modern and flexible approach for this development is proposed that would offer shared facilities within the off-street parking area of the development is better suited for this development as deliveries are more likely to occur from smaller commercial vehicles. This approach will meet the intent of the regulation by designating loading areas in the off-street parking areas to accommodate deliveries. The minimum standard for a loading berth is 14 feet in width by 20 feet in depth. The designated loading space will be signed and striped to ensure that an area equal to these dimensions or larger is provided within the off-street parking area during business hours of the proposed commercial space. A detailed location and design will be designated in the final development plans.

SECTION 46.150: DESIGN AND IMPROVEMENT STANDARDS

The following standards apply to the design and improvement of areas used for vehicle parking, storage, loading, and circulation:

A. Design standards.

1. "One standard parking space" means a minimum for a parking stall of eight feet in width and 16 feet in length. These stalls shall be identified as "compact." To accommodate larger cars, 50 percent of the parking spaces shall have a minimum dimension of nine feet in width and 18 feet in length (nine feet by 18 feet). When multifamily parking stalls back onto a driveway, as opposed to a drive aisle within a parking lot, the stalls shall be nine feet by 20 feet. Parking for development in water resource areas may have 100 percent compact spaces.

Response: All of the proposed off-street parking is accessed from drive aisles within the proposed development; therefore the minimum parking space dimensions for the development would by nine feet in width by 18 feet. All of the off-street parking proposed with this development has been designed to meet these standards. There are no compact spaces proposed with the development and there are no water resource areas located on the property.

2. Disabled parking and maneuvering spaces shall be consistent with current federal dimensional standards and subsection B of this section and placed nearest to accessible building entryways and ramps.

Response: Disabled parking for the proposed development has been located throughout the site and has been designed to satisfy the federal dimensional standards as required. The location of the proposed Americans with Disabilities Act (ADA) spaces are located nearest to accessible building entryways and ramps. The team consulted with an ADA consultant to locate the required accessibility routes to ensure that the site meets the requirements of the ADA.

3. Repealed by Ord. 1622.

4. Service drives for non-residential development shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.

Response: There are no proposed service drives separate from the on-site access drives associated with the development.

5. *Each parking and/or loading space shall have clear access, whereby the relocation of other vehicles to utilize the parking space is not required, except where stacked parking is permitted pursuant to CDC 46.070(B)(4) or 46.090(A).*

Response: The proposed loading space discussed previously in this narrative will be signed and striped to minimize conflicts with off-street parking. All proposed parking on site is provided with clear access and will not require the relocation of other vehicles to function. There is no proposed stacked parking associated with this development.

6. *Except for single-family attached and detached residences, any area intended to be used for off-street parking as contained in this chapter shall have all parking spaces clearly marked using a permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of flow and maintain vehicular and pedestrian safety. Permeable parking surface spaces may have an alternative delineation for parking spaces.*

Response: All proposed off-street parking, drives, and access aisles will be clearly marked as required. A signage and striping plan will be included in the final design drawings satisfying these requirements.

7. *Except for residential parking, and parking for public parks and trailheads, at least 50 percent of all areas used for the parking and/or storage and/or maneuvering of any vehicle, boat and/or trailer shall be improved with asphalt or concrete surfaces according to the same standards required for the construction and acceptance of City streets. The remainder of the areas used for parking may use a permeable paving surface designed to reduce surface runoff. Parking for public parks or trailheads may use a permeable paving surface designed to reduce surface runoff for all parking areas. Where a parking lot contains both paved and unpaved areas, the paved areas shall be located closest to the use which they serve.*

Response: All proposed parking, drives, and access aisles will be improved with asphalt in accordance with these requirements.

8. *Off-street parking spaces for single-family attached and detached residences shall be improved with a paved surface. Other parking facilities for single-family homes that are to accommodate additional vehicles, boats, recreational vehicles, and trailers, etc., need not be paved. All parking for multifamily residential development shall be paved with concrete or asphalt. Driveways shall measure at least 20 feet from the back of sidewalk to garage or the end of the parking pad to accommodate cars and sport utility vehicles without the vehicles blocking the public sidewalk.*

Response: The proposed development includes multi-family residential homes. All of the proposed parking, drives, and access will be paved with asphalt. There are no garages proposed for the development that are oriented to a public street. The garages proposed with this development are not oriented to the street and are not provided with individual driveways that are subject to this standard. Further, there are not any proposed garages within 20 feet of the street.

9. *Access drives from the street to off-street parking or loading areas for non-residential development shall be designed and constructed to facilitate the flow of traffic and provide maximum safety for pedestrian and vehicular traffic on the site. The number of access drives shall be limited to the*

minimum that will allow the property to accommodate and service the anticipated traffic. Access drives for all development shall be clearly and permanently marked and defined through use of rails, fences, walls, or other barriers or markers on frontage not occupied by service drives.

Response: As stated previously, proposed off-street parking, drives, and access aisles will be clearly marked as required. A signage and striping plan will be included in the final design drawings satisfying these requirements. All proposed access drive locations are intended to facilitate a circuitous flow of traffic for resident, business, and fire access

10. *Access drives shall have a minimum vision clearance as provided in Chapter 42 CDC, Clear Vision Areas.*

Response: As stated earlier, it is feasible for all proposed access drives to meet the Clear Vision Areas required in Chapter 42. There are no proposed obstructions and any landscaping would be pruned to provide 8-feet of vertical clearance. Compliance with this chapter will be illustrated on the final design drawings.

11. *Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least four inches high located two feet back from the front of the parking stall. Such parking spaces may be provided without wheel stops if the sidewalks or landscaped areas adjacent the parking stalls are two feet wider than the minimum width.*

Response: All of the proposed off-street parking spaces adjacent to the interior landscaped areas will be provided with a wheel stop in accordance with this requirement. Where parking spaces are adjacent to sidewalks, the sidewalk has been designed to be two feet wider than the required minimum width of six feet.

12. *Off-street parking and loading areas shall be drained in accordance with City of West Linn Public Works Design Standards. Storm drainage at commercial sites may also have to be collected to treat oils and other residue.*

Response: All stormwater on-site will be captured and conveyed, treated, and designed in below ground facilities located on the property. Details will be provided with the preliminary storm report and illustrated in the final design documents.

13. *Artificial lighting on all off-street parking facilities shall be concealed or shielded with an Illuminating Engineering Society of North America (IESNA) full cut-off style fixture with an angle not exceeding 90 degrees to minimize the potential for glare and unnecessary diffusion on adjacent property and so as not to create a hazard to the public use of any road or street. Examples of shielded light fixtures are shown below.*

Response: All on-site lighting will be designed to satisfy the lighting standards for the off-street parking facilities. Compliance will be ensured through the submission of a final photometric plan and fixture cut sheets as part of the final design and construction application. The final lighting design, designed by a professional lighting designer will demonstrate that all fixtures are IESNA full cut-off style, with an angle not exceeding 90 degrees, and are installed to minimize glare and unnecessary light trespass onto adjacent properties.

14. *Directional arrows and traffic control devices which are placed on parking lots shall be identified.*

Response: A signage and striping plan will be included in the final design drawings satisfying these requirements.

15. *The maximum driveway grade for single-family housing shall be 15 percent. The 15 percent shall be measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply. Variations require approval of a Class II variance by the Planning Commission pursuant to Chapter 75 CDC. Regardless, the last 18 feet in front of the garage must maintain a maximum grade of 12 percent as measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply.*

Response: Driveways into the site along Tannler Drive have all been designed to be less than 15 percent. All driveways into the on-site garages have been designed to be less than 12 percent as required. Compliance with these standards will be illustrated in the final design drawings submitted for permit.

16. *Visitor or guest parking must be identified by painted "GUEST" or "VISITOR."*

Response: Visitor and guest parking will be identified in the signage and striping plan included in the final design drawings satisfying these requirements.

17. *Parking spaces shall have less than a five percent grade. No drainage across adjacent sidewalks or walkways is allowed.*

Response: Parking spaces have been designed to have less than a five percent grade as required, and no drainage will be directed to cross any adjacent sidewalks or walkways as required.

18. *Commercial, office, industrial, and public parking lots may not occupy more than 50 percent of the main lot frontage of a development site. The remaining frontage shall comprise buildings or landscaping. If over 50 percent of the lineal frontage comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet wide and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. The defensible space of the parking lot should not be compromised.*

Response: None of the proposed off-street parking fronts the public street. All frontages, with the exception of proposed driveway access locations, are provided with buildings or landscaping.

19. *Areas of the parking lot improved with asphalt or concrete surfaces shall be designed into areas of 12 or less spaces through the use of defined landscaped area. Groups of 12 or less spaces are defined as:*
    a. *Twelve spaces in a row, provided there are no abutting parking spaces, as in the case when the spaces are abutting the perimeter of the lot; or*
    b. *Twelve spaces in a group with six spaces abutting together; or*
    c. *Two groups of 12 spaces abutting each other, but separated by a 15-foot-wide landscape area including a six-foot-wide walkway.*

d. *Parking areas improved with a permeable parking surface may be designed using the configurations shown in subsections (A)(19)(a), (b) and (c) of this section except that groups of up to 18 spaces are allowed.*
e. *The requirements of this chapter relating to total parking lot landscaping, landscaping buffers, perimeter landscaping, and landscaping the parking lot islands and interior may be waived or reduced pursuant to CDC 32.110(F) in a WRA application without a variance being required.*

Response: It is feasible to satisfy these requirements given the fact that there are no minimum parking requirements for the proposed development. The site plan provided with this submittal breaks the proposed parking bays into groups that are less than 12 spaces. The largest bay is 8. Compliance with these requirements will be illustrated with the final design drawings.

20. *Pedestrian connections through parking areas.*
    a. *Pedestrian walkways shall be provided in parking areas that are larger than one-half acre. The pedestrian walkways or sidewalks should provide access to building entrances, existing or planned pedestrian facilities in the public right-of-way, and to accessible parking spaces.*
    b. *Walkways or sidewalks shall be constructed through parking lots where such parking lots lie between major buildings/activity areas (an example in multifamily housing: between recreation center, swimming pool, manager's office, park or open space areas, parking lots, etc.) within a development and adjacent streets or adjacent transit stops. The walkways or sidewalks should also provide access to building entrances, existing or planned pedestrian facilities in the public rights-of-way, and to accessible parking spaces.*
    c. *Walkways through parking lots shall be constructed using a material that visually contrasts with the parking lot and driveway surface and that may have a contrasting surface texture (surface texture shall not interfere with safe use of wheelchairs, baby carriages, shopping carts, etc.). Walkways shall be physically separated from adjacent vehicle parking and parallel vehicle traffic through the use of grade separation, walls, curbs, and/or landscaping.*
    d. *Walkways shall be a minimum of six feet wide.*

Response: The site is of sufficient size to feasibly accommodate all pedestrian connection standards listed above, including widths and materials as well as the provision of pedestrian walkways within and through parking areas as required. The final design documents will detail the layout and design of these pedestrian facilities. The proposed plan will demonstrate that the walkways provide safe and accessible connections to building entrances, the adjacent public right-of-way, and accessible parking spaces, incorporating contrasting materials and physical separation from vehicular traffic to satisfy all code requirements.

21. *Parking and circulation patterns shall be easily comprehended and defined. The patterns shall be clear to minimize traffic hazards and congestion and to facilitate emergency vehicles. Residential developments which are exempt from design review or subject to only clear and objective design review are not required to comply with this design standard.*

Response: The proposed development is a mixed use development comprised of both residential and commercial uses. The parking and circulation have been professionally designed to be circuitous, meet fire and service access requirements as well as prevent traffic congestion. The proposed parking and circulation will be striped and signed as required and there is no evidence to suggest that the design would be hazardous.

22. *Parking spaces for residential development subject to clear and objective review shall be provided on the same lot. Parking spaces for non-residential development or for residential development subject to discretionary review shall be close to the related use.*

Response: All proposed off-street parking is provided on the project site.

23. *Permeable parking spaces shall be designed and built in compliance with the West Linn Public Works Design Standards.*

Response: If in final design, permeable parking is found to be a financially viable option, it will be designed and built in compliance with the applicable West Linn Public Works Design Standards. There is currently no plan to provide permeable parking with this development.

B. *Accessible parking standards for persons with disabilities. If any parking is provided for the public or visitors, or both, the needs of the people with disabilities shall be based upon the following standards or current applicable federal standards, whichever are more stringent:*
   1. *Minimum number of accessible parking space requirements (see following table):*

NUMBER OF TOTAL PARKING SPACES	TOTAL NUMBER OF ACCESSIBLE SPACES	NUMBER OF VAN-ACCESSIBLE SPACES REQUIRED, OF TOTAL	SPACES SIGNED "WHEELCHAIR USE ONLY"
1 – 25	1	1	–
26 – 50	2	1	–
51 – 75	3	1	–
76 – 100	4	1	–
101 – 150	5	–	1
151 – 200	6	–	1
201 – 300	7	–	2
301 – 400	8	–	2
401 –500	9	–	2
501 – 999	2 percent of total spaces	–	1 in every 6 accessible spaces or portion thereof
Over 1,000	20 spaces plus 1 for every 100 spaces, or fraction thereof, over 1,000	–	1 in every 6 spaces or portion thereof

Response: The proposed development will provide 165 off-street surface parking stalls and 219 parking stalls within carports or garages for a total of 384 stalls. There are 13 ADA parking stalls provided. Two of these stalls will be signed "Wheelchair Use Only as required.

2. *Location of parking spaces. Parking spaces for the individual with a disability that serve a particular building shall be located on the shortest possible accessible circulation route to an accessible entrance to a building. In separate parking structures or lots that do not serve a particular building, parking spaces for the persons with disabilities shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility.*

Response: The proposed site plan demonstrates that all accessible parking spaces are located on the shortest possible accessible circulation route to an accessible building entrance. All proposed parking areas are intended to serve a specific building, the ADA proposed locations ensure convenient and direct access, complying with the standard.

3. *Accessible parking space and aisle shall meet ADA vertical and horizontal slope standards.*

Response: Noted by the design team compliance with this standard will be demonstrated with submittal of the final construction drawings

4. *Where any differences exist between this section and current Federal standards, those Federal standards shall prevail over this code section.*

Response: The design team will ensure that the final construction documents demonstrate compliance with the Federal standards for the location and design of the required ADA parking spaces.

5. *One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide.*

Response: Noted by the design team compliance with this standard will be demonstrated with submittal of the final construction drawings.

6. *Van-accessible parking spaces shall have an additional sign marked "Van Accessible" mounted below the accessible parking sign. A van-accessible parking space reserved for wheelchair users shall have a sign that includes the words "Wheelchair Use Only." Van-accessible parking shall have an adjacent eight-foot-wide aisle. All other accessible stalls shall have a six-foot-wide aisle. Two vehicles may share the same aisle if it is between them. The vertical clearance of the van space shall be 96 inches.*

Response: As indicated earlier, all onsite parking and circulation will be striped and signed in accordance with these code requirements. The final construction documents will include a signage and striping plan demonstrating compliance with these requirements.

C. *Landscaping in parking areas. Reference Chapter 54 CDC, Landscaping.*

Response: Landscaping is addressed later in this narrative. As proposed, the site is large enough to accommodate the required landscaping and it is feasible for the development to satisfy the requirements of Chapter 54 CDC.

D. *Bicycle facilities and parking.*

1. *Provisions shall be made for pedestrian and bicycle ways if such facilities are identified on pages 24-26 of the West Linn Transportation System Plan or in the 2013 West Linn Trails Plan.*
2. *Bicycle parking improvements and location.*
    a. *Bicycle parking facilities shall either be lockable enclosures in which the bicycle is stored, or secure stationary racks which accommodate bicyclists' locks securing the frame and both wheels.*
    b. *The nearest bicycle parking space shall be no more than 50 feet from the entrance to the building and shall be visible from the building entrance.*
    c. *Required parking shall be signed and reserved for bicycle parking only. If a bicycle parking area is not visible from the main building entrance, a directional sign shall be posted at the building entrance indicating the location of the bicycle parking area.*
    d. *Required bicycle parking shall be lighted to a minimum three foot-candles to allow secure use at night.*
3. *Bicycle parking must be provided in the following amounts:*

Response: Per the West Linn TSP, there are no proposed trails connections through the subject property; however, Figure 6 on page 25 of the adopted TSP calls for on-street connections to the communities' trail system along the sites frontage of both Tannler Drive and Blankenship Rd. The applicant expects that the development will be required to improve the frontages along both facilities. Compliance with the trail design will be provided with the final design documentation. Proposed bicycle parking is spread throughout the site to accommodate the mix of uses. With 320 multi-family residential uses, 320 bicycle parking spaces are required. These spaces are proposed to be located within the unit and near the common areas. Required bicycle parking for the proposed commercial uses will be provided at a rate of 0.33 spaces per 1,000 square feet as it's the most restrictive of the uses that would be expected to be located in the flex/commercial retail portion of the site. With the 10,520 square feet of flex commercial/retail/office uses, 4 spaces would be required. The code requires 50% of the required bicycle parking spaces for the multi-family development to be covered and 50% of the flex space would be required to covered. All of the proposed bicycle parking spaces are required to be visible, signed, and lit. It is feasible for the proposed development to satisfy these requirements. Compliance with these standards will be demonstrated on the final design drawings.

E. See Figures 1 and 2 below.

Response: These two figures reference the required parking layout and dimensional design. All proposed parking will be designed to satisfy these requirements. Compliance will be demonstrated with the final design documents.

F. The following requirements apply to any new development that includes more than one-half acre of new off-street surface parking on a lot or parcel. The new surface parking area shall be measured based on the perimeter of all new off-street parking spaces, maneuvering lanes, and maneuvering areas, including driveways and drive aisles:
1. *Tree canopy covering at least 40 percent of the new parking lot area at maturity but no more than 15 years after planting. Trees planted or preserved to meet parking area landscaping requirements in CDC 54.020 may count toward the tree canopy cover percentage.*
2. *At a minimum, trees planted to meet canopy cover requirements must be planted at the standards and specifications no lower than the 2021 American National Standards Institute A300 standards.*

Response: The project landscape architect is aware of these requirements. Compliance with these standards is feasible and will be demonstrated with the final landscape drawings. The site is sufficient size to accommodate the canopy requirements.

G. New construction or redevelopment for the following uses must include provision of electric service capacity, as defined in ORS 455.417 and in this Code, for a minimum percentage of vehicle parking spaces:

1. *Commercial buildings under private ownership: 20%*
2. *Multifamily buildings (5 or more units): 40%*
3. *Mixed use buildings consisting of privately owned commercial spaces and five or more residential dwelling units: 40%*

Response: The proposed development is a mixed-use project consisting of privately owned commercial spaces and includes more than 5 residential dwelling units. Therefore, the development is required to include provision of electric service capacity for 40% of the off-street parking spaces. The proposal complies with this requirement and compliance with this standard will be demonstrated with the final design drawings.

CHAPTER 48: ACCESS, EGRESS, AND CIRCULATION

SECTION 48.020: APPLICABILITY AND GENERAL PROVISIONS

A. The provisions of this chapter do not apply where the provisions of the Transportation System Plan or land division chapter are applicable and set forth differing standards.

Response: The design team is aware that there may be differing provisions between the adopted TSP and this Chapter and will comply with the applicable standards for access as required.

B. All lots shall have access from a public street or from a platted private street approved under the land division chapter.

Response: As proposed all lots will have access from Tannler Drive, an existing public street within the City.

C. No building or other permit shall be issued until scaled plans are presented to the City and approved by the City as provided by this chapter, and show how the access, egress, and circulation requirements are to be fulfilled. Access to State or County roads may require review, approval, and permits from the appropriate authority.

Response: Compliance with the standards is feasible and will be demonstrated on scaled plans presented with the final design documents.

D. Should the owner or occupant of a lot, parcel or building enlarge or change the use to which the lot, parcel or building is put, resulting in increasing any of the requirements of this chapter, it shall be unlawful and a violation of this code to begin or maintain such altered use until the provisions of this chapter have been met, and, if required, until the appropriate approval authority under Chapter 99 CDC has approved the change.

Response: This is an application to change the use from three vacant parcels to a mixed-use development. The development is designed by a team of licensed or registered professionals that are aware of the applicable

standards for access, egress, and circulation that apply to the proposed development. The proposed development is designed to comply with the applicable requirements as discussed in this narrative and will be demonstrated in the final design documents.

E. Owners of two or more uses, structures, lots, parcels, or units of land may agree to utilize jointly the same access and egress when the combined access and egress of both uses, structures, or parcels of land satisfies the requirements as designated in this code; provided, that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases, or contracts to establish joint use. Copies of said instrument shall be placed on permanent file with the City Recorder.

Response: Joint access into the site already exists with the office development located west of the subject site. Once developed, that should be the only location where shared access is necessary.

F. Property owners with access to their property via platted stems of flag lots may request alternate access as part of a discretionary review if other driveways and easements are available and approved by the City Engineer.

Response: This standard does not apply to this property.

SECTION 48.025: ACCESS CONTROL

A. Purpose. The following access control standards apply to public, industrial, commercial and residential developments including land divisions. Access shall be managed to maintain an adequate level of service and to maintain the functional classification of roadways as required by the West Linn Transportation System Plan.

Response: The proposal is for approval of a mixed-use development that includes both commercial and residential uses. The design team is aware of the requirements and intends to satisfy the applicable requirements as discussed below and illustrated in the final design documents.

B. Access control standards.

1. Traffic impact analysis requirements. A traffic analysis prepared by a qualified professional may be required to determine access, circulation and other transportation requirements. The purpose, applicability and standards of this analysis are found in CDC 85.170(B)(2).

Response: The applicant has anticipated that a TIA will be required for the development. Kittelson and Associates are qualified professionals that have been hired to prepare the traffic analysis. That analysis will be provided shortly once the analysis is complete. The applicant understands that the city will require a final TIA before it determines the application is complete.

2. In order to comply with the access standards in this chapter, the City or other agency with access permit jurisdiction may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit. Access to and from off-street parking areas shall not permit backing onto a public street.

Response: The proposed development is adjacent to two public streets and has been designed to comply with the applicable access standards located within this chapter. None of the proposed access points to the off-street parking areas will require backing onto a public street. Compliance with these requirements are discussed below and will be illustrated in the final design documents.

3. *Access options. When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided from a public street adjacent to the development lot or parcel. Street accesses shall comply with access spacing standards in subsection (B)(6) of this section, the West Linn Public Works Design Standards, and TSP. As an alternative, the applicant may request alternative access provisions listed below as Option 1 and Option 2, subject to approval by the City Engineer through a discretionary process.*
    a) *Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted. For the purpose of this subsection, a mid-block lane is a narrow private drive providing lot frontage and access for rear lot development.*
    b) *Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway shall be recorded in this case to ensure access to the closest public street for all users of the private street/drive.*

Response: Proposed access locations into the development comply with the access spacing standards as discussed in subsection (B)(6) below and illustrated in the design plans prepared for the development. The final design documents will illustrate compliance with these standards and any applicable standards within the Public Works Design Standards and TSP if they are not already met.

4. *Subdivisions fronting onto an arterial street. New residential land divisions fronting onto an arterial street shall be required to provide alleys or secondary (local or collector) streets for access to individual lots. When alleys or secondary streets cannot be constructed due to topographic or other physical constraints, access may be provided by consolidating driveways for clusters of two or more lots.*

Response: The proposed development does not include a residential land division. This standard is not applicable to this request.

5. *Double-frontage lots. When a lot or parcel has frontage onto two or more streets, access shall be provided first from the street with the lowest classification. For example, access shall be provided from a local street before a collector or arterial street.*

Response: Once the property line adjustment is approved for the proposed development. The lot containing proposed buildings 9, 10, and 11 will have frontage onto Tannler Drive and Blankenship Rd. Tannler Drive is classified as a neighborhood collector in figure 17 of the adopted TSP. Blankenship Rd. is classified as a collector in the same figure. Since Tannler Drive has the lowest classification, access has been proposed from that right of way to satisfy this standard.

6. *Access spacing.*

a) *The access spacing standards found in Tables 14 and 15 of the TSP and in CDC 48.060 shall be applicable to all newly established public street intersections, non-traversable medians, and curb cuts. Deviation from the access spacing standards may be granted by the City Engineer as part of a discretionary review if the applicant demonstrates that the deviation will not compromise the safe and efficient operation of the street and highway system.*
b) *Private drives and other access ways are subject to the requirements of CDC 48.060.*

Response: Access spacing requirements are not listed for neighborhood collector in CDC section 48.060. However, Table 15 within the TSP requires that access locations between street intersections and driveways or simply between driveways on a neighborhood collector are required to be spaced a minimum of 50 feet away from each other. All of the proposed access locations have been designed to satisfy these spacing requirements as illustrated on the submitted site plan.

7. *Number of access points. For single-family (detached and attached) housing types, one street access point is permitted per lot or parcel when alley access cannot otherwise be provided; except that two access points may be permitted corner lots (i.e., no more than one access per street), subject to the access spacing standards in CDC 48.060. The number of street access points for multiple family development is subject to the access spacing standards in CDC 48.060. The number of street access points for commercial, industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with subsection (C)(8) of this section, in order to maintain the required access spacing, and minimize the number of access points.*

Response: As discussed previously, the proposed access locations for this mixed-use development has been designed to satisfy the access spacing standards along a neighborhood collector as required in CDC 48.060. All the driveways intended to serve the development will come off Tannler Drive, a neighborhood collector. The spacing of driveways along this classification is 50 feet. The site plan demonstrates that the proposed development will satisfy this requirement.

8. *Shared driveways. For residential development, shared driveways may be required in order to meet the access spacing standards in subsection (C)(6) of this section. For non-residential development, the number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The City shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes in accordance with the following standards:*
    a) *When necessary pursuant to this subsection (C)(8), shared driveways and/or frontage streets shall be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent lot or parcel develops. "Developable" means that a lot or parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).*
    b) *Access easements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.*

c) *Exception. Exceptions to the shared driveway or frontage street requirements may be granted as part of a discretionary review if the City determines that existing development patterns or physical constraints (e.g., topography, lot or parcel configuration, and similar conditions) prevent extending the street/driveway in the future.*

Response: There is an existing shared driveway with the property located east of the subject property. That driveway is protected through a shared access agreement. The proposed development will continue to provide access to that property in order to comply with the easement. There is no need for any additional shared driveways to serve the development as proposed.

C. Street connectivity and formation of blocks required. In order to promote efficient vehicular and pedestrian circulation throughout the City, land divisions and site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards:

1. *Block length and perimeter. The maximum block length shall not exceed 800 feet along a collector, neighborhood route, or local street, or 1,800 feet along an arterial, unless a smaller block length is required pursuant to CDC 85.200(B)(2).*
2. *Street standards. Public and private streets shall also conform to Chapter 92 CDC, Required Improvements, and to any other applicable sections of the West Linn Community Development Code and approved TSP.*
3. *Exception. Exceptions to the above standards may be granted as part of a discretionary review when blocks are divided by one or more pathway(s), in conformance with the provisions of CDC 85.200©, Pedestrian and bicycle trails, or cases where extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations preclude implementation, not just inconveniences or design challenges.*

Response: The subject site is steep and does not conform to a traditional city block as there are no other streets on the perimeter to tie into. The project is seeking an exception to this standard under provision 3 above. While there is a public right of way located along the northeastern boundary of the property, it only provides a connection to this property. The right-of-way extended to the west property line, but the tax map indicates that that portion of the right of way, except for a 20-foot sewer easement and pedestrian trail, was abandoned. The steep slopes, large Oak trees, and existing development, would make any connection to the west unlikely to be extended. The topography and surrounding development patterns are not conducive to the formation of a typical block system. The proposed development is provided with a pedestrian system that bisects the property. That pedestrian path heads north from the Tannler Drive realignment, north to the proposed picnic shelter and open space.

SECTION 48.030: MINIMUM VEHICULAR REQUIREMENTS FOR RESIDENTIAL USES

A. Direct individual access from single-family dwellings and duplex lots to an arterial street, as designated in the TSP, is prohibited for lots or parcels created after the effective date of this code where an alternate access is either available or is proposed as part of a submitted development application. Evidence of alternate or future access may include temporary cul-de-sacs, dedications or stubouts on adjacent lots or parcels, or tentative street layout plans submitted by an adjacent property owner/developer or by the owner/developer, or previous owner/developer, of the property in question.

In the event that alternate access is not available, the applicant may request access onto an arterial street as part of a discretionary review, and approval may be granted by the Planning Director and City Engineer after review of the following criteria:

1. *Topography.*
2. *Traffic volume to be generated by development (i.e., trips per day).*
3. *Traffic volume presently carried by the street to be accessed.*
4. *Projected traffic volumes.*
5. *Safety considerations such as line of sight, number of accidents at that location, emergency vehicle access, and ability of vehicles to exit the site without backing into traffic.*
6. *The ability to consolidate access through the use of a joint driveway.*
7. *Additional review and access permits may be required by State or County agencies.*

Response: The proposed development is for a mixed-use development. There are no single-family dwellings or duplex lots associated with this proposal. Nevertheless, none of the proposed accesses to serve the proposed development are to a designated arterial. This standard is not applicable to this development.

B. *Driveway standards. When any portion of any house is less than 150 feet from the adjacent right-of-way, driveway access to the home shall meet the following standards:*
   1. *One single-family residence, including residences with an accessory dwelling unit as defined in CDC 02.030, shall provide a driveway with 10 feet of unobstructed horizontal clearance. Dual-track or other driveway designs that minimize the total area of impervious driveway surface are encouraged but not required.*
   2. *Two to four single-family residential homes shall provide a driveway with 14- to 20-foot-wide paved or all-weather surface.*
   3. *Maximum driveway grade shall be 15 percent. The 15 percent shall be measured along the centerline of the driveway only. Variations require approval of a Class II variance by the Planning Commission pursuant to Chapter 75 CDC. However, in no case shall the last 18 feet in front of the garage exceed 12 percent grade as measured along the centerline of the driveway only. Grades elsewhere along the driveway shall not apply.*
   4. *The driveway shall include a minimum of 20 feet in length between the garage door and the back of sidewalk, or, if no sidewalk is proposed, to the paved portion of the right-of-way.*

Response: The proposed development is for a multi-family mixed-use development. This standard is not applicable to this development.

C. *When any portion of one or more homes is more than 150 feet from the adjacent right-of-way, the provisions of subsection B of this section shall apply in addition to the following provisions.*
   1. *A turnaround shall be provided if required by Tualatin Valley Fire and Rescue (TVF&R) in order to receive a service provider permit.*
   2. *Minimum vertical clearance for the driveway shall be 13 feet, six inches.*
   3. *A minimum centerline turning radius of 45 feet is required unless waived by TVF&R.*
   4. *There shall be sufficient horizontal clearance on either side of the driveway so that the total horizontal clearance is 20 feet.*

Response: The proposed development is for a multi-family mixed use development. This standard is not applicable to this development.

D. Access to five or more single-family homes shall be by a street built to City of West Linn standards, consistent with the TSP (Tables 26 through 30 and Exhibits 6 through 9) and the Public Works Design Standards. All streets shall be public. This full street provision may only be waived by variance.

Response: The proposed development is for a multi-family mixed-use development. This standard is not applicable to this development.

E. Access and/or service drives for multifamily dwellings shall be fully improved with hard surface pavement:

1. *With a minimum of 24-foot width when accommodating two-way traffic; or*
2. *With a minimum of 15-foot width when accommodating one-way traffic. Horizontal clearance shall be two and one-half feet wide on either side of the driveway.*
3. *Minimum vertical clearance of 13 feet, six inches.*
4. *Turnaround facilities as required by TVF&R standards for emergency vehicles when the drive is over 150 feet long. Fire Department turnaround areas shall not exceed seven percent grade unless waive by TVF&R.*
5. *The grade shall not exceed 10 percent on average, with a maximum of 15 percent.*
6. *A minimum centerline turning radius of 45 feet for the curve.*

Response: The proposed development includes 320 multi-family dwellings. Access to these units is provided through multiple driveways accommodating two-way traffic. All of the proposed accesses into the site are 24 feet or greater and are designed to satisfy these requirements. The access is also designed to satisfy the requirements for emergency vehicles. Compliance with the dimensional requirements of these standards will be illustrated with the final design drawings.

F. Where on-site maneuvering and/or access drives are necessary to accommodate parking, in no case shall said maneuvering and/or access drives be less than that required in Chapters 46 and 48 CDC.

Response: On-site maneuvering and access drives have been designed to comply with the applicable standards of Chapters 46 and 48 of the West Linn CDC. Compliance with the dimensional requirements of these provisions will be illustrated with the final design drawings.

G. In order to facilitate through traffic and improve neighborhood connections, the developer shall make all local street connections identified in the Transportation System Plan, Table 17 and Figure 12, that are within the boundaries of the project, which may necessitate construction of a public street through a multifamily site.

Response: There are no local street connections identified in the TSP, Table 17 or figure 12 within the boundaries of the project site. This standard is not applicable to the proposed development.

H. Gated accessways to residential development other than a single-family home are prohibited.

Response: Gated accessways are not proposed with this development.

SECTION 48.040: MINIMUM VEHICLE REQUIREMENTS FOR NON-RESIDENTIAL USES

Access, egress, and circulation system for all non-residential uses shall not be less than the following:

A. *Service drives for non-residential uses shall be fully improved with hard surface pavement:*
   1. *With a minimum of 24-foot width when accommodating two-way traffic; or*
   2. *With a minimum of 15-foot width when accommodating one-way traffic. Horizontal clearance shall be two and one-half feet wide on either side of driveway.*
   3. *Meet the requirements of CDC 48.030(E)(3) through (6).*
   4. *Pickup window driveways may be 12 feet wide unless the Fire Chief determines additional width is required.*

Response: As mentioned previously, the proposed development is a mixed-use development that includes 320 multi-family dwellings and approximately 10,520 square feet of flex commercial/retail space. Access to the development is provided through multiple driveways accommodating two-way traffic. All the proposed accesses are 24 feet or greater and designed to satisfy these requirements. The access is designed to satisfy the requirements for emergency vehicles. Compliance with the dimensional requirements of these standards will be illustrated with the final design drawings.

B. *All non-residential uses shall be served by one or more service drives as determined necessary to provide convenient and safe access to the property and designed according to CDC 48.030(A). In no case shall the design of the service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street, other than an alley.*

Response: There are no service drives proposed with the development. All access and circulation is proposed to occur on site. Due to the continuous design of the on-site circulation, there is no reason that any vehicle would need to back into a public street.

C. *All on-site maneuvering and/or access drives shall be maintained pursuant to CDC 46.130.*

Response: All on-site maneuvering will be paved and designed to satisfy the City of West Linn design standards. The project site will be maintained by the owners of the development.

D. *Gated accessways to non-residential uses are prohibited unless required for public safety or security.*

Response: As stated previously, there are no gated accessways proposed with this development.

SECTION 48.050: ONE-WAY VEHICULAR ACCESS POINTS

Where a proposed parking facility plan indicates only one-way traffic flow on the site, it shall be accommodated by a specific driveway serving the facility, and the entrance drive shall be situated closest to oncoming traffic, and the exit drive shall be situated farthest from oncoming traffic.

Response: One-way vehicular access points are not proposed with this development. This standard is not applicable to the development.

SECTION 48.060: WIDTH AND LOCATION OF CURB CUTS AND ACCESS SEPARATION REQUIREMENTS

A. *Minimum curb cut width shall be 16 feet.*

Response: Curb cuts for the proposed driveways are intended to accommodate two-way traffic and will exceed the minimum curb cut width of 16 feet. Please see the proposed site plan submitted with this application.

B. Maximum curb cut width shall be 36 feet, except along Highway 43 in which case the maximum curb cut shall be 40 feet. For emergency service providers, including fire stations, the maximum shall be 50 feet.

Response: None of the proposed curb cuts will exceed 36 feet in width. The project site is not located along Highway 43 and does not include access to emergency services. Please see the proposed site plan submitted with this application.

C. No curb cuts shall be allowed any closer to an intersecting street right-of-way line than the following:
1. *On an arterial when intersected by another arterial, 150 feet.*
2. *On an arterial when intersected by a collector, 100 feet.*
3. *On an arterial when intersected by a local street, 100 feet.*
4. *On a collector when intersecting an arterial street, 100 feet.*
5. *On a collector when intersected by another collector or local street, 35 feet.*
6. *On a local street when intersecting any other street, 35 feet.*

Response: Curb cuts proposed with this development are onto Tannler Drive, a designated neighborhood collector within the TSP. The site has been designed to satisfy the access spacing requirements of the TSP which is 50 feet. This standard is not applicable to the proposed development.

D. There shall be a minimum distance between any two adjacent curb cuts on the same side of a public street, except for one-way entrances and exits, as follows:
1. *On an arterial street, 150 feet.*
2. *On a collector street, 75 feet.*
3. *Between any two curb cuts on the same lot or parcel on a local street, 30 feet.*

Response: The access spacing requirements for neighborhood collectors is 50 feet as required by the TSP and discussed earlier in this code. This standard is not applicable to the proposed development.

E. A rolled curb may be installed in lieu of curb cuts and access separation requirements.

Response: Rolled curbs are not proposed in lieu of curb cuts and access separation requirements.

F. For non-residential development, curb cuts shall be kept to the minimum, particularly on Highway 43. Consolidation of driveways is preferred. The standard on Highway 43 is one curb cut per business if consolidation of driveways is not possible.

Response: The proposal is for approval of a mixed-use development that is not located on Highway 43. The number of driveways proposed to serve the site is simply to accommodate resident and visitor access as well as to meet the emergency and service access needs of the development.

G. Clear vision areas shall be maintained, pursuant to Chapter 42 CDC, and required line of sight shall be provided at each driveway or accessway, pursuant to the West Linn Public Works Design Standards.

Response: As stated previously in this narrative, clear vision areas will be illustrated on the final design drawings and the owner is aware of the requirement to maintain the clear vision areas. This standard is an on-going requirement of development.

SECTION 48.080: BICYCLE AND PEDESTRIAN CIRCULATION

A. Within all multifamily developments, each residential dwelling shall be connected to vehicular parking stalls, common open space, and recreation facilities by a pedestrian pathway system having a minimum width of six feet and constructed of concrete, asphalt, brick or masonry pavers, or other hard surface. The pathway material shall be of a different color or composition from the driveway. (Bicycle routes adjacent to the travel lanes do not have to be of different color or composition.)

B. Bicycle and pedestrian ways within a subdivision shall be constructed according to the provisions in CDC 85.200(C).

C. Bicycle and pedestrian ways at commercial or industrial sites shall be provided according to the provisions of Chapter 55 CDC, Design Review.

Response: All the proposed uses within the development are connected to vehicular parking and common areas by a comprehensive system of pedestrian sidewalks. The proposed sidewalks will be eight feet in width adjacent to all vehicular parking stalls and six feet in all other locations. The proposed sidewalks will be constructed of concrete and protected from vehicular circulation by a six-inch curb. The development does not include a subdivision. The site plan that accompanies this application illustrates that it's feasible for this site to satisfy these requirements. Compliance with the dimensional requirements will be illustrated in the final design documents.

CHAPTER 52: SIGNS

Response: No signs are proposed with the project at this time. However, when they are proposed they will be designed to comply with all applicable standards and the contractor will obtain all necessary permits prior to installation.

CHAPTER 53: SIDEWALK USE

SECTION 53.030: STANDARDS

Displays and tables may be placed, and customer service may be conducted, on sidewalks subject to the following:

A. A pedestrian accessway, a minimum of four feet in width, shall be maintained free of obstructions on all sidewalks.

B. Displays, tables, and customer service shall not extend beyond the frontage associated with the products or service, with the exception that businesses at street intersections with extended sidewalks may use the extended sidewalk consistent with this section.

C. Permission from the Oregon Department of Transportation for use of sidewalks in state right-of-way.

Response: The tenants of the flex commercial spaces are not yet known, and there are no anticipated displays or tables for customer services on the sidewalks with the current proposal. If in the future this is proposed, it will be feasible for the displays and/or tables to meet the above standards.

