



Site Plan and Design Review Staff Report and Recommendation

Community Development Department, Planning Division

REPORT DATE:	December 12, 2022
HEARING DATE:	December 19, 2022
PROJECT NAME:	West Grove Apartments
FILE NUMBER:	311-22-000028-PLNG
LAND USE REQUEST:	Site development and design review of a proposed 45-unit multi-family apartment complex.
PROPERTY LOCATION:	2320 & 2230 26 th Avenue Washington County Tax Lots 1N331CA01500 & 1N331CA01700
APPLICANT:	Evan Scesa – Creekwood Homes Inc.
OWNER:	John LePari, Hunter LePari, Aimee LePari & Joseph LePari
COMPREHENSIVE PLAN MAP DESIGNATION:	High Density Residential
ZONING MAP DESIGNATION:	Residential, High (RH)
APPLICABLE STANDARDS AND CRITERIA:	City of Forest Grove Development Code §17.2.300 et. seq. <i>Design Review</i> §17.2.400 et. seq. <i>Site Development Review</i> §17.2.100 et. seq. <i>Adjustments</i> §17.3.100 et. seq. <i>Residential Zones</i> §17.5.100 et. seq. <i>Tree Protection</i> §17.7.200 et. seq. <i>Solid Waste and Recycling</i> §17.8.000 et. seq. <i>General Development Standards</i>
REVIEWING STAFF:	Amy Kreimeier (AICP) Senior Planner
RECOMMENDATION:	Staff recommends approval with conditions

I. REVIEW PROCEDURE

Development Code (DC) §17.2.300 et. seq. *Design Review* requires review of new multi-family housing, defined as five or more units. The Planning Commission shall be the review authority for multi-family projects of more than five units. Because the proposed project would include 45 units, it is subject to Commission review. The Commission can act on a request for Design Review after holding a public hearing pursuant to DC §17.1.600 et. seq. Type III Process. Applications subject to Design Review are also subject to Site Development Review as provided in DC § 17.2.400. The Site Development Review is subject to Planning Commission review, pursuant to DC §17.1.205 - *Consolidated Review*.

Design Review applications may be processed in one of two tracts: Development Standards or Design Guidelines. The applicant has selected the Development Standards tract. Applications are required to meet the clear and objective development standards which are provided in the Development Code. These requirements are intended to be specific and directive. The purpose is to establish a baseline for site plan design which works in conjunction with other requirements of the Development Code.

The application was submitted on July 12, 2022. An Incomplete letter was mailed to the applicant on August 8, 2022. The application was resubmitted on October 14th and it was deemed complete on November 1, 2022.

Public notice for this application was mailed to property owners and residents within 300 feet of the site on November 30, 2022 as required by DC §17.1.610. Notice of this request was published in the News-Times on December 8, 2022. As of the writing of this report, no comments have been received from the public.

Copies of the application materials were provided to the Plans Review Board. Comments and conditions received from the Plans Review Board pertain to complying with various standard Building, Light & Power, and Fire code requirements that will be addressed through the building permit review process. Conditions have been provided by the Fire, Engineering, and Light and Power Department and are attached as Exhibits B-D.

II. BACKGROUND

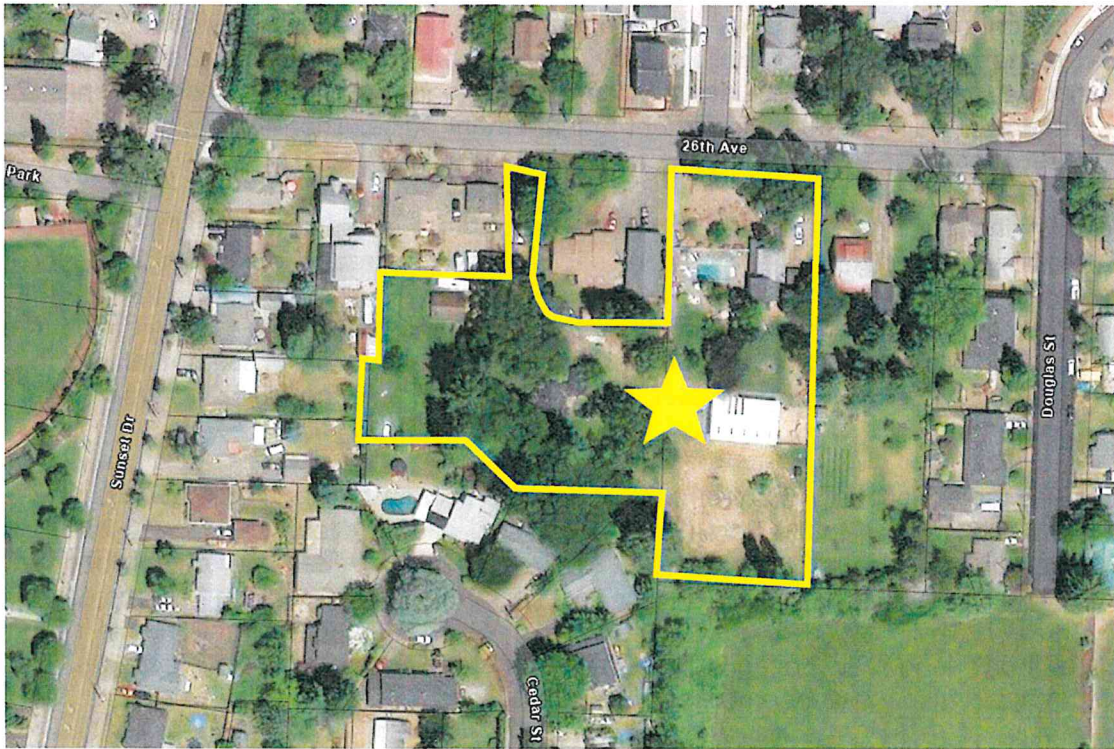
A. LAND USE HISTORY

The subject site is comprised of two tax lots in the Curtis Subdivision, originally platted in 1906. The lots were annexed into the city in 2006. Each lot is currently occupied by a single-unit residence which will be demolished in order to facilitate this infill development project. The subject site and the surrounding area is zoned RH (Residential, High). Properties abutting the project site are predominantly occupied by traditional single-unit residential dwellings. Pacific University owns the abutting vacant property to the southeast.

B. SITE EXAMINATION

The subject site is comprised of two tax lots totaling ±2.29-acres located on 26th Avenue. Tax lot 1500 is a standard ±1.23-acre lot and tax lot 1700 is a ±1.06-acre flag lot. The site is a unique shape resulting from combining a flag lot with a 20-foot wide accessway and a standard ±139-foot wide rectangular-shaped property. The subject properties are relatively flat with less than 5 percent slope. There are no mapped wetlands on the site,

but it is within a potential area of impact to a Clean Water Services (CWS) vegetative corridor. Both properties have frontage along and access to 26th Avenue. Existing sanitary sewer, water, stormwater, and franchise utilities are available to the site within 26th Avenue right-of-way. The image below shows the subject property in relation to the surrounding area.



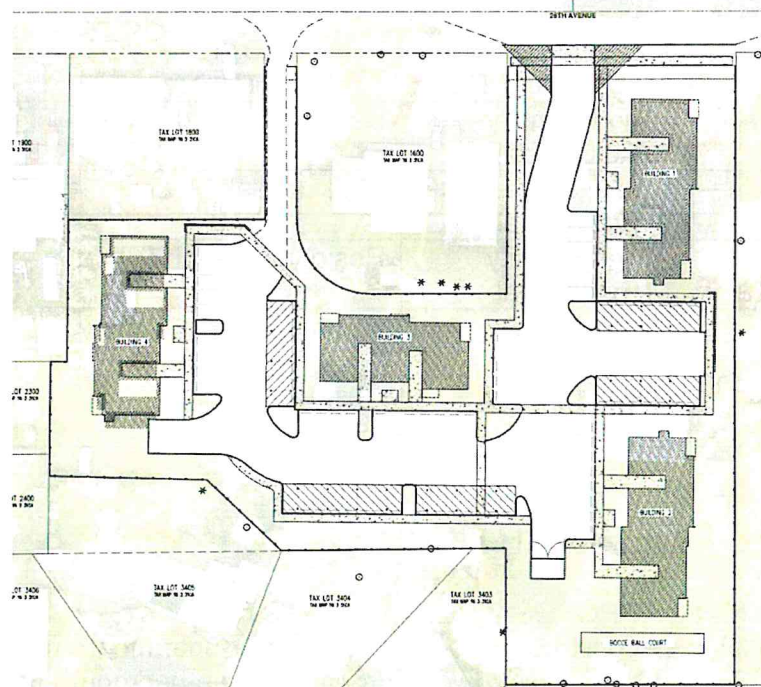
C. COMPREHENSIVE PLAN DESIGNATION AND ZONING

LOCATION	COMPREHENSIVE PLAN DESIGNATION	ZONE DISTRICT	LAND USE
Site	High Density Residential	Residential, High (RH)	Single-Unit Residential
North	Medium Density Residential	Residential, Medium (RM)	Single-Unit Residential
South	High Density Residential	Residential, High (RH)	Single-Unit Residential
East	High Density Residential	Residential, High (RH)	Single-Unit Residential
West	High Density Residential	Residential, High (RH)	Single-Unit Residential

III. PROJECT DESCRIPTION

A. DESCRIPTION OF PROPOSAL

The proposal is to construct a 45-unit multi-family apartment project consisting of four buildings. 2 one-bedroom, 41 two-bedroom, 2 three-bedroom units, and an office are



BUILDING ELEVATION



IV. DEVELOPMENT CODE CONFORMANCE

A. RESIDENTIAL DEVELOPMENT STANDARDS

RESIDENTIAL, HIGH (RH) ZONE (DC §17.3.130 A-E)		
CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL
Minimum Lot Size	7,000 square feet (SF)	±98,158 SF
Minimum Lot Width	100 feet	±139 feet
Minimum Lot Depth	70 feet	±155 feet
Minimum Setbacks		
- Front Yard to Dwelling	12 feet	20 feet
- Front Yard to Garage/Parking	14 feet	±80 feet
- Interior Side	Buffer yard as required per DC §17.8.425, Table 8-3	10 feet minimum
- Rear	Buffer yard as required per DC §17.8.425, Table 8-3	±33 feet minimum
Maximum Building Height	45 feet	±36 feet

B. BUILDING DESIGN STANDARDS

MULTI-UNIT DEVELOPMENT (DC §17.8.710 A)		
CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL
Massing and form	No building shall have a dimension greater than 150 feet without a minimum 3 feet off-set of the exterior wall.	±50-foot maximum dimension
Massing and form	Every 2 dwelling units shall be offset from the next dwelling unit by at least 4 feet in depth.	4-foot offset provided

Massing and form	All habitable rooms shall incorporate at least 1 window when facing parking lots and common areas.	Provided.
Compatibility	All buildings shall incorporate a porch or architecturally defined entry space for each ground level dwelling unit with a minimum area of 16 square feet per dwelling unit, with no dimension less than 4 feet. Shared porches or entry spaces are permitted.	Interior shared entry space provided; ±56 SF minimum area/ 2 units (28 SF per unit) Minimum dimension 7 ft.
Privacy	Front entryways into dwelling units shall be separated vertically or horizontally a minimum of 3 feet from sidewalks used by more than 1 dwelling unit	±18 feet minimum
Privacy	Bedroom and bathroom windows shall be offset a minimum of 4 feet from windows on adjacent buildings	±95 feet minimum (buildings 1 & 2)

C. PARKING

OFF-STREET PARKING REQUIREMENTS		
CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL
Multi-family units (outside the town center) (DC §17.8.515, Table 8-4)	67.5 spaces required 1-bedroom: 1.25/DU 2-bedroom: 1.50/DU 3-bedroom: 1.75/DU	72 spaces provided
Bicycle Parking (DC §17.8.540)	20% of required auto parking (13.5 spaces)	20 spaces provided

D. OPEN SPACE

MULTI-FAMILY DWELLINGS, 20 UNITS OR MORE (DC §17.8.205)		
CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL
Required Open Space	20% of lot area	41% (±40,011 SF)
Recreation Space	½ of required open space (10%) Minimum area of 870 SF, minimum dimension of 20 ft.	11% (±7,108 SF) Minimum area 1,143 SF, minimum dimension ±25 ft.
	Children's play area required	<i>Not provided, discussed in analysis</i>

Private Open Space	1 patio or balcony/DU • Minimum area of 48 SF, minimum dimension of 4 ft.	45 patio/balconies provided • Minimum area ±50 SF
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E. LANDSCAPING, SCREENING & BUFFERING

LANDSCAPING REQUIREMENTS		
CODE STANDARD	CODE REQUIREMENT	PROJECT PROPOSAL
Parking Lot Landscaping (DC §17.8.415)	8% of interior parking lot area • Minimum area of 48 SF, Minimum dimension of 6 ft.	3,418 SF (10%) • Minimum area 54 SF, <i>Minimum dimension 3 ft.</i> <i>Does not meet; discussed in analysis</i>
Parking Lot Trees (DC §17.8.415)	1 tree/1,600 square feet of interior parking lot area	21 trees
Buffering & Screening (DC §17.8.425, Table 8-3)	Minimum 10-foot landscape buffer	10 feet minimum

F. ACCESS & CIRCULATION

MULTI-UNIT DEVELOPMENT		
CODE STANDARD	CODE REQUIREMENT	PROPOSAL
Access drive aisles (DC §17.8.120)	One-way traffic: 12 ft. minimum Two-way traffic: 20 ft. minimum	One-way: 12 ft. Two-way: 26 ft.
Minimum Walkway width (DC §17.8.140 A)	5 feet	5 feet
Walkway Separation from Dwellings (DC §17.8.140 A)	10 feet minimum	<i>8 feet</i> <i>Adjustment requested, discussed in analysis</i>
Pedestrian Connection (DC §17.8.140 A)	A continuous pedestrian connection shall be provided from the front door of all residential buildings to the public sidewalk, parking area(s), and open space/recreation areas.	Provided
Crime Prevention Through Environmental Design (CPTED) (DC §17.8.140 A)	Minimum of 25 square feet of window area within each dwelling unit facing a common open space, pedestrian path or car park to allow visual surveillance.	±32 SF minimum

G. SERVICE AREAS

MULTI-UNIT RESIDENTIAL BUILDINGS		
CODE STANDARD	CODE REQUIREMENT	PROPOSAL
Minimum Size (DC §17.7.205 A)	More than 10 units: 50 SF + 5 SF for each unit above 10 (225 SF)	240 SF

Enclosure Design (DC §17.7.205 C)	6-foot minimum height sight-obscuring fence, wall or hedge shall enclose exterior storage areas	7.5 feet
Gate Openings (DC §17.7.205 C)	Required; minimum of 10 ft. wide and shall be capable of being secured in a closed and open position.	17.25 feet
Service Area Screening (DC §17.8.140.A.4)	All development of two or more stories in height shall be required to provide screening of garbage collection and storage areas from above.	Provided
Access (DC §17.7.205 D)	10 ft. minimum horizontal clearance; 8 ft. minimum vertical clearance	17.25 feet horizontal; 10 feet vertical

H. PUBLIC UTILITIES

The application has been reviewed by the Engineering, Fire, Light and Power, Police, and Public Works departments. All departments have indicated that existing public utilities to serve the site are adequate. Existing sanitary sewer, water, stormwater, and franchise utilities are available to the site within 26th Avenue right-of-way. Specific comments and conditions from the Engineering, Fire and Light & Power departments are listed in Exhibits B-D.

V. REVIEW CRITERIA

The project is subject to the City's design review, site development, and adjustment review criteria, listed below.

Design Review Criteria (Development Code §17.2.350)

Projects subject to design review by the Director (Type II) or the Design Review Commission (Type III) shall be evaluated based on the following:

- A. The development standards of the applicable zoning district and any overlay district;
- B. The general development standards of Development Code Article 8;
- C. Departures from code requirements may be permitted as part of a Track 2 Design Review Process, when the following criteria are met:
 - i. The design guidelines contained in the applicable section of the Design Guideline Handbook are adequately addressed.
 - ii. The applicant demonstrates that the overall development would result in a development that better meets the intent of the design guidelines than a design that simply meets the code.

Site Development Review Criteria (Development Code §17.2.450)

- A. The site development plan complies with all applicable standards of the base zoning district, any overlay district and applicable general development standards of Article 8.
- B. The site development plan ensures reasonable compatibility with surrounding uses as it relates to the following factors:

- i. Building mass and scale do not result in substantial visual and privacy impacts to nearby residential properties; and
 - ii. Proposed structures, parking lots, outdoor use areas or other site improvements that could cause substantial off-site impacts such as noise, glare and odors are oriented away from nearby residential uses and/or adequately mitigated through other design techniques.
- C. The site development plan preserves or adequately mitigates impacts to unique or distinctive natural features including, but not limited to:
 - i. Significant on-site vegetation and trees
 - ii. Prominent topographic features, and
 - iii. Sensitive natural resource areas such as wetlands, creek corridors and riparian areas.
- D. The site development plan preserves or adequately mitigates impacts to designated historic resources.
- E. The site development plan provides adequate right-of-way and improvements to abutting streets to meet the street standards of the city. This may include, but not be limited to, improvements to the right-of-way, sidewalks, bikeways and other facilities needed because of anticipated vehicular and pedestrian traffic generation.
- F. The site development promotes safe, attractive and usable pedestrian facilities that connect building entrances, public sidewalks, bicycle and auto parking spaces, transit facilities and other parts of a site or abutting properties that may attract pedestrians.

Adjustment Review Criteria (Development Code §17.2.120.B)

Type II Adjustment Process.

1. The requested adjustment is from 10% to 20% of the setback, height or lot coverage standard;
2. Granting the adjustment will be consistent with the purpose of the affected zoning district or meet or exceed the purpose of the standard to be modified;
3. If in a residential zone, the adjustment will not significantly detract from the livability or appearance of the residential area. If in a commercial or industrial zone, the adjustment will be consistent with the desired character of the area;
4. If more than one adjustment is requested, the cumulative effect of the adjustments shall result in a project which is consistent with the overall purpose of the zone; and
5. Any impacts resulting from the adjustment are mitigated to the extent practical.

VI. ANALYSIS AND FINDINGS

Staff's analysis of the project's compliance with the applicable review criteria and development standards is provided in the form of findings and is attached as Exhibit A to this report. The applicant's descriptions in response to the relevant review criteria can be found within the application narrative.

VII. ALTERNATIVES

The Planning Commission has the following alternatives:

1. Approve the application as submitted by the applicant
2. Approve the application with conditions.
3. Deny the application, stating reasons for doing so.
4. Continue the matter to a date certain for further consideration.

VIII. RECOMMENDATION

Staff recommends the Planning Commission find that the proposed design review, site development review, and adjustment application satisfies the applicable review criteria based on the information provided in the application and the findings attached to this report. Staff recommends approval of the site development, design review, and adjustment applications for the proposed 45-unit multi-family apartments at 2320 & 2230 26th Avenue, with the following conditions:

1. The applicant is bound to the project description and all representations made by the applicant during the application and decision-making proceeding.
2. This approval is valid for a period of one year from the effective approval date. The applicant may file for an extension in accordance with the provisions of DC §17.1.135.F. No single extension of time shall exceed a one-year period. Extensions shall not exceed a total of two years from the effective date of the initial approval.
3. All plans submitted to date are considered conceptual only. Detailed plans and specifications shall be submitted that demonstrate compliance with the conditions of approval, standards and regulations adopted by the City of Forest Grove, and/or all other agencies that have jurisdiction.
4. The project shall proceed only in accordance with plans titled "West Grove Apartments", as prepared by AKS Engineering and Forestry consisting of 27 sheets, dated received October 14, 2022 and revised landscape plan sheet P05 titled "Preliminary Landscape Plan" as prepared by AKS Engineering and Forestry, consisting of 1 sheet, dated received November 17, 2022, except as may be modified by the conditions contained herein, and shall proceed in accordance with the Forest Grove Development Code.
5. The Preliminary Alternate Site Plan proposed and included in the plans as sheet P03, submitted on October 14, 2022, is not approved.
6. All plans shall be coordinated for consistency by the applicant. Any change or modification to one particular plan shall require the corresponding revisions on other plans. All plans shall be consistent with that approved by the Community Development Department. The applicant shall be responsible for correcting any inconsistency which may occur through error or omission during plan preparation or construction.
7. The applicant shall continue to comply with all applicable City building and development standards, including all dimensional standards and public works specifications.
8. Submit a complete geo-technical engineer's report for the project that addresses footing drains, if required, and any footing/foundation requirements. All recommendations from the geotechnical report shall be incorporated into building/construction plans.
9. Clustered mailboxes shall be installed prior to the issuance of a certificate of occupancy. Placement locations and specifications of clustered mailboxes shall be approved by the Forest Grove Post Office prior to installation.

10. Frontage improvements shall be provided along the entirety of the site's frontage with 26th Avenue, including the western flag pole access drive, in accordance with code requirements and in coordination with the 26th Avenue Improvement Project.
11. The 12-foot-wide western access drive aisle located in the flag lot access of Tax Lot 1700 shall be clearly striped and signed as a one-way exit only lane for residents and emergency vehicle access and egress. No parking – fire lane signs shall be posted throughout the entire length of this drive aisle.
12. Pathways shall be separated from dwellings by a minimum of 10 feet. This requirement may be reduced by up to a maximum of two feet adjacent to Building 3 and along the southern elevation of Building 1.
13. A children's play area shall be provided on site in accordance with DC §17.8.205.C.2.
14. Per O.R.S. 455.417, a minimum of 20% of the spaces in the new parking area shall be required to have electric vehicle charging infrastructure.
15. Compliance with the attached Engineering Conditions of Approval dated August 2, 2022 (Exhibit B).
16. Compliance with the attached Light and Power Conditions of Approval dated October 31, 2022 (Exhibit C).
17. Compliance with the attached Fire Department Conditions of Approval dated October 18, 2022 (Exhibit D).

IX. LIST OF ATTACHMENTS

The following exhibits were received, marked, and entered into the record as evidence for this application at the time this staff report was written. Exhibits received after the date of this report will be marked beginning with the next consecutive letter and will be entered into the record at the time the public hearing is opened, prior to oral testimony.

- Exhibit A:** Review Criteria Analysis and Findings
- Exhibit B:** Engineering Division Conditions of Approval
- Exhibit C:** Light and Power Department Standards and Conditions
- Exhibit D:** Fire Department Standards and Conditions
- Exhibit E:** Development Code Standards and Specifications
- Exhibit F:** Application Materials, prepared and submitted by the applicant
- Exhibit G:** PowerPoint
- Exhibit H:** Correspondence

EXHIBIT A
DESIGN REVIEW, SITE DEVELOPMENT AND ADJUSTMENT REVIEW CRITERIA
ANALYSIS AND FINDINGS

Design Review Criteria (Development Code §17.2.350)

Projects subject to design review by the Director (Type II) or the Design Review Commission (Type III) shall be evaluated based on the following:

A. The development standards of the applicable zoning district and any overlay district;

ANALYSIS: The project is located in the RH, Residential High, zoning district. Multi-family development is a permitted use. A summary of development code conformance is provided in Section IV of the staff report. The project is proposed on a ±98,158 SF property made up of two lots with a minimum width of ±139 feet and a minimum depth of ±155 feet. The project exceeds the minimum required front setback of 12 feet with a proposed 20-foot setback and the minimum 14-foot required setback to any garage or parking area with a ±80-foot setback proposed to the parking area. Interior side and rear setbacks are required to meet the buffering requirements of DC §17.8.425, Table 8-3. According to the buffer and screening standards in 17.8.425, a multi-unit dwelling abutting single-family residential developments must be ten feet from the rear and interior property lines. The proposed buildings setbacks meet or exceed this minimum buffer requirement from the adjacent properties along the interior side and rear property lines with setbacks ranging from 10 to over 40 feet.

FINDING: The proposed project meets or exceeds the development standards for the RH zoning district. The project meets the dimensional requirements for minimum lot size, width and depth, and building height. The project meets or exceeds dimensional requirements for minimum front, interior side, and rear setbacks.

B. The general development standards of Development Code Article 8;

ANALYSIS: The following sections evaluate compliance with the general development standards of Development Code article 8 as they apply to the proposed project. A general summary of development code conformance is also provided in Section IV of the staff report.

Access and Circulation (DC § 17.8.100)

The project site is located on 26th Avenue, ±275 feet east of the intersection between 26th Avenue and Sunset Drive. The project proposes to take access from two established driveway connections to 26th Avenue. A 26-foot-wide driveway/aisle will provide primary access and emergency vehicle access to the site from 26th Avenue. An existing 20-foot-wide flag lot access to Tax lot 1700, west of the primary entrance, will be utilized as a secondary 12-ft wide one-way exit only lane for future residents. This access drive may also be used for additional emergency vehicle access and egress. The project also proposes a dedicated fire turnaround on the southwest corner of the project site. The proposed drive aisles, along with the dedicated turnaround, meet the minimum access and maneuverability requirements outlined in the Uniform Fire Code. The access drive aisles, fire turnaround, and connected parking area are to be fully improved with hard surface pavement. Frontage improvements for the site and proposed driveways are **conditioned** to be coordinated with the 26th Avenue Improvement Project. This will ensure that the proposed widths and locations of driveways and curb cuts meet code requirements and align with the improvement project.

A 5-foot-wide pedestrian pathway is proposed along the primary access drive at 26th Avenue which continues through the site and connects to the entrance of every dwelling unit to shared parking areas, recreation areas, and the public right of way. Pedestrian pathways adjacent to off-street parking areas will be separated vertically by a curb. Crosswalks will clearly identify where the pedestrian path may cross a vehicle drive aisle or access way. The planned pedestrian circulation will provide direct access consistent with the applicable ADA requirements from each dwelling unit to the off-street parking area, public right of way, and other site amenities. The proposed site design and circulation allows for a clear line of sight to be maintained between all front building entries and the public sidewalk and parking area. Lighting will be provided at all exterior dwelling unit entrances and within the parking area to ensure safety and visibility of the site and pedestrian environment.

The specific site access and circulation standards for multi-family development of DC § 17.8.140.A require pathways to be separated a minimum of 10 feet from dwellings. Buildings 2 and 4 meet this requirement, buildings 1 and 3 do not. As proposed, the east and west facades of Building 3 are 9.78 feet from the planned pedestrian path. The eastern portion of Building 3's southern facade is 8 feet from the pedestrian path. The southern facade of Building 1 is located 9 feet from the pedestrian pathway. The applicant has requested an adjustment to allow for a reduction of the minimum 10-foot separation required by the code. This request is analyzed in more detail in the Adjustment Review Criteria section of this document. In general, staff is in support of this request and has included a **condition** to allow for a reduction in the required separation of pathways from dwellings for Buildings 1 and 3 in the amount and locations proposed by the applicant.

This project proposes a 240 square foot trash enclosure in an accessible location near the southeast portion of the site and parking area, directly abutting the planned drive aisle. This enclosure exceeds the minimum size required for a multi-family development of 45-units. The enclosure will be fully screened by a 7.5-foot-tall enclosure and roof to screen view the enclosure from above by the residential units. HVAC equipment is proposed for each unit to be located adjacent to each unit's patio or balcony. As such the HVAC equipment will be adequately screened from view by proposed landscaping or balcony railing. No rooftop mechanical equipment is proposed. All mechanical equipment and service areas will be sufficiently screened from view from the adjacent street right-of-way.

FINDING: The project provides appropriate access, egress, and circulation for regular shared use and emergency access, meeting the minimum access and circulation requirements for residential uses. The proposed drive aisles meet the minimum required width for one-way and two-traffic. The proposed drive aisles, along with the dedicated turnaround, meet the minimum access and maneuverability requirements outlined in the Uniform Fire Code.

FINDING: Frontage improvements for the site and proposed driveways are **conditioned** to be coordinated with the 26th Avenue Improvement Project. This will ensure that the proposed widths and locations of driveways and curb cuts meet code requirements and align with the improvement project.

FINDING: The proposal meets the specific site access and circulation standards for multi-family developments, as **conditioned**. The project meets the connectivity requirements for parking areas and the pedestrian environment, sufficiently screens service areas, and meets Crime Prevention Through Environmental Design (CPTED) requirements. Approval of the requested adjustment for pathway separation and compliance with the **condition** to permit

the adjustment adjacent to Buildings 1 and 3 will ensure the project is compliant with the circulation requirements for multi-unit development. As conditioned, the project provides a functional and safe environment for vehicles and pedestrians that is visually appealing from the adjacent street right-of-way and functionally and aesthetically tied to adjacent residential neighborhoods.

Clear Vision Area (DC § 17.8.150)

The project proposes to take access from two established driveway connections to 26th Avenue. Both driveways meet the clear vision area requirements of the code. No fence, wall, hedge, tree planting or structure is proposed within the clear vision areas which would impede visibility. A six-foot-tall cedar fence is proposed around the perimeter of the project site to help screen the buildings from neighboring properties. The fence is not expected to extend into the front setback area or be located within any identified clear vision areas.

FINDING: The proposed driveways providing vehicular access to 26th Avenue meet the requirements for clear vision areas.

Open Space, Recreational Facilities, and Common Areas (DC § 17.8.200)

±40,011 SF of the lot area or 41% is proposed to be set aside as open space. This is double the requirement for 20% of the lot area to be set aside as open space. Multi-family projects of 20 units or more are also required to improve ½ of the required open space area (10%) as recreation space. The project proposes ±7,108 SF (11%) of recreation space. The open space and recreational areas are accessible by a direct connection to the proposed pedestrian pathways.

Proposed recreation space includes two large public recreation areas located in the southeast and southwest corners of the site and the private patio and balconies provided for each unit. The public recreation areas meet the minimum area and dimension requirements at 1,143 SF and 3,715 SF each with a minimum dimension of ±25 ft. A bocce ball court is proposed in the recreation area located in the southeastern corner of the site. In addition to this, DC § 17.8.205.C.2 requires that a children's play area be included in the recreation area. No children's play area was proposed on the plans. Staff has included a **condition** to provide a children's play area in accordance with DC § 17.8.205.C.2.

FINDING: The proposal provides more open space and recreation space than what is required by the code. Upon compliance with the **condition** to provide a children's play area the proposal will meet all the development code requirements for open space, recreational facilities, and common areas.

Landscaping, Screening, and Buffering (DC § 17.8.400)

Landscaping is proposed throughout the project site. 41% of the site is proposed to be landscaped with a mixture of trees, shrubs and groundcover. Trees are proposed along the projects 26th Avenue frontage, around the perimeter of the site, and throughout the interior parking area. The site has also been designed to protect the root system of several significant trees located off-site but adjacent to the property lines.

According to the buffer and screening standards in DC §17.8.425, Table 8-3, a multi-unit dwelling abutting single-family residential developments must provide a 10-foot landscape buffer along the rear and interior property lines. The landscaped buffer proposed between property lines and the buildings meets and, in many locations, exceeds this requirement. The property's perimeter will be adequately screened from surrounding uses with a mix of living

ground cover, shrubs, and trees. Additionally, a 6-foot-tall cedar fence is proposed to screen the project from adjacent properties.

10% of the projects interior parking area will be landscaped exceeding code requirements. This includes 21 trees located in landscaped planting bays and adjacent to the parking area perimeter sidewalks. The proposed landscaped areas within the interior parking area all exceed the minimum required area of 48 SF. The smallest landscaped planting area proposed being 54 SF. Although they meet the minimum required area, two landscaped planting bays within the parking area do not meet the minimum dimension requirements. The eastern most planting bays in the parking area between buildings 1 & 2 show a minimum dimension of 3 feet where 6 is the minimum required by the code. These planting bays and the adjacent sidewalk lie just outside the critical root zone of an off-site tree that is to be protected. A retaining wall is proposed which will allow the sidewalk to be constructed while preserving the tree's root zone.

DC § 17.1.120.D states that "Where two or more requirements of this Code apply, the most restrictive requirement shall govern." The proposed sidewalk is required to comply with access and circulation requirements and protection of the tree's critical root zone is required per DC §17.5.100 et. seq. *Tree Protection*. Compliance with the 6-foot minimum dimension requirement for landscape planting areas would require reducing the size of or eliminating the proposed sidewalk or removing the tree proposed for protection. Given the site constraints, it is not possible to meet all three code requirements without conflict. Therefore, the most restrictive requirements shall govern. Access and circulation and tree protection requirements shall be met and the minimum dimension requirement for landscape planting areas will not be applicable to the two referenced planting areas.

FINDING: The project meets the requirements for landscaping, buffering, and screening. 41% of the site will be landscaped with a mixture of trees, shrubs, and groundcover. A minimum 10-foot landscape buffer is provided around the entire perimeter of the site as required by code. The interior parking area meets landscape requirements for minimum area and provides the required number of trees.

FINDING: The landscape planting areas within the interior parking area meet the minimum required dimension except for the two easternmost planting areas between buildings 1 and 2. The minimum depth requirement in this location conflicts with code requirements for access and circulation and tree protection. Therefore, the most restrictive requirements shall govern. Access and circulation and tree protection requirements shall be met and the minimum dimension requirement for landscape planting areas will not be applicable to the two referenced planting areas.

Off-street Parking and Loading (DC § 17.8.500)

The project includes 72 parking spaces spread evenly throughout the parking area. The parking spaces are all standard size, 9 feet wide and 18 feet long. 35 parking spaces are proposed to be covered. 20 bicycle parking spaces are proposed. Bicycle spaces are to be located adjacent to proposed buildings. Both site access drives, off-street parking spaces, and loading areas will be improved with hard surface pavement. Pedestrian pathways adjacent to off-street parking areas will be separated vertically by a curb. Crosswalks will clearly identify where the pedestrian path may cross a vehicle drive aisle or access way. As discussed previously, the proposed parking area meets requirements for required landscaping.

FINDING: The proposal meets the requirements for off-street parking. Vehicle and bicycle parking spaces have been provided in excess of the amount required by code and the design of the parking area, access aisles, and parking lot landscaping meets code requirements.

Public Improvements (DC § 17.8.600)

The application has been reviewed by the Engineering, Fire, Light and Power, Police, and Public Works departments. All departments have indicated that existing public utilities to serve the site are adequate. Existing sanitary sewer, water, stormwater, and franchise utilities are available to the site within 26th Avenue right-of-way. Specific comments and **conditions** from the Engineering, Fire and Light & Power departments are listed in Exhibits B-E.

The project site has frontage along 26th Avenue. Primary access to the site will be provided via a private driveway connection to 26th Avenue. The connection incorporates the necessary design considerations to minimize traffic conflicts. Per the ITE Trip Generation Manual (11th Edition), the project will result in 23 peak p.m. vehicle trips. Additional safety measures were not identified as required during the pre-application meeting for the project. According to the Forest Grove TSP, 26th Avenue is classified as a collector requiring a minimum right-of-way width of 66 feet. Street cross sections are included with the preliminary plans which show ±6 feet of dedication proposed along the site's frontage along with the necessary improvements. Partial street improvements including additional paving, sidewalk, and a planter strip are proposed along the project's frontage on 26th Avenue.

Frontage improvements are required for both the flagpole frontage and the sites primary frontage along 26th Avenue. The city has recently begun the 26th Avenue Improvement Project. This City project extends along 26th Avenue from Sunset Drive to Hawthorne Street and will include improvements such as a wider street, sidewalks, curb, and street drainage. The Engineering Division has included a **condition** to coordinate any proposed frontage improvements, right of way or easement dedications, and utility connection with the 26th Avenue Improvement Project (Exhibit B).

The public sanitary sewer system has been designed to provide sanitary sewer access to service the planned development. Private sewer lateral connections are planned to each of the project's buildings from the public system to be extended from 26th Avenue south through the project. A 4-inch domestic water line is planned to extend into the project site from a main situated in 26th Avenue. An 8-foot public utility easement (PUE) is shown on the adjacent to the public right-of-way to allow for the undergrounding of franchise utilities. The code requires a minimum PUE of 10 feet. The Light and Power Department has included this requirement in their conditions (Exhibit C)

FINDING: Upon compliance with the Light and Power and Engineering **conditions of approval**, the project will satisfy the standards and requirements for public improvements. Compliance with the **condition** to coordinate any proposed frontage improvements, right of way or easement dedications, and utility connection with the 26th Ave Improvement Project will ensure the project is aligned with the proposed improvement plans.

Building Design and Development Standards (DC § 17.8.700)

The site plan consists of 4 three-story apartment buildings with a height of ±36 feet. Buildings 1, 2, and 4 are identical with 12 two-bedroom units proposed. Building 3 includes a mix of 2 one-bedroom units, 5 two-bedroom units, 2 three-bedroom units, and the apartment management office. The office will be located on the first floor of the western portion of the building 3.

The proposed buildings are ±100 feet wide with a 4-foot offset every 50 feet or 2 dwelling units. All habitable rooms contain at least 1 window when facing parking lots or common areas. Each dwelling unit facing a common open space, pedestrian path or car park has over 30 SF of window area to allow visual surveillance. The buildings have been designed so that units are accessed from an internal entry area rather than from the exterior façade. Each internal entry space is over 50 SF to be shared by two units. Ground floor entries are separated from sidewalks by a minimum of 18 feet. Proposed building style and materials include a gabled composition roof with cedar shingle detailing, vertical board and batten siding on the 1st floor, and horizontal hardiplank lap siding on the 2nd and 3rd floors.

FINDING: The design of the proposed buildings meets code requirements for massing and form, compatibility, and privacy. The proposed building designs are safe and compatible with surrounding single-family uses and will not create substantial visual or privacy impacts.

Lighting Standards (DC § 17.8.750)

Lighting is proposed at the entrance to each unit, throughout the parking area, and along proposed pathways. Detailed lighting plans and proposed materials will be submitted and reviewed for compliance with detailed construction plans.

FINDING: Lighting is proposed throughout the project site and at the entry to each unit accordance with code requirements.

FINDING: As demonstrated in this analysis, the project generally meets the applicable standards of the base zoning district and the applicable development standards of Article 8, as conditioned.

C. Departures from code requirements may be permitted as part of a Track 2 Design Review Process, when the following criteria are met:

- i. The design guidelines contained in the applicable section of the Design Guideline Handbook are adequately addressed.*
- ii. The applicant demonstrates that the overall development would result in a development that better meets the intent of the design guidelines than a design that simply meets the code.*

FINDING: The applicant has selected Track 1 Development Standards. Applications are required to meet the clear and objective development standards which are provided in the Development Code. This criterion is not applicable.

Site Development Review Criteria (Development Code §17.2.450)

A. The site development plan complies with all applicable standards of the base zoning district, any overlay district and applicable general development standards of Article 8.

FINDING: As demonstrated in this analysis, the project generally meets the applicable standards of the base zoning district and the applicable development standards of Article 8, as conditioned. The proposed project meets or exceeds the development standards for the RH zoning district. The project meets the dimensional requirements for minimum lot size, width and depth, and building height. The project meets or exceeds dimensional requirements for minimum front, interior side, and rear setbacks.

B. *The site development plan ensures reasonable compatibility with surrounding uses as it relates to the following factors:*

- i. *Building mass and scale do not result in substantial visual and privacy impacts to nearby residential properties; and*
- ii. *Proposed structures, parking lots, outdoor use areas or other site improvements that could cause substantial off-site impacts such as noise, glare and odors are oriented away from nearby residential uses and/or adequately mitigated through other design techniques.*

FINDING: The design of the proposed buildings meets code requirements for massing and form, compatibility, and privacy. The proposed building designs are safe and compatible with surrounding single-family uses and will not create substantial visual or privacy impacts.

FINDING: The site plan consists of 4 three-story apartment buildings. The buildings are oriented toward the interior of the site away from the surrounding single-family residential uses. Parking is also provided along the interior of the site and is separated into three parking areas to the east, south, and west.

FINDING: The project exceeds the minimum required front setback of 12 feet with a proposed 20-foot setback and the minimum 14-foot required setback to any garage or parking area with a ±80-foot setback proposed to the parking area. The proposed buildings setbacks meet or exceed this minimum buffer requirement from the adjacent properties along the interior side and rear property lines with setbacks ranging from 10 to over 40 feet. By locating the structures farther from the property lines than what is required by code, potential impacts from noise, glare, odors, are adequately mitigated.

FINDING: The property's perimeter will be adequately screened from surrounding uses with a mix of living ground cover, shrubs, and trees. Additionally, a 6-foot-tall cedar fence is proposed to screen the project from adjacent properties.

C. *The site development plan preserves or adequately mitigates impacts to unique or distinctive natural features including, but not limited to:*

- i. *Significant on-site vegetation and trees*
- ii. *Prominent topographic features, and*
- iii. *Sensitive natural resource areas such as wetlands, creek corridors and riparian areas.*

FINDING: The subject property has been surveyed to determine the property boundaries and existing site features, a certified arborist inventoried the existing trees on the site, and a natural resources professional made a site visit to determine the presence of wetlands and other natural features. According to the City's Comprehensive Plan, the project site is within an area of potential impact to a CWS vegetative corridor. A CWS Service Provider Letter is included in the application. No mapped wetlands are located within the project area.

FINDING: An inventory of all the trees on the site and a tree preservation plan is included in the preliminary plans. The site development plan preserves significant off-site trees adjacent to the property lines and adequately mitigates impacts to protected trees by providing a buffer around the critical root zones where no development is to occur.

- D. *The site development plan preserves or adequately mitigates impacts to designated historic resources.*

FINDING: There are no historic resources existing on site. This criterion is not applicable.

- E. *The site development plan provides adequate right-of-way and improvements to abutting streets to meet the street standards of the city. This may include, but not be limited to, improvements to the right-of-way, sidewalks, bikeways and other facilities needed because of anticipated vehicular and pedestrian traffic generation.*

FINDING: The project site has frontage along 26th Avenue. Primary access to the site will be provided via a private driveway connection to 26th Avenue. The connection incorporates the necessary design considerations to minimize traffic conflicts. Per the ITE Trip Generation Manual (11th Edition), the apartments will result in 23 peak p.m. vehicle trips. Additional safety measures were not identified as required during the pre-application meeting for the project. According to the Forest Grove TSP, 26th Avenue is classified as a collector requiring a minimum right-of-way width of 66 feet. Street cross sections are included with the preliminary plans which show ±6 feet of dedication proposed along the site's frontage along with the necessary improvements. Partial street improvements including additional paving, sidewalk, and a planter strip are proposed along the project's frontage on 26th Avenue.

FINDING: Frontage improvements are required for both the flagpole frontage and the sites primary frontage along 26th Avenue. The city has recently begun the 26th Avenue Improvement Project. This City project extends along 26th Avenue from Sunset Drive to Hawthorne Street and will include improvements such as a wider street, sidewalks, curb, and street drainage. The Engineering Division has included a **condition** to coordinate any proposed frontage improvements, right of way or easement dedications, and utility connection with the 26th Ave Improvement Project. Compliance with this **condition** will ensure the project is aligned with the proposed improvement plans.

- F. *The site development promotes safe, attractive and usable pedestrian facilities that connect building entrances, public sidewalks, bicycle and auto parking spaces, transit facilities and other parts of a site or abutting properties that may attract pedestrians.*

FINDING: The proposal includes driveways, access aisles, off-street parking spaces, bicycle parking, and a pedestrian path connecting the front entrances of each unit to the planned sidewalk along 26th Avenue.

FINDING: A 5-foot-wide pedestrian pathway is proposed along the primary access drive at 26th Avenue which continues through the site and connects to the entrance of every dwelling unit to shared parking areas, recreation areas, and the public right of way. Pedestrian pathways adjacent to off-street parking areas will be separated vertically by a curb. Crosswalks will clearly identify where the pedestrian path may cross a vehicle drive aisle or access way. The planned pedestrian circulation will provide direct access consistent with the applicable ADA requirements from each dwelling unit to the off-street parking area, public right of way, and other site amenities.

FINDING: The proposed site design and circulation allows for a clear line of site to be maintained between all front building entries and the public sidewalk and parking area. Lighting will be provided at all exterior dwelling unit entrances and within the parking area to ensure safety and visibility of the site and pedestrian environment.

FINDING: The specific site access and circulation standards for multi-family development of DC § 17.8.140.A require pathways to be separated a minimum of 10 feet from dwellings. Buildings 2 and 4 meet this requirement, buildings 1 and 3 do not. As proposed, the east and west facades of Building 3 are 9.78 feet from the planned pedestrian path. The eastern portion of Building 3's southern facade is 8 feet from the pedestrian path. The southern façade of Building 1 is located 9 feet from the pedestrian pathway. The applicant has requested an adjustment to allow for a reduction of the minimum 10-foot separation required by the code. This request is analyzed in more detail in the Adjustment Review Criteria section of this document. In general, staff is in support of this request and has included a **condition** to allow for a reduction in the required separation of pathways from dwellings for Buildings 1 and 3 in the amount and locations proposed by the applicant.

FINDING: Approval of the requested adjustment for pathway separation and compliance with the **condition** to permit the adjustment adjacent to Buildings 1 and 3 will ensure the project is compliant with the circulation requirements for multi-unit development. As conditioned, the project provides a functional and safe environment for vehicles and pedestrians that is visually appealing from the adjacent street right-of-way and functionally and aesthetically tied to adjacent residential neighborhoods.

Adjustment Review Criteria (Development Code §17.2.120.B)

Type II Adjustment Process.

1. *The requested adjustment is from 10% to 20% of the setback, height or lot coverage standard;*

The specific site access and circulation standards for multi-family development of DC §17.8.140.A require pathways to be separated a minimum of 10 feet from dwellings. Buildings 2 and 4 meet this requirement, buildings 1 and 3 do not. As proposed, the east and west facades of Building 3 are 9.78 feet from the planned pedestrian path. The eastern portion of Building 3's southern facade is 8 feet from the pedestrian path. The southern façade of Building 1 is located 9 feet from the pedestrian pathway. A 10 to 20 percent reduction in this standard is one-to-two feet, and the applicant is requesting a two-foot encroachment into the 10-foot setback meaning this request qualifies for a Type II Adjustment Review.

2. *Granting the adjustment will be consistent with the purpose of the affected zoning district or meet or exceed the purpose of the standard to be modified;*

The adjustment to the required pedestrian pathway separation is necessary to maintain an exterior buffer from the neighboring properties and the minimum vehicle and pedestrian access requirements. This is consistent with the purpose of access and circulation standards to provide a functional and safe environment for vehicles and pedestrians that is visually appealing from the adjacent street right-of-way and functionally and aesthetically tied to adjacent residential neighborhoods.

3. *If in a residential zone, the adjustment will not significantly detract from the livability or appearance of the residential area. If in a commercial or industrial zone, the adjustment will be consistent with the desired character of the area;*

The adjustment will not detract from the livability of the residential area. It will allow for additional landscaped buffer area between the project site and surrounding single-family uses. Additional landscaped separation between uses enhances livability of surrounding properties

and appearance of the residential area. The adjustment to the required pathway separation affects locations internal to site, not visible from the surrounding properties or residential area.

4. *If more than one adjustment is requested, the cumulative effect of the adjustments shall result in a project which is consistent with the overall purpose of the zone; and*

Only one adjustment is requested. This criterion is not applicable.

5. *Any impacts resulting from the adjustment are mitigated to the extent practical.*

The adjustment to the required pathway separation affects locations internal to site, not visible from the surrounding properties or residential area. No impacts are anticipated. This criterion is met.

EXHIBIT B

City of Forest Grove Engineering Conditions of Approval

Applicant/representative shall sign below and return to City Engineering. Applicant/representative has read the conditional approval form and understands the conditions of approval outlined to this project. Not meeting these conditions may result in withdrawal of engineering approval to project.

GENERAL

1. All plans submitted to date are considered preliminary only. Upon completion of land use application approval, detailed construction plans and specifications must be submitted to engineering that demonstrate compliance with standards and regulations adopted by the City of Forest Grove and/or all other agencies that have jurisdiction including Clean Water Services, Washington County, Oregon Department of Transportation, and the conditions of approval as passed by the City Planning Commission for Land Use Approval. Contact engineering for questions on detail construction plan check process and the required number of construction plan sets/specification required for the detailed review.
2. All detailed construction plans submitted shall be stamped by an Oregon registered professional engineer.
3. All information related to vertical and horizontal location including in documents containing legal description, Draft Development Plan, Final Development Plan, Final Plat, Right-of-Way Deed, or Easement, and Record Drawings must be on the City of Forest Grove current City Datum. Narrative of City Datum including Bench Mark information is available through City Engineering Department.
4. Prior to issuance of Building Permit, Applicant will enter into an agreement with the City of Forest Grove for the construction of public facilities. City will prepare Agreement Allowing Developer to Construct Public facilities. The Agreement document shall be fully executed by City and Developer prior to start of construction.
5. Public improvements shall be in place and accepted by the City Engineer prior to issuance of building permits for new lots of record.
6. Final Development Plans and Specifications containing design for construction of public facilities shall receive approvals (as applicable) from City of Forest Grove, Clean Water Services, and other affected jurisdictional agencies. Developer is responsible for all submittals, approvals and permit acquisitions, unless advised otherwise by the City. Permits, if required, shall be secured by developer or authorized representative prior to start of construction (e.g. both on-site and off-site construction).
7. It is the responsibility of the Applicant to ensure that the project contractor is aware of, and abides by, all conditions of approval. Prior approval from engineering must be received before any changes are constituted in site design, grading, building design, building colors or materials, etc.
8. Applicant shall, at applicant's expense, and under City's direction, provide for traffic control, during construction, so as to minimize the impact on residents surrounding or adjacent to the Project. Applicant agrees that, during any construction within or as a part of the overall Project, all existing

roadways as of the date of approval of this project, at all times, remain passable to a minimum of two lanes of traffic, one in each direction, or an acceptable detour approved by City. Applicant further agrees that if, at any time, City shall determine that there are not sufficient acceptable traffic lanes or acceptable detours which are passable, that all construction by applicant shall immediately cease upon written demand therefore, by City.

9. Applicant shall replace, or have replaced, or repair or have repaired, as the case may be, all existing infrastructure which have been destroyed or damaged, and applicant shall replace or have replaced, repair, or have repaired, as the case may be, or pay to the owner, the entire cost of replacement by reason of any work done hereunder, whether such property be owned by the City or any agency thereof, by any private, or by any person whomsoever, or by any combination of such owners. Any such repair or replacement shall be to the satisfaction and subject to the approval of the City Engineer.
10. Applicant shall provide such monumentation as may be required by City Engineer, in accordance with accepted standards. The applicant shall post security guaranteeing the payment of the cost of setting the monuments. The cost of setting the monuments will be determined by the City Engineer upon approval of the improvement plans. The Applicant shall pay the engineer or surveyor for the cost of setting the monuments within three (3) months from date of notification by the engineer or surveyor that the monuments have been set. If the applicant does not pay the engineer or surveyor within the three (3) months from date of notification, the City shall pay the engineer or surveyor for the security and refund the difference, if any, to the Applicant.
11. Prior to commencement of project work the project Applicant shall provide proposed trucking routes for all equipment and material deliveries as may be required by the City Engineer. The City shall, at Applicant expense, video the routes to establish preconstruction conditions. Damage to any public improvements, on or off site caused by construction operations, during construction on the subject property shall be repaired to the satisfaction of the City Engineer at full expense to the Applicant. This shall include slurry seal, overlay, or street reconstruction if deemed warranted by the City Engineer.
12. Project Applicant shall obtain, at Project Applicants sole expense, any and all easements or real property which may be required for the development of the Project, and which may be necessary and required in order for Project Applicant to comply with these Conditions of Approval, and the applicable ordinances and resolutions of the City.
13. All engineering design, including, but not limited to, storm sewers and appurtenances, sanitary sewers and appurtenances, streets including, but not limited to, geometrics, sight distances, lighting and sound walls, water systems and appurtenances, signing and striping, landscaping and appurtenances, shall be supported by applicable engineering studies/calculations, as required by the City Engineer.
14. Project applicant shall design/install all improvements and perform all work required for this project in accordance with established City Standards or as approved by the City Engineer and Public Works. Plans for all improvements, including, but not limited to, storm drainage, water and sewer main sizes, either on-site or off-site, shall be in accordance with City Specifications and shall be approved by the City Engineer.

15. The Project Applicant shall be responsible for all work performed by any and all contractors and subcontractors.
16. Detailed plans reflecting the design and construction of all public infrastructure improvements for street, sewer, water, fiber optics and storm drain, both on- and off-site, shall be as directed by the City Engineer. Developer shall have written approval from the City Engineer for any variations from the City's master plans or standards prior to any final approval.
17. The applicant, in order to reduce the tracking of mud throughout the City, shall design/install standard construction entrances, and shall be responsible for cleaning up (or any expenses incurred by the City for cleaning up) mud, debris, etc. from City streets that is attributed to his project during construction.
18. As-built work in the public right of way are to be submitted to the engineering department on CD ROM or DVD computer disk in a format approved by engineering. Digitized information shall be submitted before requesting a final inspection and should reflect as-built status and information as approved by engineering.
19. Public facilities serving the proposed development, including but not limited to, sanitary sewers, water, streets, storm sewers, electrical power facilities, parks, public safety and schools shall be adequate and meet current City standards; or it is guaranteed that inadequate or nonexistent public facilities will be upgraded or constructed by the applicant prior to occupancy of the project.
20. Except as provided otherwise, in the City's conditions of approval or special specifications for construction of public improvements, the Design and Construction Standards for Sanitary Sewer and Surface Water Management by Clean Water Services shall apply in all matters concerning sanitary sewers and the management of storm and surface water runoff.
21. The recommendations of the traffic study, geotechnical report, and drainage report shall be incorporated into the detailed construction plans and specification review.
22. Unless approved otherwise applicant shall extend utilities and roadways through the project to site boundaries for purposes of future development.
23. Identify in plans and profile, any potential vertical conflict points between utilities. Show provisions necessary to accommodate any such questionable or otherwise close conditions.

DEDICATIONS

24. The Applicant shall provide all necessary easements for streets, alleys, sewer, and water facilities, irrigation, fiber optics, district facilities, and other facilities as may be required by the City. Utility easements shall be at a minimum a clear fifteen feet (16') for one utility and a clear twenty feet (20') for two or more utilities. Easements shall not be split between property lines or as otherwise determined by the City Engineer. The easement widths identified are minimums and in certain circumstances, additional easement widths may be required as determined by the City Engineer.

GRADING/DRAINAGE

25. It is the responsibility of the Applicant to meet all Clean Water Service Standard. City engineering will coordinate and submit a set of completed detailed construction plans (completed City engineering review process) for Clean Water Services review.
26. Regarding drainage, the applicant must identify if the project will impact existing surrounding uses including but not limited to agricultural uses. The applicant shall submit a drainage plan showing enough detail to address the mitigation of impacts on these existing surrounding uses or to conclusively show that there will be no impacts to the satisfaction of the City Engineer. The mitigation of these impacts is the financial responsibility of the Applicant until the City formally accepts the mitigation. Additionally, the Applicant shall bear the financial responsibility of, and shall dedicate to the City, runoff control easements, as needed.
27. The applicant must identify issues where the finished grade of the property is higher or lower than the abutting property or adjacent lots, and a suitable solution acceptable to City Engineering shall be required. Solutions including retaining walls shall be shown on grading plans. Retaining walls shall be structurally engineered if over four (4) feet in height, including surcharge, and will require a separate building permit. Applicant shall ensure proper setback requirement on these measures for mitigating grade differences, including building code requirement of two foot setback from toe of slopes.
28. A geotechnical report shall be prepared and submitted by a geotechnical engineer who will be retained by the Applicant to observe, test, and certify that all recommendations outlined in the Report are fulfilled during construction. The reports shall be less than one year old. The reports shall include information on the nature, distribution, physical, and engineering properties of the soils onsite and/or soils to be used as fill, and include recommendations on grading procedures.
29. Prepare and submit hydrology/hydraulic calculations for sizing of all proposed drainage devices. The analysis shall also determine if changes in the post-development versus pre-development conditions have occurred. The analysis shall be stamped and signed by an Oregon Civil Engineer and prepared per area standard, including Clean Water Services requirements. Local regulations requires certain new development and redevelopment projects/activities to incorporate post construction Best Management Practices (BMPs) into the grading/drainage plans to control pollutants. Please refer to the Clean Water Service guidelines for specific comments and requirements.
30. The applicant shall take every step necessary to contain all dirt, construction materials, and construction run-off on site. No grading or construction-related debris, either directly or indirectly carried by water, will be permitted to leave the construction site.
31. All grading projects require an Erosion Control Plan as part of the grading plans. Grading permits will not be issued until an Erosion Control Plan is approved. Please refer to Clean Water Services requirements.
32. The project shall incorporate site design measures for reducing water quality impacts of the project, in compliance with Clean Water Services requirements. Where feasible, parking lots and other impervious areas shall be designed to drain stormwater runoff to, private water quality facilities, vegetated drainage swales, filter strips, and/or other treatment devices that can be integrated into required landscaping areas and traffic islands prior to discharge into storm drain systems. The use of permeable paving for parking and driveway surfaces is encouraged, to reduce runoff from the site.

Such paving should meet fire department requirements and be structurally appropriate for the location. Such water quality mitigations should plan to meet manufacture required maintenance provision.

33. All new private water quality facilities will be required to sign a Private Water Quality Facility Maintenance Agreement and provide information for City master storm water connection report prior to receiving building permit.
34. Project applicant shall, at Project Applicant expense, shall prepare and submit a Dust Emission Control Plan for Project Grading. The Plan shall require that contractor work specifications shall include provisions for adequate water to be applied during construction in order to control dust disturbance resulting from grading operations. The Plan and related contractor work specifications shall be reviewed and approved by the
35. Prior to City issuance of a grading permit, dust control measures shall be applied in accordance with all ordinances, rules and regulations of the City, including regarding use of water for compaction or dust control purposes.
36. The Applicant shall submit a grading plan to the City Engineer for approval which reflects the recommendations of a final Geologic and Geotechnical study, including construction procedures and/or design criteria. Construction plans submitted to the City Engineering shall conform to the City Engineering Design Standards and include specifications necessary to minimize potential impacts resulting from soil conditions on the project site. The City Engineer or his representative shall verify in the field that all conditions have been satisfied.
37. The project plans shall include erosion control measures to prevent soil, dirt and debris from entering the storm drain system, in accordance with Clean Water Service standards. Drainage from parking lots and private streets to the public right-of-way will be filtered through a City approved systems. The system shall be located on the development property and maintained by the property owner.
38. Pre-development flow from adjacent properties onto the project site shall be maintained or accounted for in the final design.
39. The on-site drainage system must be properly designed to maximize infiltration of roof and/or surface runoff into the underlying soil before discharging into public storm drain, street or alley. Also, the storm drainage from project site can not become a nuisance to surrounding property.
40. Storm pipe video inspection shall be provided to the Engineering Division prior to final approval.

RIGHT OF WAY IMPROVEMENTS

41. Any existing damage or damage incurred during construction to the approaches, curb, gutter and/or sidewalk shall be repaired and/or replaced to the approval of the City Engineer.
42. A State Encroachment permit shall be secured prior to the construction of improvements on State or County Facilities.

43. All street improvements shall conform with the requirements of the Americans with Disabilities Act, including the placement of sidewalk at the rear of the driveway at all driveway locations and adjacent to the back of curb at all non-driveway locations.
44. All proposed streets shall be fully improved in conformance with the City standards to the width required by the City. The Project shall install normal and necessary public improvements along the property street frontages to the satisfaction of the City Engineer.
45. These improvements may include, but are not necessarily limited to, grading, curb and gutter, sidewalk, paving, make-up paving and wheel chair ramps, along with construction of all standard utilities necessary including water facilities, sanitary sewer, and storm drainage systems, street lighting, underground utilities, traffic control devices, landscaping, and automatic irrigation systems. All approved driveway locations shall be constructed to City standards.
46. Public sidewalk location shall be shown on the approved plans. Sidewalks (parallel with public streets) shall be located near property/R.O.W. line unless approved otherwise by the City Engineer. Unless designated otherwise on the approved plans, sidewalks shall be installed concurrent with development of lot(s) of record.

TRAFFIC & LIGHTING

47. Arrange for relocation of all utilities, poles, signals, street lights, etc.
48. Developer shall provide and install the following : (1) all signing including, but not limited to, street names, speed, warning, no parking, vehicular and pedestrian traffic protection and direction, for public rights-of-way and easements; and (2) pavement striping, marking and reflective pavement markers. All such signing, striping and marking shall be shown on the approved plans.
49. All signing shall conform to the City Sign Ordinance in regards to size, design, and location. All signs shall be reviewed, approved, and a sign permit obtained prior to installation.
50. Prior to acceptance of improvements by the City, the developer shall perform roadway surface improvements, such as slurry seal or overlay as required by the City Engineer, and shall install any additional traffic signs, striping and pavement markings determined necessary by the City's Traffic Engineer, after inspection of the final physical improvement, to insure safe operation of all intersections and segments of streets before any building can be occupied.
51. Establishment of new pedestrian crossings at uncontrolled intersections or at mid-block locations on roadways under control of the City shall be based upon an engineering study by applicant, and reviewed and approved by the City Engineer according to evaluation process set by Washington County.