CHAPTER 54: LANDSCAPING

SECTION 54.020: APPROVAL CRITERIA

A. Tree preservation.

1. *Intent and guidance. In designing the new project, every reasonable attempt should be made to preserve and protect existing trees and to incorporate them into the new landscape plan. Similarly, significant landscaping (e.g., bushes, shrubs) should be integrated. The rationale is that saving a 30-foot-tall mature tree helps maintain the continuity of the site, they are qualitatively superior to two or three two-inch caliper street trees, they provide immediate microclimate benefits (e.g., shade), they soften views of the street, and they can increase the attractiveness, marketability, and value of the development.*
2. *Inventory required. Every development proposal shall submit an inventory of existing site conditions, which includes significant trees and heritage trees.*
3. *Repealed by Ord. 1754.*
4. *Developers must also comply with the municipal code chapter on tree protection and, if applicable, with CDC 55.100(B) or 55.105(B).*
5. *Heritage trees. Heritage trees are trees which, because of their age, type, notability, or historical association, are of special importance. Heritage trees are trees designated by the City Council following review of a nomination. A heritage tree may not be removed without a public hearing at least 30 days prior to the proposed date of removal. Development proposals involving land with heritage tree(s) shall be required to protect and save the tree(s). Further discussion of heritage trees is found in the municipal code.*

Response: The proposed development has been designed to minimize tree removal. There are large and more significant stands of trees located at the northern end of the subject site. A certified arborist has been hired to inventory the trees on site, assess their health, and recommend protection measures to ensure that they survive the proposed construction and thrive once the development opens and is occupied. According to the project arborist, there are no Heritage trees located on the property. The final design documents will include a tree protection plan that complies with the applicable standards of CDC chapter 55.

B. Landscaping – By type, location and amount.

1. *Residential uses (non-single-family). A minimum of 25 percent of the gross site area including parking, loading and service areas shall be landscaped, and may include the open space and recreation area requirements under CDC 55.100 or 55.105, as applicable. Parking lot landscaping may be counted in the percentage.*

Response: The site is 11.36 acres in size. The proposed development is mixed-use and will landscape 72.4 percent of the gross site as illustrated on the proposed site plan provided with this application.

2. *Non-residential uses. A minimum of 20 percent of the gross site area shall be landscaped. Parking lot landscaping may be counted in the percentage.*

Response: As indicated above, this is a mixed-use development. The site is 11.36 acres in size. The proposed development is mixed-use and will landscape 72.4 percent of the gross site as illustrated on the proposed site plan provided with this application.

3. *Parking area landscaping – All uses (residential uses (non-single-family) and non-residential uses):*

a. *There shall be one shade tree planted for every eight parking spaces, except as required under subsection (B)(3)(d) of this section. Shade trees are defined as medium to large trees with a canopy, at maturity, at least 40 feet in diameter. These trees shall be evenly distributed throughout the parking lot to provide shade.*

Response: It is feasible for the proposed development to satisfy the parking area landscape requirements of this chapter. Compliance with these dimensional requirements will be provided with the final design documents.

b. *Parking lots with over 20 spaces shall have a minimum 10 percent of the interior of the parking lot devoted to landscaping. Pedestrian walkways in the landscaped areas are not to be counted in the percentage. The perimeter landscaping, as provided in subsection (B)(3)(h) of this section, shall not be included in the 10 percent figure.*

Response: The proposed parking lots will have more than 20 spaces and is therefore subject to these landscape requirements. Given the size of the site, it is feasible that the proposed development can comply with these standards. Compliance will be illustrated in the final design documents.

c. *Parking lots with 10 to 20 spaces shall have a minimum five percent of the interior of the parking lot devoted to landscaping. The perimeter landscaping, as provided in subsection (B)(3)(h) of this section, shall not be included in the five percent.*

Response: The proposed development includes a parking lot with more than 20 spaces. This standard is not applicable to this development.

d. *Parking lots with fewer than 10 spaces shall have perimeter landscaping, if required under subsection (B)(3)(h) of this section, and at least two shade trees.*

Response: The proposed development includes a parking lot with more than 20 spaces. This standard is not applicable to this development.

e. *Non-residential parking areas paved with a permeable parking surface may reduce the required minimum interior landscaping by one-third for the area with the permeable parking surface only.*

Response: No permeable parking is proposed with this development. This standard is not applicable to the proposed development.

f. *The landscaped areas shall not have a width of less than five feet and shall be uniformly distributed throughout the parking or loading area.*

Response: As illustrated in the site plan attached to this submittal, the landscaped areas are uniformly distributed throughout the parking areas and none of the landscaped areas are less than five feet in width. Compliance with these standards will be illustrated in the final landscape plans.

g. *The soils, site, proposed soil amendments, and proposed irrigation system shall be appropriate for the healthy and long-term maintenance of the proposed plant species.*

Response: Any proposed soil amendments will be illustrated in the final landscape plans. The proposed irrigation system will be an as-built system intended to ensure the establishment of the proposed plants as well as the healthy and long-term maintenance of the proposed landscaping. Compliance with this standard will be illustrated in the final landscape plans.

h. A parking, loading, or service area which abuts a street shall be set back from the right-of-way line by perimeter landscaping in the form of a landscaped strip at least 10 feet in width. When a parking, loading, or service area or driveway is contiguous to an adjoining lot or parcel, there shall be an intervening five-foot-wide landscape strip. The landscaped area shall contain:

1) Trees spaced as appropriate to the species, not to exceed 30 feet apart on center, on the average;
2) Shrubs, not to reach a height greater than three feet, six inches, spaced no more than five feet apart on the average; and
3) Vegetative ground cover such as grass, wildflowers, or other landscape material to cover 100 percent of the exposed ground within two growing seasons. No bark mulch shall be allowed except under the canopy of low level shrubs.

Response: It is feasible for the proposed development to satisfy these requirements. As proposed and illustrated on the submitted site plan, all the parking areas are setback from the street right-of-way line and provided with a landscape strip that meets or exceeds ten feet. The perimeter parking and maneuvering areas adjacent to surrounding lots are provided with a landscaped that meets or exceeds 5 feet. Compliance with the landscape dimensional requirements will be provided in the final landscape plans.

i. If over 50 percent of the lineal frontage of the main street or arterial adjacent to the development site comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet in width and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. This extra requirement only applies to one street frontage.

Response: There is no proposed parking fronting any of the surrounding streets. Further, none of the surrounding streets are designated arterials. This standard is not applicable to the proposed development.

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

Response: All areas in the proposed parking lots not used for parking, maneuvering, or circulation will be landscaped as required. Compliance with this standard will be illustrated in the final landscape plans.

k. The landscaping in parking areas shall maintain minimum vision clearance as provided in Chapter 42 CDC, Clear Vision Areas.

Response: As stated previously in this narrative all vision clearance will be maintained in accordance with CDC Chapter 42. Compliance with these standards will be illustrated in the final design drawings.

4. *Other landscaping standards – All uses (residential uses (non-single-family) and non-residential uses):*
    a. *Outdoor storage areas, service areas (loading docks, refuse deposits, and delivery areas), and above-ground utility facilities shall be buffered and screened to obscure their view from adjoining properties and to reduce noise levels to acceptable levels at the property line. The adequacy of the buffer and screening shall be determined by the criteria set forth in CDC 55.100(C)(1) or 55.105(G), as applicable.*

Response: The proposed trash enclosures will be screened in accordance with these standards. Compliance with this standard will be illustrated in the final landscape drawings.

    b. *For non-residential development, crime prevention shall be considered and plant materials shall not be located in a manner which prohibits surveillance of public and semi-public areas (shared or common areas).*

Response: Given the size of the site and the layout of the development, it is feasible for the proposed development to satisfy this requirement. Compliance with this requirement will be illustrated in the final landscape drawings.

    c. *Irrigation facilities shall be located so that landscaped areas can be properly maintained and so that the facilities do not interfere with vehicular or pedestrian circulation.*

Response: Proposed irrigation facilities will be as-built systems constructed by the contractor. All proposed irrigation will be buried and will not interfere with vehicular or pedestrian circulation.

    d. *For commercial, office, and other non-residential sites, the developer shall select trees that possess the following characteristics:*
        1) *Provide generous "spreading" canopy for shade.*
        2) *Roots do not break up adjacent paving.*
        3) *Tree canopy spread starts at least six feet up from grade in, or adjacent to, parking lots, roads, or sidewalks unless the tree is columnar in nature.*
        4) *No sticky leaves or sap-dripping trees (no honey-dew excretion).*
        5) *No seed pods or fruit-bearing trees (flowering trees are acceptable).*
        6) *Disease-resistant.*
        7) *Compatible with planter size.*
        8) *Drought-tolerant unless irrigation is provided.*
        9) *Attractive foliage or form all seasons.*

Response: The landscape architect is aware of this standard and will select trees for the landscaping that satisfy the requirements. Compliance with this requirement will be illustrated in the final landscape drawings.

    e. *Plant materials (shrubs, ground cover, etc.) shall be selected for their appropriateness to the site, drought tolerance, year-round greenery and coverage, staggered flowering periods, and avoidance of nuisance plants (Scotch broom, etc.).*

Response: The landscape architect is aware of this standard and will select trees for the landscaping that satisfy the requirements. Compliance with this requirement will be illustrated in the final landscape drawings.

C. *Landscaping (trees) in new subdivision. […]*

Response: The proposed development does not include a subdivision. This standard is not applicable to this development.

D. *Landscaping requirements in water resource areas (WRAs). Pursuant to CDC 32.110(E)(3) the requirements of this chapter relating to total site landscaping, landscaping buffers, landscaping around parking lots, and landscaping the parking lot interior may be waived or reduced in a WRA application without a variance being required.*

Response: There are no water resources areas located within or adjacent to the project site. This standard is not applicable to the proposed development.

SECTION 54.030: PLANTING STRIPS FOR MODIFIED AND NEW STREETS

All proposed changes in width in a public street right-of-way or any proposed street improvement shall include allowances for planting strips, unless an applicant demonstrates that this is not feasible and requests an exception as part of a discretionary review. Plans and specifications for planting such areas shall be integrated into the general plan of street improvements. This chapter requires any multifamily, commercial, or public facility which causes change in public right-of-way or street improvement to comply with the street tree planting plan and standards.

Response: The proposed development will include frontage improvements along Tannler Drive and Blankenship. A design exception will be submitted to the City Engineer requesting modifications to the street section along Tannler Drive to provide a curb-tight sidewalk with the planter strip and street tress provided behind the sidewalk. The exception will include a request to eliminate the bike lane due to the steepness of the facility. Compliance with this standard will be illustrated in the final design drawings.

SECTION 54.040: INSTALLATION

A. *All landscaping shall be installed according to accepted planting procedures.*
B. *The soil and plant materials shall be of good quality.*
C. *Landscaping shall be installed in accordance with the provisions of this code.*
D. *Certificates of occupancy shall not be issued unless the landscaping requirements have been met or other arrangements have been made and approved by the City such as the posting of a bond.*

Response: The applicant is aware of this requirement all improvements will be professionally installed consistent with these standards prior to a request for a certificate of occupancy.

SECTION 54.050: PROTECTION OF STREET TREES

Street trees may not be topped or trimmed unless approval is granted by the Parks Supervisor or, in emergency cases, when a tree imminently threatens power lines.

Response: There are no street trees along the site's existing frontage. New street trees will be planted along the site's frontage with the proposed street improvements. The applicant is aware that this is an ongoing standard that will apply to the development in the future.

SECTION 54.060: MAINTENANCE

A. *The owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of 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.*

B. *All plant growth in interior landscaped areas shall be controlled by pruning, trimming, or otherwise so that:*
   1. *It will not interfere with the maintenance or repair of any public utility;*
   2. *It will not restrict pedestrian or vehicular access; and*
   3. *It will not constitute a traffic hazard because of reduced visibility.*

Response: The applicant is aware that this is an ongoing standard that will apply to the development in the future.

SECTION 54.070: SPECIFICATION SUMMARY

	Area/Location	Landscaping Req'd.
1.	Between parking lot and right-of-way. CDC 54.020(B)(3)(h).	10 ft.
2.	Between parking lot and other lot. CDC 54.020(B)(3)(f).	5 ft.
3.	Between parking lot and right-of-way if parking lot comprises more than 50 percent of main right-of-way frontage. CDC 54.020(B)(3)(i).	15 ft.
4.	Percentage of residential/multifamily site to be landscaped. CDC 54.020(B)(1).	25%
5.	Percentage of non-residential (commercial/industrial/office) site to be landscaped. CDC 54.020(B)(2).	20%
6.	Percentage of 10 – 20 car parking lot to be landscaped (excluding perimeter). CDC 54.020(B)(3)(a).	5%
7.	Percentage of 1 – 9 car parking lot to be landscaped (excluding perimeter). CDC 54.020(B)(3)(a).	0%
8.	Percentage of 20+ car parking lot to be landscaped (excluding perimeter). CDC 54.020(B)(3)(a).	10%

Response: As stated previously, compliance with these dimensional requirements will be illustrated in the final landscape drawings.

CHAPTER 55: DESIGN REVIEW

SECTION 55.100: STANDARDS – CLASS II DESIGN REVIEW – GENERAL/DISCRETIONARY

Response: The proposed project is a mixed use development with residential uses. The project will be reviewed as a Class II Design Review under clear and objective standards as outlined in Section 55.105. Please see the below section for details on compliance with approval criteria.

SECTION 55.105: APPROVAL STANDARDS – CLASS II DESIGN REVIEW – RESIDENTIAL/CLEAR AND OBJECTIVE

A. *Applicability. Class II Design Review applications for the development of one or more new dwelling units, as applicable under CDC 55.020(B), are subject to the clear and objective approval standards in this*

section. Proposals where the applicant cannot or chooses not to meet the clear and objective approval standards in this section may apply under the discretionary Class II approval standards in CDC 55.100. The approval authority shall make findings with respect to the following criteria when approving, approving with conditions, or denying a Class II design review application for residential development:

Response: The proposed development includes one or more new dwelling units and is therefore subject to the clear and objective approval standards in this section.

B. The provisions of the following chapters shall be met:
1. *Chapter 34 CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses.*
2. *Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.*
3. *Chapter 41 CDC, Building Height, Structures on Steep Lots, Exceptions.*
4. *Chapter 42 CDC, Clear Vision Areas.*
5. *Chapter 44 CDC, Fences.*
6. *Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas.*
7. *Chapter 48 CDC, Access, Egress and Circulation.*
8. *Chapter 52 CDC, Signs.*
9. *Chapter 54 CDC, Landscaping.*

Response: All of the applicable standards in the above listed Chapters can be satisfied by the proposed development. Please see the responses within each chapter of this narrative, as well as the supporting plan sets and reports to demonstrate that compliance is feasible. The final design documents will illustrate compliance with the applicable standards for each of those chapters.

C. Relationship to the natural and physical environment.
1. *The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the municipal code, shall be saved. If requested by the applicant, diseased heritage trees, as determined by the City Arborist, may be removed.*

Response: There are no heritage trees on the subject property. This standard is not applicable to the proposed development.

2. *The following shall be protected pursuant to the criteria of subsections (C)(2)(a) through (f) of this section: all heritage trees, as defined in the municipal code and all significant trees and significant tree clusters, as defined in CDC 2.030.*
   a. *The protected area for heritage trees, significant trees, and significant tree clusters is defined as the area within the dripline of the tree(s), plus an additional 10-foot measurement beyond the dripline.*
   b. *Required protected areas include the following:*
      1) *On Type I and II lands, protected areas are required for all heritage trees and all significant trees and significant tree clusters. The protected area(s) shall also be preserved within a dedication or easement.*
      2) *On non-Type I and II lands, protected areas are required for all heritage trees, significant trees, and significant tree clusters. However, in no case shall more than 20 percent of the non-Type I and II lands on the site be required to be set aside within protected areas.*

Where the percentage of total protected area exceeds 20 percent of the non-Type I and II lands, and includes both heritage trees and significant trees or tree clusters, the priority shall be to first protect the heritage trees, followed by protecting the significant tree clusters, and significant trees. Exemptions of subsections (C)(2)(d), (e), and (f) of this section shall apply.

Response: As stated previously, there are no heritage trees on site. Significant trees are defined as, "A tree with a minimum of six-inch DBH for Oregon white oak, Pacific madrone, and Pacific dogwood, and 12-inch DBH for all other tree species. If the tree splits into multiple trunks above grade but below breast height, the diameter shall be determined by adding the total diameter of all trunks two inches or greater DBH." Significant tree clusters are defined as, "Three or more significant trees with overlapping driplines," within the CDC. The lands on site have been classified and the trees are being inventoried by the project arborist. To the extent possible the significant trees on site have been preserved and are set aside in larger open spaces located at the north end of the proposed development. Protection measures, as prescribed by the project arborist, will be implemented during construction of the proposed development. The protected areas will be set preserved within an easement.

c. *Development within required protected areas is prohibited except as specified in subsections (C)(2)(d), (e), and (f) of this section.*

Response: The design of the proposed development was guided by information provided by the project arborist. Tree protection was a key consideration in the design given the subject sites proximity to the White Oak Savannah located on the east side of Tannler Drive. All development within required protected areas is either prohibited or will be limited to only those activities permitted by subsections (C)(2)(d), (e), and (f) of the code as discussed below.

d. *The following are exempt from the requirements of subsections (C)(2)(a) through (c) of this section: significant trees, significant tree clusters, or heritage trees that would prevent the extension of stubbed streets from abutting properties; and where a row of significant trees or tree clusters would block access, per construction code standards, to a lot or parcel.*

Response: There are no stubbed streets from abutting properties and there is not a row of significant trees or tree clusters that would block access. These exemptions are not applicable to the proposed development.

e. *The site layout shall achieve at least 70 percent of maximum density for the developable net area. The developable net area excludes all Type I and II lands and up to 20 percent of the remainder of the site for the purpose of protecting significant trees or significant tree clusters as specified in this subsection (C)(2).*

Response: There is not a maximum density prescribed for the Office Business Center zoning designation. This standard is not applicable to this development.

f. *Where an applicant proposes grading within the required protected area for significant tree(s) or significant tree clusters, the applicant may request an exception to the tree protection requirements of this section in order to remove the significant tree(s) or tree cluster(s). The applicant shall submit evidence to the Planning Director that the grading is necessary for the development of street grades, per City construction codes, and that all reasonable alternative*

grading plans have been considered and cannot work. The applicant shall then submit a mitigation plan to the City Arborist to compensate for the removal of the tree(s) on an "inch-by-inch" basis (e.g., a 48-inch Douglas fir could be replaced by 12 trees, each four inches). The mix of tree sizes and types shall be approved by the City Arborist.

Response: Proposed grading to provide access to residents, service providers, and emergency services is necessary at the northern end of the site. It's not likely that all of the significant trees can be avoided given the number of trees in that location. Some trees have been proposed for removal, will be discussed in the arborist report, and identified in the plan set. Mitigation for those trees removed will be calculated subject to these standards and planted on site in the larger open space areas with installation of the proposed landscape. A mitigation plan will be provided with the final design drawings as required.

3. *The structures shall not be located in areas subject to slumping and sliding. The Comprehensive Plan Background Report's Hazard Map, or updated material as available and as deemed acceptable by the Planning Director, shall be the basis for preliminary determination.*

Response: While there are steep slopes on the subject property, there were not any areas identified by the geotechnical engineer or within the City's online maps to suggest that any of the development site is located in an area that is subject to slumping and sliding. Please see the geotechnical report provided with this application.

D. *Building orientation and entries. The following standards are intended to create and maintain street frontages that are attractive, create an environment that is conducive to walking, and provide natural surveillance of public spaces.*
   1. *Main entrance. At least one main entrance for each residential structure shall meet the requirements of both subsections (D)(1)(a) and (b) of this section.*
      a. *The entry shall be no further than eight feet behind the longest street-facing wall of the building; and*
      b. *The entry shall either face the street, be at an angle of no more than 45 degrees from the street, or open to a porch. If the entry opens to a porch, the porch shall meet all of the following standards:*
         1) *Have a minimum area of 25 square feet, with a minimum depth of five feet;*
         2) *Have at least one porch entry facing the street; and*
         3) *Have a roof that is a maximum of 12 feet above the floor of the porch and that covers at least 30 percent of the porch area.*

Response: It is feasible for the proposed buildings located along the Tannler Drive frontage at the location of the realignment and where the commercial/retail flex spaces are proposed, but the orientation of the remaining buildings is restricted due to site conditions. For this reason, a mandatory adjustment to building orientation standards as allowed by SB 1537 is requested. Compliance with the approval criteria of SB 1537 is discussed later in this narrative.

2. *Alternative for multifamily structures. As an alternative to subsection (D)(1)(a) of this section, an entrance to a multifamily structure may face a courtyard if the courtyard-facing entrance is located within 60 feet of a street and the courtyard meets the following standards:*
   a. *The courtyard must be at least 15 feet in width;*
   b. *The courtyard must abut a street; and*

c. The courtyard must be landscaped or hard-surfaced for use by pedestrians.

Response: Please see the response above. The orientation of the multifamily structures on this site is largely driven by the topography. While some of the buildings can satisfy these standards, not all of them can, so a mandatory adjustment under SB 1537 is requested for building orientation requirements with this application.

E. Architecture. The following standards are intended to promote building details in new residential construction that provide visual interest, contribute to a high-quality living environment for residents, give a sense of quality and permanence, and enhance compatibility with the surrounding community:

1. Windows. At least 15 percent of the area of each facade facing a street, and 20 percent of the ground floor facing a street, shall be glazing or entry doors with glazing insets.

a. Transparent windows allowing views from the dwelling to the street meet this standard. Up to 25 percent of the required area may also be met by privacy (translucent) windows, glass blocks, or entry doors with translucent glass.

b. Window area is considered the entire area within the outer window frame, including any interior window grid.

c. All of the window area of the street-facing wall(s) of an attached garage, and half of the total window area in the door(s) of an attached garage may be counted toward this standard.

d. Doors used to meet this standard contain glass and shall face the street or be at an angle of not more than 45 degrees from the street. Security viewing devices ("peepholes") do not by themselves meet this standard.

e. Door area is considered the portion of the door that moves. Door frames do not count toward this standard.

Response: According to the project architect, a licensed architect, the buildings are being designed to provide a minimum of at least 15 percent window area of each facade facing a street, and at least 20 percent of the ground floor facing the street is glazing or entry doors with glazing insets. This standard will be satisfied in the final drawings.

2. Articulation. All residential dwelling structures shall incorporate elements that break up all street-facing facades facing streets into smaller planes using four or more of the elements listed below. On corner or multi-frontage lots, four or more elements shall be provided on each street-facing facade. Architectural features that meet the standards in this subsection include the following features:

a. A covered porch with a minimum depth of five feet (measured horizontally from the face of the main facade) and a minimum length of six feet;

b. A balcony, at least four feet deep and eight feet wide, that is accessible from one interior room;

c. A bay window at least six feet wide, bumped out by at least two feet and extending from the top of the foundation to the top of the main facade wall;

d. A recessed building entry at least two feet deep, as measured horizontally from the face of the main building facade, and at least five feet wide;

e. A section of the facade, at least six feet in width, that is either recessed or bumped out by at least two feet deep from the front wall plane;

f. An offset on the building face of at least 16 inches from one exterior wall to the other;

g. A gabled dormer at least four feet wide and integrated into the roof form;

h. Roofline offset of at least two feet from the top surface of one roof to the top surface of the other; or

i. Other similar architectural features proposed by the applicant if approved by the review authority through discretionary review.

Response: The residential dwelling structures will incorporate the following elements;

a. A covered porch with a minimum depth of five feet (measured horizontally from the face of the main facade) and a minimum length of six feet;

b. A balcony, at least four feet deep and eight feet wide, that is accessible from one interior room;

e. A section of the facade, at least six feet in width, that is either recessed or bumped out by at least two feet deep from the front wall plane;

f. Roofline offset of at least two feet from the top surface of one roof to the top surface of the other; or

h. Roofline offset of at least two feet from the top surface of one roof to the top surface of the other; or

i. Other similar architectural features proposed by the applicant if approved by the review authority through discretionary review.

Compliance with this standard will be illustrated in the final drawings.

3. Detailed design elements. All residential dwelling structures shall provide at least nine of the following elements, on any street-facing facade. On all other facades, at least four of the following elements shall be provided:

c. A recessed building entry at least two feet deep, as measured horizontally from the face of the main building facade, and at least five feet wide;

d. Roof eaves on all elevations that project at least 12 inches from the intersection of the roof and the exterior walls;

e. A minimum of three gable end brackets (either triangular knee braces or rake brackets), spaced a maximum of 15 feet on center;

f. Roofline offset of at least two feet from the top surface of one roof to the top surface of the other;

g. Hip or gambrel roof design with a minimum pitch of 6/12;

h. Siding in gables which differs from the primary siding type (e.g., shingle siding in gable when primary siding is horizontal lap);

i. Tile roofs;

j. Fiber-cement horizontal lap siding between three and seven inches wide (the visible portion once installed);

k. Exterior finish materials covering at least 40 percent of the facade from one or more of the following: brick, fiber-cement shingles, stone, or stucco;

l. Window trim around all windows with a minimum width of three inches and a minimum thickness of five-eighths inches;

m. On any facade not facing a street, minimum 15 percent of the area in glazing or entry doors, consistent with subsections (E)(1)(a) through (e) of this section;

n. Recesses in all windows on a facade of at least three inches as measured horizontally from the face of the facade;

o. Mullions or window grids in all windows on a facade;

p. Attached garage width, as measured on the inside of the garage door frame, of 35 percent or less of the width of the street-facing facade;
q. Horizontal band or barge boards;
r. Color palette including four colors. Colors may be paint or intrinsic to the material (e.g., wood, brick, or stone). One main color shall cover at least 40 percent of the street-facing facade and each of the other colors shall be used on a minimum of four square feet; and/or
s. Other similar architectural features proposed by the applicant if approved by the review authority through discretionary review.

Response: The residential buildings are designed to incorporate the following design elements into the street facing facades;

j. A recessed building entry at least two feet deep, as measured horizontally from the face of the main building facade, and at least five feet wide;
k. Roof eaves on all elevations that project at least 12 inches from the intersection of the roof and the exterior walls;
m. Roofline offset of at least two feet from the top surface of one roof to the top surface of the other;
q. Fiber-cement horizontal lap siding between three and seven inches wide (the visible portion once installed);
s. Window trim around all windows with a minimum width of three inches and a minimum thickness of five-eighths inches;
t. On any facade not facing a street, minimum 15 percent of the area in glazing or entry doors, consistent with subsections (E)(1)(a) through (e) of this section;
x. Horizontal band or barge boards;
y. Color palette including four colors. Colors may be paint or intrinsic to the material (e.g., wood, brick, or stone). One main color shall cover at least 40 percent of the street-facing facade and each of the other colors shall be used on a minimum of four square feet; and/or
z. Other similar architectural features proposed by the applicant if approved by the review authority through discretionary review.

The residential buildings are also being designed to incorporate at least 4 of the above design elements on all other facades that do not face the street. This standard is met.

4. Transition stepbacks. The following standards apply to multifamily development and are intended to create transitions with nearby lower-density or smaller-scale residential development, in order to enhance compatibility of scale and to reduce the impacts of multifamily development on lower-density development. This standard applies to multifamily buildings that exceed 30 feet, where an abutting lot meets the criteria of subsection (E)(4)(a) or (b) of this section, or both. In such cases, the building on the subject site shall meet the standard in subsection (E)(4)(c) of this section.
a. The abutting lot is in the R-40, R-20, R-15, R-10, R-7, R-5, or R-4.5 zoning district.
b. The abutting lot has a pre-existing single-family detached home and is in a zoning district other than those listed in subsection (E)(4)(a) of this section. For the purposes of this section a "pre-existing single-family detached home" is one constructed prior to September 18, 2023.
c. The subject building shall be designed to "step back" the building height along the property line shared by the abutting lot that meets criteria of subsection (E)(4)(a) or (b) of this section. The

required height stepback shall be at least one foot for every one-foot increase in height above 30 feet.

Response: As stated earlier in this narrative, there are existing single-family homes adjacent to the northernmost property line. The structures associated with the proposed development that are closest to those property lines include single story carports and garages that will be well below 30 feet in height. Buildings 1 and 2, while close to the property line, are far enough away and step down the slope in a manner that should allow this standard to be satisfied. Compliance with this standard will be provided with the final design documents.

F. Vehicle parking. The automobile shall be shifted from a dominant role, relative to other modes of transportation, by the following means:
1. Limitation on parking frontage for multifamily developments.
a. Parking and vehicle use areas and garages adjacent to any public or private street frontage, except alleys, shall extend across no more than 50 percent of the street frontage.
b. No parking spaces, with the exception of underground parking, shall be placed within any required front yard area.
c. Parking areas shall not be located between buildings and a public or private street, except alleys.

Response: This standard is satisfied by the proposed development. None of the proposed parking is adjacent to the public street frontage or located within a required front yard. There is also no parking proposed between the streets and buildings.

G. Pedestrian access and circulation. The following standards are intended to ensure that pedestrian circulation systems for multifamily development are designed to provide clear, identifiable, safe, and convenient connections within the development and to adjacent uses and public streets/sidewalks:
1. Residential developments shall meet the pedestrian circulation standards in CDC 48.080(A).
2. Except as required for crosswalks, per subsection (G)(4) of this section, where a pedestrian pathway abuts a vehicle circulation area, it shall be physically separated by a curb that is raised at least six inches or by bollards.
3. All pedestrian pathways shall comply with the requirements of the Americans with Disabilities Act.
4. In order to provide safe crossings of streets, driveways, and parking areas, crossings shall be clearly marked with either contrasting paving materials (such as pavers, light-color concrete inlay between asphalt, or similar contrasting material) or reflective striping that emphasizes the crossing under low light and inclement weather conditions.
5. Pedestrian connections shall be provided between buildings and between the development and adjacent rights-of-way, transit stops, and commercial developments. At least one connection shall be made to each adjacent street and sidewalk for every 200 linear feet of street frontage. Sites with less than 200 linear feet of street frontage shall provide at least one connection to the street and/or sidewalk.

Response: The development is provided with a comprehensive pedestrian system that connects all the proposed structures to each other, to the on-site community clubhouse, and to the adjacent public street right of way. The current system includes a pedestrian path that bisects the property from the realigned Tannler Drive to the open space and covered picnic area at the north end of the site. Sidewalks extend from all of the buildings to Tannler Drive connecting all of the buildings and common areas to each other. Please see the site plan attached to this

submittal. Compliance with the pedestrian circulation standards has been discussed previously in this narrative, and compliance with these standards will be illustrated in the final design drawings.

H. Compatibility between adjoining uses, buffering, and screening.

1. Buffering. Where a multifamily development abuts a non-residential use or a property zoned R-40, R-20, R-15, R-10, R-7, R-5, or R-4.5, a landscape buffer shall be provided in accordance with the following standards:

a. The buffer shall have a minimum depth of 10 feet and shall extend for the length of the property line of the abutting use or uses.

b. The buffer area may only be occupied by utilities, screening, sidewalks, bikeways, landscaping, and approved vegetated post-construction stormwater quality facilities. No buildings, vehicular accessways or parking areas are allowed in a buffer area.

c. The minimum improvements within a buffer area shall consist of the following:

1) At least one row of trees. These trees will be not less than 10 feet high at the time of planting for deciduous trees and spaced not more than 30 feet apart and five feet high at the time of planting for evergreen trees and spaced not more than 15 feet apart. This requirement may be waived by the Director when it can be demonstrated that such trees would conflict with other purposes of this code (e.g., solar access).

2) At least five five-gallon shrubs or 10 one-gallon shrubs for each 1,000 square feet of required buffer area.

3) The remaining area treated with attractive ground cover (e.g., lawn, bark, rock, ivy, evergreen shrubs).

2. Screening. On-site screening from view from adjoining properties of parking, loading, and service areas for multifamily development shall be provided in accordance with the following standards:

a. A landscape buffer shall be provided that meets the standards in subsection (H)(1) of this section.

b. In addition, one of the following types of screening shall be provided:

1) One row of evergreen shrubs that will grow to form a continuous hedge at least four feet tall within two years of planting; or

2) A fence or masonry wall at least five feet tall constructed to provide a uniform sight-obscuring screen; or

3) An earth berm combined with evergreen plantings or a fence that forms a sight and noise buffer at least six feet tall within two years of installation.

4) Rooftop air cooling and heating systems and other mechanical equipment shall be screened from view from adjoining properties.

Response: This condition exists along the northern and eastern property lines. The buffer will be designed to include a mixture of trees, shrubs, and low growing ground cover or lawn. All of the on-site service areas will be screened by landscaping along the perimeter of the site and fencing or landscaping adjacent to the trash enclosures. Compliance with the required buffering and screening will be illustrated with the final landscape.

I. Noise. Where noise levels produced off site exceed the noise standards contained in West Linn Municipal Code Section 5.487, residential dwelling units shall be placed on the site in areas having minimal noise exposure or sound barriers shall be used to lessen noise impacts.

Response: There are no known surrounding uses that generate noise levels expected to exceed the noise standards contained in the West Linn Municipal code..

J. Private outdoor area. This section only applies to multifamily projects.
1. *Each dwelling unit shall have an outdoor private area (e.g., patio, terrace, porch, or balcony) of not less than 48 square feet in area;*
2. *The private outdoor area shall be screened from view from adjacent units or oriented to avoid direct lines of sight into adjacent units.*
3. *Except for front porches, private outdoor areas for at-grade dwellings shall be screened from view from public streets and shared outdoor areas.*

Response: It is feasible for the proposed development to satisfy this requirement for most units within the development. All of the upper floor units will be provided with a balcony. Ground floor units will be provided with ground floor patios. Both amenities will be designed to screen the view from adjacent units. For units where this standard cannot be achieved, an adjustment under SB 1537 has been requested. Compliance with these standards will be demonstrated in the final architectural.

K. Shared outdoor recreation areas. This section only applies to multifamily projects.
1. *Shared outdoor recreation areas are open spaces that provide recreational and social opportunities, such as playfields, improved playgrounds, swimming pools, tennis courts, community gardens, plazas, picnic areas, paths, and passive seating areas. Such areas must be improved and maintained for their intended use.*
2. *In addition to the requirements of subsection F of this section, usable outdoor recreation space shall be provided in residential developments for the shared or common use of all the residents in the following amounts:*
   a. *Studios up to and including two-bedroom units: 200 square feet per unit.*
   b. *Three or more bedroom units: 300 square feet per unit.*
3. *The required recreation space may be provided as follows:*
   a. *It may be all outdoor space; or*
   b. *It may be part outdoor space and part indoor space; for example, an outdoor tennis court and indoor recreation room; and*
   c. *Where some or all of the required recreation area is indoor, such as an indoor recreation room, then these indoor areas must be readily accessible to all residents of the development subject to clearly posted restrictions as to hours of operation and such regulations necessary for the safety of minors.*
   d. *No single area of outdoor recreational space shall encompass an area of less than 250 square feet. All common outdoor recreational space shall be clearly delineated and readily identifiable as such.*
4. *All shared outdoor recreational spaces shall be visible from the windows of at least 20 percent of the dwelling units, or two dwelling units, whichever is greater, to facilitate crime prevention and safety.*

Response: Given the size of the site, It is feasible for the development to satisfy this requirement through the provision of a large open space located in the northern portion of the property, within the community clubhouse and pool, and within other designated open space or plaza areas associated with the development. Compliance with these standards will be illustrated as part of the final landscape design.

L. Demarcation of public, semi-public, and private spaces. The structures and site improvements shall be designed so that public areas such as streets or public gathering places, semi-public areas, and private outdoor areas are clearly defined in order to establish persons having a right to be in the space, to provide for crime prevention, and to establish maintenance responsibility. These areas shall be defined by one or more of the following:

1. *A deck, patio, fence, low wall, hedge, or draping vine;*
2. *A trellis or arbor;*
3. *A change in level;*
4. *A change in the texture of the path material;*
5. *Sign; or*
6. *Landscaping.*

Response: It is feasible for the proposed development to satisfy this requirement through a combination of improvements, signage, and landscaping included in the enumerated list above. Compliance with these requirements will be illustrated in the final landscape and design documents.

M. Public transit.

1. *Provisions for public transit may be required where the site abuts an existing public transit route. The required facilities shall be based on the following:*
   a. *The location of other transit facilities in the area.*
   b. *The size and type of the proposed development.*
   c. *The rough proportionality between the impacts from the development and the required facility.*
2. *The required facilities shall be limited to such facilities as the following:*
   a. *A waiting shelter with a bench surrounded by a three-sided covered structure, with transparency to allow easy surveillance of approaching buses.*
   b. *A turnout area for loading and unloading designed per regional transit agency standards.*
   c. *Hard-surface paths connecting the development to the waiting and boarding areas.*
   d. *Regional transit agency standards shall, however, prevail if they supersede these standards.*
3. *The primary building entrance shall not be more than 200 feet from the transit stop with a pedestrian link in compliance with subsection G of this section.*
4. *Multifamily projects (over 40 units) may be required to provide for the relocation of transit stops to the front of the site if the existing stop is within 200 to 400 yards of the site and the exaction is roughly proportional to the impact of the development. The multifamily project may be required to provide new facilities in those cases where the nearest stop is over 400 yards away. If a new or relocated transit stop is to be required, this information shall be provided to the applicant at the pre-application conference, or before the application is deemed complete. The transit stop shall be built per subsection (M)(2) of this section.*

Response: It is feasible for the proposed development to satisfy these requirements. There is an existing transit stop on Blankenship Rd. The applicant would expect a condition of approval should the transit agency deem improvements or relocation of the transit stop is necessary given the size of the development.

N. Public facilities. An application may only be approved if adequate public facilities, as defined in CDC 2.030, will be available to provide service to the property prior to occupancy.

1. *Streets.*

a. *In situations where the level-of-service or volume-to-capacity performance standard for an affected City or State roadway is currently failing or projected to fail to meet the standard, and an improvement project is not programmed, the development shall avoid further degradation of the affected transportation facility. Mitigation must be provided to bring the facility performance standard to existing conditions at the time of occupancy.*
b. *Sufficient right-of-way and slope easement shall be dedicated to accommodate all abutting streets to be improved to City standards, in accordance with the West Linn Public Works Design Standards.*
c. *The realignment or redesign of roads shall be consistent with West Linn Public Works Design Standards and shall be consistent with applicable code restrictions regarding resource areas, pursuant to Chapter 27 CDC, Flood Management Areas, Chapter 28 CDC, Willamette and Tualatin River Protection, and Chapter 32 CDC, Water Resource Area Protection.*
d. *Streets shall be installed per the standards in CDC 85.200(A). Sidewalks shall be installed per CDC 85.200(A)(16) and 92.010(H), and applicable provisions of this chapter.*
e. *Where streets bisect or traverse water resource areas (WRAs) the street width shall be reduced to the "constrained" cross-section width indicated in the TSP for the applicable street type. The street design shall also be consistent with habitat friendly provisions of CDC 32.060(I).*
f. *If a traffic impact analysis is required by CDC 85.170(B)(2)(d), the applicant shall construct or cause to be constructed any off-site improvements identified in the Transportation System Plan that are necessary to mitigate the impacts from the proposed development as identified by the analysis. In no case shall an applicant be required to contribute more than their proportionate share of the costs. Proportionate share of the costs is established by the proportionality analysis required as part of the traffic impact analysis.*

Response: The site has frontage onto two existing public streets. Those streets do not traverse a water resource area in this vicinity. The street realignment of Tannler Drive to meet the City's TSP and frontage improvements along both streets are anticipated as part of this development. Frontage improvements including curb, gutter, sidewalk, and planter strips with street trees are anticipated with the proposed development. A traffic impact analysis is in process and will be provided with the final design documents that illustrate compliance with these requirements.

2. *Storm detention and treatment and geologic hazards. Per the submittals required by CDC 55.130 and 92.010(E), all proposed storm detention and treatment facilities must comply with the standards for the improvement of public and private drainage systems located in the West Linn Public Works Design Standards, and the applicant must provide sufficient factual data to support the conclusions of the submitted plan. Per the submittals required by CDC 55.130(E), the applicant must demonstrate that the proposed methods of rendering known or potential hazard sites safe for development, including proposed geotechnical remediation, are feasible and adequate to prevent landslides or other damage to property and safety. The review authority may impose conditions, including limits on type or intensity of land use, which it determines are necessary to mitigate known risks of landslides or property damage.*

Response: All on-site stormwater will be managed on site. Stormwater will be mechanically treated and detained underground before slowly being discharged to the public storm sewer. Stormwater generated with the new public facilities will be captured and conveyed to a public storm facility to be constructed along Blankenship Road. There, the stormwater will be treated and detained prior to being discharged into the public storm sewer.

3. *Municipal water. A registered civil engineer shall prepare a plan for the provision of water which demonstrates to the City Engineer's satisfaction the availability of sufficient volume, capacity, and pressure to serve the proposed development's domestic, commercial, and industrial fire flows. All plans will then be reviewed by the City Engineer.*

Response: The conceptual utility plan and all final utility plans are being designed by a registered and licensed civil engineer. As proposed, a private water system connecting to the existing public water system in the Greene Street Right-of-Way will be extended into the site to serve the buildings in the '2 Bland' water pressure zone and a water system connected to the existing public water system in Tannler Drive will be extended into the site to serve all of the buildings within the '1 Willamette' pressure zone. The final design documents and reports will demonstrate compliance with the City design manual for utility improvements associated with this development.

4. *Sanitary sewers. A registered civil engineer shall prepare a sewerage collection system plan which demonstrates sufficient on-site capacity to serve the proposed development. The City Engineer shall determine whether the existing City system has sufficient capacity to serve the development.*

Response: The conceptual utility plan and all final utility plans are being designed by a registered and licensed civil engineer. As proposed, a sewer system connecting to the existing system in Tannler Drive will serve all the buildings on-site. The final design documents and reports will demonstrate compliance with the City design manual for utility improvements associated with this development.

5. *Solid waste and recycling storage areas. Appropriately sized and located solid waste and recycling storage areas shall be provided that are sized and located in accordance with West Linn Municipal Code Section 4.500 and must provide adequate capacity to accommodate the minimum service volumes identified in Metro Code Section 5.15-2040.*

Response: It is feasible for the proposed development to satisfy these requirements. As proposed, the solid waste and recycling storage facilities are located throughout the site. The solid waste service provider is being consulted in the design and location of the facilities. Compliance with these requirements will be provided in the final design drawings.

O. Crime prevention and safety/defensible space.

1. *Windows shall be located so that all shared or common use areas, including vehicle parking areas, bicycle parking, shared outdoor areas, and pedestrian paths, are visible from at least 20 percent of the dwelling units, or two dwelling units, whichever is greater.*
2. *Mailboxes, recycling, and solid waste facilities shall be located in lighted areas having vehicular or pedestrian traffic.*
3. *Shared or common use areas, including building entries, vehicle parking areas, bicycle parking, shared outdoor areas, and pedestrian paths, shall be lighted to the following minimum levels of foot-candles to enhance safety and allow use at night:*
   a. *Building entries: minimum three foot-candles.*
   b. *Pedestrian paths: minimum two foot-candles.*
   c. *Required bicycle parking: minimum three foot-candles.*
   d. *Vehicle parking: minimum two foot-candles.*

4. *Light fixtures shall also be provided in potentially dangerous areas such as parking lots, stairs, ramps, and abrupt grade changes.*
5. *Fixtures shall be placed at a height so that light patterns overlap at a height of seven feet which is sufficient to illuminate a person. All residential projects undergoing design review shall meet the following shielding and light trespass standards:*
    a. *Shielding. Any light source or lamp that emits more than 900 lumens (15 watt fluorescent/LED or 60 watt incandescent) shall be concealed or shielded with an Illuminating Engineering Society of North America (IESNA) full cut-off style fixture with an angle not exceeding 90 degrees to minimize the potential for glare and unnecessary diffusion on adjacent property. Examples of shielded light fixtures are shown below.*
    b. *Light trespass. Maximum lighting levels at property lines shall not increase lighting levels more than 1.75 foot-candles 10 feet beyond the property line.*

Response: Given the size of the site and the proposed layout, it is feasible for the proposed development to satisfy these crime prevention requirements. Compliance with these requirements will be illustrated in the final design documents and lighting plans.

P. *Provisions for persons with disabilities.*
    1. *Accessible routes shall be provided between all buildings and accessible site facilities. The accessible route shall be the most practical direct route between accessible building entries, accessible site facilities, and the accessible entry to the site. An accessible route shall connect to the public right-of-way and to at least one on-site or adjacent transit stop (if the area is served by transit). All facilities shall conform to, or exceed, the Americans with Disabilities Act (ADA) standards, including those included in the Uniform Building Code.*

Response: Accessible routes will be provided to meet the ADA standards for access to the public streets, between buildings, and to the transit stop located in Blankenship. An ADA consultant has been working with the design team to prepare the plans. Compliance with these requirements will be illustrated in the final design documents.

Q. *Signs.*
    1. *Based on considerations of crime prevention and the needs of emergency vehicles, a system of signs for identifying the location of each residential unit shall be established.*
    2. *The signs shall not obscure vehicle drivers' sight distance.*
    3. *Signs and appropriate traffic control devices and markings shall be installed or painted in the driveway and parking lot areas to identify bicycle and pedestrian routes.*

Response: It is feasible for the proposed development to satisfy these requirements. A comprehensive wayfinding, signage, and striping plan will be included with the final design documents to illustrate conformance with these requirements.

R. *Utilities. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting, and cable television, shall be placed underground, except as provided in subsection (R)(1) of this section. The design standards of Section 5.487 of the West Linn Municipal Code relative to existing high ambient noise levels shall apply to this subsection.*

1. *Exceptions to the underground utilities requirement shall be permitted in those cases where adjacent properties have above-ground utilities and where the development site's frontage is under 200 feet and the site is less than one acre. High voltage transmission lines, as classified by Portland General Electric or electric service provider, are also exempted. Where adjacent future development is planned or proposed, conduits may be required at the direction of the City Engineer. All services shall be underground with the exception of standard above-grade equipment such as some meters, etc.*

Response: The design team has been coordinating the design of the site with the applicable utility companies. The applicant anticipates meeting this requirement by placing all new and relocated utilities underground as required.

S. Refuse and recycling standards.

1. *All multifamily developments over five units requiring Class II design review shall comply with the standards set forth in these provisions. Modifications to these provisions may be permitted only if the applicant elects to use the discretionary review criteria in CDC 55.100. Refer to the criteria in CDC 55.100(O)(1).*

Response: The proposed development would provide 320 multi-family dwellings and is subject to the clear and objective design review process; therefore, these standards are applicable to the proposed development. Compliance with these requirements will be illustrated in the final design documents.

2. *Compactors, containers, and drop boxes shall be located on a level Portland cement concrete pad, a minimum of four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment at the time of construction. The pad shall be designed to discharge surface water runoff to avoid ponding.*

Response: It is feasible for the proposed development to satisfy this requirement. The trash enclosure locations are shown on the site plan attached to this application. The enclosures are generally located in between the garages on the north side of the parking areas except for the trash enclosure serving buildings 9 and 10. That enclosure is located on the east side of the site. Compliance with these requirements will be illustrated in the final design drawings.

3. *Recycling and solid waste service areas.*
    a. *Recycling receptacles shall be designed and located to serve the collection requirements for the specific type of material.*
    b. *The recycling area shall be co-located with the garbage container areas and be accessible to the local franchised collection firm's equipment.*
    c. *Recycling receptacles or shelters located outside a structure shall have lids and be covered by a roof constructed of water- and insect-resistive material. The maintenance of enclosures, receptacles and shelters is the responsibility of the property owner.*
    d. *The location of the recycling area and method of storage shall be approved by the local fire marshal.*
    e. *Recycling and solid waste service areas shall be at ground level and/or otherwise accessible to the franchised solid waste and recycling collection firm.*
    f. *Recycling and solid waste service areas shall be used only for purposes of storing solid waste and recyclable materials and shall not be a general storage area to store personal belongings of tenants, lessees, property management or owners of the development or premises.*

Response: It is feasible for the proposed development to satisfy these requirements. As proposed, the solid waste and recycling storage facilities are located throughout the site. The solid waste service provider is being consulted in the design and location of the facilities. Compliance with these requirements will be provided in the final design drawings.

4. *Special wastes or recyclable materials.*
    a. *Environmentally hazardous wastes defined in ORS 466.005 shall be located, prepared, stored, maintained, collected, transported, and disposed of in a manner acceptable to the Oregon Department of Environmental Quality.*
    b. *Containers used to store cooking oils, grease or animal renderings for recycling or disposal shall not be located in the principal recyclable materials or solid waste storage areas. These materials shall be stored in a separate storage area designed for such purpose.*

Response: It is feasible for the proposed development to satisfy these requirements. As proposed, the solid waste and recycling storage facilities are located throughout the site. The solid waste service provider is being consulted in the design and location of the facilities. Compliance with these requirements will be provided in the final design drawings.

5. *Screening and buffering.*
    a. *Enclosures shall include a curbed landscape area at least three feet in width on the sides and rear. Landscaping shall include, at a minimum, a continuous hedge maintained at a height of 36 inches.*
    b. *Placement of enclosures adjacent to residentially zoned property and along street frontages is strongly discouraged. If enclosures are not located so as to conceal them from public view, the landscape hedge required under subsection (S)(5)(a) of this section shall be at least six feet tall.*
    c. *All dumpsters and other trash containers shall be completely screened on all four sides with an enclosure that is comprised of a durable material such as masonry that is used in at least one building on the site. Chain link fencing, with or without slats, will not be allowed.*

Response: As proposed, none of the enclosures would be adjacent to residentially zoned properties or street frontages. As mentioned previously, it is feasible for the development to satisfy these requirements with the design of the enclosure. Compliance with the required buffering and screening will be illustrated with the final landscape drawings.

6. *Litter receptacles.*
    a. *Location. Litter receptacles may not encroach upon the minimum required walkway widths.*
    b. *Litter receptacles may not be located within public rights-of-way except as permitted through an agreement with the City in a manner acceptable to the City Attorney or their designee.*

Response: There are no proposed litter receptacles proposed with this development. If they are subsequently proposed in support of the multi-family buildings, they will be located interior to the development and outside of any required walkways. Any receptacles placed in support of the commercial/retail flex space will obtain City approval prior to placement.

III. RESPONSE TO APPLICABLE APPROVAL CRITERIA FOR SENATE BILL 1537 MANDATORY ADJUSTMENTS

INTRODUCTION AND SUMMARY

Within this development Mill Creek Residential Trust (the applicant) submits this adjustment application to mandate approval of five adjustments including an adjustment to: (1) Common area, open space or area that must be landscaped on the same lot or parcel as proposed housing; (2) Building height maximum; (3) Prohibitions on ground floors of mixed use buildings against residential uses except for one face of the building facing the street and within 20 feet of the street or against nonresidential active uses that support the residential uses of the building; (4) Building orientation requirements; (5) Requirements for balconies and porches. These adjustments are all expressly listed as mandatory adjustments under SB 1537.

APPROVAL CRITERIA

This narrative addresses the applicable approval criteria under Senate Bill 1537 of 2024 ("SB 1537") for approval of the adjustments. The relevant language of SB 1537 is provided in italics, with responses following each section.

SECTION 38. Mandatory adjustment to housing development standards.
(1) As used in sections 38 to 41 of this 2024 Act:
(a) "Adjustment" means a deviation from an existing land use regulation.

Response: This application is for an "adjustment" within the meaning of SB 1537 because it requests a deviation from section 21.050.2; section 21.070.A.6; 55.105.D.1(a) and (b) and D.2(a)(b)(c); 55.105.j.(1)(2) and (3); and 55.105.K(2) and (3) which are existing land use regulations of the City. This standard is met.

(b) "Adjustment" does not include:
(A) A request to allow a use of property not otherwise permissible under applicable zoning requirements;
(B) Deviations from land use regulations or requirements related to accessibility, affordability, fire ingress or egress, safety, local tree codes, hazardous or contaminated site clean-up, wildlife protection, or statewide land use planning goals relating to natural resources, natural hazards, the Willamette River Greenway, estuarine resources, coastal shorelands, beaches and dunes or ocean resources;
(C) A complete waiver of land use regulations or any changes beyond the explicitly requested and allowed adjustments; or
(D) Deviations to requirements related to the implementation of fire or building codes, federal or state air, water quality or surface, ground or stormwater requirements, or requirements of any federal, state or local law other than a land use regulation.

Response: This application does not request a use of the property that is not otherwise allowed nor any deviations from the enumerated prohibited categories in subsections (B) or (D). Nor does this application request a complete waiver of land use regulations or changes other than those explicitly requested. Both residential and commercial uses are permitted in the subject zone, along with all the accessory infrastructure, parking and related site amenities. This standard is met.

(2) Except as provided in section 39 of this 2024 Act, a local government shall grant a request for an adjustment in an application to develop housing as provided in this section. An application qualifies for an adjustment under this section only if the following conditions are met:

Response: The statute provides that the City "shall grant" this adjustment – because the project is "housing" – provided that the conditions addressed below are met.

(a) The application is for a building permit or a quasi-judicial, limited or ministerial land use decision;

Response: As described in the procedural history above, this application relates to a development permit for the project. Additionally, this application itself is a limited land use decision application under SB 1537 Section 38(3). This standard is met.

(b) The development is on lands zoned to allow for residential uses, including mixed-use residential;

Response: As confirmed by the code and this application, the project is proposed on lands zoned to allow mixed-use residential. This standard is met.

(c) The residential development is for densities not less than those required under section 55(3)(a)(C) of this 2024 Act;

Response: Section 55(3)(a)(C) referenced in this section requires that "The development will be built at net residential densities not less than: … (iii) Six units per net residential acre if sited in a city with a population of 2,500 or greater and less than 30,000[.]" The City of West Linn has a population of approximately 26,597 people. The project proposes 320 units on a site that is 11.41 acres, well exceeding this standard. This standard is met.

(d) The development is within an urban growth boundary, not including lands that have not been annexed by a city;

Response: The project is proposed within the City of West Linn urban growth boundary. This standard is met.

(e) The development is of net new housing units in new construction projects, including:
- *(A) Single-family or multifamily;*
- *(B) Mixed-use residential where at least 75 percent of the developed floor area will be used for residential uses;*
- *(C) Manufactured dwelling parks;*
- *(D) Accessory dwelling units; or*
- *(E) Middle housing as defined in ORS 197A.420;*

Response: The project will provide 320 "net new housing units in new construction" of a series of multifamily and mixed-use buildings. This standard is met.

(f) The application requests not more than 10 distinct adjustments to development standards as provided in this section. A "distinct adjustment" means:

(A) An adjustment to one of the development standards listed in subsection (4) of this section where each discrete adjustment to a listed development standard that includes multiple component standards must be counted as an individual adjustment; or

(B) An adjustment to one of the development standards listed in subsection (5) of this section where each discrete adjustment to a listed development standard that includes multiple component standards must be counted as an individual adjustment; and

Response: The project is requesting 5 adjustments under SB 1537. This standard is met.

(g) The application states how at least one of the following criteria apply:

(A) The adjustments will enable development of housing that is not otherwise feasible due to cost or delay resulting from the unadjusted land use regulations;

….

(C) The adjustments will increase the number of housing units within the application;….

Response: The project meets multiple of the Section 38(2)(g) criteria, although only one is needed to meet the standard. Under Section 38(2)(g)(C), this adjustment will increase the number of housing units within the application by permitting approximately 148 -154 additional units based on the allowance to place residential units on the ground floor and the allowed increase in height. This standard is met.

(3) A decision on an application for an adjustment made under this section is a limited land use decision. Only the applicant may appeal the decision. No notice of the decision is required if the application is denied, other than notice to the applicant. In implementing this subsection, a local government may:

(a) Use an existing process, or develop and apply a new process, that complies with the requirements of this subsection; or

(b) Directly apply the process set forth in this subsection.

Response: This is not an approval criterion. The applicant understands that this application is for a limited land use decision that only the applicant may appeal. The applicant understands that the City is directly applying the process provided in SB 1537 to implement the statue for this application.

(4) A local government shall grant an adjustment to the following development standards:

- *§ 38 (4)(a) Side or rear setbacks;*
- *(4)(b) For an individual development project, common area, open space or area that must be landscaped on the same lot or parcel as proposed housing;*
- *(4)(c) Parking minimums;*
- *(4)(d) Minimum lot sizes;*
- *(4)(e) Maximum lot sizes;*
- *(4)(f) Building lot coverage;*
- *(4)(g) (A)(i)* Bicycle parking (minimum spaces);*
- *(4)(g) (A)(ii)* Bicycle parking (location);*
- *(4)(g)(B)* Building height maximums (excluding cottage clusters);*
- *(4)(g) (C)* Unit density maximums;*
- *(4)(g) (D)(i)* Prohibitions on ground floors of mixed use buildings against residential uses except for one face of the building facing the street & within 20 ft of the street; and*

- *(4)(g) (D)(ii)* Prohibitions on ground floors of mixed use buildings against nonresidential active uses that support the residential uses of the building.*

Response: This application requests an adjustment to:

- Section 38(4)(g)(D)(i) -Prohibitions on ground floors of mixed-use buildings against residential uses except for one face of the building facing the street and within 20 feet of the street
- Section 38(4)(g)(B) - Building height maximums (excluding cottage clusters)
- Section 38(4)(b) - For an individual development project, common area, open space or area that must be landscaped on the same lot or parcel as proposed housing

Accordingly, the City "shall grant" the adjustment under this subsection (4). This standard is met.

(5) A local government shall grant an adjustment to design standards that regulate:

- *§ 38 (5)(a) Facade materials, color or pattern;*
- *(5)(b) Facade articulation;*
- *(5)(c) Roof forms and materials;*
- *(5)(d) Entry and garage door materials;*
- *(5)(e) Garage door orientation unless adjacent to or across from school/public park;*
- *(5)(f) Window materials except bird-safe glazing requirements;*
- *(5)(g) Total window area;*
- *(5)(h)(A)* Building orientation requirements, not including transit street orientation requirements;*
- *(5)(h)(B)* Building height transition requirements;*
- *(5)(h)(C)* Requirements for balconies and porches; and*
- *(5)(h)(D)* Requirements for recesses and offsets.*

….

Response: The application requests approval of the following two design standard adjustments:

- Section 38(5)(h)(a) - Building orientation requirements, not including transit street orientation requirements
- Section 38 (5)(h)(C) - Requirements for balconies and porches

Accordingly, the City "shall grant" the adjustment under this subsection (5). This standard is met.

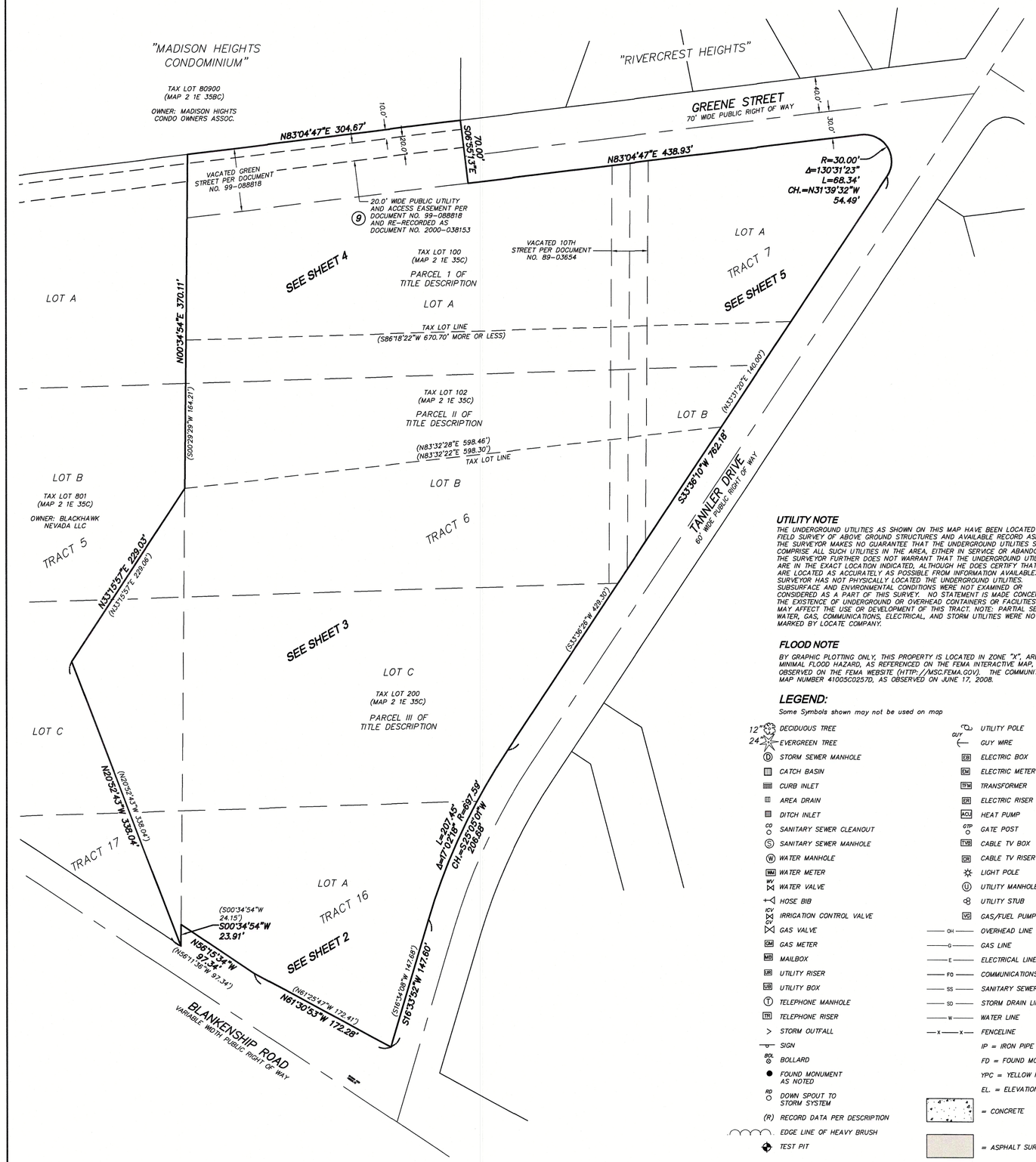
For all of the reasons set forth above, the applicant requests approval of the adjustments. As adjusted, the applicant requests that the project be approved to provide a mixed-use development, including 320 multi-family residential units and 10,520 square feet of ground floor of flex commercial/retail space.

IV. CONCLUSION

This written statement and the accompanying supporting documents demonstrate that the proposed project complies with the applicable approval criteria or can be conditioned to comply for a Design Review, Property Line Adjustment, and five SB 1537 mandatory adjustments. Therefore, the applicant respectfully requests that the City approve the application.

PROJECT STATISTICS

	SF	Acre	%
Lot Areas			
Existing Lot Area	494,710	11.36	
Tannler ROW - Dedication	35,327	0.81	
Tannler ROW - Swap	17,277	0.40	
Net Lot Area - North	401,561	9.22	
Net Lot Area - South	75,104	1.72	
Total Net Lot Area	**476,665**	**10.94**	
Lot Coverage			
Buildings	106,246	2.44	22.3%
Garages	24,456	0.56	5.1%
Car Ports	20,272	0.47	4.3%
Total Lot Coverage	**150,974**	**3.47**	**31.7%**
Landscape Area	**345,322**	**7.93**	**72.4%**
Commercial Area	**10,520**		
Residential Units			
Studio	20		6.3%
1-bedroom	130		40.6%
2-bedroom	120		37.5%
3-bedroom	50		15.6%
Total Residential Units	**320**		**100.0%**
Onsite Parking			
Surface	154		40.1%
Car Ports	118		30.7%
Garages	99		25.8%
Handicapped standard	10		2.6%
Handicapped Van	1		0.3%
Handicapped Car Port	1		0.3%
Handicapped Garage	1		0.3%
Total Onsite Parking	**384**		**100.0%**



UTILITY NOTE

THE UNDERGROUND UTILITIES AS SHOWN ON THIS MAP HAVE BEEN LOCATED FROM FIELD SURVEY OF ABOVE GROUND STRUCTURES AND AVAILABLE RECORD ASBUILTS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT. NOTE: PARTIAL SEWER, WATER, GAS, COMMUNICATIONS, ELECTRICAL, AND STORM UTILITIES WERE NOT MARKED BY LOCATE COMPANY.

FLOOD NOTE

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE "X", AREA OF MINIMAL FLOOD HAZARD, AS REFERENCED ON THE FEMA INTERACTIVE MAP, AS OBSERVED ON THE FEMA WEBSITE (HTTP://MSC.FEMA.GOV). THE COMMUNITY MAP NUMBER 41005C0257D, AS OBSERVED ON JUNE 17, 2008.

LEGEND:

Some Symbols shown may not be used on map

- 12" / 24" DECIDUOUS TREE / EVERGREEN TREE
- STORM SEWER MANHOLE
- CATCH BASIN
- CURB INLET
- AREA DRAIN
- DITCH INLET
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- WATER MANHOLE
- WATER METER
- WATER VALVE
- HOSE BIB
- IRRIGATION CONTROL VALVE
- GAS VALVE
- GAS METER
- MAILBOX
- UTILITY RISER
- UTILITY BOX
- TELEPHONE MANHOLE
- TELEPHONE RISER
- STORM OUTFALL
- SIGN
- BOLLARD
- FOUND MONUMENT AS NOTED
- DOWN SPOUT TO STORM SYSTEM
- (R) RECORD DATA PER DESCRIPTION
- EDGE LINE OF HEAVY BRUSH
- TEST PIT
- UTILITY POLE
- GUY WIRE
- ELECTRIC BOX
- ELECTRIC METER
- TRANSFORMER
- ELECTRIC RISER
- HEAT PUMP
- GATE POST
- CABLE TV BOX
- CABLE TV RISER
- LIGHT POLE
- UTILITY MANHOLE
- UTILITY STUB
- GAS/FUEL PUMP
- OVERHEAD LINE
- GAS LINE
- ELECTRICAL LINE
- COMMUNICATIONS LINE
- SANITARY SEWER LINE
- STORM DRAIN LINE
- WATER LINE
- FENCELINE
- IP = IRON PIPE
- FD = FOUND MONUMENT
- YPC = YELLOW PLASTIC CAP
- EL. = ELEVATION
- = CONCRETE
- = ASPHALT SURFACE

RECORD DESCRIPTION:

PARCEL I:

All that portion of the following described tracts lying Northerly of the tract decreed to the State of Oregon, by and through its State Highway Commission by Judgment order filed October 15, 1968 in Case No. 67574, in the Circuit Court for Clackamas County, Oregon and Northerly of that tract described by deed to Holgate Baptist Church, recorded in Document No. 83-014682, Clackamas County records and Westerly of Tannler Drive, in the City of West Linn, County of Clackamas and State of Oregon, as follows:

All of tracts 6, 7 and 16, WILLAMETTE TRACTS (Plat Book 5, Page 0006), Tracts 1-64 inclusive;

TOGETHER WITH that portion of 10th Street that inured thereto upon vacation thereof.

ALSO TOGETHER WITH that portion of vacated Green Street which inured thereto by Ordinance No. 1439 recorded September 09, 1999 as Fee No. 99-088818.

PARCEL II:

Part of Lots A and B, Block 6, and part of Lots A and B, Block 7, WILLAMETTE TRACTS (Plat Book 5, Page 0006), in the City of West Linn, County of Clackamas and State of Oregon, described as follows:

Beginning at a point on the North line of the Willamette Tracts (Plat Book 5, Page 0006) in the Perrin Donation Land Claim, being in Section 35, Township 2 South, Range 1 East, of the Willamette Meridian, where the extension of the West line of Tannler Drive, as shown on the plat of WILLAMETTE VIEW ESTATES intersects said North line. Said point is South 83° West, 826.94 feet from a stone marking the Northeast corner of said WILLAMETTE TRACTS (Plat Book 5, Page 0006); thence South 33°31'20" West, 157.19 feet to a point on the West line of said Tannler Drive; thence continuing along said West line of Tannler Drive, South 33°31'20" West 332.81 feet to the true point of beginning; thence North 33°31'20" East along said West line 140.00 feet; thence South 86°18'22" West, 670.70 feet, more or less, to the West line of tract 6 of said WILLAMETTE TRACTS (Plat Book 5, Page 0006); thence South 0°29'29" West along the West line of said tract 6, a distance of 164.21 feet, more or less, to a point that bears South 83°32'22" West from the point of beginning; thence North 83°32'22" East, 598.30 feet, more or less, to the true point of beginning.

TOGETHER WITH that portion of 10th Street that inured thereto upon vacation thereof.

PARCEL III:

A tract of land being all of Parcel 1 of Deed Document Number 2005-126465, and a portion of Deed Document Number 2006-050100, both found in Deed Records of Clackamas County, located in the Southwest 1/4 of Section 35, Township 2 South, Range 1 East of the Willamette Meridian, City of West Linn, County of Clackamas and State of Oregon, being more particularly described as follows:

Beginning at the most Southerly corner of Parcel 1 of Deed Document Number 2005-126465, Deed Records of Clackamas County, said corner being on the Northerly right of way line of Blankenship Road (of which right of way width varies); thence along said Northerly right of way line, North 61°25'47" West, 172.41 feet to an angle point; thence North 56°11'36" West, 97.34 feet to a point on the East line of deed Document Number 2006-050100, deed records of Clackamas County; thence along said East line South 00°34'54" West, 24.15 feet; thence leaving said East line, North 20°52'43" West, 338.04 feet; thence North 33°15'57" East, 229.03 feet to a point on said East line, said point being the Northwest corner of said Parcel 1; thence along the North line of said Parcel 1, North 83°37'28" East, 598.46 feet to the Northeast corner thereof, said corner being 30.00 feet Westerly of the centerline of Tannler Drive when measured at right angles; thence parallel with, Westerly of, and 30.00 feet distant from said centerline, the following courses: South 33°36'26" West, 429.30 feet to a point of curvature; thence along a curve to the left, having a radius of 697.59 feet, through a central angle of 17°02'18", an arc length of 207.45 feet (chord of which bears South 25°05'17" West, 206.68 feet) to a point of tangency; thence South 16°34'08" West, 147.68 feet to the point of beginning.

TOGETHER WITH that portion of 10th Street that inured thereto upon vacation thereof.

PARCEL IV: *SHOWN AS EXCEPTION 10, SEE SHEETS 2 AND 3 OF THIS SURVEY*

A non-exclusive easement for access purposes, being appurtenant to Parcels I, II and III described above, as more fully set forth and described in Reciprocal Access Easement agreement recorded September 17, 2013, as Recorder's Fee No. 2013-065913, Clackamas County Records.

Said description is the same as per Preliminary Title Report per Chicago Title Company of Oregon Order No. 472525002936, with an Effective date of July 2, 2025.

SURVEYOR'S NARRATIVE / RESOLUTION:

THE PURPOSE OF THIS SURVEY IS TO MONUMENT THE BOUNDARIES OF THOSE TRACTS OF LAND CONVEYED BY DEED RECORDED AS DOCUMENT NO. 2025-007205, CLACKAMAS COUNTY DEED RECORDS.

FOR THE SOUTHERLY SOUTHWEST LINE OF THE SUBJECT TRACT, AND MY BASIS OF BEARINGS, I HELD NORTH 20°52'43" WEST BETWEEN FOUND MONUMENTS 100 AND 101, PER SURVEY NO. 2012-019. I THEN HELD FOUND MONUMENTS 101 AND 102, WHICH MATCHED RECORD BEARING AND DISTANCE, PER SURVEY NO. 2012-019 AND THE SUBJECT DEED. I THEN HELD FOUND MONUMENTS 100 AND 102 AND EXTENDED THIS LINE NORTH FOR THE MOST NORTHERLY SEGMENT OF THE WEST LINE. THIS CORRELATES CLOSELY WITH RECORD BEARING AND DISTANCE PER SAID SURVEY NO. 2012-019.

FOR THE MOST NORTHERLY LINE OF THE SUBJECT TRACT, BEING THE SOUTH LINE OF THE PLAT OF "BLAND ACRES", PLAT NO. 304, ALSO BEING COINCIDENT WITH THE SOUTH LINE OF THE PLAT OF "RIVERCREST HEIGHTS", PLAT NO. 2913, AS WELL AS THE NORTH RIGHT OF WAY LINE OF GREENE STREET (NOW PARTIALLY VACATED), I HELD FOUND MONUMENTS 180, 159, AND 160, AND A POINT 30.00 FEET NORTH OF FOUND MONUMENT 157, PER SURVEYS NO. 19251, 28021, AND 28686, AND THE PLATS OF "BLAND ACRES" AND "WILLAMETTE VIEW ESTATES", PLAT NO. 2545.

I HELD FOUND MONUMENTS 158, 157, 153, 151, AND 150, AND RECORD CURVE RADIUS PER SURVEY NO. 2004-239 AND THE PLAT OF "WILLAMETTE VIEW ESTATES", FOR THE CENTERLINE OF TANNLER DRIVE (A 60.00 FOOT WIDE RIGHT OF WAY). I THEN CALCULATED THE NORTHEAST RIGHT OF WAY 30.00 FEET NORTHEASTERLY OF AND PARALLEL WITH SAID CENTERLINE, PER SAID PLAT.

FOR THE CENTERLINE OF SW BLANKENSIP ROAD, I HELD FOUND MONUMENT 150 (ORIGIN UNKNOWN) AND A POINT 30.00 FEET SOUTHWESTERLY OF FOUND MONUMENT 100, PER SURVEY NO. 2012-019. I THEN CALCULATED THE WESTERLY SEGMENT OF THE NORTH RIGHT OF WAY LINE 30.00 FEET NORTHERLY OF AND PARALLEL WITH SAID CENTERLINE, EXTENDING THIS SOUTHEASTERLY RECORD DISTANCE PER SURVEY NO. 15587 TO AN ANGLE POINT. THEN PROCEEDED SOUTHEASTERLY THROUGH FOUND MONUMENT 181 TO INTERSECT THE ESTABLISHED WESTERLY RIGHT OF WAY LINE OF TANNLER ROAD.

ITEMS, EASEMENTS, AND ENCUMBRANCES:

Please refer to the title report noted in Surveyor's Note No. 1 for all items concerning agreements, liens, waivers, assessments, leases, taxes, and other matters of record which do not reflect survey matters and are not listed below. The following items were listed in the Title Report supplied by the client and are listed here with my comment.

As per Preliminary Title Report File No. 472525002936, from Chicago Title Company of Oregon, with an Effective date of July 2, 2025.

(9) *A 20 foot wide utility and public access easement as set forth in City of West Linn Ordinance No. 1439 situated within vacated Greene Street, affecting Parcel I;*
Ordinance No.: 1439
Recording Date: September 9, 1999
Recording No: 99-088818

And modified by instrument;
Recording Date: June 13, 2000
Recording No.: 2000-038153

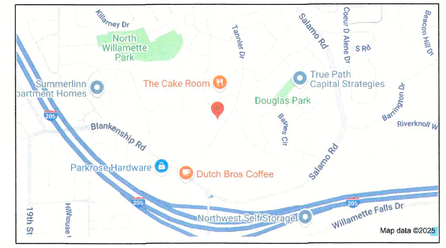
(10) *Reciprocal Access Easement Agreement, including a parking area easement situated within Parcel 3 and potential maintenance obligations, including the terms and provisions thereof;*
Recording Date: September 17, 2013
Recording No.: 2013-065913

BENCHMARK / VERTICAL DATUM

THE DATUM FOR THIS SURVEY IS BASED UPON A STATIC GPS OBSERVATION OF LOCAL CONTROL POINTS, PROCESSED THROUGH OPUS. DATUM IS NAVD 88.

ZONING NOTE

AT THE TIME OF THIS SURVEY, NO ZONING REPORT HAD BEEN PROVIDED TO THE SURVEYOR. HOWEVER, ACCORDING TO THE OFFICIAL CITY OF WEST LINN WEBSITE, SUBJECT PARCEL IS ZONED OBC – OFFICE BUSINESS CENTER.



VICINITY MAP

NOT TO SCALE

SURVEYORS NOTES

1 *Survey as shown was prepared from a legal description as contained in Chicago Title Company of Oregon Preliminary Title Report Order No. 472525002936, with an effective date of July 2, 2025.*

2 *Some features shown on this plat may be shown out of scale for clarity.*

3 *Dimensions on this plat are expressed in feet and decimal parts thereof unless otherwise noted. Bearings are referred to an assumed meridian and are used to denote angles only. Monuments were found at points where indicated.*

4 *My basis of bearings is North 20°52'43" West along the Southerly Southwest line of subject tract per Survey Number 2012-019, Clackamas County Survey Records. Horizontal coordinates are based on Oregon State Plane coordinates, North Zone, NAD83(2011)(epoch 2010).*

5 *Gross Land Area = 494,715 or 11.36 acres.*

6 *Subject site posted address: 2410, 2422, and 2444 Tannler Drive, West Linn, OR 97068.*

7 *At the time of this survey, there was no observable evidence of recent earth moving work, building construction, or building additions.*

8 *According to the US Fish and Wildlife Service "National Wetland Inventory" Website, there are no identified wetlands on the subject property. At the time of this survey, there were no field delineation of the wetlands.*

9 *At the time of this survey, there in one offsite easements or servitudes disclosed in documents to the surveyor: Exception 10 – Reciprocal Access Easement Agreement, including a parking area easement situated within Parcel 3 and potential maintenance obligations, including the terms and provisions thereof; Recording Date: September 17, 2013 Recording No.: 2013-065913, see sheets 2 and 3 of this survey.*

10 *No division or party wall exists or is designated by the client with respect to adjoining properties.*

11 *At the time of this survey, there are 23 striped parking spaces and 0 handicap space.*

12 *Professional Liability Insurance policy obtained by the surveyor in the minimum amount as required is in effect throughout the contract term.*

13 *At the time of this survey, there is no observed evidence of recent street or sidewalk construction or repairs. There is no indication of changes in rights of way.*

14 *At the time of this survey, there is no observed evidence of site use as a solid waste dump, slump or sanitary landfill.*

15 *At the time of this survey, there is no observed evidence of cemeteries or burial places.*

16 *Monuments have not yet been set at all of the boundary corners, as of September 10, 2025.*

ALTA/NSPS LAND TITLE SURVEY:

2410, 2422, and 2444 Tannler Drive, West Linn, OR 97068

Based upon Preliminary Title Report

Order No. 472525002936 of Chicago Title Company of Oregon

bearing an effective date of July 2, 2025

Surveyor's Certification

To: Tannler Holdings LLC, an Oregon limited liability company; and Chicago Title Company of Oregon:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6a, 7a, 7b, 8, 11a, 11b, 16, and 19 of Table A thereof. The field work was completed on September 2, 2025.