STORM AND SANITARY SEWER IMPROVEMENTS

52. Sewer pipe video inspection shall be provided to the Engineering Division prior to final approval.
53. Regarding septic systems, the applicant must identify if the project will impact existing surrounding

systems. The applicant shall submit a plan showing enough detail to address the mitigation of impacts on these existing surrounding uses or to conclusively show that there will be no impacts to the satisfaction of the City Engineer. The mitigation of these impacts is the financial responsibility of the Applicant until the City formally accepts the mitigation. Additionally, the Applicant shall bear the financial responsibility of, and shall dedicate to the City, runoff control easements, as needed. County standards on setbacks to existing system shall be followed.

- 54. Public Storm Drain and Sewer pipe materials shall be in accordance with the latest Clean Water Services design and construction standards.
- 55. Location of sewer and storm mains shall follow City standards or approved otherwise by the City Engineer.
- 56. Submit Drainage Report. Include (therein) data relevant to treatment and detention of storm and surface water runoff.

EXCAVATION, PAVING, and GRADING

- 57. Paving shall be per City Standards.
- 58. Limits of Paving Restoration shall be determined by the City Engineer or Public Works Inspector.
- 59. All site grading and public improvement work shall conform with the City of Forest Grove Municipal Code, development Conditions of Approval, City of Forest Grove Standard Specifications, Uniform Building Code Appendix Chapter 33-Excavation and Grading, and, if applicable, the Agreement Allowing Developer to Construct Public Improvements.

WATER

- 60. Water facilities must comply with plumbing cross-connection control standards as required by City Ordinance and State law for the protection of water supplies. Information on acceptable back-flow assemblies is available from the City Water Division.
- 61. The size and location of all water meters shall be determined by the Engineer/Architect or authorized representative. All water meters will be furnished and installed by the Water Division at the expense of the Applicant.
- 62. All public water system components must be constructed within public right-of-way or public easements.
- 63. All water connections to the City Water Distribution system shall be shown on the construction plan submittal review. This includes irrigation water meters for general open areas in a development project. Water irrigation meters and related impact fees will be paid before the Civil/Grading plans are approved and will be based on the City current meter fee schedules.
- 64. Municipal Code requires that water systems shall be designed to flow a minimum 2000 gpm (medium density) with 20 psi residual pressure at all new fire hydrants. New public water mains shall be sized 8-inch minimum dia. and be D.I.P. unless approved otherwise by the City Engineer.

65. Standard location for public water mains is on the West and/or South side of the public street R.O.W. and additionally, West and/or South of public storm drains unless approved otherwise by the City Engineer.
 66. Public Fire Hydrant spacing and location shall conform to City Code and as otherwise required by the City Fire Marshal.
 67. All new Fire Hydrants shall conform to current City Standards. City Standards require that all hydrants be equipped with a 4-inch Storz fitting. Where possible, each hydrant location shall be identified with installation of blue reflective pavement marker, adjacent to hydrant, near centerline of street or as determined otherwise by the City Fire Marshal. Hydrants situated outside of public street R.O.W. shall be clearly marked and protected from damage as deemed necessary by the City Fire Marshall.
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68. Size of the new water meter service shall be shown on the plans and shall be installed by the Applicant at his/her expense per City Standard Specifications.
 69. Domestic and fire backflow-prevention devices, designed to protect the public water supply, shall be approved by the City Engineer in addition to the City Building & Plumbing Official.
 70. Water used in conjunction with construction of the project shall be obtained only from pre-approved sources. A permit to take City water for this purpose shall be secured by applicant or representative prior to start of construction activity.

SPECIAL CONDITIONS

- Developer shall coordinate frontage improvements, Right of Way or Easement dedications, and utility connection with the 26th Ave Improvement Project.

If you have any questions about any of the above items, please contact me at djrobbins@forestgrove-or.gov or (503) 992-3292.

Project Engineer: [Derek Robbins]

Applicant (print name): _____

Signature _____ Date _____

EXHIBIT C

Light and Power Department
Conditions of Approval
West Grove Apartments
311-22-000028-PLNG
10/31/2022

1. A CAD file of the site plan which includes wet utilities shall be provided to FGL&P before an electrical design will begin.
2. A 10-foot public utility easement is required along all exterior property lines.
3. The electrical services to tax lots 1600 & 1800 will need to be reconfigured or an easement granted for the existing services to remain. The developer will be responsible for any associated costs.
4. A multi-residential application with loading and equipment data for each building must be submitted to FGL&P prior to start of electrical design.
5. All electrical metering equipment shall comply with FGL&P's Service Requirements & Guidelines.
6. Developer shall contact Jason O'Dell to discuss transformer and metering equipment placement when all documents are submitted.

Contact:

Jason O'Dell

Journeyman Lineman Estimator

Forest Grove Light & Power

(503)992-3294

jodell@forestgrove-or.gov

Request for Multi-Family & Residential Development

Applicant Information:

Date: _____

Project/Customer Name: _____ E-Mail: _____

Service Address: _____ City: _____

Nearest Cross Street: _____ Zip: _____

Billing Information:

Name: _____ Company Name: _____

Mailing Address: _____ City: _____ Zip: _____

Phone Number(s): _____ E-Mail: _____

Contact Information: (If different from Billing Information, such as onsite Electrical Contractor, Engineer, Architect, etc.)

Name: _____ Company Name: _____

Mailing Address: _____ City: _____ Zip: _____

Phone Number(s): _____ E-Mail: _____

Multi-Family Information:

Estimated Connection Date: _____

Subdivision []	Minor Partition []	Manufactured Home Park []	Number of Lots _____
Apt/Condo []	Rowhouse/Townhomes []	Number of Units _____	Number of House Services _____
		Number of Bldgs _____	
		Amps per Unit _____	Service Size (Amps) _____
		Sq.Ft. per Unit _____	Service Voltage _____

Service Type Requested: Overhead [] Underground [] If existing, will service be: Conversion [] Relocation []

Customer Load	Electric/KW	GAS
Lighting		
Water Heater		
Range		
Space Heat/Furnace		
Air conditioning /Heat Pump		
Tons _____ Lock Rotor		
Amps _____		
Number of AC/HP Units		
Largest Motor		
Electric Vehicle Charging Unit		
# of EV Units _____		
Other:		

A Scaled Site Plan Showing Preferred Ground Level Service & Meter Locations is Required along with a Detailed Drawing of Switch Gear and Electric Room Specifications if Applicable.

****Please See Attached Requirements For Electronic Files****

LOAD DATA MUST BE AS COMPLETE AS POSSIBLE.

Cost of design changes due to inadequate/inaccurate information will be borne by the property owner or electrician. Load data forms without plans will be delayed and/or not processed. Site, grading, utility and landscaping plans are required to complete PGE electrical design.

Customer Signature: _____ Date: _____

(Must have signature to process)

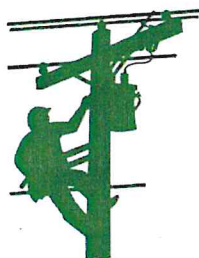
Forest
Grove

Light & Power Department

Serving the City of Forest Grove
and surrounding areas

**Electric Service
Requirements &
Guidelines**

August 2020



**CITY OF FOREST GROVE
LIGHT & POWER DEPARTMENT**

2019

ELECTRIC SERVICE HANDBOOK

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DIRECTORY

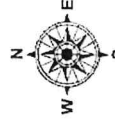
<u>OFFICE</u>	<u>LOCATION</u>	<u>TELEPHONE</u>
City Hall	1924 Council Street	(503) 992-3200
	Forest Grove, OR 97116	
Light & Power Department	1818 "B" Street	(503) 992-3250
	P.O. Box 326	
General Information, Outages & Service Requests.....		(503) 992-3250
Energy Conservation		(503) 992-3250
Operations		(503) 992-3252
Engineering		(503) 992-3296
Outages after 5:00 p.m.		(503) 992-3250
Billing Office	1924 Council Street	(503) 992-3221
Billing Information.....		(503) 992-3221
Move-In & Move-Out		(503) 992-3221
Credit & Delinquent Bills		(503) 992-3221
Utilities Notification Center		
Request for Location of Underground Equipment.....		1(800) 332-2344
Washington County,		
Building Services Division	155 N 1st Avenue, Suite 350	(503) 846-3470
	Hillsboro, OR 97124	
Electrical Inspections & Permits		(503) 846-3699

City of Forest Grove Light & Power Service Area

MAP LEGEND

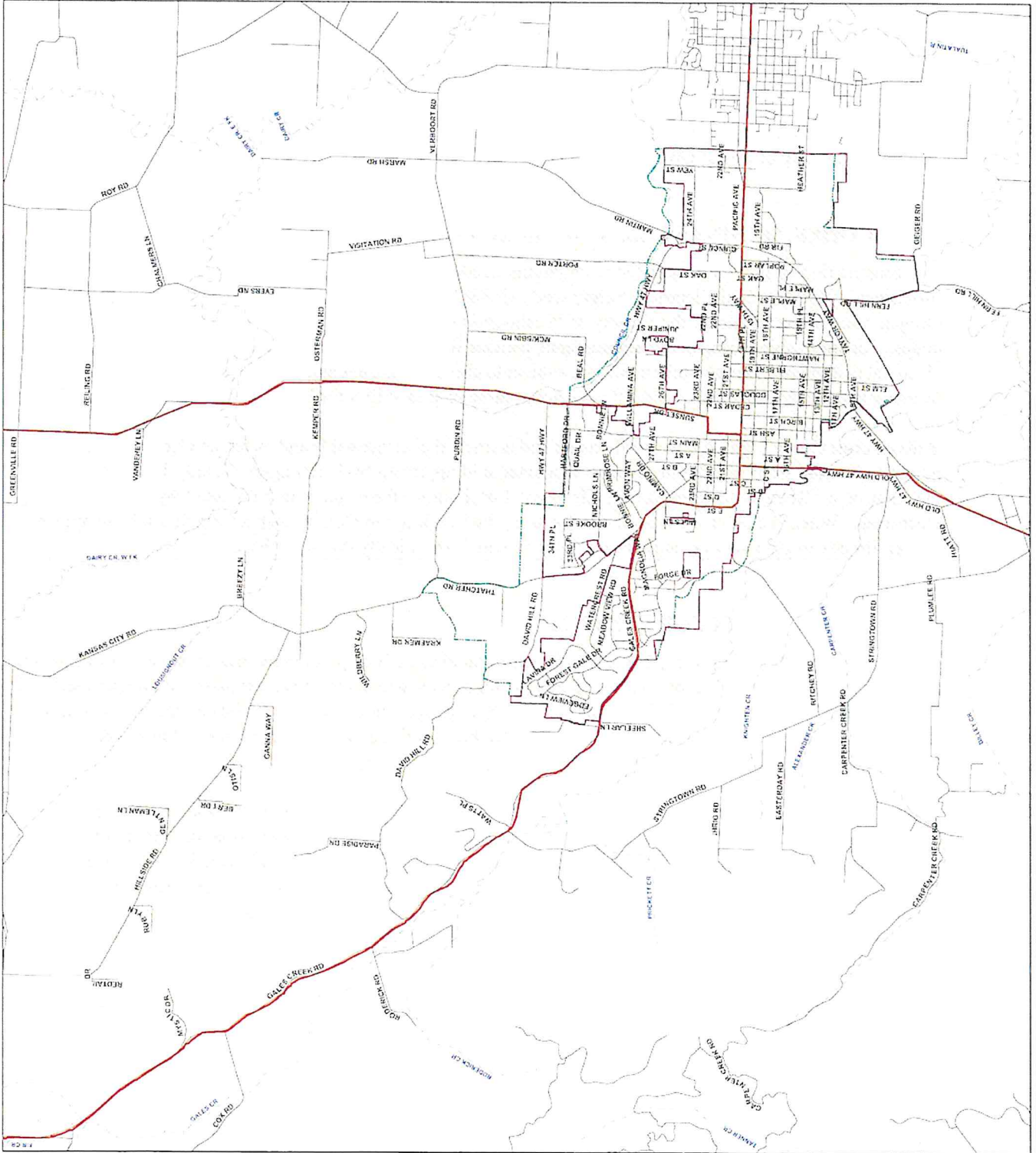
- Light & Power Service Area
- Urban Growth Boundary
- City Limits
- Major Roads
- Roads and Streets
- Streams

Map produced for The City of Forest Grove use.
Information displayed is subject to frequent change
and The City of Forest Grove makes no warranties
as to the accuracy of this map.



City of Forest Grove Light & Power Service Area

City of Forest Grove - Engineering Department
Features shown may not reflect all The City of Forest Grove
Power and Light Service Area
Map current as of May 2005 - Product 05-02



1 GENERAL INFORMATION

1.01 PURPOSE

This booklet was prepared to aid you in establishing electric service for new and remodeled structures. The information in this handbook can assist you with many of the guidelines and general requirements that must be met before Forest Grove Light & Power can connect your electric service. It covers general information such as the location of your service entrance equipment, the height of service masts, and the depth of trenches. We recognize that you may require personal assistance from our staff and we encourage you to contact us to discuss your electric service requirements. It is the desire of Forest Grove Light & Power and the local electrical code enforcing authority to provide you with high-quality safe electric service.

In order to avoid unnecessary repetition, the letters "FGL&P" or the word "Utility" as used in the following pages shall mean the City of Forest Grove Light & Power Department.

1.02 CODES, ORDINANCES, AND APPROVALS

The construction of new or remodeled installations needs to conform to the latest revisions of the applicable provisions of the National Electrical Safety Code (NESC), the National Electrical Code (NEC), the State of Oregon rules and regulations, the County of Washington codes, and the City of Forest Grove ordinances and codes. For applicable wiring code requirements, contact Washington County Building Services Division or an electrical contractor. These requirements are subject to change in the event that the governing codes, ordinances, or rate schedules are changed. FGL&P does not assume responsibility for keeping this book current.

Before Forest Grove Light & Power will install and connect the service cable and meter, an electrical work permit must be obtained from and the installation inspected and approved by Washington County Building Services Division or a "Request to Energize an Electrical Installation" form must be completed by the supervising electrician. When the service passes the inspection, the Washington County Inspector will apply an approval sticker directly to your service entrance equipment, which is typically the meter base.

1.03 APPLICATION FOR SERVICE

It is important that Forest Grove Light & Power be provided as early as possible with accurate load information and the date when you will require service. Requests for service which require an extension of primary electrical facilities, such as residential subdivisions, mobile home parks, apartment complexes, and commercial or industrial loads, should include a plot plan showing structures, lot lines, curbs, and street centerlines in digital format; either MicroStation (DGN) or AutoCAD (DWG).

Requests for service for commercial and industrial loads should also include a single-line diagram of the electrical layout and a completed electrical application form. The request must show load information, including lighting, receptacle, water heating, cooking, electric heat, air conditioning, and motor load. Sufficient information on equipment operations will also be required so that the kilowatt demand of the load can be estimated. If conditions are encountered during construction that require changes to the service, FGL&P must be consulted so mutually satisfactory alternative arrangements can be made.

FGL&P ELECTRIC SERVICE HANDBOOK 2019

Engineering, scheduling, and construction of the work will vary, depending upon the complexity of the job. Typically, a service can be installed and connected within ten business days of FGL&P receiving the request for service. Installations that involve one of the following may require special attention:

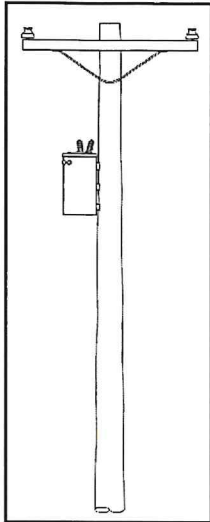


Figure 1: Overhead Transformer

- Size of the service will be larger than 200 amps.
- Service will be three phase.
- There is no transformer on the nearest pole (See Figure 1).
- Overhead service is over 100 feet from the nearest pole.
- Underground service is over 125 feet from the nearest pole.
- Underground service is over 150 feet from a padmount transformer (See Figure 2).
- Lot has no pedestal or transformer.
- Service trench will be opened before wiring is scheduled for County inspection.
- Service route will cross another piece of property.
- Service route will cross a railroad, road, wetland, stream, or foreign utility facilities.
- Request that Forest Grove Light & Power facilities be extended or otherwise altered.

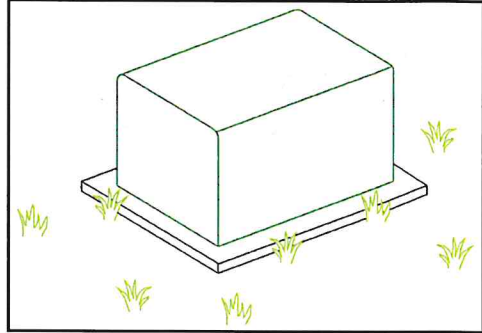


Figure 2: Padmount Transformer

If any of these situations apply or if you have any questions, please contact Forest Grove Light & Power engineering at (503) 992-3296. We can provide additional information which may be useful in planning your electric service. We can also answer questions about the availability of temporary power during construction.

1.04 CUSTOMER'S RESPONSIBILITY FOR SAFETY

The Customer shall comply with all federal, state, and local laws and regulations, as well as all applicable laws of negligence concerning all activities in the vicinity of the Utility's electrical wire and equipment. The Customer shall comply with laws and regulations to protect himself, his family, his employees, the Utility, and all third parties from injury, loss, or damage. If the Utility serves the Customer by means of primary voltage or transmission voltage circuits on the Customer's premises, the Utility may require the Customer to obtain and retain insurance coverage which the Utility deems adequate to satisfy the duty of indemnification.

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1.05 TYPES OF SERVICE AVAILABLE

The available electric service is 60 hertz, alternating current, single- or three-phase. Normally, only one voltage will be provided for each service location. The nominal secondary voltages available from overhead and underground distribution lines are given below:

Overhead Service

Single-phase, 120/240 volt, three-wire, grounded

Three-phase, 120/208 volt, four-wire, grounded, wye

Three-phase, 120/240 volt, four-wire, grounded, delta (1-PH 120/240 load may not exceed 100 amps)

Three-phase, 277/480 volt, four-wire, grounded, wye

Under certain conditions and at the option of the Utility, the following voltages may be provided:
single-phase, 120 volt, two-wire, grounded; single-phase, 120/208 volt, three-wire, grounded.

Underground Service

Single-phase, 240/120 volt, three-wire, grounded

Three-phase, 208/120 volt, four-wire, grounded, wye

Three-phase, 480/277 volt, four-wire, grounded, wye

Under certain conditions and at the option of the Utility, the following voltages may be provided:
single-phase, 120 volt, two-wire, grounded; single-phase 120/208 volt, three-wire, grounded.

1.06 DISCONNECTION AND RECONNECTION OF SERVICE

Normally, only authorized Forest Grove Light & Power employees shall connect or disconnect the Utility's electric service to a building or structure. Under certain circumstances, electrical contractors, with prior approval by the Utility, may disconnect and/or temporarily reconnect single-phase services no larger than 200 amperes that are 120/240V or less. The Utility must be notified as soon as possible of the work that has been performed.

At the Customer's request, the Utility will disconnect a service prior to it being modified in order to maintain safe working conditions. There will be no charge for these disconnections during regular working hours. The service will be reconnected without charge if it can be completed during regular working hours and at the Utility's convenience; otherwise, the Customer will be billed a reconnection charge in accordance with the fee schedule in effect.

All new or modified services must be inspected by the Washington County Electrical Inspector (the County) prior to power being supplied. Services which have been disconnected for longer than six months for any reason must be brought into compliance with current Forest Grove Light & Power standards and inspected by the County. Services which are found to be unsafe or pose a risk of injury shall be immediately disconnected by the Utility.

1.07 SEALS

The purpose of seals placed by the Utility on meters and associated service equipment is to prevent injury and/or tampering. In normal circumstances, these seals are to be removed by only authorized Utility employees. If an emergency should require seal removal without prior notification, Forest Grove Light & Power must be notified as soon as possible, so the installation can be inspected and the seal replaced.

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1.08 TEMPORARY SERVICE

Single Family Residence

Forest Grove Light & Power will install a temporary service at a residential construction site as a service to construction contractors. The features of the service and the fee for the service are further described below. The temporary service is to be used for construction power only. **If other loads, such as area lighting, job shacks (including motorhomes), heating or air-conditioning units, or a furnace blower, are connected, the temporary service will be disconnected and removed. In addition, if the temporary pedestal is tampered with, the service will be disconnected and removed and the Contractor will be billed for any and all damages to the equipment.** The Customer or Contractor will then need to apply for a new temporary service.

Location of temporary services for construction work must be selected so that the equipment can be used throughout the construction period. Should relocation of a temporary service become necessary, the relocation cost will be borne by the Customer or Contractor, in accordance with the fee schedule in effect.

Features*

- Utility-supplied temporary service equipment.
- Either underground or overhead, depending on local availability.
- No temporary service electrical permit and inspection needed.
- (2) 20 amp, 120 volt circuits;
- (1) 20 amp, 240 volt circuit.

Fee**

- Prepaid fee allows up to four months of use.***
- Up to one 4-month extension.***
- Fee is to be prepaid at the Light and Power Department office.

* Each temporary service is assigned to an individual construction site and will be removed when the permanent service is connected.

** Applicable where temporary service will be placed adjacent to existing Utility equipment.

*** Check current fee schedule for rate.

Other than Single Family Residence

In general, temporary service at construction sites other than single family residences (e.g. commercial, apartments, etc.), will be metered. The Customer or Contractor is responsible for installing a temporary meter pole and obtaining the necessary inspections. Please contact Forest Grove Light & Power for additional information.

1.09 CLEARANCES FROM UTILITY EQUIPMENT

This section covers clearances which must be maintained around Utility equipment. For equipment which is located in areas subject to vehicular traffic, the Customer shall provide and install steel traffic bollards, painted yellow, and set in concrete. If you have a special situation or question, please contact Forest Grove Light & Power at (503) 992-3250.

Poles

In order to ensure the safety of Utility personnel, a clearance of 10 feet from all Utility poles to any structures or equipment must be maintained. Any obstructions found in this clear zone will be removed by the Utility. In addition, nothing may be attached to Utility poles. This includes, but is not limited to, all signs and placards. Attachments will be removed and the violators may be responsible for the cost of removal.

Padmount Equipment

In general, a minimum clearance of three feet is required around the sides and back of padmounted electrical equipment. A separation of eight feet shall be maintained between transformers and building openings. In no event shall any portion of a combustible structure encroach into the clearance zone 8' in any direction from a transformer at ground level. The clearance zone includes all space below and above the 8' ground level clearance zone. For all equipment, the minimum clearance in front is eight feet. No obstructions, including fences, retaining walls, poles, mail boxes, shrubs, trees, or landscaping, may be placed within this area. Refer to Figure 3 for details.

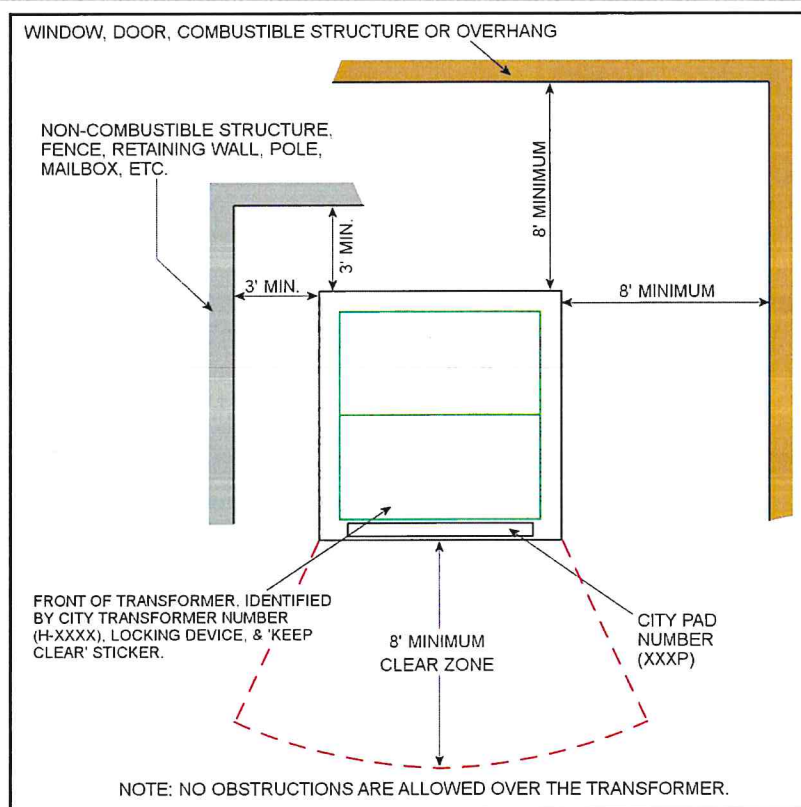


Figure 3: Clearances to Pad Mount Transformers (Plan View)

2 SERVICE ENTRANCE & METERING REQUIREMENTS

2.01 GENERAL

This section covers requirements for customer metering and service entrance installations for secondary voltages less than 600 volts. If you have a special situation or question, please contact Forest Grove Light & Power at 992-3296.

2.02 RESPONSIBILITIES

Forest Grove Light & Power will provide, install, and maintain transformers, meters, and service drops or service laterals (see Article 100 of the National Electrical Code). The customer will provide, install, and maintain all service equipment, including instrument transformer enclosures (if applicable), the meter socket, and either conduit, if the service is underground, or the weatherhead and service entrance conductors, if the service is overhead. In addition, the customer will be responsible for providing rights-of-way and access for the installation and maintenance of the Utility's facilities.

2.03 CUSTOMER EQUIPMENT ON UTILITY POLES

Customer-owned equipment, including metering, switching devices, conduits, conductors, luminaires, etc., is not permitted on Forest Grove Light & Power poles. In some situations, the Utility may elect to provide meter poles (e.g. overhead service to mobile homes or farmyard service), as shown in Section 3.05.

2.04 METERING EQUIPMENT LOCATIONS

In general, meters are to be located on the exterior of the structure being served and are limited to the front wall or on a side wall within three feet of the front, unless approved by the utility. The front of the structure is the portion facing normal public access. Locations that could have access restricted, such as carports, breezeways, or fenced yards, will **not** be approved. The meter shall not be installed over window wells, steps in stairways, or in other unsafe or inconvenient locations. Residential meter location shall be approved by the Utility prior to installation of service equipment.

All building plans are reviewed by the Forest Grove Light & Power and the location of the meter base and the route of the service drop and/or conduit are indicated on site plan.

If, in the opinion of the Utility, a meter is made inaccessible, such as by the installation of a fence or enclosure, the Customer shall, at his expense, move the meter base to an accessible location.

Meter socket height may be no more than 6 feet and no less than 5 feet above finished grade or floor (Figure 4). With prior approval from Forest Grove Light & Power, a meter pedestal with a minimum height of 3 feet 6 inches above finished grade may be installed for mobile homes. Refer to Section 4.05 for details. In all cases, the center of the meter socket is the point of reference.

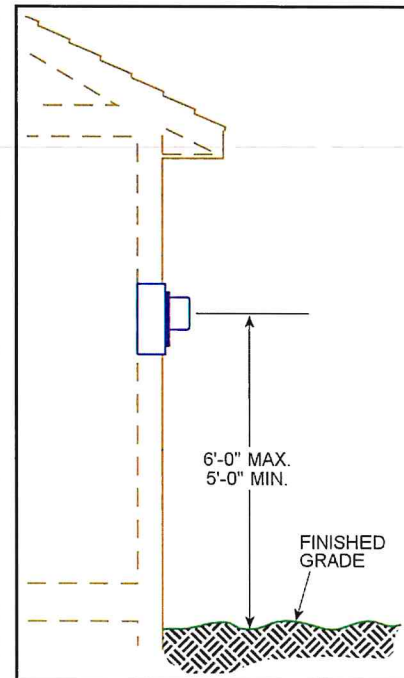


Figure 4: Meter Height

Ganged Meter Bases

For ganged meter bases, such as those used for duplexes and apartments, the meters are to be located on the exterior of the structure being served and are limited to the front. The front of the structure is the portion facing normal public access. With prior approval from the Utility, the meter base may be mounted on the side of the structure, provided the edge of the meter base is no more than three feet from the front of the structure, as shown in Figure 5. Refer to Section 2.05 for details on marking the meter bases.

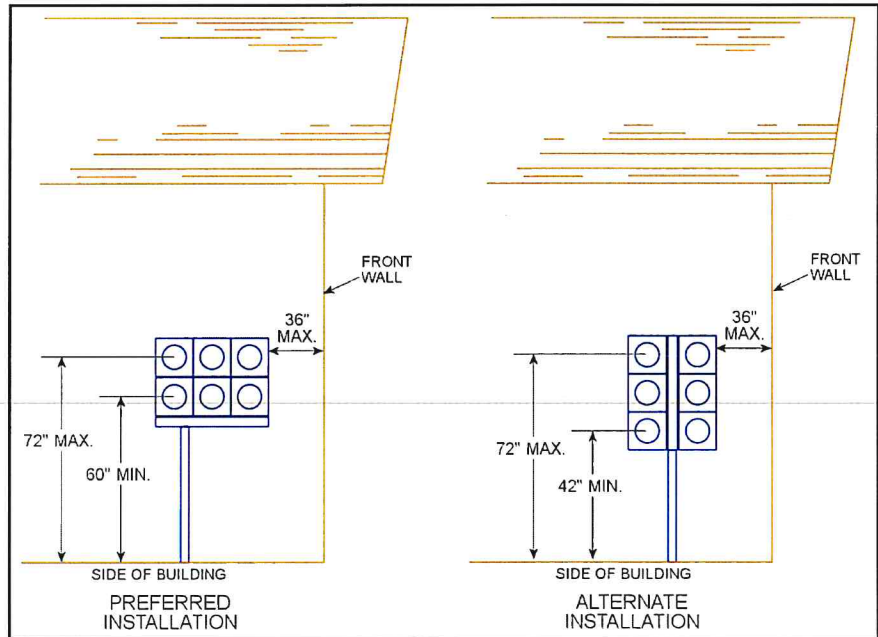


Figure 5: Ganged Meter Bases

2.05 METER IDENTIFICATION

Where two or more meters are grouped, the Customer is responsible for clearly and permanently marking each meter position with a label glued to its front to indicate the particular location supplied by it. The labels must be printed and weatherproof. Minimum height of 1" is required for all characters.

Service will not be connected until the marking is completed. Refer to Figure 6 for details.

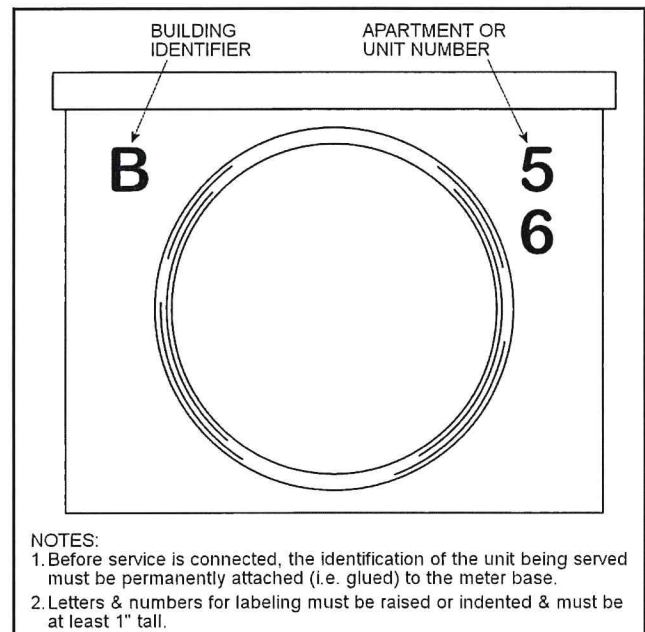


Figure 6: Meter Identification

2.06 METERING EQUIPMENT CLEARANCES

All meters, metering equipment, and enclosures must be readily accessible by Forest Grove Light & Power personnel at all times for meter reading, maintenance, testing, installation, or removal. They must be at a location free from obstructions, vibration, corrosive atmosphere, and abnormal temperatures.

Working space in front of meters or metering equipment (including instrument transformer enclosures) must be at least 36 inches measured from the front of the meter glass or enclosure. Working space behind freestanding switchboards must be at least 36 inches from the panel to any obstruction, with provisions for safe exit. Refer to Figure 7 for details. To maintain safe working conditions, no exceptions will be allowed (NEC). A minimum clearance of 36 inches must be maintained between the electric meter enclosure and gas meter.

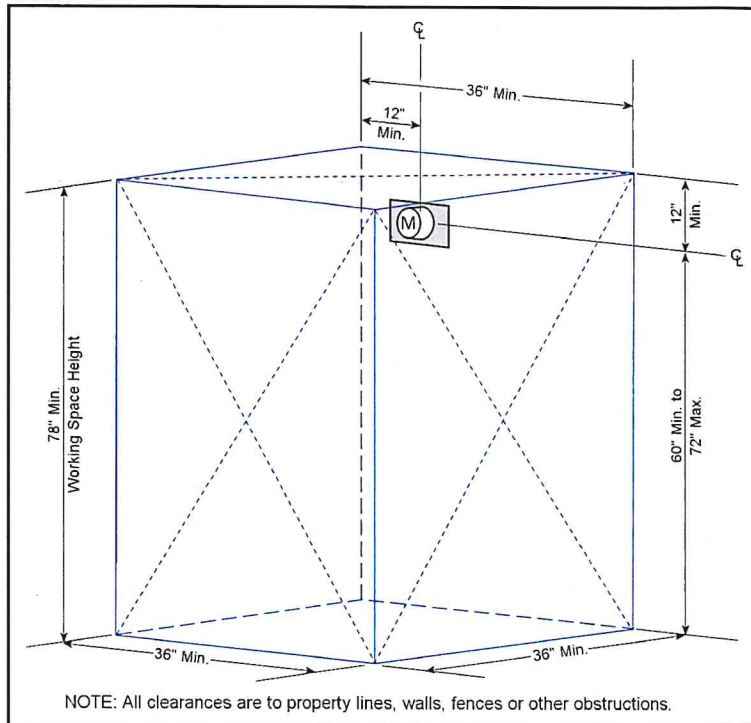


Figure 7: Clearances to Meters

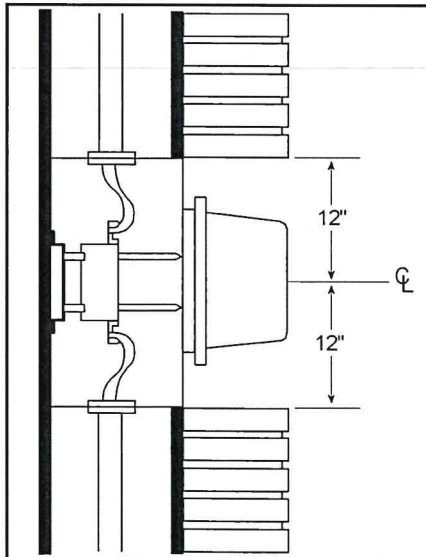


Figure 8: Flush-Mount Meter

The center of all meter socket enclosures must be a minimum of 12 inches from walls, ceilings, service equipment, or other obstructions. Building siding may not cover or overlap any portion of the meter socket. Refer to Figure 8.

2.07 GROUNDING

All meter sockets, enclosures, and conduit must be bonded and grounded in accordance with Articles 230 and 250 of the latest edition of the NEC. Where self-contained meter sockets are used, the neutral conductor must be connected to the ground terminal in the socket.

2.08 SEALING OF CABINETS AND GUTTERS

All cabinets and gutters containing unmetered conductors, other than mainline switches required by applicable electrical codes, must be arranged for sealing with the Utility's seal. Removable conduit fittings may be installed between the service outlet and the meter when approved by the Utility. These fittings must be visible from the meter location or from an exterior ground position and must be arranged for sealing.

2.09 METERING EQUIPMENT SPECIFICATIONS

Meter socket

Meter sockets and troughs must be of a type acceptable to Forest Grove Light & Power and must be UL listed and approved for the intended use. Each unit must be equipped with the required number of terminals and meter jaws, and a sealing ring or gasket. Terminals must be marked with the conductor range for aluminum or copper conductors. When aluminum conductors are used, the socket must be listed or approved and clearly marked by the manufacturer for that use.

- Any meter socket that does not have a meter must have a cover plate and be sealed.
- Meter sockets are not to be jumpered to provide power when a meter is not installed.
- All meter equipment exposed to weather must be rain-tight according to NEMA-3R.
- Before a meter is installed, all unused openings of the meter socket enclosure are to be closed with plugs that are locked tightly in place from inside the enclosure.
- Meter bases shall be securely fastened to a stud behind the outside wall with minimum 2" fasteners. All exceptions must be presented to the Operations Superintendent prior to installation.

For self-contained meter sockets, the meter must be located ahead of the disconnect switch. Under special conditions, permission may be granted to modify this sequence in group installations of more than six individual occupancies, provided all equipment ahead of the meter can be sealed by Forest Grove Light & Power. Meter and circuit breaker combinations are acceptable for 0-400 amperes single-phase and 0-200 amperes three-phase services, provided the meter socket section meets dimensional requirements.

Meter socket requirements

Refer to Figures 9 and 10 and notes below:

<i>Voltage Rating</i>	<i>Applic. *</i>	<i>Amp Rating</i>	<i>No. of Phases</i>	<i>No. of Terminals</i>	<i>Socket Type</i>	<i>Refer to Note(s)</i>	<i>Typical Meter Base or Equivalent</i>
120/240	res	up to 200	1	4	Fig 9, A	1	Square D #UTRS213B
120/240	res	201-400	1	4	Fig 9, A		Square D #UTH4300T
120/208	comm	up to 200	1	5	Fig 9, B	1, 2	Square D #EM52NRB
120/240	comm	up to 200	1	4	Fig 9, A	1, 2	Square D #UTH4213T
120/240	comm	201-400	1	4	Fig 9, A	2	Square D #UTH4330T
120/240	comm	401-600	1	6	Fig 9, C	3	Circle AW #12146
208/120	comm	up to 200	3	7	Fig 9, D	2	Square D #EM72NRB
208/120	comm	over 200	3	13	Figs 9 E; 10	3, 4	Circle AW #121413
480/277	comm	up to 200	3	7	Fig 9, D	2	Square D #EM72NRB
480/277	comm	over 200	3	13	Figs 9 E; 10	3-5	Circle AW #121413

* *Applic.* refers to the typical usage or application: “res” represents residential and “comm” represents commercial.

Notes

1. Services 0-200 amperes must use a self-contained meter socket enclosure 4-1/4 inches deep, 11 inches wide and 14 inches high, minimum.
2. All self-contained meter sockets for non-residential service require a manual circuit-closing block. Automatic circuit closers are **NOT** acceptable.
3. All CT meter bases must have test switch perches.
4. All three-phase services that have a main bus rating greater than 200 amperes must have current transformers and a 13-terminal meter socket.

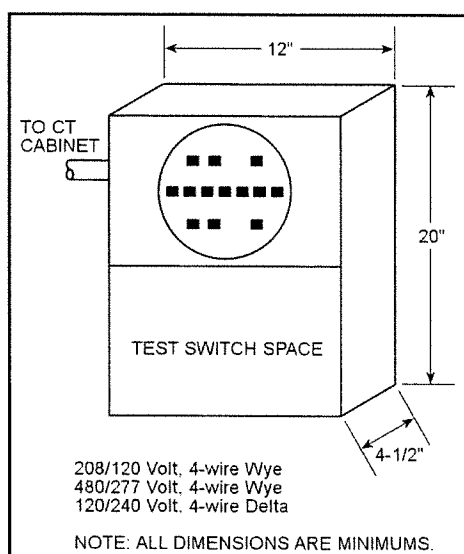


Figure 10: 13-Terminal Meter Base

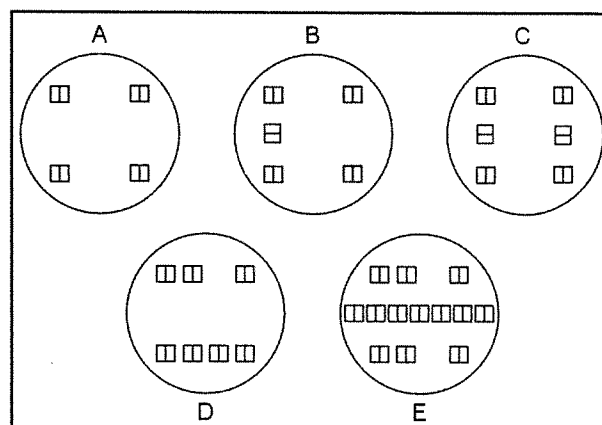


Figure 9: Standard Meter Bases

5. For voltages over 240 volts line-to-line, a potential transformer compartment must be installed. (Hoffman A24R248HCR or equal)

For services with a main bus rating greater than 400 amperes single-phase or 200 amperes three-phase, provisions must be made for current transformers. In addition, provisions for potential transformers must be made when the voltage of the service exceeds 240 volts, line-to-line.

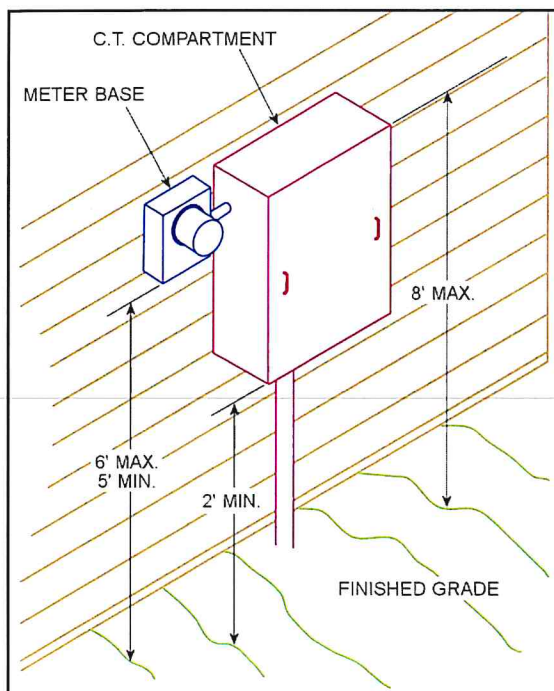


Figure 11: Preferred Installation

Instrument Transformer Enclosure Requirements

All potential and current transformers must be installed on the supply side of the main disconnect. All load monitoring equipment or current-limiting fuses must be located on the load side of the Utility's metering. Instrument transformer enclosures must contain only main service conductors; no customer equipment is allowed inside the meter or instrument transformer enclosures. Three sets of main service conductors may be served off the load side of the current transformer. The bottom of the enclosure must be no less than two feet and the top must be no more than eight feet above the floor or working platform. Refer to Figures 11 for details. All exceptions must be obtained in advance from the Utility's Meter Department. All meters and enclosures are to be located in accordance with Section 2.04.

2.10 RESPONSIBILITIES FOR EQUIPMENT**Customer responsibilities:**

- Provide and install all service conductors and equipment, including breakers or fuses, on the customer's side of the point of delivery.
- Provide and install the weatherhead and service entrance conductors if the service is overhead.
- If applicable, provide and install the conduit to the pedestal if the service is underground.
- If applicable, provide and install the conductor to the metered pedestal if the service is underground.
- Provide the minimum clearances for all meter bases and instrument transformer enclosures. Refer to Section 2.06.
- Provide and install the meter base, which
- If more than one meter, clearly and permanently identify each meter base in accordance with Section 2.05.
- If applicable, provide and install a sealable instrument transformer enclosure(s) in accordance with the following Utility requirements (dimensions are minimum):

Current Transformer (CT) Compartment: (refer to Figures 11 & 12)						
Size of Service	No. of Phases	No. of CTs or PTs	Width	Height	Depth	Height above Final Grade
401-600A	1	2	30"	36"	11"	30"
201-400A	3	3	30"	36"	11"	30"
*401-800A	3	3	30"	48"	11"	24"
*over 800A	3	3	Consult with Utility Engineer			
Potential Transformer (PT) Compartment: (refer to Figures 13 and 17)						
Hoffman A24R248HCR (or equal)						
*over-240V	3	3	24"	24"	8"	36"

**Enclosure with hinged door is required*

- If applicable, provide and install metering circuit conduit (1 ¼" min. diameter) between the meter base and instrument transformer enclosure(s), making it as short as possible. Do not use flex conduit in meter circuits. The conduit run must not exceed 50 feet in length unless specifically approved by Forest Grove Light & Power's Meter Department. Conduit must not contain condulets or junction boxes.

Forest Grove Light & Power's responsibilities:

- Provide and install service drops or laterals on the Utility's side of the point of delivery.
- Provide and install meters.
- If applicable, provide and install current instrument transformers.
- If applicable, provide and install potential transformers.

2.11 LARGE SERVICES (OVER 800 AMPERES)

Remote Meter Pedestal Service

Forest Grove Light & Power Engineering must be consulted regarding all services with a rating of 800 amps or more. Typically, they will be served from a dedicated, pad-mounted type of transformer. Some situations may require that the CTs be installed in the secondary compartment of the transformer. FGLP metering personnel will install the CTs and/or PTs and run wires to customer provided and installed meter socket (if service over 240 volts) via customer provided and installed 1 1/4" (min.) metallic or PVC conduit.



Figure 12: Freestanding CT Meter Base

The supporting members are to be 2" steel or equivalent and are to be set in a minimum of 24" of concrete. The center of the meter is to be between 3'-6" and 5' above final grade. Refer to Figures 12 to 14 for details. There must be a minimum of 24" of clearance between the transformer and the meter base installation. Refer to Figure 16.



Figure 13: Freestanding CT Meter Base



Figure 14: Clearance Between Transformer & Freestanding Meter Base

3 OVERHEAD SERVICES

3.01 GENERAL REQUIREMENTS

The process of installing a new overhead service to your home is a joint project between you and Forest Grove Light & Power. We request that several items be completed prior to connecting your service. Once these items are complete, Forest Grove Light & Power will install your service wire and new meter.

The items to be completed are:

- Contact Forest Grove Light & Power and request a new permanent service. Our telephone number is 992-3250. If temporary service is needed, it may be requested at the same time.
- Obtain an electrical work permit from the Washington County Building Services Division.
- Install the new meter base. Refer to Section 2.04 for the location.
- Install the service mast and service entrance conductor through the mast.
- Provide a clear path from the weatherhead to the Forest Grove Light & Power contact point.
- Obtain the appropriate electrical inspection.
- After the above items have been completed, call the Operations Superintendent at 992-3252 and inform him that the meter base has been inspected and you are ready for service.

If clarification is needed on any of the items, please call Forest Grove Light & Power and someone will assist you.

NOTE: In general, new electric services within the city limits of Forest Grove must be installed underground.

3.02 SERVICE LINE LOCATION

The location of the overhead service line has been marked on the building plans by the FGL&P Project Engineer. The service route must be accessible not only during initial installation, but also throughout its service life. Trees must remain clear of the line through regular pruning or tree removal by the homeowner.

3.03 SERVICE INSTALLATION

The location of the meter base has been marked on the building plans by the FGL&P Project Engineer. In general, it should be on the front wall or on a side wall within three feet of the front of the structure. The front is the portion facing normal public access. Locations that could have access restricted, such as carports, breezeways, or fenced yards, are not acceptable. The service mast shall be located so that only one attachment of the service conductors to the building is required. Exceptions must be approved by Forest Grove Light & Power and the County Inspector before any equipment is purchased to avoid delays in connecting your service.

The mast must be a minimum of 2-inch rigid galvanized steel conduit and attached to the building securely enough to support the weight of the service conductors. The height of the mast should be determined according to applicable service conductor clearances (refer to Section 3.04). Normally, a guy is not required on service masts 26 inches or less above the roof. If the service mast is more than 100 feet from the source or over 26" tall or if the service is larger than 200 amps, guying is required (Figure 17). Stiff leg guying (not shown) is an acceptable alternative.

The service conductors should not be terminated on chimneys, vent pipes, gutters, or other nonstructural portions of the building. Suitable service attachment devices should be provided and installed during construction. Service entrance conductors are to be installed by the customer and should extend a minimum of 18 inches from the end of the weatherhead to permit the attachment of the service conductor by Forest Grove Light & Power.

Any questions regarding service entrance equipment, including the size of the service entrance conductors, should be referred to the Washington County Building Services Division or the County Inspector by calling (503) 846-3470.

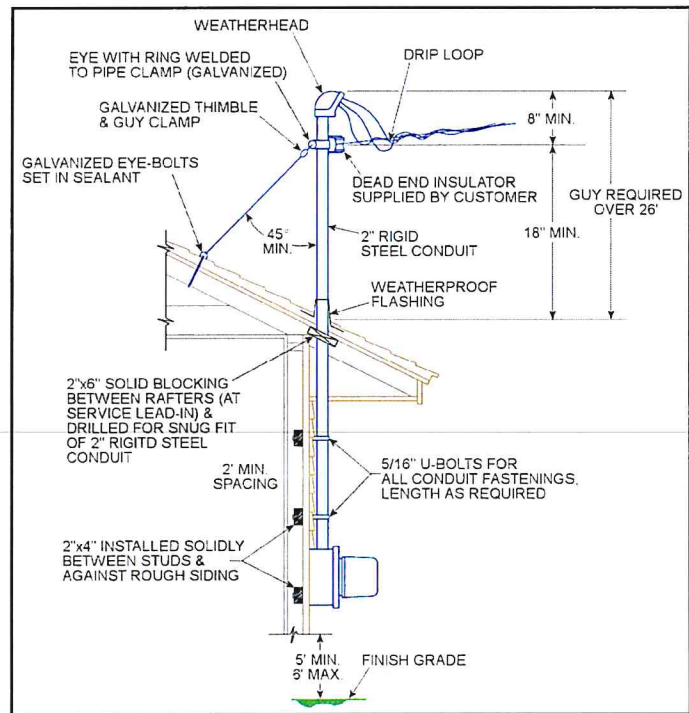


Figure 15: Overhead Service Entrance (Less Than 200A)

3.04 CLEARANCE REQUIREMENTS

Service conductors should be attached a minimum of 12 feet and a maximum of 25 feet above final grade. The bottom of the drip loop must be a minimum of 10'-6" above final grade (Figure 18). (NESC Table 232-1)

Horizontal clearances from buildings

Service drop conductors must have a minimum horizontal clearance of 3 feet to walls and windows and 5 feet to readily accessible locations, such as balconies, porches, and fire escapes. (NESC Table 234-1)

Vertical clearances over roofs

Service conductors must have a vertical clearance of at least eight feet above the roof. Where the roof is not readily accessible, a clearance of 3 feet is permitted.

Where the roof is not readily accessible and the weatherhead is no more than 4 feet from the edge of the roof, a clearance of 18" is permitted for a horizontal distance of 6 feet, beyond which a minimum clearance of 3 feet is required. (NESC 234.C.3.d.(1))

Vertical clearances over porches & decks

A minimum clearance of 11 feet is required over porches and decks. (NESC Table 234-1)

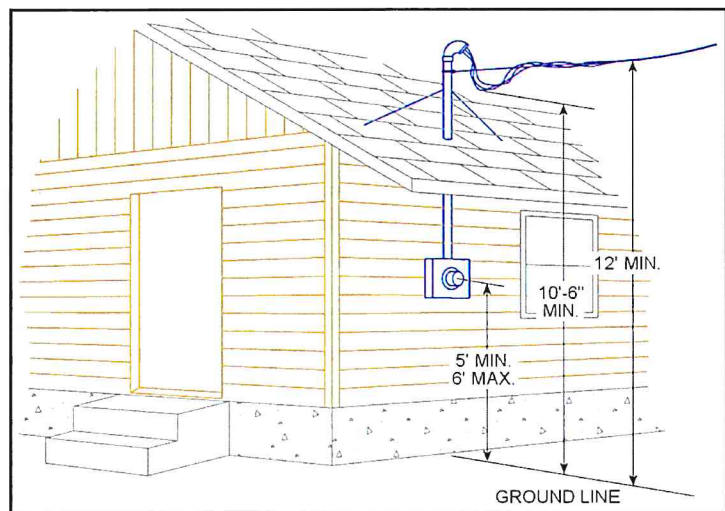


Figure 16: Service Conductor Clearances

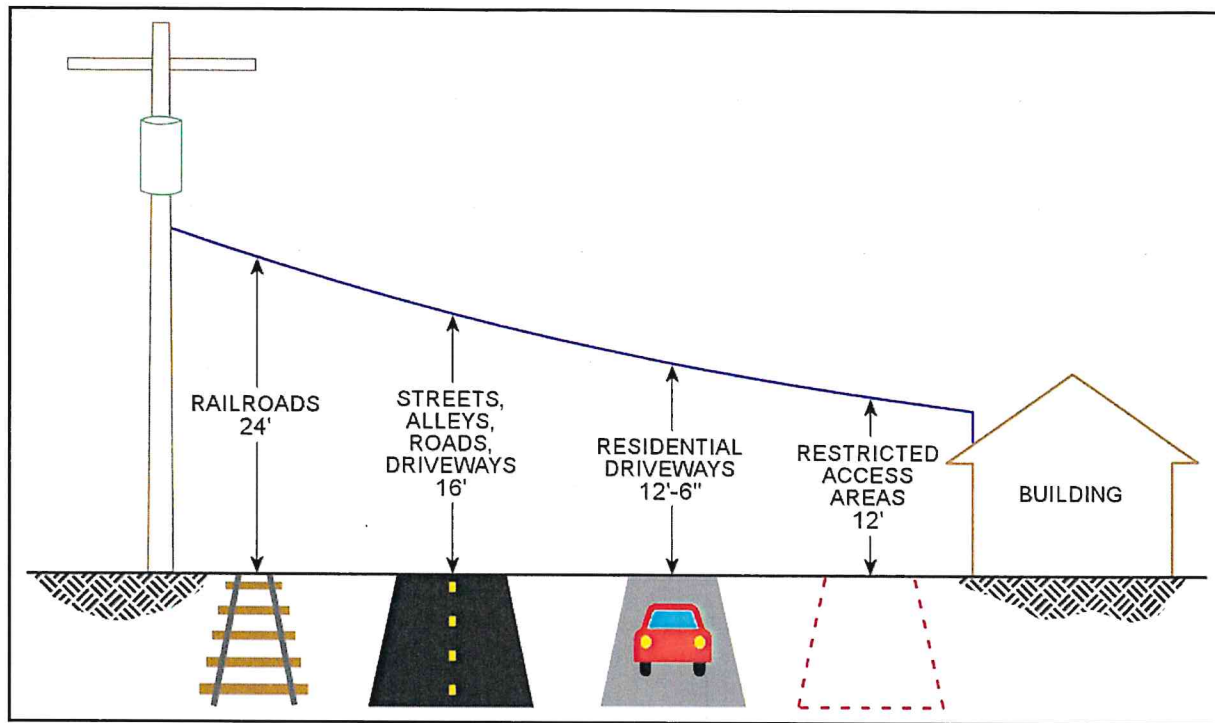


Figure 17: Conductor Clearances Above Grade

Vertical clearances from ground

Service drop conductors 600 volts and under shall have the following minimum clearance from final grade (Figure 19): (NESC Table 232-1)

- 10'-6"**: At the electric service entrance or at the drip loop of the building electrical entrance, measured from final grade or other accessible surface.
- 12'-0"**: Spaces and ways subject to pedestrians or restricted vehicle traffic only.
- 12'-6"**: Over residential driveways.
- 16'-0"**: Over roads, streets, driveways, parking lots, alleys, and other areas subject to truck traffic, including cultivated fields, grazing lands, forests, and orchards.
- 24'-0"**: Over track rails of railroads.

3.05 METER POLE

If the meter is not installed on a permanent building or structure, Forest Grove Light & Power requires that a meter pole be set. It is the customer's responsibility to coordinate with Engineering or Operations to find an acceptable location for the pole.

The customer is responsible for owning and maintaining the meter pole. Contact the Operations Superintendent for the purchase and installation of the meter pole. Refer to Figures 18 and 19 for details. Fees may apply in the event that a meter pole is required.

Guying

A guy may be required on meter poles where the service conductor is over 50 feet between points of attachment or if the main bus rating of the service is larger than 200 amps.

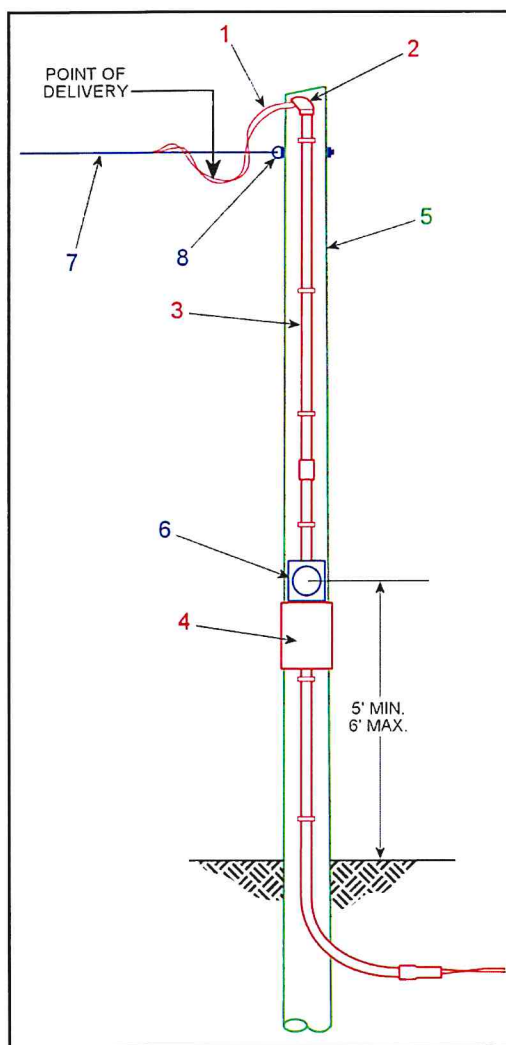


Figure 19: Meter Pole

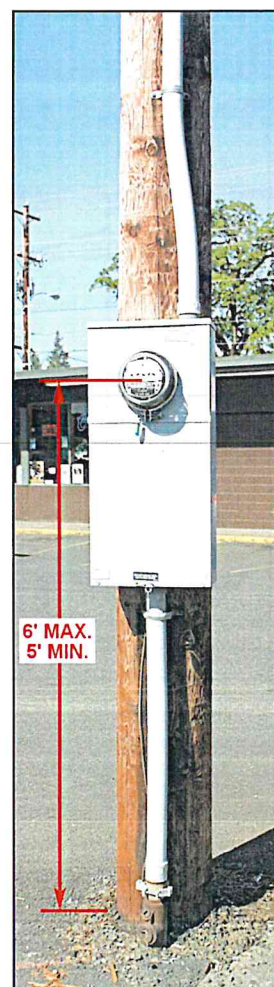


Figure 18: Meter Pole Equipment

Items Owned & Installed by Customer

1. Service entrance conductors - 18inches (min.) out of weatherhead
2. Weatherhead
3. Conduit and straps
4. Meter socket, disconnect switch, and service equipment, including grounds.

Items Owned by Customer & Installed by FGL&P

5. Meter pole

Items Owned & Installed by FGL&P

6. Meter
7. Service conductors
8. Insulated clevis

4 UNDERGROUND SERVICES

4.01 GENERAL REQUIREMENTS

The process of installing a new underground service to your home is a joint project between you and Forest Grove Light & Power. We request that several items be completed prior to connecting your service. Once these items are complete, Forest Grove Light & Power will install your service wire and new meter.

The items to be completed are:

- Contact Forest Grove Light & Power and request a new permanent service. Our telephone number is (503) 992-3250. If temporary service is needed, it may be requested at the same time.
- Obtain an electrical work permit from the Washington County Building Services Division.
- Install the new meter base. Refer to Section 2.04 for the location.
- Obtain underground locates and provide a trench to the Forest Grove Light & Power contact point. Install the service conduit in the trench. Contact FGLP (503) 992-3250 to arrange for inspection of trench and conduit prior to back filling trench.
- Install the service conduit on the building.
- If applicable, install the service conductor.
- Obtain the appropriate electrical inspection.

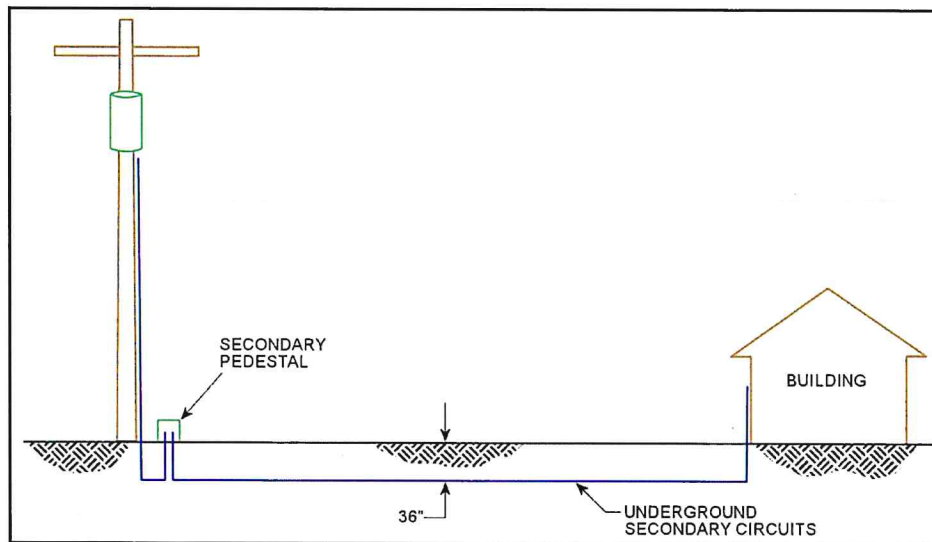


Figure 20: Typical Underground Service

After the above items have been completed, call the FGLP at (503) 992-3250 and inform him that the meter base has been inspected and you are ready for service. If clarification is needed on any of the items, please call Forest Grove Light & Power and someone will assist you.