Toby G. Bolden
Registered Land Surveyor No.: 60377
In the State of Oregon
Date of Survey: September 6, 2025
Date of Last Revision: 10SEP25

SIGNED ON: 10SEP25

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JULY 13, 2004
TOBY G. BOLDEN
60377LS

RENEWS: DECEMBER 31, 2025

N

GRAPHIC SCALE

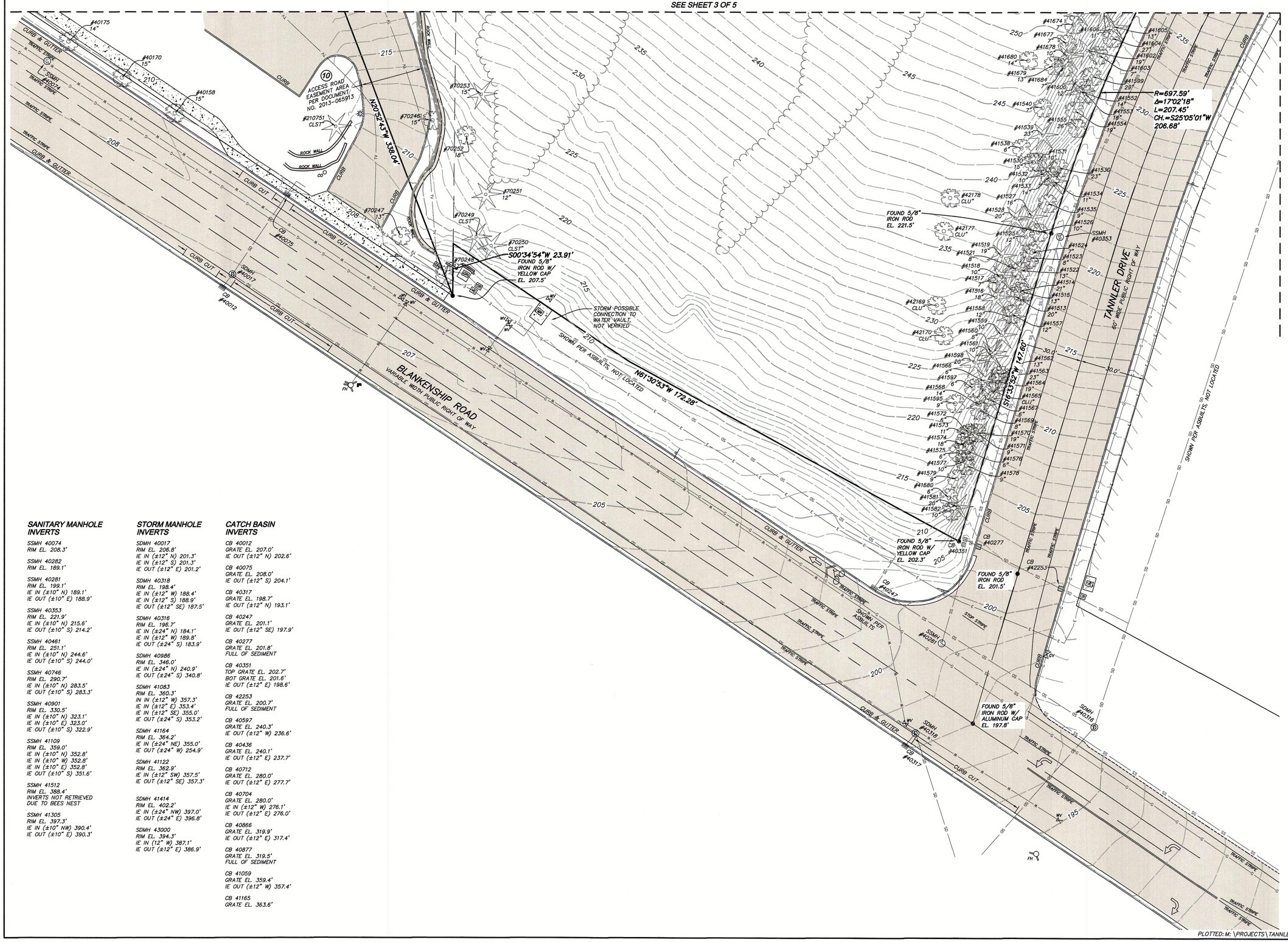
60 0 30 60 120

(IN FEET)
1 INCH = 60 FT.

CENTERLINE CONCEPTS
LAND SURVEYING, INC.
19376 MOLALLA AVE., SUITE 120
OREGON CITY, OREGON 97045
PHONE 503.650.0188 FAX 503.650.0189

PLOTTED: M: \PROJECTS\TANNLER HOLDINGS-TANNLER & BLANKENSHIP\DWG\ALTA-ECM C3D.dwg

SEE SHEET 3 OF 5



FOR LEGEND AND NOTES, SEE SHEET 1 OF 5

SANITARY MANHOLE INVERTS

SSMH 40074
RIM EL. 208.3'

SSMH 40282
RIM EL. 189.1'

SSMH 40281
RIM EL. 199.1'
IE IN (±10" N) 189.1'
IE OUT (±10" E) 188.9'

SSMH 40353
RIM EL. 221.9'
IE IN (±10" N) 215.6'
IE OUT (±10" S) 214.2'

SSMH 40461
RIM EL. 251.1'
IE IN (±10" N) 244.6'
IE OUT (±10" S) 244.0'

SSMH 40746
RIM EL. 290.7'
IE IN (±10" N) 283.5'
IE OUT (±10" S) 283.3'

SSMH 40901
RIM EL. 330.5'
IE IN (±10" N) 323.1'
IE IN (±10" E) 323.0'
IE OUT (±10" S) 322.9'

SSMH 41109
RIM EL. 359.0'
IE IN (±10" N) 352.8'
IE IN (±10" W) 352.8'
IE IN (±10" E) 352.8'
IE OUT (±10" S) 351.6'

SSMH 41512
RIM EL. 388.4'
INVERTS NOT RETRIEVED DUE TO BEES NEST

SSMH 41305
RIM EL. 397.3'
IE IN (±10" NW) 390.4'
IE OUT (±10" E) 390.3'

STORM MANHOLE INVERTS

SDMH 40017
RIM EL. 206.8'
IE IN (±12" N) 201.3'
IE IN (±12" S) 201.3'
IE OUT (±12" E) 201.2'

SDMH 40318
RIM EL. 198.4'
IE IN (±12" W) 188.4'
IE IN (±12" S) 188.9'
IE OUT (±12" SE) 187.5'

SDMH 40316
RIM EL. 196.7'
IE IN (±24" N) 184.1'
IE IN (±12" W) 189.8'
IE OUT (±24" S) 183.9'

SDMH 40986
RIM EL. 346.0'
IE IN (±24" N) 240.9'
IE OUT (±24" S) 340.8'

SDMH 41083
RIM EL. 360.3'
IN IN (±12" W) 357.3'
IE IN (±12" E) 353.4'
IE IN (±12" SE) 355.0'
IE OUT (±24" S) 353.2'

SDMH 41164
RIM EL. 364.2'
IE IN (±24" NE) 355.0'
IE OUT (±24" W) 254.9'

SDMH 41122
RIM EL. 362.9'
IE IN (±12" SW) 357.5'
IE OUT (±12" SE) 357.3'

SDMH 41414
RIM EL. 402.2'
IE IN (±24" NW) 397.0'
IE OUT (±24" E) 396.8'

SDMH 43000
RIM EL. 394.3'
IE IN (12" W) 387.1'
IE OUT (±12" E) 386.9'

CATCH BASIN INVERTS

CB 40012
GRATE EL. 207.0'
IE OUT (±12" N) 202.6'

CB 40075
GRATE EL. 208.0'
IE OUT (±12" S) 204.1'

CB 40317
GRATE EL. 198.7'
IE OUT (±12" N) 193.1'

CB 40247
GRATE EL. 201.1'
IE OUT (±12" SE) 197.9'

CB 40277
GRATE EL. 201.8'
FULL OF SEDIMENT

CB 40351
TOP GRATE EL. 202.7'
BOT GRATE EL. 201.6'
IE OUT (±12" E) 198.6'

CB 42253
GRATE EL. 200.7'
FULL OF SEDIMENT

CB 40597
GRATE EL. 240.3'
IE OUT (±12" W) 236.6'

CB 40436
GRATE EL. 240.1'
IE OUT (±12" E) 237.7'

CB 40712
GRATE EL. 280.0'
IE OUT (±12" E) 277.7'

CB 40704
GRATE EL. 280.0'
IE IN (±12" W) 276.1'
IE OUT (±12" E) 276.0'

CB 40866
GRATE EL. 319.9'
IE OUT (±12" E) 317.4'

CB 40877
GRATE EL. 319.5'
FULL OF SEDIMENT

CB 41059
GRATE EL. 359.4'
IE OUT (±12" W) 357.4'

CB 41165
GRATE EL. 363.6'

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

SIGNED ON: 10 SEP 25

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
TOBY G. BOLDEN
60377LS

RENEWS: DECEMBER 31, 2025

CENTERLINE CONCEPTS
LAND SURVEYING, INC.
19376 MOLALLA AVE., SUITE 120
OREGON CITY, OREGON 97045
PHONE 503.650.0188 FAX 503.650.0189

SEE SHEET 4 OF 5

EXISTING BUILDING

FOUND 5/8" IRON ROD W/ YELLOW CAP EL. 284.9'

ROCK WALL

CURB

GR

#70289 36"
#70287 10"
#70286 17"
#70285 14"
#70284 21"
#70283 15"
#70270 20"
#70269 14"
#70271 15"
#70268 16"
#70266 14"
#70265 16"
#70264 16"
#70263 17"
#70023 16"
#70022 19"
#70021 CLST"
#70015 9"
#70016 13"
#70017 8"
#70018 14"
#70019 10"
#70020 9"
#70024 CLST"
#70262 15"
#70261
#70260 17"
#70259 10"
#70258 22"
#70257 16"
#70256 8"
#70255 10"
#70014 17"
#70009 11"
#70010 10"
#70011 7"
#212666 9"
2527 10"
#70003 12"
#70004 9"
#70005 8"
#70006 10"
#70007 10"
#70008 15"
#42247 14"
#42248 16"
#42249 18"
#70254 10"
#210949 21"
#210948 CLST"
#210947 CLST"
#210924 7"

N33°15'57"E 229.03'

(10) PARKING AREA EASEMENT PER DOCUMENT NO. 2013-065913

4 PARKING STALLS

37.7'

265

264

255

250

245

240

235

230

225

220

FOUND 5/8" IRON ROD W/ YELLOW CAP EL. 246.9'

109.3'

249

10 PARKING STALLS

5 PARKING STALLS

(10) ACCESS ROAD AREA EASEMENT PER DOCUMENT NO. 2013-065913

N20°52'43"W 336.04'

295 310 290 305 285 300 280 295 275 290 270 285 265 280 260 275 255 270 250 265 245 260 240 255 235 250 230 245 225 240 220 235 230

#41726 CLU
#41730 11"
#41726 9"
#41727 10"
#41723 11"
#41719 9"
#41720 8"
#41721 6"
#41715 10"
#41712 8"
#41710 22"
#41700 7"
#41701 23"
#41704 9"
#41703 8"
#41705 6"
#41702 6"
#41691
#41690 11"
#41692 6"
#41694 8"
#41693 17"
#41689 7"
#41685 22"
#41688 23"
#41686 18"
#41644 15"
#41645 7"
#41646 6"
#41642 8"
#41638 19"
#41640 18"
#41639 14"
#41651 13"
#41636 9"
#41634 7"
#41652 9"
#41654 6"
#41653 6"
#41628 10"
#41557 17"
#41625 15"
#41623 17"
#41624 8"
#41660 7"
#41613 8"
#41662 19"
#41663 11"
#41666 18"
#41665 8"
#41667 6"
#41668 6"
#41671 9"
#41672 7"
#41674 18"
#41843 14"
#41641 8"
#41637 6"
#41635 7"
#41632 18"
#41631 10"
#41630 9"
#41629 6"
#41620 9"
#41621 9"
#41622 10"
#41626 CLU
#41619 21"
#41618 10"
#41617 7"
#41616 10"
#41615 6"
#41614 8"
#41612 7"
#41611 17"
#41610 18"
#41609 20"
#41607 6"
#41606 16"

SSMH #40461

FOUND 5/8" IRON ROD W/ YELLOW CAP EL. 247.1'

FOUND 5/8" IRON ROD EL. 247.5'

CB #40436

CB #40597

S13°36'10"W 762.18'

TANNLER DRIVE
60' WIDE PUBLIC RIGHT OF WAY

TRAFFIC STRIPE

CURB

50'

SHOWN PER ASBUILTS, NOT LOCATED

SEE SHEET 5 OF 5

SEE SHEET 2 OF 5

FOR LEGEND AND NOTES, SEE SHEET 1 OF 5

FOR UTILITY INVERT MEASURES, SEE SHEET 5 OF 5

N

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

SIGNED ON: 10 SEP 25

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
TOBY G. BOLDEN
60377LS

RENEWS: DECEMBER 31, 2025

CENTERLINE CONCEPTS
LAND SURVEYING, INC.
19376 MOLALLA AVE., SUITE 120
OREGON CITY, OREGON 97045
PHONE 503.650.0188 FAX 503.650.0189

PLOTTED: M: \PROJECTS\TANNLER HOLDINGS-TANNLER & BLANKENSHIP\DWG\ALTA-ECM C3D.dwg

"MADISON HEIGHTS CONDOMINIUM"

TAX LOT 80900
(MAP 2 1E 35BC)

"RIVERCREST HEIGHTS"

(9) 20.0' WIDE PUBLIC UTILITY AND ACCESS EASEMENT PER DOCUMENT NO. 99-088818 AND RE-RECORDED AS DOCUMENT NO. 2000-038153

4' VINYL FENCE 0.3' SOUTH OF PROPERTY LINE

FOUND 5/8" IRON ROD WITH YELLOW CAP EL. 380.6'

N83°04'47"E 304.67'

S06°55'13"E 70.00'

N83°04'47"E 438.93'

GREENE STREET
70' WIDE PUBLIC RIGHT OF WAY

EXISTING SHED

SSMH #41305

4' VINYL FENCE

ROCK WALL

CURB

TYP. ROCK WALL

N00°34'54"E 370.11'

SEE SHEET 3 OF 5

SEE SHEET 5 OF 5

FOR LEGEND AND NOTES, SEE SHEET 1 OF 5

FOR UTILITY INVERT MEASURES, SEE SHEET S OF 5

N

GRAPHIC SCALE

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PLOTTED: M: \PROJECTS\TANNLER HOLDINGS-TANNLER & BLANKENSHIP\DWG\ALTA-ECM C3D.dwg

SEE MATCH LINE, THIS SHEET

SEE SHEET 3 OF 5

SEE SHEET 4 OF 5

"RIVERCREST HEIGHTS"

GREENE STREET
70' WIDE PUBLIC RIGHT OF WAY

TANNLER DRIVE
60' WIDE PUBLIC RIGHT OF WAY

N83°04'47"E 438.93'

R=30.00'
Δ=130°31'23"
L=68.34'
CH.=N31°39'32"W
54.49'

S33°36'10"W 762.18'

FOUND 5/8" IRON ROD EL. 304.1'

FOUND 5/8" IRON ROD EL. 345.1'

FOUND 5/8" IRON ROD EL. 322.2'

SHOWN PER ASBUILTS, NOT LOCATED

RETAINING WALL

ROCK WALL

CURB

TRAFFIC STRIPE

CURB CUT

CB #40712
CB #40704
CB #40868
CB #40877

SSMH #40746
SSMH #40901
SSMH #41512
SSMH #41109
SSMH #41122
SSMH #41083
SDMH #41414
SDMH #43000
SDMH #40986
CB #41059

FOR LEGEND AND NOTES, SEE SHEET 1 OF 5

FOR UTILITY INVERT MEASURES, SEE SHEET 5 OF 5

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

N

SIGNED ON: 10SEP25

REGISTERED PROFESSIONAL LAND SURVEYOR

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JULY 13, 2004
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PLOTTED: M:\PROJECTS\TANNLER HOLDINGS-TANNLER & BLANKENSHIP\DWG\ALTA-ECM C3D.dwg

SLOPE ANALYSIS PLAN

MODERA - WEST LINN

WEST LINN, OREGON

HHPR Harper Houf Peterson Righellis Inc.

ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS

530 Center Street NE, Suite 240, Salem, OR 97301
phone: 503.365.1131 www.hhpr.com fax: 503.221.1171

DESIGNED:	RMM
DRAWN:	SSM
CHECKED:	RMM
DATE:	09/12/25

REVISIONS		
DATE	NO.	DESCRIPTION

SHEET NO.

JOB NO. MCR-01

SCALE: 1" = 40'

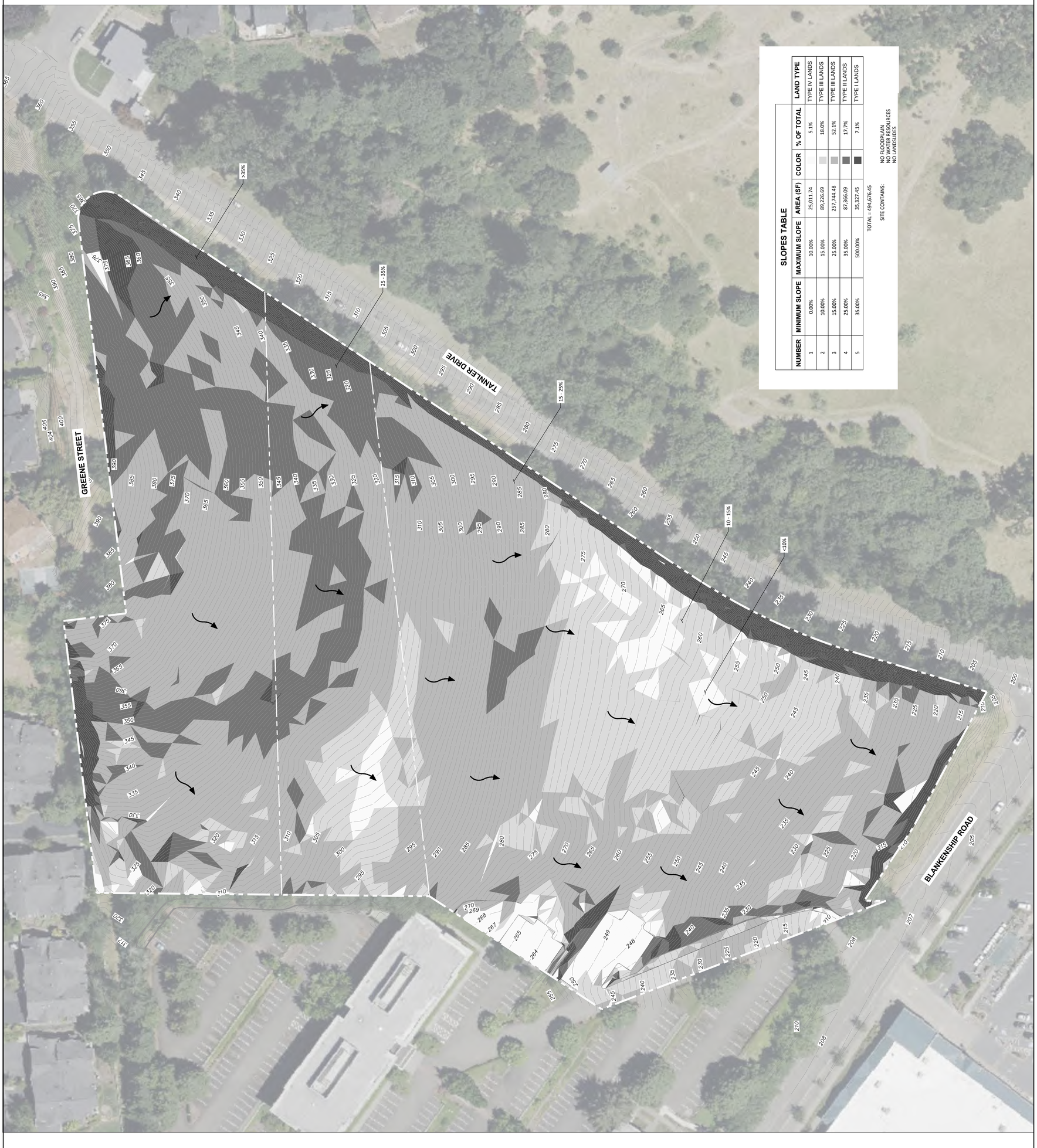
0 20 40 80

SLOPES TABLE

NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	AREA (SF)	COLOR	% OF TOTAL	LAND TYPE
1	0.00%	10.00%	25,011.74		5.1%	TYPE IV LANDS
2	10.00%	15.00%	89,226.69		18.0%	TYPE III LANDS
3	15.00%	25.00%	257,744.48		52.1%	TYPE III LANDS
4	25.00%	35.00%	87,366.09		17.7%	TYPE II LANDS
5	35.00%	500.00%	35,327.45		7.1%	TYPE I LANDS

TOTAL = 494,676.45

SITE CONTAINS:
NO FLOODPLAIN
NO WATER RESOURCES
NO LANDSLIDES



P:\04-Salem\MCR (Mill Creek Residential Trust)\MCR-01 (Tanner Rd Multifamily)\MCR01-DWG\Exhibits\Slope Analysis Exhibit MCR01 - SLOPE ANALYSIS (5 bands).dwg

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 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. 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

Dana Freitas

Chicago Title Company of Oregon
100 SW Main Street, Suite 450, Portland, OR 97204
(503)973-7400 FAX (866)418-1416

PRELIMINARY REPORT

ESCROW OFFICER: Jennifer Lyke
Jennifer.Lyke@CTT.com
(503)973-7402

ORDER NO.: 472525002936

TITLE OFFICER: Nathan Hobbs

TO: Chicago Title Company of Oregon
100 SW Main Street, Suite 450
Portland, OR 97204

ESCROW LICENSE NO.: 201004072
OWNER/SELLER: Tannler Holdings LLC
BUYER/BORROWER: MCRT Investments LLC, a Delaware limited liability company
PROPERTY ADDRESS: 2410, 2422 and 2444 Tannler Drive, West Linn, OR 97068

EFFECTIVE DATE: July 2, 2025, 08:00 AM

1. THE POLICY AND ENDORSEMENTS TO BE ISSUED AND THE RELATED CHARGES ARE:

	AMOUNT	PREMIUM
ALTA Owner's Policy 2021	$ 12,000,000.00	$ 24,340.00
Owner's Extended		
OTIRO Endorsement No. 110		$ 0.00
ALTA Loan Policy 2021	$ TBD	$ TBD
Extended Lender's		
Government Lien Search		$ 105.00

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:

   Tannler Holdings LLC, an Oregon limited liability company

4. THE LAND REFERRED TO IN THIS REPORT IS SITUATED IN THE CITY OF WEST LINN, COUNTY OF CLACKAMAS, STATE OF OREGON, AND IS DESCRIBED AS FOLLOWS:

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

EXHIBIT "A"

Legal Description

PARCEL I:

All that portion of the following described tracts lying Northerly of the tract decreed to the State of Oregon, by and through its State Highway Commission by Judgment order filed October 15, 1968 in Case No. 67574, in the Circuit Court for Clackamas County, Oregon and Northerly of that tract described by deed to Holgate Baptist Church, recorded in Document No. 83-014682, Clackamas County records and Westerly of Tannler Drive, in the City of West Linn, County of Clackamas and State of Oregon, as follows:

All of tracts 6, 7 and 16, WILLAMETTE TRACTS (Plat Book 5, Page 0006), Tracts 1-64 inclusive;

TOGETHER WITH that portion of 10th Street that inured thereto upon vacation thereof.

ALSO TOGETHER WITH that portion of vacated Green Street which inured thereto by Ordinance No. 1439 recorded September 09, 1999 as Fee No. 99-088818.

PARCEL II:

Part of Lots A and B, Block 6, and part of Lots A and B, Block 7, WILLAMETTE TRACTS (Plat Book 5, Page 0006), in the City of West Linn, County of Clackamas and State of Oregon, described as follows:

Beginning at a point on the North line of the Willamette Tracts (Plat Book 5, Page 0006) in the Perrin Donation Land Claim, being in Section 35, Township 2 South, Range 1 East, of the Willamette Meridian, where the extension of the West line of Tannler Drive, as shown on the plat of WILLAMETTE VIEW ESTATES intersects said North line. Said point is South 83° West, 826.94 feet from a stone marking the Northeast corner of said WILLAMETTE TRACTS (Plat Book 5, Page 0006); thence South 33°31'20" West, 157.19 feet to a point on the West line of said Tannler Drive; thence continuing along said West line of Tannler Drive, South 33°31'20" West 332.81 feet to the true point of beginning; thence North 33°31'20" East along said West line 140.00 feet; thence South 86°18'22" West, 670.70 feet, more or less, to the West line of tract 6 of said WILLAMETTE TRACTS (Plat Book 5, Page 0006); thence South 0°29'29" West along the West line of said tract 6, a distance of 164.21 feet, more or less, to a point that bears South 83°32'22" West from the point of beginning; thence North 83°32'22" East, 598.30 feet, more or less, to the true point of beginning.

TOGETHER WITH that portion of 10th Street that inured thereto upon vacation thereof.

PARCEL III:

A tract of land being all of Parcel 1 of Deed Document Number 2005-126465, and a portion of Deed Document Number 2006-050100, both found in Deed Records of Clackamas County, located in the Southwest 1/4 of Section 35, Township 2 South, Range 1 East of the Willamette Meridian, City of West Linn, County of Clackamas and State of Oregon, being more particularly described as follows:

Beginning at the most Southerly corner of Parcel 1 of Deed Document Number 2005-126465, Deed Records of Clackamas County, said corner being on the Northerly right of way line of Blankenship Road (of which right of way width varies); thence along said Northerly right of way line, North 61°25'47" West, 172.41 feet to an angle point; thence North 56°11'36" West, 97.34 feet to a point on the East line of deed Document Number 2006-050100, deed records of Clackamas County; thence along said East line South 00°34'54" West, 24.15 feet; thence leaving said East line, North 20°52'43" West, 338.04 feet; thence North 33°15'57" East, 229.06 feet to a point on said East line, said point being the Northwest corner of said Parcel 1; thence along the North line of said Parcel 1, North 83°37'28" East, 598.46 feet to the Northeast corner thereof, said corner being 30.00 feet Westerly of the centerline of Tannler Drive when measured at right angles; thence parallel with, Westerly of, and 30.00 feet distant from said

EXHIBIT "A"

Legal Description

centerline, the following courses: South 33°36'26" West, 429.30 feet to a point of curvature; thence along a curve to the left, having a radius of 697.59 feet, through a central angle of 17°02'18", an arc length of 207.45 feet (chord of which bears South 25°05'17" West, 206.68 feet) to a point of tangency; thence South 16°34'08" West, 147.68 feet to the point of beginning.

TOGETHER WITH that portion of 10th Street that inured thereto upon vacation thereof.

PARCEL IV:

A non-exclusive easement for access purposes, being appurtenant to Parcels I, II and III described above, as more fully set forth and described in Reciprocal Access Easement agreement recorded September 17, 2013, as Recorder's Fee No. 2013-065913, Clackamas County Records.

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 which may be asserted by persons in possession thereof.

3. Easements, or claims thereof, 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, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records. 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, or right to a lien, for services, labor, material or equipment rental, or for contributions due to the State of Oregon for unemployment compensation or worker's compensation, heretofore or hereafter furnished, imposed by law and not shown by the Public Records.

SPECIFIC ITEMS AND EXCEPTIONS:

6. Property taxes in an undetermined amount, which are a lien but not yet payable, including any assessments collected with taxes to be levied for the fiscal year 2025-2026.

7. The Land is within Clackamas County Service District No. 1 and is subject to its levies and assessments Note: We find no liens of record as of June 11, 2025.

8. City Liens, if any, in favor of the City of West Linn.(This property is located within the city limits, but currently is not listed in Conduits. An inquiry call to the City should be made.)

9. A 20 foot wide utility and public access easement as set forth in City of West Linn Ordinance No. 1439 situated within vacated Greene Street, affecting Parcel I;
Ordinance No.: 1439
Recording Date: September 9, 1999
Recording No: 99-088818

And modified by instrument;
Recording Date: June 13, 2000
Recording No.: 2000-038153

10. Reciprocal Access Easement Agreement, including a parking area easement situated within Parcel 3 and potential maintenance obligations, including the terms and provisions thereof;
Recording Date: September 17, 2013
Recording No.: 2013-065913

11. A deed of trust to secure an indebtedness in the amount shown below,

Amount:	$2,080,000.00
Dated:	February 27, 2025
Trustor/Grantor:	Tannler Holdings LLC, an Oregon limited liability company
Trustee:	First American Title Insurance
Beneficiary:	Community Financial Corporation
Loan No.:	400 6028 4
Recording Date:	March 4, 2025
Recording No.:	2025-007206

The Deed of Trust set forth above is purported to be a "Credit Line" Deed of Trust. It is a requirement that the Trustor/Grantor of said Deed of Trust provide written authorization to close said credit line account to the Lender when the Deed of Trust is being paid off through the Company or other Settlement/Escrow Agent or provide a satisfactory subordination of this Deed of Trust to the proposed Deed of Trust to be recorded at closing.

12. Existing leases and tenancies, if any, and any interests that may appear upon examination of such leases.

13. Personal property taxes, if any.

14. Note: We find no Notice of Completion recorded on said Land.

15. Any invalidity or defect in the title of the vestees in the event that the trust referred to herein is invalid or fails to grant sufficient powers to the trustee(s) or in the event there is a lack of compliance with the terms and provisions of the trust instrument.

Jeffery I. Parker, Trustee of the Jeffery I. Parker Revocable Living Trust U/T/D January 25, 2017 and
Alisha Wilt, Successor Trustee, Diane M. Wilt Revocable Living Trust

If title is to be insured in the trustee(s) of a trust (or if their act is to be insured), this Company will require a copy of said Trust Agreement or a Trust Certification pursuant to ORS Chapter 130.860.

The Company reserves the right to make additional requirements or add additional items or exceptions after review of the requested documentation.

16. The Company has on file a copy of the Operating Agreement for Tannler Holdings LLC, an Oregon limited liability company, dated January 24, 2025. A copy of any amendments subsequent to the date of said Operating Agreement should be furnished for review prior to closing.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

17. 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.

18. 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.

19. Any encroachment (of existing improvements located on the subject 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.

    The Company will require an inspection of the premises, and this exception may be eliminated or limited as a result thereof.

ADDITIONAL REQUIREMENTS/NOTES:

A. Note: Property taxes for the fiscal year 2024-2025 shown below are paid in full.

Amount:	$5,994.24
Levy Code:	003-058
Account No.:	00407526
Map No.:	21E35C 00100
Affects:	Parcel I

Amount:	$3,646.40
Levy Code:	003-058
Account No.:	00407535
Map No.:	21E35C 00102
Affects:	Parcel II

Amount:	$17,914.88
Levy Code:	003-058
Account No.:	00407544
Map No.:	21E35C 00200
Affects:	Parcel III

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. In addition to the standard policy exceptions, the exceptions enumerated above shall appear on the final ALTA Policy unless removed prior to issuance.

C. Note: There are no matters against the party(ies) shown below which would appear as exceptions to coverage in a title insurance product:

Parties: MCRT Investments LLC, a Delaware limited liability company

D. 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: Mill Creek Residential Trust and/or assigns

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.

E. Note: The only conveyance(s) affecting said Land, which recorded within 24 months of the date of this report, are as follows:

Grantor:	Alisha Wilt, Successor Trustee, Diane M. Wilt Revocable Living Trust
Grantee:	Tannler Holdings LLC, an Oregon limited liability company
Recording Date:	March 4, 2025
Recording No:	2025-007204

Grantor:	Jeffery I. Parker, Trustee of the Jeffery I. Parker Revocable Living Trust U/T/D January 25, 2017
Grantee:	Tannler Holdings LLC, an Oregon limited liability company
Recording Date:	March 4, 2025
Recording No:	2025-007205

F. 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.

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. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, processing, manufacture, sale, dispensing or use of marijuana and psilocybin, the Company is not able to close or insure any transaction involving Land associated with these activities.

I. Recording Charge (Per Document) is the following:

County	First Page	Each Additional Page
Multnomah	$86.00	$5.00
Washington	$81.00	$5.00
Clackamas	$93.00	$5.00

Note: When possible the company will record electronically. An additional charge may be applied.

Note: Please send any documents for recording to the following address:
Portland Title Group
Attn: Recorder
1455 SW Broadway, Suite 1450
Portland, OR. 97201

J. 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.

K. 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.

L. NOTE: IMPORTANT INFORMATION REGARDING PROPERTY TAX PAYMENTS

Fiscal Year:	July 1st through June 30th
Taxes become a lien on real property, but are not yet payable:	July 1st
Taxes become certified and payable (approximately on this date):	October 15th
First one third payment of taxes is due:	November 15th
Second one third payment of taxes is due:	February 15th
Final payment of taxes is due:	May 15th

Discounts: If two thirds are paid by November 15th, a 2% discount will apply.
If the full amount of the taxes are paid by November 15th, a 3% discount will apply.

Interest: Interest accrues as of the 15th of each month based on any amount that is unpaid by the due date. No interest is charged if the minimum amount is paid according to the above mentioned payment schedule.

M. Note: If an Owner's Title Insurance Policy is requested, the State of Oregon requires every ALTA Owner's Policy (07-01-2021) to include the OTIRO 110 Endorsement as a supplement to the definition of Insured in said Owner's Policy's Conditions to confirm coverage is the same for an Oregon Registered Domestic Partner as it is for a Spouse.

EXHIBIT ONE

2021 AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (07-01-2021)
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, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
      i. the occupancy, use, or enjoyment of the Land;
      ii. the character, dimensions, or location of any improvement on the Land;
      iii. the subdivision of land; or
      iv. environmental remediation or protection.
   b. any governmental forfeiture, police, regulatory, or national security power.
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed, or agreed to by the Insured Claimant;
   b. not Known to the Company, not recorded in the Public Records at the 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 the Date of Policy (Exclusion 3.d. 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 consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser or encumbrancer had been given for the Insured Mortgage at the Date of Policy.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business law.
5. Invalidity or unenforceability of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or Consumer Protection Law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights law, that the transaction creating the lien of the Insured Mortgage is a:
   a. fraudulent conveyance or fraudulent transfer;
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extend the Insured Mortgage is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any reason not stated in the Covered Risk 13.b
7. Any claim of a PACA-PSA Trust. Exclusion 7 does not modify or limit the coverage provided under Covered Risk 8.
8. Any lien on the Title for real estate taxes or assessments imposed by a governmental authority and created or attaching between the Date of Policy and the date of recording of the Insured Mortgage in the Public Records. Exclusion 8 does not modify or limit the coverage provided under Covered Risk 2.b. or 11.b.
9. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

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.

2021 AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (07-01-2021)
EXCLUSIONS FROM COVERAGE

The following matters are 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, permit, or governmental regulation (including those relating to building and zoning) that restricts, regulates, prohibits, or relates to:
      i. the occupancy, use, or enjoyment of the Land;
      ii. the character, dimensions or location of any improvement on the Land;
      iii. the subdivision of land; or
      iv. environmental remediation or protection;
   b. any governmental forfeiture, police, regulatory, or national security power
   c. the effect of a violation or enforcement of any matter excluded under Exclusion 1.a. or 1.b.

   Exclusion 1 does not modify or limit the coverage provided under Covered Risk 5 or 6.
2. Any power of eminent domain. Exclusion 2 does not modify or limit the coverage provided under Covered Risk 7.
3. Any defect, lien, encumbrance, adverse claim, or other matter:
   a. created, suffered, assumed or agreed to by the Insured Claimant;
   b. not known to the Company, not recorded in the Public Records at the 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 the Date of Policy (Exclusion 3.d. does not modify or limit the coverage provided under Covered Risk 9 or 10); or
   e. resulting in loss or damage that would not have been sustained if consideration sufficient to qualify the Insured named in Schedule A as a bona fide purchaser had been given for the Title at the Date of Policy.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights law, that the transaction vesting the Title as shown in Schedule A is a:
   a. fraudulent conveyance or fraudulent transfer, or
   b. voidable transfer under the Uniform Voidable Transactions Act; or
   c. preferential transfer:
      i. to the extent the instrument of transfer vesting the Title as shown in Schedule A is not a transfer made as a contemporaneous exchange for new value; or
      ii. for any other reason not stated in Covered Risk 9.b.
5. Any claim of a PACA-PSA Trust. Exclusion 5 does not modify or limit the coverage provided under Covered Risk 8.
6. Any lien on the Title for real estate taxes or assessments imposed or collected by a governmental authority that becomes due and payable after the Date of Policy. Exclusion 6 does not modify or limit the coverage provided under Covered Risk 2.b.
7. Any discrepancy in the quantity of the area, square footage, or acreage of the Land or of any improvement to the Land.

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.

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 Complaint Center:
http://www.ic3.gov

FIDELITY NATIONAL FINANCIAL
PRIVACY NOTICE

Effective January 1, 2025

Fidelity National Financial, Inc. and its majority-owned subsidiary companies (collectively, "FNF," "our," or "we") respect and are committed to protecting your privacy. This Privacy Notice explains how we collect, use, and protect personal information, when and to whom we disclose such information, and the choices you have about the use and disclosure of that information.

A limited number of FNF subsidiaries have their own privacy notices. If a subsidiary has its own privacy notice, the privacy notice will be available on the subsidiary's website and this Privacy Notice does not apply.

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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);
- identity information (*e.g.,* Social Security Number, driver's license, passport, or other government ID number);
- financial account information (*e.g.,* loan or bank account information);
- biometric data (e.g., fingerprints, retina or iris scans, voiceprints, or other unique biological characteristics; and
- other personal information necessary to provide products or services to you.

We may collect Personal Information about you from:

- information we receive from you or your agent;
- information about your transactions with FNF, our affiliates, or others; and
- information we receive from consumer reporting agencies and/or governmental entities, either directly from these entities or through others.

Collection of Browsing Information

FNF automatically collects the following types of Browsing Information when you access an FNF website, online service, or application (each an "FNF Website") from your Internet browser, computer, and/or device:

- Internet Protocol (IP) address and operating system;
- browser version, language, and type;
- domain name system requests; and
- browsing history on the FNF Website, such as date and time of your visit to the FNF Website and visits to the pages within the FNF Website.

Like most websites, our servers automatically log each visitor to the FNF Website and may collect the Browsing Information described above. We use Browsing Information for system administration, troubleshooting, fraud investigation, and to improve our websites. Browsing Information generally does not reveal anything personal about you, though if you have created a user account for an FNF Website and are logged into that account, the FNF Website may be able to link certain browsing activity to your user account.

Other Online Specifics

Cookies. When you visit an FNF 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. Information gathered using cookies helps us improve your user experience. For example, a cookie can help the website load properly or can customize the display page based on your browser type and user preferences. You can choose whether or not to accept cookies by changing your Internet browser settings. Be aware that doing so may impair or limit some functionality of the FNF Website.

Web Beacons. We use web beacons to determine when and how many times a page has been viewed. This information is used to improve our websites.

Do Not Track. Currently our FNF Websites do not respond to "Do Not Track" features enabled through your browser.

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FNF uses Personal Information for these main purposes:

- To provide products and services to you or in connection with a transaction involving you.
- To improve our products and services.
- To prevent and detect fraud;
- To maintain the security of our systems, tools, accounts, and applications;
- To verify and authenticate identities and credentials;
- To communicate with you about our, our affiliates', and others' products and services, jointly or independently.
- To provide reviews and testimonials about our services, with your consent.

When Information Is Disclosed

We may disclose your Personal Information and Browsing Information in the following circumstances:

- to enable us to detect or prevent criminal activity, fraud, material misrepresentation, or nondisclosure;
- to affiliated or nonaffiliated service providers who provide or perform services or functions on our behalf and who agree to use the information only to provide such services or functions;
- to affiliated or nonaffiliated third parties with whom we perform joint marketing, pursuant to an agreement with them to jointly market financial products or services to you;
- to law enforcement or authorities in connection with an investigation, or in response to a subpoena or court order; or
- in the good-faith belief that such disclosure is necessary to comply with legal process or applicable laws, or to protect the rights, property, or safety of FNF, its customers, or the public.

The law does not require your prior authorization and does not allow you to restrict the disclosures described above. Additionally, we may disclose your information to third parties for whom you have given us authorization or consent to make such disclosure. We do not otherwise share your Personal Information or Browsing Information with nonaffiliated third parties, except as required or permitted by law.

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 bankruptcy, reorganization, insolvency, receivership, or an assignment for the benefit of creditors. By submitting Personal Information and/or Browsing Information to FNF, you expressly agree and consent to the use and/or transfer of the foregoing information in connection with any of the above described proceedings.

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We maintain physical, electronic, and procedural safeguards to protect your Personal Information.

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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.

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- FNF affiliates and subsidiaries;
- Non-affiliated third parties, with your consent;
- Business in connection with the sale or other disposition of all or part of the FNF business and/or assets;

- Service providers;
- Law endorsement or authorities in connection with an investigation, or in response to a subpoena or court order.

For California Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties, except as permitted by California law. For additional information about your California privacy rights, please visit the "California Privacy" link on our website (fnf.com/california-privacy) or call (888) 413-1748.

For Nevada Residents: We are providing this notice pursuant to state law. You may be placed on our internal Do Not Call List by calling FNF Privacy at (888) 714-2710 or by contacting us via the information set forth at the end of this Privacy Notice. For further information concerning Nevada's telephone solicitation law, you may contact: Bureau of Consumer Protection, Office of the Nevada Attorney General, 555 E. Washington St., Suite 3900, Las Vegas, NV 89101; Phone number: (702) 486-3132; email: aginquiries@ag.state.nv.us.

For Oregon Residents: We will not share your Personal Information or Browsing Information with nonaffiliated third parties for marketing purposes, except after you have been informed by us of such sharing and had an opportunity to indicate that you do not want a disclosure made for marketing purposes. For additional information about your Oregon consumer privacy rights, or to make a consumer privacy request, or appeal a previous privacy request, please email privacy@fnf.com or call (888) 714-2710

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The FNF Websites are not intended or designed to attract persons under the age of eighteen (18). 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.

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FNF's headquarters is located within the United States. If you reside outside the United States and choose to provide Personal Information or Browsing Information to us, please note that we may transfer that information outside of your country of residence. By providing FNF with your Personal Information and/or Browsing Information, you consent to our collection, transfer, and use of such information in accordance with this Privacy Notice.

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Certain FNF companies provide services to mortgage loan servicers, including hosting websites that collect customer information on behalf of mortgage loan servicers (the "Service Websites"). The Service Websites may contain links to both this Privacy Notice and the mortgage loan servicer or lender's privacy notice. The sections of this Privacy Notice titled When Information is Disclosed, Choices with Your Information, and Accessing and Correcting Information do not apply to the Service Websites. The mortgage loan servicer or lender's privacy notice governs use, disclosure, and access to your Personal Information. FNF does not share Personal Information collected through the Service Websites, except as required or authorized by contract with the mortgage loan servicer or lender, or as required by law or in the good-faith belief that such disclosure is

necessary: to comply with a legal process or applicable law, to enforce this Privacy Notice, or to protect the rights, property, or safety of FNF or the public.

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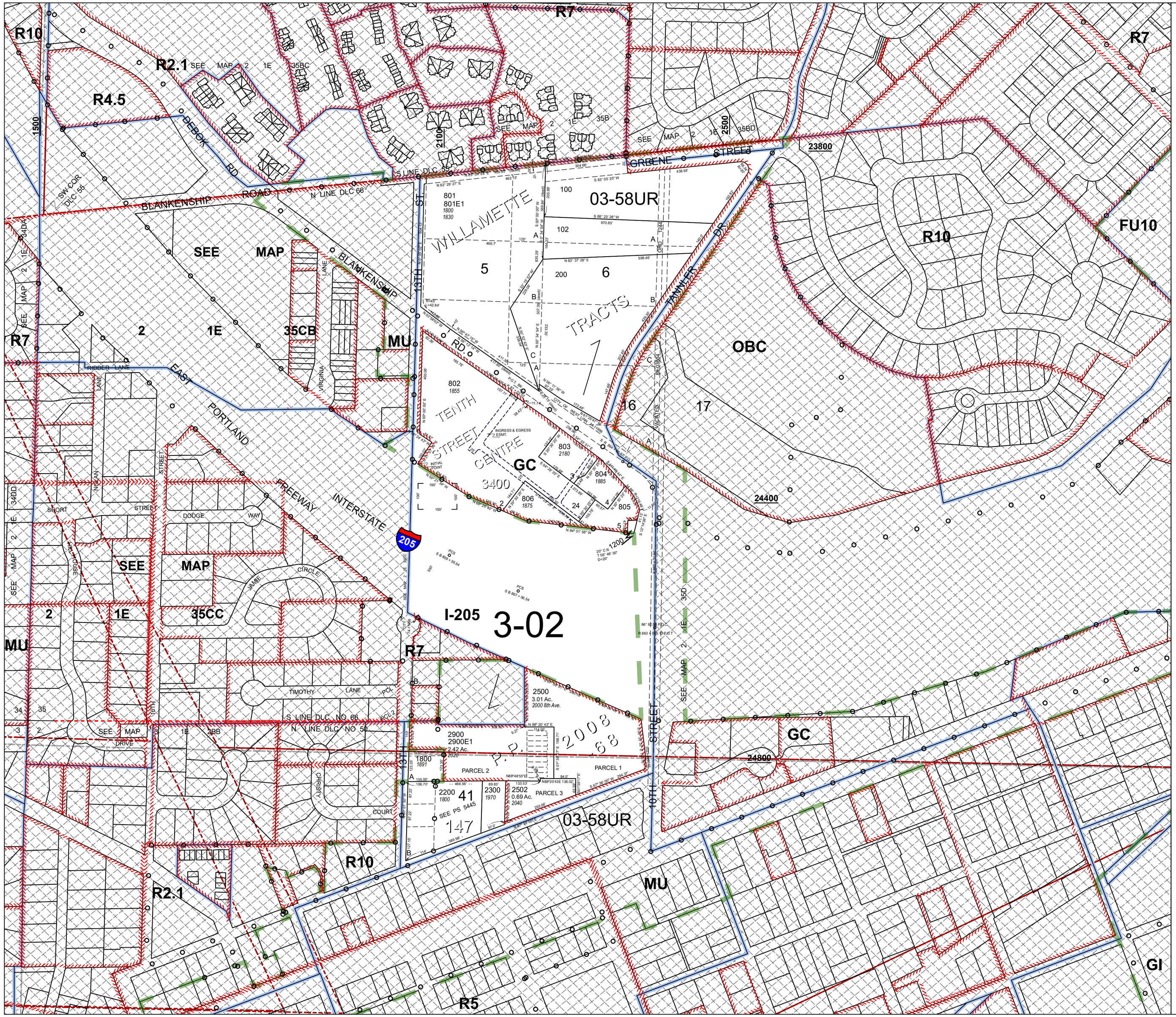
By submitting Personal Information and/or Browsing Information to FNF, you consent to the collection and use of the information in accordance with this Privacy Notice. We may change this Privacy Notice at any time. The Privacy Notice's effective date will show the last date changes were made. If you provide information to us following any change of the Privacy Notice, that signifies your assent to and acceptance of the changes to the Privacy Notice.

Accessing and Correcting Information; Contact Us

If you have questions or would like to correct your Personal Information, visit FNF's Privacy Request website or contact us by phone at (888) 714-2710, by email at privacy@fnf.com, or by mail to:

Fidelity National Financial, Inc.
601 Riverside Avenue,
Jacksonville, Florida 32204
Attn: Chief Privacy Officer



2 1E 35C
WEST LINN

S.W.1/4 SEC.35 T.2S. R.1E. W. M.
CLACKAMAS COUNTY

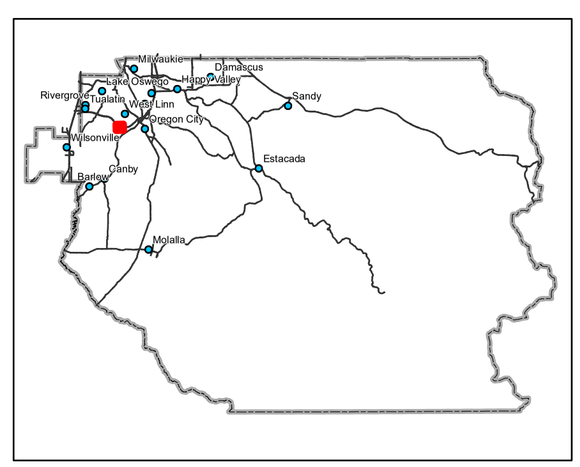
1" = 200'

D. L. C.
WILLIAM BLAND NO. 55
M. K. PERRIN NO. 50 & 66
JOSEPH FIELDS NO. 67

Cancelled	Cancelled
600	90000
400	90010
1300	90100
1400	90101
2400	90111
2600	90121
2700	90200
2800	90212
1602	90215
101	90218
900	90221
1000	90222
201	1900
1100	2000
300	2100
807	1500
103	1604
2500E1	1603
1700	1601A1
2501	1601
2500E2	1600

- Parcel Boundary
- Private Road ROW
- Historical Boundary
- Railroad Centerline
- Tax Code Lines
- Map Index
- Water Lines
- Land Use Zoning
- Plats
- Water
- Corner
- Section Corner
- 1/16th Line
- Govt Lot Line
- DLC Line
- Meander Line
- PLSS Section Line
- Historic Corridor 40'
- Historic Corridor 20'

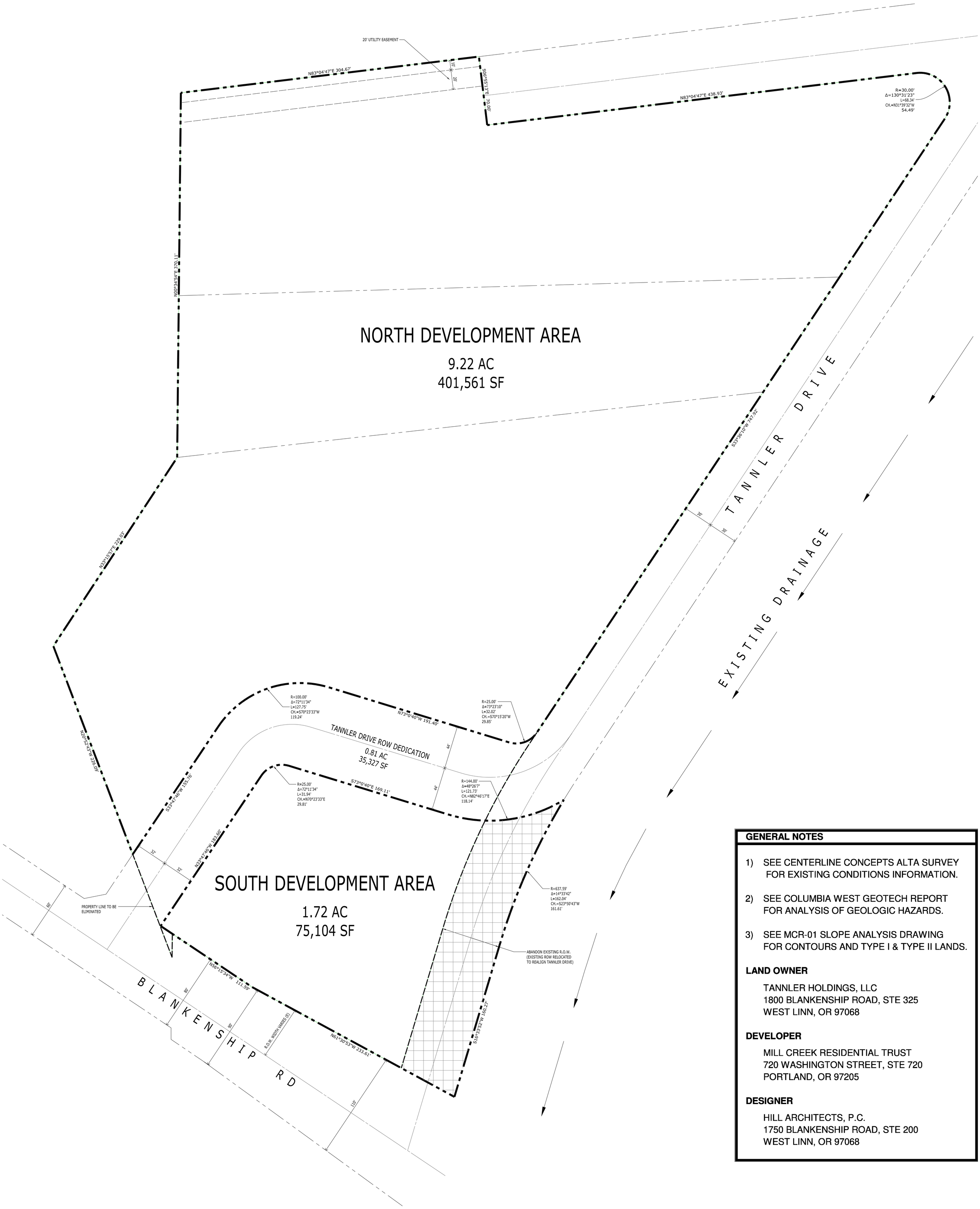
N W E S



THIS MAP IS FOR ASSESSMENT PURPOSES ONLY

Print Date: 4/3/2024

2 1E 35C
WEST LINN



GENERAL NOTES

1) SEE CENTERLINE CONCEPTS ALTA SURVEY FOR EXISTING CONDITIONS INFORMATION.

2) SEE COLUMBIA WEST GEOTECH REPORT FOR ANALYSIS OF GEOLOGIC HAZARDS.

3) SEE MCR-01 SLOPE ANALYSIS DRAWING FOR CONTOURS AND TYPE I & TYPE II LANDS.

LAND OWNER

TANNLER HOLDINGS, LLC
1800 BLANKENSHIP ROAD, STE 325
WEST LINN, OR 97068

DEVELOPER

MILL CREEK RESIDENTIAL TRUST
720 WASHINGTON STREET, STE 720
PORTLAND, OR 97205

DESIGNER

HILL ARCHITECTS, P.C.
1750 BLANKENSHIP ROAD, STE 200
WEST LINN, OR 97068

MODERA WEST LINN

WEST LINN, OREGON

SITE ANALYSIS - PARCEL PLAN 2.4

SEPTEMBER 18, 2025

Report of Geotechnical Engineering Services

Modera West Linn

West Linn, Oregon

September 16, 2025

Geotechnical ■ Environmental ■ Special Inspections

Columbia West

Engineering, Inc

www.columbia-west.com

Geotechnical ▪ Environmental ▪ Special Inspections
Columbia West Engineering, Inc

Vancouver, Washington • Phone: 360-823-2900
Portland, Oregon • Phone: 971-384-1666
www.columbia-west.com

September 16, 2025

MCRT Investments LLC
720 SW Washington Street, Suite 720
Portland, OR 97205

Attention: Chad Encinas

Re: Report of Geotechnical Engineering Services
Modera West Linn
Tannler Drive and Blankenship Road
West Linn, Oregon
CWE Project: MCRT-1-01-1

Columbia West Engineering, Inc. (Columbia West) is pleased to present this report of geotechnical engineering services for the Modera West Linn project located in West Linn, Oregon. Our services were conducted in accordance with the Professional Services Contract for Projects in Oregon between MCRT Investments LLC and Columbia West dated July 9, 2025.

We appreciate the opportunity to work on the project. Please contact us if you have any questions regarding this report.

Sincerely,

Najib A. Kalas, PE
Principal Engineer

Brett A. Shipton, PE, GE
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
84829PE
OREGON
November 10, 2015
NAJIB A. KALAS
EXPIRES: 06/30/27

cc: Tim Urben, MCRT Investments LLC

GLW:NAK:BAS:kat
Attachments
Document ID: MCRT-1-01-1-091625-geor-rev.docx

EXECUTIVE SUMMARY

This executive summary presents the primary geotechnical considerations associated with the proposed Modera West Linn project located in West Linn, Oregon. Our conclusions and recommendations are based on the subsurface information presented in the report and proposed development information provided by the design team. Detailed discussion of the geotechnical considerations summarized here is presented in respective sections of the report.

- Shallow basalt bedrock was encountered at the site. The upper portion of the bedrock is weathered and decomposed and was possible to excavate using small excavator with a toothed bucket. The underlying intact bedrock could not be penetrated by the excavator, even with significant effort. Some site cuts are proposed below intact bedrock elevations, which will likely require specialized excavation methods such as hydraulic breakers, rock trenchers, or blasting.

- Contract bid documents should require that contractors list a unit cost for rock excavation using in-place (bank) volumes, which can be measured by surveying. The unit cost should not be provided in excavated (swelled) volumes, which are more difficult to accurately measure.

- Based on the results of our explorations and analysis, proposed structures can be supported by spread footings bearing on firm, native soil and rock or engineered structural fill overlying undisturbed native material. Differential settlement may result where buildings are founded partially on bedrock and partially on soil. Differential settlement can be minimized by use of compacted gravel pads for footings established over the native silt or gravelly soil. Our foundation recommendations are provided in Section 6.1 (Foundation Support).

- Floor slabs for some of the structures may also span soil and bedrock. There is a potential for differential settlement or reflection cracking of floor slabs along bedrock/soil interfaces. We recommend that the floor slab base section be increased to a minimum of 12 inches along such interfaces. More detailed recommendations are presented in Section 6.2 (Floor Slabs).

- Liquefaction, lateral spreading, and fault rupture are not considered hazards at the site.

- Near-surface, fined-grained soil is sensitive to disturbance and softening when at a moisture content that is above optimum. Granular access pads and staging areas will be necessary to minimize damage to exposed subgrade soil during construction. Subgrade protection is discussed in Section 7.2 (Construction Traffic and Staging).

- Moisture conditioning (drying) of on-site silt and gravelly soil will be required to use the material as structural fill. Accordingly, on-site soil will likely only be suitable for use as structural fill during the dry season.

- The on-site basalt can be used as general structural fill, provided it is adequately processed to smaller particles sizes and to a well-graded (non-uniform) state.

- Groundwater may become perched on the shallow bedrock during periods of persistent rainfall and may impact site cuts, retaining walls, and below-grade structures. Adequate drainage will be essential behind retaining walls to intercept perched groundwater flow and convey it away from proposed structures. Foundation perimeter drains will also be required where upslope footing excavations extend below the level of the basalt rock surface.

- The conceptual site and grading plan dated August 29, 2025, indicates that significant cuts of up to approximately 25 feet and associated retaining walls may be proposed at the site. Our scope of services did not include exploration of the intact basalt using rock coring techniques. For proposed cuts and walls exceeding 15 feet in height, we recommend additional exploration via rock coring to evaluate the presence of bedding planes and assess the feasibility of constructing large, over-steepened cuts into the rock. We should also be contacted to review site grading plans as they are developed to provide appropriate recommendations for additional exploration and analysis. Further, we recommend that site retaining walls be designed on a case-by-case basis with input from a qualified geotechnical engineer. Based on the current conceptual plan, we anticipate that up to three borings with rock coring to depths between approximately 25 and 35 feet BGS will be required.

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ABBREVIATIONS AND ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
AC	asphalt concrete
ACP	asphalt concrete pavement
ASCE	American Society of Civil Engineers
ASTM	ASTM International
BGS	below ground surface
CRBG	Columbia River Basalt Group
g	gravitational acceleration (32.2 feet/second^2)
H:V	horizontal to vertical
km	kilometer(s)
MCE	maximum considered earthquake
OSHA	Occupational Safety and Health Administration
OSSC	2024 Oregon Standard Specifications for Construction
pcf	pounds per cubic foot
pci	pounds per cubic inch
PG	performance grade
psf	pounds per square foot
psi	pounds per square inch
SOSSC	State of Oregon Structural Specialty Code
USGS	U.S. Geological Survey
WGS 84	World Geodetic System 1984

REPORT OF GEOTECHNICAL ENGINEERING SERVICES
MODERA WEST LINN
WEST LINN, OREGON

1.0 INTRODUCTION

Columbia West is pleased to submit this report of geotechnical engineering services for the Modera West Linn project located in West Linn, Oregon. The 11.41-acre site is located northwest of the intersection of Tannler Drive and Blankenship Road. The site is shown relative to surrounding physical features on Figure 1. Existing conditions and current exploration locations are shown on Figure 2. A description of our field exploration program and the exploration logs are presented in Appendix A. A description of the laboratory testing program and the test results are presented in Appendix B. Prior explorations by others are presented in Appendix C. Abbreviations and acronyms used herein are defined immediately following the Table of Contents.

2.0 PROJECT UNDERSTANDING

The conceptual site and grading plan dated August 29, 2025, shown on Figure 3, indicates that the proposed development includes several up to four-story, wood-framed residential buildings; mixed-use residential and commercial buildings; a community center/clubhouse; carports; garages; and office buildings with associated infrastructure, including swimming pools, pavement, and utilities. Tannler Drive will be realigned to accommodate the proposed development.

Foundation loads were not available at the time of this report; however, we have assumed maximum column and wall loads will be less than 200 kips and less than 4.5 kips per lineal foot, respectively. We estimate the distributed slab live load is less than 100 psf. Preliminary spot-grading information provided by the design team indicates that deep cuts and associated retaining walls with exposed heights of up to approximately 25 feet are planned for the proposed development. Fills on the order of approximately 10 feet or more may also be proposed. We should be contacted to revise our recommendations if the assumptions stated above are incorrect.

3.0 BACKGROUND

In preparing this report, we reviewed the following documents that contain relevant information regarding the site:

- *Report of Geotechnical Engineering Services; Willamette 205 Corporate Center; Blankenship Road and Tannler Drive; West Linn, Oregon,* prepared by GeoDesign, Inc., dated July 7, 2006
- *Report of Geotechnical Engineering Services; NWC of Tannler & Blankenship; Tannler Drive and Blankenship Road; West Linn, Oregon,* prepared by GeoDesign, Inc., dated July 28, 2014

These investigations included 33 test pit excavations that were explored to depths between 3.3 and 13.5 feet BGS. In general, the prior test pit explorations encountered silt to varying depths overlying basalt bedrock. Layers of silty gravel and gravelly silt with cobbles were encountered between the silt and bedrock units in some test pits, which were interpreted as colluvium or

decomposed bedrock. The upper portion of the underlying bedrock was described as decomposed to weathered and fractured and transitions to intact bedrock with depth. The ground surface was reported to be covered by an approximately 2- to 8-inch-thick root zone from surface vegetation. Abundant shrub roots were reportedly observed to depths of 12 to 18 inches. Slow to moderate groundwater seepage was reported in three of the test pits at depths between 3.5 and 10 feet BGS. The findings of our current subsurface exploration program are supplemented by the exploration logs from the 2006 and 2014 reports, which are presented in Appendix C.

4.0 PURPOSE AND SCOPE

The purpose of our services was to provide geotechnical engineering recommendations for use in design and construction of the proposed development. Specifically, we completed the following tasks:

- Reviewed information available in Columbia West's files from previous geological and geotechnical studies conducted at and in the vicinity of the site, including test pit logs and associated laboratory testing prepared by GeoDesign for the site in 2006 and 2014.
- Coordinated and managed the field exploration program, which included locating public and private utilities, coordinating site access, and scheduling subcontractors and Columbia West field staff.
- Excavated 10 test pits to depths between 2 and 6 feet BGS.
- Observed subsurface conditions, maintained continuous logs of the explorations, and collected samples at representative intervals.
- Completed a laboratory testing program using select soil samples collected from the explorations, which included the following:
  - Ten moisture content determinations in general accordance with ASTM D2216
  - Four particle-size analyses in general accordance with ASTM D1140
  - Two Atterberg limits tests in general accordance with ASTM D4318
- Prepared this geotechnical report that includes the following:
  - Summary of soil and groundwater conditions at the site
  - Assessment of seismic hazards
  - Recommendations for foundation support, including allowable bearing capacity, estimated foundation settlement, and lateral resistance parameters for shallow foundations
  - Recommendations for floor slab subgrade preparation
  - Recommendations for retaining walls, including lateral earth pressures, backfill, compaction, and drainage
  - Recommendations for site preparation, including grading and drainage, stripping depths, fill type for imported material, compaction criteria, trench excavation and backfill, use of on-site soil, and wet/dry weather earthwork
  - Recommendations for bedrock excavation
  - Recommendations for managing identified groundwater conditions that may affect the performance of structures and site improvements
  - Recommendations for AC pavement design for on-site access drives and parking areas, including subbase, base course, and AC paving thicknesses
  - Code-based seismic design parameters in accordance with the 2022 SOSSC

5.0 SITE CONDITIONS

5.1 GEOLOGY

The site is located on an upland terrace extending southeast from the Tualatin Mountains. The Tualatin Mountains form the physiographic boundary between the Portland Basin to the north and east, the Tualatin Basin to the west, and the Central Willamette Valley to the south. These basins are part of the larger Puget Sound-Willamette Valley physiographic province, a tectonically active lowland situated between the Coast Range to the west and the Cascade Mountains to the east (Orr and Orr 1999).

Geologic mapping by Schlicker and Finlayson (1979) and Madin (2009) indicates that near-surface geology consists of Miocene-aged (16 million to 12 million years old) basalt flows of the CRBG. The CRBG is a series of basalt flows that originated from southeastern Washington and northeastern Oregon.

5.2 SURFACE CONDITIONS

The 11.41-acre site is bounded by Tannler Drive to the east, Blankenship Road to the south, commercial development to the west, and residential development to the north. The site is generally open, vacant, and covered by grasses and brush. Scattered mature trees are present in the north portion of the site and along property boundaries. The site slopes up to the north, with grades ranging from approximately 12 to 17 percent. Site elevations range from approximately 384 feet at the northern site boundary to 200 feet adjacent to Blankenship Road (WGS 84).

5.3 SUBSURFACE CONDITIONS

Subsurface conditions were explored by excavating 10 test pits (TP-1 through TP-10) to depths between 2 and 6 feet BGS. Our subsurface exploration program was supplemented with previous subsurface explorations conducted at the site by GeoDesign (GeoDesign 2006, 2014). GeoDesign's explorations included 33 test pits excavated to depths between 3.3 and 13.5 feet BGS.

The recent exploration locations are shown on Figures 2 and 3. A description of our field exploration program and the exploration logs are presented in Appendix A. A description of the laboratory testing program and the test results are presented in Appendix B. Prior exploration locations, exploration logs, and laboratory test results prepared by GeoDesign are presented in Appendix C. A summary of the subsurface conditions is presented below.

5.3.1 Root Zone and Topsoil

All of our test pits were explored through surface vegetation consisting of 8 to 12 inches of topsoil and a 2- to 5-inch-thick root zone. The topsoil generally consists of silt with gravel and trace organics. Previous explorations by GeoDesign encountered 2- to 8-inch-thick root zones with up to 18 inches of topsoil that contains abundant shrub roots.

5.3.2 Undocumented Fill

Undocumented fill was encountered in test pit TP-11 of GeoDesign's 2006 field investigation and extends to a depth of 4 feet BGS. The fill consists of silt with trace to some gravel and trace clay.

5.3.3 Silt (Colluvium)

Underlying the topsoil in test pits TP-1 through TP-7, and TP-10, medium stiff silt with varying proportions of gravel extends to depths between 1.5 and 5 feet BGS. This unit represents colluvium. The tested moisture content of the silt ranged from 12 to 23 percent at the time of exploration. Atterberg limits testing indicates that the silt exhibits medium plasticity. Previous explorations by GeoDesign encountered the silt to similar depths.

5.3.4 Decomposed Basalt

Underlying the topsoil in test pits TP-8 and TP-9 and the silt layer in test pit TP-6, gravelly silt to silty gravel extends to depths of 3 to 4 feet BGS. The gravelly silt is stiff to very stiff and the silty gravel is medium dense to very dense. This unit represents decomposed residual soil of the underlying basalt bedrock. The silt and gravel constituents vary across the site based on the degree of decomposition. Our excavator was able to penetrate this unit without much difficulty. Previous explorations by GeoDesign also encountered this unit, which was observed to be up to 8 feet thick. The tested moisture content of the unit ranged from 11 to 33 percent at the time of exploration.

5.3.5 Basalt

All of our test pits met refusal on basalt at depths between 2 and 6 feet BGS. The observed depth to refusal in each test pit is shown on Figures 2 and 3. Many of the previous explorations by GeoDesign also met refusal on basalt at depths between 3.3 and 13.5 feet BGS. The upper portion of the bedrock is generally decomposed to weathered and fractured. Weathering appears to generally decrease with depth. The excavator was able to penetrate the weathered zones of basalt but was unable to penetrate the intact basalt, even with significant effort. Our scope of services did not include exploration of the intact basalt using rock coring techniques. Accordingly, we are unable to assess the degree of weathering and fracturing of the intact basalt. The upper rock layers exposed in the test pits are generally moderately to intensely fractured and very close to close jointed. Based on our experience and prior observations of deep rock coring in the site vicinity, we believe that the upper portion of the intact bedrock is likely highly to slightly weathered and very intensely to moderately fractured.

5.3.6 Groundwater

Groundwater was not observed in our current explorations. Slow to moderate groundwater seepage was reported in three of the previous test pits at depths between 3.5 and 10 feet BGS. According to Snyder (2008), the approximate elevation of the static groundwater table at the site is 175 feet. This elevation corresponds to an approximate depth to groundwater of 25 to 210 feet BGS depending on location and ground surface elevation. Groundwater levels are also subject to seasonal variation and may rise during extended periods of increased precipitation or flooding. During and after periods of rainfall, groundwater will likely become perched on the shallow bedrock formation and travel downslope where it could manifest at the ground surface or in walls where the top of bedrock is exposed by cuts or below-grade structures.

5.4 SEISMIC HAZARDS

5.4.1 Liquefaction

Liquefaction is a phenomenon caused by a rapid increase in pore water pressure that reduces the effective stress between soil particles. Granular soil, which relies on interparticle friction for

strength, undergoes a loss of strength until the excess pore pressures dissipate. In general, loose, saturated sand soil with low silt and clay content is the most susceptible to liquefaction. Low plasticity, silty sand and silt may be moderately susceptible to liquefaction under relatively higher levels of ground shaking. Based on our explorations and the observed shallow depth to bedrock, liquefaction is not considered a hazard at the site.

5.4.2 Lateral Spreading

Lateral spreading is a liquefaction-related seismic hazard and occurs on gently sloping or flat sites underlain by liquefiable sediment adjacent to an open face, such as a riverbank. Liquefied soil adjacent to an open face can flow toward the open face, resulting in lateral ground displacement. Since liquefaction is not a hazard at the site, lateral spreading is not a geotechnical design consideration for the project.

5.4.3 Fault Rupture

Based on USGS interactive fault mapping, the nearest mapped fault to the site is the Canby-Molalla fault, which is located approximately 3 km southwest of the site (USGS 2025). As such, fault rupture is not considered a hazard at the site.

6.0 DESIGN

6.1 FOUNDATION SUPPORT

6.1.1 General

The proposed structures can be supported by spread footings bearing on firm, native soil and rock or engineered structural fill overlying undisturbed native material. For structures near slopes, we recommend foundations have sufficient embedment to provide a minimum 10-foot offset from the free face of the slopes. For existing slopes steeper than 2H:1V or foundations located behind retaining walls, we recommend that foundations or foundation-supporting elements be embedded such that they are set back at least 5 feet from a 2H:1V grade projected from the base of the slope or wall as shown on Figure 4. The minimum footing offsets and embedments indicated above may be ignored for foundations bearing on basalt bedrock.

Foundations should not be supported by undocumented fill, soft soil, or disturbed soil. If encountered, these materials should be improved or completely removed and replaced with structural fill. If footing subgrade soil is above its optimum moisture content at the time of subgrade preparation, we recommend that a minimum of 4 inches of compacted aggregate be placed over exposed subgrade soil to protect it from foot traffic. The aggregate should consist of imported granular material as described in Section 7.4.1 (Structural Fill). Columbia West should observe exposed subgrade prior to placement of crushed aggregate to confirm that the foundation subgrade is prepared in accordance with the recommendations in this report.

6.1.2 Bearing Capacity

Continuous wall and isolated spread footings should be at least 18 inches and 24 inches wide, respectively. The bottoms of exterior footings should be at least 18 inches below the lowest adjacent exterior grade. The bottoms of interior footings should be established at least 12 inches below the base of the slab.

Footings bearing on native silt or silty gravel/gravelly silt subgrade prepared as recommended above should be sized based on an allowable bearing pressure of 2,500 psf. The bearing pressure can be increased to 3,000 psf for footings established on gravel pads and 8,000 psf for footings established on bedrock. These are net bearing pressures; the weight of the footing and overlying backfill can be ignored in calculating footing sizes. The recommended allowable bearing pressures apply to the total of dead plus long-term live loads and may be increased by one-third for short-term loads such as those resulting from wind or seismic forces.

6.1.3 Settlement

There is potential for differential settlement between adjacent columns where one is founded directly on bedrock and the other on native silty soil. Based on the expected column loads, our analyses indicate that columns founded directly on native silt or silty gravel could experience settlement magnitudes up to approximately 0.75 inch, while settlement of columns on bedrock will be negligible. Therefore, the total differential settlement will be up to 0.75 inch.

If this level of differential settlement in not acceptable, we recommend that all foundations be established on either bedrock or 1-foot-thick compacted gravel pads overlying native soil. We estimate that the total settlement for footings established on gravel pads will be less than 0.5 inch; differential settlement between adjacent columns on gravel pads and bedrock will also be less than 0.5 inch. Footing pads should extend at least 6 inches beyond the edges of the footing and consist of imported granular material as described in Section 7.4.1 (Structural Fill). The on-site basalt can be used if it is processed to meet the requirements of imported granular material.

6.1.4 Resistance to Sliding

Lateral loads on footings can be resisted by passive earth pressure on the sides of the structures and by friction on the bases of the footings. Our analysis indicates that the available passive earth pressure for footings confined by on-site silt and gravelly soil or structural fill is 350 pcf, modeled as an equivalent fluid pressure. The recommended passive pressure can be increased to 800 pcf for footings confined entirely by intact basalt bedrock. Adjacent floor slabs, pavement, or the upper 12-inch depth of unpaved areas should not be considered when calculating passive resistance. In addition, in order to rely on passive resistance, a minimum of 10 feet of horizontal clearance must exist between the faces of the footings and any adjacent downslopes.

For footings in contact with the on-site native silt, a coefficient of friction equal to 0.30 may be used when calculating resistance to sliding. This value may be increased to 0.40 for footings in contact with basalt bedrock, silty gravel, or compacted gravel pads.

6.1.5 Subgrade Observation and Preparation

All footing subgrade should be evaluated by a representative of Columbia West to confirm suitable bearing conditions. Observations should also confirm that loose or soft material, organic material, unsuitable fill, prior topsoil zones, and softened subgrade have been removed. Localized deepening of footing excavations may be required to penetrate any deleterious or soft material, particularly during wet weather conditions. Footing excavations should be backfilled with compacted crushed aggregate.

Excavations that extend into the underlying basalt may require special excavation considerations as discussed in Section 7.3 (Excavation).

6.2 FLOOR SLABS

Floor slabs can be supported on firm, competent, native soil or engineered structural fill prepared as described in this report. Floor slabs with maximum floor loads of 150 psf may be designed assuming a modulus of subgrade reaction, k, of 150 pci.

To provide a capillary break, slabs should be underlain by at least 6 inches of compacted crushed aggregate that contains less than 5 percent fines by dry weight. Geotextile may be used below the crushed aggregate layer to increase subgrade support. Recommendations for floor slab aggregate base and subgrade geotextile are discussed in Section 7.4 (Materials).

We anticipate that floor slabs may be founded partially on bedrock and partially on soil. There is a potential for differential settlement or reflection cracking of floor slabs along bedrock/soil transitions. We recommend that the floor slab base section be increased to a minimum of 12 inches along such transitions to reduce the potential for excessive differential settlement. The thickened section should extend laterally at least 15 feet on either side of the interface. Since the exact location of the soil/rock interface is impossible to predict, sufficient field observation will be necessary during slab preparation to identify these conditions.

The on-site soil will tend to maintain a moderate to high moisture content. The installation of a vapor barrier may be warranted in order to reduce the potential for moisture transmission through and efflorescence growth on the floor slabs. In addition, flooring manufacturers often require vapor barriers to protect flooring and flooring adhesives and will warrant their product only if a vapor barrier is installed according to their recommendations. Actual selection and design of an appropriate vapor barrier, if needed, should be based on discussions among members of the design team.

All slab subgrade should be evaluated by a member of our geotechnical staff to confirm suitable bearing conditions. Observations should also confirm that loose or soft material, organic material, unsuitable fill, prior topsoil zones, and softened subgrade have been removed and replaced with structural fill. In addition, contaminated base rock for the slabs should be removed and replaced prior to pouring the slab.

6.3 SEISMIC DESIGN CRITERIA

Seismic design for the proposed structures is prescribed by the 2022 SOSSC, which references ASCE 7-16. Based on the results of our subsurface explorations, the site soil and rock conditions meet the criteria for Site Class B. Seismic design parameters for Site Class B are presented in Table 1.

Table 1. Seismic Design Parameters in Accordance with ASCE 7-16

Parameter	Short Period (T_s)	1-Second Period (T_1)
MCE spectral response acceleration, S	S_s = 0.837 g	S_1 = 0.378 g
Site class	B	
Site coefficient, F	F_a = 0.9	F_v = 0.8
Adjusted spectral response acceleration, S_M	S_{MS} = 0.75 g	S_{M1} = 0.30 g
Design spectral response acceleration, S_D	S_{DS} = 0.50 g	S_{D1} = 0.20 g

6.4 RETAINING STRUCTURES

6.4.1 Assumptions

Our retaining wall design recommendations are based on the following assumptions: (1) the walls consist of conventional, cantilevered retaining walls, (2) the walls are less than 8 feet in height, (3) the backfill is drained, and (4) the backfill has a slope flatter than 4H:1V. We recommend that a qualified geotechnical engineer perform design calculations for the larger on-site walls once the wall type and geometry has been determined.

The following design parameters may be applicable for larger walls that may be proposed. However, if design is performed by others, Columbia West should review preliminary wall plans to determine if the design parameters are suitable and should review the final wall calculations.

Retaining walls may not be necessary where intact bedrock is encountered. However, we recommend additional exploration via rock coring to evaluate the presence of bedding planes; assess the feasibility of constructing large, over-steepened cuts into the rock; and assess the potential need for retaining walls. Based on the current conceptual plan, we anticipate that at least three borings with rock coring to depths between approximately 25 and 35 feet BGS will be required.

We expect that walls can be constructed directly on top of the intact bedrock. In this case, the project team should consider installing fascia over the entire wall to create a uniform appearance.

6.4.2 Wall Design Parameters

Unrestrained site walls that retain native soil and decomposed bedrock should be designed to resist active earth pressures of 35 to 55 pcf when supporting slopes between 4H:1V and 2H:1V, respectively. These values can be reduced to 25 to 30 pcf for wall supporting moderately weathered bedrock at the same slope angles. Where retained slopes are between inclinations of 4H:1V and 2H:1V, the designer may linearly interpolate between these active earth pressures. For embedded building walls, seismic lateral forces can be modeled assuming a force of $6H^2$ pounds per lineal foot of wall, where H is the height of the wall in feet, and applied as a distributed load with centroid located at 0.6H from the base of the wall, where H is the height of the wall.

If retaining walls are restrained from rotation prior to being backfilled, the aforementioned active earth pressures should be increased by 15 pcf. If other surcharges (e.g., slopes steeper than 2H:1V, foundations, vehicles, etc.) are located within a horizontal distance from the back of a wall

equal to twice the height of the wall, additional pressures should be accounted for in the wall design. Lateral earth pressures induced by surcharge loads may be estimated using the criteria presented on Figure 5.

The wall footings should be designed in accordance with the guidelines in Section 6.1 (Foundation Support).

6.4.3 Wall Drainage and Backfill

The above design parameters have been provided assuming drains will be installed behind the wall to prevent buildup of hydrostatic pressures behind all walls. If a drainage system is not installed, our office should be contacted for revised design forces.

Backfill placed behind the walls and extending a horizontal distance of ½H, where H is the height of the retaining wall, should consist of retaining wall select backfill placed and compacted in conformance with Section 7.4.1 (Structural Fill).

A minimum 6-inch-diameter, perforated collector pipe should be placed at the bases of the walls. The pipe should be embedded in a minimum 2-foot-wide zone of angular drain rock that is wrapped in a drainage geotextile fabric and extends up the back of the walls to within 1 foot of the finish grade. The drain rock and drainage geotextile fabric should meet the specifications in Section 7.4 (Materials). The perforated collector pipes should discharge at an appropriate location away from the bases of the walls. The discharge pipes should not be tied directly into stormwater drain systems, unless measures are taken to prevent backflow into the drainage systems of the walls.

Settlement of up to 1 percent of the wall height commonly occurs immediately adjacent to the wall as the wall rotates and develops active lateral earth pressures. Consequently, we recommend construction of flatwork adjacent to retaining walls be postponed at least four weeks after backfilling of the walls, unless survey data indicates that settlement is complete prior to that time.

6.5 PAVEMENT

We understand that private AC pavement may be proposed for on-site access drives and vehicle parking. Pavement should be installed on compacted subgrade or new engineered fill prepared in conformance with Section 7.1 (Site Preparation). Pavement improvements in the public right-of-way should adhere to jurisdictional guidelines.