NOTE: Please consult with Forest Grove Light & Power Engineering to determine the "A.I.C." rating that will be required for your equipment. Failure to do so may result in you having to replace your equipment at your cost and may cause delays in connecting the service.

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4.02 SERVICE LINE LOCATION

Forest Grove Light & Power requires that for an underground service, the cable route be through an area that will be accessible to excavation equipment in the future. In the event that the cable ever fails, this will enable the Utility to either replace or repair it more quickly. The area where the cable and conduit are run may need to be dug up if the conduit should collapse. Forest Grove Light & Power requires that all services be installed in electrical (grey) Schedule 40 PVC or better conduit. Also, a minimum clearance of 5 feet must be maintained from any sewer drain field, regardless of the type of construction used in the sewer system.

4.03 TRENCHING REQUIREMENTS

Survey Monuments

The State of Oregon administers state laws pertaining to removal or destruction of survey monuments. If you plan on doing *ANY* digging within one foot (1') of a survey monument or property corner, you are required to comply with all relevant codes and rules. This includes monuments and property pins you can see as well as monuments and property pins which are expected. You will need to contact a licensed land surveyor to meet this requirement.

Locates

Before digging, it is necessary to obtain locates for underground utilities in the area. Locates can be obtained by calling the Utility Notification Center at (503) 246-6699. The Center must be contacted 48 hours prior to performing any excavating. They will have representatives from the utilities visit the site to locate their facilities.

The locaters will drive stakes or spray paint directly over each utility, signifying its location. Each type of utility has a color assigned to its facilities. The color codes are red for electric, orange for communication, yellow for gas and oil, green for sewer, and blue for water.

Please note that some private water, irrigation, and similar utilities do not participate with the Utility Notification Center. These utilities will need to be notified directly by the excavator. Once all of the utilities have been located, any digging within two feet of the location mark must be done by hand.

General Requirements

The excavated trench must be free of sharp objects or obstructions that could damage the conduit. After the conduit is installed, the first 6 inches of cover should be earth which is free of large rocks, sharp objects, or scrap building materials. **The trench and conduit MUST be inspected by Forest Grove Light & Power prior to backfilling. A Utility personnel will apply a bright green sticker to the conduit after it has passed inspection.** The service will not be energized until adequate clearances have been provided and the trench has been backfilled and compacted. Mark the end of the conduit to allow the crews to find the conduit and connect to it. To schedule an inspection of the installed conduit and open trench, call FGLP at (503) 992-3250. Refer to Figure 21 for additional trenching details.

Service conductors (600 volts or less)

All trenches for underground service conductors and conduits must be between 36" and 40" deep. If other utilities share the trench with power, the trench should have a minimum width of 18 inches.

Primary Cables (15,000 volts)

All trenches for underground primary conductors and conduits must be between 48" and 52" deep. Trench width varies depending upon which utilities will share the trench. When power conduits cross over or under gas lines, a vertical separation of 12 inches is required.

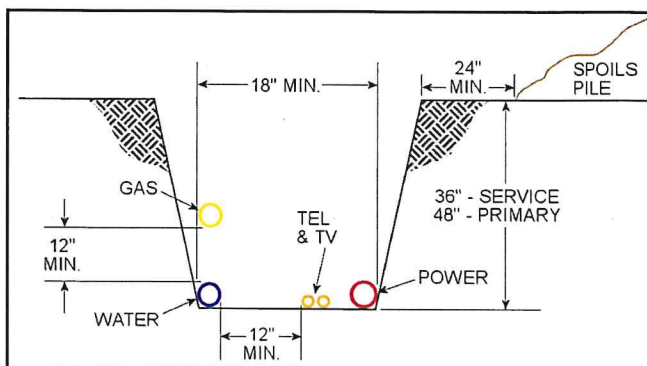


Figure 21: Trenching Details

4.04 UNDERGROUND SERVICE INSTALLATION

The location of the meter base has been marked on the building plans by the FGL&P Project Engineer. In general, it should be on the front wall or on a side wall within three feet of the front of the structure. The front is the portion facing normal public access. Locations that could have access restricted, such as carports, breezeways, or fenced yards, are not acceptable.

The maximum distance from the meter base to the serving transformer is 150 feet. If the meter base is further than this distance, please contact Forest Grove Light & Power. It may be necessary to modify the Department's facilities in order to provide power for the new service.

All service cables must be installed in conduit. The size and number of conduits installed depends on the size of the service:

Size of Service	No. of Phases	Nominal Diameter	No. of Conduits
0-200A	1 or 3	3"	1
201-400A	1 or 3	4"	1
401-600A	1 or 3	*4"	2
601-800A	3	4"	2
over 800A	3	4"	Consult Utility

*For 201-400A service a 3" conduit may be acceptable upon utility approval

In addition to the sweep at the pedestal (supplied by the Customer) and the sweep at the bottom of the meter base (supplied by the Customer), the service conduit run may contain NO MORE than one 90-degree bend or the equivalent. The sweeps must have a minimum radius of 36" unless approved by the utility.

Service conductors within a building or structure must be installed in rigid steel galvanized conduit or Schedule 80 PVC conduit. The total length of the raceway within the building to the customer's overcurrent protection shall be as short as possible. On an outside wall, service conductors may be installed in Schedule 40 PVC conduit, or equivalent. For locations where damage (such as from vehicles) may occur, Schedule 80 PVC or rigid steel conduit is required. Consult utility for clarification.

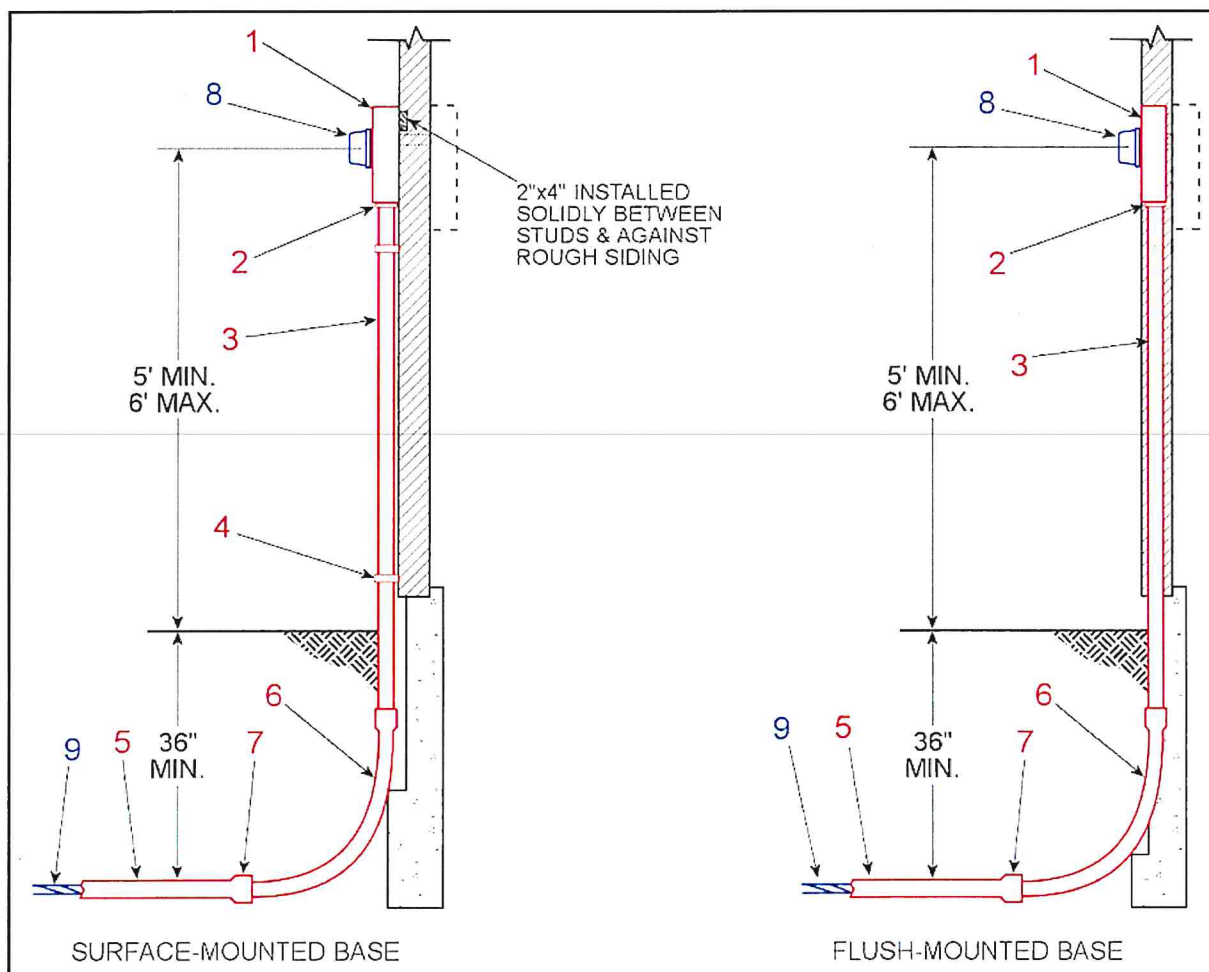


Figure 22: Underground Service Meter Installation

Items Installed by Customer

1. Meter base – 200 amp continuous rated
2. Lock nut & insulating bushing
3. Service conduit
4. Conduit strap
5. Service conduit in trench – Sch. 40 PVC, minimum*
6. Sweep, 90°, 36" minimum radius
7. Bell end of conduit

Items Installed by FGL&P

8. Meter
9. Service lateral conductor

* Conduit will be maintained by FGLP

4.05 METER PEDESTAL

Service, 0-200 amperes

Meter pedestals are to be constructed of metal which has been treated to protect it from deterioration; wood pedestals are **not** allowed. The pedestal must be set in concrete and plumb to the finished grade and the concrete must be rigid prior to the City connecting the service. It is to be situated near the front of the structure and located such that a meter reader is not required to enter an enclosed area. Please contact Forest Grove Light & Power for assistance in choosing your meter base location.

Factory-Built Meter Pedestal

Items Installed by Customer

1. Factory-built meter pedestal
2. Service conduit, 3" sch. 40 PVC min.*
3. Sweep, 3" sch. 40 PVC min., 24-inch min radius
4. Ground wire (in accordance with NEC)
5. Ground rods (two required)
6. 18"x18"x24" deep concrete stabilizer
7. Service conductor (from meter base to customer's load; size as needed per NEC)

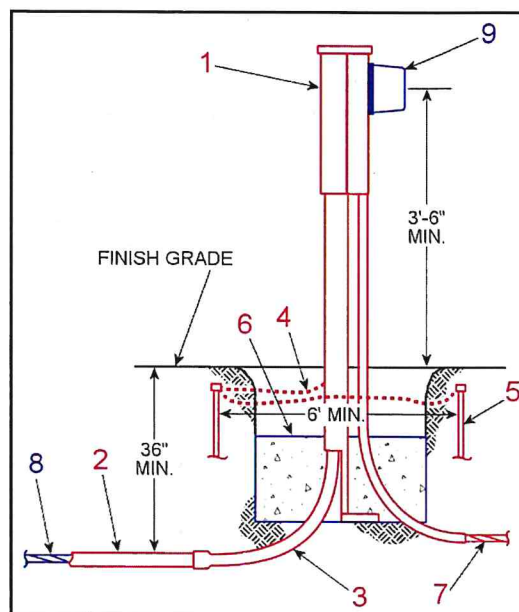


Figure 23: Factory-Built Meter Pedestal

Items Installed by FGL&P

8. Service conductor to the utility pedestal**
9. Meter

NOTE: Factory-built pedestals must have two separate raceways to isolate the Utility's service conductor from the customer's service conductor (NEC).

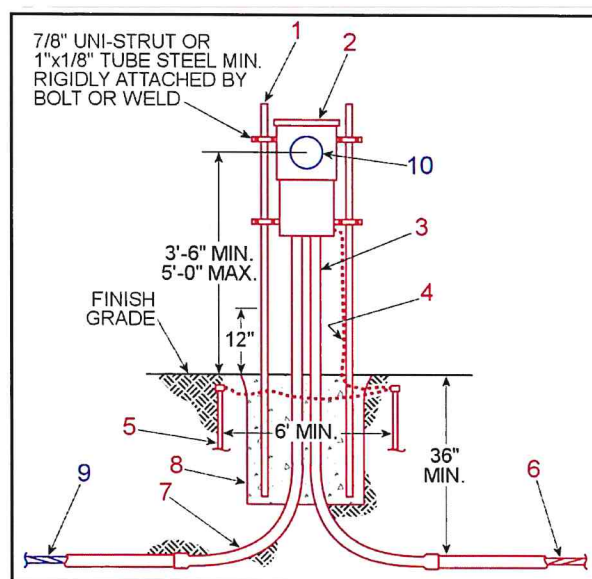


Figure 24: Site-Built Meter Pedestal

Site-Built Meter Pedestal

Items Installed by Customer

1. 1½" Unistrut or 2" galvanized steel pipe, min.
2. Meter base, service entrance equipment
3. Service conduit, 3" Sch. 40 PVC min.
4. Ground wire (in accordance with NEC)
5. Ground rods (two required)
6. Service conductor (from meter base to customer's load; size as needed per NEC)
7. Sweep, 3" Sch. 40 PVC min., 36-inch min. radius
8. 18"x18"x24" deep concrete stabilizer

Items installed by FGL&P

9. Service conductor to the utility pedestal
10. Meter

* Conduit will be maintained by FGL&P.

** Customer may be required to provide and install the service conductors.

5 CUSTOMER EQUIPMENT, DEVICES & CHARACTER OF SERVICE

5.01 GENERAL

Forest Grove Light & Power makes reasonable effort to prevent abnormal voltages and frequencies and loss of phase on its distribution system. However, such operating conditions can occur due to circumstances beyond the Utility's control. As such, the customer's equipment should be designed to afford protection against operating anomalies such as fault currents, under- and over-voltages, and, for three phase services, loss of phase.

Electric service supplied by Forest Grove Light & Power may be subjected to voltage disturbances which will not normally affect the performance of lighting, appliances, heating, motors, or other typical electrical equipment, but may result in the improper operation of voltage-sensitive equipment, such as computers or microprocessors. It is the customer's responsibility to provide those power conditioning devices that may be required to ensure the quality of power necessary for proper performance of voltage-sensitive equipment.

5.02 SINGLE-PHASE SERVICE

Single-phase service, if available, will be provided to customers upon request, except where the size of the service is more than 600 amperes. Three-phase service may be required where, in the Utility's judgment, the customer's connected load would be more efficiently supplied by three-phase. (e.g.-If there are large motors, heat pumps, or air conditioners.) All appropriate line extension charges will be born by the customer.

If the total load of a single phase service exceeds 4 kilowatts or if the rating of any single piece of equipment exceeds 2 kilowatts, the service may **not** be two wire 120V. The single phase service shall be three wire and the load shall be balanced on the ungrounded conductors as closely as practical.

Single phase motors larger than 5 horsepower and air conditioners or heat pumps larger than 3.5 tons may NOT be connected without prior approval from the Utility. Please note that single-phase motors larger than 3 horsepower may cause unavoidable voltage dips (light flicker). Any residential space heating or water-heating appliance having a total capacity greater than 11.5 kilowatts shall be designed and controlled so that not more than 11.5 kilowatts will be switched on or off at any one time.

5.03 THREE-PHASE SERVICE

Three-phase service, if available, will be provided to customers upon request, except where the total load is less than 10 kilowatts or the largest motor is less than 3 horsepower. All appropriate line extension charges will be born by the customer.

In areas with overhead distribution lines, either wye or delta connected three-phase service **may** be available. In areas with underground distribution lines, **only** wye connected three-phase service is available. The selection of the voltage to be supplied is at the option of the Utility and will depend upon the characteristics of the Utility's distribution system in the area and the customer's electrical needs.

The manner in which the single-phase loads of a three-phase service are connected is critical. For wye connected services, all single-phase loads should be split evenly among the three phases. For four wire delta connected services, only three-phase load shall be connected to the power leg. With prior permission, single phase 240 volt resistance heating equipment may be balanced across all three phases. Connections made otherwise may result in an overload or single-phase condition with the possibility of damage to the customer's three-phase equipment.

Normally, three-phase, 480-volt service will not be supplied where the total load to be served is less than 50 kilowatts, except where the load consists of a single motor, such as irrigation pumping, with a nameplate rating of at least 30 horsepower.

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The Utility, at its option, may limit the maximum load served through a single point of delivery to the capacity of the Utility's largest standard transformer(s). Customers requiring three-phase service should contact Forest Grove Light & Power in a sufficient amount of time to allow equipment to be ordered, received, and installed.

5.04 MOTOR PROTECTION AND STARTING

To assure adequate safety to personnel and equipment, the customer shall provide and maintain code-approved protective devices to protect all motors against overloading, short circuits, ground faults, and low voltage, and to protect all three-phase motors against loss of phase(s).

Reduced-voltage starters are usually required on motors rated in excess of 50 horsepower and motors that are rated in excess of 10 horsepower that are frequently started to minimize interference with service to other customers. The Utility will furnish information regarding allowable starting currents. The maximum starting current permitted will depend upon the frequency of start of the motor and the size and character of the customer's load.

If voltage fluctuations are caused on a service by the starting of motors on that service, the customer will be responsible for installing approved reduced-voltage starters. If these measures do not correct the problem, the Utility may install additional facilities at the customer's expense.

5.05 INTERFERING LOADS

The customer's electrical equipment and devices are to have characteristics that efficiently utilize the Utility distribution system and do not adversely affect any of the Utility's facilities. This includes maintaining an average total harmonic distortion (THD) level of the load current that is consistent with the IEEE 519 standard for distribution system customers. In addition, the customer's equipment may not cause interference with the electric service to other customers.

In the event that a customer's equipment causes problems, the customer shall modify their equipment to eliminate the interference. Where corrective measures taken by the customer do not correct the problem, the Utility, at its option, may install additional facilities, such as separate service entrances, separate transformers, capacitor banks, or separate primary distribution lines, at the customer's expense.

The Utility reserves the right to inspect and test any equipment connected to its lines and to require any information necessary to determine the operating characteristics of the equipment. Prior to purchase, the customer shall submit information to the Utility regarding all equipment which might cause interference with service to other customers or require additional facilities for its satisfactory operation. Typical examples of this type of equipment include large motors (over 30hp), variable speed drives, large UPS systems, induction heating equipment, X-ray machines, large inductive loads, and any equipment which generates significant amounts of harmonics.

5.06 POWER FACTOR

The Utility's current rate schedules specify a charge for excessive reactive demand, which may cause inferior performance of the customer's electrical system. It is recommended that the customer install corrective devices, such as capacitors, to make the most effective use of the electrical system and minimize or eliminate the reactive demand charge.

5.07 AVAILABLE FAULT CURRENT

Upon request, the Utility will supply the information on available fault current at the customer's service entrance. It is the customer's responsibility to install equipment which will withstand that fault current.

5.08 EMERGENCY AND STANDBY GENERATORS

Emergency or standby generators are to be connected to the customer's wiring system by a permanently installed transfer switch intended for that purpose. The transfer switch is to be designed and installed so that connection of the generator to the Utility system is prevented for **all** modes of operation. Compliance with these provisions is necessary to prevent serious or possible fatal accidents. **Portable generators shall not be connected to a permanent wiring system at any time.**

All transfer switches and/or transfer operating schemes must be inspected by the Utility Electrical Engineer, as well as the appropriate governmental inspector(s).

5.09 PARALLEL GENERATION AND COGENERATION

Parallel generation is the production of electric energy where sources of generation other than the Utility's are connected for parallel operation with the Utility's system. Such sources, when customer-owned, may provide all or part of their output to the Utility and may include, but are not limited to, wind turbines, waterwheels, steam turbines, solar conversion, and geothermal devices.

Cogeneration is the joint production of electric energy and useful thermal energy in a combined process. These sources may include, but are not limited to, gas turbines, diesel-driven generators with waste heat recovery, and steam or back-pressure turbines.

Each proposal for either parallel generation or cogeneration will be handled on an individual basis and will require a special contract between the customer and the Utility.

The operation of the parallel generation or cogeneration system must be approved by the Utility. The metering location, type of metering, and the method of interconnecting the customer's and the Utility's systems will be designated by the Utility.

GLOSSARY

AIC - Available Interruptible Current

Amps - The unit of measure for current.

ANSI - American National Standard Institute

Approved - Acceptable to the authority having jurisdiction.

Clearance - A set distance between two objects.

Common Ground Point - The conductor used to connect the grounding electrode to the equipment grounding conductor and/or to the grounded conductor of the circuit at the service.

Conduit - A listed or approved wireway with a smooth interior surface to permit easy drawing-in of the electrical conductors. A conduit may be metallic or non-metallic, depending on its usage, in accordance with codes and Forest Grove Light & Power standards. Note: non-metallic conduit must be gray in color.

Corrosion Inhibitor - Electrical joint compound used to retard oxidation of electrical connections.

County Inspector - The qualified representative of the County of Washington Building Services Division who has been authorized by governmental agencies to inspect electrical service installations on their behalf.

Current - The flow of electricity between two conductors or a conductor and ground due to a voltage. It is measured in "amps".

Demand - The maximum average kilowatt load used by the customer for a specific period of time during the billing period.

Direct Burial - The installation of electrical conductors in a trench without the use of conduit.

Drip Loop - A loop formed in overhead secondary conductors at the weatherhead to prevent water from entering the service entrance conduit and equipment.

Enclosure - A cabinet designed for surface or flush mounting and provided with a frame, mat or trim in which doors or removable covers are hung.

Face of the Pole - The side of the pole with the date stamp embedded in the pole.

Ganged Meter Base - A single enclosure which houses more than one revenue electric meter.

Group Installation - More than one electrical device, such as panels, meters, motors, etc., connected together by a common electric circuit.

Guying - Cables or braces used to relieve the strain of overhead conductors on masts and poles.

Instrument Transformer - Current and/or potential transformers used with metering equipment to monitor high current and/or voltage.

Manual Circuit-Closing Block - A provision for paralleling the meter circuit, allowing the meter to be removed without interrupting service to the customer.

Meter Base (also meter socket) - The mounting device consisting of meter jaws, connectors, and enclosure for accommodating socket-type meters.

Meter Equipment - Any equipment associated with measuring electric energy.

Meter Jaw - A spring-loaded receptacle installed inside a meter socket, interfacing the terminals of the meter to the source and load conductors of the service.

Meter Pole - A pole which supports the metering equipment. The pole is owned and maintained by the customer.

Metering Room - A permanently dedicated and secured room, used for the installation and maintenance of the customer's electrical metering equipment. This room may not be used for storage. It must have minimum door dimensions of not less than 2 feet 8 inches by 6 feet 8 inches and must provide all required clearances.

NEC - National Electrical Code

NESC - National Electrical Safety Code

Neutral - The grounded conductor in a single-phase, three-wire or three-phase, four-wire system. The service conductor that is at zero potential to ground.

FGL&P ELECTRIC SERVICE HANDBOOK 2019

Operations Superintendent - The designated representative of Forest Grove Light & Power responsible for scheduling all work and construction activities. The Operations Superintendent inspects work performed by customers, including trenching, conduit, and vaults.

OAR - Oregon Administrative Rule

Point of Delivery - The point at which Forest Grove Light & Power's circuit and the customer's system are interconnected. The customer is responsible for the purchase, installation, and maintenance of all equipment on the load side of this point.

Power - The measure of the amount of energy transferred over a period of time. It is typically measured in "kilowatts".

Power Factor - The measure of the non-useful work required by electrical equipment, such as motors, transformers, and fluorescent lights.

Power Leg (also wild, delta, or high leg) - The phase leg of a delta service that has only three phase load connected to it (ie-no single phase loads). This leg shall be identified in red.

Project Engineer - The designated representative of Forest Grove Light & Power who is responsible for the design and/or coordination of new and modified services for Forest Grove Light & Power customers. The Project Engineer responds to inquiries on policies, standards, practices, rates, and energy utilization.

Revenue Meter - A device used to measure the amount of electrical energy consumed by a customer.

Seal - The locking device used to secure meter and/or service entrance equipment to assure safety and security for the unit.

Secondary Voltage - The lower voltage, after transformation, used to supply the customer with electrical energy. Normally less than 600 volts.

Select Backfill - Native soil or soil brought in from another area, free from sharp objects, rocks, scrap building material, and corrosive material.

Self-Contained - In reference to meter sockets: a device designed and rated to continuously carry the entire capacity of the service entrance equipment.

Service Drop - The overhead conductors from Forest Grove Light & Power's system to the customer's point of attachment.

Service Entrance Conductors - Those conductors which extend between the customer's load center and point of delivery.

Service Entrance Equipment - Service conduit, conductors, weatherhead, meter base, enclosures, service disconnect and load center.

Service Mast - The conduit above the meter used to provide mechanical protection for the overhead service conductors and to support the service drop from Forest Grove Light & Power's system.

Standards - Authorized design principles applied to engineering, construction, and operation of Forest Grove Light & Power's electrical facilities.

Temporary Service - An electrical service installed by Forest Grove Light & Power to provide power to a customer on a temporary basis. Temporary service may be provided for up to four months.

Transformer - A device used to change the voltage to a level which can be utilized by the customer.

UL (Underwriters' Laboratories) - A nationally-recognized test laboratory which lists materials it has tested and accepted.

Voltage - A difference in electric potential between two conductors or a conductor and ground. It is measured in "volts".

Watt - The unit of measure for power.

SOURCES

The following national standards were used to compile the information in this booklet:

ANSI	05.1	American National Standards Institute
AWPA	C4	American Wood Products Association
EUSERC		Electric Utility Service Equipment Requirements Committee
NEC	200-6	Identifying Grounded Conductors
NEC	225-18	Clearance from Ground
NEC	225-19	Clearances from Buildings for Conductors of Not Over 600 Volts, Nominal
NEC	230	Services
NEC	250	Grounding
NEC	300-5	Wiring Methods, Underground Installations
NEC	310-12	Conductor Identification
NEC	310-14	Aluminum Conductors
NEC	550-32	Mobile Home Service Equipment
NESC	150	Current Transformers
NESC	232	Vertical Clearances of Wires and Conductors above Ground and Roads
NESC	234	Clearances of Wires and Conductors from Buildings

EXHIBIT D

Fire Department
Conditions of Approval
West Grove Apartments
311-22-000028-PLNG
10/18/2022

1. Post an approved address sign out on the main entrance to the complex. Each number shall be at least 6 inches high, contrast the background they are mounted on, and be clearly visible from both directions of travel on 26th Avenue
2. Post address signs on each building indicating the four digit street number in minimum height numbers of 6 inches high. This numbering shall be clearly visible, so it's easily seen from the access road, and not blocked by trees, carports, or other construction features. Unit numbers shall also be posted clearly visible on the building, near the entrances to each, and be at least four inches in height.
3. Post no parking fire lane signs in the following locations:
 - a. Both sides of the entire length of the main entrance road
 - b. Along all identified fire department turn arounds
 - c. Throughout the entire length of the exit only lane
4. FDC for sprinkler system shall be a 4 inch Storz thread type, and be mounted on a 30 degree downward sweep
5. Locate Knox key boxes at the door to every fire sprinkler riser room, key boxes shall be mounted between four and five feet above finish grade.
6. Locate a minimum rated 2A 10B C portable fire extinguisher in approved locations at the common area for each floor of each of the apartment buildings.

David Nemeyer

Division Chief – Fire & Life Safety

Forest Grove Fire & Rescue

1919 Ash Street

Forest Grove, Oregon 97116

Desk: 503.992.3177

dnemeyer@forestgrove-or.gov

EXHIBIT E – DEVELOPMENT CODE STANDARDS & SPECIFICATIONS

- 1) The applicant shall comply with all applicable City building and development standards, including all dimensional standards and public works specifications.
- 2) All signage (including but not limited to, street names, vehicular parking restrictions, and vehicular and pedestrian traffic protection and direction) for public rights-of-way and easements; pavement striping and marking; and pavement reflectors (including, but not limited to, blue fire hydrant markers), shall be shown on the approved plans and installed by the developer. To minimize conflict with driveway locations and street trees, signs shall be attached to light poles wherever possible (DC §17.8.525 *Design Standards*).
- 3) All utility connections shall be underground (DC §17.8.645(A) *Underground Utilities*).
- 4) All lighting shall comply with the provisions of DC §17.8.755(C) *Pedestrian Lighting Standards* and §17.8.755(D) *Lighting Standards for Multi-Unit Development*.
- 5) Fences within the side and rear yards are limited to a height of six feet. The fence may be placed on the property line but shall be reduced to a height of 3½ feet in the required front yard (DC §17.7.040(B) *Fences*).
- 6) Private open space shall be separated from common open space through the use of perimeter landscaping, fencing or a change in vertical grade (e.g., second floor balconies) (DC §17.8.205(C)(4) *Open Space, Recreational Facilities, and Common Areas*).
- 7) All condominium, two-family dwellings and multi-family dwellings of 20 units or more, residential care facilities, residential care institutions and nursing or convalescent homes shall improve one-half of the required open space as recreation space. Recreation space shall be planted in grass and/or improved for recreational use, and have a minimum area of 870 square feet and a minimum dimension of 20 feet. For two-family and multi-family dwellings, the recreational area shall include a children's play area. A fence shall be installed that is a minimum of 30 inches in height to separate a parking lot, street or driveway from any children's play area (DC §17.8.205(C)(2) *Open Space, Recreational Facilities, and Common Areas*).
- 8) Service drives for multi-family dwellings shall be fully improved with hard surface pavement with a minimum width of:
 1. Twelve feet when accommodating one-way traffic; or
 2. Twenty feet when accommodating two-way traffic.In no case shall the design of said service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street (DC §17.8.120(C) *Minimum Access Requirements for Residential Uses*).
- 9) Private residential access drives shall be provided and maintained in accordance with the provisions of the Uniform Fire Code (DC §17.8.120(D) *Minimum Access Requirements for Residential Uses*).
- 10) Minimum driveway widths at the street right-of-way line shall be 15 feet for institutional, commercial, industrial and multi-family residential uses, and ten feet for single-family and two-family residential uses (DC §17.8.130 *Width and Locations of Driveways and Curb Cuts*).
- 11) Parking space configuration, stall and access aisle size shall be of sufficient width for all vehicles turning and maneuvering, based on the standards shown in DC §17.8.525 Figures 8-10 and 8-11 (DC §17.8.525(D) *Off-Street Parking and Loading*).
- 12) Except for single-family and duplex residences, any area intended to be used to meet the off-street parking requirements shall have all parking spaces clearly marked using

permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of traffic flow and maintain vehicular and pedestrian safety (DC §17.8.525(E) *Off-Street Parking and Loading*).

- 13) Except for single-family and duplex residences, 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. Where possible, pervious surfacing should be used for off-street parking areas (DC §17.8.525(F) *Off-Street Parking and Loading*).

West Grove Apartments Design Review Application

Date: October 2022

Submitted to: City of Forest Grove
1924 Council Street
Forest Grove, OR 97116

Applicant: Creekwood Homes, Inc.
PO Box 1785
North Plains, OR 97133

AKS Job Number: 9240



12965 SW Herman Road, Suite 100
Tualatin, OR 97062
(503) 563-6151

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Exhibits

- Exhibit A: Preliminary Plans
- Exhibit B: City Land Use Application Form
- Exhibit C: Property Ownership Information
- Exhibit D: Washington County Tax Assessor's Map
- Exhibit E: CWS Service Provider Letter
- Exhibit F: Geotechnical Engineering Report
- Exhibit G: Preliminary Stormwater Report
- Exhibit G: Neighborhood Meeting Materials

West Grove Apartments Design Review Application

Submitted to:	City of Forest Grove 1924 Council Street Forest Grove, OR 97116
Applicant:	Creekwood Homes, Inc. PO Box 1785 North Plains, OR 97133
Property Owners:	Creekwood Homes, Inc. PO Box 1785 North Plains, OR 97133
Applicant's Consultant:	AKS Engineering & Forestry, LLC 12965 SW Herman Road, Suite 100 Tualatin, OR 97062 Contact(s): Tony Mills Email: millst@aks-eng.com Phone: (503) 563-6151
Site Location:	2230 & 2320 26 th Avenue
Washington County Assessor's Map:	1N 3 31CA Tax Lot 1500 & 1700
Site Size:	2.29 acres
Land Use Districts:	Multi-Unit (High) Residential



I. Executive Summary

On behalf of Creekwood Homes, Inc. (Applicant), AKS Engineering & Forestry is submitting this Design Review application for a 45-unit multi-family apartment project in the City of Forest Grove (City). This project involves infill development of a ±2.29-acre property located south of SW 26th Avenue in an area zoned for higher-density residential uses (Multi-Unit High Residential (RMH)) but is occupied by traditional single-family residential dwellings. The site is a unique shape resulting from combining a flag lot with a 20-foot wide accessway and a standard rectangular-shaped property (±139 feet wide). Both properties have frontage along (and access to) SW 26th Avenue.

This site plan intends to provide a multi-unit apartment consistent with the RMH zoning designation while being compatible with the surrounding properties. One of the primary ways the preliminary plans attempt this is by establishing a large buffer area around the property's perimeter. Laying out the site this way creates some spatial restrictions on the interior. To provide a buffer from the surrounding properties and meet basic code requirements for access, the applicant is requesting an adjustment to some of the preferable typical interior design standards for this type of project. The project includes:

- 4 multi-dwelling buildings
- 45 Dwelling Units
- A management office
- A ±3,700 SF Open Space/ Recreation Area
- ±70 Off Street Parking Spaces (covered and uncovered)
- ±20 Bicycle parking spaces
- Two direct pedestrian connections to SW 26th Ave
- Emergency vehicles turn around areas consistent with Oregon Fire Code
- One-way emergency vehicle egress

This written narrative, together with preliminary plans and other documentation included in the application materials, establishes that the application is in compliance with all applicable approval criteria. This documentation represents substantial evidence and provides the basis for the Planning Commission to approve of the application.

II. Site Description/Setting

The subject site is a ±2.29-acre property comprised of two tax lots (Washington County Assessor's Map 1N 3 31CA, Tax Lots 1500 and 1700) situated in the City of Forest Grove's Multi-Unit High Residential zone (RH). Tax Lot 1500 is a standard ±1.23-acre lot occupied by a single-family residence. Tax Lot 1700 is a ±1.06-acre flag lot occupied by a single-family dwelling. Properties abutting the project site are predominantly occupied by single-family residential dwellings and situated within the RMH zone. Pacific University owns the abutting vacant property to the southeast. Access to each lot is provided via established driveway connections to 26th Avenue. The project site is ±275 feet east of the intersection between 26th Avenue and Sunset Drive. According to the Forest Grove Transportation System Plan (TSP), 26th Avenue is classified as a collector. Existing sanitary sewer, water, stormwater, and franchise utilities are available to the site within 26th Avenue right-of-way. The subject properties are relatively flat (less than 5 percent slope). There are no mapped wetlands on the site, but it is within a potential area of impact to a Clean Water Services (CWS) vegetative corridor.

III. Applicable Review Criteria

This apartment project is a “needed housing” application under Oregon Revised Statute (ORS) 197.303(1)(a) as it provides housing within an urban growth boundary. ORS 197.307(4) states that a local government may apply only clear and objective standards, conditions, and procedures regulating the development of needed housing, and such standards, conditions, and procedures cannot have the effect, either in themselves or cumulatively, of discouraging needed housing through unreasonable cost or delay.

Oregon Courts and the Land Use Board of Appeals (LUBA), have generally held that an approval standard is not clear and objective if it imposes on an applicant “subjective, value-laden analyses that are designed to balance or mitigate impacts of the development.” *Rogue Valley Association of Realtors v. City of Ashland*, 35 Or LUBA 139, 158 (1998) *aff’d*, 158 Or App 1 (1999). ORS 197.831 places the burden on local governments to demonstrate that the standards and conditions placed on needed housing applications can be imposed only in a clear and objective manner. While this application addresses all standards and conditions, the Applicant reserves the right to object to the enforcement of standards or conditions that are not clear and objective and does not waive its right to assert that the needed housing statutes apply to this application. The exceptions in ORS 197.307(4)(a) and 197.307(5) do not apply to this application. ORS 197.307(7)(a) is controlled by ORS 197.307(4). The City has not taken an exception under 197.303(3).

This Application is also a “limited land use application” as that term is defined in ORS 197.015 (12). ORS 197.195 (1) describes how certain standards can be applied to a limited land use application.

FOREST GROVE DEVELOPMENT CODE

ARTICLE 2 LAND USE REVIEWS

APPLICATION PROCESS AND PROCEDURES

17.1.205 CONSOLIDATED REVIEW.

Where a proposal involves more than one application for the same property, the applicant may submit concurrent applications. The applications shall be consolidated for review in accordance with the highest numbered procedure. For example, a minor adjustment (Type I) can be consolidated with a conditional use (Type III), but it will be subject to Type III procedures.

Response: This application includes a Design Review and an Adjustment. Per Section 17.2.330 of the Forest Grove Development Code, a Design Review for multi-dwelling developments with more than five units must be reviewed through a Type III process. According to Section 17.2.110, an Adjustment is examined through a Type I or II process. Per Section 17.1.205, this application is anticipated to be reviewed through the Type III process outlined in 17.1.600.

17.1.210 INITIATION AND WITHDRAWAL OF LAND USE APPLICATION.

Land use applications shall be initiated by one of the following:

- A. Application by all the owners or all the contract purchasers of the subject property, or any person authorized in writing to act as agent of the owner or contract purchasers;
- B. The City Council ;
- C. The Planning Commission;
- D. The Community Development Director ; or

-
- E. Public agencies or utilities that have statutory rights of eminent domain for projects they have the authority to construct.

The Director may withdraw any application at the written request of the applicant, prior to the final written decision.

Fees for applications withdrawn at the request of the applicant shall be refunded, less the actual costs incurred by the city in processing the application.

Response: This application has been prepared and submitted on behalf of Creekwood Homes, Inc. Creekwood Homes is currently under contract to purchase the property. The requirements of Section 17.1.210 are satisfied.

17.1.215 PRE-APPLICATION CONFERENCE.

The Director shall not accept a Type II, III or IV land use application for processing unless the applicant or the applicant's representative has attended a pre-application conference, or the Director has, in his or her discretion, signed a waiver of the pre-application conference.

The purpose of the pre-application conference is to acquaint the applicant with the requirements of this Code, the Comprehensive Plan and other relevant criteria. It is designed to assist the applicant. The applicant assumes the risk for delays or other problems caused by failure to attend a pre-application conference. It is impossible, however, for the pre-application conference to be an exhaustive review of all potential issues and the conference shall not prevent the city from enforcing all applicable regulations.

To schedule a pre-application conference, the applicant shall submit a completed and signed conference request form and the following information:

- A. A short narrative describing the proposal, including at minimum:
 - 1. Proposed use ;
 - 2. Size of buildings and/or number and types of residential units;
 - 3. Approximate building heights ; and
 - 4. Other information as applicable, such as:
 - a. Number of employees ;
 - b. Use of hazardous materials (including general quantity and type); and
 - c. Any known special conditions applicable to the site or proposed development .
- B. A conceptual site plan ; and
- C. The appropriate fee.

The Director shall schedule the pre-application conference within seven working days of the request. The Director shall identify and prepare a summary of topics to be discussed and shall provide the applicant with a written summary of the conference.

If a complete application relating to the proposed development action that was the subject of the pre- application conference has not been submitted within one year of the conference, a new pre-application conference or waiver is required.

Response: This application involves a Design Review for a multi-dwelling apartment with more than five dwelling units. Consistent with 17.2.230, the project will be reviewed following the Type III process outlined in 17.1.600. Consistent with the requirements in 17.1.215, a Pre-

Application Conference for this project was held on February 2nd, 2022. This requirement is satisfied.

17.1.220 NEIGHBORHOOD MEETING.

When the Director determines that a proposed project has the potential to raise concerns of neighborhood or community impact, the applicant shall initiate, attend and conduct a neighborhood meeting. The purpose of the neighborhood meeting is to allow the neighbors and other interested parties to become familiar with the proposal and to identify issues that may be associated with an application . The Director shall identify the need for the meeting within seven days after the pre-application conference is held.

The neighborhood meeting is intended to result in an application that is responsive to neighborhood concerns, reducing the likelihood for delays and appeals of the application . The city expects an applicant to take the reasonable concerns and recommendations of the neighborhood into consideration when preparing an application . The city expects the neighbors will work with the applicant to provide such input.

Neighborhood meetings must be conducted before the city will accept an application on any portion of the proposal. The applicant can request a sign-in sheet from the Community Development Department or provide his or her own sign-in sheet, which must be completed on the night of the neighborhood meeting and submitted to the city at the time of application as verification that the meeting was held. The sign-in sheet should indicate the date, time and location of the meeting, a brief heading describing the subject of the proposal, and the signatures of those in attendance at the meeting. The city shall retain the sign-in sheet as part of the record in the land use case file.

Those notified of the neighborhood meeting shall, at minimum, include all surrounding property owners and residents located at the notification distance of the greatest level permit or 300 feet if the permit type is not known, as well as any other interested parties identified by the Director .

Response: A neighborhood meeting for this project was held on June 20th, 2022. The Neighborhood Meeting Materials in Exhibit G include a summary of the meeting.

17.1.225 APPLICATION CONTENTS

A land use application shall consist of at least the following:

- A. A completed city application form with the following information:
 - 1. Property description and assessor map parcel number(s);
 - 2. Name, address, telephone number of the applicant(s), property owner(s) or contract purchaser(s), and, if applicable, the same information of the authorized agent of the applicant, property owner or contract purchaser
 - 3. A complete list of the approvals sought by the applicant.

Response: A completed and signed land use application form is included in Exhibit B. This requirement is satisfied.

- B. A narrative description of the proposed development, existing site conditions, and pertinent background information.
- C. Findings that discuss how the approval criteria of the Code are or can be met.

Response: This written narrative includes a project overview, findings demonstrating how the project is consistent with the applicable criteria, and a description of the existing site conditions. This requirement is satisfied.

- D. A transportation study is required when determined by the City at a pre-application conference the proposed project would have traffic circulation or safety impacts, need for off-site street improvements or would increase traffic on adjacent streets by at least 50 peak hourly trips, or at least 500 average daily trips, or a Transportation Impact Study is required by the Oregon Department of Transportation or Washington County Department of Land Use and Transportation. The transportation study shall be prepared under the supervision of professional engineer qualified in the traffic engineering field as defined by OAR 820-040-0030. The transportation study shall include the expected trip generation of the proposed development including the weekday AM peak hour, PM peak hour, and daily traffic estimates. The transportation study shall identify all site-access points and intersections (signalized and unsignalized) adjacent to the development site. If the development site fronts an arterial or collector street the analysis shall identify and assess all intersections within ¼ mile of the development site.

Response: Per comments from City Staff, the planned apartment is not anticipated to generate enough daily or peak-hour trips to necessitate a transportation study. Therefore, this requirement is not applicable.

- E. Duplicates of the above information as required by the Director. (Note: The pre-application conference summary will provide guidance on what specific information is required and how many copies must be submitted.)

Response: Consistent with the request from city staff, the necessary application materials have been provided.

- F. All required application fees.

Response: The necessary fees have been provided by the applicant in accordance with the City's fee schedule.

TYPE III PROCESS – QUASI-JUDICIAL LAND USE DECISIONS

17.1.605 TYPE III APPLICATIONS AND APPROVAL CRITERIA.

Applications so designated throughout the Development Code are reviewed under the Type III process based on the requirements and criteria for each application set forth in other sections of this Code. Examples of these applications include:

- Quasi-Judicial Zoning Map Amendments with review by Planning Commission and approval by City Council
- New Conditional Use Permit or Major Modification of Use Permit
- Certain types of Design Review
- Variance
- Elevation by Director of a Type II permit
- Preliminary Plan for Planned Development
- Demolition or relocation of Historic Landmark
- Manufactured Dwelling Parks
- Removal of Registered Tree from the Register

· Certain Types of Wireless Communication Facilities

Any application that is not specifically designated in the Code as being under one of the four review processes, and which the Director determines is similar in impact and scope to other Type III applications, shall be processed as a Type III application.

Response: Per Section 17.2.300, new multi-unit developments with more than five units must be reviewed following the Type III process. This project involves ±45 dwelling units. Therefore, this application will be reviewed through the Type III Quasi-Judicial Process.

ADJUSTMENT

17.2.100 PURPOSE.

The adjustment process provides a mechanism by which the Director may make limited modifications to yard setback, height and lot coverage standards. Adjustment reviews provide limited flexibility for unusual situations if the proposed development continues to meet the intended purpose of the regulations.

§ 17.2.110 PROCEDURE.

- A. Requests for changes of less than 10% of the setback, height or lot coverage standard shall follow the Type I process.
- B. Requests for changes from 10% to 20% of the setback, height or lot coverage standard shall follow the Type II process.
- C. Requests for changes to standards other than setback, height or lot coverage, or which are for more than 20% of the setback, height or lot coverage standard are processed as variances under § 17.2.700.

Response:

17.2.120 REVIEW CRITERIA.

- A. Type I Adjustment Process.
 - 1. The requested adjustment is for less than 10% of the setback, height or lot coverage standard; and
 - 2. Granting adjustment shall be consistent with the purpose of the affected zoning.

Response: Per 17.8.140.A.1.b, dwellings are required to be separated 10 feet from pedestrian pathways. As shown on the Preliminary Plans (Exhibit A), the east and west facades of Building 3 are 9.78 feet from the planned pedestrian path. The eastern portion of Building 3's southern exterior is 8 feet from the pedestrian path. Therefore, an adjustment is necessary. A 10 to 20 percent reduction in this standard is one-to-two feet, and the applicant is requesting a two-foot encroachment into the 10-foot setback meaning this request qualifies for a Type II Adjustment Review. Building 3 is intended to include a mix of dwellings and the apartment management office. The office will be located on the first floor of the western portion of the building, where the most significant reduction is necessary. The adjustment is essential to maintain an exterior buffer from the neighboring properties and the minimum vehicle and pedestrian access requirements.

DESIGN REVIEW

17.2.310 APPLICABILITY.

Design review is required for the following:

[...]

B. New multi-unit developments;

[...]

Response: Per 17.2.300, Design Review approval is required for a new multi-unit project. As demonstrated in the Preliminary Plans (Exhibit A), the applicant desires to follow the clear and objective Track 1-Development Standards in the Design Guideline Handbook. The applicable Design Review submittal requirements, as discussed at the pre-application conference, are included in this application.

17.2.320 OVERVIEW OF PROCESS.

Design review applications will be processed in one of two tracks: Development Standards or Design Guidelines. The applicant shall identify the desired tract as part of the initial application. The tracks are described as follows:

Track 1-Development Standards. Applications are required to meet the clear and objective development standards which are provided in the Development Code. These requirements are intended to be specific and directive. The purpose is to establish a baseline for site plan design which works in conjunction with other requirements of the Development Code.

Track 2-Design Guidelines. Applications allow more flexibility in terms of design. Under this process the applicant shall be held to the intent of the standards, but is allowed to vary from these standards if demonstrated that related guidelines and objectives are adequately addressed and that the deviation results in a higher quality development than would result under a strict interpretation of the Code.

Response: The applicant desires to follow Track 1-Development Standards for this Design Review application. As demonstrated throughout this application, the applicable clear and objective development standards are satisfied.

17.2.330 PROCEDURE.

The design review applicant must select one of two design review tracks: (1) development standards track or the (2) design guidelines track. Depending upon the tract and specific characteristics of the project, these are reviewed under a Type II or Type III procedure, as described below.

A. Track 1 – Development Standards. Applications shall be reviewed under a Type II or III procedures as outlined below:

1. Type II Review. The Director is the review authority for the following Track 1 – Design Standards applications :
 - a. Multi-family developments with three to five units; and
 - b. Commercial alterations, remodels, renovation and new construction of less than 10,000 square feet.
2. Type III Review. The Planning Commission is the review authority for the following Track 1 design review applications :
 - a. Multi-family developments with more than six units;
 - b. Commercial alterations, remodels, renovation and new construction of more than 10,000 square feet; and
 - c. Any Type II design review application elevated by the Director to the Type III procedure.

Response: As stated above, this application will follow the Track 1 Design Review process. The application is for a multi-unit apartment project including more than six units; therefore, a Type III review process applies with the Planning Commission as the review authority.

17.2.340 SUBMITTAL REQUIREMENTS.

In addition to the standard submittal requirements for a Type II or Type III application, and the submittal requirements of a site plan in § 17.2.440, the following documents are required for Design Review. Plans shall be drawn to scale and fully dimensioned. At the pre-application conference, the Director may specify more detailed submittal requirements or waive specific submittal requirements if warranted.

- A. Architectural drawings, renderings, sketches and a materials board showing all elevations of proposed buildings as they will appear on completion.
- B. All existing and proposed walls and fences, including the location, height, type of design and composition.
- C. An open space plan showing the locations and dimensions of common and private open space, including active and passive recreational areas.

Response: The applicable Design Review submittal requirements, as discussed at the pre-application conference, are included in this application. These requirements are satisfied.

17.2.350 REVIEW CRITERIA.

Projects subject to design review by the Director (Type II) or the Design Review Commission (Type III) shall be evaluated based on the following:

- A. The development standards of the applicable zoning district and any overlay district;
- B. The general development standards of Article 8;
- C. Departures from code requirements may be permitted as part of a Track 2 Design Review Process, when the following criteria are met.
 - 1. The design guidelines contained in the applicable section of the “Design Guideline Handbook” are adequately addressed.
 - 2. The applicant demonstrates that the overall development would result in a development that better meets the intent of the design guidelines than a design that simply meets the Code.

Response: The applicable sections of the Residential Zoning Standards of Article 3 and the General Development Standards of Article 8 are addressed in the Preliminary Plans (Exhibit A) and throughout this written narrative. This application demonstrates compliance with the Track 1 Development Standards. As such, it is not anticipated that the Track 2 Design Standards must be addressed.

SITE DEVELOPMENT REVIEW

[...]

17.2.410 APPLICABILITY.

Site development review is required for the following:

- A. All new development of vacant sites (with the exception of the exemptions listed below);
- B. An expansion of 20% or more of the existing building square footage on the development site;

-
- C. A new parking lot or 20% expansion of an existing parking lot that is not associated with new commercial or multi-family development;
 - D. Any change of use (according to use table of applicable zoning district);
 - E. As part of a Master Plan application (§§ 17.4.100 et seq);
 - F. As part of a Conditional Use permit application (§ 17.2.200); and
 - G. As part of a Design Review application (§§ 17.2.300 et seq).

17.2.420 EXEMPTIONS.

The following development is exempt from site development review:

- A. Home occupations;
- B. Family day care; and
- C. Accessory structures.

Response: As stated above, Site Development Review applies to new development of vacant sites and as part of a Design Review application; therefore, this section applies to the apartment project application.

17.2.430 PROCEDURE.

Site development review is categorized as a Type I procedure for one single-family detached dwelling on an individual lot; one duplex on an individual lot; one manufactured home on an individual lot. All other site development reviews shall follow the Type II procedure unless exempt.

Response: This Site Development Review application is consolidated with the Design Review application. Therefore, a Type III process will be followed.

17.2.440 SUBMITTAL REQUIREMENTS.

In addition to the standard submittal requirements for a Type II application, the following plans and information are required for Site Development Review. The Director may waive specific submittal requirements at the pre-application conference, if warranted.

Site Development Plans shall be drawn to scale and fully dimensioned, and shall illustrate the following:

- A. Boundaries of the development site, with lot line dimensions and land area in square feet;
- B. Boundaries of lots adjacent to the development site, with general locations of existing buildings and driveways and description of current land uses;
- C. Existing contours of the development site at two-foot intervals for slopes of less than 10% and at ten-foot intervals for slopes of more than 10%. Additional contour data may be required by the Director for slopes greater than 20%;
- D. Major existing physical and natural features such as perennial and intermittent streams, wooded areas, marshes, rock outcroppings and vegetative cover types;
- E. Environmental resource areas subject to the provisions in § 17.8.305 and, where applicable, §§ 17.5.005 et seq. and environmental hazard areas subject to the requirements in § 17.8.310;
- F. Individual trees or groves of trees subject to the provisions of §§ 17.5.100 et seq.;

-
- G. Historic Landmarks subject to the provisions of §§ 17.5.200 et seq.;
 - H. Location, dimensions and heights of existing and/or proposed structures, including area in square feet and designation of existing and/or proposed use;
 - I. Setback dimensions from buildings to lot lines and lot coverage as a percentage of total lot size;
 - J. Location and dimensions of existing and/or proposed streets, driveways, transit facilities, sidewalks, trails, off-street parking and loading space, bicycle parking facilities, landscaped areas, recreation areas and trash storage areas;
 - K. Location of existing utilities and fire hydrants adjacent to the site, including the size of storm sewer, sanitary sewer and water lines;
 - L. Location and names of public street, parks, utility rights-of-way and easements within or adjacent to the site;
 - M. Location and types of proposed drainage, water and sewer facilities to serve the development;
 - N. Elevation drawings of proposed buildings;
 - O. Landscape plan depicting existing and proposed trees, shrubs, groundcover, irrigation and architectural features such as fences or walls. Proposed plantings shall be designated as to species, quantities and size at time of planting;
 - P. Location, character and dimensions of proposed signs and lighting; and
 - Q. Locations and dimensions of all existing and proposed outdoor storage areas, including but not limited to trash storage and recycling areas.

Response: The subject property has been surveyed to determine the property boundaries and existing site features, a certified arborist inventoried the existing trees on the site, and a natural resources professional made a site visit to determine the presence of wetlands and other natural features. This information is provided in the Preliminary Plans (Exhibit A).

17.2.450 REVIEW CRITERIA.

The Director shall review and approve, conditionally approve or deny the site development plan based on the following criteria:

- A. The site development plan complies with all applicable standards of the base zoning district, any overlay district and the applicable general development standards of Article 8.

Response: As demonstrated in this written narrative, the Preliminary Plans (Exhibit A) generally meet the applicable standards of the base zoning district and the applicable development standards of Article 8. This application includes a request for a minor adjustment from the standard in 17.8.140.A.1.b. The adjustment criteria are addressed in this narrative.

- B. The site development plan ensures reasonable compatibility with surrounding uses as it relates to the following factors:
 - 1. Building mass and scale do not result in substantial visual and privacy impacts to nearby residential properties; and
 - 2. Proposed structures, parking lots, outdoor use areas or other site improvements that could cause substantial off-site impacts such as

noise, glare and odors are oriented away from nearby residential uses and/or adequately mitigated through other design techniques.

Response: The above information, as applicable, is included in the Preliminary Plans (Exhibit A).

- C. The site development plan preserves or adequately mitigates impacts to unique or distinctive natural features including, but not limited to:
1. Significant on-site vegetation and trees;
 2. Prominent topographic features; and
 3. Sensitive natural resource areas such as wetlands, creek corridors and riparian areas.

Response: According to the City's Comprehensive Plan, the project site is within an area of potential impact to a CWS vegetative corridor. A CWS Service Provider Letter is included in Exhibit E. No mapped wetlands are located within the project area. An inventory of all the trees on the site and a tree preservation plan is included in the Preliminary Plans (Exhibit A). This criterion is satisfied.

- D. The site development plan preserves or adequately mitigates impacts to designated historic resources.

Response: Designated historic resources are not located on the subject site or adjacent to it. This criterion does not apply.

- E. The site development plan provides adequate right-of-way and improvements to abutting streets to meet the street standards of the city. This may include, but not be limited to, improvements to the right-of-way, sidewalks, bikeways and other facilities needed because of anticipated vehicular and pedestrian traffic generation.

Response: The project site has frontage along 26th Avenue, which is classified as a collector. The Preliminary Plans (Exhibit A) demonstrate compliance with the applicable frontage improvement requirements.

- F. The site development plan promotes safe, attractive and usable pedestrian facilities that connect building entrances, public sidewalks, bicycle and auto parking spaces, transit facilities and other parts of a site or abutting properties that may attract pedestrians.

Response: Preliminary Plans (Exhibit A) include a driveway and travel aisle, off-street parking space, bicycle parking, and a pedestrian path connecting the front entrances to each planned building to the planned sidewalk along 26th Avenue. This criterion is satisfied.

ARTICLE 3 ZONING DISTRICTS

RESIDENTIAL ZONES

[...]

17.3.110

LIST OF RESIDENTIAL ZONES

[...]

- F. Residential RMH. The RMH zone is intended for development at a target density of 20.28 dwelling units per net acre. Multi-unit residential buildings will be the predominant housing type in this zone. RMH zoning is generally applied near transit streets and adjacent to commercial districts. The RMH zone also allows a limited range of

non-residential uses to help provide services for residents and enhance the quality of the higher density neighborhood.

Response: This application involves a multi-unit apartment. The subject site is within the RMH zone. This section is applicable.

17.3.120 USE REGULATIONS

Refer to Article 12 for information on the characteristics of uses included in each of the Use Categories.

- A. Permitted Uses. Uses allowed in the Residential zones are listed in Table 3-2 with a "P". These uses are allowed if they comply with the development standards and other regulations of this Code.
- B. Limited Uses. Uses that are allowed subject to specific limitations are listed in Table 3-2 with an "L". These uses are allowed if they comply with the limitations listed in the footnotes to the table and the development standards and other regulations of this Code.
- C. Conditional Uses. Uses that are allowed if approved through the conditional use process are listed in Table 3-2 with a "C". These uses are allowed provided they comply with the conditional use approval criteria, the development standards, and other regulations of this Code. The conditional use process and approval criteria are stated in Section 10.2.200.
- D. Not Permitted Uses. Uses listed in Table 3-2 with an "N" are not permitted or prohibited. Existing uses may be subject to the regulations of Section 10.7.100, Nonconforming Development.
- E. Accessory Uses. Uses that are accessory to a primary use are allowed if they comply with specific regulations for accessory uses and all development standards.

TABLE 3-2 Residential Zones: Use Table	
USE CATEGORY	RMH
HOUSING TYPES Multi-Family Units	P

P = Permitted L = Limited C = Conditional Use N = Not Permitted

Response: As outlined in Table 3-2 under 17.3.120, multi-dwelling units are permitted within the RMH zone. This project involves a multi-unit apartment. within the RMH zone. This standard is satisfied.

17.3.130 RESIDENTIAL DEVELOPMENT STANDARDS

- C. Minimum Lot Size and Dimensions (RM and RH Zones) Varied lot sizes and housing types are permitted and encouraged within the density ranges established for the RML and RMH Zones. However, construction of new single family detached units is restricted to existing lots smaller than 5,000 square feet in the RMH Zone in order to retain land for multi-family housing.

TABLE 3-4: Lot Dimensional Requirements RML and RMH Zones		
Housing Type	Minimum Lot Size	Minimum Lot Dimensions [1]
Multi-Unit	7,000 Square Feet	Depth: 70 feet Width: 100 feet
[1] Lot width is measured at the front building line.		

Response: As shown on the Preliminary Plans (Exhibit A), the properties within the project site meet the minimum dimensional requirements for a multi-unit apartment within the RMH zone. These requirements are satisfied.

[...]

D. Setback Standards

Building setbacks have an important relationship to the character of the street. Because varied lot sizes and housing types are permitted in the residential zones, uniform setbacks are established to provide a consistent streetscape.

TABLE 3-5: Minimum Setback Requirements	
Front Yard, Dwelling ^{1,2}	12 feet
Front Yard, Garage	14 feet
Interior Side Yard ^{3,4}	Buffer yard required based on adjacent use reference 17.8.425 (Table 8-2)
Rear Yard ^{5,6}	Buffer yard required based on adjacent use reference 17.8.425 (Table 8-2)

Footnotes:

[1] The side yard setback for attached single-unit dwellings/townhomes shall be a minimum of zero (0) feet at common walls and five (5) feet or one (1) foot for each three (3) feet of building height at the eave line, from the end of the unit series. Unless approved by the Director, the dwellings shall be arranged on lots in a manner that the non-zero setback portion for one lot shall be adjacent to the non-zero setback portion on the adjoining lot in order to provide greater continuous open space.

[2] Accessory buildings (including accessory dwellings and detached garages) that do not exceed one (1) story in height shall not be located closer than five (5) feet to any side or rear property line.

[3] Attached garages which exit to an alley may have a minimum rear yard setback of five (5) feet.