6.5.1 Design Values

At the time this report was prepared, the volume of traffic for the development was unknown. Consequently, we have provided pavement sections for automobile-only parking, automobile-only drive aisles, and drive aisles that will also service heavy vehicle traffic (i.e., garbage trucks, semitrucks, etc.). Our pavement recommendations are based on the following design parameters and assumptions:

- Resilient moduli for subgrade soil and aggregate base material were assumed to be 4,000 psi and 20,000 psi, respectively.
- Pavement design life of 20 years with no expected traffic growth.

- Initial and terminal serviceability indices of 4.2 and 2.5, respectively.
- Reliability of 85 percent and standard deviation of 0.4.
- Pavement may be exposed to a fire apparatus load of 75,000 pounds on an infrequent basis.

6.5.2 AC Pavement Sections

Recommended AC pavement sections are presented in Table 2. Material properties and compaction recommendations for AC and aggregate base layers are presented in Section 7.4 (Materials).

Table 2. AC Pavement Sections

Pavement Use	Trucks per Day	AC[1] (inches)	Aggregate Base[1] (inches)
Automobile parking	0	2.5	8
Automobile-only drive aisles	0	3	9
Heavy truck areas	Up to 10	4	10.5
	Up to 25	4.5	12.5
	Up to 50	5	14

1. All thicknesses are intended to be the minimum acceptable.

The material thicknesses in Table 2 are intended to be minimum acceptable values for the final condition. The aggregate base thicknesses do not account for construction traffic, and haul roads and staging areas should be used as described in Section 7.2 (Construction Traffic and Staging).

6.6 DRAINAGE

6.6.1 Temporary

During work at the site, the contractor should be made responsible for temporary drainage of surface water as necessary to prevent standing water and/or erosion at the working surface. During rough and finished grading of the site, the contractor should keep all pads and subgrade free of ponding water.

6.6.2 Surface

The ground surface at finished pads should be sloped away from their edges at a minimum 2 percent gradient for a distance of at least 5 feet. Roof drainage from buildings should be directed into solid, smooth-walled drainage pipes that carry the collected water to the storm drain system.

6.6.3 Curtain Drains and Foundation Drains

It is likely that groundwater will become perched on the basalt bedrock layer during periods of persistent rainfall. Groundwater flow could impact downslope buried structures or could daylight in site cuts. Adequate drainage is essential behind retaining walls to serve as a curtain drain to intercept perched groundwater and convey it away from the planned structures. The drain should

be sloped to a suitable discharge point. The following section provides recommendations for retaining wall drains are presented in Section 6.4.3 (Wall Drainage and Backfill).

If upslope footing excavations extend into the weathered and intact bedrock, perimeter footing drains should be installed to convey the perched water away from the structures. The footing drains should be constructed at a minimum slope of approximately 0.5 percent and pumped or drained by gravity to a suitable discharge point. The drains should consist of 4-inch-diameter, perforated drainpipe embedded in a minimum 1-foot-wide zone of crushed drain rock, should extend to near the ground surface, and should be wrapped in geotextile fabric. The invert elevation of the drainpipe should be installed at the base of the footing. The drain rock and drainage geotextile should meet the requirements specified in Section 7.4 (Materials).

6.7 PERMANENT SLOPES

Permanent cut and fill slopes in the on-site soil and decomposed bedrock may be constructed up to 15 feet tall to a gradient as steep as 2H:1V. However, cut slopes over 15 feet tall should be limited to a gradient of 2.5H:1V or should be partially retained by a retaining wall. Slopes in moderately weathered basalt bedrock may be constructed to 1H:4V, provided they are observed by a registered geologist or geotechnical engineer. Slopes that will be maintained by mowing should not be constructed steeper than 3H:1V.

Rock slopes should be evaluated to determine if bedding planes exist, which would require flatter cuts or permanent support. Our scope of services did not include exploration of the intact basalt using rock coring techniques. For proposed walls exceeding 15 feet in height, we recommend additional exploration via rock coring to evaluate the presence of bedding planes; assess the feasibility of constructing large, over-steepened cuts into the rock; and assess the potential need for retaining walls. We should also be contacted to review final site grading plans as they are developed to provide appropriate recommendations for additional exploration and analysis.

Newly constructed fill slopes should be overconstructed by at least 12 inches and then trimmed back to the required slope to maintain a firm face. Access roads and pavement should be located at least 5 feet from the top of cut and fill slopes. The setback should be increased to 10 feet for buildings, unless special foundation considerations are implemented. As discussed in Section 6.1 (Foundation Support), for existing slopes steeper than 2H:1V or foundations located behind retaining walls, we recommend that foundations or foundation-supporting elements be embedded such that they are set back at least 5 feet from a 2H:1V grade projected from the base of the slope or wall as shown on Figure 4. Soil slopes should be planted with appropriate vegetation to provide protection against erosion as soon as possible after grading. Surface water runoff should be collected and directed away from slopes to prevent water from running down the face of the slope.

6.7.1 Slope Stability

Our field explorations indicate that subsurface conditions consist of a relatively thin layer of silt overlying decomposed to intact basalt bedrock. The natural slope of the ground surface is approximately 4H:1V or flatter. Published geologic hazard data indicate that the site is not mapped within an area of landslide topography, slump, debris flow, or other seismic hazards

(Schlicker and Finlayson 1979). The nearest ancient landslide feature is mapped more than 0.5 mile east of the site, which resulted from the excavation of the nearby interstate at the toe of the landslide.

Preliminary spot-grading plans indicate that on-site material will generally be cut and filled in a terraced topography, which will likely improve global slope stability. Based on the preliminary spot-grading plan and the quality of the underlying bedrock, it is our opinion that there is a low risk of landsliding at the site. However, as discussed above, large cuts into bedrock may expose bedding planes that could not be observed within our test pit explorations. The presence of bedding planes could impact local stability of proposed cuts and should be evaluated via supplemental borings with rock coring as discussed in prior sections prior to finalizing project grading plans.

7.0 CONSTRUCTION

7.1 SITE PREPARATION

7.1.1 Stripping and Grubbing

The existing root zone should be stripped and removed from all proposed structural fill, pavement, and building areas and for a 5-foot margin around such areas. Based on the current and previous explorations, the depth of removal will generally range from approximately 2 to 8 inches. Thick root masses were also observed in some isolated areas to depths of 12 to 18 inches. The actual stripping depth should be based on field observations at the time of construction. Stripped material should be transported offsite for disposal or used in landscaped areas.

Existing trees or shrubs should be removed from pavement and building areas. In addition, root balls should be grubbed out to the depth of the roots. Depending on the methods used to remove the root balls, considerable disturbance and loosening of the subgrade could occur during site grubbing. We recommend that soil disturbed during grubbing operations be removed to expose firm, undisturbed subgrade. The resulting excavations should be backfilled with structural fill.

7.1.2 Subgrade Evaluation

Upon completion of stripping and prior to the placement of structural fill, exposed subgrade soil should be evaluated by proof rolling with a fully loaded dump truck or similar heavy, rubber-tired construction equipment. When the subgrade is too wet for proof rolling or inaccessible to a loaded dump truck, a foundation probe may be used to identify areas of soft, loose, or unsuitable soil. Subgrade evaluation should be performed by Columbia West. If soft or yielding subgrade areas are identified during evaluation, we recommend the subgrade be over excavated and backfilled with compacted imported granular fill.

7.2 CONSTRUCTION TRAFFIC AND STAGING

Near-surface, fine-grained soil will be easily disturbed during construction. If not carefully executed, site preparation, excavation, and grading can create extensive soft areas, resulting in significant repair costs. Earthwork planning should include considerations for minimizing subgrade disturbance, particularly during wet weather conditions.

If construction occurs during wet weather conditions or if the moisture content of the surficial soil is more than a few percentage points above optimum, site stripping and cutting may need to be accomplished using track-mounted equipment. Under these conditions, granular access pads and staging areas will also be necessary provide a firm support base and sustain construction equipment.

Based on our experience, between 12 and 18 inches of imported granular material is generally required in staging areas and between 18 and 24 inches in areas supporting construction traffic. In areas of heavy construction traffic, geotextile separation fabric may be placed between the subgrade soil and imported granular material to increase subgrade support and minimize fines migration into the aggregate base layer.

As an alternative to thickened crushed rock sections, haul roads and utility work zones may be constructed using cement-amended subgrade overlain by a crushed rock wearing surface. If this approach is used, the thickness of granular material in staging areas and along haul roads can typically be reduced to between 6 and 9 inches. This recommendation is based on an assumed minimum unconfined compressive strength of 100 psi for subgrade amended to a depth of 12 to 16 inches. The actual thickness of the amended material and imported granular material will depend on the contractor's means and methods and, accordingly, should be the contractor's responsibility.

Project stakeholders should understand that wet weather construction is risky and costly. Proper construction methods and techniques are critical to overall project integrity and should be observed and documented by Columbia West.

7.3 EXCAVATION

7.3.1 Basalt Bedrock

The upper portions of the basalt bedrock are weathered and fractured and could generally be penetrated to varying degrees by an excavator. While excavation of weathered bedrock is expected to be more difficult than the silt, we do not expect special excavation equipment to be necessary in the moderately weathered to decomposed material. Excavators used for the current and previous explorations could not penetrate the intact bedrock. Special excavation techniques such as hydraulic breakers, rock trenchers, or blasting will likely be required to excavate the intact basalt bedrock where test pits encountered refusal. The observed depth to refusal on basalt for the current explorations are shown on Figures 2 and 3. The depth to weathered and intact bedrock encountered in the previous explorations are shown on the 2006 Figure 2 and 2014 Figure 2 presented in Appendix C.

The contract bid documents should require that contractors list a unit cost for rock excavation using in-place (bank) volumes, which can be measured by surveying. The unit cost should not be provided in excavated (swelled) volumes, which are more difficult to accurately measure.

7.3.2 Rockfall Hazards

Grading and excavation should be conducted by the earthwork contractor in a sequence that will prevent overhanging rock material that might become dislodged. The contractor should also be responsible for providing protection for property and personnel. This might include sloping of cut

areas, building protective berms, or providing catchment netting or equipment at the base of a slope excavation, depending on the final grading plan and construction sequence.

7.3.3 Trench Cuts and Shoring

Trench cuts in the silt and gravelly soil should stand near vertical to a depth 4 feet, with moderate potential for raveling. Open excavation techniques may be used to excavate trenches with depths between 4 and 8 feet, provided the walls of the excavation are cut at a slope of 1H:1V, groundwater seepage is not present, and with the understanding that some raveling may occur. The trenches should be flattened to a stable inclination if excessive raveling or caving occurs. Trenches in the bedrock should stand near vertical and should not require shoring. Some minor raveling should be expected in closely fractured zones of the basalt.

Use of a trench shield or other approved temporary shoring is recommended in the silt and gravelly soil where sloping is not possible. If a conventional shield is used, the contractor should limit the length of open trench. If shoring is used, we recommend that the type and design of the shoring system be the responsibility of the contractor, who is in the best position to choose a system that fits the overall plan of operation. All excavations should be made in accordance with applicable OSHA and state regulations.

7.3.4 Temporary Dewatering

Perched groundwater will likely be encountered in excavations during and following periods of persistent rainfall. Groundwater flowing into open excavations should be removed by pumping from a sump. The pump should be capable of handling variable flow rates. Water should be routed to a suitable discharge point.

7.3.5 Open Excavations

Open excavations will be necessary for building cuts. Cuts up to 15 feet in slightly weathered to intact bedrock will likely stand vertical and may not require shoring or sloping. However, rock scaling may be required to mitigate rockfall hazards. Cuts exceeding 15 feet into bedrock may require flatter inclinations, unless additional exploration and evaluation indicate that vertical cuts are feasible. We recommend that cuts in the overlying silt, gravelly soil, and highly weathered basalt be sloped in accordance with OSHA regulations. Temporary shoring may be possible to support cuts in soil, but may be difficult to install due to the underlying bedrock. If shoring is used, we recommend that the type and design of the shoring system be the responsibility of the contractor, who is in the best position to choose a system that fits the overall plan of operation.

7.4 MATERIALS

7.4.1 Structural Fill

7.4.1.1 General

Areas proposed for fill placement should be appropriately prepared as described in Section 7.1 (Site Preparation). Engineered fill placement should be observed by Columbia West. Compaction of engineered structural fill should be verified by nuclear gauge field compaction testing performed in accordance with ASTM D6938. Field compaction testing should be performed for each vertical foot of engineered fill placed.

Various materials may be acceptable for use as structural fill. Structural fill should be free of organic material or other unsuitable material and meet the specifications provided in the following sections. Representative samples of proposed engineered structural fill should be submitted for laboratory testing and approval by Columbia West prior to placement.

7.4.1.2 On-Site Soil

The on-site native soil is generally suitable for use as structural fill, provided it is free of debris, organic material, or other unsuitable material and has no particles larger than 6 inches in diameter. Gravelly or chipped bedrock material may need to be crushed or processed to achieve smaller particle sizes before placing as fill.

On-site silty soil will be difficult, if not impossible, to adequately compact at all times of the year, except the dry summer months. We expect that moisture conditioning (drying) will be required to use on-site silty soil for structural fill. Accordingly, extended dry weather will be required to adequately condition the soil for use as structural fill.

The native gravel soil contains varying amounts of silt. As silt content increases, sensitivity to moisture also increases. It should not be assumed that the silty gravel will be able to be adequately compacted during wet weather.

The weathered and intact bedrock will have to be crushed and processed into a smaller, well-graded distribution prior to placement as structural fill. When placed as embankment fill, the material should have no particles larger than 6 inches in diameter. Occasional cobbles up to 10 inches in diameter may be acceptable in the on-site soil, provided they are dispersed in the fill, they do not create voids in the fill matrix, and compaction can be achieved by sufficiently large equipment. Compaction equipment should impart enough energy to break cobbles. Fill containing oversized material should be closely monitored by qualified geotechnical field staff. Fine grading of gravelly soil may result in segregating cobbles or coarse gravel from the sandy/fine gravel matrix, resulting in unsatisfactory (poorly graded or "boney") fill. Fill material should be maintained as well graded with gravelly and sandy material for proper compaction during fill placement and mass grading.

If the native basalt will be processed and used as aggregate base or trench backfill, it should meet the requirements listed further in this section. When used as structural fill, on-site soil should be placed in lifts with a maximum uncompacted thickness of 8 inches and compacted to not less than 95 percent of maximum dry density as determined by ASTM D1557.

7.4.1.3 Imported Granular Material

Imported granular material should consist of pit- or quarry-run rock, crushed rock, or crushed gravel and sand. The imported granular material should also be durable, angular, and fairly well graded between coarse and fine material; should have less than 5 percent fines by dry weight; and should have at least two mechanically fractured faces. Imported granular material should be placed in loose lifts not exceeding 12 inches in thickness and compacted to at least 95 percent of maximum dry density as determined by ASTM D1557. During wet weather conditions or where wet subgrade conditions are present, the initial loose lift of granular fill should be approximately 18 inches thick and should be compacted with a smooth-drum roller operating in static mode.

7.4.1.4 Trench Backfill

Trench backfill placed below, adjacent to, and up to at least 12 inches above utility lines (i.e., the pipe zone) should consist of well-graded granular material with a maximum particle size of 1½ inches and less than 7 percent fines by dry weight. Material should meet the specifications of OSSC 00405.13 (Pipe Zone Material). Pipe zone backfill should be compacted to at least 90 percent of maximum dry density as determined by ASTM D1557 or as required by the local jurisdictional agency or pipe manufacturer.

Within pavement areas, the remainder of the trench backfill up to subgrade elevation should consist of well-graded granular material with a maximum particle size of 2½ inches and less than 7 percent fines by dry weight. The material should meet the specifications of OSSC 00405.14 (Trench Backfill; Class B, C, or D). This material should be compacted to at least 92 percent of maximum dry density as determined by ASTM D1557 or as required by the local jurisdictional agency or pipe manufacturer. The upper 3 feet of the trench backfill should be compacted to at least 95 percent of modified maximum dry density.

Outside of structural areas, trench backfill placed above the pipe zone may consist of general fill material that has a maximum particle size of 6 inches, is free of organic material, and meets the specifications of OSSC 00405.14 (Trench Backfill; Class A, B, C, or D). This general trench backfill should be compacted to at least 90 percent of maximum dry density as determined by ASTM D1557 or as required by the local jurisdictional agency or pipe manufacturer.

7.4.1.5 Stabilization Material

Stabilization material should consist of pit- or quarry-run rock, crushed rock, or crushed gravel meeting the specifications of OSSC 00330.16 (Stone Embankment Material). The material should have at least two fractured faces, a maximum particle size of 6 inches, and less than 5 percent by dry weight passing the U.S. Standard No. 4 sieve. Stabilization material should be free or organic material or other unsuitable material.

Stabilization material should be placed in loose lifts between 12 and 18 inches thick and compacted to a firm, unyielding condition with a smooth-drum roller operating without vibratory action. If stabilization material is used to stabilize soft subgrade beneath pavement or construction haul roads, a geotextile should be placed as a separation barrier between the soil subgrade and the stabilization material. Geotextile is not required where stabilization material is used to stabilize the bases of utility trenches. Placement of stabilization material should conform to the specifications of OSSC 00331 (Subgrade Stabilization).

7.4.1.6 Drain Rock

Drain rock should consist of angular, granular material with a maximum particle size of 2 inches and less than 2 percent fines by dry weight. Drain rock should be free of roots, organic material, and other unsuitable material and should have at least two mechanically fractured faces. Drain rock should be compacted to a firm, unyielding condition. Drain rock should be completely wrapped in a geotextile drainage fabric meeting the requirements presented below.

7.4.1.7 Retaining Wall Backfill

Backfill material placed behind retaining walls and extending a horizontal distance of ½H, where H is the height of the retaining wall, should consist of imported granular material as described above and should have less than 7 percent fines by dry weight. We recommend the wall backfill be separated from general fill, native soil, and/or topsoil using a geotextile fabric that meets the specifications provided below for drainage geotextiles.

The wall backfill should be compacted to a minimum of 95 percent of maximum dry density as determined by ASTM D1557. However, backfill located within a horizontal distance of 3 feet from a retaining wall should only be compacted to approximately 90 percent of maximum dry density as determined by ASTM D1557. Backfill placed within 3 feet of the wall should be compacted in lifts less than 6 inches thick using hand-operated tamping equipment (such as a jumping jack or vibratory plate compactor). If flatwork (sidewalks or pavement) will be placed atop the wall backfill, we recommend that the upper 2 feet of material be compacted to 95 percent of maximum dry density as determined by ASTM D1557.

7.4.1.8 Retaining Wall Leveling Pad

Imported granular material placed at the bases of retaining wall footings should consist of select granular material. The granular material should be ¾- to 1-inch-minus aggregate size and should have at least two mechanically fractured faces. The leveling pad material should be placed in a 6- to 12-inch-thick lift and compacted to not less than 95 percent of maximum dry density as determined by ASTM D1557.

7.4.1.9 Floor Slab Aggregate Base

Aggregate base for building floor slabs should consist of ¾- or 1½-inch-minus (as applicable), imported granular material meeting the requirements of OSSC 00641 (Aggregate Subbase, Base, and Shoulders). Slab aggregate base should have less than 5 percent fines by dry weight. During the dry season, aggregate base may contain up to 10 percent fines by dry weight. Slab aggregate base should be compacted to at least 95 percent of maximum dry density as determined by ASTM D1557.

7.4.2 Pavement

7.4.2.1 AC

The AC should be Level 2, ½-inch, dense ACP according to OSSC 00744 (Asphalt Concrete Pavement) and compacted to 92 percent of the theoretical maximum density of the mix as determined by AASHTO T 209. The minimum and maximum lift thicknesses are 2 inches and 3 inches, respectively, for ½-inch ACP. Asphalt binder should be performance graded and conform to PG 64-22 or better. The binder grade should be adjusted depending on the aggregate gradation and amount of recycled asphalt pavement and/or recycled asphalt shingles in the contractor's mix design submittal.

7.4.2.2 Cold Weather Paving Considerations

In general, AC paving is not recommended during cold weather (temperatures less than 40 degrees Fahrenheit). Compacting under these conditions can result in low compaction and premature pavement distress.

Each AC mix design has a recommended compaction temperature range that is specific for the particular AC binder used. In colder temperatures, it is more difficult to maintain the temperature of the AC mix as it can lose heat while stored in the delivery truck, as it is placed, and in the time between placement and compaction. In Oregon, the AC surface temperature during paving should be at least 40 degrees Fahrenheit for lift thickness greater than 2.5 inches and at least 50 degrees Fahrenheit for lift thickness between 2 and 2.5 inches.

If AC paving activities must take place during cold weather construction as defined above, the contractor and design team should discuss options for minimizing risk of pavement serviceability.

7.4.2.3 Pavement Aggregate Base

Aggregate base for pavement should consist of ¾- or 1½-inch-minus (as applicable) imported granular material meeting the requirements of OSSC 02630.10 (Dense-Graded Aggregate). Pavement aggregate base should have less than 5 percent fines by dry weight. During the dry season, aggregate base may contain up to 10 percent fines by dry weight. Pavement aggregate base should be compacted to at least 95 percent of maximum dry density as determined by ASTM D1557.

7.4.3 Geotextile Fabric

7.4.3.1 Subgrade Geotextile

Subgrade geotextile should conform to OSSC Table 02320-4 and OSSC 00350 (Geosynthetic Installation). A minimum initial aggregate base lift of 6 inches is required over geotextiles. All drainage aggregate and stabilization material should be underlain by a subgrade geotextile.

7.4.3.2 Drainage Geotextile

Drainage geotextile should conform to Type 2 material of OSSC Table 02320-1 and OSSC 00350 (Geosynthetic Installation). A minimum initial aggregate base lift of 6 inches is required over geotextiles.

7.5 EROSION CONTROL

Soil at this site is susceptible to erosion by wind and water; therefore, erosion control measures should be carefully planned and installed before construction begins. Surface water runoff should be collected and directed away from sloped areas to prevent water from running down the slope face. Measures that can be employed to reduce erosion include the use of silt fences, hay bales, buffer zones of natural growth, sedimentation ponds, and granular haul roads. All erosion control methods should be in accordance with local jurisdiction standards.

8.0 OBSERVATION OF CONSTRUCTION

Satisfactory pavement, earthwork, and foundation performance depends to a large degree 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. Columbia West should be retained to observe subgrade preparation, fill placement, foundation excavations, drainage system installation, and pavement placement and to review laboratory compaction and field moisture-density information.

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.

9.0 LIMITATIONS

We have prepared this report for use by the addressee and members of the design and construction team for the proposed project. This report is subject to the limitations expressed in Appendix D.

♦ ♦ ♦

We appreciate the opportunity to be of service to you. Please call if you have questions concerning this report or if we can provide additional services.

Sincerely,

Greg L. Williamson, PE
Senior Geotechnical Engineer

Najib A. Kalas, PE
Principal Engineer

Brett A. Shipton, PE, GE
Principal Engineer

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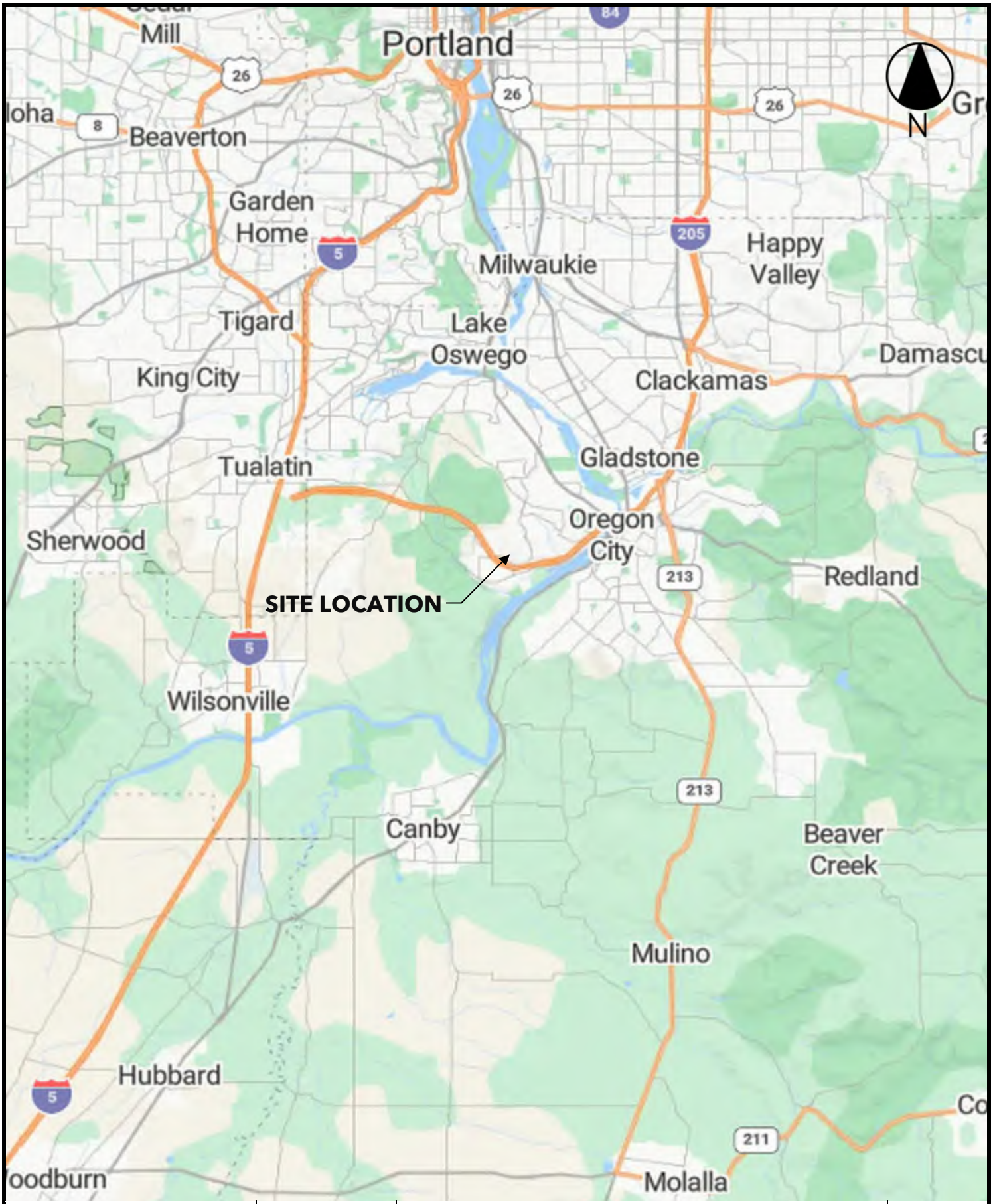
FIGURES



Geotechnical ▪ Environmental ▪ Special Inspections Columbia West Engineering, Inc	PROJECT NO.: MCRT-1-01-1 SEPTEMBER 2025	VICINITY MAP MODERA WEST LINN WEST LINN, OREGON	FIGURE 1

LEGEND

- SITE BOUNDARY
- TEST PIT
- (6) DEPTH TO REFUSAL ON BASALT (FEET BGS)

N

0 28 56 84 112 140 280

NOTES:
1. AERIAL PHOTO SOURCED FROM GOOGLE EARTH.
2. EXPLORATION LOCATIONS ARE APPROXIMATE AND NOT SURVEYED.
3. REFER TO REPORT TEXT FOR EXPLORATION DESCRIPTIONS.

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MODERA WEST LINN
WEST LINN, OREGON
TANNLER DRIVE AND BLANKENSHIP ROAD

SITE PLAN - EXISTING CONDITIONS

PROJECT NO:
MCRT-1-01-1

SEPTEMBER 2025

FIGURE
2

LEGEND

- SITE BOUNDARY
- TEST PIT
- (6) DEPTH TO REFUSAL ON BASALT (FEET BGS)

N

0 25 50 75 100 125 250

NOTES:
1. CONCEPTUAL SITE AND GRADING PLAN PREPARED BY HILL ARCHITECTS, DATED AUGUST 29, 2025.
2. EXPLORATION LOCATIONS ARE APPROXIMATE AND NOT SURVEYED.
3. REFER TO REPORT TEXT FOR EXPLORATION DESCRIPTIONS.

Geotechnical ■ Environmental ■ Special Inspections
Columbia West Engineering, Inc

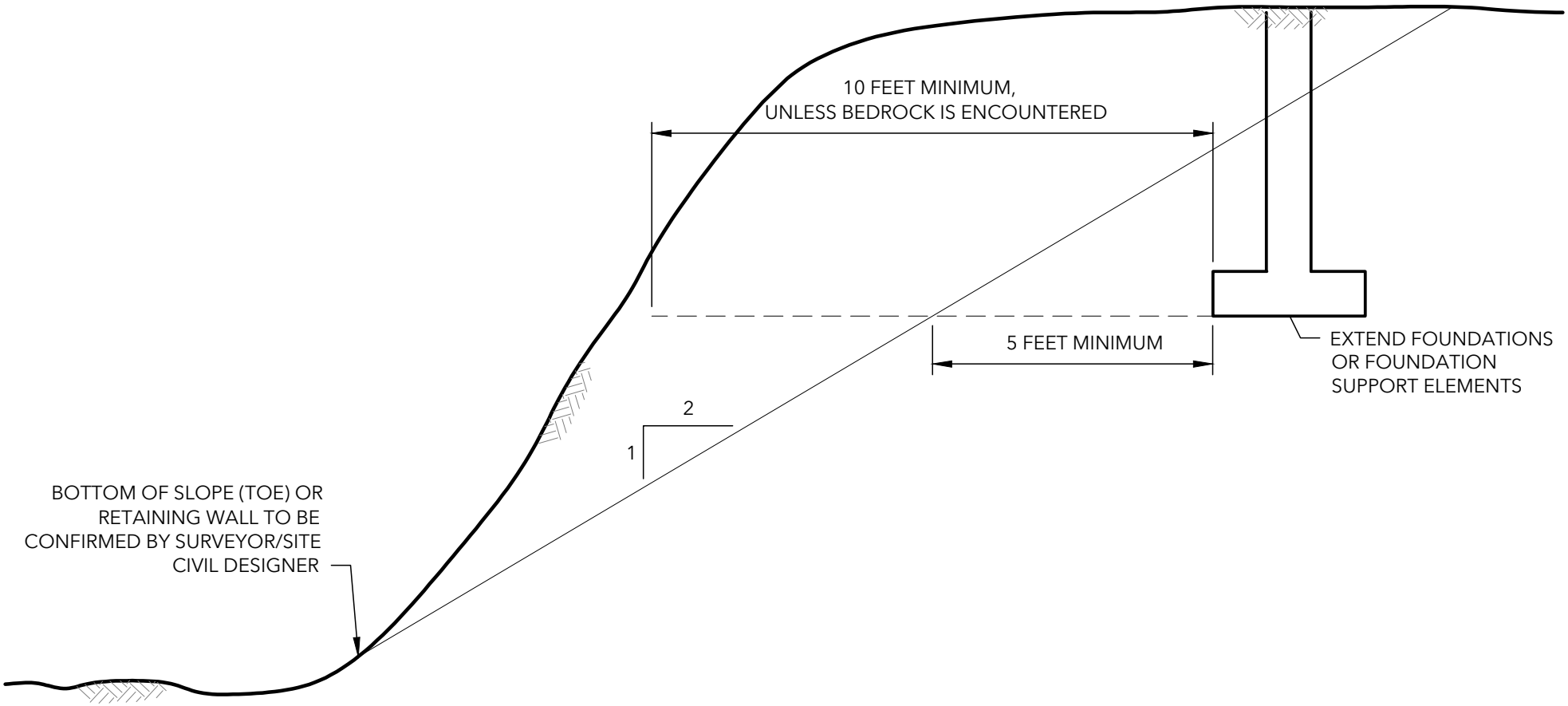
MODERA WEST LINN
WEST LINN, OREGON
TANNLER DRIVE AND BLANKENSHIP ROAD

SITE PLAN - PROPOSED CONDITIONS

PROJECT NO:
MCRT-1-01-1

SEPTEMBER 2025

FIGURE
3



NOT TO SCALE

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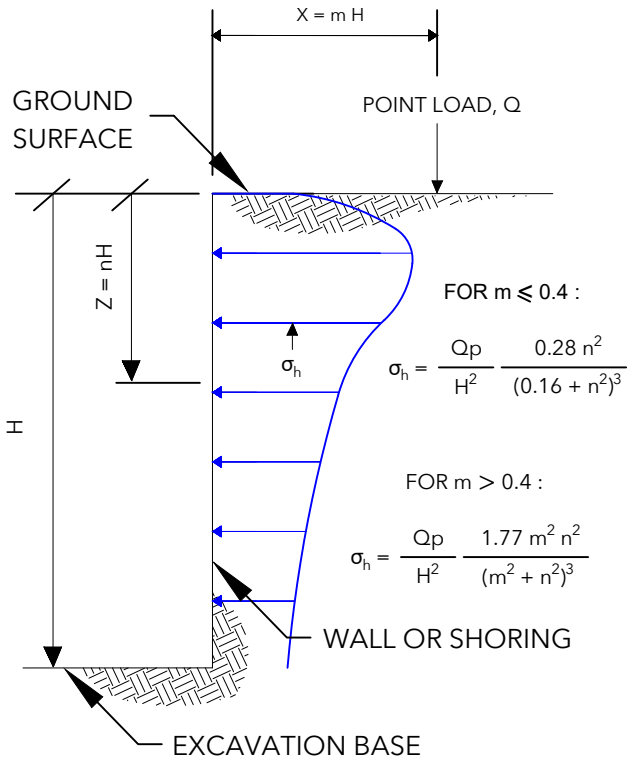
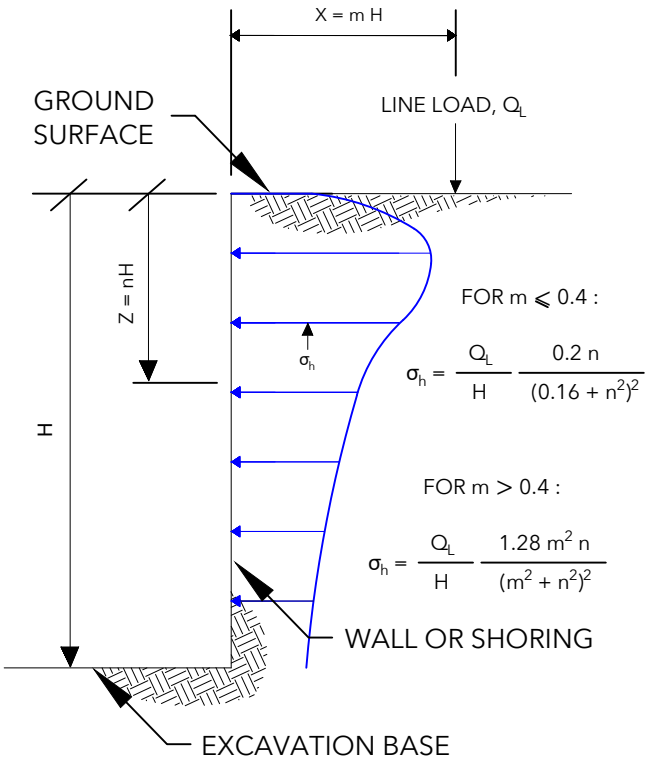
FOUNDATION OFFSET SCHEMATIC

FIGURE
4

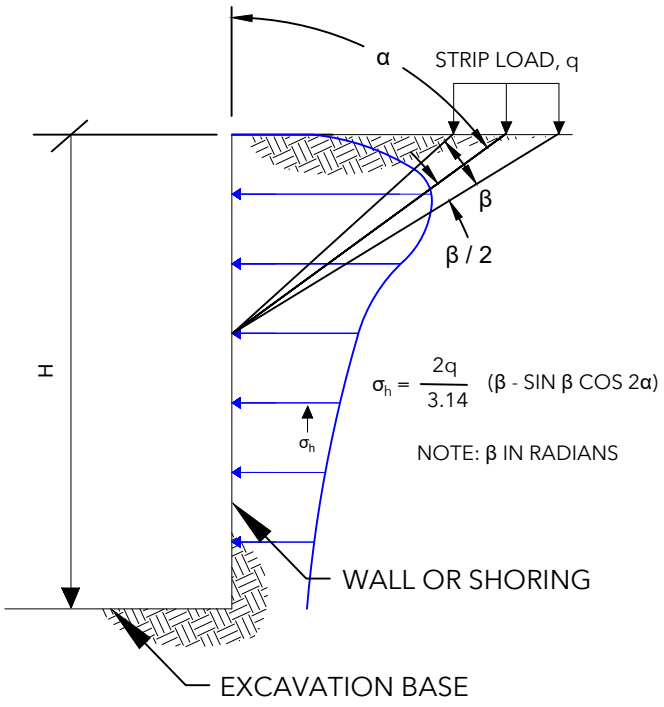
VERTICAL POINT LOAD



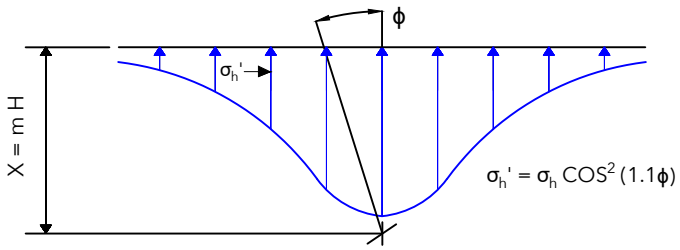
LINE LOAD PARALLEL TO WALL



STRIP LOAD PARALLEL TO WALL



VERTICAL POINT LOAD HORIZONTAL PRESSURE DISTRIBUTION



NOTES:

1. FIGURE SHOULD BE USED JOINTLY WITH RECOMMENDATIONS PRESENTED IN THE REPORT TEXT.
2. LATERAL EARTH PRESSURES ASSUME RIGID WALLS WITH BACKFILL MATERIALS HAVING A POISSON'S RATIO OF 0.5.
3. TOTAL LATERAL EARTH PRESSURES RESULTING FROM COMBINED LOADS MAY BE CALCULATED USING SUPERPOSITION.
4. DRAWING IS NOT TO SCALE.

APPENDIX A

APPENDIX A
FIELD EXPLORATIONS

GENERAL

We explored subsurface conditions at the site by excavating 10 test pits (TP-1 through TP-10) to depths between 2 and 6 feet BGS. Excavation services were provided by Dan J. Fischer Excavating, Inc. of Forest Grove, Oregon, on August 8, 2025, using a Hitachi ZX40 track-mounted excavator. The explorations were conducted under the supervision of Columbia West personnel. The exploration logs are presented in this appendix.

The approximate exploration locations are shown on Figures 2 and 3. The locations were determined in the field by pacing or measuring from existing site features. This information should be considered accurate only to the degree implied by the methods used.

SOIL AND ROCK SAMPLING

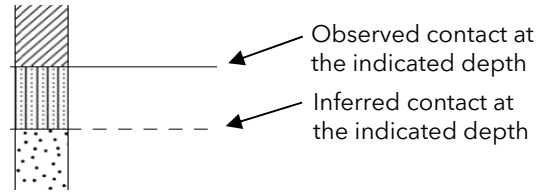
Representative disturbed samples of soil and rock observed in the test pit explorations were collected from the test pit walls and base using the excavator bucket. Sampling methods and intervals are shown on the exploration logs.

SOIL AND ROCK CLASSIFICATION

The soil and rock encountered in the explorations were classified in the field in accordance with the "Exploration Legend," "Soil Classification System," and "Rock Classification System," which are presented in this appendix. The exploration logs indicate the depths at which the soil and rock characteristics change, although the change could be gradual. If the change occurred between sample locations, the depth was interpreted. Classifications are shown on the exploration logs.