[4] A larger rear yard setback may be required for multi-family dwellings when the rear yard abuts a lower density residential zone. The need for a larger rear yard setback to provide privacy, access to sunlight and a transition between zones shall be evaluated in the Design Review Process. The screening and buffering standards of Article 8 will be used as guidelines.

Response: Preliminary Plans (Exhibit A) indicate that the planned apartment buildings will be 20 feet from the front property line (Along SW 26th Avenue). According to the buffer and screening standards in 17.8.425, a multi-unit dwelling abutting single-family residential developments must be ten feet from the rear and interior property lines. As demonstrated in the Preliminary Plans, the building locations exceed (and in most cases double) the minimum buffer requirements from the adjacent properties. These standards are satisfied.

E. Building Height

Building height standards are used to establish a compatible building scale. This can help to create a harmonious visual setting and helps to bring about a successful mixing of diverse housing types.

[...]

- Buildings in the RH Zone are limited to a maximum height of three (3) stories or forty-five (45) feet, whichever is less. A step-down in

building heights may be required for multi-family building(s) that abut a lower density residential zone.

The need for a step down in building heights to provide privacy, access to sunlight and a transition between zones shall be evaluated in the Design Review Process.

Response: The project site is designated as RMH. As shown on the Preliminary Elevation Plans (Exhibit A), the structures are expected to be three stories and less than 45 feet in height. This standard is satisfied.

17.3.140 RESIDENTIAL DESIGN STANDARDS

All residential development is subject to the design standards found in §17.8.710.

Response: Compatibility with the applicable design standards is demonstrated in the Preliminary Plans (Exhibit A). Responses to the specific Track 1 standards in Section 17.8.710 are addressed within this written narrative.

ARTICLE 5: SPECIAL PROVISIONS

TREE PROTECTION

§ 17.5.100 PURPOSE.

The trees of Forest Grove, a reminder of the city's namesake, offer historic, aesthetic, spiritual, social, environmental and monetary values to the community. This sub article of the Code establishes guidelines, a legal framework and authority for the community forestry program. The intent of this sub article is to enhance the quality of life in Forest Grove by promoting good stewardship that will ensure the continued health of the community forest. The Development Code creates a protected status for trees as listed below:

Response: A certified arborist surveyed the existing trees on and around the subject property. Preliminary Plans (Exhibit A) include an inventory list of all the trees on and off-site that this project may impact and a Tree Preservation and Removal Plan. The index consists of the size and health rating for each tree.

A. Street Trees : Any woody perennial plant permitted by the city to be planted in the public right-of-way. Typically a one and three-fourths inch or larger nursery stock tree .

Response: As shown on the Existing Conditions Plan (Exhibit A), four established trees are located within SW 26th Avenue's right of way along the project site's frontage. SW 26th Avenue is classified as a Collector. The existing trees are expected to be removed to make the necessary frontage improvements for a collector street and establish an adequate driveway connection for the site. The Preliminary Landscape Plans show the planned street trees.

B. Natural Resource Vegetation : Trees and vegetation within sensitive lands or vegetative corridors as required by Clean Water Services Design and Construction Standards.

Response: A natural resources professional conducted a site assessment of the subject property and submitted findings to Clean Water Services (CWS). According to a letter from CWS (Exhibit E), there are no known resources on the site.

-
- C. Trees on Developable Land : Trees which have a diameter of six inches or larger, or Oregon White Oaks with a diameter of three inches or larger, measured at four and one-half feet above natural grade , on land subject to or undergoing development review. Development review includes site review, design review, partition or subdivision review or building permit review.

Response: This application is for a Design Review involving a multi-dwelling apartment with more than five units. A Preliminary Tree Preservation and Removal Plan identifying the trees necessary for removal is included in Exhibit A.

- D. Trees on approved site plan : Existing trees shown on site plans and designated for protection as part of the site plan approval.
- E. Register Trees : Trees placed on the register list (includes tree groves) as described in § 35.096 of the Municipal Code. Register trees may include trees from any of the above categories as well as trees on private property.

Where any tree fits into more than one category, the most restrictive criteria apply.

Response: There are no registered trees on the subject property.

17.5.110 CITY APPROVAL REQUIRED.

B. Permit requirements.

1. The applicant shall file an application for protected tree removal or pruning with the city . The application shall include information on the location and size of the parcel, the location, type and size of the tree or proposed for removal or pruning, and the reasons for the request. Where specified by this Code, a tree protection plan shall be provided in accordance with the provisions of § 17.5.120. The application and reasons shall address appropriate criteria based on the categories in described in § 17.5.100 (i.e., street trees , trees on developable land , etc.).
2. Where an application involves infested tree (s), the application shall contain an analysis of the tree (s) by an arborist .
3. The Director shall determine whether the request is valid under the terms of this Code within four working days of submittal of the application . If valid, the application shall be processed as a Type I permit within seven working days unless referred or appealed to the Community Forestry Commission (CFC).
4. Applications for the removal or pruning of trees pursuant to § 17.5.125 shall be submitted as part of the land use permit application or grading permit, whichever is first. The application shall be reviewed and acted upon by the Community Forestry Commission prior to the issuance of any land use approval for new development or grading permit. Notice will be sent consistent with the Type II procedures with appeal to the City Council .

Response: This application is for a Design Review involving a multi-dwelling apartment with more than five units. It is anticipated that several trees will be removed as a part of this project. A Preliminary Tree Preservation and Removal Plan identifying the trees necessary for removal is included in Exhibit A.

17.5.115 TREE PROTECTION PLAN AND PROTECTION REQUIREMENTS.

- A. Plan requirements. Where required by this Code, a tree protection plan shall be submitted and approved by the Director or, where specified, the

Community Forestry Commission. The plan shall be prepared by an Arborist and shall include:

1. A scale drawing of the subject property;
2. Location, species and diameter of each tree on site and within 15 feet of the site ;
3. Location of the critical root zone ;
4. Location of existing and proposed roads, water, sanitary and storm sewer, irrigation and other utility lines/facilities and easement ;
5. Location of dry wells and soakage trenches;
6. Location of existing and proposed structures ;
7. Existing topography and proposed grade change or cut and fill as a result of development
8. Existing and proposed impervious surfaces ;
9. Identification of a contact person and/or arborist who will be responsible for implementing and maintaining the approved tree protection plan;
10. Identification of a contact person and/or arborist who will be responsible for implementing and maintaining the approved tree protection plan; and
11. For Register Trees , an assessment of tree health or hazard condition, and recommendations for treatment of each applicable tree .

Response: Exhibit A includes an inventory and health assessment for all the trees potentially impacted by this project, an Existing Conditions Plan that maps all of the existing trees, and a Preliminary Tree Protection and Removal Plan. The above-listed plans' information meets the requirements in 17.5.115.A.

17.5.120 STREET TREES (TREES IN PUBLIC RIGHTS-OF-WAY).

A. Standards and requirements.

1. Street trees required. All development projects fronting on a public or private street more than 100 feet in length approved after the adoption of this title shall be required to plant street trees

Response: As shown on the Preliminary Plans (Exhibit A), the subject property has more than 100 feet of frontage along SW 26th Avenue. Therefore, street trees are required.

2. Street tree planting list. Certain trees can severely damage utilities, streets and sidewalks or can cause personal injury. Approval of any planting list shall be subject to review by the Director

Response: The Preliminary Landscape Plans (Exhibit A) identify a Wireless Zelkova as the intended species to be planted as street trees. The Wireless Zelkova is listed on the City of Forest Grove's suggested Street Tree Planting list.

3. Tree plan required. New street trees shall conform to an existing tree plan unless a specific exception is granted. When a tree plan does not exist, the city shall determine tree species. In selection of tree species, the city shall consider the list of prohibited trees , the available planting area, above or below ground restrictions, the need for tree diversity, and the requests of adjacent property owners.

Response: This requirement is understood. The plans show trees based on the city's recommended tree list. There does not appear to be a tree plan for the project site. The applicant is prepared to address any necessary changes to the tree species in the final site plan.

4. Size and spacing of street trees . The specific spacing of street trees by size of tree shall be as follows.
 - a. Small or narrow-stature trees under 25 feet tall and less than 16 feet wide branching at maturity shall be spaced no greater than 20 feet apart.
 - b. Medium-sized trees 25 to 40 feet tall, 16 to 35 feet wide branching at maturity shall be spaced no greater than 30 feet apart.
 - c. Large trees over 40 feet tall and more than 35 feet wide branching at maturity shall be spaced no greater than 40 feet apart.
 - d. Except for signalized intersections, trees shall not be planted closer than 20 feet from a street intersection, nor closer than two feet from private driveways (measured at the back edge of the sidewalk), fire hydrants or utility poles to maintain visual clearance.
 - e. No new utility pole location shall be established closer than five feet to any existing street tree .
 - f. Street trees shall not be planted closer than 20 feet to light standards.
 - g. Where there are overhead power lines, the street tree species selected shall be of a type which, at full maturity, will not interfere with the lines.
 - h. Street trees shall not be planted within two feet of any permanent hard surface paving or walkway:
 - i. Space between the tree and the hard surface may be covered by a nonpermanent hard surface such as grates, bricks on sand, paver blocks and cobblestones; and
 - ii. Sidewalk cuts in concrete for tree planting shall be at least four feet by four feet to allow for air and water into the root area.

Response: As shown in the Preliminary Landscape Plans (Exhibit A), the current trees generally meet the spacing requirements based on the expected size of the species. However, per 17.5.120.3, the species may be subject to change. It is anticipated that (if necessary) this will be addressed through the final site plan approval.

- B. Criteria for pruning or removal. The permit for major pruning or removal shall be granted if any of the following criteria are met.

[...]

4. The removal has been approved as part of a development project, pursuant to the provisions of § 17.5.135.

Response: This application is for a Design Review involving a multi-dwelling apartment. The anticipated removal of trees in the right-of-way is related to and dependent on the project's approval.

17.5.130 TREES ON DEVELOPABLE LAND, PRIOR TO AND DURING DEVELOPMENT.

C. Review standards during development review.

1. Prior to the removal of any protected trees a tree permit is required. If there is a land use or other permit which may result in modification of the site the tree permit shall be reviewed concurrent with that other permit and follow the same process.

Response: This application is for a Design Review to place a multi-dwelling apartment on the subject site. Tree removal is anticipated to be associated with the construction of the potential site. Therefore, this requirement is satisfied.

2. Permit requirements. In conjunction with the development permit requested, the applicant shall include the location, size and species of all trees subject to this Code. Groves or trees that are to be protected do not have to be individually delineated; however, the approximate number of trees in each grove shall be indicated.

Response: The size, species, and health of each tree that will potentially be impacted are included in the Preliminary Tree Preservation and Removal Table (Exhibit A).

3. Protection plan. For all trees proposed to be preserved, the applicant shall submit a protection plan consistent with the provisions of § 17.5.120. Protected trees shall be identified on landscape plans.

Response: A Preliminary Tree Preservation and Removal Plan is included in Exhibit A.

4. Review criteria. Protected Trees , as defined in § 17.5.100 shall be preserved unless the applicant proves to the satisfaction of the reviewing body that removal is necessary as a result of:
 - a. Need to remove trees that pose a safety hazard to pedestrians, property or vehicular traffic or threaten to cause disruption of public service; or which pose a safety hazard to persons or buildings ;
 - b. Need to remove diseased trees or trees weakened by age, storm, fire or other injury;
 - c. Need to observe good arboricultural practices;
 - d. Need for access to the building site or immediately around the proposed structure for construction equipment;
 - e. Need for essential grade changes to implement safety standards common to standard engineering or architectural practices;
 - f. Surface water drainage and utility installations;
 - g. Locations of driveways , buildings or other permanent improvements so as to avoid unreasonable economic hardship;
 - h. Compliance with other ordinances or codes; and

-
- i. Need to install solar energy equipment. For criteria d-g above, the applicant shall provide evidence of exploring alternate designs that would increase tree protection. Removal of register trees shall also comply with the criteria in § 17.5.145.

Response: Per Section 17.5.130.4.a-i, the Preliminary Tree Preservation and Removal Plan (Exhibit A) demonstrates the need to remove trees on the site to allow the planned apartment to meet the necessary parking, access, grading, and engineering requirements. The Tree Preservation and Removal Table provides the health and structural rating of each tree that the project will potentially impact.

ARTICLE 7 MISCELLANEOUS PROVISIONS

FENCES

17.7.040 STANDARDS FOR RESIDENTIAL ZONES.

The following standards apply to fences , walls and screens in all residential zones and for residential uses in all other zones:

- A. Front yard .Fences within the required front yard setback area are limited to a height of three and one-half feet;
- B. Side and rear yards .Fences within the side and rear yards are limited to a height of six feet. The fence may be placed on the property line but shall be reduced to a height of three- and one-half feet in the required front yard ;
- C. Corner lots . On corner lots , which by definition have two front yards , may have a fence up to six feet in height in the front yard adjacent to the street that does not contain the dwelling 's primary entrance when one of the following conditions is met:
 - 1. If the street is improved with curbs and gutters, with or without sidewalks, the fence is located a minimum of ten feet from the face of the curb; or
 - 2. If the adjoining street is unimproved, the fence is no closer than three feet from the property line.
- D. Separation from utilities. Fences shall be installed at least three feet from a utility pedestal or electrical transformer; and
- D. Clear vision area . All fences shall comply with the clear vision area requirements for streets and driveways

Response: The Preliminary Plans (Exhibit A) show a six-foot cedar fence around the perimeter of the project site to help screen the building from neighboring properties. The fence is not expected to extend into the front setback area or be located within any identified clear-vision areas within the project site.

SOLID WASTE AND RECYCLING

17.7.200 PURPOSE.

The purpose of this sub article is to ensure that certain new construction incorporates functional and adequate space for on-site storage and efficient collection of solid waste and recycling prior to pick up and removal by haulers. These standards shall apply to new multi-family residential buildings containing three or more units and non-residential construction.

17.7.205 SIZE, LOCATION, DESIGN AND ACCESS STANDARDS FOR STORAGE AREAS.

The applicant shall indicate the size and location of the storage area for solid waste and recycling on the site plan required for site development review or design review.

- A. Storage area size. The following guidelines shall be used to determine the appropriate size for the storage area.

[...]

2. More than ten units: 50 square feet plus five square feet for each unit above ten.

Response: Per 17.7.205, the trash enclosure for the property should be 225 square feet. As shown on the Preliminary Plans (Exhibit A), the trash enclosure area is planned to be 240 square feet. This requirement is satisfied.

B. Location standards.

1. To encourage its use, the storage area for recycling shall be co-located with the storage area for solid waste.
2. Indoor and outdoor storage areas shall comply with Building and Fire Code requirements.
3. Storage area space requirements can be satisfied with a single location or multiple locations and combine both interior and exterior locations.
4. Exterior storage areas can be located within interior yard or rear yard areas. Exterior storage areas shall not be located within a required front yard setback or in a yard adjacent to a public or private street .
5. Exterior storage areas shall be located in central and visible locations on a site to enhance security for users.
6. Exterior storage areas can be located in a parking area, if the proposed use provides at least the minimum number of parking spaces required by this Code.
7. The storage area shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on the site or on public streets adjacent to the site .

Response: The planned trash enclosure is currently shown in an outdoor, accessible location near the southern portion of the property. Solid waste and recycling will be collocated.

C. Design standards.

1. The dimensions of the storage area shall accommodate containers consistent with current methods of local collection.
2. Storage containers shall meet Fire Code standards and be made and covered with waterproof materials or situated in a covered area.
3. A sight-obscuring fence , wall or hedge at least six feet in height shall enclose exterior storage areas. Gate openings, which allow access to users and haulers, shall be provided. Gate openings for haulers shall be a minimum of ten feet wide and shall be capable of being secured in a closed and open position.
4. Storage area(s) and containers shall be clearly labeled to indicate the type of material accepted.

Response: An elevation drawing of the planned trash enclosure is included in the Preliminary Plans (Exhibit A). The enclosure is expected to be covered and behind a sight-obscuring fence.

D. Access standards.

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

Response: As shown on the Preliminary Plans (Exhibit A), the trash enclosure directly abuts the planned drive aisle. The applicant has reached out to Waste Management to confirm the location is accessible to their trucks.

ARTICLE 8 GENERAL DEVELOPMENT STANDARDS

ACCESS AND CIRCULATION

17.8.100 PURPOSE.

The purpose of this subarticle is to establish standards and regulations for safe and efficient vehicle access and egress on a site and for general circulation within the site, including pedestrian circulation.

17.8.105 APPLICABILITY.

- A. When provisions apply. The provisions of this article shall apply to all development, including the construction of new structures, and the remodeling or new structures or a change of use which increases the on-site parking or loading requirements or which changes the access requirements.
- B. When site plan /design review is not required. Where the provisions of site plan review or design review do not apply to the proposed developments, the Director shall approve, approve with conditions, or deny an access plan submitted under the provisions of this article in conjunction with another permit or land use action.
- C. Conflict with land division requirements. The requirements and standards of this article shall not apply where they conflict with the land division rules and standards of Article 6.

Response: This application involves a new multi-unit apartment. Therefore, these standards apply.

17.8.110 GENERAL PROVISIONS.

- A. Continuing obligation of property owner. The provision and maintenance of access and egress stipulated in this section are continuing requirements for the use of any structure or parcel of real property in the city.
- B. Access plan requirements. No building or other permit shall be issued until a scaled site plan is submitted that shows how access, egress and circulation

requirements are to be fulfilled. The Director shall provide the applicant with information about the submittal requirements for an access plan.

- C. Joint access. Owners of two or more uses, structures or parcels of land may agree to jointly use the same access and egress when the combined access and egress of both uses, structures or parcels of land satisfies their requirements as designated in this article, provided:
 - 1. Satisfactory legal evidence shall be presented in the form of deeds, easements, leases or contracts to establish the joint use; and
 - 2. Copies of the deeds, easements, leases, or contracts are placed on permanent file with the city.
- D. Public street access. All vehicular access and egress shall connect directly with a public or private street approved by the city for public use, except where joint access is provided through adjacent or other property which is connected to a street. Vehicular access to a residential use shall be provided within the same lot for single-family and two-family dwellings, and within the same lot or development for multi-family dwellings. Access to multi-family units shall avoid being located through single-family residential areas before being connected to a collector or arterial as designated by the city's Transportation Plan.

Response: The Preliminary Plans (Exhibit A) identify how the project provides appropriate access, egress, and circulation for regular shared use and emergency access. As shown on the preliminary plans, a 26-foot-wide driveway/travel aisle will provide direct access to the site from 26th avenue. An existing 20-foot-wide flag lot access to Tax lot 1700 will be utilized as a part of the site's pedestrian circulation and for one-way emergency vehicle egress. It is not anticipated that joint access will be necessary for this project. These requirements are satisfied.

17.8.115 ON-SITE PEDESTRIAN WALKWAYS.

A. Required walkways. On-site pedestrian walkways are required as follows:

- 1. Walkways shall extend from the ground floor entrances or from the ground floor landing of stairs, ramps, or elevators of all commercial, institutional and industrial uses to the public sidewalk or curb of the public street or streets which provide the required access and egress. Walkways shall provide convenient connections between buildings in multi-building commercial, institutional, and industrial complexes. Walkways shall be constructed between a new development and neighboring developments. If connections aren't currently available, then planned connections shall be designed to provide an opportunity to connect adjoining developments.
- 2. The maximum distance between a parking space and a walkway shall not exceed 45 feet. All walkways constructed within parking lots shall be raised to standard sidewalk height. All surface treatment of walkways shall be firm, stable and slip resistant.
- 3. Required walkways shall be paved with hard-surfaced materials such as concrete, asphalt, stone, brick, etc. Walkways may be required to be lighted and/or signed as needed for safety purposes. Lighting and or signs may be required for walkways for safety purposes.
- 4. Whenever required walkways cross vehicle access driveways or parking lots, such crossings shall be designed and located for pedestrian safety. Required walkways shall be physically separated

from motor vehicle traffic and parking by either a minimum six-inch vertical separation (curbed) or a minimum three-foot horizontal separation, except that pedestrian crossing of traffic aisles are permitted for distances no greater than 36 feet if appropriate landscaping, pavement markings or contrasting pavement materials are used. Walkways shall be a minimum of four feet in width, exclusive of vehicle overhangs and obstructions such as mailboxes, benches, bicycle racks and signposts, and shall be in compliance with ADA standards.

5. Where required for pedestrian access, interior landscape areas in combination with pedestrian walkways between rows of parking shall be at least ten feet in width to accommodate walkways, shrubbery and trees 20 to 30 feet on-center. This ten-foot width may be reduced between tree areas depending on the characteristics of the vegetation. Angled or perpendicular parking spaces shall provide bumper stops or widened curbs to prevent bumper overhang into interior landscaped areas or walkways.

Response: As demonstrated in the Preliminary Plans (Exhibit A), on-site pedestrian walkways are located adjacent to the off-street parking areas. They are expected to be separated vertically by a curb. A crosswalk will be clearly identified where the pedestrian path may cross a vehicle drive aisle or access way. The planned pedestrian circulation will provide direct access consistent with the applicable ADA requirements from each dwelling unit to the off-street parking area, public right of way, and other site amenities. These standards are satisfied.

17.8.120 MINIMUM ACCESS REQUIREMENTS FOR RESIDENTIAL USES.

- A. Direct access to arterial streets from a residential dwelling established after the effective date of this Code is prohibited. The city may permit direct access to an arterial for lots of subdivisions approved prior to the effective date of this Code, and for multi-family residential complexes if the access is designed to local residential street standards.

Response: The subject site has frontage alone on 26th Avenue. Forest Grove's TSP classifies 26th Avenue as a collector. Dwelling units in the apartment will have indirect access to 26th Avenue via a shared driveway. This requirement is not applicable.

- B. Single-family dwellings and duplexes shall be required to have one driveway, fully improved with hard surface pavement, with a minimum width of ten feet.

Response: This project does not involve a single-family dwelling. This requirement is not applicable.

- C. Service drives for multi-family dwellings shall be fully improved with hard surface pavement with a minimum width of:

1. Twelve feet when accommodating one-way traffic; or
2. Twenty feet when accommodating two-way traffic.

In no case shall the design of said service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street.

Response: Service drives are typically reserved for maintenance and delivery vehicles. The planned primary travel aisles exceed the minimum standards for a service drive and are expected to provide adequate access for service vehicles. These requirements are satisfied.

-
- D. Private residential access drives shall be provided and maintained in accordance with the provisions of the Uniform Fire Code.
 - E. Dead-end access drives in excess of 150 feet shall be provided with approved provisions for the turning around of fire apparatus by one of the following:
 - 1. A circular, paved surface having a minimum turn radius measured from center point to outside edge of 35 feet;
 - 2. A hammerhead, paved surface with each leg of the hammerhead having a minimum depth of 40 feet and a minimum width of 20 feet; or
 - 3. The maximum cross slope of a required turnaround is 5%.

Response: As shown on the Preliminary Plans (Exhibit A), emergency access to the site is provided via the primary two-way driveway entrance along SW 26th Avenue. Plans show a dedicated fire turnaround on the southwest corner of the project site. The existing travel aisles along with the dedicated turnaround meet the minimum access and maneuverability requirements outlined in the Uniform Fire Code. In addition to the minimum requirements, a 12-foot-wide emergency vehicle egress is planned along the existing 20-foot-wide stem associated with Tax Lot 1700. This requirement is satisfied.

- F. Driveway grades shall not exceed a maximum of 20%.

Response: The Existing Conditions Plans (Exhibit A) show that the property is relatively flat with less than five percent slopes. Driveway grades are not anticipated to exceed 20%. This standard is satisfied.

[...]

17.8.130 WIDTHS AND LOCATIONS OF DRIVEWAYS AND CURB CUTS.

- A. Minimum driveway widths at the street right-of-way line shall be 15 feet for institutional, commercial, industrial and multi-family residential uses, and ten feet for single-family and two-family residential uses.
- B. Maximum driveway widths at the street right-of-way line shall be as follows.
 - 1. In residential zones:
 - a. Twenty-four feet for lots with less than 60 feet of street frontage;
 - b. Thirty feet for lots with street frontages of 60 feet or greater; and
 - c. There shall be a minimum distance of 30 feet between any two adjacent curb cuts on the same lot.
 - 2. Thirty-six feet in institutional, town center or commercial zones; and
 - 3. Forty feet in industrial zones.

Response: Consistent with these requirements, the Preliminary Plans (Exhibit A) indicate that the planned driveway and travel aisle will be 26 feet wide to accommodate two-way travel. These requirements are satisfied.

- C. Location of curb cut. No portion of a curb cut shall be located closer to an intersecting street right-of-way line than:
 - 1. One hundred feet on an arterial street with four or more travel lanes;

-
2. Fifty feet on an arterial street with two or three travel lanes;
 3. Fifty feet on a collector street; or
 4. Twenty feet on a local street.

Response: As identified on the vicinity map, the planned connection to 26th Avenue (a collector) will be more than 50 feet from where the street intersects with Sunset Drive. This requirement is satisfied.

D. Minimum distance between curb cuts. On arterial and collector streets, minimum distances shall be maintained as follows between adjacent curb cuts on the same side of any such street :

1. Eighty-five feet where the speed limit is 20 mph or less;
2. One hundred five feet where the speed limit is 25 mph;
3. One hundred twenty-five feet where the speed limit is 30 mph;
4. One hundred fifty feet where the speed limit is 35 mph;
5. One hundred eighty-five feet where the speed limit is 40 mph;
6. Two hundred thirty feet where the speed limit is 45 mph; and
7. Two hundred seventy-five feet where the speed limit is 50 mph or greater.

E. In measuring the distance between curb cuts on arterial and collector streets, existing curb cuts, or accesses serving single-family and two-family dwellings shall not be considered.

Response: All adjacent properties to the project site are occupied by single-family dwellings with established driveway accesses to 26th Avenue (a collector). These requirements are not applicable to the planned multi-unit apartment.

F. City Engineer 's authority to restrict driveway widths and locations. To ensure that driveways do not conflict with public infrastructure, the City Engineer has the authority to restrict the width and location of any driveway.

Response: The specific features shown on the Preliminary Plans (Exhibit A) incorporate feedback from city staff at the required pre-application meeting. This requirement is understood.

17.8.140 SPECIFIC SITE ACCESS AND CIRCULATION STANDARDS.

The following access and circulation standards apply specifically to certain types of development or apply within certain locations within the community.

A. Multi-unit development. A functional and safe environment for vehicles and pedestrians is important within residential areas. Multi-unit development should be visually appealing from the adjacent street right-of-way and be functionally and aesthetically tied to adjacent residential neighborhoods.

1. Circulation.

- a. A continuous pedestrian connection shall be provided from the front door of all residential buildings to the public sidewalk.
- b. Separate pathways from dwellings a minimum distance of ten feet. The separation is measured from the pathway edge closest to any dwelling unit.

-
- c. On-site pedestrian walkways are required to be a minimum width of five feet connecting dwelling units to parking/open space /recreation areas.

Response: Preliminary Plans (Exhibit A) show a continuous pedestrian path (at least five feet wide) connecting the entrance of each dwelling unit to shared parking areas, recreation areas, and the public right of way. Plans also indicate how the path can meet the minimum spacing requirements. These standards are satisfied.

2. Parking areas.

- a. Separate physically and visually parking areas greater than 10,000 square feet in area with landscape planter bays at least 18 feet in width. Individual parking areas may be connected by a driveway.
- b. The sidewalk system shall connect the front door of all residential buildings to parking area(s).

Response: As shown on the Preliminary Landscape Plans (Exhibit A), the planned parking area is expected to be landscaped per the applicable standards. The property's perimeter will be adequately screened from surrounding uses. The Preliminary Plans (Exhibit A) show how the on-site sidewalk system will connect the parking area to the front door of each dwelling.

3. Pedestrian environment.

- a. Residential doors which face a public right-of-way shall be setback a minimum of three feet plus any additional width needed to meet the minimum sidewalk requirements (where applicable) from a public sidewalk.
- b. The following types of doors shall not provide the primary entrance into a dwelling unit: sliding glass or solid metal doors without glazing.
- c. Residential stoops, porches or terraces shall be raised a maximum of three feet above grade at the adjacent right-of-way.
- d. Residences with entry porches or terraces shall have a minimum area of 40 square feet.
- e. Residential entries shall be lowered a maximum of four feet below grade measured at adjacent right-of-way.

Response: Preliminary Elevation Drawings (Exhibit A) identify how the applicable requirements in the section are satisfied.

4. Screening/service areas.

- a. All mechanical equipment shall be screened from view by an opaque fence or solid landscape screen eight feet high.
- b. Service/refuse collection areas shall not be located within 20 feet of public rights-of-way.
- c. All development of two or more stories in height shall be required to provide screening of garbage collection and storage areas from above.

-
- d. All roof mounted mechanical equipment other than vents shall be screened from ground level view. The screening shall be as high as the height of the equipment and shall be integrated with the exterior building facade.

Response: This project involves a multi-unit residential apartment. Mechanical equipment and service areas are anticipated to include utility areas (franchise and public), trash receptacles, and HVAC. The preliminary plans identify that the planned trash enclosure area will be more than 20 feet from the public right of way. An elevation of the trash enclosure is included in the Preliminary Plans (Exhibit A). The HVAC equipment is shown on the Preliminary Elevation Plans (Exhibit A). The Preliminary Landscape Plan shows the exterior HVAC mechanical equipment will be adequately screened.

5. Landscaping.

- a. At least 75% of required landscaped area shall be planted with any suitable combination of trees, shrubs or evergreen ground cover.
- b. A maximum of 25% of required landscaped area may include architectural features or artificial ground covers such as sculptures, benches, masonry or stone walls, rock groupings, decorative hard paving and gravel areas interspersed with planting areas.

Response: Preliminary Landscape Plans (Exhibit A) demonstrate that more than 75% of the landscape area will be planted with trees, shrubs, and ground cover.

6. Crime Prevention Through Environmental Design (CPTED).

- a. No landscaping, fences, walls or plant materials greater than five feet in height shall be installed which obstruct the visibility of a dwelling entry from a public street .
- b. A minimum of 25 square feet of window area shall be provided within each dwelling unit facing a common open space, pedestrian path or car park to allow visual surveillance.
- c. A clear line of site between all front building entries and the public sidewalk or car park shall be maintained.
- d. Lighting shall be provided at all exterior dwelling unit entrances.
- e. Guard or a keyed variation of gated residential development is prohibited.
- f. Motion activated security lighting is prohibited along public rights-of-way.

Response: Preliminary Plans (Exhibit A), including a preliminary site plan, elevation drawings, and landscape plans, show how the project is consistent with the CPTED requirements. These standards are satisfied.

CLEAR VISION AREA

17.8.150 PURPOSE.

The purpose of this sub article is to establish standards that will ensure proper sight distances at intersections to reduce the hazard from vehicular turning movements.

§ 17.8.155 STANDARDS.

Except in the Town Center zones, a clear vision area shall be maintained on the corners of all property adjacent to the intersection of two streets, a street and a railroad, or a driveway providing vehicular access to a public street , excluding alleys .

- A. On corner lots, no vehicle, fence , wall, hedge or other planting or structure shall be parked, erected, planted, placed, located or maintained, except for occasional tree trunks or poles, so as to impede visibility within the greater of the two clear vision areas defined below (see Figure 8-5):
 - 1. The triangular area formed by the curb lines along such lots and a straight line joining said curb lines at points which are 30 feet distant from the intersection of the curb lines and measured along such lines; or
 - 2. The triangular area formed by the property lines of such lots and a straight line joining said property lines at points which are ten feet distant from the intersection of the property lines and measured along such lines.
- B. A private access shall be treated as a public street for the purpose of this section. The edge of the paved surface area of the private access, be it roadway, curb or sidewalk, shall be treated as the curb line in determining the vision clearance area.
- C. The vision clearance area for all commercial, industrial, institutional and multi-family uses shall be determined in the manner set forth in subsection A.1. above.
- D. The vision clearance area for single-family homes and duplexes shall be determined in the manner set forth in subsection A.2. above.
- E. Any obstruction maintained in violation of this section shall be deemed in violation of the Development Code and shall be abated pursuant to § 17.1.400 enforcement procedures.

Response: Preliminary Plans (Exhibit A) delineate clear vision areas adjacent to the planned driveway connections to 26th Avenue. The identified clear vision areas are consistent with the applicable requirements of this section. These standards are satisfied.

OPEN SPACE, RECREATIONAL FACILITIES AND COMMON AREAS

17.8.200 PURPOSE.

The purpose of this sub article is to establish standards for the provision of open space and recreational facilities, and where part of development , requirements for common areas.

17.8.205 STANDARDS.

[...]

- C. Except for developments in TCC or TCT zones, any development not involved in a division of land, open space and recreation areas shall be held in common for residential condominiums or by the primary land owner for apartment complexes or non-residential development . The area shall be placed within an easement unless waived by the Director for minor recreation facilities or recreation facilities that are integrated with the developed portion of the project. Developments within the NMU zone may modify the standards below through an approved MUPD.

-
1. Residential projects in the Residential Multi-family Low (RML) and Residential Multi-family High (RMH) districts shall provide the following: All condominium, two-family dwellings , multi-family dwellings , residential care facilities , residential care institutions and nursing or convalescent homes shall provide 20% of the lot area in open space , excluding that area designated in the site plan and improved for off-street parking and driveways . All dwelling units shall be immediately accessible to a minimum of 600 square feet of open space .

Response: Preliminary Landscape Plans Show that ±40,520 square feet (41%) of the subject property are dedicated as open space. The pedestrian path provides each dwelling unit direct access to the planned open space areas.

-
2. All condominium, two-family dwellings and multi-family dwellings of 20 units or more, residential care facilities , residential care institutions and nursing or convalescent homes shall improve one-half of the required open space as recreation space . of 20 feet. For two- Recreation space shall be planted in grass and/or improved for recreational use , and have a minimum area of 870 square feet and a minimum dimension family and multi-family dwellings , the recreational area shall include a children's play area. A fence shall be installed that is a minimum of 30 inches in height to separate a parking lot, street or driveway from any children's play area.

Response: This application involves a multi-dwelling apartment with more than 20 units. The Preliminary Plans (Exhibit A) show a dedicated open space area with an 870-square-foot recreational area. The recreational area is accessible by a direct connection to the sidewalk/ pedestrian path. This requirement is satisfied.

3. For the development of condominiums, two-family and multi-family dwellings of 20 units or more, residential care facilities and residential care institutions , individual private open space (patio or balcony) shall be provided for each dwelling unit. All private open space shall be directly accessible from the dwelling unit through a doorway. Patios and balconies shall be at least 48 square feet in size with a minimum width dimension of four feet.
4. Floor area of ground floor patios and all balconies for individual units can be used to meet no more than one-half of the recreational land area requirement. Private open space shall be separated from common open space through the use of perimeter landscaping, fencing or a change in vertical grade (e.g., second floor balconies).

Response: Preliminary building floor plans for upper level and main floor dwelling units are included in Exhibit A and show a dedicated terrace is planned for each unit. The terrace is intended to provide the required private open space for each dwelling unit. This requirement is satisfied.

5. Where a proposed condominium, multi-family development , residential care facility , residential care institution , or nursing or convalescent home will abut an existing or proposed public park or open space , the development shall integrate into its design the adjoining park or open space to maximize its benefits to development residents.

Response: According to City of Forest Gove maps, the project site does not abut a public park. This standard is not applicable.

6. No less than 75% of all open space areas excluding recreational space shall be landscaped with living ground cover, shrubs or trees .

Response: The Preliminary Landscape Plans (Exhibit A) demonstrate that the open space areas will be landscaped with a living ground cover, shrubs, and trees. This requirement is satisfied.

D. Areas and tracts of land to be held in common, shall meet the following requirements.

1. Common areas shall be held in ownership by either a homeowners association or operator of a multi-family development , residential care facility , residential care institution or nursing or convalescent home.
2. To ensure adequate maintenance of common areas within the land division, the applicant shall provide maintenance provisions in Covenants, Conditions and Requirements (CC & Rs) when to be maintained by a homeowners association or another method an operator of a multi-family development , residential care facility , residential care institution or nursing or convalescent home.

Response: It is expected that a management company will operate the planned multi-family apartment. This requirement is satisfied.

LANDSCAPING, SCREENING AND BUFFERING

[...]

17.8.405 APPLICABILITY.

- A. Applicability. The provisions of this subarticle shall apply to all new development and to a change of use that result in the need for increased on-site parking.
- B. When site development/design review does not apply. Where the provisions of Site Development Review or Design Review do not apply, the Director shall approve, approve with conditions or deny a landscape plan submitted under the provisions of this subarticle by means of a Type I procedure.
- C. Landscape plan. The applicant shall submit a landscape plan. The Director shall provide the applicant with information on the submittal requirements.

Response: This application is for a new multi-unit apartment. A Preliminary Landscape Plan is provided in Exhibit A. The plan identifies that ±98,158 square feet of the 2.29-acre site will be landscaped with trees, shrubs, and ground cover. As shown, 11% of the planned parking area and 41% of the entire site are expected to be landscaped. A list of plants and the planting schedule can be found on the Preliminary Landscape Notes & Planting schedule.

17.8.410 GENERAL PROVISIONS.

- A. Obligation to maintain. It shall be the continuing obligation of the property owner to maintain required landscaped areas in an attractive manner free of weeds and noxious vegetation . In addition, the minimum amount of required living landscape materials shall be maintained.
- B. Ground preparation. The ground in all required landscaped areas should be properly prepared with suitable soil and fertilizer. Specifications shall be

submitted with the landscape plans showing that adequate preparation of the top soil and sub-soil will be undertaken prior to planting to support the plantings over a long period of time.

C. Installation requirements. The installation of all landscaping shall be as follows:

1. All landscaping shall be installed according to accepted planting procedures and the provisions of this article;
2. The plant materials shall be of high grade, and shall meet the size and grading standards of the American Standards for Nursery Stock; and
3. All required landscaped areas must be provided with a piped underground irrigation system unless a licensed landscape architect or certified nurseryman submits written verification that the proposed plant materials do not require irrigation.

D. Pruning required. All plant growth in landscaped areas of developments shall be controlled by pruning or trimming so that it will not:

1. Interfere with the maintenance or repair of any public utility;
2. Restrict pedestrian or vehicular access; and
3. Constitute a traffic hazard because of reduced visibility.

E. Certificate of occupancy. 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 performance bond or security equal to 125% of the cost of the landscaping.

F. Care of landscaping along public rights-of-way. Appropriate methods for the care and maintenance of street trees and landscaping materials shall be provided by the owner of the property abutting the rights-of-way unless otherwise required for emergency conditions and the safety of the general public.

Response: These requirements are understood. Installation is anticipated to occur during the construction phases of this project. The Preliminary Landscape Notes and Plant Schedule are included in Exhibit A. These standards can be satisfied.

17.8.415 GENERAL STANDARDS.

A. Non-invasive native vegetation is encouraged to be used for all landscaping except within 100 feet of a natural resource area. In such situations, native vegetation is required.

Response: The Preliminary Landscape Plans and Landscape Notes and Plant Schedule (Exhibit A) includes a list of the expected plants. There are no mapped natural resource areas within the project site. This requirement is satisfied.

B. Installation of bio-swales or preservation of wetlands should be located where possible in landscaped areas.

Response: As previously mentioned, there are no mapped wetlands within the project area. This standard is not applicable.

C. Required landscaping adjacent to public rights-of-way. A strip of land at least five feet in width located between the abutting right-of-way and the off-street

parking area or vehicle use area which is exposed to an abutting right-of-way, except in required vision clearance areas.

Response: The planned off-street parking area is more than ± 80 feet from the right of way. Compliance with this requirement is shown in the Preliminary Plans (Exhibit A).

- D. Perimeter landscaping relating to abutting properties. On the site of a building or structure or open lot use providing an off-street parking area or other vehicular use area, where such areas will not be entirely screened visually by an intervening building or structure from abutting property, a five-foot landscaped strip shall be between the common lot line and the off-street parking area or other vehicular use area exposed to abutting property. Landscaped areas should include where possible water quality features such as bio-swales or wetlands, trees, grass, shrubs and other plant material so as to cover the landscape area.

Response: As shown on the Preliminary Plans (Exhibit A), the perimeter of the project site will include a 5-to-10-foot landscape strip. This requirement is satisfied.

- E. Parking area interior landscaping. Landscaped areas shall be appropriately distributed to break up large expanses of pavement, improve the appearance and climate of the site, improve safety and delineate pedestrian walkways and traffic lanes. Except for industrial development within industrial zones, the following interior landscaping shall be met.
1. Percentage approach. For the purpose of this section, INTERIOR PARKING LOT AREA is defined as the hard surface parking area (parking stalls and aisles). Such area does not include loading and unloading zones or perimeter landscaping around the lot . Where perimeter landscaping intrudes into the parking lot four or more feet, that area is included in both the interior parking lot area and interior parking lot landscaping.
 2. A required landscaped area shall have a minimum interior dimension of six feet and be no less than 48 square feet in area.
 3. At least 8% of the Interior Parking Lot Area shall be landscaped. Landscaped areas may include water quality features such as bio-swales or wetlands, trees, grass, shrubs and other plant material so as to cover the landscape area.
 4. One tree shall be required for every 1,600 square feet of interior parking lot area as defined in subsection 1. above. Trees shall have a minimum two-inch caliper and six-foot branch height at time of planting.
 5. Interior parking area landscaping and trees must be dispersed throughout the parking area. Some trees may be grouped, but the groups must be dispersed. Required trees may be planted within five feet of the edges of the parking area.
 6. Perimeter landscaping area may not substitute for interior landscaping. However, interior landscaping may join perimeter landscaping as long as it extends four feet or more into the parking area from the perimeter landscape line.

Response: As shown on the Preliminary Landscape Plans (Exhibit A), 11% of the planned parking lot area will be landscaped, and 22 trees will be provided. Per 17.8.410.E, 8% of the off-street parking area must be landscaped, and 20 trees are required based on the parking area size. These standards are satisfied.

B. Buffering and screening requirements.

1. A buffer consists of an area within a required setback adjacent to a property line and having a depth equal to the amount specified in the buffering and screening matrix and containing a length equal to the length of the property line of the abutting use or uses.
2. Utilities, screening, sidewalks and bikeways, and landscaping may only occupy a buffer area. No buildings, accessways or parking areas shall be allowed in a buffer area except where an accessway has been approved by the city .
3. The minimum improvements within a buffer area shall consist of combinations for landscaping and screening as specified in Tables 8-2, 8-3 and 8-4. In addition, improvements shall meet the following specifications:
 - a. At least one row of trees shall be planted. They shall have a minimum caliper of two inches at four feet in height above grade for deciduous trees and a minimum height of five feet high for evergreen trees at the time of planting. Spacing for trees shall be as follows:
 1. Small or narrow-stature trees, less than 25 feet tall or less than 16 feet wide at maturity shall be spaced no further than 20 feet apart;
 2. Medium-sized trees between 25 to 40 feet tall and with 16 to 35 feet wide branching at maturity shall be spaced no greater than 30 feet apart; and
 3. Large trees, over 40 feet tall and with more than 35 feet wide branching at maturity, shall be spaced no greater than 40 feet apart.
 - b. In addition, at least ten five-gallon shrubs or 20 one-gallon shrubs shall be planted for each 1,000 square feet of required buffer area; and
 - c. The remaining area shall be planted in lawn or other living ground cover.
4. Where screening is required, the following standards shall apply in addition to those required for buffering:
 - a. A hedge of narrow or broad leaf evergreen shrubs shall be planted which will form a four-foot continuous screen of the height specified in Table 8-3 within two years of planting;
 - b. An earthen berm planted with evergreen plant materials shall be provided which will form a continuous screen of the height specified in Table 8-3 within two years; or
 - c. A fence or wall of the height specified in Table 8-3 shall be constructed to provide a continuous sight-obscuring screen.
5. Buffering and screening provisions shall be superseded by the clear vision area requirements as set forth in § 17.8.150.
6. When the use to be screened is downhill from the adjoining zone or use, the prescribed heights of required fences , walls or landscape screening shall be measured from the actual grade of the adjoining

property. In this case, fences and walls may exceed the permitted six-foot height at the discretion of the Director as a condition of approval. When the grades are so steep so as to make the installation of walls, fences or landscaping to the required height impractical, a detailed landscape/screening plan shall be submitted for approval.

Response: Per Tables 8-2 and 8-3 in 17.8.425, new multi-family units with more than five units are required to maintain a 10-foot buffer from abutting properties with existing single-family dwellings. The Preliminary Plans (Exhibit A) demonstrate compliance with these requirements.

7. Fences and walls.
 - a. Fences and walls shall be constructed of any materials commonly used in the construction of fences and walls such as wood, stone, rock or brick, or otherwise acceptable by the Director;
 - b. Such fence or wall construction shall be in compliance with other city regulations;
 - c. Walls shall be a minimum of six inches thick; and
 - d. Chain link fences with slats shall qualify for screening. However, chain link fences without slats shall require the planting of a continuous evergreen hedge to be considered screening.

Response: As indicated on the Preliminary Plans (Exhibit A), the Applicant intends to install a 6-foot cedar fence around the perimeter of the property.

- C. Screening: special provisions.
 1. Screening and landscaping of parking and loading areas. Screening and landscaping of parking and loading areas is required as provided in this article.
 2. Screening of service facilities. Except for one-family and two-family dwellings, any service facilities such as gas meters and air conditioners which would otherwise be visible from a public street, customer or resident parking area, any public facility or any residential area shall be screened from view by placement of a solid wood fence or masonry wall between five and eight feet in height.
 3. Screening of refuse containers. Except for one- and two-family dwellings, any refuse container or refuse collection area which would be visible from a public street, parking lot, residential or commercial area, or any public facility such as a school or park shall be screened or enclosed from view by placement of a solid wood fence, masonry wall or evergreen hedge. All refuse shall be contained within the screened area.
 4. Screening of swimming pools. All swimming pools shall be enclosed as required by the City of Forest Grove Building Code

Response: Consistent with these provisions, a 5-to-10-foot landscape strip along with a 6-foot cedar fence is planned around the perimeter of the project site, and the refuse will be within an enclosure.

OFF-STREET PARKING AND LOADING

[...]

17.8.505

APPLICABILITY.

- A. New construction. At the time of the erection of a new structure within any residential, commercial, institutional and industrial zoning district, off-street vehicle parking shall be provided in accordance with this section. Except as specified in subsection D. below, uses in the Town Center zones are exempt from the requirement to provide off-street parking.

Response: This application involves a new multi-family apartment with four buildings. Therefore, off-street parking and loading standards are applicable.

17.8.510

GENERAL PROVISIONS.

[...]

- B. Parking plan requirements. The parking plan, drawn to scale, shall show all elements necessary to indicate that off-street parking requirements are met. The parking plan shall include but not be limited to:

1. Delineation of individual parking and loading spaces and their dimensions;
2. Circulation area necessary to serve parking spaces;
3. Access to streets, alleys and properties to be served;
4. Curb cuts;
5. Location and dimensions of all parking area landscaping (does not apply to single-family dwellings and duplexes);
6. Grading and drainage (does not apply to single-family dwellings and duplexes); and
7. Specifications as to signs and bumper guards (does not apply to single-family dwellings and duplexes).

Response: This application involves a new multi-family apartment with four buildings. Therefore, off-street parking and loading standards are applicable.

[...]

- E. Parking area connections. In order to eliminate the need to use public streets for movements between commercial or industrial properties, parking areas shall be designed to connect with parking areas within a project site and on adjacent properties unless not feasible. Access easements between properties shall be required where necessary to provide for parking area connections.

Response: This application involves a new multi-family residential apartment. This standard is not applicable.

- F. Walkway connections. In order to facilitate pedestrian and bicycle circulation, access and parking area plans shall provide an efficient sidewalk and/or walkway connection between neighboring developments and land uses.

Response: As shown in the Preliminary Plans (Exhibit A), the planned multi-family apartment includes a sidewalk/pedestrian path which connects all of the buildings on the site to the public right-of-way. This requirement is met.

- G. Standards of measurement. Except as otherwise defined in this Code, "one standard parking space" means a parking stall of nine feet in width and 18

feet in length. To accommodate compact cars more efficiently, up to 50% of the available parking spaces may have a minimum dimension of eight feet in width and 16 feet in length so long as they are identified as compact car stalls and are not readily accessible to large cars.

GROSS LEASABLE AREA means all finished floors and excludes elevators, corridors, utility or rest rooms, and interior service areas and all outside service areas, boiler rooms, freight tunnels or corridors and truck docks.

GROSS FLOOR AREA means the total square footage including all finished floors. This number is estimated to be 10% greater than Gross Leasable Area.

Response: As shown in the Preliminary Plans (Exhibit A), the planned off-street parking spaces will be nine feet in width and 18 feet in length. This standard is satisfied.

- I. Where improvements subject to these off-street parking and loading provisions result in hard surfaces, pervious surfaces are encouraged to be used. Where improvements are within the public rights-of-way, such surfaces can be used upon approval by the City Engineer.

Response: Site access, off-street parking spaces, and loading areas are planned to be improved with hard surfaces. A partially graveled second driveway located on the western portion of the site is for planned emergency access (Alternative A). This requirement is satisfied.

17.8.515 OFF-STREET PARKING REQUIREMENTS.

Table 8-5: Parking Requirements			
Land Use	Minimum Parking Required	Maximum Parking Allowed	
		Parking Zone A	Parking Zone B
RESIDENTIAL			
- Multi-Family Units (outside the Town Center)	DU<500 sq. ft: 1.0/DU 1 bedroom: 1.25/DU 2 bedroom: 1.50/DU 3 bedroom: 1.75/DU	None	None

Response: As shown on the Preliminary Plans (Exhibit A), the number of planned off-street parking spaces is consistent with the ratios in 17.8.515, Table 8-5. This requirement is satisfied.

17.8.525 DESIGN AND MAINTENANCE STANDARDS FOR OFF-STREET PARKING AND LOADING.

- A. No backing movement. Excluding single-family and duplex residences, groups of more than two parking spaces shall be served by a service drive so that no backing movements or other maneuvering within a street or other public right-of-way would be required.

Response: The planned off-street parking area includes a 26-foot-wide travel aisle to provide access, site circulation, and vehicle maneuvering. It is not expected that vehicles will need to utilize public streets to maneuver out of or into off-street parking spaces. This standard is satisfied.

- B. Free flow of traffic. Service drives 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.
- C. Parking accessible from street. Each parking and/or loading space shall be accessible from a street and the access shall be of a width and location as described in §§ 17.8.100 et seq. for Access and Circulation.

-
- D. Parking space, stall and access aisle dimensions. Parking space configuration, stall and access aisle size shall be of sufficient width for all vehicles turning and maneuvering, based on the standards shown in Figures 8-10 and 8-11.

Response: A 26-foot-wide driveway connection will provide free-flowing access and egress to the site from 26th Avenue. The Preliminary Plans (Exhibit A) show that the project site will include a second one-way driveway for emergency egress.

- E. Permanent marking. Except for single-family and duplex residences, any area intended to be used to meet the off-street parking requirements shall have all parking spaces clearly marked using permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of traffic flow and maintain vehicular and pedestrian safety.

Response: The Preliminary Plans (Exhibit A) indicate the planned layout of the parking area. Striping for individual spaces will be reviewed and inspected during the building permit process.

- F. Surfacing.

Except for single-family and duplex residences, 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.

Off-street parking spaces for single-family and duplex residences shall be improved with an asphalt or concrete surface to specifications as approved by the Building Official.

Where possible, pervious surfacing should be used for off-street parking areas.

Response: As previously stated, the shared off-street parking area is planned to be a hardened surface consistent with the requirements of this section.

- G. Wheel stops. 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 one and one-half feet back from the front of the parking stall as defined in Figure 8-7.

Response: Preliminary Plans (Exhibit A) indicate that each parking space will include a wheel stop to separate the parking space from the sidewalk.

- H. Drainage. Off-street parking and loading areas shall provide stormwater drainage in accordance with specifications approved by the City Engineer . Off-street parking and loading facilities shall be drained to avoid flow of water across public sidewalks.

Response: Preliminary stormwater plans are included in Exhibit A. The off-street parking spaced will include stormwater drainage in accordance with the applicable City standards. This requirement is satisfied.

- I. Lighting. Artificial lighting on all off-street parking facilities shall be designed to deflect all light away from surrounding residences and so as not to create a glare hazard to the public use of any road or street.

Response: Preliminary Elevation Plans (Exhibit A) show the planned lighting for each building. Additional site lighting will be provided with a final site and photometric plan.

-
- J. Maintenance. All parking lots shall be kept clean and in good repair at all times. Breaks in paved surfaces shall be repaired promptly and broken or splintered wheel stops shall be replaced so that their function will not be impaired.

Response: The Applicant is prepared to provide regular maintenance to the planned apartment in accordance with these requirements.

- K. Parking lots over three acres in size. Parking lots over three acres in size shall be designed to incorporate curbs and sidewalks along major drive aisles.

Response: The Preliminary Plans (Exhibit A) indicate the planned layout of the parking area. Striping for individual spaces will be reviewed and inspected during the building permit process.

17.8.540 BICYCLE PARKING.

- A. When required. Bicycle parking shall be provided on-site in conjunction with the following uses:
1. Multi-family housing;
 2. Retail and office development;
 3. Industrial development;
 4. Institutional development; and
 5. Transit stations, park-and-ride lot and automobile parking structures.
- B. Required number of spaces. The number of bicycle parking spaces required shall be at least 20% of the required automobile parking for the use, but not less than two spaces.
- C. Location and design standards. Bicycle parking facilities shall be:
1. Located within 75 feet of a primary building entrance and dispersed for multiple entrances;
 2. Designed to provide direct access to a public right-of-way, but not to obstruct sidewalks or walkways. Public sidewalks may be utilized for bicycle parking when parking can't be reasonably accommodated on-site and the location is convenient to the building's primary entrance. If a public sidewalk is used for bicycle parking, a minimum of six feet of clear and unobstructed sidewalk must be maintained;
 3. In a location visible to building occupants or from the main parking lot;
 4. Thoroughly illuminated during working hours. Bicycle parking areas shall be at least as well lit as automobile parking areas;
 5. Bicycle parking facilities shall offer security in the form of either a lockable enclosure in which the bicycle can be stored or a stationary rack to which the bicycle can be locked. All bicycle racks, lockers or other facilities shall be securely anchored to the ground or to a structure. Bicycle racks shall be designed so that bicycles may be securely locked to them without undue inconvenience. Such racks shall be designed to hold bicycles securely by means of the frame, with the frame supported so that the bicycle cannot be pushed or fall to one side in a manner that will damage the wheels; and
 6. Bicycle parking spaces shall be at least six feet long and two feet wide with an overhead clearance of at least seven feet. An access aisle of at

least five feet shall be provided and maintained beside or between each row of bicycle parking. Each required bicycle parking space shall be accessible without moving another bicycle.

Response: The Preliminary Plans (Exhibit A) identify bicycle parking spaces in front of each building within seventy-five feet of the main entrance. Specific bicycle parking plans will be provided during the building permit phase. Preliminary plans identify that the applicable requirements for each space can be met. These requirements are satisfied.

17.8.545 LANDSCAPING AND SCREENING OF PARKING AND LOADING AREAS.

[...]

B. Applicability. This section is applicable to all areas used for the display or parking of any and all types of vehicles, boats or heavy construction equipment, whether such vehicles, boats or equipment are self-propelled or not, and all land upon which vehicles traverse the property as a function of the primary use, hereinafter referred to as "other vehicular uses," including but not limited to activities of a drive-in nature such as, but not limited to, filling stations, grocery and dairy stores, banks, restaurants and the like. Screening and landscaping of parking and loading areas is required, with the exception of parking areas serving single-family dwellings and duplexes, and parking areas that are under or within buildings. The interior landscaping requirements do not apply to parking areas for industrial uses in the industrial zones.

Response: This project involves a shared parking area to provide off-street parking for the planned apartment. Therefore, this section is applicable to the subject project.

- C. Required landscaping for parking lots adjacent to public rights-of-way. A minimum five-foot landscaped strip is required between the abutting right-of-way and the off-street parking area or vehicle use area.
- D. Perimeter parking lot landscaping. When the off-street parking area or other vehicular use area is not visually screened from an abutting property by an intervening building or structure, a minimum five-foot landscaped strip shall be installed between the common property line and the off-street parking area or other vehicular use area that is visually exposed.
- E. Interior parking lot landscaping. Landscaped areas shall be appropriately distributed to break up large expanses of pavement, improve the appearance and climate of the site, improve safety and delineate pedestrian walkways and traffic lanes. For the purpose of this section, interior parking lot area is defined as the hard surface parking area (parking stalls and aisles). Such area does not include loading and unloading zones or perimeter landscaping around the lot.
1. At least 8% of the interior parking lot area shall be landscaped. Landscaped areas should include water quality features such as bio-swales or wetlands, trees, grass, shrubs and other material when possible so as to cover the landscape area.
 2. A required landscaped area shall have a minimum interior dimension of six feet and be no less than 48 square feet in area. Landscaping shall be protected from vehicular damage by some form of wheel guard or curb.
 3. One tree shall be required for every 1,600 square feet of interior parking lot area. Trees shall have a minimum two-inch caliper and six-foot branch height at the time of planting.

-
4. Interior parking area landscaping and trees must be dispersed throughout the parking area. Some trees may be grouped, but the groups must be dispersed.
 5. Perimeter landscaping may not substitute for interior landscaping. However, interior landscaping may join perimeter landscaping as long as it extends four feet or more into the parking area from the perimeter landscape line.

Response: As shown on the Preliminary Plans (Exhibit A), a 5-to-10-foot landscape strip is planned around the entire perimeter of the site. At least 8 percent of the interior parking area is landscaped appropriately. These requirements are satisfied.

- F. Landscaping within clear vision areas. All landscaping of parking lots within clear vision areas shall provide unobstructed cross-visibility at a level between three to ten feet above the curb line. With the exception of grass or groundcover, no landscaping shall be located closer than three feet from the edge of any accessway pavement.

Response: Clear vision areas are delineated on the Preliminary Plans (Exhibit A) and will be landscaped in accordance with these requirements. This standard is satisfied.

PUBLIC IMPROVEMENTS

...

17.8.605 GENERAL PROVISIONS

- A. When Standards Apply. Unless otherwise provided, the standard specifications for construction, reconstruction or repair of streets, sidewalks, curbs, and other public improvements within the City shall occur in accordance with the standards of this article. No development may occur unless the public facilities related to development comply with the public facility requirements established in this section.
- B. Standard Specifications. The City Engineer shall establish standard specifications consistent with the application of engineering principles.

Response: The subject site has frontage along 26th Avenue, and the Preliminary Plans (Exhibit A) demonstrate the planned frontage and utility improvements. To the extent possible these provisions can be met.

- C. Adjustments. Adjustments to the provisions in this chapter related to street improvements may be granted by means of a Type II procedure, as governed by §10.2.100.

Response: Adjustments from the public improvement requirements are not anticipated with this application. This provision is not applicable.

17.8.610 STREETS

- A. Improvements. No development shall occur unless the development has frontage or approved access to a public street:
 1. Streets within a development and streets adjacent shall be improved in accordance with this article;

Response: The subject site has frontage along 26th Avenue. Access to the planned apartment will be provided via a new driveway connection to 26th Avenue. As shown in the Preliminary Plans

(Exhibit A), the portion of 26th Avenue that fronts the subject site will be improved to the applicable standards.

2. Any new street or additional street width planned as a portion of an existing street shall be dedicated and improved in accordance with this code;

Response: A new street is not necessary as a part of the planned site improvements. As required, right-of-way dedication is shown on the Preliminary Plans (Exhibit A). This requirement is satisfied.

3. New development shall be connected to a collector or arterial by a paved street;

Response: According to the City of Forest Grove TSP, 26th Avenue is classified as a collector. As shown on the Preliminary Plans (Exhibit A) a 26-foot-wide paved accessway will connect the multi-family apartment to 26th Avenue. This requirement is satisfied.

4. Where transportation-related improvements are required as a result of a transportation study pursuant to §10.1.225 D, the developer shall install said improvements to the satisfaction of the City Engineer, or participate in the financing of said improvement where the impacts are beyond the responsibility of one project; and
5. The City Engineer may accept a future improvement guarantee in lieu of street or other transportation related improvements if one or more of the following conditions exist:
 - a. A partial improvement is not feasible due to the inability to achieve proper design standards;
 - b. A partial improvement may create a potential safety hazard to motorists or pedestrians;
 - c. Due to the nature of existing development on adjacent properties it is unlikely that street improvements would be extended in the foreseeable future and the improvement associated with the project under review does not, by itself, provide a significant improvement to street safety or capacity;
 - d. The improvement would be in conflict with an adopted capital improvement plan;
 - e. The improvement is associated with an approved land partition on property zoned residential and the proposed land partition does not create any new streets; or
 - f. Additional planning work is required to define the appropriate design standards for the street and the application is for a project that would contribute only a minor portion of the anticipated future traffic on the street.

Response: According to the Institute of Travel Engineers (ITE) Trip Generation Manual (11th Edition), the planned apartment will result in twenty-three peak p.m. trips from the site. According to City staff, this number of trips does not warrant additional transportation related improvements. These requirements are not applicable.

6. Improvements to streets shall be made according to adopted City standards, unless the approval authority determines that the

standards will result in an unacceptable adverse impact on existing development or on the proposed development or on natural features such as wetlands, steep slopes or existing mature trees.

Response: It is anticipated that portions of the site with frontage along 26th Avenue will be improved to City standards. This requirement is understood.

- B. Creation of Rights-Of-Way for Streets and Related Purposes. Rights-of-way shall be created through the approval of a final subdivision plat or major partition; however, the Council may approve the creation of a street by acceptance of a deed, provided that such street is deemed essential by the Council for the purpose of general traffic circulation: ...

Response: This project does not include a subdivision or partition application. It is not anticipated that a new street is necessary for the planned apartment. This requirement is not applicable.

- C. Creation of Access Easements. The approval authority may approve an access easement established by deed without full compliance with this title provided such an easement is the only reasonable method by which a lot large enough to develop can be created:
1. Access easements shall be provided and maintained in accordance with the Uniform Fire Code;
 2. Access shall be in accordance with Sections 10.8.100 et. seq.

Response: This project involves a multi-family apartment. Access to the site will be via a shared private driveway. It is not anticipated that an access easement will be necessary for this site. This requirement is not applicable.

[...]

- E. Minimum Rights-Of-Way and Street Widths. Unless otherwise indicated on an approved street plan, or as needed to continue an existing improved street, street right-of-way and roadway widths shall not be less than the minimum width described below. Where a range is indicated, the width shall be determined by the appropriate decision-making authority based upon anticipated average daily traffic (ADT) on the new street segment.

These are presented in Table 8-8.

1. The decision-making body shall make its decision about desired right-of-way width and pavement width of the various street types within the subdivision or development after consideration of the following:
 - a. The type, design and location of the road as set forth in the Transportation System Plan. Standards for specific streets identified in the Transportation System Plan shall apply;
 - b. Anticipated traffic generation;
 - c. On-street parking needs;
 - d. Sidewalk and bikeway requirements;
 - e. Requirements for placement of utilities;
 - f. Street lighting;
 - g. Drainage and slope impacts;

- h. Street tree location;
- i. Planting and landscape areas;
- j. Safety and comfort for motorists, bicyclists, and pedestrians;
- k. Access needs for emergency vehicles.

TABLE 8-7: STREET STANDARDS		
Street Classification	Minimum R.O.W. Width	Minimum Roadway Width
Collector	66 feet	40 feet

Table 8-8 Footnotes:

[1] These streets shall not exceed 330 feet in length for any one segment. Each end of the segment shall connect to an existing or planned street with a minimum roadway width of 32 feet. Fire hydrants shall be placed at one-third intervals along the street segment. Driveways shall be placed in a manner to provide queuing space to allow for adequate traffic passage including emergency vehicles.

[2] These streets shall not exceed 330 feet in length for any one segment or the length needed to traverse a wetland or natural resource area. Each end of the segment shall connect to an existing or planned street with a minimum roadway width of 32 feet. Fire hydrants shall be placed at one-third intervals along the street segment. On-street parking is permitted on one side only.

[3] Street right-of-way may be reduced if approved by the City Engineer to preserve natural features, crossing a wetland or natural resource area or where construction of a full-width street would result in excessive cut and fill due to existing topography.

[4] One-way traffic only; no on-street parking permitted. One-way streets may be permitted only to preserve natural features or where the construction of a full-width street would result in excessive cut-and-fill due to existing topography, as determined by the City Engineer.

Response: The project site has frontage along 26th Avenue. According to the Forest Grove TSP, 26th Avenue is classified as a collector requiring a minimum right-of-way width of 66 feet. The portion of 26th Avenue that has frontage along the project site is ±60 feet wide. Street cross sections are included with the Preliminary Plans (Exhibit A), which show ±6 feet of dedication is planned along the site's frontage along with the necessary improvements. These standards are satisfied.

[...]

- I. Existing Rights-Of-Way. Whenever existing rights-of-way adjacent to or within a tract are of less than standard width, additional rights-of-way shall be provided at the time of subdivision or development.

Response: As shown on the Preliminary Plans (Exhibit A), ±6 feet of right-of-way dedication is planned along the project's frontage on 26th Avenue. This requirement is satisfied.

- J. Partial Street Improvements. Partial street improvements resulting in a pavement width of less than twenty (20) feet; while generally not acceptable may be approved where essential to reasonable development when in conformity with the other requirements of these regulations, and when it will be practical to require the improvement of the other half when the adjoining property developed.

Response: Partial Street improvements including additional paving, sidewalk, and planter strip are planned along the project's frontage on 26th Avenue. This requirement is met.

[...]

- N. Ramps, and Driveway Approaches. Concrete curbs, curb cuts, wheelchair, bicycle ramps and driveway approaches shall be constructed in accordance with standards specified in this chapter; and:
 - 1. Concrete curbs and driveway approaches are required; except

-
2. Where no sidewalk is planned, an asphalt approach may be constructed with City Engineer approval; and
 3. Asphalt and concrete driveway approaches to the property line shall be built to City configuration standards.

Response: The planned ramps and accessway along the primary driveway are expected to meet the applicable requirements and standards.

- O. Streets Adjacent To Railroad Right-Of-Way. Wherever the proposed development contains or is adjacent to a railroad right-of-way, provision shall be made for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land. The distance shall be determined with due consideration at cross streets or the minimum distance required for approach grades and to provide sufficient depth to allow screen planting along the railroad right-of-way in nonindustrial areas.

Response: The subject site is not adjacent to railroad right-of-way. This requirement does not apply.

- P. Access Control. Access control as described for each classification of street within the transportation element (Transportation System Plan (TSP), shall be implemented when a new street or street extension is built.

Response: Specific access control will be reviewed with the construction documents for conformance with the City's TSP. This requirement is met.

- Q. Access to Arterials and Major Collectors. Where a development abuts or is traversed by an existing or proposed arterial or major collector street, the development design shall provide adequate protection for residential properties and shall separate residential access and through traffic, or if separation is not feasible, the design shall minimize the traffic conflicts. The design shall include any of the following:
 1. A parallel access street along the arterial or major collector;
 2. Lots of suitable depth abutting the arterial or major collector to provide adequate buffering with frontage along another street;
 3. Screen planting at the rear or side property line to be contained in a non-access reservation along the arterial or major collector; or
 4. Other treatment suitable to meet the objectives of this subsection;
 5. If a lot has access to two streets with different classifications, primary access should be from the lower classification street.

Response: The project site has frontage on 26th Avenue, which is classified as a collector in the Forest Grove TSP. As outlined on the Preliminary Plans (Exhibit A), access to the planned apartment will be provided via a private driveway connection to 26th Avenue. The connection incorporates the necessary design considerations to minimize traffic conflicts. Per the ITE Trip Generation Manual (11th Edition), the apartment will result in twenty-three peak p.m. vehicle trips. According to City staff, the traffic generated by the development will not require additional safety measures.

R. Alleys, Public or Private

1. Alleys shall be no less than fifteen (15) feet in width. In commercial and industrial districts, alleys shall be provided unless other permanent provisions for access to off street parking and loading facilities are made.

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2. While alley intersections and sharp changes in alignment shall be avoided, the corners of necessary alley intersections shall have a radius of not less than twelve (12) feet.

Response: An alley is not anticipated with this project. These requirements are not applicable.

- S. Survey Monuments. Upon completion of a street improvement and prior to acceptance by the City, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the City that all boundary and interior monuments shall be reestablished and protected.

Response: This project does not include changes to existing property boundaries. Therefore, survey monuments are not necessary.

T. Private Streets

1. Design standards for private streets shall be established by the City Engineer; and
2. The City shall require legal assurances for the continued maintenance of private streets, such as a recorded maintenance agreement.
3. Private streets serving more than six (6) dwelling units are permitted only within planned developments, mobile home parks, and multi-family residential developments.

Response: Private streets are not anticipated with this project. These requirements are not applicable.

- U. Railroad Crossings. Where an adjacent development results in a need to install or improve a railroad crossing, the cost for such improvements may be a condition of development approval, or another equitable means of cost distribution shall be determined by the Public Works Director and approved by the Commission.

Response: Access to the project site does not require a railroad crossing. This requirement does not apply.

- V. Street Signs. The City shall install all street signs, relative to traffic control and street names, as specified by the City Engineer for any development. The cost of signs shall be the responsibility of the developer.

Response: Specific signage will be reviewed with the project's construction documents. Street signs are to be installed by the City and financed by the developer. This requirement is met.

- W. Traffic Signals. The location of traffic signals shall be noted on approved street plans. Where a proposed street intersection will result in an immediate need for a traffic signal, a signal meeting approved specifications shall be installed. The cost shall be included as a condition of development.

Response: Traffic signals are not warranted nor required. This requirement does not apply.

- X. Street Light Standards. Street lights shall be installed in accordance with regulations adopted by the City's direction.

Response: Street lights are not anticipated with this project. This requirement is not applicable.

- Y. Street Name Signs. Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.

Response: A new street is not expected to be necessary for this project. This requirement is not applicable.

17.8.615 EASEMENTS

- A. Easements. Easements for sewers, drainage, water mains, electric lines or other public utilities shall be either dedicated or provided for in the deed restrictions, and where a development traversed by a watercourse, or drainageway, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the watercourse.

Response: As shown on the Preliminary Plans (Exhibit A) public utility easements will be provided along the first eight feet adjacent to all public rights-of-way. This standard will be satisfied.

10.8.620 SIDEWALKS

- A. Sidewalks Required. Sidewalks shall be constructed, replaced or repaired to City design standards as set forth in the standard specifications manual and located as follows:

1. On both sides of arterial and collector streets to be built at the time of street construction;
2. On both sides of all other streets and in pedestrian easements and rights-of-way, except as provided further in this section, to be constructed along all portions of the property designated for pedestrian ways in conjunction with development of the property; and
3. On one side of any industrial street to be constructed at the time of street construction or after determination of curb cut locations.

Response: A 5-foot-wide sidewalk along the project site's frontage abutting 26th Avenue is included in the Preliminary Plans (Exhibit A). This requirement is met.

- B. Parkway Requirements. A parkway at least five (5) feet between the curb and the sidewalk shall be required in the design of any arterial or collector street where parking is prohibited adjacent to the curb, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant segments of the street; or it would conflict with the utilities.

Response: A ±7-foot-wide parkway strip is planned along the project's frontage on 26th Avenue (collector). This requirement is satisfied.

- C. Sidewalks in Town Center District. In the Town Center District, sidewalks shall be ten (10) feet in width, and:

1. All sidewalks shall provide a continuous unobstructed path; and
2. The width of curbside sidewalks shall be measured from the back of the curb.

Response: This project is not located within the Town Center District; these requirements do not apply.

- D. Maintenance. Maintenance of sidewalks, curbs, and planter strips is the continuing obligation of the adjacent property owner.

Response: Maintenance of project improvements beyond the curb of adjoining streets will be the responsibility of the adjacent property owner. This requirement is met.

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- E. Application for Permit and Inspection. If the construction of a sidewalk is not included in a performance bond of an approved subdivision or the performance bond has lapsed, then every person, firm or corporation desiring to construct sidewalks as provided by this chapter, shall, before entering upon the work or improvement, apply for a street opening permit to the Engineering department to so build or construct:

[...]

Response: Sidewalks are planned to be constructed with the project's public improvements. This requirement is met.

10.8.625 SANITARY SEWERS

- A. Sewers Required. Sanitary sewers shall be installed to serve each new development and to connect developments to existing mains in accordance with the provisions set forth in Design and Construction Standards for Sanitary and Surface Water Management (as adopted by Clean Water Services in 1996 and including any future revisions or amendments) and the adopted policies of the Comprehensive Plan and the City's Master Sewer Plan.
- B. Sewer Plan Approval. The City Engineer shall approve all sanitary sewer plans and proposed systems prior to issuance of development permits involving sewer service.
- C. Over-Sizing. Proposed sewer systems shall include consideration of additional development within the area as projected by the Comprehensive Plan.
- D. Permits Denied. Development permits may be restricted by the Commission or Hearings Officer where a deficiency exists in the existing sewer system or portion thereof which cannot be rectified within the development and which if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of state or federal standards pertaining to operation of the sewage treatment system.

Response: As shown on the Preliminary Plans (Exhibit A), the project's public sanitary sewer system has been designed to provide sanitary sewer access to service the planned development. Private sewer lateral connections are planned to each of the project's buildings from the public system to be extended from 26th Avenue south through the project. These requirements are met.

10.8.630 WATER FACILITIES

- A. Water Facilities Required. Water facilities shall be installed to serve each new development and to connect developments to existing mains in accordance with the provisions set forth in the adopted policies of the Comprehensive Plan and the City's Master Water Plan.
- B. Water Plan Approval. The City Engineer shall approve all plans for water facilities and proposed systems prior to issuance of development permits involving water service.
- C. Over-Sizing. Proposed water facilities shall include consideration of additional development within the area as projected by the Comprehensive Plan.
- D. Permits Denied. Development permits may be restricted by the Planning Commission or Hearings Officer where a deficiency exists in the existing water system or portion thereof which cannot be rectified within the development and which, if not rectified, will result in a threat to public health

or safety or violations of local, state or federal standards pertaining to the operation of the water system.

Response: As shown on the Preliminary Plans (Exhibit A), a 4-inch domestic water line is planned to extend into the project site from a main situated in 26th Avenue. These requirements are met.

10.8.635 **STORM DRAINAGE**

- A. General Provisions. The Director and City Engineer shall issue a development permit only where adequate provisions for storm water and flood water runoff have been made, and:
 - 1. The storm water drainage system shall be separate and independent of any sanitary sewerage system;
 - 2. Where possible, inlets shall be provided so surface water is not carried across any intersection or allowed to flood any street; and
 - 3. Surface water drainage patterns shall be shown on every development proposal plan.
- B. Easements. Where a watercourse, drainageway, channel or stream traverses a development, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse and such further width as will be adequate for conveyance and maintenance.
- C. Accommodation of Upstream Drainage.
 - 1. A culvert or other drainage facility shall be large enough to accommodate runoff from its entire upstream drainage area, whether inside or outside the development, and;
 - 2. The City Engineer shall approve the necessary size of the facility, based on the provisions of Design and Construction Standards for Sanitary and Surface Water Management (as adopted and amended by Clean Water Services) and the City's Master Storm Water Sewer Plan.
- D. Effect on Downstream Drainage. Where it is anticipated by the City Engineer that the additional runoff resulting from the development will overload an existing drainage facility, the Director and Engineer shall withhold approval of the development until provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with the Design and Construction Standards for Sanitary and Surface Water Management (as adopted by Clean Water Services and including any future revisions or amendments).

Response: The application materials include a Preliminary Stormwater Report. The report shows that stormwater will be collected on-site and conveyed to the public storm drainage system located in 26th Avenue.

17.8.640 **BIKEWAYS**

- A. Bikeway Extension. Developments adjoining proposed bikeways identified on the City's adopted pedestrian/bikeway plan shall include provisions for the future extension of such bikeways through the dedication of easements or rights-of-way.
- B. Cost of Construction. Development permits issued for planned unit developments, conditional use permits, subdivisions, and other developments

which will principally benefit from such bikeways shall be conditioned to include the cost or construction of bikeway improvements.

- C. Minimum Width. Minimum width for bikeways within the roadway is five (5) feet per bicycle travel lane. Minimum width for two-way bikeways separated from the road is eight (8) feet.

Response: A bikeway is not anticipated with this application. This requirement does not apply.

17.8.645 UTILITIES

- A. Underground Utilities. All utility lines in new developments shall be placed underground, and:
1. The developer shall make all necessary arrangements with the serving utility to provide the underground services;
 2. The City reserves the right to approve location of all surface mounted facilities;
 3. All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and
 4. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

Response: As shown on the Preliminary Plans (Exhibit A), the planned utilities will be placed underground. These requirements are met.

- B. Information on Development Plans. The applicant for a development shall show on the development plan or in the explanatory information, easements for all underground utility facilities, and:
1. Plans showing the location of all underground facilities as described herein shall be submitted to the City Engineer for review and approval; and
 2. Care shall be taken in all cases to ensure that above ground equipment does not obstruct vision clearance areas for vehicular traffic.

Response: An 8-foot public utility easement is shown on the Preliminary Plans (Exhibit A) adjacent to the public right-of-way (26th Avenue) to allow for the undergrounding of franchise utilities. Pedestals and above ground equipment shall comply with the vision clearance triangle regulations.

- C. Exception to Under-Grounding Requirement for Infill Development. An applicant for infill development, which is served by above ground utilities, may be exempt from the requirement for undergrounding utilities. This exception shall apply only to existing utility lines.

Response: This application involves a multi-family apartment on a site surrounded by existing developed lots. Existing above ground utility lines are along the frontage of the project site. The project may be exempt from undergrounding requirements.

17.8.650 AGREEMENT

For projects involving public improvements, the applicant shall enter into an agreement with the City Engineer prior to any site preparation or, where there is a partition or subdivision, prior to approval of the final map. The agreement shall be in a form as approved by the City Engineer.

At a minimum, it shall include detailed plans for public improvements and provide adequate assurance to guarantee the installation of the improvements (known as Performance Assurance) and the workmanship and material of the installation (known as Maintenance Assurance). The agreement may be waived by the City Engineer if the level of work is considered minor.

However, the assurances shall be required for any public improvements. The assurance shall be based on the following requirements:

- A. Maintenance Assurance. All improvements installed by the developer shall be guaranteed as to workmanship and material for a period of one (1)-year following acceptance by the City Engineer.
- B. Form of Assurance. All assurances shall be secured by cash deposit, bond or irrevocable letter of credit in the amount of 100% of the cost to complete the project as set by the City Engineer.

Response: Prior to the construction of public improvements, the developer shall enter a public improvement contract with the City and provide a performance bond. Upon completion and acceptance of the public improvements, the developer shall convert the performance bond into a one-year maintenance bond. These requirements are satisfied.

BUILDING DESIGN AND DEVELOPMENT STANDARDS

17.8.705 APPLICABILITY.

The standards in this subarticle apply to all multi-unit residential and commercial projects, and all projects within Town Center zoning districts.

17.8.710 STANDARDS.

A. Building design standards for multi-unit development except within Town Center zones.

1. Massing and form.

- a. On lots with an average cross slope of 15% or more, no more than 60% of the site shall be re-graded.

Response: As shown on the Existing Conditions Plan (Exhibit A), the subject property is relatively flat with an average slope less than 15 percent.

- b. No building shall have a dimension greater than 150 feet without a minimum three feet off-set of the exterior wall.
- c. At a minimum, every two dwelling units shall be offset from the next dwelling unit by at least four feet in depth.
- d. All habitable rooms shall incorporate at least one window when facing parking lots and common areas.

2. Compatibility.

- a. All buildings shall incorporate a porch or architecturally defined entry space for each ground level dwelling unit with a minimum area of 16 square feet per dwelling unit, with no dimension less than four feet.

-
- b. Shared porches or entry spaces are permitted. All grade level porches shall include hand-railing, half-walls or shrubs to define their outside perimeter.
 - 3. Privacy.
 - a. Front entryways into dwelling units shall be separated vertically or horizontally a minimum of three feet from sidewalks used by more than one dwelling unit.
 - b. Bedroom and bathroom windows shall be offset a minimum of four feet from windows on adjacent buildings (unless window glazing is frosted, diffused or glass block).

Response: This application is for a multi-unit apartment including four buildings. Preliminary Plans (Exhibit A) demonstrate the building's compliance with the applicable building design standards. These requirements are met.

- 4. Building relationship with adjacent arterials.
 - a. Buildings shall be setback at least ten feet from arterials.
 - b. Buildings shall be oriented away from arterials and no front or main entries shall be facing the arterials.
 - c. The setback area shall be landscaped consistent with the buffering requirements of § 17.8.425, except that chain link fence shall not be allowed.

Response: The subject property has frontage along 26th Avenue, which is classified as a collector. These requirements are not applicable.

[...]

LIGHTING STANDARDS

17.8.755 GENERAL PROVISIONS.

- A. When standards apply. Unless otherwise provided, the provisions of this subarticle apply to lighting that is part of a multi-family or commercial project, or lighting within one of the Town Center zoning districts.

Response: This application is for a multi-unit apartment including four buildings. Therefore, this section is applicable.

- B. Adjustments. Adjustments to the provisions in this section may be considered as part of the Adjustment, Design Review, Conditional or Planned Development Process.

Response: This application does not include an adjustment from these standards. This requirement is satisfied.

- C. Luminous standards. Light intensity standards shall be as follows:
 - 1. Outdoor lighting shall be provided in a manner that enhances security, is appropriate for the use, and avoids adverse impacts on surrounding properties. Glare shall not cause illumination on other properties in excess of a measurement of 0.5 foot-candles of light.
 - 2. Street lights shall meet the lighting requirements of the Public Works Director upon consultation with the Light and Power Director.
 - 3. Pedestrian lighting standards:

-
- a. Lighting for on-site pedestrian circulation system shall be lighted to a minimum level of 0.5 foot-candles, a 1.5 foot-candle average, and a maximum to minimum ratio of seven-to-one to enhance pedestrian safety and allow employees, residents, customers or the public to use the walkways at night.
 - b. Pedestrian walkway lighting through parking lots shall be lighted to a 0.5 foot-candle average and a maximum to minimum ratio of ten-to-one to light the walkway and enhance pedestrian safety. Artificial lighting which may be provided shall enhance security, be appropriate for the use, and avoid adverse impacts on surrounding properties and the night sky through appropriate shielding. The lighting shall not cause a measurement in excess of 0.5 foot-candles of light on other properties.

Response: These requirements will be reviewed in the building permit phase of the planned multi-family project. This requirement can be met.

D. Lighting standards for multi-unit development.

- 1. All exterior dwelling unit entrances and pedestrian walkways shall be lighted.
- 2. Poles outside of the public right-of-way shall be a maximum of 14 feet in height if the lot is less than 20,000 square feet and 18 feet for lots larger than 20,000 square feet.
- 3. Concrete light fixture bases taller than eight inches are prohibited.
- 4. Area lighting shall be directed downward with no splay of light off the site. Any light source over ten feet high shall incorporate cut-off shield.
- 5. Plastic signs with internal light source are prohibited.

Response: These requirements will be reviewed in the building permit phase of the planned multi-dwelling project. This requirement can be met.

IV. Conclusion

The required findings have been made and this written narrative and accompanying documentation demonstrate that the application is consistent with the applicable provisions of the City of Forest Grove Community Development Code. The evidence in the record is substantial and supports approval of the application. Therefore, the City can rely upon this information in its approval of the application.

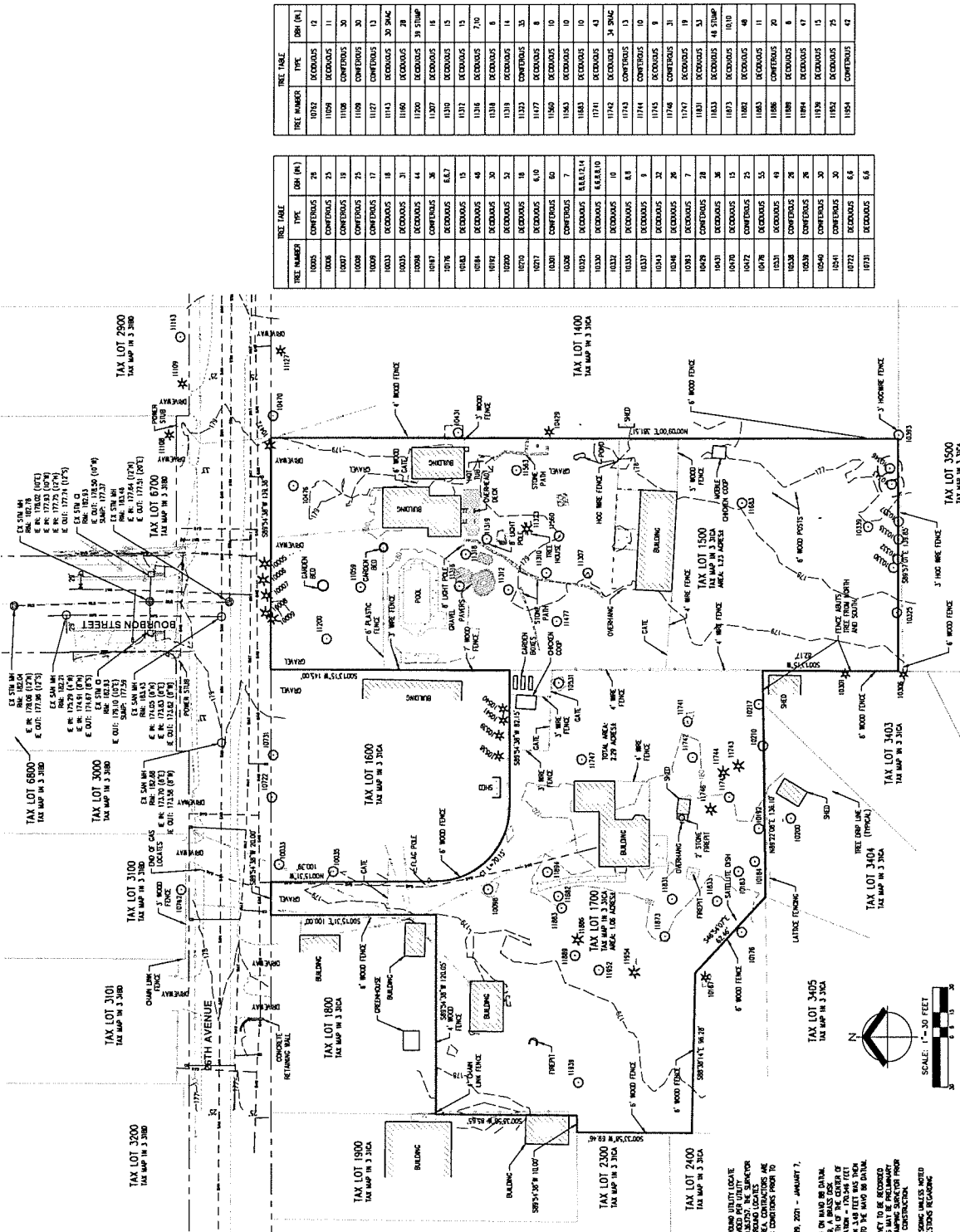


Exhibit A: Preliminary Plans

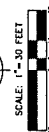
PRELIMINARY EXISTING CONDITIONS PLAN WEST GROVE APARTMENTS CREEKWOOD HOMES FOREST GROVE, OR

PROJECT NO. 2020-001
 DATE: 12/15/2020
 DRAWN BY: J. B. BROWN
 CHECKED BY: J. B. BROWN
 SCALE: 1" = 30' FEET

P01



CARP TABLE			
CARP	RADIUS	DELTA	LENGTH
1	44.7'	89.4°	20.1'



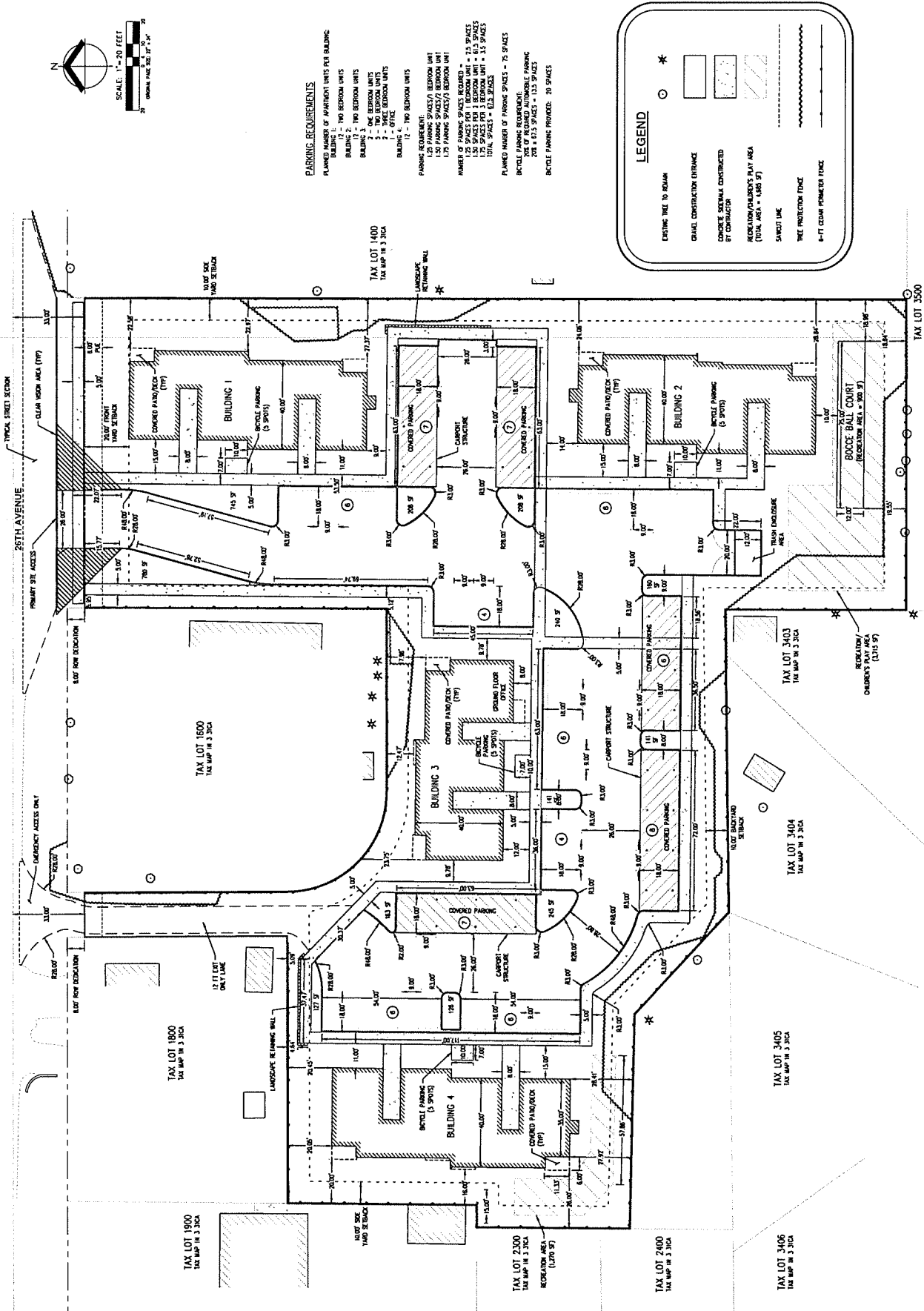
- NOTES:**
- EXISTING CONDITIONS ARE BASED ON AERIAL PHOTOGRAPHY AND FIELD SURVEY. THE SURVEYOR HAS NOT CONDUCTED A FIELD SURVEY OF THE PROJECT AREA. THE SURVEYOR IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED IN THIS PLAN. THE INFORMATION IS SUBJECT TO CHANGE UPON AERIAL PHOTOGRAPHY INSPECTION.
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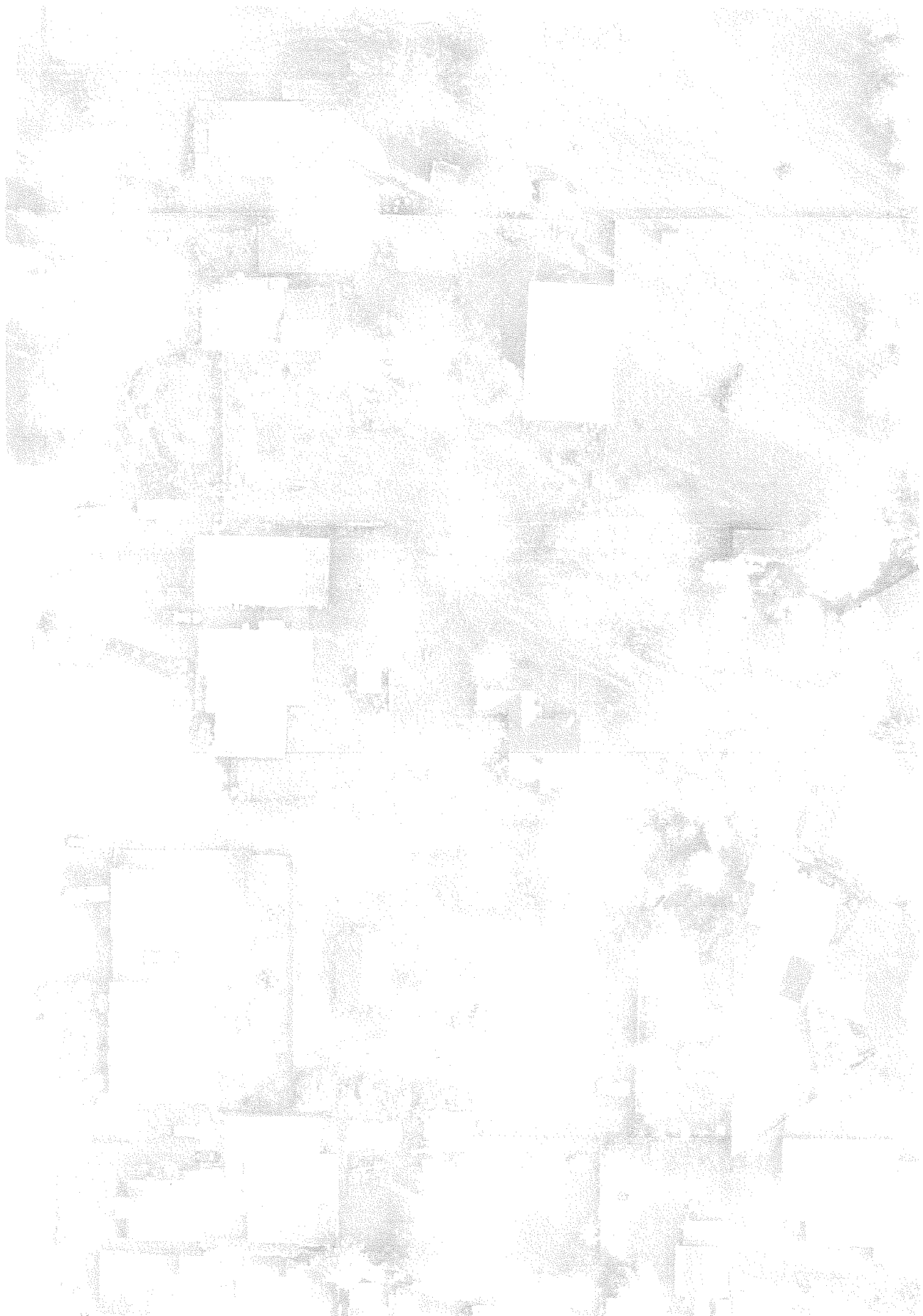
TREE NUMBER	TREE TYPE	DBH (IN)
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10002	CONIFEROUS	25
10003	CONIFEROUS	15
10004	CONIFEROUS	25
10005	CONIFEROUS	17
10006	CONIFEROUS	18
10007	CONIFEROUS	31
10008	CONIFEROUS	14
10009	CONIFEROUS	38
10010	CONIFEROUS	15
10011	CONIFEROUS	6.7
10012	CONIFEROUS	15
10013	CONIFEROUS	48
10014	CONIFEROUS	50
10015	CONIFEROUS	50
10016	CONIFEROUS	18
10017	CONIFEROUS	6.10
10018	CONIFEROUS	7
10019	CONIFEROUS	8.8, 8.14
10020	CONIFEROUS	10
10021	CONIFEROUS	8.8
10022	CONIFEROUS	9
10023	CONIFEROUS	22
10024	CONIFEROUS	36
10025	CONIFEROUS	7
10026	CONIFEROUS	30
10027	CONIFEROUS	38
10028	CONIFEROUS	15
10029	CONIFEROUS	25
10030	CONIFEROUS	55
10031	CONIFEROUS	49
10032	CONIFEROUS	26
10033	CONIFEROUS	30
10034	CONIFEROUS	30
10035	CONIFEROUS	6.6
10036	CONIFEROUS	6.6

TREE NUMBER	TREE TYPE	DBH (IN)
10037	CONIFEROUS	12
10038	CONIFEROUS	11
10039	CONIFEROUS	30
10040	CONIFEROUS	13
10041	CONIFEROUS	20
10042	CONIFEROUS	28
10043	CONIFEROUS	14
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10099	CONIFEROUS	10
10100	CONIFEROUS	10

PRELIMINARY ALTERNATE SITE PLAN WEST GROVE APARTMENTS CREEKWOOD HOMES FOREST GROVE, OR

NOT FOR CONSTRUCTION
DATE: 01/17/2021
BY: JMM
CHECKED BY: JMM
DATE: 01/17/2021
PROJECT NO: P03





West Grove Apartments Design Review Application

Date: October 2022

Submitted to: City of Forest Grove
1924 Council Street
Forest Grove, OR 97116

Applicant: Creekwood Homes, Inc.
PO Box 1785
North Plains, OR 97133

AKS Job Number: 9240



12965 SW Herman Road, Suite 100
Tualatin, OR 97062
(503) 563-6151

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Exhibits

- Exhibit A:** Preliminary Plans
- Exhibit B:** City Land Use Application Form
- Exhibit C:** Property Ownership Information
- Exhibit D:** Washington County Tax Assesor's Map
- Exhibit E:** CWS Service Provider Letter
- Exhibit F:** Geotechnical Engineering Report
- Exhibit G:** Preliminary Stormwater Report
- Exhibit G:** Neighborhood Meeting Materials

West Grove Apartments Design Review Application

Submitted to:	City of Forest Grove 1924 Council Street Forest Grove, OR 97116
Applicant:	Creekwood Homes, Inc. PO Box 1785 North Plains, OR 97133
Property Owners:	Creekwood Homes, Inc. PO Box 1785 North Plains, OR 97133
Applicant's Consultant:	AKS Engineering & Forestry, LLC 12965 SW Herman Road, Suite 100 Tualatin, OR 97062 Contact(s): Tony Mills Email: millst@aks-eng.com Phone: (503) 563-6151
Site Location:	2230 & 2320 26 th Avenue
Washington County Assessor's Map:	1N 3 31CA Tax Lot 1500 & 1700
Site Size:	2.29 acres
Land Use Districts:	Multi-Unit (High) Residential



I. Executive Summary

On behalf of Creekwood Homes, Inc. (Applicant), AKS Engineering & Forestry is submitting this Design Review application for a 45-unit multi-family apartment project in the City of Forest Grove (City). This project involves infill development of a ± 2.29 -acre property located south of SW 26th Avenue in an area zoned for higher-density residential uses (Multi-Unit High Residential (RMH)) but is occupied by traditional single-family residential dwellings. The site is a unique shape resulting from combining a flag lot with a 20-foot wide accessway and a standard rectangular-shaped property (± 139 feet wide). Both properties have frontage along (and access to) SW 26th Avenue.

This site plan intends to provide a multi-unit apartment consistent with the RMH zoning designation while being compatible with the surrounding properties. One of the primary ways the preliminary plans attempt this is by establishing a large buffer area around the property's perimeter. Laying out the site this way creates some spatial restrictions on the interior. To provide a buffer from the surrounding properties and meet basic code requirements for access, the applicant is requesting an adjustment to some of the preferable typical interior design standards for this type of project. The project includes:

- 4 multi-dwelling buildings
- 45 Dwelling Units
- A management office
- A $\pm 3,700$ SF Open Space/ Recreation Area
- ± 70 Off Street Parking Spaces (covered and uncovered)
- ± 20 Bicycle parking spaces
- Two direct pedestrian connections to SW 26th Ave
- Emergency vehicles turn around areas consistent with Oregon Fire Code
- One-way emergency vehicle egress

This written narrative, together with preliminary plans and other documentation included in the application materials, establishes that the application is in compliance with all applicable approval criteria. This documentation represents substantial evidence and provides the basis for the Planning Commission to approve of the application.

II. Site Description/Setting

The subject site is a ± 2.29 -acre property comprised of two tax lots (Washington County Assessor's Map 1N 3 31CA, Tax Lots 1500 and 1700) situated in the City of Forest Grove's Multi-Unit High Residential zone (RH). Tax Lot 1500 is a standard ± 1.23 -acre lot occupied by a single-family residence. Tax Lot 1700 is a ± 1.06 -acre flag lot occupied by a single-family dwelling. Properties abutting the project site are predominantly occupied by single-family residential dwellings and situated within the RMH zone. Pacific University owns the abutting vacant property to the southeast. Access to each lot is provided via established driveway connections to 26th Avenue. The project site is ± 275 feet east of the intersection between 26th Avenue and Sunset Drive. According to the Forest Grove Transportation System Plan (TSP), 26th Avenue is classified as a collector. Existing sanitary sewer, water, stormwater, and franchise utilities are available to the site within 26th Avenue right-of-way. The subject properties are relatively flat (less than 5 percent slope). There are no mapped wetlands on the site, but it is within a potential area of impact to a Clean Water Services (CWS) vegetative corridor.

III. Applicable Review Criteria

This apartment project is a “needed housing” application under Oregon Revised Statute (ORS) 197.303(1)(a) as it provides housing within an urban growth boundary. ORS 197.307(4) states that a local government may apply only clear and objective standards, conditions, and procedures regulating the development of needed housing, and such standards, conditions, and procedures cannot have the effect, either in themselves or cumulatively, of discouraging needed housing through unreasonable cost or delay.

Oregon Courts and the Land Use Board of Appeals (LUBA), have generally held that an approval standard is not clear and objective if it imposes on an applicant “subjective, value-laden analyses that are designed to balance or mitigate impacts of the development.” *Rogue Valley Association of Realtors v. City of Ashland*, 35 Or LUBA 139, 158 (1998) *aff’d*, 158 Or App 1 (1999). ORS 197.831 places the burden on local governments to demonstrate that the standards and conditions placed on needed housing applications can be imposed only in a clear and objective manner. While this application addresses all standards and conditions, the Applicant reserves the right to object to the enforcement of standards or conditions that are not clear and objective and does not waive its right to assert that the needed housing statutes apply to this application. The exceptions in ORS 197.307(4)(a) and 197.307(5) do not apply to this application. ORS 197.307(7)(a) is controlled by ORS 197.307(4). The City has not taken an exception under 197.303(3).

This Application is also a “limited land use application” as that term is defined in ORS 197.015 (12). ORS 197.195 (1) describes how certain standards can be applied to a limited land use application.

FOREST GROVE DEVELOPMENT CODE

ARTICLE 2 LAND USE REVIEWS

APPLICATION PROCESS AND PROCEDURES

17.1.205 CONSOLIDATED REVIEW.

Where a proposal involves more than one application for the same property, the applicant may submit concurrent applications. The applications shall be consolidated for review in accordance with the highest numbered procedure. For example, a minor adjustment (Type I) can be consolidated with a conditional use (Type III), but it will be subject to Type III procedures.

Response: This application includes a Design Review and an Adjustment. Per Section 17.2.330 of the Forest Grove Development Code, a Design Review for multi-dwelling developments with more than five units must be reviewed through a Type III process. According to Section 17.2.110, an Adjustment is examined through a Type I or II process. Per Section 17.1.205, this application is anticipated to be reviewed through the Type III process outlined in 17.1.600.

17.1.210 INITIATION AND WITHDRAWAL OF LAND USE APPLICATION.

Land use applications shall be initiated by one of the following:

- A. Application by all the owners or all the contract purchasers of the subject property, or any person authorized in writing to act as agent of the owner or contract purchasers;
- B. The City Council ;
- C. The Planning Commission;
- D. The Community Development Director ; or

-
- E. Public agencies or utilities that have statutory rights of eminent domain for projects they have the authority to construct.

The Director may withdraw any application at the written request of the applicant , prior to the final written decision.

Fees for applications withdrawn at the request of the applicant shall be refunded, less the actual costs incurred by the city in processing the application .

Response: This application has been prepared and submitted on behalf of Creekwood Homes, Inc. Creekwood Homes is currently under contract to purchase the property. The requirements of Section 17.1.210 are satisfied.

17.1.215 PRE-APPLICATION CONFERENCE.

The Director shall not accept a Type II, III or IV land use application for processing unless the applicant or the applicant 's representative has attended a pre-application conference, or the Director has, in his or her discretion, signed a waiver of the pre-application conference.

The purpose of the pre-application conference is to acquaint the applicant with the requirements of this Code, the Comprehensive Plan and other relevant criteria. It is designed to assist the applicant . The applicant assumes the risk for delays or other problems caused by failure to attend a pre-application conference. It is impossible, however, for the pre-application conference to be an exhaustive review of all potential issues and the conference shall not prevent the city from enforcing all applicable regulations.

To schedule a pre-application conference, the applicant shall submit a completed and signed conference request form and the following information:

A. A short narrative describing the proposal, including at minimum:

1. Proposed use ;
2. Size of buildings and/or number and types of residential units;
3. Approximate building heights ; and
4. Other information as applicable, such as:
 - a. Number of employees ;
 - b. Use of hazardous materials (including general quantity and type); and
 - c. Any known special conditions applicable to the site or proposed development .

B. A conceptual site plan ; and

C. The appropriate fee.

The Director shall schedule the pre-application conference within seven working days of the request. The Director shall identify and prepare a summary of topics to be discussed and shall provide the applicant with a written summary of the conference.

If a complete application relating to the proposed development action that was the subject of the pre- application conference has not been submitted within one year of the conference, a new pre-application conference or waiver is required.

Response: This application involves a Design Review for a multi-dwelling apartment with more than five dwelling units. Consistent with 17.2.230, the project will be reviewed following the Type III process outlined in 17.1.600. Consistent with the requirements in 17.1.215, a Pre-

Application Conference for this project was held on February 2nd, 2022. This requirement is satisfied.

17.1.220 NEIGHBORHOOD MEETING.

When the Director determines that a proposed project has the potential to raise concerns of neighborhood or community impact, the applicant shall initiate, attend and conduct a neighborhood meeting. The purpose of the neighborhood meeting is to allow the neighbors and other interested parties to become familiar with the proposal and to identify issues that may be associated with an application . The Director shall identify the need for the meeting within seven days after the pre-application conference is held.

The neighborhood meeting is intended to result in an application that is responsive to neighborhood concerns, reducing the likelihood for delays and appeals of the application . The city expects an applicant to take the reasonable concerns and recommendations of the neighborhood into consideration when preparing an application . The city expects the neighbors will work with the applicant to provide such input.

Neighborhood meetings must be conducted before the city will accept an application on any portion of the proposal. The applicant can request a sign-in sheet from the Community Development Department or provide his or her own sign-in sheet, which must be completed on the night of the neighborhood meeting and submitted to the city at the time of application as verification that the meeting was held. The sign-in sheet should indicate the date, time and location of the meeting, a brief heading describing the subject of the proposal, and the signatures of those in attendance at the meeting. The city shall retain the sign-in sheet as part of the record in the land use case file.

Those notified of the neighborhood meeting shall, at minimum, include all surrounding property owners and residents located at the notification distance of the greatest level permit or 300 feet if the permit type is not known, as well as any other interested parties identified by the Director .

Response: A neighborhood meeting for this project was held on June 20th,2022. The Neighborhood Meeting Materials in Exhibit G include a summary of the meeting.

17.1.225 APPLICATION CONTENTS

A land use application shall consist of at least the following:

- A. A completed city application form with the following information:
 - 1. Property description and assessor map parcel number(s);
 - 2. Name, address, telephone number of the applicant(s), property owner(s) or contract purchaser(s), and, if applicable, the same information of the authorized agent of the applicant, property owner or contract purchaser
 - 3. A complete list of the approvals sought by the applicant.

Response: A completed and signed land use application form is included in Exhibit B. This requirement is satisfied.

- B. A narrative description of the proposed development, existing site conditions, and pertinent background information.
- C. Findings that discuss how the approval criteria of the Code are or can be met.

Response: This written narrative includes a project overview, findings demonstrating how the project is consistent with the applicable criteria, and a description of the existing site conditions. This requirement is satisfied.

- D. A transportation study is required when determined by the City at a pre-application conference the proposed project would have traffic circulation or safety impacts, need for off-site street improvements or would increase traffic on adjacent streets by at least 50 peak hourly trips, or at least 500 average daily trips, or a Transportation Impact Study is required by the Oregon Department of Transportation or Washington County Department of Land Use and Transportation. The transportation study shall be prepared under the supervision of professional engineer qualified in the traffic engineering field as defined by OAR 820-040-0030. The transportation study shall include the expected trip generation of the proposed development including the weekday AM peak hour, PM peak hour, and daily traffic estimates. The transportation study shall identify all site-access points and intersections (signalized and unsignalized) adjacent to the development site. If the development site fronts an arterial or collector street the analysis shall identify and assess all intersections within ¼ mile of the development site.

Response: Per comments from City Staff, the planned apartment is not anticipated to generate enough daily or peak-hour trips to necessitate a transportation study. Therefore, this requirement is not applicable.

- E. Duplicates of the above information as required by the Director. (Note: The pre-application conference summary will provide guidance on what specific information is required and how many copies must be submitted.)

Response: Consistent with the request from city staff, the necessary application materials have been provided.

- F. All required application fees.

Response: The necessary fees have been provided by the applicant in accordance with the City's fee schedule.

TYPE III PROCESS – QUASI-JUDICIAL LAND USE DECISIONS

17.1.605 TYPE III APPLICATIONS AND APPROVAL CRITERIA.

Applications so designated throughout the Development Code are reviewed under the Type III process based on the requirements and criteria for each application set forth in other sections of this Code. Examples of these applications include:

- Quasi-Judicial Zoning Map Amendments with review by Planning Commission and approval by City Council
- New Conditional Use Permit or Major Modification of Use Permit
- Certain types of Design Review
- Variance
- Elevation by Director of a Type II permit
- Preliminary Plan for Planned Development
- Demolition or relocation of Historic Landmark
- Manufactured Dwelling Parks
- Removal of Registered Tree from the Register

· Certain Types of Wireless Communication Facilities

Any application that is not specifically designated in the Code as being under one of the four review processes, and which the Director determines is similar in impact and scope to other Type III applications, shall be processed as a Type III application.

Response: Per Section 17.2.300, new multi-unit developments with more than five units must be reviewed following the Type III process. This project involves ±45 dwelling units. Therefore, this application will be reviewed through the Type III Quasi-Judicial Process.

ADJUSTMENT

17.2.100 PURPOSE.

The adjustment process provides a mechanism by which the Director may make limited modifications to yard setback, height and lot coverage standards. Adjustment reviews provide limited flexibility for unusual situations if the proposed development continues to meet the intended purpose of the regulations.

§ 17.2.110 PROCEDURE.

- A. Requests for changes of less than 10% of the setback, height or lot coverage standard shall follow the Type I process.
- B. Requests for changes from 10% to 20% of the setback, height or lot coverage standard shall follow the Type II process.
- C. Requests for changes to standards other than setback, height or lot coverage, or which are for more than 20% of the setback, height or lot coverage standard are processed as variances under § 17.2.700.

Response:

17.2.120 REVIEW CRITERIA.

- A. Type I Adjustment Process.
 - 1. The requested adjustment is for less than 10% of the setback, height or lot coverage standard; and
 - 2. Granting adjustment shall be consistent with the purpose of the affected zoning.

Response: Per 17.8.140.A.1.b, dwellings are required to be separated 10 feet from pedestrian pathways. As shown on the Preliminary Plans (Exhibit A), the east and west facades of Building 3 are 9.78 feet from the planned pedestrian path. The eastern portion of Building 3's southern exterior is 8 feet from the pedestrian path. Therefore, an adjustment is necessary. A 10 to 20 percent reduction in this standard is one-to-two feet, and the applicant is requesting a two-foot encroachment into the 10-foot setback meaning this request qualifies for a Type II Adjustment Review. Building 3 is intended to include a mix of dwellings and the apartment management office. The office will be located on the first floor of the western portion of the building, where the most significant reduction is necessary. The adjustment is essential to maintain an exterior buffer from the neighboring properties and the minimum vehicle and pedestrian access requirements.

DESIGN REVIEW

17.2.310 APPLICABILITY.

Design review is required for the following:

[...]

B. New multi-unit developments;

[...]

Response: Per 17.2.300, Design Review approval is required for a new multi-unit project. As demonstrated in the Preliminary Plans (Exhibit A), the applicant desires to follow the clear and objective Track 1-Development Standards in the Design Guideline Handbook. The applicable Design Review submittal requirements, as discussed at the pre-application conference, are included in this application.

17.2.320 OVERVIEW OF PROCESS.

Design review applications will be processed in one of two tracks: Development Standards or Design Guidelines. The applicant shall identify the desired tract as part of the initial application. The tracks are described as follows:

Track 1-Development Standards. Applications are required to meet the clear and objective development standards which are provided in the Development Code. These requirements are intended to be specific and directive. The purpose is to establish a baseline for site plan design which works in conjunction with other requirements of the Development Code.

Track 2-Design Guidelines. Applications allow more flexibility in terms of design. Under this process the applicant shall be held to the intent of the standards, but is allowed to vary from these standards if demonstrated that related guidelines and objectives are adequately addressed and that the deviation results in a higher quality development than would result under a strict interpretation of the Code.

Response: The applicant desires to follow Track 1-Development Standards for this Design Review application. As demonstrated throughout this application, the applicable clear and objective development standards are satisfied.

17.2.330 PROCEDURE.

The design review applicant must select one of two design review tracks: (1) development standards track or the (2) design guidelines track. Depending upon the tract and specific characteristics of the project, these are reviewed under a Type II or Type III procedure, as described below.

A. Track 1 – Development Standards. Applications shall be reviewed under a Type II or III procedures as outlined below:

1. **Type II Review.** The Director is the review authority for the following Track 1 – Design Standards applications :
 - a. Multi-family developments with three to five units; and
 - b. Commercial alterations, remodels, renovation and new construction of less than 10,000 square feet.
2. **Type III Review.** The Planning Commission is the review authority for the following Track 1 design review applications :
 - a. Multi-family developments with more than six units;
 - b. Commercial alterations, remodels, renovation and new construction of more than 10,000 square feet; and
 - c. Any Type II design review application elevated by the Director to the Type III procedure.

Response: As stated above, this application will follow the Track 1 Design Review process. The application is for a multi-unit apartment project including more than six units; therefore, a Type III review process applies with the Planning Commission as the review authority.

17.2.340 SUBMITTAL REQUIREMENTS.

In addition to the standard submittal requirements for a Type II or Type III application, and the submittal requirements of a site plan in § 17.2.440, the following documents are required for Design Review. Plans shall be drawn to scale and fully dimensioned. At the pre-application conference, the Director may specify more detailed submittal requirements or waive specific submittal requirements if warranted.

- A. Architectural drawings, renderings, sketches and a materials board showing all elevations of proposed buildings as they will appear on completion.
- B. All existing and proposed walls and fences, including the location, height, type of design and composition.
- C. An open space plan showing the locations and dimensions of common and private open space, including active and passive recreational areas.

Response: The applicable Design Review submittal requirements, as discussed at the pre-application conference, are included in this application. These requirements are satisfied.

17.2.350 REVIEW CRITERIA.

Projects subject to design review by the Director (Type II) or the Design Review Commission (Type III) shall be evaluated based on the following:

- A. The development standards of the applicable zoning district and any overlay district;
- B. The general development standards of Article 8;
- C. Departures from code requirements may be permitted as part of a Track 2 Design Review Process, when the following criteria are met.
 - 1. The design guidelines contained in the applicable section of the “Design Guideline Handbook” are adequately addressed.
 - 2. The applicant demonstrates that the overall development would result in a development that better meets the intent of the design guidelines than a design that simply meets the Code.

Response: The applicable sections of the Residential Zoning Standards of Article 3 and the General Development Standards of Article 8 are addressed in the Preliminary Plans (Exhibit A) and throughout this written narrative. This application demonstrates compliance with the Track 1 Development Standards. As such, it is not anticipated that the Track 2 Design Standards must be addressed.

SITE DEVELOPMENT REVIEW

[...]

17.2.410 APPLICABILITY.

Site development review is required for the following:

- A. All new development of vacant sites (with the exception of the exemptions listed below);
- B. An expansion of 20% or more of the existing building square footage on the development site;

-
- C. A new parking lot or 20% expansion of an existing parking lot that is not associated with new commercial or multi-family development;
 - D. Any change of use (according to use table of applicable zoning district);
 - E. As part of a Master Plan application (§§ 17.4.100 et seq);
 - F. As part of a Conditional Use permit application (§ 17.2.200); and
 - G. As part of a Design Review application (§§ 17.2.300 et seq).

17.2.420 EXEMPTIONS.

The following development is exempt from site development review:

- A. Home occupations;
- B. Family day care; and
- C. Accessory structures.

Response: As stated above, Site Development Review applies to new development of vacant sites and as part of a Design Review application; therefore, this section applies to the apartment project application.

17.2.430 PROCEDURE.

Site development review is categorized as a Type I procedure for one single-family detached dwelling on an individual lot; one duplex on an individual lot; one manufactured home on an individual lot. All other site development reviews shall follow the Type II procedure unless exempt.

Response: This Site Development Review application is consolidated with the Design Review application. Therefore, a Type III process will be followed.

17.2.440 SUBMITTAL REQUIREMENTS.

In addition to the standard submittal requirements for a Type II application, the following plans and information are required for Site Development Review. The Director may waive specific submittal requirements at the pre-application conference, if warranted.

Site Development Plans shall be drawn to scale and fully dimensioned, and shall illustrate the following:

- A. Boundaries of the development site, with lot line dimensions and land area in square feet;
- B. Boundaries of lots adjacent to the development site, with general locations of existing buildings and driveways and description of current land uses;
- C. Existing contours of the development site at two-foot intervals for slopes of less than 10% and at ten-foot intervals for slopes of more than 10%. Additional contour data may be required by the Director for slopes greater than 20%;
- D. Major existing physical and natural features such as perennial and intermittent streams, wooded areas, marshes, rock outcroppings and vegetative cover types;
- E. Environmental resource areas subject to the provisions in § 17.8.305 and, where applicable, §§ 17.5.005 et seq. and environmental hazard areas subject to the requirements in § 17.8.310;
- F. Individual trees or groves of trees subject to the provisions of §§ 17.5.100 et seq.;

-
- G. Historic Landmarks subject to the provisions of §§ 17.5.200 et seq.;
 - H. Location, dimensions and heights of existing and/or proposed structures, including area in square feet and designation of existing and/or proposed use;
 - I. Setback dimensions from buildings to lot lines and lot coverage as a percentage of total lot size;
 - J. Location and dimensions of existing and/or proposed streets, driveways, transit facilities, sidewalks, trails, off-street parking and loading space, bicycle parking facilities, landscaped areas, recreation areas and trash storage areas;
 - K. Location of existing utilities and fire hydrants adjacent to the site, including the size of storm sewer, sanitary sewer and water lines;
 - L. Location and names of public street, parks, utility rights-of-way and easements within or adjacent to the site;
 - M. Location and types of proposed drainage, water and sewer facilities to serve the development;
 - N. Elevation drawings of proposed buildings;
 - O. Landscape plan depicting existing and proposed trees, shrubs, groundcover, irrigation and architectural features such as fences or walls. Proposed plantings shall be designated as to species, quantities and size at time of planting;
 - P. Location, character and dimensions of proposed signs and lighting; and
 - Q. Locations and dimensions of all existing and proposed outdoor storage areas, including but not limited to trash storage and recycling areas.

Response: The subject property has been surveyed to determine the property boundaries and existing site features, a certified arborist inventoried the existing trees on the site, and a natural resources professional made a site visit to determine the presence of wetlands and other natural features. This information is provided in the Preliminary Plans (Exhibit A).

17.2.450 REVIEW CRITERIA.

The Director shall review and approve, conditionally approve or deny the site development plan based on the following criteria:

- A. The site development plan complies with all applicable standards of the base zoning district, any overlay district and the applicable general development standards of Article 8.

Response: As demonstrated in this written narrative, the Preliminary Plans (Exhibit A) generally meet the applicable standards of the base zoning district and the applicable development standards of Article 8. This application includes a request for a minor adjustment from the standard in 17.8.140.A.1.b. The adjustment criteria are addressed in this narrative.

- B. The site development plan ensures reasonable compatibility with surrounding uses as it relates to the following factors:
 - 1. Building mass and scale do not result in substantial visual and privacy impacts to nearby residential properties; and
 - 2. Proposed structures, parking lots, outdoor use areas or other site improvements that could cause substantial off-site impacts such as

noise, glare and odors are oriented away from nearby residential uses and/or adequately mitigated through other design techniques.

Response: The above information, as applicable, is included in the Preliminary Plans (Exhibit A).

- C. The site development plan preserves or adequately mitigates impacts to unique or distinctive natural features including, but not limited to:
1. Significant on-site vegetation and trees;
 2. Prominent topographic features; and
 3. Sensitive natural resource areas such as wetlands, creek corridors and riparian areas.

Response: According to the City's Comprehensive Plan, the project site is within an area of potential impact to a CWS vegetative corridor. A CWS Service Provider Letter is included in Exhibit E. No mapped wetlands are located within the project area. An inventory of all the trees on the site and a tree preservation plan is included in the Preliminary Plans (Exhibit A). This criterion is satisfied.