EXPLORATION LEGEND

SAMPLER TYPE	DESCRIPTION
SPT	Sample collected from the indicated depth in general accordance with ASTM D1586, *Standard Test Method Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils,* using an SPT sampler and 140-pound hammer
SH	Sample collected from the indicated depth in general accordance with ASTM D1587, *Standard Practice for Thin-Walled Tube Sampling of Fine-Grained Soils for Geotechnical Purposes,* using a thin-walled Shelby tube, or in general accordance with ASTM D6519, *Standard Practice for Sampling of Soil Using the Hydraulically Operated Stationary Piston Sampler,* using a thin-walled tube
D&M	Sample collected from the indicated depth in general accordance with ASTM D3550, *Standard Practice for Thick Wall, Ring-Lined, Split Barrel, Drive Sampling of Soils,* using a Dames & Moore sampler and 140-pound hammer or pushed
CSS	Sample collected from the indicated depth in general accordance with ASTM D3550, *Standard Practice for Thick Wall, Ring-Lined, Split Barrel, Drive Sampling of Soils,* using a 3-inch-outside diameter California split-spoon sampler and 140-pound hammer
DP	Sample collected from the indicated depth in general accordance with ASTM D6282, *Standard Guide for Direct Push Soil Sampling for Environmental Site Characterizations,* using a direct-push soil sampler
GRAB	Grab sample collected from the indicated depth
CORE	Pavement or rock core interval at the indicated depth



GEOTECHNICAL ABBREVIATIONS			
ATT	Atterberg limits	PP	Pocket penetrometer
CBR	California bearing ratio	P200	Percent passing No. 200 sieve
CON	Consolidation test	RES	Resilient modulus
DD	Dry density	SIEV	Sieve analysis
DS	Direct shear	TS	Torvane shear
HYD	Hydrometer	tsf	Tons per square foot
MC	Moisture content	UC	Unconfined compressive strength
MD	Moisture-density relationship	UU	Unconsolidated undrained triaxial test
NP	Non-plastic	VS	Vane shear
OC	Organic content	WD	Wet density

ENVIRONMENTAL ABBREVIATIONS			
CA	Sample submitted for chemical analysis	ND	Not detected
		NS	No sheen
PID	Photoionization detector headspace analysis	SS	Slight sheen
		MS	Moderate sheen
ppm	Parts per million	HS	Heavy sheen

SOIL CLASSIFICATION SYSTEM

PARTICLE-SIZE CLASSIFICATION

COMPONENT	ASTM / USCS		AASHTO	
	Size Range	Sieve Size Range	Size Range	Sieve Size Range
Boulders	Greater than 300 mm	Greater than 12 inches	--	--
Cobbles	75 mm to 300 mm	3 inches to 12 inches	Greater than 75 mm	Greater than 3 inches
Gravel	75 mm to 4.75 mm	3 inches to No. 4 sieve	75 mm to 2.00 mm	3 inches to No. 10 sieve
Coarse	75 mm to 19.0 mm	3 inches to 3/4-inch sieve	--	--
Fine	19.0 mm to 4.75 mm	3/4-inch to No. 4 sieve	--	--
Sand	4.75 mm to 0.075 mm	No. 4 to No. 200 sieve	2.00 mm to 0.075 mm	No. 10 to No. 200 sieve
Coarse	4.75 mm to 2.00 mm	No. 4 to No. 10 sieve	2.00 mm to 0.425 mm	No. 10 to No. 40 sieve
Medium	2.00 mm to 0.425 mm	No. 10 to No. 40 sieve	--	--
Fine	0.425 mm to 0.075 mm	No. 40 to No. 200 sieve	0.425 mm to 0.075 mm	No. 40 to No. 200 sieve
Fines (Silt and Clay)	Less than 0.075 mm	Passing No. 200 sieve	Less than 0.075 mm	Passing No. 200 sieve

CONSISTENCY FOR FINE-GRAINED SOIL

CONSISTENCY	SPT N-VALUE (blows per foot)	D&M N-VALUE (blows per foot)	POCKET PENETROMETER (unconfined compressive strength [tsf])
Very soft	0 to 2	0 to 3	Less than 0.25
Soft	2 to 4	3 to 6	0.25 to 0.5
Medium stiff	4 to 8	6 to 12	0.5 to 1.0
Stiff	8 to 15	12 to 25	1.0 to 2.0
Very stiff	15 to 30	25 to 65	2.0 to 4.0
Hard	Greater than 30	Greater than 30	Greater than 4.0

RELATIVE DENSITY FOR COARSE-GRAINED SOIL

RELATIVE DENSITY	SPT N-VALUE (blows per foot)	D&M N-VALUE (blows per foot)
Very loose	0 to 4	0 to 11
Loose	4 to 10	11 to 26
Medium dense	10 to 30	26 to 74
Dense	30 to 50	74 to 120
Very dense	Greater than 50	Greater than 120

MOISTURE DESIGNATIONS

TERM	FIELD IDENTIFICATION
Dry	Very low moisture, dry to touch
Moist	Damp, color appears darkened, without visible moisture, cohesive soil will clump, sand will bulk
Wet	Visible free water, usually saturated

ADDITIONAL CONSTITUENTS

PERCENT	SILT AND CLAY IN		PERCENT	SAND AND GRAVEL IN		PERCENT	SECONDARY MATERIAL
	Fine-Grained Soil	Coarse-Grained Soil		Fine-Grained Soil	Coarse-Grained Soil		Organics and Man-Made Debris
< 5	trace	trace	< 5	trace	trace	< 4	trace
5 – 12	minor	with	5 – 15	minor	minor	4 – 12	some
> 12	some	silty/clayey	15 – 30	with	with		
			> 30	sandy/gravelly	with		

ROCK CLASSIFICATION SYSTEM

STRENGTH	DESCRIPTION	UNCONFINED COMPRESSIVE STRENGTH (psi)
Extremely weak (R0)	Easily indented by thumbnail	35 to 150
Very weak (R1)	Scratched with fingernail, peeled by knife, indented by rock pick	150 to 725
Weak (R2)	Peeled by knife, indented by rock pick	725 to 3,500
Medium strong (R3)	Cannot be peeled or scraped with a knife	3,500 to 7,250
Strong (R4)	Requires more than one blow with a rock hammer to fracture it	7,250 to 14,500
Very strong (R5)	Requires many blows with a rock hammer to fracture it	14,500 to 36,250
Extremely strong (R6)	Can only be chipped with a rock hammer	Greater than 36,250

WEATHERING	DESCRIPTION
Decomposed	A soil formed in place with original texture of rock destroyed
Completely weathered	Rock wholly weathered but rock texture preserved
Highly weathered	Rock weakened so that large pieces can be broken by hand
Moderately weathered	Rock mass is decomposed locally
Slightly weathered	Discoloration along discontinuities
Fresh	No visible signs of weathering or discoloring

JOINT SPACING	DESCRIPTION
Very close	Less than 0.2 foot
Close	0.2 foot to 1 foot
Moderately close	1 foot to 3 feet
Wide	3 feet to 10 feet
Very wide	Greater than 10 feet

FRACTURING	FRACTURE SPACING
Very intensely fractured	Chips, fragments, with scattered short core lengths
Intensely fractured	0.1 foot to 0.3 foot with scattered fragments
Moderately fractured	0.3 foot to 1 foot
Slightly fractured	1 foot to 3 feet
Very slightly fractured	Greater than 3 feet
Unfractured	No fractures observed

HEALING	DESCRIPTION
Not healed	Discontinued surface, fractured zone, sheared material, filling is not cemented
Partly healed	Less than 50% of fractures or sheared zone bonding
Moderately healed	Greater than 50% fractures or sheared zone bonding
Totally healed	All fragments are bonded

QUALITY	RQD (percent)
Very poor	Less than 25
Poor	25 to 50
Fair	51 to 75
Good	76 to 90

Rock quality designation (RQD) is a measure of quality of rock core taken from a borehole. The length of core pieces is measured along the center line of the pieces. All pieces of intact rock core equal to or greater than 100 millimeters (4 inches) long are summed and divided by the total length of the core run to obtain RQD value

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TEST PIT NUMBER: TP-1

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 12:30 PM
LOGGED BY S. Chandra
TIME COMPLETED 12:45 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS (LL-PL-PI)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (12 inches of topsoil, 3-inch-thick root zone). 1.0				
	Grab	TP1.1	ML/MH		Medium stiff, brown SILT with gravel, moist, medium plasticity, gravel is fine to coarse (colluvium). 5.0		22	40-27-13	
5	Grab	TP1.2			Extremely weak to medium strong (R0-R3), brown-gray BASALT, decomposed to moderately weathered, very close to close jointed, moist. 6.0				
					Exploration terminated at 6 feet due to refusal on basalt.				

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

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TEST PIT NUMBER: TP-2

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 12:56 PM
LOGGED BY S. Chandra
TIME COMPLETED 1:09 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	FINES (%)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (8 inches of topsoil, 3-inch-thick root zone). 0.7				
	Grab	TP2.1	ML/MH		Medium stiff, brown gravelly SILT, moist, medium plasticity, gravel is fine to coarse (colluvium). 4.0		12	61	
5	Grab	TP2.2			Extremely weak to medium strong (R0-R3), brown-gray BASALT, decomposed to moderately weathered, very close to close jointed, moist. 5.5				
					Exploration terminated at 5.5 feet due to refusal on basalt.				

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

Geotechnical ▪ Environmental ▪ Special Inspections
Columbia West Engineering, Inc

TEST PIT NUMBER: TP-3

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 1:12 PM
LOGGED BY S. Chandra
TIME COMPLETED 1:20 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (8 inches of topsoil, 2-inch-thick root zone). 0.7			
			ML/MH		Medium stiff, brown SILT with gravel, moist, medium plasticity, gravel is fine to coarse (colluvium). 1.5			
					Extremely weak to medium strong (R0-R3), brown-gray BASALT, decomposed to moderately weathered, very close to close jointed, moist. 2.0			
					Exploration terminated at 2 feet due to refusal on basalt.			
5								

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

Geotechnical ▪ Environmental ▪ Special Inspections
Columbia West Engineering, Inc

TEST PIT NUMBER: TP-4

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/09/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 1:35 PM
LOGGED BY S. Chandra
TIME COMPLETED 1:48 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	FINES (%)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (10 inches of topsoil, 3-inch-thick root zone). 0.8				
	Grab	TP4.1	ML/MH		Medium stiff, brown SILT with gravel, moist, medium plasticity, gravel is fine to coarse (colluvium). 5.0		13	76	
5	Grab	TP4.2			Medium strong to strong (R3-R4), gray BASALT, decomposed to moderately weathered, very close to close jointed, weak to moderate induration, moist. 5.5				
					Exploration terminated at 5.5 feet due to refusal on basalt.				

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

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TEST PIT NUMBER: TP-5

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 2:00 PM
LOGGED BY S. Chandra
TIME COMPLETED 2:15 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (10 inches of topsoil, 3-inch-thick root zone). 0.8			
	Grab	TP5.1	ML/MH		Medium stiff, brown SILT with gravel, moist, medium plasticity, gravel is fine to coarse (colluvium). 3.0		18	
	Grab	TP5.2			Extremely weak to medium strong (R0-R3), brown-gray BASALT, decomposed to moderately weathered, very close to close jointed, moist. 4.0			
					Exploration terminated at 4 feet due to refusal on basalt.			
5								

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

Geotechnical ▪ Environmental ▪ Special Inspections
Columbia West Engineering, Inc

TEST PIT NUMBER: TP-6

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 2:19 PM
LOGGED BY S. Chandra
TIME COMPLETED 2:25 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	FINES (%)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (8 inches of topsoil, 3-inch-thick root zone). 0.7				
	Grab	TP6.1	ML/MH		Medium stiff, brown SILT with gravel, moist, medium plasticity, gravel is fine to coarse (colluvium). 2.0		23		
	Grab	TP6.2			Stiff to very stiff, brown-gray gravelly SILT with cobbles, moist, gravel is fine to coarse (decomposed to weathered basalt). 4.0		19	52	
					Exploration terminated at 4 feet due to refusal on basalt.				
5									

GROUNDWATER: Not observed

CAVING: Not observed

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Columbia West Engineering, Inc

TEST PIT NUMBER: TP-7

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 2:28 PM
LOGGED BY S. Chandra
TIME COMPLETED 2:40 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS (LL-PL-PI)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (10 inches of topsoil, 3-inch-thick root zone). 0.8				
	Grab	TP7.1	ML/MH		Medium stiff, brown SILT with gravel, moist, medium plasticity, gravel is fine to coarse (colluvium). 2.0		17	50-34-16	
	Grab	TP7.2			Extremely weak to medium strong (R0-R3), brown-gray BASALT, decomposed to moderately weathered, very close to close jointed, moist. 3.0				
					Exploration terminated at 3 feet due to refusal on basalt.				
5									

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

Geotechnical ▪ Environmental ▪ Special Inspections
Columbia West Engineering, Inc

TEST PIT NUMBER: TP-8

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 2:47 PM
LOGGED BY S. Chandra
TIME COMPLETED 2:57 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (12 inches of topsoil, 5-inch-thick root zone). 1.0			
	Grab	TP8.1	GM		Medium dense to very dense, brown-gray silty GRAVEL with sand and cobbles, moist (decomposed to weathered basalt). Trace organics (rootlets) at 2 feet. 3.0		33	
					Exploration terminated at 3 feet due to refusal on basalt.			
5								

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

Geotechnical ▪ Environmental ▪ Special Inspections
Columbia West Engineering, Inc

TEST PIT NUMBER: TP-9

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 3:05 PM
LOGGED BY S. Chandra
TIME COMPLETED 3:15 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	FINES (%)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (8 inches of topsoil, 3-inch-thick root zone). 0.7				
			GM		Medium dense to very dense, brown-gray silty GRAVEL with sand and cobbles, moist (decomposed to weathered basalt).				
	Grab	TP9.1			3.0		11	25	
					Exploration terminated at 3 feet due to refusal on basalt.				
5									

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

Geotechnical ▪ Environmental ▪ Special Inspections
Columbia West Engineering, Inc

TEST PIT NUMBER: TP-10

PROJECT NAME Modera West Linn
CLIENT MCRT Investments LLC
PROJECT NO. MCRT-1-01-1
PROJECT CITY, STATE West Linn, Oregon
CONTRACTOR Dan J. Fischer Excavating, Inc.
DATE COMPLETED 08/08/2025
EQUIPMENT Hitachi ZX40, 2-foot toothed
TIME STARTED 3:32 PM
LOGGED BY S. Chandra
TIME COMPLETED 3:50 PM

DEPTH (ft)	SAMPLE TYPE	SAMPLE ID	USCS	GRAPHIC LOG	MATERIAL DESCRIPTION	POCKET PEN (tsf)	MOISTURE CONTENT (%)	REMARKS
					Medium stiff, brown SILT with gravel, trace organics (roots), moist (12 inches of topsoil, 4-inch-thick root zone). 1.0			
	Grab	TP10.1	ML/MH		Medium stiff, brown SILT with gravel, moist, medium plasticity, gravel is fine to coarse (colluvium). 4.0		12	
	Grab	TP10.2			Extremely weak to medium strong (R0-R3), brown-gray BASALT, decomposed to moderately weathered, very close to close jointed, moist. 5.0			
5					Exploration terminated at 5 feet due to refusal on basalt.			

GROUNDWATER: Not observed

CAVING: Not observed

BoreDM Template: Test Pit Template - New

APPENDIX B

APPENDIX B
LABORATORY TESTING

GENERAL

Laboratory testing was conducted on select soil and rock samples collected in the field to confirm field classifications and determine the index engineering properties. The laboratory classifications are shown on the exploration logs if those classifications differed from the field classifications. The locations of the tested samples are shown on the exploration logs. Descriptions of the tests are presented below and the test results are presented in this appendix.

PARTICLE-SIZE ANALYSIS

Particle-size analyses were completed on select soil samples in general accordance with ASTM D1140 (P200). This test is a quantitative determination of the percent passing the U.S. Standard No. 200 sieve by dry weight of the specimen.

MOISTURE CONTENT DETERMINATION

The natural moisture content of select soil samples was determined in general accordance with ASTM D 2216. The natural moisture content is a ratio of the weight of the water to dry soil in a test sample and is expressed as a percentage.

ATTERBERG LIMITS TESTING

Atterberg limits (plastic and liquid limits) testing was performed on select soil samples in general accordance with ASTM D4318. The plastic limit is defined as the moisture content where the soil becomes brittle. The liquid limit is defined as the moisture content where the soil begins to act similar to a liquid. The plasticity index is the difference between the liquid and plastic limits.

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MOISTURE CONTENT, PERCENT PASSING NO. 200 SIEVE BY WASHING

PROJECT	CLIENT	PROJECT NO.	
Moderna West Linn West Linn, Oregon	MCRT Investments LLC 720 SW Washington Street, Suite 720 Portland, OR 97205	MCRT-1-01-1	
		ISSUE DATE: 08/21/25	PAGE: 1 of 1
		DATE SAMPLED: 08/08/25	SAMPLED BY: S. Chandra

LABORATORY TEST DATA

TEST PROCEDURE
ASTM D2216 - Method A, ASTM D1140

LAB ID	CONTAINER MASS (g)	MOIST MASS + CONTAINER (g)	DRY MASS + CONTAINER (g)	AFTER WASH DRY MASS + CONTAINER (g)	FIELD ID	SAMPLE DEPTH (ft)	PERCENT MOISTURE CONTENT	PERCENT PASSING NO. 200 SIEVE
S25-1668	86.38	362.99	313.18	-	TP1.1	2	22%	-
S25-1669	574.85	860.98	829.57	674.67	TP2.1	2.5	12%	61%
S25-1670	550.40	969.18	922.53	639.68	TP4.1	2.5	13%	76%
S25-1671	87.94	235.35	213.33	-	TP5.1	2.5	18%	-
S25-1672	87.42	275.70	240.46	-	TP6.1	1	23%	-
S25-1673	1,538.1	4,958.4	4,420.4	2,912.6	TP6.2	2.5	19%	52%
S25-1674	87.70	373.48	331.38	-	TP7.1	1	17%	-
S25-1675	787.4	2,252.3	1,886.3	-	TP8.1	2.5	33%	-
S25-1676	1,535.3	5,540.5	5,156.5	4,246.4	TP9.1	2.5	11%	25%
S25-1677	776.3	1,895.9	1,774.0	-	TP10.1	2.5	12%	-

NOTES:
Sample weight received for Lab ID: S25-1673, and 1676 did not meet the minimum size requirements; entire sample used for analysis.

DATE TESTED: 08/14/25
TESTED BY: G. Hausmann, L. Gunderson

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ATTERBERG LIMITS REPORT

PROJECT	CLIENT	PROJECT NO.	
Moderna West Linn West Linn, Oregon	MCRT Investments LLC 720 SW Washington Street, Suite 720 Portland, OR 97205	MCRT-1-01-1	
		ISSUE DATE: 08/21/25	PAGE: 1 of 1
		LAB ID: S25-1668	FIELD ID: TP1.1
		DATE SAMPLED: 08/08/25	SAMPLED BY: S. Chandra

MATERIAL DATA

MATERIAL SAMPLED	MATERIAL SOURCE	USCS SOIL TYPE
SILT with Gravel	Test Pit TP-1 depth = 2 feet	no data provided

LABORATORY TEST DATA

LABORATORY EQUIPMENT: Liquid Limit Machine, Hand Rolled

TEST PROCEDURE: ASTM D4318 - Method A

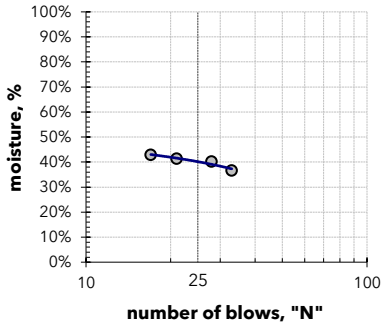
ATTERBERG LIMITS

liquid limit =	40
plastic limit =	27
plasticity index =	13

LIQUID LIMIT DETERMINATION

	❶	❷	❸	❹
wet soil + pan weight, g =	33.16	32.80	31.06	29.69
dry soil + pan weight, g =	29.90	29.41	28.12	27.03
pan weight, g =	20.99	20.97	21.01	20.82
N (blows) =	33	28	21	17
moisture, % =	36.6 %	40.2 %	41.4 %	42.8 %

LIQUID LIMIT



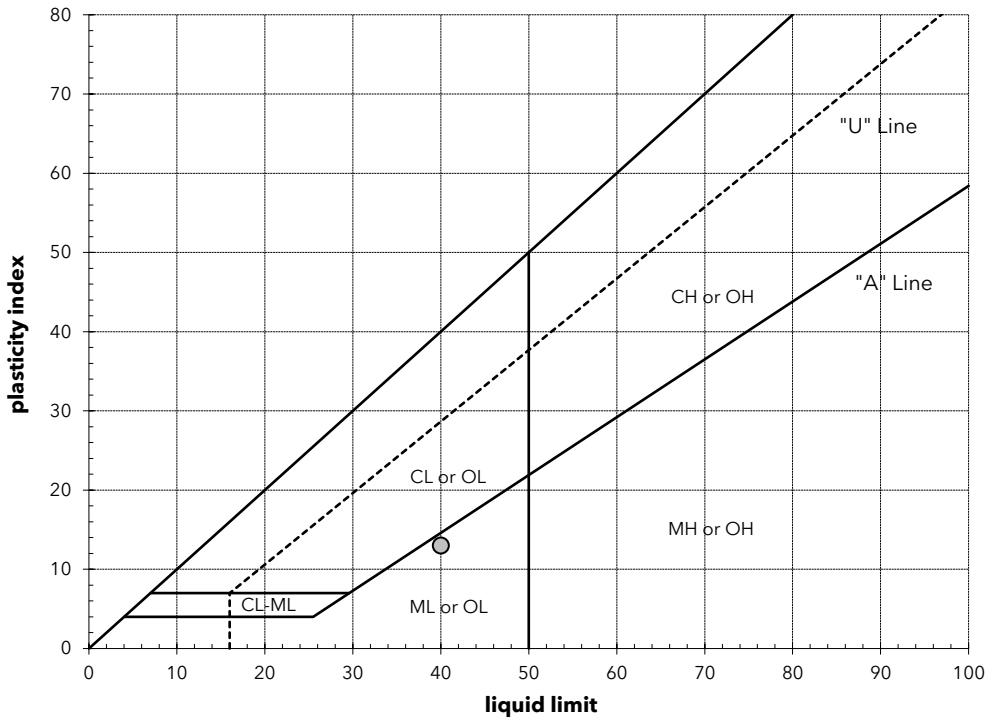
SHRINKAGE

shrinkage limit =	n/a
shrinkage ratio =	n/a

PLASTIC LIMIT DETERMINATION

	❶	❷	❸	❹
wet soil + pan weight, g =	27.16	27.17		
dry soil + pan weight, g =	25.84	25.88		
pan weight, g =	20.87	21.01		
moisture, % =	26.6 %	26.5 %		

PLASTICITY CHART



ADDITIONAL DATA

% gravel =	n/a
% sand =	n/a
% silt and clay =	n/a
% silt =	n/a
% clay =	n/a
moisture content =	22%

DATE TESTED	TESTED BY
08/19/25	G. Hausmann

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ATTERBERG LIMITS REPORT

PROJECT	CLIENT	PROJECT NO.	
Moderna West Linn West Linn, Oregon	MCRT Investments LLC 720 SW Washington Street, Suite 720 Portland, OR 97205	MCRT-1-01-1	
		ISSUE DATE: 08/21/25	PAGE: 1 of 1
		LAB ID: S25-1674	FIELD ID: TP7.1
		DATE SAMPLED: 08/08/25	SAMPLED BY: S. Chandra

MATERIAL DATA

MATERIAL SAMPLED	MATERIAL SOURCE	USCS SOIL TYPE
Gravelly SILT with Sand	Test Pit TP-7 depth = 1 foot	no data provided

LABORATORY TEST DATA

LABORATORY EQUIPMENT: Liquid Limit Machine, Hand Rolled

TEST PROCEDURE: ASTM D4318 - Method A

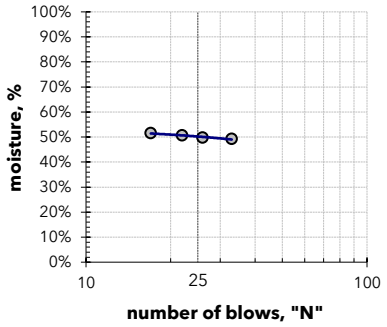
ATTERBERG LIMITS

liquid limit =	50
plastic limit =	34
plasticity index =	16

LIQUID LIMIT DETERMINATION

	❶	❷	❸	❹
wet soil + pan weight, g =	31.09	31.61	31.24	29.81
dry soil + pan weight, g =	27.76	28.09	27.60	26.62
pan weight, g =	20.99	21.01	20.42	20.43
N (blows) =	33	26	22	17
moisture, % =	49.2 %	49.7 %	50.7 %	51.5 %

LIQUID LIMIT



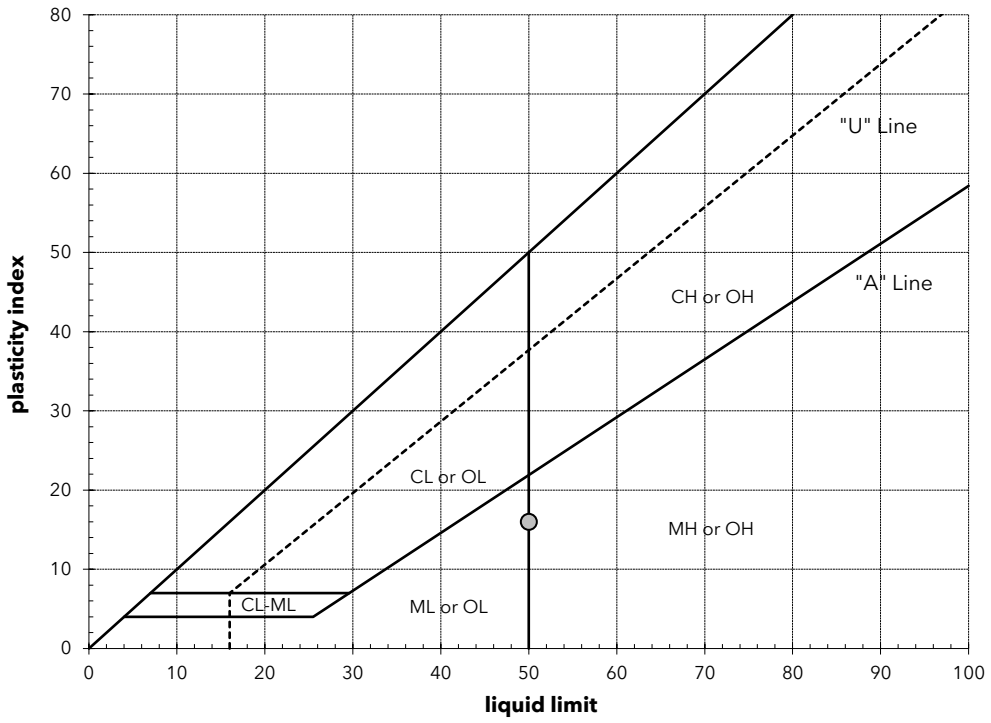
SHRINKAGE

shrinkage limit =	n/a
shrinkage ratio =	n/a

PLASTIC LIMIT DETERMINATION

	❶	❷	❸	❹
wet soil + pan weight, g =	27.95	27.82		
dry soil + pan weight, g =	26.15	26.09		
pan weight, g =	20.87	21.02		
moisture, % =	34.1 %	34.1 %		

PLASTICITY CHART



ADDITIONAL DATA

% gravel =	n/a
% sand =	n/a
% silt and clay =	n/a
% silt =	n/a
% clay =	n/a
moisture content =	17%

DATE TESTED	TESTED BY
08/18/25	G. Hausmann

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APPENDIX C

APPENDIX C
SUBSURFACE EXPLORATION BY OTHERS

This appendix presents figures, exploration logs, and laboratory test results associated with subsurface exploration programs conducted by GeoDesign at the site on February 23, 2006, and February 20, 2014. The 2006 subsurface exploration program included 16 test pits to depths between 3.3 and 11 feet BGS. The 2014 subsurface exploration program included 17 test pits to depths between 4 and 13.5 feet BGS. The figures, test pit logs, and laboratory test results were appended to the following geotechnical engineering reports:

- *Report of Geotechnical Engineering Services; Willamette 205 Corporate Center; Blankenship Road and Tannler Drive; West Linn, Oregon,* dated July 7, 2006
- *Report of Geotechnical Engineering Services; NWC of Tannler & Blankenship; Tannler Drive and Blankenship Road; West Linn, Oregon,* dated July 28, 2014

EXPLANATION:

TP-1 ■ TEST PIT

(5) DEPTH TO INTACT BEDROCK

NOTE:

(11+) INDICATES THAT BEDROCK WAS NOT ENCOUNTERED

N

0 100 200

(IN FEET)

SITE PLAN BASED ON DRAWING PROVIDED BY GROUP MACKENZIE

SITE PLAN

WILLAMETTE 205 CORPORATE CENTER
WEST LINN, OR

FIGURE 2

BLACKHAWK-1-01

JULY 2006

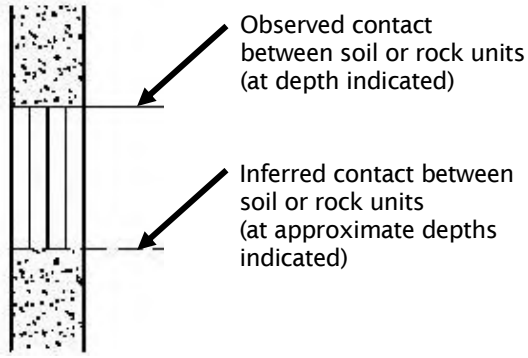
GEODESIGN INC
15575 SW Sequoia Parkway - Suite 100
Portland OR 97224
Off 503.968.8787 Fax 503.968.3068

Jul 07, 2006 - 07:57:21 DWG Name: BlackHawk-1-01-SP-FIGURE-2.dwg Updated By: akd

KEY TO TEST PIT AND BORING LOG SYMBOLS

SYMBOL	SAMPLING DESCRIPTION
	Location of sample obtained in general accordance with ASTM D 1586 Standard Penetration Test with recovery
	Location of sample obtained using thin wall, shelby tube, or Geoprobe® sampler in general accordance with ASTM D 1587 with recovery
	Location of sample obtained using Dames & Moore sampler and 300-pound hammer or pushed with recovery
	Location of sample obtained using Dames & Moore sampler and 140-pound hammer or pushed with recovery
	Location of grab sample
	Rock coring interval
	Water level during drilling
	Water level taken on date shown

Graphic Log of Soil and Rock Types



GEOTECHNICAL TESTING EXPLANATIONS

PP	Pocket Penetrometer	DD	Dry Density
TOR	Torvane	ATT	Atterberg Limits
CON	Consolidation	CBR	California Bearing Ratio
DS	Direct Shear	OC	Organic Content
P200	Percent Passing U.S. Standard No. 200 Sieve	P	Pushed Sample
HYD	Hydrometer Gradation	RES	Resilient Modulus
UC	Unconfined Compressive Strength	VS	Vane Shear
SIEV	Sieve Gradation	kPa	kiloPascal

ENVIRONMENTAL TESTING EXPLANATIONS

CA	Sample Submitted for Chemical Analysis	ND	Not Detected
PID	Photoionization Detector Headspace Analysis	NS	No Visible Sheen
ppm	Parts Per Million	SS	Slight Sheen
P	Pushed Sample	MS	Moderate Sheen
		HS	Heavy Sheen

GEODESIGN INC
15575 SW Sequoia Parkway - Suite 100
Portland OR 97224
Off 503.968.8787 Fax 503.968.3068

KEY TO TEST PIT AND BORING LOG SYMBOLS

TABLE A-1

SOIL CLASSIFICATION SYSTEM

CONSISTENCY - COARSE-GRAINED SOILS

Relative Density	Standard Penetration Resistance	Dames & Moore Sampler (140-pound hammer)	Dames & Moore Sampler (300-pound hammer)
Very Loose	0 – 4	0 - 11	0 - 4
Loose	4 – 10	11 - 26	4 - 10
Medium Dense	10 – 30	26 - 74	10 - 30
Dense	30 – 50	74 - 120	30 - 47
Very Dense	More than 50	More than 120	More than 47

CONSISTENCY - FINE-GRAINED SOILS

Consistency	Standard Penetration Resistance	Dames & Moore Sampler (140-pound hammer)	Dames & Moore Sampler (300-pound hammer)	Unconfined Compressive Strength (tsf)
Very Soft	Less than 2	Less than 3	Less than 2	Less than 0.25
Soft	2 - 4	3 – 6	2 - 5	0.25 - 0.50
Medium Stiff	4 - 8	6 – 12	5 - 9	0.50 - 1.0
Stiff	8 - 15	12 – 25	9 - 19	1.0 - 2.0
Very Stiff	15 - 30	25 – 65	19 – 31	2.0 - 4.0
Hard	More than 30	More than 65	More than 31	More than 4.0

SOIL CLASSIFICATION NAME

Name and Modifier Terms		Constituent Percentage
Coarse-grained	GRAVEL, SAND	>50%
	sandy, gravelly	30 - 50%
	silty, clayey	15 - 50%
	some (gravel, sand)	15 - 30%
	some (silt, clay)	5 - 15%
	trace (gravel, sand)	
	trace (silt, clay)	<5%
Fine-grained	CLAY, SILT	>50%
	silty, clayey	30 - 50%
	sandy, gravelly	
	some (sand, gravel)	15 - 30%
	some (silt, clay)	
	trace (sand, gravel)	5 - 15%
	trace (silt, clay)	
Organic	PEAT	50 - 100%
	organic (soil name)	15 - 50%
	(soil name) with some organics	5 - 15%

MOISTURE CLASSIFICATION

Term	Field Test
dry	very low moisture, dry to touch
moist	damp, without visible moisture
wet	visible free water, usually saturated

GRAIN SIZE CLASSIFICATION

Description		Sieve*	Observed Size
boulders		-	>12”
cobbles		-	3” - 12”
gravel	coarse	0.75” - 3”	0.75” - 3”
	fine	#4 - 0.75”	0.19” - 0.75”
sand	coarse	#10 - #4	0.079” - 0.19”
	medium	#40 - #10	0.017” - 0.079”
	fine	#200 - #40	00029” - 0.017”
fines		<#200	<0.0029”

* Use of #200 field sieve encouraged

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SOIL CLASSIFICATION SYSTEM AND GUIDELINES | **TABLE A-2**

ROCK CLASSIFICATION GUIDELINES	
HARDNESS	**DESCRIPTION**
Extremely Soft (R0)	Indented by thumbnail
Very Soft (R1)	Can be peeled by pocket knife or scratched with finger nail
Soft (R2)	Can be peeled by a pocket knife with difficulty
Medium Hard (R3)	Can be scratched by knife or pick
Hard (R4)	Can be scratched with knife or pick only with difficulty
Very Hard (R5)	Cannot be scratched with knife or sharp pick
WEATHERING	**DESCRIPTION**
Decomposed	Rock mass is completely decomposed
Predominantly Decomposed	Rock mass is more than 50% decomposed
Moderately Weathered	Rock mass is decomposed locally
Slightly Weathered	Rock mass is generally fresh
Fresh	No discoloration in rock fabric
JOINT SPACING	**DESCRIPTION**
Very Close	Less than 2 inches
Close	2 inches to 1 foot
Moderate Close	1 foot to 3 feet
Wide	3 feet to 10 feet
Very Wide	Greater than 10 feet
FRACTURING	**FRACTURE SPACING**
Very Intensely Fractured	Chips and fragments with a few scattered short core lengths
Intensely Fractured	0.1 foot to 0.3 foot with scattered fragments intervals
Moderately Fractured	0.3 foot to 1 foot with most lengths 0.6 foot
Slightly Fractured	1 foot to 3 feet
Very Slightly Fractured	Greater than 3 feet
Unfractured	No fractures
HEALING	**DESCRIPTION**
Not Healed	Discontinuity surface, fractured zone, sheared material or filling not re-cemented
Partly Healed	Less than 50% of fractured or sheared material
Moderately Healed	Greater than 50% of fractured or sheared material
Totally Healed	All fragments bonded

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ROCK CLASSIFICATION GUIDELINES **TABLE A-3**

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION / DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT %	COMMENTS
TP-1						0 50 100	
0.0		Stiff, brown SILT with trace to some gravel; dry to moist (3-inch-thick root zone).					
		becomes gravelly at 1.5 feet					
2.5		Very dense, brown GRAVEL with trace to some silt and cobbles; dry to moist, angular.	2.5				
		Stiff to very stiff, brown, gravelly SILT; moist.	3.5	P200	☒	●	P200 = 55%
5.0		Very dense, brown, fine to coarse GRAVEL with some cobbles and trace silt; dry to moist, angular (moderately weathered basalt).	5.0				
7.5		Very stiff to hard, brown SILT with some clay and trace to no gravel; dry to moist.	7.8		☒		
10.0					☒	●	No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
		Test pit completed at 11.0 feet.	11.0				
12.5							
						0 50 100	
TP-2						0 50 100	
0.0		Medium stiff to stiff, dark brown SILT with some gravel; dry to moist.			☒	●	
		Soft (R2), black and brown BASALT; predominately decomposed, vesicular, closely fractured.	1.8				
2.5		Test pit completed at 3.3 feet due to refusal on basalt.	3.3				No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
5.0							
7.5							
10.0							
12.5						0 50 100	

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EXCAVATION METHOD: backhoe (see report text)

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BLACKHAWK-1-01

TEST PIT

JULY 2006

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WEST LINN, OR

FIGURE A-1

TEST PIT LOG - 2 PER PAGE BLACKHAWK-1-01-TP1-16.GPJ GEODESIGN.GDT PRINT DATE: 7/6/06:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT %	COMMENTS
TP-3						0 50 100	
0.0		Stiff, brown SILT with trace clay; dry to moist (6-inch-thick root zone).			☒	●	
2.5							
		grades with trace gravel and cobbles at 4.0 feet	4.1		☒		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
5.0		Soft to medium hard (R2-R3), light gray-brown BASALT; moderately to slightly weathered, closely fractured.	4.3				
		Test pit completed at 4.3 feet due to refusal on basalt.					
7.5							
10.0							
12.5							
						0 50 100	
TP-4						0 50 100	
0.0		Stiff, brown SILT with trace to some clay; moist (5-inch-thick root zone).					
2.5					☒		
		grades to light brown and clayey with brown and black mottles at 3.0 feet					
5.0		grades with trace gravel and angular cobbles (colluvium) at 5.0 feet					
		encountered single cobble (10-inch diameter) at 5.5 feet	6.0				
		Dense to very dense, yellow-gray GRAVEL with some cobbles and trace silt; dry to moist, angular (colluvium).	6.5		☒	●	No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
7.5		Dense to very dense, yellow-gray, fine to coarse SAND with some clay and trace fine gravel; moist, subrounded to angular.	7.2				
10.0		Test pit completed at 7.2 feet due to refusal on basalt.					
12.5							
						0 50 100	

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BLACKHAWK-1-01

TEST PIT

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FIGURE A-2

TEST PIT LOG - 2 PER PAGE BLACKHAWK-1-01-TP1-16.GPJ GEODESIGN.GDT PRINT DATE: 7/6/06:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT %	COMMENTS
TP-5						0 50 100	
0.0		Stiff, brown SILT with trace clay; moist (3-inch-thick root zone).					
2.5					☒	●	
		Soft to medium hard (R2-R3), gray BASALT with brown staining; moderate to slightly weathered, slightly fractured (1- to 8-inch spacing).	3.0		☒		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
5.0		Test pit completed at 3.7 feet due to refusal on basalt.	3.7				
7.5							
10.0							
12.5							
						0 50 100	
TP-6						0 50 100	
0.0		Stiff, brown SILT with trace to some gravel and cobbles and trace clay; dry to moist (8-inch-thick root zone).					
2.5							
		Stiff, dark brown, gravelly SILT with some organics; dry to moist (colluvium).	3.0				
		Stiff, dark brown SILT with trace to some gravel and some organics; dry to moist (colluvium).	4.0				
5.0		grades to no gravel at 5.5 feet					
7.5					☒	●	
10.0					☒		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
		Test pit completed at 10.2 feet.	10.2				
12.5							
						0 50 100	