- D. The site development plan preserves or adequately mitigates impacts to designated historic resources.

Response: Designated historic resources are not located on the subject site or adjacent to it. This criterion does not apply.

- E. The site development plan provides adequate right-of-way and improvements to abutting streets to meet the street standards of the city. This may include, but not be limited to, improvements to the right-of-way, sidewalks, bikeways and other facilities needed because of anticipated vehicular and pedestrian traffic generation.

Response: The project site has frontage along 26th Avenue, which is classified as a collector. The Preliminary Plans (Exhibit A) demonstrate compliance with the applicable frontage improvement requirements.

- F. The site development plan promotes safe, attractive and usable pedestrian facilities that connect building entrances, public sidewalks, bicycle and auto parking spaces, transit facilities and other parts of a site or abutting properties that may attract pedestrians.

Response: Preliminary Plans (Exhibit A) include a driveway and travel aisle, off-street parking space, bicycle parking, and a pedestrian path connecting the front entrances to each planned building to the planned sidewalk along 26th Avenue. This criterion is satisfied.

ARTICLE 3 ZONING DISTRICTS

RESIDENTIAL ZONES

[...]

17.3.110 LIST OF RESIDENTIAL ZONES

[...]

- F. Residential RMH. The RMH zone is intended for development at a target density of 20.28 dwelling units per net acre. Multi-unit residential buildings will be the predominant housing type in this zone. RMH zoning is generally applied near transit streets and adjacent to commercial districts. The RMH zone also allows a limited range of

non-residential uses to help provide services for residents and enhance the quality of the higher density neighborhood.

Response: This application involves a multi-unit apartment. The subject site is within the RMH zone. This section is applicable.

17.3.120 USE REGULATIONS

Refer to Article 12 for information on the characteristics of uses included in each of the Use Categories.

- A. Permitted Uses. Uses allowed in the Residential zones are listed in Table 3-2 with a “P”. These uses are allowed if they comply with the development standards and other regulations of this Code.
- B. Limited Uses. Uses that are allowed subject to specific limitations are listed in Table 3-2 with an “L”. These uses are allowed if they comply with the limitations listed in the footnotes to the table and the development standards and other regulations of this Code.
- C. Conditional Uses. Uses that are allowed if approved through the conditional use process are listed in Table 3-2 with a “C”. These uses are allowed provided they comply with the conditional use approval criteria, the development standards, and other regulations of this Code. The conditional use process and approval criteria are stated in Section 10.2.200.
- D. Not Permitted Uses. Uses listed in Table 3-2 with an “N” are not permitted or prohibited. Existing uses may be subject to the regulations of Section 10.7.100, Nonconforming Development.
- E. Accessory Uses. Uses that are accessory to a primary use are allowed if they comply with specific regulations for accessory uses and all development standards.

TABLE 3-2 Residential Zones: Use Table	
USE CATEGORY	RMH
HOUSING TYPES Multi-Family Units	P

P = Permitted L = Limited C = Conditional Use N = Not Permitted

Response: As outlined in Table 3-2 under 17.3.120, multi-dwelling units are permitted within the RMH zone. This project involves a multi-unit apartment. within the RMH zone. This standard is satisfied.

17.3.130 RESIDENTIAL DEVELOPMENT STANDARDS

- C. Minimum Lot Size and Dimensions (RM and RH Zones) Varied lot sizes and housing types are permitted and encouraged within the density ranges established for the RML and RMH Zones. However, construction of new single family detached units is restricted to existing lots smaller than 5,000 square feet in the RMH Zone in order to retain land for multi-family housing.

TABLE 3-4: Lot Dimensional Requirements RML and RMH Zones		
Housing Type	Minimum Lot Size	Minimum Lot Dimensions [1]
Multi-Unit	7,000 Square Feet	Depth: 70 feet Width: 100 feet
[1] Lot width is measured at the front building line.		

Response: As shown on the Preliminary Plans (Exhibit A), the properties within the project site meet the minimum dimensional requirements for a multi-unit apartment within the RMH zone. These requirements are satisfied.

[...]

D. Setback Standards

Building setbacks have an important relationship to the character of the street. Because varied lot sizes and housing types are permitted in the residential zones, uniform setbacks are established to provide a consistent streetscape.

TABLE 3-5: Minimum Setback Requirements	
Front Yard, Dwelling ^{1,2}	12 feet
Front Yard, Garage	14 feet
Interior Side Yard ^{3,4}	Buffer yard required based on adjacent use reference 17.8.425 (Table 8-2)
Rear Yard ^{5,6}	Buffer yard required based on adjacent use reference 17.8.425 (Table 8-2)

Footnotes:

[1] The side yard setback for attached single-unit dwellings/townhomes shall be a minimum of zero (0) feet at common walls and five (5) feet or one (1) foot for each three (3) feet of building height at the eave line, from the end of the unit series. Unless approved by the Director, the dwellings shall be arranged on lots in a manner that the non-zero setback portion for one lot shall be adjacent to the non-zero setback portion on the adjoining lot in order to provide greater continuous open space.

[2] Accessory buildings (including accessory dwellings and detached garages) that do not exceed one (1) story in height shall not be located closer than five (5) feet to any side or rear property line.

[3] Attached garages which exit to an alley may have a minimum rear yard setback of five (5) feet.

[4] A larger rear yard setback may be required for multi-family dwellings when the rear yard abuts a lower density residential zone. The need for a larger rear yard setback to provide privacy, access to sunlight and a transition between zones shall be evaluated in the Design Review Process. The screening and buffering standards of Article 8 will be used as guidelines.

Response: Preliminary Plans (Exhibit A) indicate that the planned apartment buildings will be 20 feet from the front property line (Along SW 26th Avenue). According to the buffer and screening standards in 17.8.425, a multi-unit dwelling abutting single-family residential developments must be ten feet from the rear and interior property lines. As demonstrated in the Preliminary Plans, the building locations exceed (and in most cases double) the minimum buffer requirements from the adjacent properties. These standards are satisfied.

E. Building Height

Building height standards are used to establish a compatible building scale. This can help to create a harmonious visual setting and helps to bring about a successful mixing of diverse housing types.

[...]

- Buildings in the RH Zone are limited to a maximum height of three (3) stories or forty-five (45) feet, whichever is less. A step-down in

building heights may be required for multi-family building(s) that abut a lower density residential zone.

The need for a step down in building heights to provide privacy, access to sunlight and a transition between zones shall be evaluated in the Design Review Process.

Response: The project site is designated as RMH. As shown on the Preliminary Elevation Plans (Exhibit A), the structures are expected to be three stories and less than 45 feet in height. This standard is satisfied.

17.3.140 RESIDENTIAL DESIGN STANDARDS

All residential development is subject to the design standards found in §17.8.710.

Response: Compatibility with the applicable design standards is demonstrated in the Preliminary Plans (Exhibit A). Responses to the specific Track 1 standards in Section 17.8.710 are addressed within this written narrative.

ARTICLE 5: SPECIAL PROVISIONS

TREE PROTECTION

§ 17.5.100 PURPOSE.

The trees of Forest Grove, a reminder of the city's namesake, offer historic, aesthetic, spiritual, social, environmental and monetary values to the community. This sub article of the Code establishes guidelines, a legal framework and authority for the community forestry program. The intent of this sub article is to enhance the quality of life in Forest Grove by promoting good stewardship that will ensure the continued health of the community forest. The Development Code creates a protected status for trees as listed below:

Response: A certified arborist surveyed the existing trees on and around the subject property. Preliminary Plans (Exhibit A) include an inventory list of all the trees on and off-site that this project may impact and a Tree Preservation and Removal Plan. The index consists of the size and health rating for each tree.

A. Street Trees : Any woody perennial plant permitted by the city to be planted in the public right-of-way. Typically a one and three-fourths inch or larger nursery stock tree .

Response: As shown on the Existing Conditions Plan (Exhibit A), four established trees are located within SW 26th Avenue's right of way along the project site's frontage. SW 26th Avenue is classified as a Collector. The existing trees are expected to be removed to make the necessary frontage improvements for a collector street and establish an adequate driveway connection for the site. The Preliminary Landscape Plans show the planned street trees.

B. Natural Resource Vegetation : Trees and vegetation within sensitive lands or vegetative corridors as required by Clean Water Services Design and Construction Standards.

Response: A natural resources professional conducted a site assessment of the subject property and submitted findings to Clean Water Services (CWS). According to a letter from CWS (Exhibit E), there are no known resources on the site.

-
- C. Trees on Developable Land : Trees which have a diameter of six inches or larger, or Oregon White Oaks with a diameter of three inches or larger, measured at four and one-half feet above natural grade , on land subject to or undergoing development review. Development review includes site review, design review, partition or subdivision review or building permit review.

Response: This application is for a Design Review involving a multi-dwelling apartment with more than five units. A Preliminary Tree Preservation and Removal Plan identifying the trees necessary for removal is included in Exhibit A.

- D. Trees on approved site plan : Existing trees shown on site plans and designated for protection as part of the site plan approval.
- E. Register Trees : Trees placed on the register list (includes tree groves) as described in § 35.096 of the Municipal Code. Register trees may include trees from any of the above categories as well as trees on private property.

Where any tree fits into more than one category, the most restrictive criteria apply.

Response: There are no registered trees on the subject property.

17.5.110 CITY APPROVAL REQUIRED.

B. Permit requirements.

1. The applicant shall file an application for protected tree removal or pruning with the city . The application shall include information on the location and size of the parcel, the location, type and size of the tree or proposed for removal or pruning, and the reasons for the request. Where specified by this Code, a tree protection plan shall be provided in accordance with the provisions of § 17.5.120. The application and reasons shall address appropriate criteria based on the categories in described in § 17.5.100 (i.e., street trees , trees on developable land , etc.).
2. Where an application involves infested tree (s), the application shall contain an analysis of the tree (s) by an arborist .
3. The Director shall determine whether the request is valid under the terms of this Code within four working days of submittal of the application . If valid, the application shall be processed as a Type I permit within seven working days unless referred or appealed to the Community Forestry Commission (CFC).
4. Applications for the removal or pruning of trees pursuant to § 17.5.125 shall be submitted as part of the land use permit application or grading permit, whichever is first. The application shall be reviewed and acted upon by the Community Forestry Commission prior to the issuance of any land use approval for new development or grading permit. Notice will be sent consistent with the Type II procedures with appeal to the City Council .

Response: This application is for a Design Review involving a multi-dwelling apartment with more than five units. It is anticipated that several trees will be removed as a part of this project. A Preliminary Tree Preservation and Removal Plan identifying the trees necessary for removal is included in Exhibit A.

17.5.115 TREE PROTECTION PLAN AND PROTECTION REQUIREMENTS.

- A. Plan requirements. Where required by this Code, a tree protection plan shall be submitted and approved by the Director or, where specified, the

Community Forestry Commission. The plan shall be prepared by an Arborist and shall include:

1. A scale drawing of the subject property;
2. Location, species and diameter of each tree on site and within 15 feet of the site ;
3. Location of the critical root zone ;
4. Location of existing and proposed roads, water, sanitary and storm sewer, irrigation and other utility lines/facilities and easement ;
5. Location of dry wells and soakage trenches;
6. Location of existing and proposed structures ;
7. Existing topography and proposed grade change or cut and fill as a result of development
8. Existing and proposed impervious surfaces ;
9. Identification of a contact person and/or arborist who will be responsible for implementing and maintaining the approved tree protection plan;
10. Identification of a contact person and/or arborist who will be responsible for implementing and maintaining the approved tree protection plan; and
11. For Register Trees , an assessment of tree health or hazard condition, and recommendations for treatment of each applicable tree .

Response: Exhibit A includes an inventory and health assessment for all the trees potentially impacted by this project, an Existing Conditions Plan that maps all of the existing trees, and a Preliminary Tree Protection and Removal Plan. The above-listed plans' information meets the requirements in 17.5.115.A.

17.5.120 STREET TREES (TREES IN PUBLIC RIGHTS-OF-WAY).

A. Standards and requirements.

1. Street trees required. All development projects fronting on a public or private street more than 100 feet in length approved after the adoption of this title shall be required to plant street trees

Response: As shown on the Preliminary Plans (Exhibit A), the subject property has more than 100 feet of frontage along SW 26th Avenue. Therefore, street trees are required.

2. Street tree planting list. Certain trees can severely damage utilities, streets and sidewalks or can cause personal injury. Approval of any planting list shall be subject to review by the Director

Response: The Preliminary Landscape Plans (Exhibit A) identify a Wireless Zerkova as the intended species to be planted as street trees. The Wireless Zerkova is listed on the City of Forest Grove's suggested Street Tree Planting list.

3. Tree plan required. New street trees shall conform to an existing tree plan unless a specific exception is granted. When a tree plan does not exist, the city shall determine tree species. In selection of tree species, the city shall consider the list of prohibited trees , the available planting area, above or below ground restrictions, the need for tree diversity, and the requests of adjacent property owners.

Response: This requirement is understood. The plans show trees based on the city's recommended tree list. There does not appear to be a tree plan for the project site. The applicant is prepared to address any necessary changes to the tree species in the final site plan.

4. Size and spacing of street trees . The specific spacing of street trees by size of tree shall be as follows.
 - a. Small or narrow-stature trees under 25 feet tall and less than 16 feet wide branching at maturity shall be spaced no greater than 20 feet apart.
 - b. Medium-sized trees 25 to 40 feet tall, 16 to 35 feet wide branching at maturity shall be spaced no greater than 30 feet apart.
 - c. Large trees over 40 feet tall and more than 35 feet wide branching at maturity shall be spaced no greater than 40 feet apart.
 - d. Except for signalized intersections, trees shall not be planted closer than 20 feet from a street intersection, nor closer than two feet from private driveways (measured at the back edge of the sidewalk), fire hydrants or utility poles to maintain visual clearance.
 - e. No new utility pole location shall be established closer than five feet to any existing street tree .
 - f. Street trees shall not be planted closer than 20 feet to light standards.
 - g. Where there are overhead power lines, the street tree species selected shall be of a type which, at full maturity, will not interfere with the lines.
 - h. Street trees shall not be planted within two feet of any permanent hard surface paving or walkway:
 - i. Space between the tree and the hard surface may be covered by a nonpermanent hard surface such as grates, bricks on sand, paver blocks and cobblestones; and
 - ii. Sidewalk cuts in concrete for tree planting shall be at least four feet by four feet to allow for air and water into the root area.

Response: As shown in the Preliminary Landscape Plans (Exhibit A), the current trees generally meet the spacing requirements based on the expected size of the species. However, per 17.5.120.3, the species may be subject to change. It is anticipated that (if necessary) this will be addressed through the final site plan approval.

- B. Criteria for pruning or removal. The permit for major pruning or removal shall be granted if any of the following criteria are met.

[...]

4. The removal has been approved as part of a development project, pursuant to the provisions of § 17.5.135.

Response: This application is for a Design Review involving a multi-dwelling apartment. The anticipated removal of trees in the right-of-way is related to and dependent on the project's approval.

17.5.130 TREES ON DEVELOPABLE LAND, PRIOR TO AND DURING DEVELOPMENT.

C. Review standards during development review.

1. Prior to the removal of any protected trees a tree permit is required. If there is a land use or other permit which may result in modification of the site the tree permit shall be reviewed concurrent with that other permit and follow the same process.

Response: This application is for a Design Review to place a multi-dwelling apartment on the subject site. Tree removal is anticipated to be associated with the construction of the potential site. Therefore, this requirement is satisfied.

2. Permit requirements. In conjunction with the development permit requested, the applicant shall include the location, size and species of all trees subject to this Code. Groves or trees that are to be protected do not have to be individually delineated; however, the approximate number of trees in each grove shall be indicated.

Response: The size, species, and health of each tree that will potentially be impacted are included in the Preliminary Tree Preservation and Removal Table (Exhibit A).

3. Protection plan. For all trees proposed to be preserved, the applicant shall submit a protection plan consistent with the provisions of § 17.5.120. Protected trees shall be identified on landscape plans.

Response: A Preliminary Tree Preservation and Removal Plan is included in Exhibit A.

4. Review criteria. Protected Trees , as defined in § 17.5.100 shall be preserved unless the applicant proves to the satisfaction of the reviewing body that removal is necessary as a result of:
 - a. Need to remove trees that pose a safety hazard to pedestrians, property or vehicular traffic or threaten to cause disruption of public service; or which pose a safety hazard to persons or buildings ;
 - b. Need to remove diseased trees or trees weakened by age, storm, fire or other injury;
 - c. Need to observe good arboricultural practices;
 - d. Need for access to the building site or immediately around the proposed structure for construction equipment;
 - e. Need for essential grade changes to implement safety standards common to standard engineering or architectural practices;
 - f. Surface water drainage and utility installations;
 - g. Locations of driveways , buildings or other permanent improvements so as to avoid unreasonable economic hardship;
 - h. Compliance with other ordinances or codes; and

-
- i. Need to install solar energy equipment. For criteria d-g above, the applicant shall provide evidence of exploring alternate designs that would increase tree protection. Removal of register trees shall also comply with the criteria in § 17.5.145.

Response: Per Section 17.5.130.4.a-i, the Preliminary Tree Preservation and Removal Plan (Exhibit A) demonstrates the need to remove trees on the site to allow the planned apartment to meet the necessary parking, access, grading, and engineering requirements. The Tree Preservation and Removal Table provides the health and structural rating of each tree that the project will potentially impact.

ARTICLE 7 MISCELLANEOUS PROVISIONS

FENCES

17.7.040 STANDARDS FOR RESIDENTIAL ZONES.

The following standards apply to fences , walls and screens in all residential zones and for residential uses in all other zones:

- A. Front yard .Fences within the required front yard setback area are limited to a height of three and one-half feet;
- B. Side and rear yards .Fences within the side and rear yards are limited to a height of six feet. The fence may be placed on the property line but shall be reduced to a height of three- and one-half feet in the required front yard ;
- C. Corner lots . On corner lots , which by definition have two front yards , may have a fence up to six feet in height in the front yard adjacent to the street that does not contain the dwelling 's primary entrance when one of the following conditions is met:
 - 1. If the street is improved with curbs and gutters, with or without sidewalks, the fence is located a minimum of ten feet from the face of the curb; or
 - 2. If the adjoining street is unimproved, the fence is no closer than three feet from the property line.
- D. Separation from utilities. Fences shall be installed at least three feet from a utility pedestal or electrical transformer; and
- D. Clear vision area . All fences shall comply with the clear vision area requirements for streets and driveways

Response: The Preliminary Plans (Exhibit A) show a six-foot cedar fence around the perimeter of the project site to help screen the building from neighboring properties. The fence is not expected to extend into the front setback area or be located within any identified clear-vision areas within the project site.

SOLID WASTE AND RECYCLING

17.7.200 PURPOSE.

The purpose of this sub article is to ensure that certain new construction incorporates functional and adequate space for on-site storage and efficient collection of solid waste and recycling prior to pick up and removal by haulers. These standards shall apply to new multi-family residential buildings containing three or more units and non-residential construction.

17.7.205 SIZE, LOCATION, DESIGN AND ACCESS STANDARDS FOR STORAGE AREAS.

The applicant shall indicate the size and location of the storage area for solid waste and recycling on the site plan required for site development review or design review.

- A. Storage area size. The following guidelines shall be used to determine the appropriate size for the storage area.

[...]

2. More than ten units: 50 square feet plus five square feet for each unit above ten.

Response: Per 17.7.205, the trash enclosure for the property should be 225 square feet. As shown on the Preliminary Plans (Exhibit A), the trash enclosure area is planned to be 240 square feet. This requirement is satisfied.

B. Location standards.

1. To encourage its use, the storage area for recycling shall be co-located with the storage area for solid waste.
2. Indoor and outdoor storage areas shall comply with Building and Fire Code requirements.
3. Storage area space requirements can be satisfied with a single location or multiple locations and combine both interior and exterior locations.
4. Exterior storage areas can be located within interior yard or rear yard areas. Exterior storage areas shall not be located within a required front yard setback or in a yard adjacent to a public or private street .
5. Exterior storage areas shall be located in central and visible locations on a site to enhance security for users.
6. Exterior storage areas can be located in a parking area, if the proposed use provides at least the minimum number of parking spaces required by this Code.
7. The storage area shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on the site or on public streets adjacent to the site .

Response: The planned trash enclosure is currently shown in an outdoor, accessible location near the southern portion of the property. Solid waste and recycling will be collocated.

C. Design standards.

1. The dimensions of the storage area shall accommodate containers consistent with current methods of local collection.
2. Storage containers shall meet Fire Code standards and be made and covered with waterproof materials or situated in a covered area.
3. A sight-obscuring fence , wall or hedge at least six feet in height shall enclose exterior storage areas. Gate openings, which allow access to users and haulers, shall be provided. Gate openings for haulers shall be a minimum of ten feet wide and shall be capable of being secured in a closed and open position.
4. Storage area(s) and containers shall be clearly labeled to indicate the type of material accepted.

Response: An elevation drawing of the planned trash enclosure is included in the Preliminary Plans (Exhibit A). The enclosure is expected to be covered and behind a sight-obscuring fence.

D. Access standards.

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

Response: As shown on the Preliminary Plans (Exhibit A), the trash enclosure directly abuts the planned drive aisle. The applicant has reached out to Waste Management to confirm the location is accessible to their trucks.

ARTICLE 8 GENERAL DEVELOPMENT STANDARDS

ACCESS AND CIRCULATION

17.8.100 PURPOSE.

The purpose of this subarticle is to establish standards and regulations for safe and efficient vehicle access and egress on a site and for general circulation within the site, including pedestrian circulation.

17.8.105 APPLICABILITY.

- A. When provisions apply. The provisions of this article shall apply to all development, including the construction of new structures, and the remodeling or new structures or a change of use which increases the on-site parking or loading requirements or which changes the access requirements.
- B. When site plan /design review is not required. Where the provisions of site plan review or design review do not apply to the proposed developments, the Director shall approve, approve with conditions, or deny an access plan submitted under the provisions of this article in conjunction with another permit or land use action.
- C. Conflict with land division requirements. The requirements and standards of this article shall not apply where they conflict with the land division rules and standards of Article 6.

Response: This application involves a new multi-unit apartment. Therefore, these standards apply.

17.8.110 GENERAL PROVISIONS.

- A. Continuing obligation of property owner. The provision and maintenance of access and egress stipulated in this section are continuing requirements for the use of any structure or parcel of real property in the city.
- B. Access plan requirements. No building or other permit shall be issued until a scaled site plan is submitted that shows how access, egress and circulation

requirements are to be fulfilled. The Director shall provide the applicant with information about the submittal requirements for an access plan.

- C. Joint access. Owners of two or more uses, structures or parcels of land may agree to jointly use the same access and egress when the combined access and egress of both uses, structures or parcels of land satisfies their requirements as designated in this article, provided:
1. Satisfactory legal evidence shall be presented in the form of deeds, easements, leases or contracts to establish the joint use; and
 2. Copies of the deeds, easements, leases, or contracts are placed on permanent file with the city.
- D. Public street access. All vehicular access and egress shall connect directly with a public or private street approved by the city for public use, except where joint access is provided through adjacent or other property which is connected to a street. Vehicular access to a residential use shall be provided within the same lot for single-family and two-family dwellings, and within the same lot or development for multi-family dwellings. Access to multi-family units shall avoid being located through single-family residential areas before being connected to a collector or arterial as designated by the city's Transportation Plan.

Response: The Preliminary Plans (Exhibit A) identify how the project provides appropriate access, egress, and circulation for regular shared use and emergency access. As shown on the preliminary plans, a 26-foot-wide driveway/travel aisle will provide direct access to the site from 26th avenue. An existing 20-foot-wide flag lot access to Tax lot 1700 will be utilized as a part of the site's pedestrian circulation and for one-way emergency vehicle egress. It is not anticipated that joint access will be necessary for this project. These requirements are satisfied.

17.8.115 ON-SITE PEDESTRIAN WALKWAYS.

- A. Required walkways. On-site pedestrian walkways are required as follows:
1. Walkways shall extend from the ground floor entrances or from the ground floor landing of stairs, ramps, or elevators of all commercial, institutional and industrial uses to the public sidewalk or curb of the public street or streets which provide the required access and egress. Walkways shall provide convenient connections between buildings in multi-building commercial, institutional, and industrial complexes. Walkways shall be constructed between a new development and neighboring developments. If connections aren't currently available, then planned connections shall be designed to provide an opportunity to connect adjoining developments.
 2. The maximum distance between a parking space and a walkway shall not exceed 45 feet. All walkways constructed within parking lots shall be raised to standard sidewalk height. All surface treatment of walkways shall be firm, stable and slip resistant.
 3. Required walkways shall be paved with hard-surfaced materials such as concrete, asphalt, stone, brick, etc. Walkways may be required to be lighted and/or signed as needed for safety purposes. Lighting and or signs may be required for walkways for safety purposes.
 4. Whenever required walkways cross vehicle access driveways or parking lots, such crossings shall be designed and located for pedestrian safety. Required walkways shall be physically separated

from motor vehicle traffic and parking by either a minimum six-inch vertical separation (curbed) or a minimum three-foot horizontal separation, except that pedestrian crossing of traffic aisles are permitted for distances no greater than 36 feet if appropriate landscaping, pavement markings or contrasting pavement materials are used. Walkways shall be a minimum of four feet in width, exclusive of vehicle overhangs and obstructions such as mailboxes, benches, bicycle racks and signposts, and shall be in compliance with ADA standards.

5. Where required for pedestrian access, interior landscape areas in combination with pedestrian walkways between rows of parking shall be at least ten feet in width to accommodate walkways, shrubbery and trees 20 to 30 feet on-center. This ten-foot width may be reduced between tree areas depending on the characteristics of the vegetation. Angled or perpendicular parking spaces shall provide bumper stops or widened curbs to prevent bumper overhang into interior landscaped areas or walkways.

Response: As demonstrated in the Preliminary Plans (Exhibit A), on-site pedestrian walkways are located adjacent to the off-street parking areas. They are expected to be separated vertically by a curb. A crosswalk will be clearly identified where the pedestrian path may cross a vehicle drive aisle or access way. The planned pedestrian circulation will provide direct access consistent with the applicable ADA requirements from each dwelling unit to the off-street parking area, public right of way, and other site amenities. These standards are satisfied.

17.8.120 MINIMUM ACCESS REQUIREMENTS FOR RESIDENTIAL USES.

- A. Direct access to arterial streets from a residential dwelling established after the effective date of this Code is prohibited. The city may permit direct access to an arterial for lots of subdivisions approved prior to the effective date of this Code, and for multi-family residential complexes if the access is designed to local residential street standards.

Response: The subject site has frontage alone on 26th Avenue. Forest Grove's TSP classifies 26th Avenue as a collector. Dwelling units in the apartment will have indirect access to 26th Avenue via a shared driveway. This requirement is not applicable.

- B. Single-family dwellings and duplexes shall be required to have one driveway, fully improved with hard surface pavement, with a minimum width of ten feet.

Response: This project does not involve a single-family dwelling. This requirement is not applicable.

- C. Service drives for multi-family dwellings shall be fully improved with hard surface pavement with a minimum width of:

1. Twelve feet when accommodating one-way traffic; or
2. Twenty feet when accommodating two-way traffic.

In no case shall the design of said service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street.

Response: Service drives are typically reserved for maintenance and delivery vehicles. The planned primary travel aisles exceed the minimum standards for a service drive and are expected to provide adequate access for service vehicles. These requirements are satisfied.

-
- D. Private residential access drives shall be provided and maintained in accordance with the provisions of the Uniform Fire Code.
 - E. Dead-end access drives in excess of 150 feet shall be provided with approved provisions for the turning around of fire apparatus by one of the following:
 - 1. A circular, paved surface having a minimum turn radius measured from center point to outside edge of 35 feet;
 - 2. A hammerhead, paved surface with each leg of the hammerhead having a minimum depth of 40 feet and a minimum width of 20 feet; or
 - 3. The maximum cross slope of a required turnaround is 5%.

Response: As shown on the Preliminary Plans (Exhibit A), emergency access to the site is provided via the primary two-way driveway entrance along SW 26th Avenue. Plans show a dedicated fire turnaround on the southwest corner of the project site. The existing travel aisles along with the dedicated turnaround meet the minimum access and maneuverability requirements outlined in the Uniform Fire Code. In addition to the minimum requirements, a 12-foot-wide emergency vehicle egress is planned along the existing 20-foot-wide stem associated with Tax Lot 1700. This requirement is satisfied.

F. Driveway grades shall not exceed a maximum of 20%.

Response: The Existing Conditions Plans (Exhibit A) show that the property is relatively flat with less than five percent slopes. Driveway grades are not anticipated to exceed 20%. This standard is satisfied.

[...]

17.8.130 WIDTHS AND LOCATIONS OF DRIVEWAYS AND CURB CUTS.

- A. Minimum driveway widths at the street right-of-way line shall be 15 feet for institutional, commercial, industrial and multi-family residential uses, and ten feet for single-family and two-family residential uses.
- B. Maximum driveway widths at the street right-of-way line shall be as follows.
 - 1. In residential zones:
 - a. Twenty-four feet for lots with less than 60 feet of street frontage;
 - b. Thirty feet for lots with street frontages of 60 feet or greater; and
 - c. There shall be a minimum distance of 30 feet between any two adjacent curb cuts on the same lot.
 - 2. Thirty-six feet in institutional, town center or commercial zones; and
 - 3. Forty feet in industrial zones.

Response: Consistent with these requirements, the Preliminary Plans (Exhibit A) indicate that the planned driveway and travel aisle will be 26 feet wide to accommodate two-way travel. These requirements are satisfied.

- C. Location of curb cut. No portion of a curb cut shall be located closer to an intersecting street right-of-way line than:
 - 1. One hundred feet on an arterial street with four or more travel lanes;

-
2. Fifty feet on an arterial street with two or three travel lanes;
 3. Fifty feet on a collector street; or
 4. Twenty feet on a local street.

Response: As identified on the vicinity map, the planned connection to 26th Avenue (a collector) will be more than 50 feet from where the street intersects with Sunset Drive. This requirement is satisfied.

D. Minimum distance between curb cuts. On arterial and collector streets, minimum distances shall be maintained as follows between adjacent curb cuts on the same side of any such street :

1. Eighty-five feet where the speed limit is 20 mph or less;
2. One hundred five feet where the speed limit is 25 mph;
3. One hundred twenty-five feet where the speed limit is 30 mph;
4. One hundred fifty feet where the speed limit is 35 mph;
5. One hundred eighty-five feet where the speed limit is 40 mph;
6. Two hundred thirty feet where the speed limit is 45 mph; and
7. Two hundred seventy-five feet where the speed limit is 50 mph or greater.

E. In measuring the distance between curb cuts on arterial and collector streets, existing curb cuts, or accesses serving single-family and two-family dwellings shall not be considered.

Response: All adjacent properties to the project site are occupied by single-family dwellings with established driveway accesses to 26th Avenue (a collector). These requirements are not applicable to the planned multi-unit apartment.

F. City Engineer’s authority to restrict driveway widths and locations. To ensure that driveways do not conflict with public infrastructure, the City Engineer has the authority to restrict the width and location of any driveway.

Response: The specific features shown on the Preliminary Plans (Exhibit A) incorporate feedback from city staff at the required pre-application meeting. This requirement is understood.

17.8.140 SPECIFIC SITE ACCESS AND CIRCULATION STANDARDS.

The following access and circulation standards apply specifically to certain types of development or apply within certain locations within the community.

A. Multi-unit development. A functional and safe environment for vehicles and pedestrians is important within residential areas. Multi-unit development should be visually appealing from the adjacent street right-of-way and be functionally and aesthetically tied to adjacent residential neighborhoods.

1. Circulation.

- a. A continuous pedestrian connection shall be provided from the front door of all residential buildings to the public sidewalk.
- b. Separate pathways from dwellings a minimum distance of ten feet. The separation is measured from the pathway edge closest to any dwelling unit.

-
- c. On-site pedestrian walkways are required to be a minimum width of five feet connecting dwelling units to parking/open space /recreation areas.

Response: Preliminary Plans (Exhibit A) show a continuous pedestrian path (at least five feet wide) connecting the entrance of each dwelling unit to shared parking areas, recreation areas, and the public right of way. Plans also indicate how the path can meet the minimum spacing requirements. These standards are satisfied.

2. Parking areas.

- a. Separate physically and visually parking areas greater than 10,000 square feet in area with landscape planter bays at least 18 feet in width. Individual parking areas may be connected by a driveway.
- b. The sidewalk system shall connect the front door of all residential buildings to parking area(s).

Response: As shown on the Preliminary Landscape Plans (Exhibit A), the planned parking area is expected to be landscaped per the applicable standards. The property's perimeter will be adequately screened from surrounding uses. The Preliminary Plans (Exhibit A) show how the on-site sidewalk system will connect the parking area to the front door of each dwelling.

3. Pedestrian environment.

- a. Residential doors which face a public right-of-way shall be setback a minimum of three feet plus any additional width needed to meet the minimum sidewalk requirements (where applicable) from a public sidewalk.
- b. The following types of doors shall not provide the primary entrance into a dwelling unit: sliding glass or solid metal doors without glazing.
- c. Residential stoops, porches or terraces shall be raised a maximum of three feet above grade at the adjacent right-of-way.
- d. Residences with entry porches or terraces shall have a minimum area of 40 square feet.
- e. Residential entries shall be lowered a maximum of four feet below grade measured at adjacent right-of-way.

Response: Preliminary Elevation Drawings (Exhibit A) identify how the applicable requirements in the section are satisfied.

4. Screening/service areas.

- a. All mechanical equipment shall be screened from view by an opaque fence or solid landscape screen eight feet high.
- b. Service/refuse collection areas shall not be located within 20 feet of public rights-of-way.
- c. All development of two or more stories in height shall be required to provide screening of garbage collection and storage areas from above.

-
- d. All roof mounted mechanical equipment other than vents shall be screened from ground level view. The screening shall be as high as the height of the equipment and shall be integrated with the exterior building facade.

Response: This project involves a multi-unit residential apartment. Mechanical equipment and service areas are anticipated to include utility areas (franchise and public), trash receptacles, and HVAC. The preliminary plans identify that the planned trash enclosure area will be more than 20 feet from the public right of way. An elevation of the trash enclosure is included in the Preliminary Plans (Exhibit A). The HVAC equipment is shown on the Preliminary Elevation Plans (Exhibit A). The Preliminary Landscape Plan shows the exterior HVAC mechanical equipment will be adequately screened.

5. Landscaping.

- a. At least 75% of required landscaped area shall be planted with any suitable combination of trees, shrubs or evergreen ground cover.
- b. A maximum of 25% of required landscaped area may include architectural features or artificial ground covers such as sculptures, benches, masonry or stone walls, rock groupings, decorative hard paving and gravel areas interspersed with planting areas.

Response: Preliminary Landscape Plans (Exhibit A) demonstrate that more than 75% of the landscape area will be planted with trees, shrubs, and ground cover.

6. Crime Prevention Through Environmental Design (CPTED).

- a. No landscaping, fences, walls or plant materials greater than five feet in height shall be installed which obstruct the visibility of a dwelling entry from a public street .
- b. A minimum of 25 square feet of window area shall be provided within each dwelling unit facing a common open space, pedestrian path or car park to allow visual surveillance.
- c. A clear line of site between all front building entries and the public sidewalk or car park shall be maintained.
- d. Lighting shall be provided at all exterior dwelling unit entrances.
- e. Guard or a keyed variation of gated residential development is prohibited.
- f. Motion activated security lighting is prohibited along public rights-of-way.

Response: Preliminary Plans (Exhibit A), including a preliminary site plan, elevation drawings, and landscape plans, show how the project is consistent with the CPTED requirements. These standards are satisfied.

CLEAR VISION AREA

17.8.150 PURPOSE.

The purpose of this sub article is to establish standards that will ensure proper sight distances at intersections to reduce the hazard from vehicular turning movements.

§ 17.8.155 STANDARDS.

Except in the Town Center zones, a clear vision area shall be maintained on the corners of all property adjacent to the intersection of two streets, a street and a railroad, or a driveway providing vehicular access to a public street , excluding alleys .

- A. On corner lots, no vehicle, fence , wall, hedge or other planting or structure shall be parked, erected, planted, placed, located or maintained, except for occasional tree trunks or poles, so as to impede visibility within the greater of the two clear vision areas defined below (see Figure 8-5):
 - 1. The triangular area formed by the curb lines along such lots and a straight line joining said curb lines at points which are 30 feet distant from the intersection of the curb lines and measured along such lines; or
 - 2. The triangular area formed by the property lines of such lots and a straight line joining said property lines at points which are ten feet distant from the intersection of the property lines and measured along such lines.
- B. A private access shall be treated as a public street for the purpose of this section. The edge of the paved surface area of the private access, be it roadway, curb or sidewalk, shall be treated as the curb line in determining the vision clearance area.
- C. The vision clearance area for all commercial, industrial, institutional and multi-family uses shall be determined in the manner set forth in subsection A.1. above.
- D. The vision clearance area for single-family homes and duplexes shall be determined in the manner set forth in subsection A.2. above.
- E. Any obstruction maintained in violation of this section shall be deemed in violation of the Development Code and shall be abated pursuant to § 17.1.400 enforcement procedures.

Response: Preliminary Plans (Exhibit A) delineate clear vision areas adjacent to the planned driveway connections to 26th Avenue. The identified clear vision areas are consistent with the applicable requirements of this section. These standards are satisfied.

OPEN SPACE, RECREATIONAL FACILITIES AND COMMON AREAS

17.8.200 PURPOSE.

The purpose of this sub article is to establish standards for the provision of open space and recreational facilities, and where part of development , requirements for common areas.

17.8.205 STANDARDS.

[...]

- C. Except for developments in TCC or TCT zones, any development not involved in a division of land, open space and recreation areas shall be held in common for residential condominiums or by the primary land owner for apartment complexes or non-residential development . The area shall be placed within an easement unless waived by the Director for minor recreation facilities or recreation facilities that are integrated with the developed portion of the project. Developments within the NMU zone may modify the standards below through an approved MUPD.

-
1. Residential projects in the Residential Multi-family Low (RML) and Residential Multi-family High (RMH) districts shall provide the following: All condominium, two-family dwellings , multi-family dwellings , residential care facilities , residential care institutions and nursing or convalescent homes shall provide 20% of the lot area in open space , excluding that area designated in the site plan and improved for off-street parking and driveways . All dwelling units shall be immediately accessible to a minimum of 600 square feet of open space .

Response: Preliminary Landscape Plans Show that ±40,520 square feet (41%) of the subject property are dedicated as open space. The pedestrian path provides each dwelling unit direct access to the planned open space areas.

2. All condominium, two-family dwellings and multi-family dwellings of 20 units or more, residential care facilities , residential care institutions and nursing or convalescent homes shall improve one-half of the required open space as recreation space . of 20 feet. For two- Recreation space shall be planted in grass and/or improved for recreational use , and have a minimum area of 870 square feet and a minimum dimension family and multi-family dwellings , the recreational area shall include a children's play area. A fence shall be installed that is a minimum of 30 inches in height to separate a parking lot, street or driveway from any children's play area.

Response: This application involves a multi-dwelling apartment with more than 20 units. The Preliminary Plans (Exhibit A) show a dedicated open space area with an 870-square-foot recreational area. The recreational area is accessible by a direct connection to the sidewalk/ pedestrian path. This requirement is satisfied.

3. For the development of condominiums, two-family and multi-family dwellings of 20 units or more, residential care facilities and residential care institutions , individual private open space (patio or balcony) shall be provided for each dwelling unit. All private open space shall be directly accessible from the dwelling unit through a doorway. Patios and balconies shall be at least 48 square feet in size with a minimum width dimension of four feet.
4. Floor area of ground floor patios and all balconies for individual units can be used to meet no more than one-half of the recreational land area requirement. Private open space shall be separated from common open space through the use of perimeter landscaping, fencing or a change in vertical grade (e.g., second floor balconies).

Response: Preliminary building floor plans for upper level and main floor dwelling units are included in Exhibit A and show a dedicated terrace is planned for each unit. The terrace is intended to provide the required private open space for each dwelling unit. This requirement is satisfied.

5. Where a proposed condominium, multi-family development , residential care facility , residential care institution , or nursing or convalescent home will abut an existing or proposed public park or open space , the development shall integrate into its design the adjoining park or open space to maximize its benefits to development residents.

Response: According to City of Forest Gove maps, the project site does not abut a public park. This standard is not applicable.

6. No less than 75% of all open space areas excluding recreational space shall be landscaped with living ground cover, shrubs or trees .

Response: The Preliminary Landscape Plans (Exhibit A) demonstrate that the open space areas will be landscaped with a living ground cover, shrubs, and trees. This requirement is satisfied.

D. Areas and tracts of land to be held in common, shall meet the following requirements.

1. Common areas shall be held in ownership by either a homeowners association or operator of a multi-family development , residential care facility , residential care institution or nursing or convalescent home.
2. To ensure adequate maintenance of common areas within the land division, the applicant shall provide maintenance provisions in Covenants, Conditions and Requirements (CC & Rs) when to be maintained by a homeowners association or another method an operator of a multi-family development , residential care facility , residential care institution or nursing or convalescent home.

Response: It is expected that a management company will operate the planned multi-family apartment. This requirement is satisfied.

LANDSCAPING, SCREENING AND BUFFERING

[...]

17.8.405 APPLICABILITY.

- A. Applicability. The provisions of this subarticle shall apply to all new development and to a change of use that result in the need for increased on-site parking.
- B. When site development/design review does not apply. Where the provisions of Site Development Review or Design Review do not apply, the Director shall approve, approve with conditions or deny a landscape plan submitted under the provisions of this subarticle by means of a Type I procedure.
- C. Landscape plan. The applicant shall submit a landscape plan. The Director shall provide the applicant with information on the submittal requirements.

Response: This application is for a new multi-unit apartment. A Preliminary Landscape Plan is provided in Exhibit A. The plan identifies that ±98,158 square feet of the 2.29-acre site will be landscaped with trees, shrubs, and ground cover. As shown, 11% of the planned parking area and 41% of the entire site are expected to be landscaped. A list of plants and the planting schedule can be found on the Preliminary Landscape Notes & Planting schedule.

17.8.410 GENERAL PROVISIONS.

- A. Obligation to maintain. It shall be the continuing obligation of the property owner to maintain required landscaped areas in an attractive manner free of weeds and noxious vegetation . In addition, the minimum amount of required living landscape materials shall be maintained.
- B. Ground preparation. The ground in all required landscaped areas should be properly prepared with suitable soil and fertilizer. Specifications shall be

submitted with the landscape plans showing that adequate preparation of the top soil and sub-soil will be undertaken prior to planting to support the plantings over a long period of time.

- C. Installation requirements. The installation of all landscaping shall be as follows:
1. All landscaping shall be installed according to accepted planting procedures and the provisions of this article;
 2. The plant materials shall be of high grade, and shall meet the size and grading standards of the American Standards for Nursery Stock; and
 3. All required landscaped areas must be provided with a piped underground irrigation system unless a licensed landscape architect or certified nurseryman submits written verification that the proposed plant materials do not require irrigation.
- D. Pruning required. All plant growth in landscaped areas of developments shall be controlled by pruning or trimming so that it will not:
1. Interfere with the maintenance or repair of any public utility;
 2. Restrict pedestrian or vehicular access; and
 3. Constitute a traffic hazard because of reduced visibility.
- E. Certificate of occupancy. 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 performance bond or security equal to 125% of the cost of the landscaping.
- F. Care of landscaping along public rights-of-way. Appropriate methods for the care and maintenance of street trees and landscaping materials shall be provided by the owner of the property abutting the rights-of-way unless otherwise required for emergency conditions and the safety of the general public.

Response: These requirements are understood. Installation is anticipated to occur during the construction phases of this project. The Preliminary Landscape Notes and Plant Schedule are included in Exhibit A. These standards can be satisfied.

17.8.415 GENERAL STANDARDS.

- A. Non-invasive native vegetation is encouraged to be used for all landscaping except within 100 feet of a natural resource area. In such situations, native vegetation is required.

Response: The Preliminary Landscape Plans and Landscape Notes and Plant Schedule (Exhibit A) includes a list of the expected plants. There are no mapped natural resource areas within the project site. This requirement is satisfied.

- B. Installation of bio-swales or preservation of wetlands should be located where possible in landscaped areas.

Response: As previously mentioned, there are no mapped wetlands within the project area. This standard is not applicable.

- C. Required landscaping adjacent to public rights-of-way. A strip of land at least five feet in width located between the abutting right-of-way and the off-street

parking area or vehicle use area which is exposed to an abutting right-of-way, except in required vision clearance areas.

Response: The planned off-street parking area is more than ±80 feet from the right of way. Compliance with this requirement is shown in the Preliminary Plans (Exhibit A).

- D. Perimeter landscaping relating to abutting properties. On the site of a building or structure or open lot use providing an off-street parking area or other vehicular use area, where such areas will not be entirely screened visually by an intervening building or structure from abutting property, a five-foot landscaped strip shall be between the common lot line and the off-street parking area or other vehicular use area exposed to abutting property. Landscaped areas should include where possible water quality features such as bio-swales or wetlands, trees, grass, shrubs and other plant material so as to cover the landscape area.

Response: As shown on the Preliminary Plans (Exhibit A), the perimeter of the project site will include a 5-to-10-foot landscape strip. This requirement is satisfied.

- E. Parking area interior landscaping. Landscaped areas shall be appropriately distributed to break up large expanses of pavement, improve the appearance and climate of the site, improve safety and delineate pedestrian walkways and traffic lanes. Except for industrial development within industrial zones, the following interior landscaping shall be met.
1. Percentage approach. For the purpose of this section, INTERIOR PARKING LOT AREA is defined as the hard surface parking area (parking stalls and aisles). Such area does not include loading and unloading zones or perimeter landscaping around the lot . Where perimeter landscaping intrudes into the parking lot four or more feet, that area is included in both the interior parking lot area and interior parking lot landscaping.
 2. A required landscaped area shall have a minimum interior dimension of six feet and be no less than 48 square feet in area.
 3. At least 8% of the Interior Parking Lot Area shall be landscaped. Landscaped areas may include water quality features such as bio-swales or wetlands, trees, grass, shrubs and other plant material so as to cover the landscape area.
 4. One tree shall be required for every 1,600 square feet of interior parking lot area as defined in subsection 1. above. Trees shall have a minimum two-inch caliper and six-foot branch height at time of planting.
 5. Interior parking area landscaping and trees must be dispersed throughout the parking area. Some trees may be grouped, but the groups must be dispersed. Required trees may be planted within five feet of the edges of the parking area.
 6. Perimeter landscaping area may not substitute for interior landscaping. However, interior landscaping may join perimeter landscaping as long as it extends four feet or more into the parking area from the perimeter landscape line.

Response: As shown on the Preliminary Landscape Plans (Exhibit A), 11% of the planned parking lot area will be landscaped, and 22 trees will be provided. Per 17.8.410.E, 8% of the off-street parking area must be landscaped, and 20 trees are required based on the parking area size. These standards are satisfied.

B. Buffering and screening requirements.

1. A buffer consists of an area within a required setback adjacent to a property line and having a depth equal to the amount specified in the buffering and screening matrix and containing a length equal to the length of the property line of the abutting use or uses.
2. Utilities, screening, sidewalks and bikeways, and landscaping may only occupy a buffer area. No buildings, accessways or parking areas shall be allowed in a buffer area except where an accessway has been approved by the city .
3. The minimum improvements within a buffer area shall consist of combinations for landscaping and screening as specified in Tables 8-2, 8-3 and 8-4. In addition, improvements shall meet the following specifications:
 - a. At least one row of trees shall be planted. They shall have a minimum caliper of two inches at four feet in height above grade for deciduous trees and a minimum height of five feet high for evergreen trees at the time of planting. Spacing for trees shall be as follows:
 1. Small or narrow-stature trees, less than 25 feet tall or less than 16 feet wide at maturity shall be spaced no further than 20 feet apart;
 2. Medium-sized trees between 25 to 40 feet tall and with 16 to 35 feet wide branching at maturity shall be spaced no greater than 30 feet apart; and
 3. Large trees, over 40 feet tall and with more than 35 feet wide branching at maturity, shall be spaced no greater than 40 feet apart.
 - b. In addition, at least ten five-gallon shrubs or 20 one-gallon shrubs shall be planted for each 1,000 square feet of required buffer area; and
 - c. The remaining area shall be planted in lawn or other living ground cover.
4. Where screening is required, the following standards shall apply in addition to those required for buffering:
 - a. A hedge of narrow or broad leaf evergreen shrubs shall be planted which will form a four-foot continuous screen of the height specified in Table 8-3 within two years of planting;
 - b. An earthen berm planted with evergreen plant materials shall be provided which will form a continuous screen of the height specified in Table 8-3 within two years; or
 - c. A fence or wall of the height specified in Table 8-3 shall be constructed to provide a continuous sight-obscuring screen.
5. Buffering and screening provisions shall be superseded by the clear vision area requirements as set forth in § 17.8.150.
6. When the use to be screened is downhill from the adjoining zone or use, the prescribed heights of required fences , walls or landscape screening shall be measured from the actual grade of the adjoining

property. In this case, fences and walls may exceed the permitted six-foot height at the discretion of the Director as a condition of approval. When the grades are so steep so as to make the installation of walls, fences or landscaping to the required height impractical, a detailed landscape/screening plan shall be submitted for approval.

Response: Per Tables 8-2 and 8-3 in 17.8.425, new multi-family units with more than five units are required to maintain a 10-foot buffer from abutting properties with existing single-family dwellings. The Preliminary Plans (Exhibit A) demonstrate compliance with these requirements.

7. Fences and walls.
 - a. Fences and walls shall be constructed of any materials commonly used in the construction of fences and walls such as wood, stone, rock or brick, or otherwise acceptable by the Director;
 - b. Such fence or wall construction shall be in compliance with other city regulations;
 - c. Walls shall be a minimum of six inches thick; and
 - d. Chain link fences with slats shall qualify for screening. However, chain link fences without slats shall require the planting of a continuous evergreen hedge to be considered screening.

Response: As indicated on the Preliminary Plans (Exhibit A), the Applicant intends to install a 6-foot cedar fence around the perimeter of the property.

C. Screening: special provisions.

1. Screening and landscaping of parking and loading areas. Screening and landscaping of parking and loading areas is required as provided in this article.
2. Screening of service facilities. Except for one-family and two-family dwellings, any service facilities such as gas meters and air conditioners which would otherwise be visible from a public street, customer or resident parking area, any public facility or any residential area shall be screened from view by placement of a solid wood fence or masonry wall between five and eight feet in height.
3. Screening of refuse containers. Except for one- and two-family dwellings, any refuse container or refuse collection area which would be visible from a public street, parking lot, residential or commercial area, or any public facility such as a school or park shall be screened or enclosed from view by placement of a solid wood fence, masonry wall or evergreen hedge. All refuse shall be contained within the screened area.
4. Screening of swimming pools. All swimming pools shall be enclosed as required by the City of Forest Grove Building Code

Response: Consistent with these provisions, a 5-to-10-foot landscape strip along with a 6-foot cedar fence is planned around the perimeter of the project site, and the refuse will be within an enclosure.

OFF-STREET PARKING AND LOADING

[...]

17.8.505 **APPLICABILITY.**

- A. New construction. At the time of the erection of a new structure within any residential, commercial, institutional and industrial zoning district , off-street vehicle parking shall be provided in accordance with this section. Except as specified in subsection D. below, uses in the Town Center zones are exempt from the requirement to provide off-street parking.

Response: This application involves a new multi-family apartment with four buildings. Therefore, off-street parking and loading standards are applicable.

17.8.510 **GENERAL PROVISIONS.**

[...]

- B. Parking plan requirements. The parking plan, drawn to scale, shall show all elements necessary to indicate that off-street parking requirements are met. The parking plan shall include but not be limited to:
1. Delineation of individual parking and loading spaces and their dimensions;
 2. Circulation area necessary to serve parking spaces;
 3. Access to streets, alleys and properties to be served;
 4. Curb cuts;
 5. Location and dimensions of all parking area landscaping (does not apply to single-family dwellings and duplexes);
 6. Grading and drainage (does not apply to single-family dwellings and duplexes); and
 7. Specifications as to signs and bumper guards (does not apply to single-family dwellings and duplexes).

Response: This application involves a new multi-family apartment with four buildings. Therefore, off-street parking and loading standards are applicable.

[...]

- E. Parking area connections. In order to eliminate the need to use public streets for movements between commercial or industrial properties, parking areas shall be designed to connect with parking areas within a project site and on adjacent properties unless not feasible. Access easements between properties shall be required where necessary to provide for parking area connections.

Response: This application involves a new multi-family residential apartment. This standard is not applicable.

- F. Walkway connections. In order to facilitate pedestrian and bicycle circulation, access and parking area plans shall provide an efficient sidewalk and/or walkway connection between neighboring developments and land uses.

Response: As shown in the Preliminary Plans (Exhibit A), the planned multi-family apartment includes a sidewalk/pedestrian path which connects all of the buildings on the site to the public right-of-way. This requirement is met.

- G. Standards of measurement. Except as otherwise defined in this Code, “one standard parking space ” means a parking stall of nine feet in width and 18

feet in length. To accommodate compact cars more efficiently, up to 50% of the available parking spaces may have a minimum dimension of eight feet in width and 16 feet in length so long as they are identified as compact car stalls and are not readily accessible to large cars.

GROSS LEASABLE AREA means all finished floors and excludes elevators, corridors, utility or rest rooms, and interior service areas and all outside service areas, boiler rooms, freight tunnels or corridors and truck docks.

GROSS FLOOR AREA means the total square footage including all finished floors. This number is estimated to be 10% greater than Gross Leasable Area.

Response: As shown in the Preliminary Plans (Exhibit A), the planned off-street parking spaces will be nine feet in width and 18 feet in length. This standard is satisfied.

- I. Where improvements subject to these off-street parking and loading provisions result in hard surfaces, pervious surfaces are encouraged to be used. Where improvements are within the public rights-of-way, such surfaces can be used upon approval by the City Engineer.

Response: Site access, off-street parking spaces, and loading areas are planned to be improved with hard surfaces. A partially graveled second driveway located on the western portion of the site is for planned emergency access (Alternative A). This requirement is satisfied.

17.8.515 OFF-STREET PARKING REQUIREMENTS.

Table 8-5: Parking Requirements			
Land Use	Minimum Parking Required	Maximum Parking Allowed	
		Parking Zone A	Parking Zone B
RESIDENTIAL			
- Multi-Family Units (outside the Town Center)	DU<500 sq. ft: 1.0/DU 1 bedroom: 1.25/DU 2 bedroom: 1.50/DU 3 bedroom: 1.75/DU	None	None

Response: As shown on the Preliminary Plans (Exhibit A), the number of planned off-street parking spaces is consistent with the ratios in 17.8.515, Table 8-5. This requirement is satisfied.

17.8.525 DESIGN AND MAINTENANCE STANDARDS FOR OFF-STREET PARKING AND LOADING.

- A. No backing movement. Excluding single-family and duplex residences, groups of more than two parking spaces shall be served by a service drive so that no backing movements or other maneuvering within a street or other public right-of-way would be required.

Response: The planned off-street parking area includes a 26-foot-wide travel aisle to provide access, site circulation, and vehicle maneuvering. It is not expected that vehicles will need to utilize public streets to maneuver out of or into off-street parking spaces. This standard is satisfied.

- B. Free flow of traffic. Service drives 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.
- C. Parking accessible from street. Each parking and/or loading space shall be accessible from a street and the access shall be of a width and location as described in §§ 17.8.100 et seq. for Access and Circulation.

-
- D. Parking space, stall and access aisle dimensions. Parking space configuration, stall and access aisle size shall be of sufficient width for all vehicles turning and maneuvering, based on the standards shown in Figures 8-10 and 8-11.

Response: A 26-foot-wide driveway connection will provide free-flowing access and egress to the site from 26th Avenue. The Preliminary Plans (Exhibit A) show that the project site will include a second one-way driveway for emergency egress.

- E. Permanent marking. Except for single-family and duplex residences, any area intended to be used to meet the off-street parking requirements shall have all parking spaces clearly marked using permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of traffic flow and maintain vehicular and pedestrian safety.

Response: The Preliminary Plans (Exhibit A) indicate the planned layout of the parking area. Striping for individual spaces will be reviewed and inspected during the building permit process.

- F. Surfacing.

Except for single-family and duplex residences, 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.

Off-street parking spaces for single-family and duplex residences shall be improved with an asphalt or concrete surface to specifications as approved by the Building Official.

Where possible, pervious surfacing should be used for off-street parking areas.

Response: As previously stated, the shared off-street parking area is planned to be a hardened surface consistent with the requirements of this section.

- G. Wheel stops. 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 one and one-half feet back from the front of the parking stall as defined in Figure 8-7.

Response: Preliminary Plans (Exhibit A) indicate that each parking space will include a wheel stop to separate the parking space from the sidewalk.

- H. Drainage. Off-street parking and loading areas shall provide stormwater drainage in accordance with specifications approved by the City Engineer . Off-street parking and loading facilities shall be drained to avoid flow of water across public sidewalks.

Response: Preliminary stormwater plans are included in Exhibit A. The off-street parking spaced will include stormwater drainage in accordance with the applicable City standards. This requirement is satisfied.

- I. Lighting. Artificial lighting on all off-street parking facilities shall be designed to deflect all light away from surrounding residences and so as not to create a glare hazard to the public use of any road or street.

Response: Preliminary Elevation Plans (Exhibit A) show the planned lighting for each building. Additional site lighting will be provided with a final site and photometric plan.

-
- J. Maintenance. All parking lots shall be kept clean and in good repair at all times. Breaks in paved surfaces shall be repaired promptly and broken or splintered wheel stops shall be replaced so that their function will not be impaired.

Response: The Applicant is prepared to provide regular maintenance to the planned apartment in accordance with these requirements.

- K. Parking lots over three acres in size. Parking lots over three acres in size shall be designed to incorporate curbs and sidewalks along major drive aisles.

Response: The Preliminary Plans (Exhibit A) indicate the planned layout of the parking area. Striping for individual spaces will be reviewed and inspected during the building permit process.

17.8.540 BICYCLE PARKING.

- A. When required. Bicycle parking shall be provided on-site in conjunction with the following uses:
1. Multi-family housing;
 2. Retail and office development;
 3. Industrial development;
 4. Institutional development; and
 5. Transit stations, park-and-ride lot and automobile parking structures.
- B. Required number of spaces. The number of bicycle parking spaces required shall be at least 20% of the required automobile parking for the use , but not less than two spaces.
- C. Location and design standards. Bicycle parking facilities shall be:
1. Located within 75 feet of a primary building entrance and dispersed for multiple entrances;
 2. Designed to provide direct access to a public right-of-way, but not to obstruct sidewalks or walkways. Public sidewalks may be utilized for bicycle parking when parking can't be reasonably accommodated on-site and the location is convenient to the building's primary entrance. If a public sidewalk is used for bicycle parking, a minimum of six feet of clear and unobstructed sidewalk must be maintained;
 3. In a location visible to building occupants or from the main parking lot;
 4. Thoroughly illuminated during working hours. Bicycle parking areas shall be at least as well lit as automobile parking areas;
 5. Bicycle parking facilities shall offer security in the form of either a lockable enclosure in which the bicycle can be stored or a stationary rack to which the bicycle can be locked. All bicycle racks, lockers or other facilities shall be securely anchored to the ground or to a structure. Bicycle racks shall be designed so that bicycles may be securely locked to them without undue inconvenience. Such racks shall be designed to hold bicycles securely by means of the frame, with the frame supported so that the bicycle cannot be pushed or fall to one side in a manner that will damage the wheels; and
 6. Bicycle parking spaces shall be at least six feet long and two feet wide with an overhead clearance of at least seven feet. An access aisle of at

least five feet shall be provided and maintained beside or between each row of bicycle parking. Each required bicycle parking space shall be accessible without moving another bicycle.

Response: The Preliminary Plans (Exhibit A) identify bicycle parking spaces in front of each building within seventy-five feet of the main entrance. Specific bicycle parking plans will be provided during the building permit phase. Preliminary plans identify that the applicable requirements for each space can be met. These requirements are satisfied.

17.8.545 LANDSCAPING AND SCREENING OF PARKING AND LOADING AREAS.

[...]

- B. Applicability. This section is applicable to all areas used for the display or parking of any and all types of vehicles, boats or heavy construction equipment, whether such vehicles, boats or equipment are self-propelled or not, and all land upon which vehicles traverse the property as a function of the primary use, hereinafter referred to as “other vehicular uses,” including but not limited to activities of a drive-in nature such as, but not limited to, filling stations, grocery and dairy stores, banks, restaurants and the like. Screening and landscaping of parking and loading areas is required, with the exception of parking areas serving single-family dwellings and duplexes, and parking areas that are under or within buildings. The interior landscaping requirements do not apply to parking areas for industrial uses in the industrial zones.

Response: This project involves a shared parking area to provide off-street parking for the planned apartment. Therefore, this section is applicable to the subject project.

- C. Required landscaping for parking lots adjacent to public rights-of-way. A minimum five-foot landscaped strip is required between the abutting right-of-way and the off-street parking area or vehicle use area.
- D. Perimeter parking lot landscaping. When the off-street parking area or other vehicular use area is not visually screened from an abutting property by an intervening building or structure, a minimum five-foot landscaped strip shall be installed between the common property line and the off-street parking area or other vehicular use area that is visually exposed.
- E. Interior parking lot landscaping. Landscaped areas shall be appropriately distributed to break up large expanses of pavement, improve the appearance and climate of the site, improve safety and delineate pedestrian walkways and traffic lanes. For the purpose of this section, interior parking lot area is defined as the hard surface parking area (parking stalls and aisles). Such area does not include loading and unloading zones or perimeter landscaping around the lot.
1. At least 8% of the interior parking lot area shall be landscaped. Landscaped areas should include water quality features such as bio-swales or wetlands, trees, grass, shrubs and other material when possible so as to cover the landscape area.
 2. A required landscaped area shall have a minimum interior dimension of six feet and be no less than 48 square feet in area. Landscaping shall be protected from vehicular damage by some form of wheel guard or curb.
 3. One tree shall be required for every 1,600 square feet of interior parking lot area. Trees shall have a minimum two-inch caliper and six-foot branch height at the time of planting.

-
4. Interior parking area landscaping and trees must be dispersed throughout the parking area. Some trees may be grouped, but the groups must be dispersed.
 5. Perimeter landscaping may not substitute for interior landscaping. However, interior landscaping may join perimeter landscaping as long as it extends four feet or more into the parking area from the perimeter landscape line.

Response: As shown on the Preliminary Plans (Exhibit A), a 5-to-10-foot landscape strip is planned around the entire perimeter of the site. At least 8 percent of the interior parking area is landscaped appropriately. These requirements are satisfied.

- F. Landscaping within clear vision areas. All landscaping of parking lots within clear vision areas shall provide unobstructed cross-visibility at a level between three to ten feet above the curb line. With the exception of grass or groundcover, no landscaping shall be located closer than three feet from the edge of any accessway pavement.

Response: Clear vision areas are delineated on the Preliminary Plans (Exhibit A) and will be landscaped in accordance with these requirements. This standard is satisfied.

PUBLIC IMPROVEMENTS

...

17.8.605 GENERAL PROVISIONS

- A. When Standards Apply. Unless otherwise provided, the standard specifications for construction, reconstruction or repair of streets, sidewalks, curbs, and other public improvements within the City shall occur in accordance with the standards of this article. No development may occur unless the public facilities related to development comply with the public facility requirements established in this section.
- B. Standard Specifications. The City Engineer shall establish standard specifications consistent with the application of engineering principles.

Response: The subject site has frontage along 26th Avenue, and the Preliminary Plans (Exhibit A) demonstrate the planned frontage and utility improvements. To the extent possible these provisions can be met.

- C. Adjustments. Adjustments to the provisions in this chapter related to street improvements may be granted by means of a Type II procedure, as governed by §10.2.100.

Response: Adjustments from the public improvement requirements are not anticipated with this application. This provision is not applicable.

17.8.610 STREETS

- A. Improvements. No development shall occur unless the development has frontage or approved access to a public street:
 1. Streets within a development and streets adjacent shall be improved in accordance with this article;

Response: The subject site has frontage along 26th Avenue. Access to the planned apartment will be provided via a new driveway connection to 26th Avenue. As shown in the Preliminary Plans

(Exhibit A), the portion of 26th Avenue that fronts the subject site will be improved to the applicable standards.

2. Any new street or additional street width planned as a portion of an existing street shall be dedicated and improved in accordance with this code;

Response: A new street is not necessary as a part of the planned site improvements. As required, right-of-way dedication is shown on the Preliminary Plans (Exhibit A). This requirement is satisfied.

3. New development shall be connected to a collector or arterial by a paved street;

Response: According to the City of Forest Grove TSP, 26th Avenue is classified as a collector. As shown on the Preliminary Plans (Exhibit A) a 26-foot-wide paved accessway will connect the multi-family apartment to 26th Avenue. This requirement is satisfied.

4. Where transportation-related improvements are required as a result of a transportation study pursuant to §10.1.225 D, the developer shall install said improvements to the satisfaction of the City Engineer, or participate in the financing of said improvement where the impacts are beyond the responsibility of one project; and
5. The City Engineer may accept a future improvement guarantee in lieu of street or other transportation related improvements if one or more of the following conditions exist:
 - a. A partial improvement is not feasible due to the inability to achieve proper design standards;
 - b. A partial improvement may create a potential safety hazard to motorists or pedestrians;
 - c. Due to the nature of existing development on adjacent properties it is unlikely that street improvements would be extended in the foreseeable future and the improvement associated with the project under review does not, by itself, provide a significant improvement to street safety or capacity;
 - d. The improvement would be in conflict with an adopted capital improvement plan;
 - e. The improvement is associated with an approved land partition on property zoned residential and the proposed land partition does not create any new streets; or
 - f. Additional planning work is required to define the appropriate design standards for the street and the application is for a project that would contribute only a minor portion of the anticipated future traffic on the street.

Response: According to the Institute of Travel Engineers (ITE) Trip Generation Manual (11th Edition), the planned apartment will result in twenty-three peak p.m. trips from the site. According to City staff, this number of trips does not warrant additional transportation related improvements. These requirements are not applicable.

6. Improvements to streets shall be made according to adopted City standards, unless the approval authority determines that the

standards will result in an unacceptable adverse impact on existing development or on the proposed development or on natural features such as wetlands, steep slopes or existing mature trees.

Response: It is anticipated that portions of the site with frontage along 26th Avenue will be improved to City standards. This requirement is understood.

- B. Creation of Rights-Of-Way for Streets and Related Purposes. Rights-of-way shall be created through the approval of a final subdivision plat or major partition; however, the Council may approve the creation of a street by acceptance of a deed, provided that such street is deemed essential by the Council for the purpose of general traffic circulation: ...

Response: This project does not include a subdivision or partition application. It is not anticipated that a new street is necessary for the planned apartment. This requirement is not applicable.

- C. Creation of Access Easements. The approval authority may approve an access easement established by deed without full compliance with this title provided such an easement is the only reasonable method by which a lot large enough to develop can be created:
1. Access easements shall be provided and maintained in accordance with the Uniform Fire Code;
 2. Access shall be in accordance with Sections 10.8.100 et. seq.

Response: This project involves a multi-family apartment. Access to the site will be via a shared private driveway. It is not anticipated that an access easement will be necessary for this site. This requirement is not applicable.

[...]

- E. Minimum Rights-Of-Way and Street Widths. Unless otherwise indicated on an approved street plan, or as needed to continue an existing improved street, street right-of-way and roadway widths shall not be less than the minimum width described below. Where a range is indicated, the width shall be determined by the appropriate decision-making authority based upon anticipated average daily traffic (ADT) on the new street segment.

These are presented in Table 8-8.

1. The decision-making body shall make its decision about desired right-of-way width and pavement width of the various street types within the subdivision or development after consideration of the following:
 - a. The type, design and location of the road as set forth in the Transportation System Plan. Standards for specific streets identified in the Transportation System Plan shall apply;
 - b. Anticipated traffic generation;
 - c. On-street parking needs;
 - d. Sidewalk and bikeway requirements;
 - e. Requirements for placement of utilities;
 - f. Street lighting;
 - g. Drainage and slope impacts;

- h. Street tree location;
- i. Planting and landscape areas;
- j. Safety and comfort for motorists, bicyclists, and pedestrians;
- k. Access needs for emergency vehicles.

TABLE 8-7: STREET STANDARDS		
Street Classification	Minimum R.O.W. Width	Minimum Roadway Width
Collector	66 feet	40 feet

Table 8-8 Footnotes:

[1] These streets shall not exceed 330 feet in length for any one segment. Each end of the segment shall connect to an existing or planned street with a minimum roadway width of 32 feet. Fire hydrants shall be placed at one-third intervals along the street segment. Driveways shall be placed in a manner to provide queuing space to allow for adequate traffic passage including emergency vehicles.

[2] These streets shall not exceed 330 feet in length for any one segment or the length needed to traverse a wetland or natural resource area. Each end of the segment shall connect to an existing or planned street with a minimum roadway width of 32 feet. Fire hydrants shall be placed at one-third intervals along the street segment. On-street parking is permitted on one side only.

[3] Street right-of-way may be reduced if approved by the City Engineer to preserve natural features, crossing a wetland or natural resource area or where construction of a full-width street would result in excessive cut and fill due to existing topography.

[4] One-way traffic only; no on-street parking permitted. One-way streets may be permitted only to preserve natural features or where the construction of a full-width street would result in excessive cut-and-fill due to existing topography, as determined by the City Engineer.

Response: The project site has frontage along 26th Avenue. According to the Forest Grove TSP, 26th Avenue is classified as a collector requiring a minimum right-of-way width of 66 feet. The portion of 26th Avenue that has frontage along the project site is ±60 feet wide. Street cross sections are included with the Preliminary Plans (Exhibit A), which show ±6 feet of dedication is planned along the site's frontage along with the necessary improvements. These standards are satisfied.

[...]

- I. Existing Rights-Of-Way. Whenever existing rights-of-way adjacent to or within a tract are of less than standard width, additional rights-of-way shall be provided at the time of subdivision or development.

Response: As shown on the Preliminary Plans (Exhibit A), ±6 feet of right-of-way dedication is planned along the project's frontage on 26th Avenue. This requirement is satisfied.

- J. Partial Street Improvements. Partial street improvements resulting in a pavement width of less than twenty (20) feet; while generally not acceptable may be approved where essential to reasonable development when in conformity with the other requirements of these regulations, and when it will be practical to require the improvement of the other half when the adjoining property developed.

Response: Partial Street improvements including additional paving, sidewalk, and planter strip are planned along the project's frontage on 26th Avenue. This requirement is met.

[...]

- N. Ramps, and Driveway Approaches. Concrete curbs, curb cuts, wheelchair, bicycle ramps and driveway approaches shall be constructed in accordance with standards specified in this chapter; and:

- 1. Concrete curbs and driveway approaches are required; except

-
2. Where no sidewalk is planned, an asphalt approach may be constructed with City Engineer approval; and
 3. Asphalt and concrete driveway approaches to the property line shall be built to City configuration standards.

Response: The planned ramps and accessway along the primary driveway are expected to meet the applicable requirements and standards.

- O. **Streets Adjacent To Railroad Right-Of-Way.** Wherever the proposed development contains or is adjacent to a railroad right-of-way, provision shall be made for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the land. The distance shall be determined with due consideration at cross streets or the minimum distance required for approach grades and to provide sufficient depth to allow screen planting along the railroad right-of-way in nonindustrial areas.

Response: The subject site is not adjacent to railroad right-of-way. This requirement does not apply.

- P. **Access Control.** Access control as described for each classification of street within the transportation element (Transportation System Plan (TSP), shall be implemented when a new street or street extension is built.

Response: Specific access control will be reviewed with the construction documents for conformance with the City's TSP. This requirement is met.

- Q. **Access to Arterials and Major Collectors.** Where a development abuts or is traversed by an existing or proposed arterial or major collector street, the development design shall provide adequate protection for residential properties and shall separate residential access and through traffic, or if separation is not feasible, the design shall minimize the traffic conflicts. The design shall include any of the following:

1. A parallel access street along the arterial or major collector;
2. Lots of suitable depth abutting the arterial or major collector to provide adequate buffering with frontage along another street;
3. Screen planting at the rear or side property line to be contained in a non-access reservation along the arterial or major collector; or
4. Other treatment suitable to meet the objectives of this subsection;
5. If a lot has access to two streets with different classifications, primary access should be from the lower classification street.

Response: The project site has frontage on 26th Avenue, which is classified as a collector in the Forest Grove TSP. As outlined on the Preliminary Plans (Exhibit A), access to the planned apartment will be provided via a private driveway connection to 26th Avenue. The connection incorporates the necessary design considerations to minimize traffic conflicts. Per the ITE Trip Generation Manual (11th Edition), the apartment will result in twenty-three peak p.m. vehicle trips. According to City staff, the traffic generated by the development will not require additional safety measures.

- R. **Alleys, Public or Private**

1. Alleys shall be no less than fifteen (15) feet in width. In commercial and industrial districts, alleys shall be provided unless other permanent provisions for access to off street parking and loading facilities are made.

-
2. While alley intersections and sharp changes in alignment shall be avoided, the corners of necessary alley intersections shall have a radius of not less than twelve (12) feet.

Response: An alley is not anticipated with this project. These requirements are not applicable.

- S. Survey Monuments. Upon completion of a street improvement and prior to acceptance by the City, it shall be the responsibility of the developer's registered professional land surveyor to provide certification to the City that all boundary and interior monuments shall be reestablished and protected.

Response: This project does not include changes to existing property boundaries. Therefore, survey monuments are not necessary.

T. Private Streets

1. Design standards for private streets shall be established by the City Engineer; and
2. The City shall require legal assurances for the continued maintenance of private streets, such as a recorded maintenance agreement.
3. Private streets serving more than six (6) dwelling units are permitted only within planned developments, mobile home parks, and multi-family residential developments.

Response: Private streets are not anticipated with this project. These requirements are not applicable.

- U. Railroad Crossings. Where an adjacent development results in a need to install or improve a railroad crossing, the cost for such improvements may be a condition of development approval, or another equitable means of cost distribution shall be determined by the Public Works Director and approved by the Commission.

Response: Access to the project site does not require a railroad crossing. This requirement does not apply.

- V. Street Signs. The City shall install all street signs, relative to traffic control and street names, as specified by the City Engineer for any development. The cost of signs shall be the responsibility of the developer.

Response: Specific signage will be reviewed with the project's construction documents. Street signs are to be installed by the City and financed by the developer. This requirement is met.

- W. Traffic Signals. The location of traffic signals shall be noted on approved street plans. Where a proposed street intersection will result in an immediate need for a traffic signal, a signal meeting approved specifications shall be installed. The cost shall be included as a condition of development.

Response: Traffic signals are not warranted nor required. This requirement does not apply.

- X. Street Light Standards. Street lights shall be installed in accordance with regulations adopted by the City's direction.

Response: Street lights are not anticipated with this project. This requirement is not applicable.

- Y. Street Name Signs. Street name signs shall be installed at all street intersections. Stop signs and other signs may be required.

Response: A new street is not expected to be necessary for this project. This requirement is not applicable.

17.8.615 EASEMENTS

- A. Easements. Easements for sewers, drainage, water mains, electric lines or other public utilities shall be either dedicated or provided for in the deed restrictions, and where a development traversed by a watercourse, or drainageway, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the watercourse.

Response: As shown on the Preliminary Plans (Exhibit A) public utility easements will be provided along the first eight feet adjacent to all public rights-of-way. This standard will be satisfied.

10.8.620 SIDEWALKS

- A. Sidewalks Required. Sidewalks shall be constructed, replaced or repaired to City design standards as set forth in the standard specifications manual and located as follows:

1. On both sides of arterial and collector streets to be built at the time of street construction;
2. On both sides of all other streets and in pedestrian easements and rights-of-way, except as provided further in this section, to be constructed along all portions of the property designated for pedestrian ways in conjunction with development of the property; and
3. On one side of any industrial street to be constructed at the time of street construction or after determination of curb cut locations.

Response: A 5-foot-wide sidewalk along the project site's frontage abutting 26th Avenue is included in the Preliminary Plans (Exhibit A). This requirement is met.

- B. Parkway Requirements. A parkway at least five (5) feet between the curb and the sidewalk shall be required in the design of any arterial or collector street where parking is prohibited adjacent to the curb, except where the following conditions exist: there is inadequate right-of-way; the curbside sidewalks already exist on predominant segments of the street; or it would conflict with the utilities.

Response: A ±7-foot-wide parkway strip is planned along the project's frontage on 26th Avenue (collector). This requirement is satisfied.

- C. Sidewalks in Town Center District. In the Town Center District, sidewalks shall be ten (10) feet in width, and:

1. All sidewalks shall provide a continuous unobstructed path; and
2. The width of curbside sidewalks shall be measured from the back of the curb.

Response: This project is not located within the Town Center District; these requirements do not apply.

- D. Maintenance. Maintenance of sidewalks, curbs, and planter strips is the continuing obligation of the adjacent property owner.

Response: Maintenance of project improvements beyond the curb of adjoining streets will be the responsibility of the adjacent property owner. This requirement is met.

-
- E. Application for Permit and Inspection. If the construction of a sidewalk is not included in a performance bond of an approved subdivision or the performance bond has lapsed, then every person, firm or corporation desiring to construct sidewalks as provided by this chapter, shall, before entering upon the work or improvement, apply for a street opening permit to the Engineering department to so build or construct:

[...]

Response: Sidewalks are planned to be constructed with the project's public improvements. This requirement is met.

10.8.625 SANITARY SEWERS

- A. Sewers Required. Sanitary sewers shall be installed to serve each new development and to connect developments to existing mains in accordance with the provisions set forth in Design and Construction Standards for Sanitary and Surface Water Management (as adopted by Clean Water Services in 1996 and including any future revisions or amendments) and the adopted policies of the Comprehensive Plan and the City's Master Sewer Plan.
- B. Sewer Plan Approval. The City Engineer shall approve all sanitary sewer plans and proposed systems prior to issuance of development permits involving sewer service.
- C. Over-Sizing. Proposed sewer systems shall include consideration of additional development within the area as projected by the Comprehensive Plan.
- D. Permits Denied. Development permits may be restricted by the Commission or Hearings Officer where a deficiency exists in the existing sewer system or portion thereof which cannot be rectified within the development and which if not rectified will result in a threat to public health or safety, surcharging of existing mains, or violations of state or federal standards pertaining to operation of the sewage treatment system.

Response: As shown on the Preliminary Plans (Exhibit A), the project's public sanitary sewer system has been designed to provide sanitary sewer access to service the planned development. Private sewer lateral connections are planned to each of the project's buildings from the public system to be extended from 26th Avenue south through the project. These requirements are met.

10.8.630 WATER FACILITIES

- A. Water Facilities Required. Water facilities shall be installed to serve each new development and to connect developments to existing mains in accordance with the provisions set forth in the adopted policies of the Comprehensive Plan and the City's Master Water Plan.
- B. Water Plan Approval. The City Engineer shall approve all plans for water facilities and proposed systems prior to issuance of development permits involving water service.
- C. Over-Sizing. Proposed water facilities shall include consideration of additional development within the area as projected by the Comprehensive Plan.
- D. Permits Denied. Development permits may be restricted by the Planning Commission or Hearings Officer where a deficiency exists in the existing water system or portion thereof which cannot be rectified within the development and which, if not rectified, will result in a threat to public health

or safety or violations of local, state or federal standards pertaining to the operation of the water system.

Response: As shown on the Preliminary Plans (Exhibit A), a 4-inch domestic water line is planned to extend into the project site from a main situated in 26th Avenue. These requirements are met.

10.8.635 **STORM DRAINAGE**

- A. **General Provisions.** The Director and City Engineer shall issue a development permit only where adequate provisions for storm water and flood water runoff have been made, and:
 - 1. The storm water drainage system shall be separate and independent of any sanitary sewerage system;
 - 2. Where possible, inlets shall be provided so surface water is not carried across any intersection or allowed to flood any street; and
 - 3. Surface water drainage patterns shall be shown on every development proposal plan.
- B. **Easements.** Where a watercourse, drainageway, channel or stream traverses a development, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse and such further width as will be adequate for conveyance and maintenance.
- C. **Accommodation of Upstream Drainage.**
 - 1. A culvert or other drainage facility shall be large enough to accommodate runoff from its entire upstream drainage area, whether inside or outside the development, and;
 - 2. The City Engineer shall approve the necessary size of the facility, based on the provisions of Design and Construction Standards for Sanitary and Surface Water Management (as adopted and amended by Clean Water Services) and the City's Master Storm Water Sewer Plan.
- D. **Effect on Downstream Drainage.** Where it is anticipated by the City Engineer that the additional runoff resulting from the development will overload an existing drainage facility, the Director and Engineer shall withhold approval of the development until provisions have been made for improvement of the potential condition or until provisions have been made for storage of additional runoff caused by the development in accordance with the Design and Construction Standards for Sanitary and Surface Water Management (as adopted by Clean Water Services and including any future revisions or amendments).

Response: The application materials include a Preliminary Stormwater Report. The report shows that stormwater will be collected on-site and conveyed to the public storm drainage system located in 26th Avenue.

17.8.640 **BIKEWAYS**

- A. **Bikeway Extension.** Developments adjoining proposed bikeways identified on the City's adopted pedestrian/bikeway plan shall include provisions for the future extension of such bikeways through the dedication of easements or rights-of-way.
- B. **Cost of Construction.** Development permits issued for planned unit developments, conditional use permits, subdivisions, and other developments

which will principally benefit from such bikeways shall be conditioned to include the cost or construction of bikeway improvements.

- C. Minimum Width. Minimum width for bikeways within the roadway is five (5) feet per bicycle travel lane. Minimum width for two-way bikeways separated from the road is eight (8) feet.

Response: A bikeway is not anticipated with this application. This requirement does not apply.

17.8.645 UTILITIES

- A. Underground Utilities. All utility lines in new developments shall be placed underground, and:
1. The developer shall make all necessary arrangements with the serving utility to provide the underground services;
 2. The City reserves the right to approve location of all surface mounted facilities;
 3. All underground utilities, including sanitary sewers and storm drains installed in streets by the developer, shall be constructed prior to the surfacing of the streets; and
 4. Stubs for service connections shall be long enough to avoid disturbing the street improvements when service connections are made.

Response: As shown on the Preliminary Plans (Exhibit A), the planned utilities will be placed underground. These requirements are met.

- B. Information on Development Plans. The applicant for a development shall show on the development plan or in the explanatory information, easements for all underground utility facilities, and:
1. Plans showing the location of all underground facilities as described herein shall be submitted to the City Engineer for review and approval; and
 2. Care shall be taken in all cases to ensure that above ground equipment does not obstruct vision clearance areas for vehicular traffic.

Response: An 8-foot public utility easement is shown on the Preliminary Plans (Exhibit A) adjacent to the public right-of-way (26th Avenue) to allow for the undergrounding of franchise utilities. Pedestals and above ground equipment shall comply with the vision clearance triangle regulations.

- C. Exception to Under-Grounding Requirement for Infill Development. An applicant for infill development, which is served by above ground utilities, may be exempt from the requirement for undergrounding utilities. This exception shall apply only to existing utility lines.

Response: This application involves a multi-family apartment on a site surrounded by existing developed lots. Existing above ground utility lines are along the frontage of the project site. The project may be exempt from undergrounding requirements.

17.8.650 AGREEMENT

For projects involving public improvements, the applicant shall enter into an agreement with the City Engineer prior to any site preparation or, where there is a partition or subdivision, prior to approval of the final map. The agreement shall be in a form as approved by the City Engineer.

At a minimum, it shall include detailed plans for public improvements and provide adequate assurance to guarantee the installation of the improvements (known as Performance Assurance) and the workmanship and material of the installation (known as Maintenance Assurance). The agreement may be waived by the City Engineer if the level of work is considered minor.

However, the assurances shall be required for any public improvements. The assurance shall be based on the following requirements:

- A. Maintenance Assurance. All improvements installed by the developer shall be guaranteed as to workmanship and material for a period of one (1)-year following acceptance by the City Engineer.
- B. Form of Assurance. All assurances shall be secured by cash deposit, bond or irrevocable letter of credit in the amount of 100% of the cost to complete the project as set by the City Engineer.

Response: Prior to the construction of public improvements, the developer shall enter a public improvement contract with the City and provide a performance bond. Upon completion and acceptance of the public improvements, the developer shall convert the performance bond into a one-year maintenance bond. These requirements are satisfied.

BUILDING DESIGN AND DEVELOPMENT STANDARDS

17.8.705 APPLICABILITY.

The standards in this subarticle apply to all multi-unit residential and commercial projects, and all projects within Town Center zoning districts.

17.8.710 STANDARDS.

- A. Building design standards for multi-unit development except within Town Center zones.
 - 1. Massing and form.
 - a. On lots with an average cross slope of 15% or more, no more than 60% of the site shall be re-graded.
 - 2. Compatibility.
 - a. All buildings shall incorporate a porch or architecturally defined entry space for each ground level dwelling unit with a minimum area of 16 square feet per dwelling unit, with no dimension less than four feet.
 - b. No building shall have a dimension greater than 150 feet without a minimum three feet off-set of the exterior wall.
 - c. At a minimum, every two dwelling units shall be offset from the next dwelling unit by at least four feet in depth.
 - d. All habitable rooms shall incorporate at least one window when facing parking lots and common areas.

Response: As shown on the Existing Conditions Plan (Exhibit A), the subject property is relatively flat with an average slope less than 15 percent.

-
- b. Shared porches or entry spaces are permitted. All grade level porches shall include hand-railing, half-walls or shrubs to define their outside perimeter.
 - 3. Privacy.
 - a. Front entryways into dwelling units shall be separated vertically or horizontally a minimum of three feet from sidewalks used by more than one dwelling unit.
 - b. Bedroom and bathroom windows shall be offset a minimum of four feet from windows on adjacent buildings (unless window glazing is frosted, diffused or glass block).

Response: This application is for a multi-unit apartment including four buildings. Preliminary Plans (Exhibit A) demonstrate the building's compliance with the applicable building design standards. These requirements are met.

- 4. Building relationship with adjacent arterials.
 - a. Buildings shall be setback at least ten feet from arterials.
 - b. Buildings shall be oriented away from arterials and no front or main entries shall be facing the arterials.
 - c. The setback area shall be landscaped consistent with the buffering requirements of § 17.8.425, except that chain link fence shall not be allowed.

Response: The subject property has frontage along 26th Avenue, which is classified as a collector. These requirements are not applicable.

[...]

LIGHTING STANDARDS

17.8.755 GENERAL PROVISIONS.

- A. When standards apply. Unless otherwise provided, the provisions of this subarticle apply to lighting that is part of a multi-family or commercial project, or lighting within one of the Town Center zoning districts.

Response: This application is for a multi-unit apartment including four buildings. Therefore, this section is applicable.

- B. Adjustments. Adjustments to the provisions in this section may be considered as part of the Adjustment, Design Review, Conditional or Planned Development Process.

Response: This application does not include an adjustment from these standards. This requirement is satisfied.

- C. Luminous standards. Light intensity standards shall be as follows:
 - 1. Outdoor lighting shall be provided in a manner that enhances security, is appropriate for the use, and avoids adverse impacts on surrounding properties. Glare shall not cause illumination on other properties in excess of a measurement of 0.5 foot-candles of light.
 - 2. Street lights shall meet the lighting requirements of the Public Works Director upon consultation with the Light and Power Director.
 - 3. Pedestrian lighting standards:

-
- a. Lighting for on-site pedestrian circulation system shall be lighted to a minimum level of 0.5 foot-candles, a 1.5 foot-candle average, and a maximum to minimum ratio of seven-to-one to enhance pedestrian safety and allow employees, residents, customers or the public to use the walkways at night.
 - b. Pedestrian walkway lighting through parking lots shall be lighted to a 0.5 foot-candle average and a maximum to minimum ratio of ten-to-one to light the walkway and enhance pedestrian safety. Artificial lighting which may be provided shall enhance security, be appropriate for the use, and avoid adverse impacts on surrounding properties and the night sky through appropriate shielding. The lighting shall not cause a measurement in excess of 0.5 foot-candles of light on other properties.

Response: These requirements will be reviewed in the building permit phase of the planned multi-family project. This requirement can be met.

D. Lighting standards for multi-unit development.

- 1. All exterior dwelling unit entrances and pedestrian walkways shall be lighted.
- 2. Poles outside of the public right-of-way shall be a maximum of 14 feet in height if the lot is less than 20,000 square feet and 18 feet for lots larger than 20,000 square feet.
- 3. Concrete light fixture bases taller than eight inches are prohibited.
- 4. Area lighting shall be directed downward with no splay of light off the site. Any light source over ten feet high shall incorporate cut-off shield.
- 5. Plastic signs with internal light source are prohibited.

Response: These requirements will be reviewed in the building permit phase of the planned multi-dwelling project. This requirement can be met.

IV. Conclusion

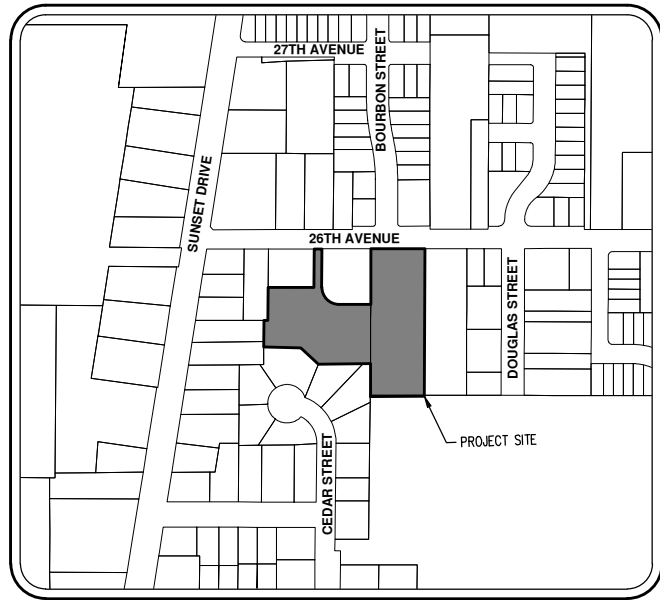
The required findings have been made and this written narrative and accompanying documentation demonstrate that the application is consistent with the applicable provisions of the City of Forest Grove Community Development Code. The evidence in the record is substantial and supports approval of the application. Therefore, the City can rely upon this information in its approval of the application.



Exhibit A: Preliminary Plans

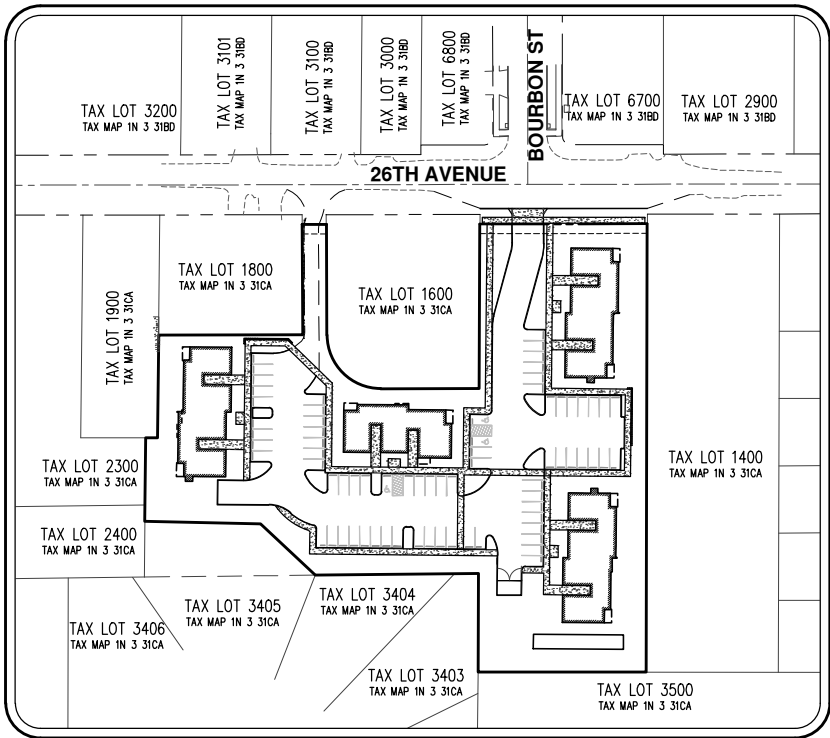
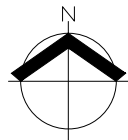
WEST GROVE APARTMENTS

LAND USE APPLICATION



VICINITY MAP

1"=250'



SITE MAP

1"=80'

LEGEND	
EXISTING	PROPOSED
DECIDUOUS TREE	●
CONIFEROUS TREE	★
FIRE HYDRANT	⦿
WATER BLOWOFF	⦿
WATER METER	⦿
WATER VALVE	⦿
DOUBLE CHECK VALVE	⦿
AIR RELEASE VALVE	⦿
SANITARY SEWER CLEAN OUT	⦿
SANITARY SEWER MANHOLE	⦿
SIGN	⦿
STREET LIGHT	⦿
MAILBOX	⦿
STORM DRAIN CLEAN OUT	⦿
STORM DRAIN CATCH BASIN	⦿
STORM DRAIN AREA DRAIN	⦿
STORM DRAIN MANHOLE	⦿
GAS METER	⦿
GAS VALVE	⦿
GUY WIRE ANCHOR	⦿
UTILITY POLE	⦿
POWER VAULT	⦿
POWER JUNCTION BOX	⦿
POWER PEDESTAL	⦿
COMMUNICATIONS VAULT	⦿
COMMUNICATIONS JUNCTION BOX	⦿
COMMUNICATIONS RISER	⦿

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE	---	---
BOUNDARY LINE	---	---
PROPERTY LINE	---	---
CENTERLINE	---	---
DITCH	---	---
CURB	---	---
EDGE OF PAVEMENT	---	---
EASEMENT	---	---
FENCE LINE	---	---
GRAVEL EDGE	---	---
POWER LINE	---	---
OVERHEAD WIRE	---	---
COMMUNICATIONS LINE	---	---
GAS LINE	---	---
STORM DRAIN LINE	---	---
SANITARY SEWER LINE	---	---
WATER LINE	---	---

PROJECT LOCATION

LOCATED ON THE SOUTH SIDE OF 26TH AVENUE, EAST OF SUNSET DRIVE INTERSECTION, IN THE CITY OF FOREST GROVE, WASHINGTON COUNTY, OREGON

PROPERTY DESCRIPTION

TAX LOT 1500 AND 1700 (WASHINGTON COUNTY ASSESSOR'S MAP 1N 3 31CA) LOCATED IN THE NORTHEAST 1/4 OF SOUTHWEST 1/4 SECTION SECTION 31, TOWNSHIP 1 NORTH, RANGE 3 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON

EXISTING LAND USE

RESIDENTIAL PROPERTY

PROJECT PURPOSE

45 UNIT MULTI-FAMILY (APARTMENTS) DEVELOPMENT IN THE RMH ZONING DISTRICT

VERTICAL DATUM

ELEVATIONS ARE BASED ON NAVD 88 DATUM. WASHINGTON COUNTY BENCHMARK NO. 579, A BRASS DISK LOCATED ON PORTER ROAD, 75 FEET NORTH OF THE CENTER OF DRIVEWAY FOR 2036 PORTER ROAD. ELEVATION = 170.546 FEET (NGVD 29). USING A VERTCON CONVERSION 3.48 FEET WAS THEN ADDED TO THE NGVD 29 DATUM TO GET TO THE NAVD 88 DATUM.

APPLICANT

CREEKWOOD HOMES, INC.
CONTACT: EVAN SCESA
PO BOX 1785
NORTH PLAINS, OR 97133

ARCHITECTURAL FIRM

SUNTEL DESIGN, INC.
CONTACT: JIM MEI, AIBD
155 B AVENUE, SUITE 105
LAKE OSWEGO, OR 97034

PLANNING/CIVIL ENGINEERING/SURVEYING/ NATURAL RESOURCE/ARBORIST/LANDSCAPE ARCHITECTURE FIRM

AKS ENGINEERING & FORESTRY, LLC
CONTACT: TONY MILLS
12965 SW HERMAN ROAD, SUITE 100
TUALATIN, OR 97062
PH: 503-563-6151
EMAIL: MILLST@AKS-ENG.COM

GEOTECHNICAL ENGINEER

GEOPACIFIC, INC.
CONTACT: JIM IMBRIE, PE, GE
14835 SW 72ND AVENUE
TIGARD, OR 97224
PH: 503-598-8445

SHEET INDEX

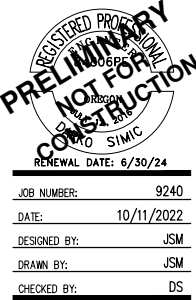
CIVIL ENGINEERING PLANS

- P00 COVER SHEET WITH LEGEND AND SITE MAP
- P01 PRELIMINARY EXISTING CONDITIONS PLAN
- P02 PRELIMINARY SITE PLAN
- P03 PRELIMINARY ALTERNATE SITE PLAN
- P04 PRELIMINARY SITE PLAN - AERIAL
- P05 PRELIMINARY LANDSCAPE PLAN
- P06 PRELIMINARY LANDSCAPE NOTES & PLANT SCHEDULE
- P07 PRELIMINARY GRADING & EROSION CONTROL PLAN
- P08 26TH AVE PLAN, PROFILE AND SECTION
- P09 PRELIMINARY COMPOSITE UTILITY PLAN
- P10 PRELIMINARY DEMOLITION PLAN
- P11 PRELIMINARY TREE PRESERVATION AND REMOVAL PLAN
- P12 PRELIMINARY TREE PRESERVATION AND REMOVAL TABLE

ARCHITECTURAL PLANS

- 1 BUILDING 1 - FRONT & LEFT ELEVATION
- 2 BUILDING 1 - REAR & RIGHT ELEVATION
- 3 BUILDING 1 - TYPICAL FLOOR PLAN
- 1 BUILDING 2 - FRONT & LEFT ELEVATION
- 2 BUILDING 2 - REAR & RIGHT ELEVATION
- 3 BUILDING 2 - TYPICAL FLOOR PLAN
- 1 BUILDING 3 - FRONT & LEFT ELEVATION
- 2 BUILDING 3 - REAR & RIGHT ELEVATION
- 3 BUILDING 3 - MAIN LEVEL FLOOR PLAN
- 4 BUILDING 3 - TYPICAL UPPER FLOOR PLAN
- 1 BUILDING 4 - FRONT & LEFT ELEVATION
- 2 BUILDING 4 - REAR & RIGHT ELEVATION
- 3 BUILDING 4 - TYPICAL FLOOR PLAN
- D.O TRASH ENCLOSURE DETAIL

COVER SHEET WITH LEGEND AND SITE MAP
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR



P00

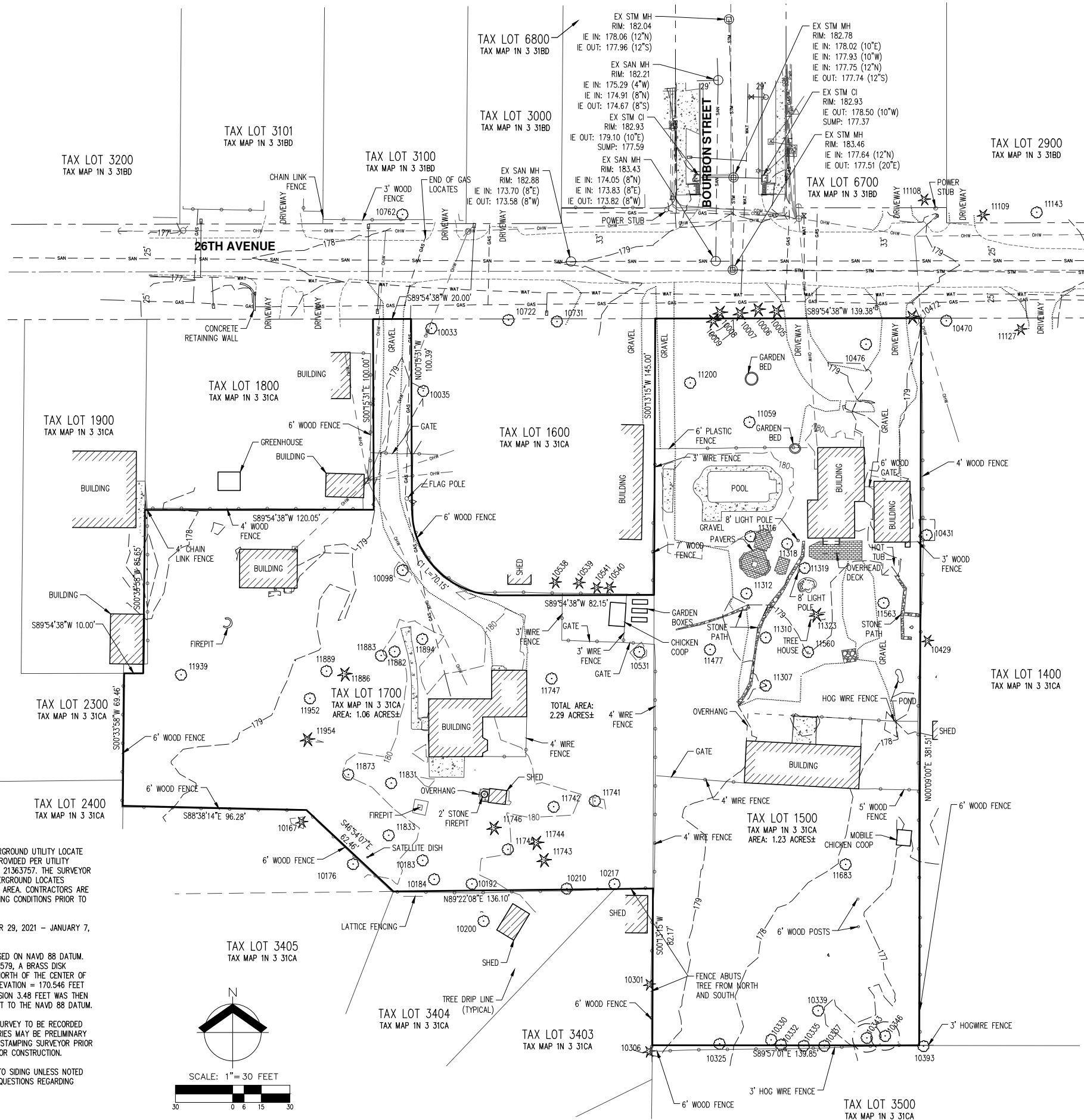
AKS ENGINEERING & FORESTRY, LLC
12965 SW HERMAN RD, STE 100
TUALATIN, OR 97062
503-563-6151
WWW.AKS-ENG.COM
ENGINEERING • SURVEYING • NATURAL RESOURCES
FORESTRY • PLANNING • LANDSCAPE ARCHITECTURE

PRELIMINARY EXISTING CONDITIONS PLAN
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR

REGISTERED
PROFESSIONAL
LAND SURVEYOR
PRELIMINARY
NOT FOR
CONSTRUCTION
JANUARY 17, 2018
KIMBERLY S. KALINA
89558PLS
RENEW: 6/30/23

JOB NUMBER: 9240
DATE: 10/11/2022
DESIGNED BY: JSM
DRAWN BY: JSM
CHECKED BY: DS

P01



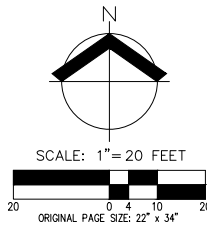
NOTES:

- UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBER 21363751 AND 21363757. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
- FIELD WORK WAS CONDUCTED DECEMBER 29, 2021 - JANUARY 7, 2022 AND MARCH 28 - 30, 2022.
- VERTICAL DATUM: ELEVATIONS ARE BASED ON NAVD 88 DATUM. WASHINGTON COUNTY BENCHMARK NO. 579, A BRASS DISK LOCATED ON PORTER ROAD, 75 FEET NORTH OF THE CENTER OF DRIVEWAY FOR 2036 PORTER ROAD. ELEVATION = 170.546 FEET (NGVD 29). USING A VERTCON CONVERSION 3.48 FEET WAS THEN ADDED TO THE NGVD 29 DATUM TO GET TO THE NAVD 88 DATUM.
- THIS IS NOT A PROPERTY BOUNDARY SURVEY TO BE RECORDED WITH THE COUNTY SURVEYOR. BOUNDARIES MAY BE PRELIMINARY AND SHOULD BE CONFIRMED WITH THE STAMPING SURVEYOR PRIOR TO RELYING ON FOR DETAILED DESIGN OR CONSTRUCTION.
- BUILDING FOOTPRINTS ARE MEASURED TO SIDING UNLESS NOTED OTHERWISE. CONTACT SURVEYOR WITH QUESTIONS REGARDING BUILDING TIES.
- CONTOUR INTERVAL IS 1 FOOT.
- TREES WITH DIAMETER OF 6" AND GREATER ARE SHOWN. TREE DIAMETERS WERE DETERMINED BY VISUAL INSPECTION. TREE INFORMATION IS SUBJECT TO CHANGE UPON ARBORIST INSPECTION.

CURVE TABLE				
CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	44.74'	89°49'51"	70.15'	N45°10'26"W 63.18'

TREE TABLE		
TREE NUMBER	TYPE	DBH (IN.)
10005	CONIFEROUS	28
10006	CONIFEROUS	25
10007	CONIFEROUS	19
10008	CONIFEROUS	25
10009	CONIFEROUS	17
10033	DECIDUOUS	18
10035	DECIDUOUS	31
10098	DECIDUOUS	44
10167	CONIFEROUS	36
10176	DECIDUOUS	6,6,7
10183	DECIDUOUS	15
10184	DECIDUOUS	48
10192	DECIDUOUS	30
10200	DECIDUOUS	52
10210	DECIDUOUS	18
10217	DECIDUOUS	6,10
10301	CONIFEROUS	60
10306	CONIFEROUS	7
10325	DECIDUOUS	8,8,8,12,14
10330	DECIDUOUS	6,6,8,8,10
10332	DECIDUOUS	10
10335	DECIDUOUS	8,8
10337	DECIDUOUS	9
10343	DECIDUOUS	32
10346	DECIDUOUS	26
10393	DECIDUOUS	7
10429	CONIFEROUS	28
10431	DECIDUOUS	36
10470	DECIDUOUS	15
10472	CONIFEROUS	25
10476	DECIDUOUS	55
10531	DECIDUOUS	49
10538	CONIFEROUS	26
10539	CONIFEROUS	26
10540	CONIFEROUS	30
10541	CONIFEROUS	30
10722	DECIDUOUS	6,6
10731	DECIDUOUS	6,6

TREE TABLE		
TREE NUMBER	TYPE	DBH (IN.)
10762	DECIDUOUS	12
11059	DECIDUOUS	11
11108	CONIFEROUS	30
11109	CONIFEROUS	30
11127	CONIFEROUS	13
11143	DECIDUOUS	30 SNAG
11160	DECIDUOUS	28
11200	DECIDUOUS	39 STUMP
11307	DECIDUOUS	16
11310	DECIDUOUS	15
11312	DECIDUOUS	15
11316	DECIDUOUS	7,10
11318	DECIDUOUS	8
11319	DECIDUOUS	14
11323	CONIFEROUS	35
11477	DECIDUOUS	8
11560	DECIDUOUS	10
11563	DECIDUOUS	10
11683	DECIDUOUS	10
11741	DECIDUOUS	43
11742	DECIDUOUS	34 SNAG
11743	CONIFEROUS	13
11744	CONIFEROUS	10
11745	DECIDUOUS	9
11746	CONIFEROUS	31
11747	DECIDUOUS	19
11831	DECIDUOUS	53
11833	DECIDUOUS	48 STUMP
11873	DECIDUOUS	10,10
11882	DECIDUOUS	48
11883	DECIDUOUS	11
11886	CONIFEROUS	20
11889	DECIDUOUS	8
11894	DECIDUOUS	47
11939	DECIDUOUS	15
11952	DECIDUOUS	25
11954	CONIFEROUS	42



PARKING REQUIREMENTS

PLANNED NUMBER OF APARTMENT UNITS PER BUILDING:

- BUILDING 1:
 - 12 - TWO BEDROOM UNITS
- BUILDING 2:
 - 12 - TWO BEDROOM UNITS
- BUILDING 3:
 - 2 - ONE BEDROOM UNITS
 - 5 - TWO BEDROOM UNITS
 - 2 - THREE BEDROOM UNITS
 - 1 - OFFICE
- BUILDING 4:
 - 12 - TWO BEDROOM UNITS

PARKING REQUIREMENT:

- 1.25 PARKING SPACES/1 BEDROOM UNIT
- 1.50 PARKING SPACES/2 BEDROOM UNIT
- 1.75 PARKING SPACES/3 BEDROOM UNIT

NUMBER OF PARKING SPACES REQUIRED =
1.25 SPACES PER 1 BEDROOM UNIT = 2.5 SPACES
1.50 SPACES PER 2 BEDROOM UNIT = 61.5 SPACES
1.75 SPACES PER 3 BEDROOM UNIT = 3.5 SPACES
TOTAL SPACES = 67.5 SPACES

PLANNED NUMBER OF PARKING SPACES = 72 SPACES

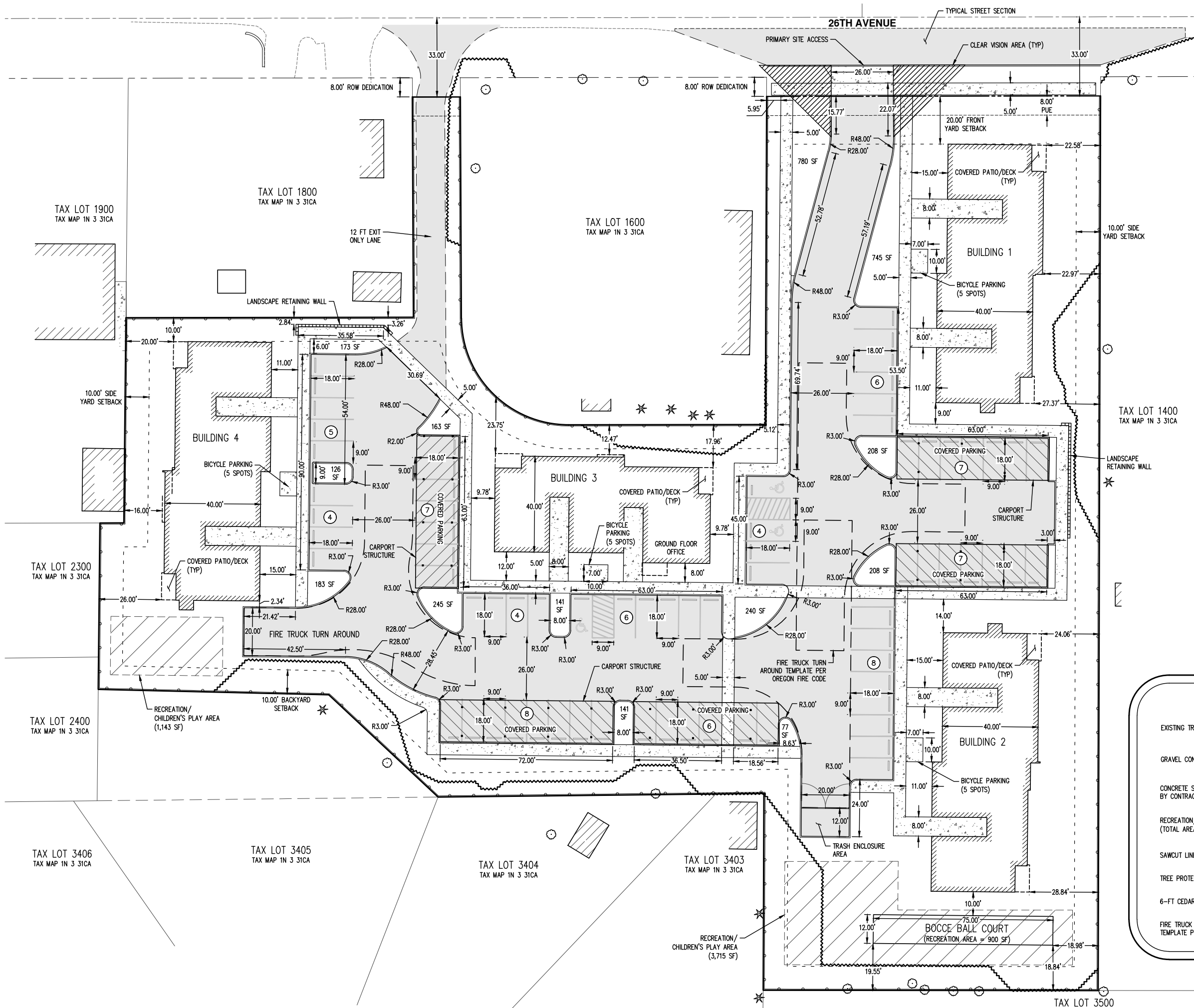
BICYCLE PARKING REQUIREMENT:

- 20% OF REQUIRED AUTOMOBILE PARKING
- 20% x 67.5 SPACES = 13.5 SPACES

BICYCLE PARKING PROVIDED: 20 SPACES

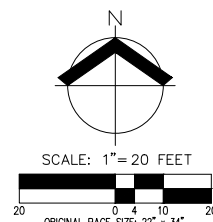
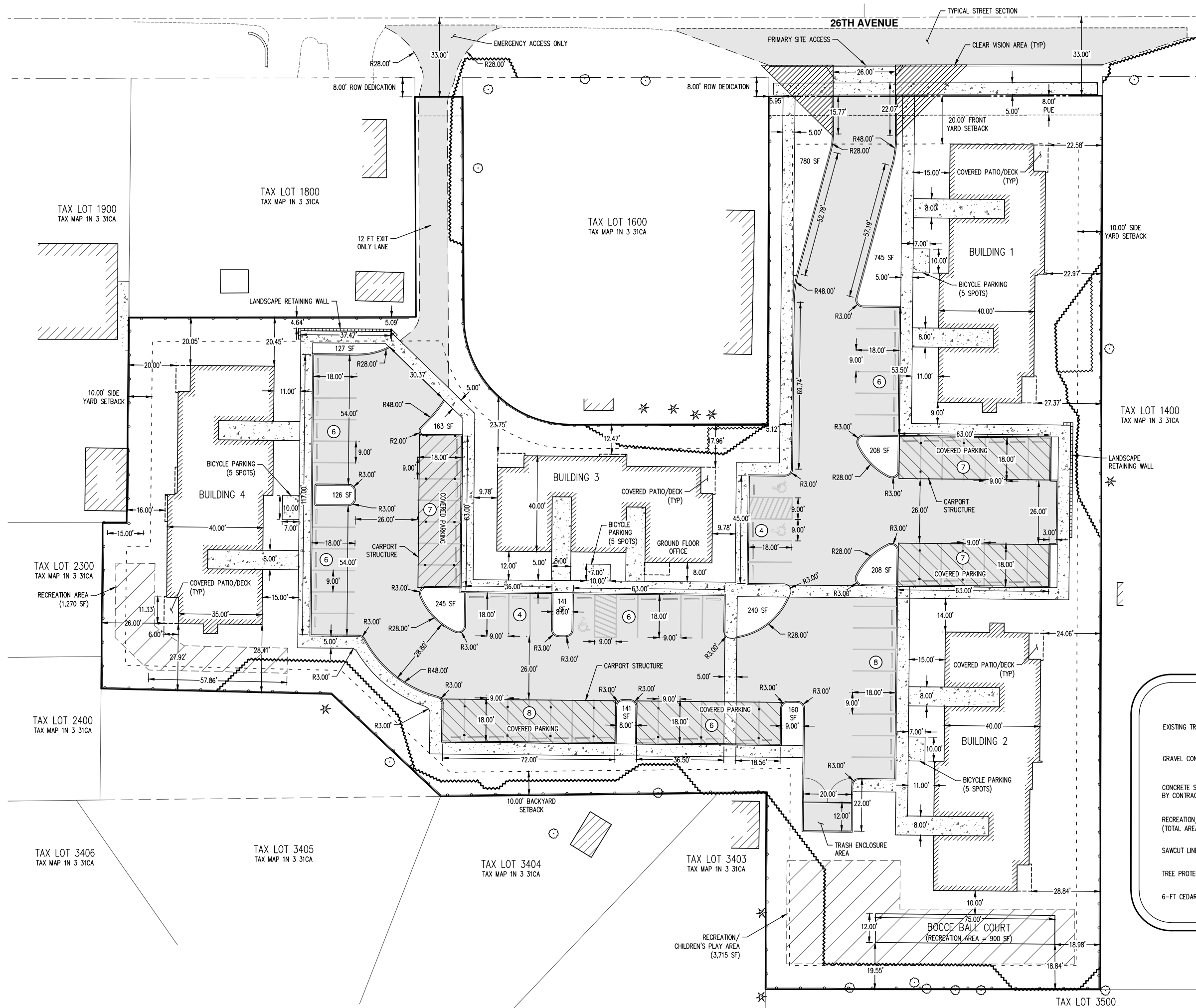
LEGEND

- EXISTING TREE TO REMAIN
- GRAVEL CONSTRUCTION ENTRANCE
- CONCRETE SIDEWALK CONSTRUCTED BY CONTRACTOR
- RECREATION/CHILDREN'S PLAY AREA (TOTAL AREA = 3,715 SF)
- SAWCUT LINE
- TREE PROTECTION FENCE
- 6-FT CEDAR PERIMETER FENCE
- FIRE TRUCK TURN AROUND TEMPLATE PER OREGON FIRE CODE



PRELIMINARY SITE PLAN WEST GROVE APARTMENTS CREEKWOOD HOMES FOREST GROVE, OR

REGISTERED PROFESSIONAL
LANDSCAPE ARCHITECT
NOT FOR CONSTRUCTION
RENEWAL DATE: 6/30/24
JOB NUMBER: 9240
DATE: 10/11/2022
DESIGNED BY: JSM
DRAWN BY: JSM
CHECKED BY: DS



PARKING REQUIREMENTS

PLANNED NUMBER OF APARTMENT UNITS PER BUILDING:

- BUILDING 1:
 - 12 - TWO BEDROOM UNITS
- BUILDING 2:
 - 12 - TWO BEDROOM UNITS
- BUILDING 3:
 - 2 - ONE BEDROOM UNITS
 - 5 - TWO BEDROOM UNITS
 - 2 - THREE BEDROOM UNITS
 - 1 - OFFICE
- BUILDING 4:
 - 12 - TWO BEDROOM UNITS

PARKING REQUIREMENT:

- 1.25 PARKING SPACES/1 BEDROOM UNIT
- 1.50 PARKING SPACES/2 BEDROOM UNIT
- 1.75 PARKING SPACES/3 BEDROOM UNIT

NUMBER OF PARKING SPACES REQUIRED =

- 1.25 SPACES PER 1 BEDROOM UNIT = 2.5 SPACES
- 1.50 SPACES PER 2 BEDROOM UNIT = 61.5 SPACES
- 1.75 SPACES PER 3 BEDROOM UNIT = 3.5 SPACES
- TOTAL SPACES = 67.5 SPACES

PLANNED NUMBER OF PARKING SPACES = 75 SPACES

BICYCLE PARKING REQUIREMENT:

- 20% OF REQUIRED AUTOMOBILE PARKING
- 20% x 67.5 SPACES = 13.5 SPACES

BICYCLE PARKING PROVIDED: 20 SPACES

LEGEND

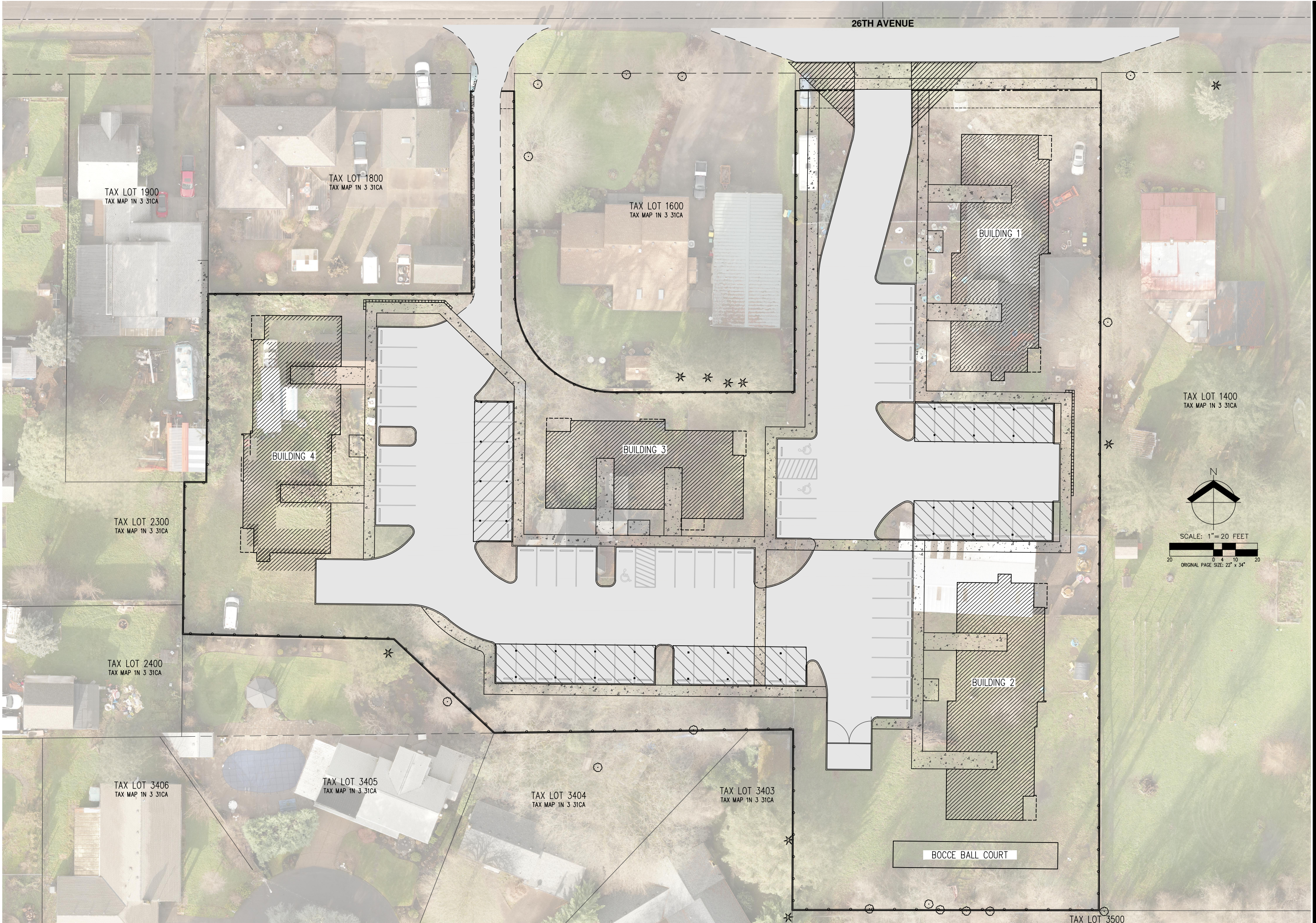
- EXISTING TREE TO REMAIN
- GRAVEL CONSTRUCTION ENTRANCE
- CONCRETE SIDEWALK CONSTRUCTED BY CONTRACTOR
- RECREATION/CHILDREN'S PLAY AREA (TOTAL AREA = 4,985 SF)
- SAWCUT LINE
- TREE PROTECTION FENCE
- 6-FT CEDAR PERIMETER FENCE