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BLACKHAWK-1-01

TEST PIT

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FIGURE A-3

TEST PIT LOG - 2 PER PAGE BLACKHAWK-1-01-TP1-16.GPJ GEODESIGN.GDT PRINT DATE: 7/6/06:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION / DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT %	COMMENTS
TP-7						0 50 100	
0.0		Stiff, brown SILT with trace clay; dry to moist (4-inch-thick root zone).					
2.5		encountered two boulders (14-inch diameter) at 3.0 feet					
		grades with some gravel and cobbles at 3.5 feet	4.0				
5.0		Soft to medium hard (R2-R3), gray BASALT with brown staining; moderately weathered, closely fractured (1 to 6 inches), slightly fractured.					
7.5		grades to extremely soft to very soft (R0-R1) at approximately 7.0 feet			☒		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
		grades to red-brown with yellow breccia at 7.5 feet	8.0				
10.0		Test pit completed at 8.0 feet due to refusal on basalt.					
12.5							
TP-8						0 50 100	
0.0		Medium stiff to stiff, brown SILT with trace clay; moist (2-inch-thick root zone).					
2.5		grades to yellow-brown with some clay at 3.5 feet					
5.0		Very dense, brown, silty GRAVEL; dry to moist, poorly graded, angular, few cobbles up to 8-inch diameter (colluvium).	5.5				
		Hard, brown, clayey SILT; dry.	6.5		☒	●	
7.5		Extremely soft (R0), dark gray BASALT with brown stains; decomposed to intensely weathered.	7.5		☒	●	No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
10.0		Test pit completed at 9.0 feet.	9.0				
12.5						0 50 100	

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BLACKHAWK-1-01

TEST PIT

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FIGURE A-4

TEST PIT LOG - 2 PER PAGE BLACKHAWK-1-01-TP1-16.GPJ GEODESIGN.GDT PRINT DATE: 7/6/06:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION / DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT %	COMMENTS
TP-9						0 50 100	
0.0		Stiff, brown SILT with trace to some clay; moist (7-inch-thick root zone).					
2.5							
5.0		grades to no clay at 4.5 feet			☒	●	
7.5							
		Dense to very dense, brown, fine to coarse GRAVEL with some fine to coarse sand and silt; moist, poorly graded, subrounded to subangular.	8.0				Minor caving observed at 8.0 feet.
10.0				P200	☒	●	P200 = 18%
		Test pit completed at 10.7 feet.	10.7				No groundwater seepage observed to the depth explored.
12.5							
						0 50 100	
TP-10						0 50 100	
0.0		Medium stiff to stiff, brown SILT with trace to some clay; moist (6-inch-thick root zone).			☒	●	
2.5							
		Dense to very dense, brown-gray, fine to coarse GRAVEL with some fine to coarse cobbles and silt and trace sand; moist, subrounded to subangular.	4.5				
5.0				P200	☒	●	P200 = 24%
7.5		grades to very fractured, decomposed basalt at 7.0 feet			☒		No groundwater seepage observed to the depth explored.
		Test pit completed at 8.8 feet.	8.8				No caving observed to the depth explored.
10.0							
12.5							
						0 50 100	

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BLACKHAWK-1-01

TEST PIT

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FIGURE A-5

TEST PIT LOG - 2 PER PAGE BLACKHAWK-1-01-TP1-16.GPJ GEODESIGN.GDT PRINT DATE: 7/6/06:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION / DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT %	COMMENTS
TP-11						0 50 100	
0.0		Medium stiff, dark brown SILT with trace to some gravel and trace clay; moist (fill).					
2.5							
		Stiff, brown SILT with trace to some clay; dry to moist, few roots.	4.0				
5.0					☒	●	
		Dense to very dense, brown-gray GRAVEL with some silt and cobbles; moist, angular (colluvium).	6.0				
7.5					☒		
		Extremely soft to very soft (R0-R1), yellow-gray BASALT; decomposed, closely fractured (1 to 5 inches).	9.0				
10.0		Test pit completed at 10.0 feet.	10.0		☒		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
12.5							
TP-12						0 50 100	
0.0		Medium stiff to stiff, brown SILT with some clay; moist (7-inch-thick root zone).					
2.5							
		Stiff, gray-brown, clayey SILT with brown mottles; moist.	3.5		☒	●	
5.0		Very dense, brown-gray GRAVEL with some cobbles and trace sand and silt; moist, subrounded to angular.	5.0				
7.5		grades to fine to coarse with some sand and silt at 8.5 feet					
10.0		becomes subrounded to subangular at 9.0 feet			☒		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
		Test pit completed at 10.8 feet.	10.8				
12.5						0 50 100	

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BLACKHAWK-1-01

TEST PIT

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FIGURE A-6

TEST PIT LOG - 2 PER PAGE BLACKHAWK-1-01-TP1-16.GPJ GEODESIGN.GDT PRINT DATE: 7/6/06:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT %	COMMENTS
TP-13						0 50 100	
0.0		Stiff, brown SILT with trace to some clay; moist (8-inch-thick root zone)					
2.5		becomes blocky with trace clay at 2.0 feet			☒	●	
		Dense to very dense, fine to coarse GRAVEL with trace to some silt, sand, and cobbles; dry to moist, subrounded to angular (colluvium).	3.0				
5.0							
7.5							
10.0					☒		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
		Test pit completed at 11.0 feet.	11.0				
12.5							
						0 50 100	
TP-14						0 50 100	
0.0		Stiff, brown SILT with trace sand; moist (8-inch-thick root zone).					
2.5		grades to gravelly at 1.5 feet					
		Extremely soft to soft (R0-R2), gray-brown BASALT; moderately weathered, closely fractured (2 to 6 inches).	3.0				
5.0					☒	●	No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
		Test pit completed at 5.0 feet due to refusal on basalt.	5.0				
7.5							
10.0							
12.5							
						0 50 100	

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EXCAVATION METHOD: backhoe (see report text)

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BLACKHAWK-1-01

TEST PIT

JULY 2006

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FIGURE A-7

TEST PIT LOG - 2 PER PAGE BLACKHAWK-1-01-TP1-16.GPJ GEODESIGN.GDT PRINT DATE: 7/6/06:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION / DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT %	COMMENTS
TP-15						0 50 100	
0.0		Dense, brown, silty GRAVEL; dry to moist, poorly graded, angular (fill).	0.7				
		Stiff, dark brown SILT with some organics; dry to moist.	2.0				
2.5		Very soft to soft (R1-R2), brown BASALT with black stains; moderately to slightly weathered, closely fractured (2 to 8 inches), blocky.	3.3		☒		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
		Test pit completed at 3.3 feet due to refusal on basalt.					
5.0							
7.5							
10.0							
12.5						0 50 100	
TP-16						0 50 100	
0.0		Stiff, brown, gravelly SILT with trace sand; dry to moist; angular gravel (5-inch-thick root zone).					
2.5		Dense to very dense, gray-brown GRAVEL with trace to some silt, sand, and cobbles; dry to moist, poorly graded, subrounded to subangular (colluvium).	3.0				
5.0							
7.5							
10.0					☒	●	No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
		Test pit completed at 11.0 feet.	11.0				
12.5						0 50 100	

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BLACKHAWK-1-01

TEST PIT

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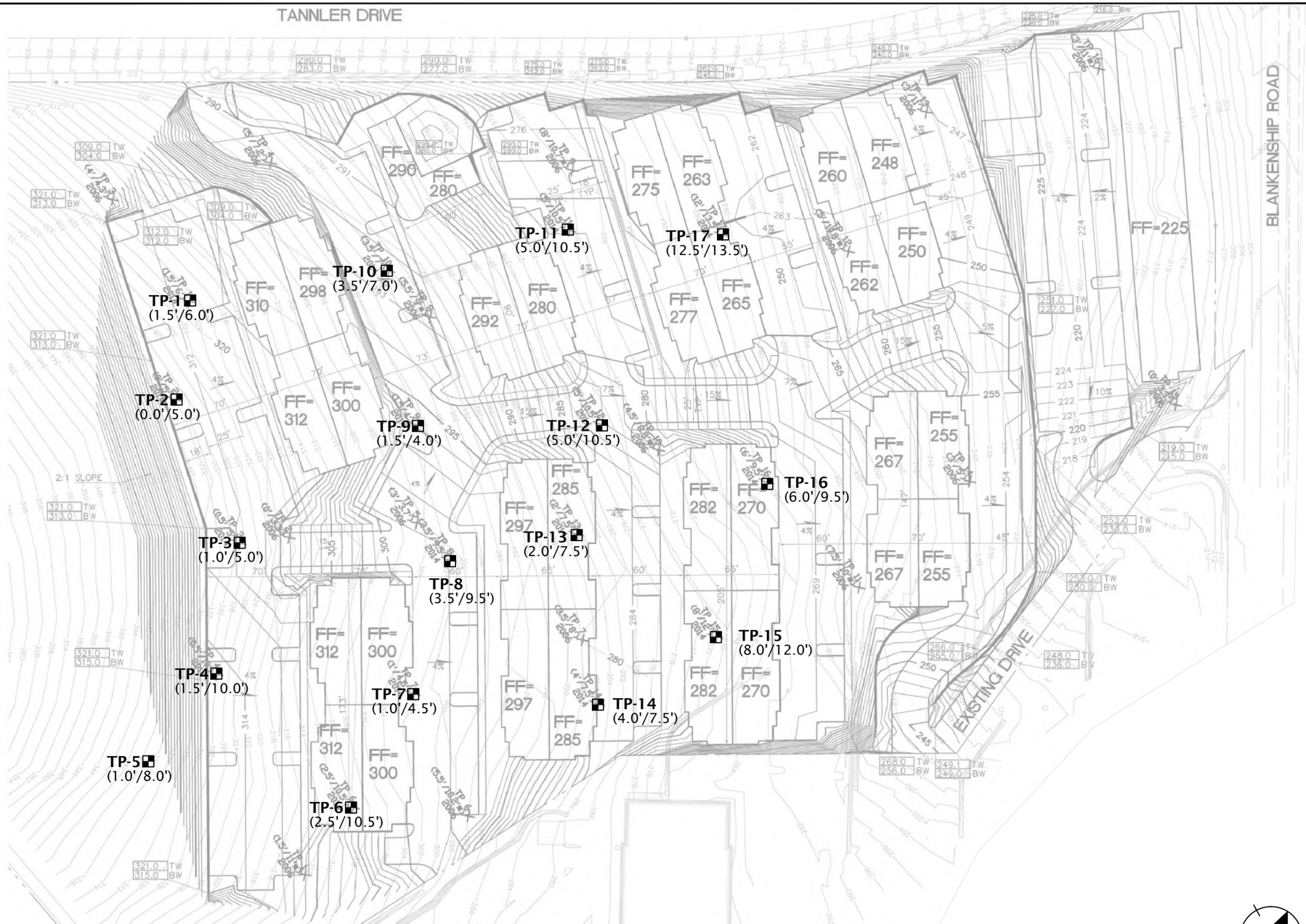
FIGURE A-8

TEST PIT LOG - 2 PER PAGE BLACKHAWK-1-01-TP1-16.GPJ GEODESIGN.GDT PRINT DATE: 7/6/06:KT



LEGEND:

TP-1 TEST PIT
(1.5'/11.0') DEPTH TO WEATHERED BASALT/DEPTH TO INTACT BASALT

SITE PLAN BASED ON IMAGE OBTAINED FROM CONAM PROPERTIES, JULY 23, 2014

SITE PLAN

NWC OF TANNLER & BLANKENSHIP
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FIGURE 2

CONAM-1-01

JULY 2014

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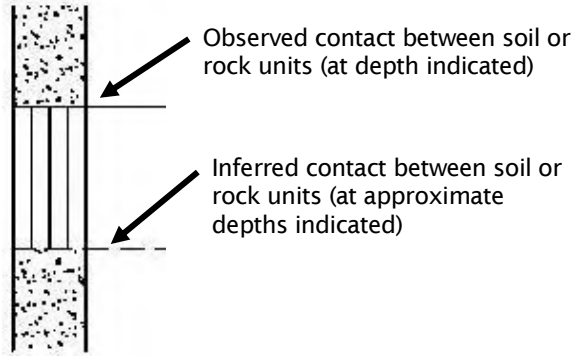
Printed By: mmiller | Print Date: 7/28/2014 11:10:25 AM
File Name: J:\A-D\ConAm\ConAm-1\ConAm-1-01\Figures\CAD\ConAm-1-01-SP01.dwg | Layout: FIGURE 2

SYMBOL	SAMPLING DESCRIPTION
	Location of sample obtained in general accordance with ASTM D 1586 Standard Penetration Test with recovery
	Location of sample obtained using thin-wall Shelby tube or Geoprobe® sampler in general accordance with ASTM D 1587 with recovery
	Location of sample obtained using Dames & Moore sampler and 300-pound hammer or pushed with recovery
	Location of sample obtained using Dames & Moore and 140-pound hammer or pushed with recovery
	Location of sample obtained using 3-inch-O.D. California split-spoon sampler and 140-pound hammer
	Location of grab sample
	Rock coring interval
	Water level during drilling
	Water level taken on date shown

Graphic Log of Soil and Rock Types



GEOTECHNICAL TESTING EXPLANATIONS

ATT	Atterberg Limits	PP	Pocket Penetrometer
CBR	California Bearing Ratio	P200	Percent Passing U.S. Standard No. 200 Sieve
CON	Consolidation		
DD	Dry Density	RES	Resilient Modulus
DS	Direct Shear	SIEV	Sieve Gradation
HYD	Hydrometer Gradation	TOR	Torvane
MC	Moisture Content	UC	Unconfined Compressive Strength
MD	Moisture-Density Relationship	VS	Vane Shear
OC	Organic Content	kPa	Kilopascal
P	Pushed Sample		

ENVIRONMENTAL TESTING EXPLANATIONS

CA	Sample Submitted for Chemical Analysis	ND	Not Detected
P	Pushed Sample	NS	No Visible Sheen
PID	Photoionization Detector Headspace Analysis	SS	Slight Sheen
		MS	Moderate Sheen
ppm	Parts per Million	HS	Heavy Sheen

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EXPLORATION KEY

TABLE A-1

RELATIVE DENSITY - COARSE-GRAINED SOILS

Relative Density	Standard Penetration Resistance	Dames & Moore Sampler (140-pound hammer)	Dames & Moore Sampler (300-pound hammer)
Very Loose	0 – 4	0 - 11	0 - 4
Loose	4 – 10	11 - 26	4 - 10
Medium Dense	10 – 30	26 - 74	10 - 30
Dense	30 – 50	74 - 120	30 - 47
Very Dense	More than 50	More than 120	More than 47

CONSISTENCY - FINE-GRAINED SOILS

Consistency	Standard Penetration Resistance	Dames & Moore Sampler (140-pound hammer)	Dames & Moore Sampler (300-pound hammer)	Unconfined Compressive Strength (tsf)
Very Soft	Less than 2	Less than 3	Less than 2	Less than 0.25
Soft	2 - 4	3 – 6	2 - 5	0.25 - 0.50
Medium Stiff	4 - 8	6 – 12	5 - 9	0.50 - 1.0
Stiff	8 - 15	12 – 25	9 - 19	1.0 - 2.0
Very Stiff	15 - 30	25 – 65	19 – 31	2.0 - 4.0
Hard	More than 30	More than 65	More than 31	More than 4.0

PRIMARY SOIL DIVISIONS			GROUP SYMBOL	GROUP NAME
COARSE-GRAINED SOILS (more than 50% retained on No. 200 sieve)	GRAVEL (more than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVELS (< 5% fines)	GW or GP	GRAVEL
		GRAVEL WITH FINES (≥ 5% and ≤ 12% fines)	GW-GM or GP-GM	GRAVEL with silt
			GW-GC or GP-GC	GRAVEL with clay
		GRAVELS WITH FINES (> 12% fines)	GM	silty GRAVEL
			GC	clayey GRAVEL
			GC-GM	silty, clayey GRAVEL
	SAND (50% or more of coarse fraction passing No. 4 sieve)	CLEAN SANDS (<5% fines)	SW or SP	SAND
		SANDS WITH FINES (≥ 5% and ≤ 12% fines)	SW-SM or SP-SM	SAND with silt
			SW-SC or SP-SC	SAND with clay
		SANDS WITH FINES (> 12% fines)	SM	silty SAND
			SC	clayey SAND
			SC-SM	silty, clayey SAND
FINE-GRAINED SOILS (50% or more passing No. 200 sieve)	SILT AND CLAY	Liquid limit less than 50	ML	SILT
			CL	CLAY
			CL-ML	silty CLAY
			OL	ORGANIC SILT or ORGANIC CLAY
		Liquid limit 50 or greater	MH	SILT
			CH	CLAY
			OH	ORGANIC SILT or ORGANIC CLAY
HIGHLY ORGANIC SOILS			PT	PEAT

MOISTURE CLASSIFICATION

Term	Field Test
dry	very low moisture, dry to touch
moist	damp, without visible moisture
wet	visible free water, usually saturated

ADDITIONAL CONSTITUENTS

Secondary granular components or other materials such as organics, man-made debris, etc.

Percent	Silt and Clay In: Fine-Grained Soils	Silt and Clay In: Coarse-Grained Soils	Percent	Sand and Gravel In: Fine-Grained Soils	Sand and Gravel In: Coarse-Grained Soils
< 5	trace	trace	< 5	trace	trace
5 – 12	minor	with	5 – 15	minor	minor
> 12	some	silty/clayey	15 – 30	with	with
			> 30	sandy/gravelly	Indicate %

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SOIL CLASSIFICATION SYSTEM

TABLE A-2

HARDNESS	DESCRIPTION
Extremely Soft (R0)	Indented by thumbnail
Very Soft (R1)	Can be peeled by pocket knife or scratched with finger nail
Soft (R2)	Can be peeled by a pocket knife with difficulty
Medium Hard (R3)	Can be scratched by knife or pick
Hard (R4)	Can be scratched with knife or pick only with difficulty
Very Hard (R5)	Cannot be scratched with knife or sharp pick
WEATHERING	**DESCRIPTION**
Decomposed	Rock mass is completely decomposed
Predominantly Decomposed	Rock mass is more than 50% decomposed
Moderately Weathered	Rock mass is decomposed locally
Slightly Weathered	Rock mass is generally fresh
Fresh	No discoloration in rock fabric
JOINT SPACING	**DESCRIPTION**
Very Close	Less than 2 inches
Close	2 inches to 1 foot
Moderate Close	1 foot to 3 feet
Wide	3 feet to 10 feet
Very Wide	Greater than 10 feet
FRACTURING	**FRACTURE SPACING**
Very Intensely Fractured	Chips and fragments with a few scattered short core lengths
Intensely Fractured	0.1 foot to 0.3 foot with scattered fragments intervals
Moderately Fractured	0.3 foot to 1 foot with most lengths 0.6 foot
Slightly Fractured	1 foot to 3 feet
Very Slightly Fractured	Greater than 3 feet
Unfractured	No fractures
HEALING	**DESCRIPTION**
Not Healed	Discontinuity surface, fractured zone, sheared material or filling not re-cemented
Partly Healed	Less than 50% of fractured or sheared material
Moderately Healed	Greater than 50% of fractured or sheared material
Totally Healed	All fragments bonded

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ROCK CLASSIFICATION SYSTEM

TABLE A-3

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Medium stiff, brown SILT (ML), abundant shrub roots; moist (2-inch-thick root zone).					
		Very soft to soft (R1-R2), gray-brown BASALT; decomposed to intensely weathered, moderately to intensely fractured.	1.5				
2.5		soft to medium hard (R2-R3), gray; moderately to intensely weathered, moderately fractured at 4.0 feet			⊠		
5.0		Exploration terminated at a depth of 6.0 feet due to refusal.	6.0				No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
7.5							
10.0							
12.5							
15.0							

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EXCAVATION METHOD: trackhoe (see report text)

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CONAM-1-01

TEST PIT TP-1

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FIGURE A-1

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Extremely soft to very soft (R0-R1), brown-gray BASALT; decomposed to moderately weathered, moderately to very intensely fractured, abundant shrub roots (2-inch-thick root zone).					
		without shrub roots at 1.5 feet					
2.5		grades to medium hard (R3); moderately to intensely weathered, moderately fractured at 3.0 feet					
		soft to medium hard (R2-R3), gray; moderately to intensely weathered, moderately fractured at 4.0 feet			⊠		
5.0		Exploration terminated at a depth of 5.0 feet due to refusal.	5.0				No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
7.5							
10.0							
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-2

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FIGURE A-2

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		TOPSOIL, abundant shrub roots (12-inch-thick root zone).					
		Very soft to soft (R1-R2), brown-gray BASALT; decomposed to moderately weathered, moderately to very intensely fractured.	1.0				
2.5		soft to medium hard (R2-R3); moderately to intensely weathered, slightly to moderately fractured at 3.5 feet					
5.0		Exploration terminated at a depth of 5.0 feet due to refusal.	5.0				No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
7.5							
10.0							
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-3

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FIGURE A-3

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		TOPSOIL, abundant shrub roots (18-inch-thick root zone).					
		Extremely soft to very soft (R0-R1), brown-gray BASALT; decomposed to intensely weathered, moderately to very intensely fractured.	1.5				
2.5							
5.0		gray-brown; decomposed at 5.0 feet slightly to moderately fractured at 5.5 feet					
7.5							
		soft to medium hard (R2-R3) at 9.5 feet					
10.0		Exploration terminated at a depth of 10.0 feet due to refusal.	10.0				No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-4

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FIGURE A-4

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		TOPSOIL, abundant shrub roots (12-inch-thick root zone).					
		Very soft to soft (R1-R2), brown BASALT; decomposed to intensely weathered, moderately to intensely fractured.	1.0				
2.5		soft to medium hard (R2-R3) at 3.0 feet					
5.0		extremely soft to very soft (R0-R1), gray-yellow; decomposed at 5.0 feet					
7.5		soft to medium hard (R2-R3) at 7.5 feet			☒		
		Exploration terminated at a depth of 8.0 feet due to refusal.	8.0				No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
10.0							
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-5

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FIGURE A-5

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Medium stiff, brown SILT with gravel (ML), trace organics (rootlets), shrub roots; moist (2-inch-thick root zone).					
		without shrub roots at 1.5 feet					
2.5		Medium dense, brown, silty GRAVEL (GM); moist, fine to coarse and angular (decomposed basalt). with cobbles at 3.0 feet	2.5				
5.0							
		Extremely soft to very soft (R0-R1), brown-gray BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	7.0				
7.5							
10.0		very soft to medium hard (R1-R3); moderately to intensely weathered at 10.0 feet	10.5				
		Exploration terminated at a depth of 10.5 feet due to refusal.					No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-6

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FIGURE A-6

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Medium stiff, brown SILT with gravel (ML), trace organics (rootlets), abundant shrub roots; moist (4-inch-thick root zone).					
		Very soft to soft (R1-R2), brown-gray BASALT; decomposed to intensely weathered, moderately to very intensely fractured.	1.0				
2.5							
		medium hard to hard (R3-R4); moderately to intensely weathered at 4.0 feet	4.5		☒		Slow groundwater seepage observed at 4.0 feet. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
5.0		Exploration terminated at a depth of 4.5 feet due to refusal.					
7.5							
10.0							
12.5							
15.0						0 50 100	

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CONAM-1-01

TEST PIT TP-7

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FIGURE A-7

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Soft to medium stiff, brown SILT (ML), some clay, trace organics (rootlets); moist (4-inch-thick root zone).					Moderate caving observed at 1.5 feet.
2.5					☒		
		Very soft to soft (R1-R2), brown and gray-yellow BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	3.5				
5.0		soft to medium hard (R2-R3); moderately to very intensely fractured at 5.0 feet					
		medium hard (R3) at 7.0 feet					
7.5							
		Exploration terminated at a depth of 9.5 feet due to refusal.	9.5				No groundwater seepage observed to the depth explored. Surface elevation was not measured at the time of exploration.
10.0							
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-8

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FIGURE A-8

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Soft to medium stiff, brown SILT with gravel (ML), trace organics (rootlets), abundant fine roots; moist (4-inch-thick root zone). without fine roots at 1.0 foot					
		Very soft to soft (R1-R2), brown and gray-black BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	1.5				
2.5		soft to medium hard (R2-R3); moderately to very intensely weathered, moderately to very intensely fractured at 3.5 feet	4.0				No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
5.0		Exploration terminated at a depth of 4.0 feet due to refusal.					Surface elevation was not measured at the time of exploration.
7.5							
10.0							
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-9

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FIGURE A-9

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Soft to medium stiff, brown SILT (ML), some clay, trace organics; moist (4-inch-thick root zone).					Minor caving observed at 1.0 foot.
		wood/roots at 2.0 feet					
2.5		medium stiff at 2.5 feet					
		Extremely soft to very soft (R0-R1), brown BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	3.5				
5.0							
		soft to medium hard (R2-R3); moderately to intensely weathered, moderately to intensely fractured at 6.5 feet	7.0				No groundwater seepage observed to the depth explored.
7.5		Exploration terminated at a depth of 7.0 feet due to refusal.					Surface elevation was not measured at the time of exploration.
10.0							
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-10

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FIGURE A-10

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0	Blackberry cuttings (2.0 inches).	0.2				
	Soft to medium stiff, dark brown SILT (ML), some clay, trace to some organics, abundant roots; moist.					
	without abundant roots at 1.0 foot					
	medium stiff, brown, none to trace organics at 1.5 feet					
	stiff at 2.0 feet					
2.5						
	brown-yellow at 4.0 feet					
5.0	Extremely soft to very soft (R0-R1), brown-gray BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	5.0				
7.5	very soft to soft (R1-R2), gray; vuggy at 8.0 feet					
	moderately to intensely fractured at 9.0 feet					
10.0	soft to medium hard (R2-R3) at 10.0 feet					Slow to moderate groundwater seepage observed at 10.0 feet.
	Exploration terminated at a depth of 10.5 feet due to refusal.	10.5				No caving observed to the depth explored.
						Surface elevation was not measured at the time of exploration.
12.5						
15.0						

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CONAM-1-01

TEST PIT TP-11

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FIGURE A-11

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0	Blackberry cuttings (2.0 inches).	0.2				
	Soft to medium stiff, dark brown SILT (ML), some clay, trace to some organics, abundant blackberry roots; moist.					
	without abundant blackberry roots at 1.0 foot					
	medium stiff, brown, trace organics at 1.5 feet					
2.5	stiff at 2.5 feet			⊠		
	brown-yellow at 4.5 feet					
5.0	Extremely soft to very soft (R0-R1), brown-gray BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	5.0				
7.5	gray; slightly to moderately fractured, vuggy at 7.5 feet					
10.0	Exploration terminated at a depth of 10.5 feet due to refusal.	10.5				No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
12.5						
15.0						

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FIGURE A-12

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Blackberry cuttings (2.0 inches).	0.2				
		Soft to medium stiff, dark brown SILT (ML), some clay, trace to some organics, blackberry roots; moist. medium stiff, brown, trace organics, without blackberry roots at 1.0 foot					Minor caving observed at 1.0 foot.
		Very soft to soft (R1-R2), gray-brown BASALT; decomposed to intensely weathered, moderately to very intensely fractured.	2.0				
2.5							
5.0							
		medium hard to hard (R3-R4); slightly to moderately weathered, moderately fractured at 7.0 feet	7.5				No groundwater seepage observed to the depth explored.
7.5		Exploration terminated at a depth of 7.5 feet due to refusal.					Surface elevation was not measured at the time of exploration.
10.0							
12.5							
15.0							

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CONAM-1-01

TEST PIT TP-13

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FIGURE A-13

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0	Blackberry cuttings (2.0 inches).	0.2				
	Soft to medium stiff, dark brown SILT (ML), some clay, trace to some organics, blackberry roots; moist.					
	medium stiff, brown, trace organics, without blackberry roots at 1.0 foot					
2.5						
	Very soft to soft (R1-R2), brown-gray BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	4.0				
5.0				⊠		
7.5	Exploration terminated at a depth of 7.5 feet due to refusal.	7.5				No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
10.0						
12.5						
15.0						

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TEST PIT TP-14

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FIGURE A-14

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	MATERIAL DESCRIPTION	ELEVATION DEPTH	SAMPLE	COMMENTS
0.0	Blackberry cuttings (2.0 inches).	0.2		
	Soft to medium stiff, dark brown SILT (ML), some clay, trace to some organics, blackberry roots; moist - **FILL**.			
	without blackberry roots at 1.0 foot			
	medium stiff, with cobbles, trace gravel at 2.0 feet			
2.5				Bottle cap and wood debris at 3.0 feet.
	Medium stiff to stiff, brown SILT (MH), some clay, trace gravel; moist.	3.5		
5.0				
7.5				
	Extremely soft to very soft (R0-R1), brown-yellow and gray BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	8.0		
10.0				
	very soft to soft (R1-R2); moderately to intensely weathered, moderately fractured at 10.5 feet			
	soft to medium hard (R3-R5) at 11.5 feet			
	Exploration terminated at a depth of 12.0 feet due to refusal.	12.0		No groundwater seepage observed to the depth explored. No caving observed to the depth explored.
12.5				Surface elevation was not measured at the time of exploration.
15.0				

GRAPHIC LOG

TESTING

● MOISTURE CONTENT %: 0 50 100

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CONAM-1-01

TEST PIT TP-15

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FIGURE A-15

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	● MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0		Blackberry cuttings (2.0 inches).	0.2				
		Soft to medium stiff, dark brown SILT (ML), some clay, trace to some organics, blackberry roots; moist.					
		medium stiff, brown, trace organics, without blackberry roots at 1.0 foot					
		stiff at 2.0 feet					
2.5							
5.0							
		Extremely soft to very soft (R0-R1), brown-yellow and gray BASALT; decomposed to intensely weathered, intensely to very intensely fractured.	6.0				
7.5							
		soft to medium hard (R2-R3); moderately to intensely weathered, moderately to intensely fractured at 9.0 feet	9.5				
10.0		Exploration terminated at a depth of 9.5 feet due to refusal.					No groundwater seepage observed to the depth explored. No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
12.5							
15.0							

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CONAM-1-01

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FIGURE A-16

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

DEPTH FEET	MATERIAL DESCRIPTION	ELEVATION DEPTH	TESTING	SAMPLE	MOISTURE CONTENT % (0 50 100)	COMMENTS
0.0	Blackberry cuttings (2.0 inches).	0.2				
	Soft to medium stiff, dark brown SILT (ML), some clay, trace to some organics, blackberry roots; moist.					
	without blackberry roots at 1.0 foot					
	medium stiff, brown-yellow, none to trace organics at 2.0 feet					
2.5	stiff at 2.5 feet					
						Slow groundwater seepage observed at 3.5 feet.
5.0	trace sand at 5.0 feet					
	with sand at 7.0 feet					
7.5						
	soft to medium hard (R2-R3); moderately to intensely weathered, moderately to intensely fractured at 9.0 feet					
10.0	with cobbles, trace gravel at 11.0 feet					
12.5	Very soft to soft (R1-R2), brown-yellow and gray BASALT; decomposed to moderately weathered, moderately to intensely fractured.	12.5				
	Exploration terminated at a depth of 13.5 feet due to refusal.	13.5				No caving observed to the depth explored. Surface elevation was not measured at the time of exploration.
15.0						

EXCAVATED BY: Dan J. Fischer Excavating, Inc. LOGGED BY: NAK COMPLETED: 02/20/14

EXCAVATION METHOD: trackhoe (see report text)

GEODESIGN INC
15575 SW Sequoia Parkway - Suite 100
Portland OR 97224
Off 503.968.8787 Fax 503.968.3068

CONAM-1-01

TEST PIT TP-17

JULY 2014

NWC OF TANNLER & BLAKENSHIP
WEST LINN, OR

FIGURE A-17

TEST PIT LOG - 1 PER PAGE CONAM-1-01-TP1_17.GPJ GEODESIGN.GDT PRINT DATE: 7/28/14:KT

APPENDIX D

APPENDIX D
REPORT LIMITATIONS AND IMPORTANT INFORMATION

Report Purpose, Use, and Standard of Care

This report has been prepared in accordance with standard fundamental principles and practices of geotechnical engineering and/or environmental consulting, and in a manner consistent with the level of care and skill typical of currently practicing local engineers and consultants. This report has been prepared to meet the specific needs of specific individuals for the indicated site. It may not be adequate for use by other consultants, contractors, or engineers, or if change in project ownership has occurred. It should not be used for any other reason than its stated purpose without prior consultation with Columbia West Engineering, Inc. (Columbia West). It is a unique report and not applicable for any other site or project. If site conditions are altered, or if modifications to the project description or proposed plans are made after the date of this report, it may not be valid. Columbia West cannot accept responsibility for use of this report by other individuals for unauthorized purposes, or if problems occur resulting from changes in site conditions for which Columbia West was not aware or informed.

Report Conclusions and Preliminary Nature

This geotechnical or environmental report should be considered preliminary and summary in nature. The recommendations contained herein have been established by engineering interpretations of subsurface soils based upon conditions observed during site exploration. The exploration and associated laboratory analysis of collected representative samples identifies soil conditions at specific discreet locations. It is assumed that these conditions are indicative of actual conditions throughout the subject property. However, soil conditions may differ between tested locations at different seasonal times of the year, either by natural causes or human activity. Distinction between soil types may be more abrupt or gradual than indicated on the soil logs. This report is not intended to stand alone without understanding of concomitant instructions, correspondence, communication, or potential supplemental reports that may have been provided to the client.

Because this report is based upon observations obtained at the time of exploration, its adequacy may be compromised with time. This is particularly relevant in the case of natural disasters, earthquakes, floods, or other significant events. Report conclusions or interpretations may also be subject to revision if significant development or other manmade impacts occur within or in proximity to the subject property. Groundwater conditions, if presented in this report, reflect observed conditions at the time of investigation. These conditions may change annually, seasonally or as a result of adjacent development.

Additional Investigation and Construction Observation

Columbia West should be consulted prior to construction to assess whether additional investigation above and beyond that presented in this report is necessary. Even slight variations in soil or site conditions may produce impacts to the performance of structural facilities if not adequately addressed. This underscores the importance of diligent construction observation and testing to verify soil conditions do not differ materially or significantly from the interpreted conditions utilized for preparation of this report.

Therefore, this report contains several recommendations for field observation and testing by Columbia West personnel during construction activities. Actual subsurface conditions are more readily observed and discerned during the earthwork phase of construction when soils are exposed. Columbia West cannot accept responsibility for deviations from recommendations described in this report or future performance of structural facilities if another consultant is retained during the construction phase or Columbia West is not engaged to provide construction observation to the full extent recommended.

Collected Samples

Uncontaminated samples of soil or rock collected in connection with this report will be retained for thirty days. Retention of such samples beyond thirty days will occur only at client's request and in return for payment of storage charges incurred. All contaminated or environmentally impacted materials or samples are the sole property of the client. Client maintains responsibility for proper disposal.

Report Contents

This geotechnical or environmental report should not be copied or duplicated unless in full, and even then only under prior written consent by Columbia West, as indicated in further detail in the following text section entitled Report Ownership. The recommendations, interpretations, and suggestions presented in this report are only understandable in context of reference to the whole report. Under no circumstances should the soil boring or test pit excavation logs, monitor well logs, or laboratory analytical reports be separated from the remainder of the report. The logs or reports should not be redrawn or summarized by other entities for inclusion in architectural or civil drawings, or other relevant applications.

Report Limitations for Contractors

Geotechnical or environmental reports, unless otherwise specifically noted, are not prepared for the purpose of developing cost estimates or bids by contractors. The extent of exploration or investigation conducted as part of this report is usually less than that necessary for contractor's needs. Contractors should be advised of these report limitations, particularly as they relate to development of cost estimates. Contractors may gain valuable information from this report, but should rely upon their own interpretations as to how subsurface conditions may affect cost, feasibility, accessibility and other components of the project work. If believed necessary or relevant, contractors should conduct additional exploratory investigation to obtain satisfactory data for the purposes of developing adequate cost estimates. Clients or developers cannot insulate themselves from attendant liability by disclaiming accuracy for subsurface ground conditions without advising contractors appropriately and providing the best information possible to limit potential for cost overruns, construction problems, or misunderstandings.

Report Ownership

Columbia West retains the ownership and copyright property rights to this entire report and its contents, which may include, but may not be limited to, figures, text, logs, electronic media, drawings, laboratory reports, and appendices. This report was prepared solely for the client, and other relevant approved users or parties, and its distribution must be contingent upon prior express written consent by Columbia West. Furthermore, client or approved users may not use, lend, sell, copy, or distribute this document without express written consent by Columbia West.

Client does not own nor have rights to electronic media files that constitute this report, and under no circumstances should said electronic files be distributed or copied. Electronic media is susceptible to unauthorized manipulation or modification, and may not be reliable.

Consultant Responsibility

Geotechnical and environmental engineering and consulting is much less exact than other scientific or engineering disciplines, and relies heavily upon experience, judgment, interpretation, and opinion often based upon media (soils) that are variable, anisotropic, and non-homogenous. This often results in unrealistic expectations, unwarranted claims, and uninformed disputes against a geotechnical or environmental consultant. To reduce potential for these problems and assist relevant parties in better understanding of risk, liability, and responsibility, geotechnical and environmental reports often provide definitive statements or clauses defining and outlining consultant responsibility. The client is encouraged to read these statements carefully and request additional information from Columbia West if necessary.

CONCEPTUAL OVERALL UTILITY PLAN

MODERA - WEST LINN

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.

ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS

205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REVISIONS			
DATE	NO.	DESCRIPTION	

DESIGNED:	RMM
DRAWN:	SSM
CHECKED:	RMM
DATE:	09/16/25

SHEET NO. **EX-1**

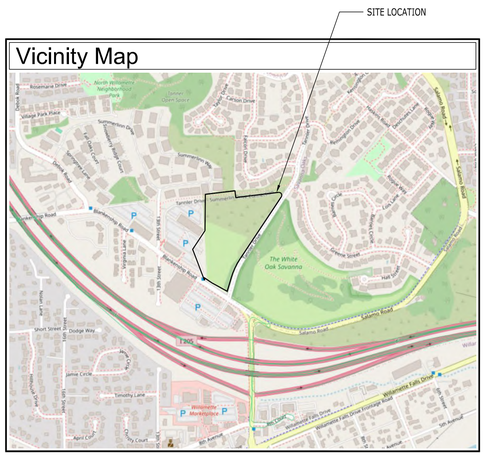
JOB NO. MCR-01

LEGEND:

- STORM SEWER LINE
- SANITARY SEWER LINE
- DOMESTIC WATER LINE
- FIRE WATER LINE

SCALE: 1" = 40'

P:\04-Salem\MCR (Mill Creek Residential Trust)\MCR-01 (Tanner Rd Multifamily)\MCR01-DWG\Exhibits\Overall Utility Concept Plan\ MCR01 - CONCEPT UTILITY PLAN.dwg



PROJECT STATISTICS

	SF	Acre	%
Lot Areas			
Existing Lot Area	494,710	11.36	
Tannler ROW - Dedication	35,327	0.81	
Tannler ROW - Swap	17,277	0.40	
Net Lot Area - North	401,561	9.22	
Net Lot Area - South	75,104	1.72	
Total Net Lot Area	**476,665**	**10.94**	
Lot Coverage			
Buildings	106,246	2.44	22.3%
Garages	24,456	0.56	5.1%
Car Ports	20,272	0.47	4.3%
Total Lot Coverage	**150,974**	**3.47**	**31.7%**
Landscape Area	**151,574**	**3.48**	**31.8%**
Commercial Area	**10,520**		
Residential Units			
Studio	20		6.3%
1-bedroom	130		40.6%
2-bedroom	120		37.5%
3-bedroom	50		15.6%
Total Residential Units	**320**		**100.0%**
Onsite Parking			
Surface	154		40.1%
Car Ports	118		30.7%
Garages	99		25.8%
Handicapped standard	10		2.6%
Handicapped Van	1		0.3%
Handicapped Car Port	1		0.3%
Handicapped Garage	1		0.3%
Total Onsite Parking	**384**		**100.0%**

0 15' 30' 60'

MODERA WEST LINN

WEST LINN, OREGON

CONCEPTUAL SITE & GRADING PLAN 2.2

SEPTEMBER 18, 2025

HILL ARCHITECTS

1750 BLANKENSHIP ROAD • SUITE 200 • WEST LINN • OREGON 97068

#25006