PRELIMINARY ALTERNATE SITE PLAN WEST GROVE APARTMENTS CREEKWOOD HOMES FOREST GROVE, OR



JOB NUMBER:	9240
DATE:	10/11/2022
DESIGNED BY:	JSM
DRAWN BY:	JSM
CHECKED BY:	DS

AKS DRAWING FILE: 9240 - SITE PLAN - AERIAL.DWG | LAYOUT: LAYOUT1 (2)

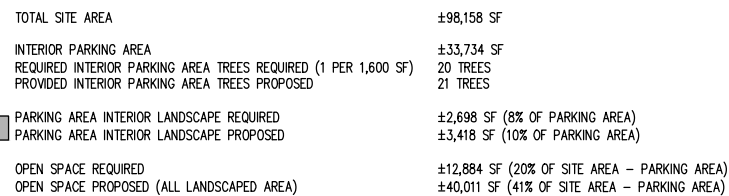


PRELIMINARY SITE PLAN - AERIAL
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR

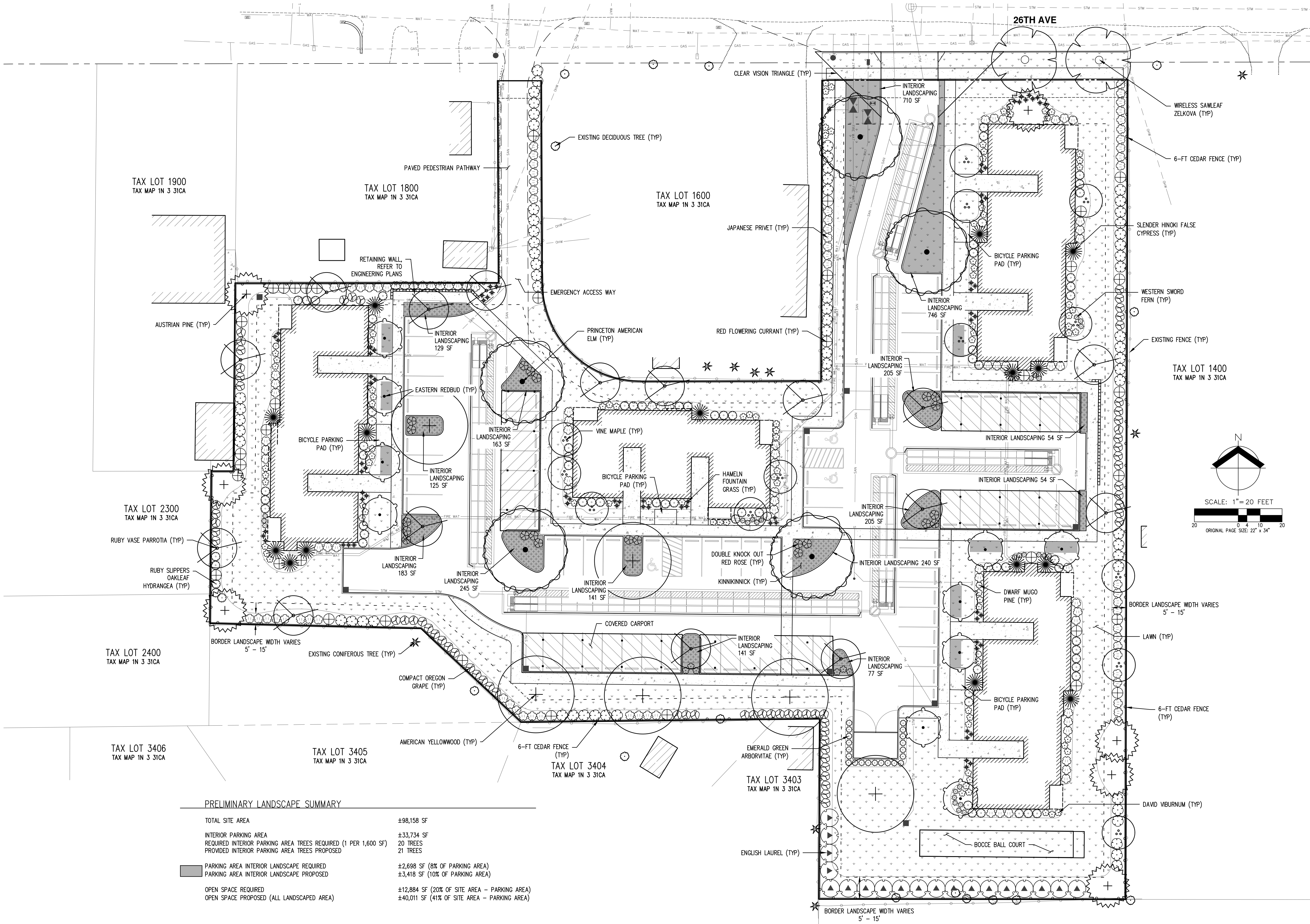
REGISTERED PROFESSIONAL ENGINEER NO. 12345 STATE OF OREGON NOT FOR CONSTRUCTION SINCE 10/10/2020	
RENEWAL DATE: 6/30/24	
JOB NUMBER:	9240
DATE:	10/11/2022
DESIGNED BY:	JSM
DRAWN BY:	JSM
CHECKED BY:	DS

REGISTERED
PRELIMINARY
NOT FOR CONSTRUCTION
KREBT & KRUSWALD
ARCHITECTS
02-06-173

P05



AKS DRAWING FILE: 9240 - LANDSCAPE.DWG | LAYOUT: P06



PRELIMINARY LANDSCAPE SUMMARY

TOTAL SITE AREA	±98,158 SF
INTERIOR PARKING AREA	±33,734 SF
REQUIRED INTERIOR PARKING AREA TREES REQUIRED (1 PER 1,600 SF)	20 TREES
PROVIDED INTERIOR PARKING AREA TREES PROPOSED	21 TREES
PARKING AREA INTERIOR LANDSCAPE REQUIRED	±2,698 SF (8% OF PARKING AREA)
PARKING AREA INTERIOR LANDSCAPE PROPOSED	±3,418 SF (10% OF PARKING AREA)
OPEN SPACE REQUIRED	±12,884 SF (20% OF SITE AREA - PARKING AREA)
OPEN SPACE PROPOSED (ALL LANDSCAPED AREA)	±40,011 SF (41% OF SITE AREA - PARKING AREA)

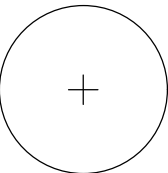
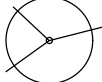
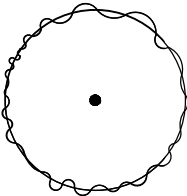
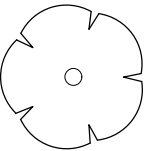
PRELIMINARY LANDSCAPE PLAN
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR



JOB NUMBER:	9240
DATE:	10/11/2022
DESIGNED BY:	NKP
DRAWN BY:	NKP
CHECKED BY:	KAH

PRELIMINARY LANDSCAPE NOTES:

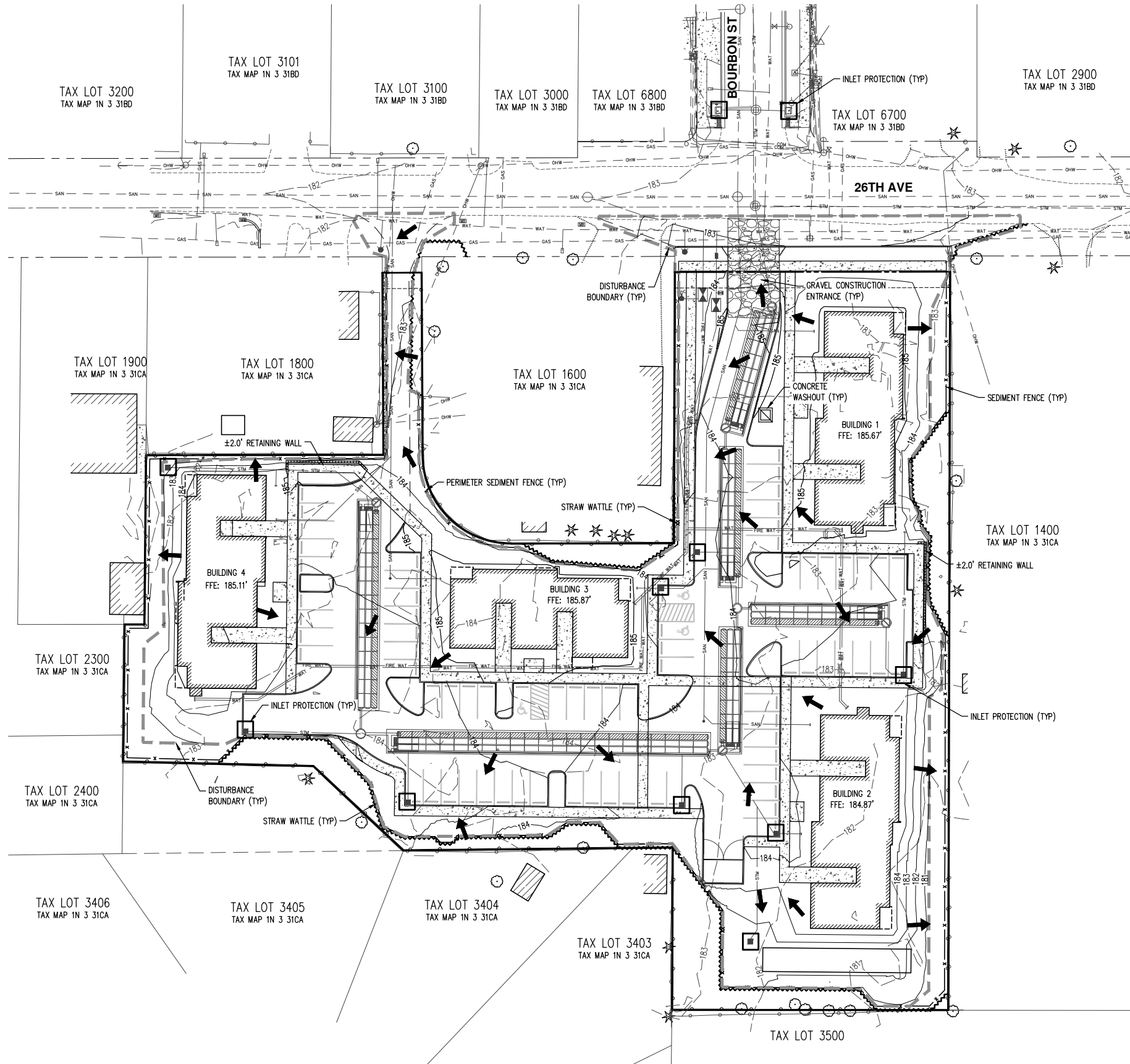
1. LANDSCAPING PLAN IS PRELIMINARY AND INTENDED TO PORTRAY DESIGN INTENT. REVISIONS OR SUBSTITUTIONS, INCLUDING CHANGES TO PLANT SPECIES, QUANTITIES, AND LOCATION, TO THE LANDSCAPE PLAN MAY OCCUR PRIOR TO FINAL SUBMITTAL AND APPROVAL WHERE ALLOWED BY CITY OF FOREST GROVE DESIGN STANDARDS.
2. ALL LANDSCAPING SHALL CONFORM TO APPLICABLE CITY OF FOREST GROVE STANDARDS (DEVELOPMENT CODE 10.8.410) AND TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1) CURRENT EDITION. ALL LANDSCAPING SHALL BE INSTALLED IN ACCORDANCE WITH ACCEPTED BEST-PRACTICE INDUSTRY STANDARDS SUCH AS THOSE ADOPTED BY THE OREGON LANDSCAPE CONTRACTORS BOARD (OLCB). CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES AND MATERIALS PRIOR TO BIDDING AND CONSTRUCTION. IF DISCREPANCIES OCCUR, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AND PROVIDING A PERMANENT UNDERGROUND IRRIGATION SYSTEM FOR ALL LANDSCAPE AREAS.
4. ALL PLANT MATERIAL SHALL BE OF HIGH GRADE, HEALTHY, EVENLY BRANCHED, TYPICAL FORM FOR THEIR SPECIES, AND MEET THE SIZE AND GRADING OF THE AMERICAN STANDARD FOR NURSERY STOCK. CONTAINERIZED PLANT STOCK SHALL BE FULLY ROOTED, BUT NOT ROOT-BOUND, IN THE CONTAINERS IN WHICH THEY ARE DELIVERED.
5. DOUBLE STAKE ALL TREES. ADJUST TREES ON SITE AS NECESSARY TO AVOID CONFLICTS WITH UTILITIES, BUILDINGS, WALKWAYS, ETC.
6. SOIL PREPARATION: ADEQUATE TOPSOIL SHALL BE PROVIDED FOR HEALTHY PLANT ESTABLISHMENT IN ALL LANDSCAPE AREAS. TOPSOIL STOCKPILED AND REUSED FROM ON-SITE OR FROM IMPORTED FROM OTHER SOURCES SHALL BE ACCEPTABLE. TOPSOIL SHALL BE RICH DARK BROWN IN COLOR, HAVE SUFFICIENT ORGANIC CONTENT FOR PLANT GROWTH, BE FREE-DRAINING, AND FREE OF DEBRIS, ROCKS OVER 1" DIAMETER, CLAY LUMPS, CONTAMINATES, ROOTS/WOODY PLANT MATERIAL, AND OTHER EXTRANEOUS MATERIAL HARMFUL TO PLANT GROWTH.
7. MULCH: APPLY 3" DEEP WELL-AGED MEDIUM GRIND OR SHREDDED DARK HEMLOCK BARK MULCH IN PLANTING BEDS, TAKING CARE TO NOT COVER FOLIAGE OR BURY ROOT CROWNS OF PLANT MATERIAL. WHERE TREES ARE PLANTED IN LAWN AREAS, A 3' DIAMETER MULCH RING SHALL BE APPLIED AROUND EACH TREE TO FACILITATE EASE OF MAINTENANCE AND TO RETAIN SOIL MOISTURE.

PRELIMINARY PLANT SCHEDULE				
TREES	BOTANICAL NAME	COMMON NAME	SIZE/CONTAINER	SPACING
	ACER CIRCINATUM	VINE MAPLE	2" CAL. B&B (MULTI-STEM, CUMULATIVE TRUNKS)	AS SHOWN
	CERCIS CANADENSIS	EASTERN REDBUD	2" CAL. B&B / 6' BRANCH HT.	AS SHOWN
	CHAMAECYPARIS OBTUSA 'GRACILIS'	SLENDER HINOKI FALSE CYPRESS	6'-7' HT. B&B	AS SHOWN
	CLADRASTIS KENTUKEA	AMERICAN YELLOWWOOD	2" CAL. B&B / 6' BRANCH HT.	AS SHOWN
	PARROTIA PERSICA 'RUBY VASE'	RUBY VASE PARROTIA	2" CAL. B&B / 6' BRANCH HT.	AS SHOWN
	PINUS NIGRA	AUSTRIAN PINE	8'-10' HT/B&B	AS SHOWN
	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	2" CAL. B&B / 6' BRANCH HT.	AS SHOWN
	ZELKOVA SERRATA 'SCHMIDTLOW' TM	WIRELESS SAWLEAF ZELKOVA	2" CAL. B&B / 6' BRANCH HT.	AS SHOWN
SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE/CONTAINER	SPACING
	HYDRANGEA QUEROIFOLIA 'RUBY SLIPPERS'	RUBY SLIPPERS OAKLEAF HYDRANGEA	5 GAL. CONT.	48" o.c.
	LIGUSTRUM JAPONICUM	JAPANESE PRIVET	5 GAL. CONT.	48" o.c.
	MAHONIA AQUIFOLIUM 'COMPACTA'	COMPACT OREGON GRAPE	2 GAL. CONT.	48" o.c.
	PENNISETUM ALOPECUROIDES 'HAMELN'	HAMELN FOUNTAIN GRASS	1 GAL. CONT.	30" o.c.
	PINUS MUGO PUMILIO	DWARF MUGO PINE	5 GAL. CONT.	36" o.c.
	POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL. CONT.	30" o.c.
	PRUNUS LAUROCERASUS	ENGLISH LAUREL	5 GAL. CONT.	96" o.c.
	RIBES SANGUINEUM	RED FLOWERING CURRANT	5 GAL. CONT.	60" o.c.
	ROSA X 'RADTKO' TM	DOUBLE KNOCK OUT RED ROSE	2 GAL. CONT.	48" o.c.
	THUJA OCCIDENTALIS 'SMARAGO'	EMERALD GREEN ARBORVITAE	4'-5' HT. B&B	36" o.c.
	VIBURNUM CARLESII	KOREAN SPICE VIBURNUM	5 GAL. CONT.	60" o.c.
	VIBURNUM DAVIDII	DAVID VIBURNUM	2 GAL. CONT.	36" o.c.
GROUND COVERS	DESCRIPTION			
	ARCTOSTAPHYLOS UVA-URSII	KINNIKINNICK	4" SP. CONT.	30" o.c.
	NORTHWEST SUPREME LAWN MIX – SUNMARK SEEDS (OR APPROVED EQUAL) 35% LOLIUM PERENNE V. DASHER 3, 35% LOLIUM PERENNE V. CUTTER II, 15% FESTUCA RUBRA V. GARNET, 15% FESTUCA RUBRA V. WINDWARD. APPLY AT A RATE OF 8 LBS PER 1,000 SQ FT OR AS RECOMMENDED BY SUPPLIER.			

PRELIMINARY LANDSCAPE NOTES & PLANT SCHEDULE
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR

REGISTERED PRELIMINARY NOT FOR CONSTRUCTION LANDSCAPE ARCHITECT	
JOB NUMBER:	9240
DATE:	10/11/2022
DESIGNED BY:	NKP
DRAWN BY:	NKP
CHECKED BY:	KAH

AKS DRAWING FILE: 9240 - GRADING.DWG | LAYOUT: LAYOUT1



LEGEND

EXISTING GROUND CONTOUR (1 FT)

184

EXISTING GROUND CONTOUR (5 FT)

185

FINISHED GRADE CONTOUR (1 FT)

174

FINISHED GRADE CONTOUR (5 FT)

185

ORANGE PERIMETER SEDIMENT FENCE
(TO BE INSTALLED PRIOR TO GRADING)

STRAW WATTLE (TO BE INSTALLED
AFTER GRADING)

EXISTING TREE TO REMAIN

INLET PROTECTION (TYP)

CONCRETE WASHOUT AREA

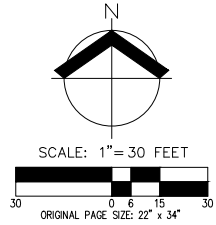
DRAINAGE FLOW DIRECTION

DISTURBANCE BOUNDARY

SAWCUT LINE

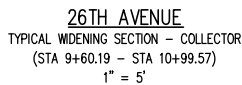
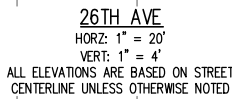
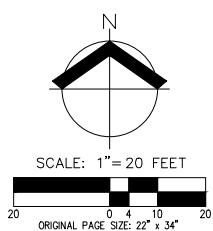
TREE PROTECTION FENCE

GRAVEL CONSTRUCTION ENTRANCE



PRELIMINARY GRADING & EROSION CONTROL PLAN
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR

REGISTERED PROFESSIONAL ENGINEER NO. 10000 STATE OF OREGON SINCE 1998
RENEWAL DATE: 6/30/24
JOB NUMBER: 9240
DATE: 10/11/2022
DESIGNED BY: JSM
DRAWN BY: JSM
CHECKED BY: DS



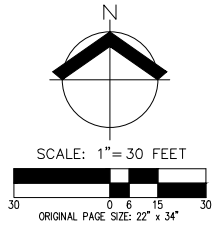
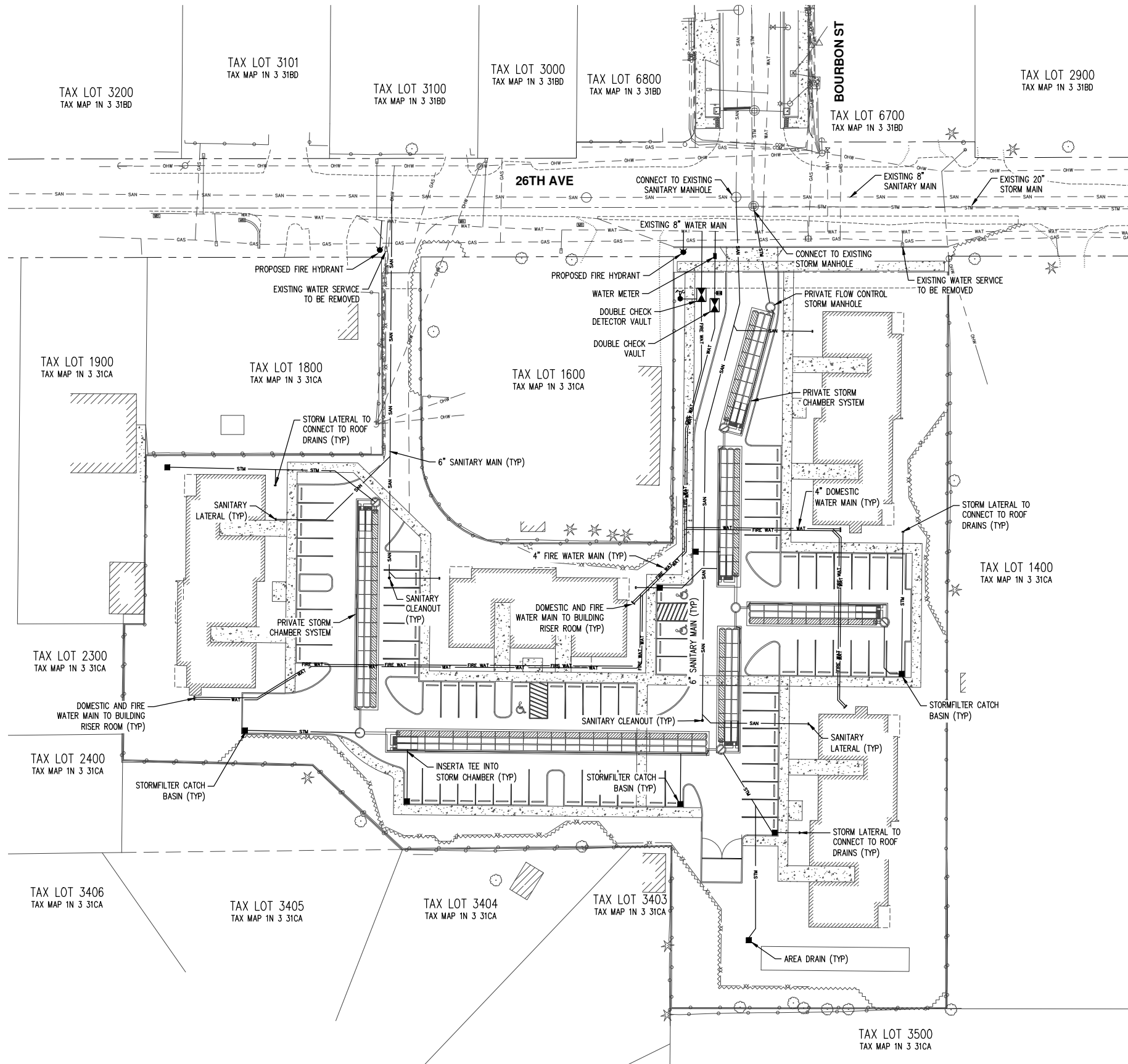
26TH AVE ALIGNMENT TABLE

CURVE/ TANGENT	STATION	RADIUS	LENGTH	DELTA	CHORD	TANGENT/CHORD BEARING
T1	5+00.98		1566.08'			N89°54'38"E



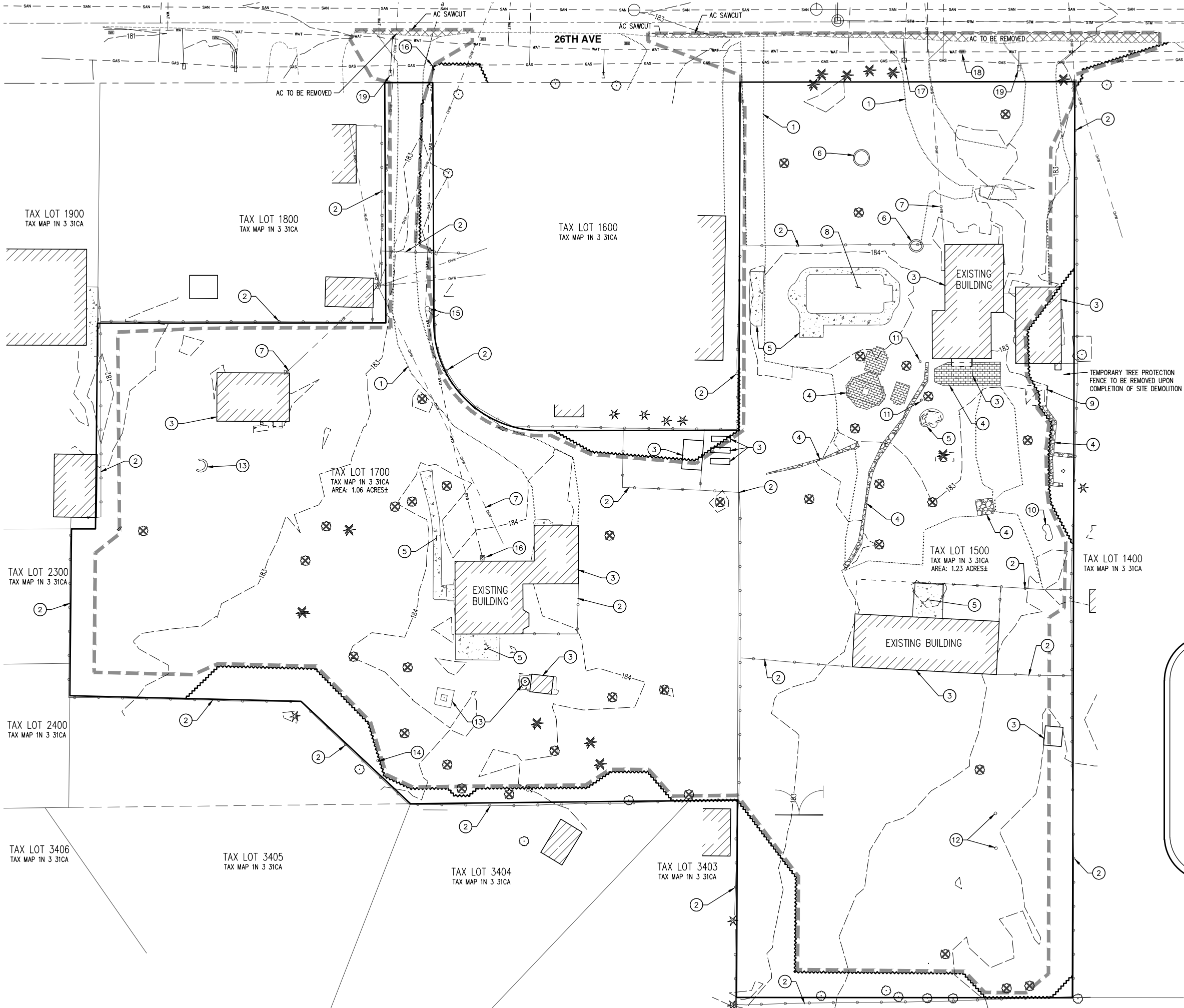
- CONCRETE SIDEWALK
- NEW AC PAVEMENT
- COMMERCIAL CONCRETE DRIVEWAY

AKS DRAWING FILE: 9240 - COMP UTILITY.DWG | LAYOUT: LAYOUT1



PRELIMINARY COMPOSITE UTILITY PLAN
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR

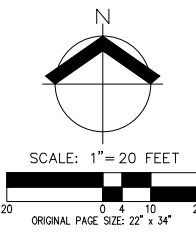
REGISTERED PROFESSIONAL ENGINEER NOT FOR CONSTRUCTION AKS ENGINEERING & FORESTRY, LLC 12005 SW HERMAN RD., STE 100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM	
RENEWAL DATE:	6/30/24
JOB NUMBER:	9240
DATE:	10/11/2022
DESIGNED BY:	JSM
DRAWN BY:	JSM
CHECKED BY:	DS



- # KEYED DEMOLITION NOTES:**
1. EXISTING GRAVEL TO BE RELOCATED AND REUSED ON-SITE.
 2. REMOVE FENCE AND HAUL OFF FOR DISPOSAL. ALL PERIMETER FENCING WILL BE REPLACED.
 3. REMOVE STRUCTURE AND HAUL OFF FOR DISPOSAL.
 4. REMOVE STONE/PAVERS AND HAUL OFF FOR DISPOSAL.
 5. REMOVE CONCRETE AND HAUL OFF FOR DISPOSAL.
 6. REMOVE GARDEN BED AND HAUL OFF FOR DISPOSAL.
 7. REMOVE OVERHEAD COMMUNICATIONS WIRE TO EXISTING POWER POLE.
 8. REMOVE POOL AND HAUL OFF FOR DISPOSAL. CONTRACTOR TO BACKFILL VOID WITH STRUCTURAL FILL.
 9. REMOVE HOT TUB AND HAUL OFF FOR SALVAGE.
 10. REMOVE POND AND HAUL OFF FOR DISPOSAL.
 11. REMOVE LIGHT POLE AND HAUL OFF FOR DISPOSAL.
 12. REMOVE WOOD POSTS AND HAUL OFF FOR DISPOSAL.
 13. REMOVE FIRE PIT AND HAUL OFF FOR DISPOSAL.
 14. REMOVE SATELLITE DISH AND HAUL OFF FOR SALVAGE.
 15. REMOVE FLAG POLE AND HAUL OFF FOR DISPOSAL.
 16. REMOVE NATURAL GAS METER. CAP AT THE MAIN AND ABANDON GAS SERVICE LINE. CONTRACTOR TO COORDINATE WITH APPROPRIATE UTILITY PROVIDER PRIOR TO REMOVAL.
 17. NATURAL GAS VALVE TO BE PROTECTED DURING SITE DEMOLITION.
 18. REMOVE MAILBOX AND HAUL OFF FOR DISPOSAL.
 19. DISCONNECT AND REMOVE WATER SERVICE LINE FROM WATER MAIN. CAP AT WATER MAIN.

LEGEND

EXISTING GROUND CONTOUR (1 FT)	---	179
EXISTING GROUND CONTOUR (5 FT)	---	180
EXISTING TREE TO REMAIN	⊙	★
EXISTING TREE TO BE REMOVED	⊗	★
DISTURBED AREA	---	
TREE PROTECTION FENCE	~~~~~	
TEMPORARY TREE PROTECTION FENCE	~~~~~	
AC SAWCUT	---	
AC TO BE REMOVED	▨	

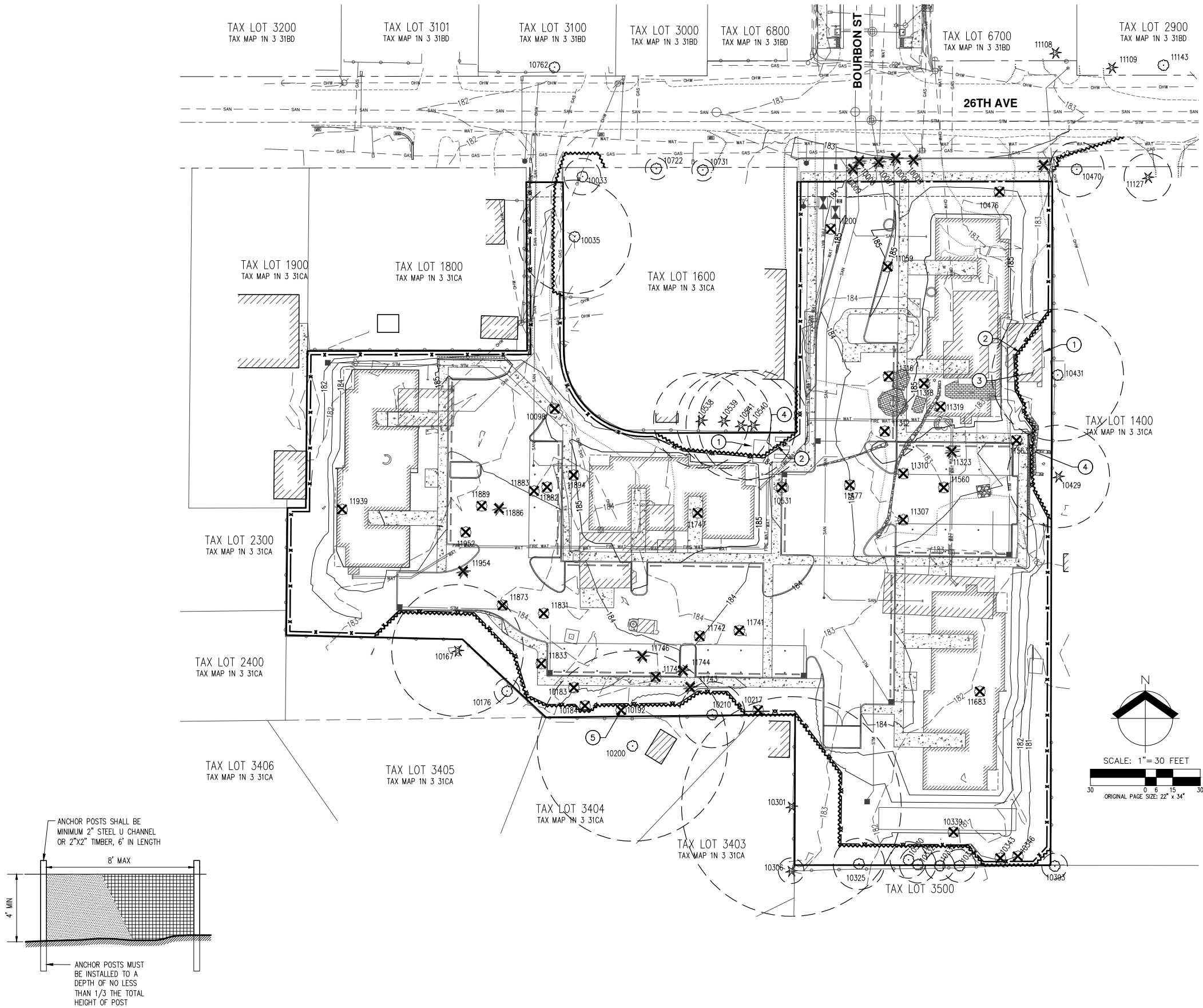


PRELIMINARY DEMOLITION PLAN
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR

REGISTERED PROFESSIONAL ENGINEER
STATE OF OREGON
LICENSE NO. 12345
EXPIRATION DATE: 12/31/2024

RENEWAL DATE:	6/30/24
JOB NUMBER:	9240
DATE:	10/11/2022
DESIGNED BY:	JSM
DRAWN BY:	JSM
CHECKED BY:	DS

P10



LEGEND

EXISTING GROUND CONTOUR (1 FT)

EXISTING GROUND CONTOUR (5 FT)

FINISHED GRADE CONTOUR (1 FT)

FINISHED GRADE CONTOUR (5 FT)

EXISTING CONIFEROUS TREE

EXISTING DECIDUOUS TREE

TREE REMOVAL

TREE PROTECTION/CONSTRUCTION FENCE
(TREE PROTECTION AREA)

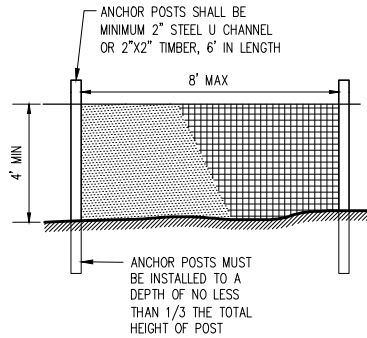
ORANGE SEDIMENT FENCE

STRAW WATTLE (TO BE USED WITHIN
ROOTZONES OF TREES TO BE PRESERVED)

ASSUMED TREE ROOTZONE
(1-FT RADIUS PER 1-IN OF DBH)

TREE PROTECTION KEYED NOTES:

- LOCATION OF TREE PROTECTION FENCE DURING DEMOLITION. TREE PROTECTION FENCE TO BE ADJUSTED TO FINAL LOCATION AS SHOWN BY NOTE #2 FOLLOWING DEMOLITION AND PRIOR TO GROUND DISTURBING ACTIVITIES.
- LOCATION OF TREE PROTECTION FENCE AFTER DEMOLITION IS COMPLETE (PRIOR TO ANY GROUND DISTURBING ACTIVITIES).
- STRUCTURES BEING DEMOLISHED NEAR TREES TO BE PRESERVED SHOULD BE REMOVED BY STRIPPING MATERIAL TO BARE SOIL, BEING CAREFUL NOT TO DAMAGE TREE ROOTS. COMPACTION, EXCAVATION, AND EQUIPMENT TRACK WALKING SHOULD BE LIMITED AND CONFINED TO THE LIMITS OF THE DEMOLITION AREA. EQUIPMENT TRACK WALKING SHOULD BE AVOIDED WITHIN THE TREE PROTECTION AREA. IF CONSTRUCTION ACCESS IS DESIRED IN AREAS BEHIND THE TREE PROTECTION FENCE, THEN STEEL PLATES, MULCH, OR OTHER MATERIAL AS APPROVED BY THE PROJECT ARBORIST SHOULD BE PLACED SO AS NOT TO CAUSE EXCESSIVE SOIL COMPACTION. A CERTIFIED ARBORIST SHOULD BE ONSITE DURING DEMOLITION IN THIS AREA.
- DEMOLITION SHALL BE PERFORMED USING HAND TOOLS AND METHODS OR BY EQUIPMENT STAGED OUTSIDE OF THE TREE PROTECTION AREA. EQUIPMENT TRACK WALKING SHALL BE AVOIDED WITHIN THE TREE PROTECTION AREA. IF EQUIPMENT ACCESS IS DESIRED, THEN STEEL PLATES, MULCH, OR OTHER MATERIALS AS APPROVED BY THE PROJECT ARBORIST SHOULD BE PLACED SO AS NOT TO CAUSE EXCESSIVE SOIL COMPACTION. A CERTIFIED ARBORIST SHOULD BE ONSITE DURING DEMOLITION IN THIS AREA.
- ARBORIST OBSERVATION REQUIRED FOR TREE REMOVAL BEHIND TREE PROTECTION FENCE.



- NOTES:
- BLAZE ORANGE PLASTIC MESH FENCE FOR TREE PROTECTION DEVICE OR APPROVED EQUAL.
 - AVOID DAMAGE TO TREE ROOT ZONE. DO NOT DAMAGE OR SEVER LARGE ROOTS WHEN INSTALLING POSTS.
 - DEVICE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION / CONSTRUCTION FENCE

BRUCE R. BALDWIN

CERTIFICATE NUMBER: PH-6666A

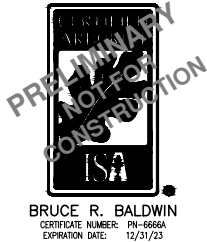
EXPIRATION DATE: 12/31/23

PRELIMINARY TREE PRESERVATION AND REMOVAL PLAN
WEST GROVE APARTMENTS
CREEKWOOD HOMES
FOREST GROVE, OR

PRELIMINARY
NOT FOR
CONSTRUCTION

JOB NUMBER:	9240
DATE:	10/11/2022
DESIGNED BY:	JSM
DRAWN BY:	JSM
CHECKED BY:	DS

Detailed Tree Inventory for West Grove Apartments							
AKS Job No. 9240 - Evaluation Date: 1/24/2022 - Evaluated by: BRK							
Tree #	DBH (in.)	Avg. Crown Radius (ft)	Tree Species Common Name (Scientific name)	Comments	Health Rating*	Structure Rating**	Remove/Preserve
10005	28	16	Douglas-fir (<i>Pseudotsuga menziesii</i>)		1	1	Remove
10006	25	20	Douglas-fir (<i>Pseudotsuga menziesii</i>)		1	1	Remove
10007	19	13	Western Redcedar (<i>Thuja plicata</i>)		1	1	Remove
10008	25	19	Douglas-fir (<i>Pseudotsuga menziesii</i>)	Deformed bole	1	2	Remove
10009	17	0	Pine (<i>Pinus</i> sp.)	Dead	3	3	Remove
10033	10,11	14	Apple (<i>Malus domestica</i>)	OFFSITE; Topped codominant limbs; Bulges at base	2	2	Preserve
10035	31	25	California Black Oak (<i>Quercus kelloggii</i>)	OFFSITE	1	1	Preserve
10098	44	28	Oregon White Oak (<i>Quercus garryana</i>)		1	1	Remove
10167	36	17	Spruce (<i>Picea abies</i>)	OFFSITE; Evaluated behind fence; Codominant with included limb	1	2	Preserve
10176	6,6,7	8	Willow (<i>Salix</i> sp.)	OFFSITE; Evaluated behind fence	1	1	Preserve
10183	15	15	Pacific Dogwood (<i>Cornus nuttallii</i>)		1	1	Remove
10184	48	30	Oregon White Oak (<i>Quercus garryana</i>)	1-sided canopy (S)	1	2	Remove
10192	30	35	Oregon White Oak (<i>Quercus garryana</i>)		1	1	Remove
10200	52	40	Oregon White Oak (<i>Quercus garryana</i>)	OFFSITE; Evaluated behind fence; 1-sided canopy (S)	1	2	Preserve
10210	18	14	Sweet Cherry (<i>Prunus avium</i>)	LINE TREE	1	1	Preserve
10217	10,6	8	English Hawthorn (<i>Crataegus monogyna</i>)	Broken branches; Decay	2	2	Remove
10301	60	21	Spruce (<i>Picea abies</i>)	LINE TREE; Some ivy coverage	1	1	Preserve
10306	7	12	Western Redcedar (<i>Thuja plicata</i>)	OFFSITE; Evaluated behind fence	1	1	Preserve
10325	14,12,8	19	English Hawthorn (<i>Crataegus monogyna</i>)	Dead limbs; Broken branches; Cavities with decay	2	2	Preserve
10330	6,6,8,8,10	16	English Hawthorn (<i>Crataegus monogyna</i>)		1	1	Preserve
10332	10	16	Maple (<i>Acer</i> sp.)	1-sided canopy (S)	1	2	Preserve
10335	8,8	10	English Hawthorn (<i>Crataegus monogyna</i>)	LINE TREE	1	1	Preserve
10337	9	7	English Hawthorn (<i>Crataegus monogyna</i>)	LINE TREE	1	1	Preserve
10339	10,9,6	11	English Hawthorn (<i>Crataegus monogyna</i>)	Uprooting (S)	3	3	Remove
10343	32	10	Poplar (<i>Populus</i> sp.)	Sparse canopy; Fungal growth on buttress root	2	2	Remove
10346	26	10	Poplar (<i>Populus</i> sp.)	Sparse canopy	2	2	Remove
10393	7	7	English Hawthorn (<i>Crataegus monogyna</i>)	OFFSITE; Lean (S)	1	2	Preserve
10429	28	17	Pondersa Pine (<i>Pinus ponderosa</i>)	OFFSITE; Codominant top	1	2	Preserve
10431	36	30	Bigleaf Maple (<i>Acer macrophyllum</i>)	OFFSITE	1	1	Preserve
10470	15	20	Black Locust (<i>Robinia pseudoacacia</i>)	OFFSITE; Large dead limb	1	1	Preserve
10472	25	15	Western Redcedar (<i>Thuja plicata</i>)	Codominant top	1	2	Remove
10476	55	37	Oregon White Oak (<i>Quercus garryana</i>)		1	1	Remove
10531	24,20,20,18	18	California Laurel (<i>Umbellularia californica</i>)		1	1	Remove
10538	26	16	Western Redcedar (<i>Thuja plicata</i>)	OFFSITE; Evaluated behind fence	1	1	Preserve
10539	26	16	Western Redcedar (<i>Thuja plicata</i>)	OFFSITE; Evaluated behind fence	1	1	Preserve
10540	30	15	Western Redcedar (<i>Thuja plicata</i>)	OFFSITE; Evaluated behind fence	1	1	Preserve
10541	30	16	Western Redcedar (<i>Thuja plicata</i>)	OFFSITE; Evaluated behind fence	1	1	Preserve
10722	6,6	-	-	OFFSITE; Not evaluated by an arborist	-	-	Preserve
10731	6,6	-	-	OFFSITE; Not evaluated by an arborist	-	-	Preserve
10762	12	-	-	OFFSITE; Not evaluated by an arborist	-	-	Preserve
11059	11	-	-	Not evaluated by an arborist	-	-	Remove
11108	30	-	-	OFFSITE; Not evaluated by an arborist	-	-	Preserve
11109	30	-	-	OFFSITE; Not evaluated by an arborist	-	-	Preserve
11127	13	-	-	OFFSITE; Not evaluated by an arborist	-	-	Preserve
11143	30	-	-	OFFSITE; Snag; Not evaluated by an arborist	-	-	Preserve
11200	39	-	-	Stump; Not evaluated by an arborist	-	-	Remove
11307	12	13	Plum (<i>Prunus</i> sp.)	Bilges; Broken limbs	2	2	Remove
11310	14	14	Ornamental Beech (<i>Fagus sylvatica</i>)		1	1	Remove
11312	13	6	Black Walnut (<i>Juglans nigra</i>)	Topped at 10'	3	3	Remove
11316	8,8,6	9	Cherry (<i>Prunus</i> sp.)	All stems topped; Large cavity with decay	3	3	Remove
11318	7	10	European White Birch (<i>Betula pendula</i>)	Dead top; Fungal growth on bole	3	2	Remove
11319	14	16	Sweetgum (<i>Liquidambar styraciflua</i>)		1	1	Remove
11323	21	20	Pondersa Pine (<i>Pinus ponderosa</i>)		1	1	Remove
11477	8	-	-	Not evaluated by an arborist	-	-	Remove
11560	10	15	European White Birch (<i>Betula pendula</i>)		1	1	Remove
11563	8	7	Pear (<i>Pyrus</i> sp.)		1	1	Remove
11683	7	6	Apple (<i>Malus domestica</i>)	Sluffing bark	1	1	Remove
11741	42	40	Oregon White Oak (<i>Quercus garryana</i>)		1	1	Remove
11742	9	7	Pine (<i>Pinus</i> sp.)		1	1	Remove
11743	13	-	-	Not evaluated by an arborist	-	-	Remove
11744	9	8	Pine (<i>Pinus</i> sp.)		1	1	Remove
11745	9	7	Pacific Dogwood (<i>Cornus nuttallii</i>)		1	1	Remove
11746	32	15	Douglas-fir (<i>Pseudotsuga menziesii</i>)		1	1	Remove
11747	14	12	Apple (<i>Malus domestica</i>)	Significant decay; Dead limbs; Many cavities	3	3	Remove
11831	53	28	Oregon White Oak (<i>Quercus garryana</i>)		1	1	Remove
11833	46	28	Oregon White Oak (<i>Quercus garryana</i>)		1	1	Remove
11873	11,11	15	Honey Locust (<i>Gleditsia triacanthos</i>)	Small cavities with decay; Broken limbs	1	2	Remove
11882	48	-	-	Not evaluated by an arborist	-	-	Remove
11883	13	17	Honey Locust (<i>Gleditsia triacanthos</i>)		1	1	Remove
11886	20	-	-	Not evaluated by an arborist	-	-	Remove
11889	14	11	Pine (<i>Pinus</i> sp.)		1	1	Remove
11894	45	30	Oregon White Oak (<i>Quercus garryana</i>)	1-sided canopy (E)	1	2	Remove
11939	15	-	-	Not evaluated by an arborist	-	-	Remove
11952	20	18	European White Birch (<i>Betula pendula</i>)	Dead top; Broken limbs	3	2	Remove
11954	36	21	Douglas-fir (<i>Pseudotsuga menziesii</i>)		1	1	Remove



PRELIMINARY TREE PRESERVATION AND REMOVAL TABLE

WEST GROVE APARTMENTS

CREEKWOOD HOMES

FOREST GROVE, OR

PRELIMINARY
NOT FOR
CONSTRUCTION

JOB NUMBER:	9240
DATE:	10/11/2022
DESIGNED BY:	JSM
DRAWN BY:	JSM
CHECKED BY:	DS



FRONT ELEVATION
SCALE: 1/4"=1'-0"



LEFT SIDE ELEVATION
SCALE: 1/4"=1'-0"

BLDG 1

CREEKWOOD HOMES

WEST GROVE APARTMENTS



THESE PLANS HAVE BEEN LICENSED FOR THE CONSTRUCTION OF ONE BUILDING ONLY. UNAUTHORIZED USE OR COPYING OF THE PLANS OR THE DESIGN THEREOF, INFRINGES RIGHTS UNDER THE COPYRIGHT ACT THAT INCLUDE PENALTIES OF UP TO \$100,000 PER WORK VIOLATION. THESE PLANS HAVE BEEN PREPARED TO MEET IBC BUILDING CODES AND MAY REQUIRE ADAPTATION TO MEET SPECIFIC SITE CONDITIONS AND LOCAL BUILDING REGULATIONS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND DETAILS PRIOR TO CONSTRUCTION FOR ERRORS AND OMISSIONS. PLEASE SEE YOUR LICENSE AGREEMENT FOR FURTHER INFORMATION.

PLAN NAME: WEST GROVE APTS - BLDG 1
DATE: 060622_EJH



REAR ELEVATION
SCALE: 1/4"=1'-0"



RIGHT SIDE ELEVATION
SCALE: 1/4"=1'-0"

BLDG 1

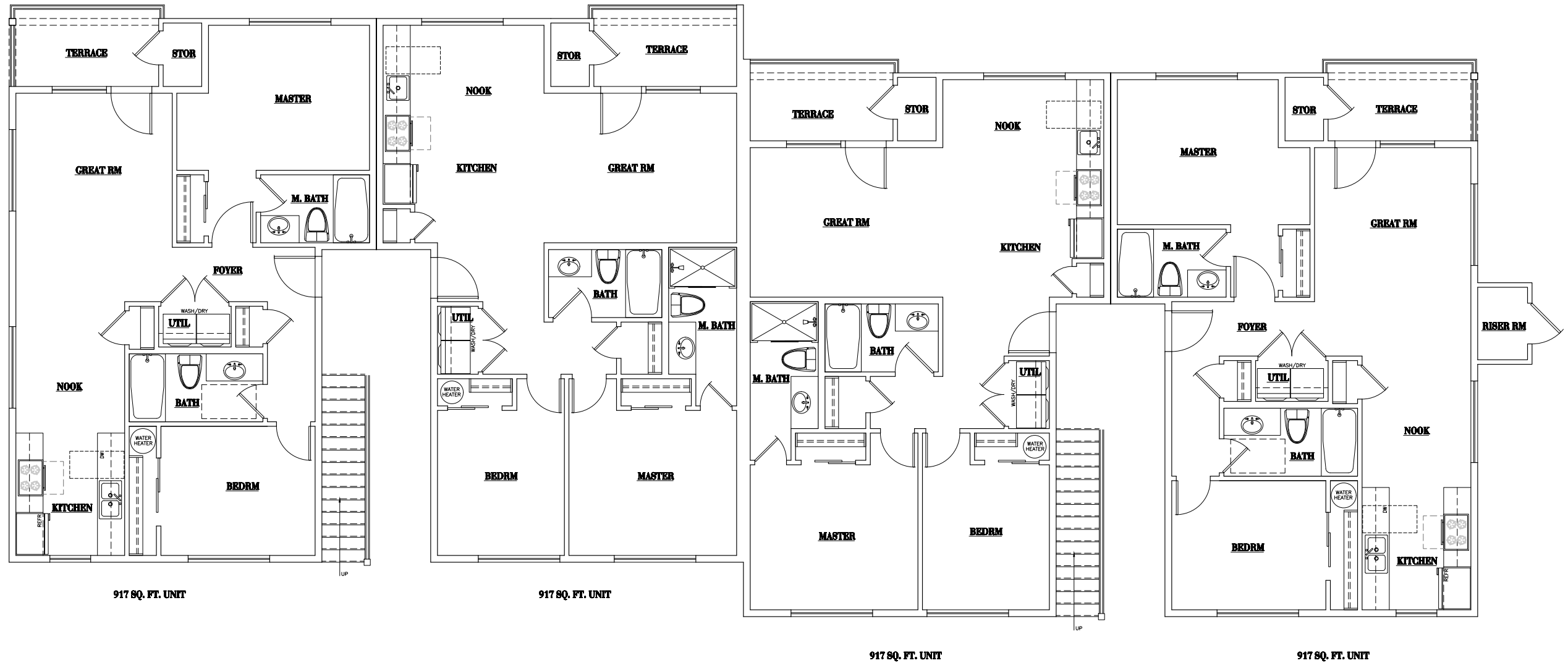
CREEKWOOD HOMES

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PLAN NAME: WEST GROVE APTS - BLDG 1
DATE: 060622_EJH



TYPICAL FLOOR PLAN
 SCALE: 1/4"=1'-0" 3,668 SQ. FT. TOTAL

BLDG 1

CREEKWOOD HOMES

WEST GROVE APARTMENTS



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PLAN NAME: WEST GROVE APTS - BLDG 1
 DATE: 060622 E.J.H.



FRONT ELEVATION
SCALE: 1/4"=1'-0"

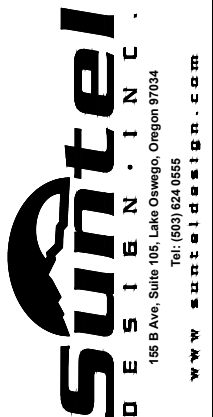


LEFT SIDE ELEVATION
SCALE: 1/4"=1'-0"

BLDG 2

CREEKWOOD HOMES

WEST GROVE APARTMENTS



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PLAN NAME: WEST GROVE APTS - BLDG 2
DATE: 060622_EJH



REAR ELEVATION
SCALE: 1/4"=1'-0"



RIGHT SIDE ELEVATION
SCALE: 1/4"=1'-0"

BLDG 2

CREEKWOOD HOMES

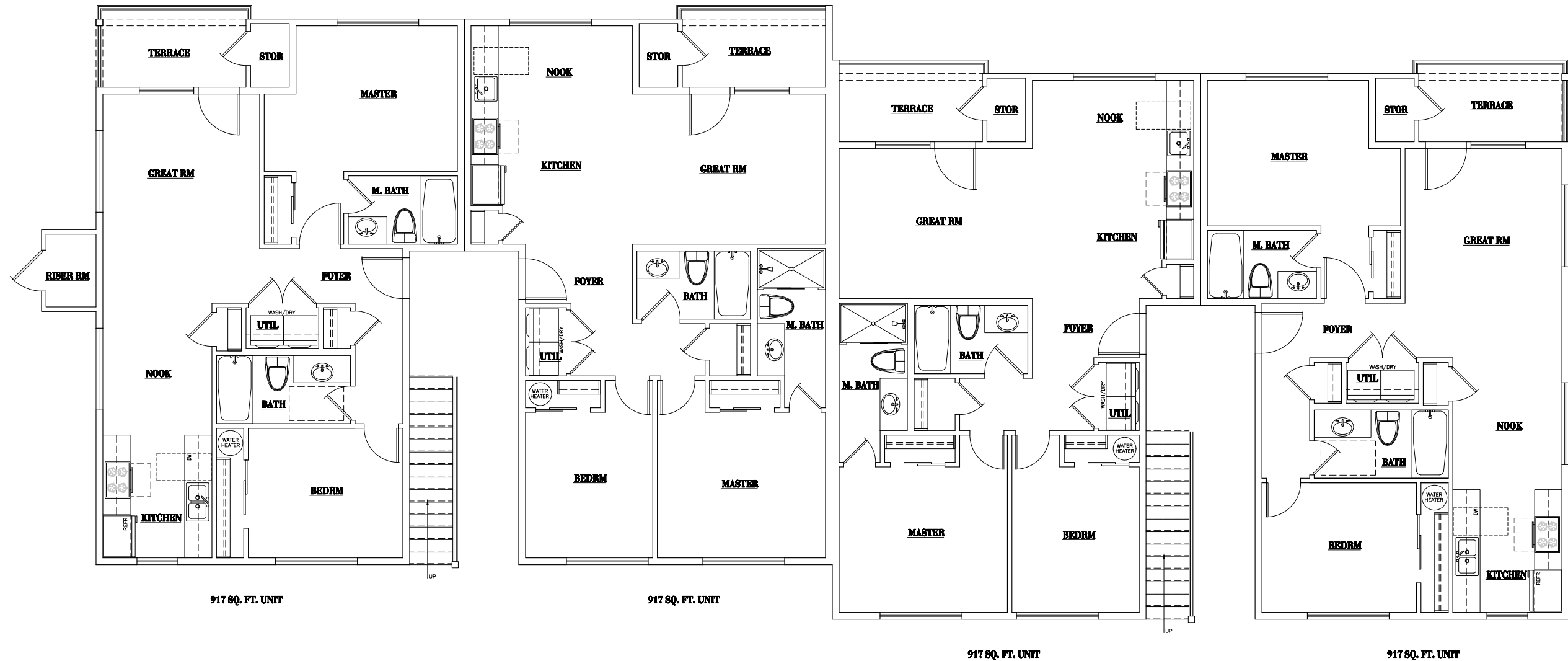
WEST GROVE APARTMENTS



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PLAN NAME: WEST GROVE APTS - BLDG 2
DATE: 060622_EJH

2



TYPICAL FLOOR PLAN

SCALE: 1/4"=1'-0"

3,668 SQ. FT. TOTAL

BLDG 2

CREEKWOOD HOMES

WEST GROVE APARTMENTS



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PLAN NAME: WEST GROVE APTS - BLDG 2

DATE: 060622_EJH



FRONT ELEVATION
SCALE: 1/4"=1'-0"



LEFT SIDE ELEVATION
SCALE: 1/4"=1'-0"

BLDG 3

CREEKWOOD HOMES

WEST GROVE APARTMENTS

Sintel
DESIGN INC.
155 B Ave, Suite 105, Lake Oswego, Oregon 97034
Tel: (503) 624-0555
www.sinteldesign.com

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PLANS OR THE DESIGN THE DEPT. INFRINGES
RIGHTS UNDER THE COPYRIGHT ACT THAT
INCLUDE PENALTIES OF UP TO \$100,000 PER
WORK VIOLATION. THESE PLANS
HAVE BEEN PREPARED TO MEET IBC BUILDING
CODES AND MAY REQUIRE ADAPTATION TO
MEET SPECIFIC SITE CONDITIONS AND LOCAL
BUILDING REGULATIONS. IT IS THE
CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY
ALL DIMENSIONS AND DETAILS PRIOR TO
CONSTRUCTION FOR ERRORS AND OMISSIONS.
PLEASE SEE YOUR LICENSE AGREEMENT FOR
FURTHER INFORMATION.

PLAN
NAME: WEST GROVE APTS - BLDG 3
DATE: 060622_EJH

1



REAR ELEVATION

SCALE: 1/4"=1'-0"



RIGHT SIDE ELEVATION

SCALE: 1/4"=1'-0"

PTAC AIR CONDITIONING UNIT
INSTALLED PER MANUF. TYP.
(BEYOND)

BLDG 3

CREEKWOOD HOMES

WEST GROVE APARTMENTS

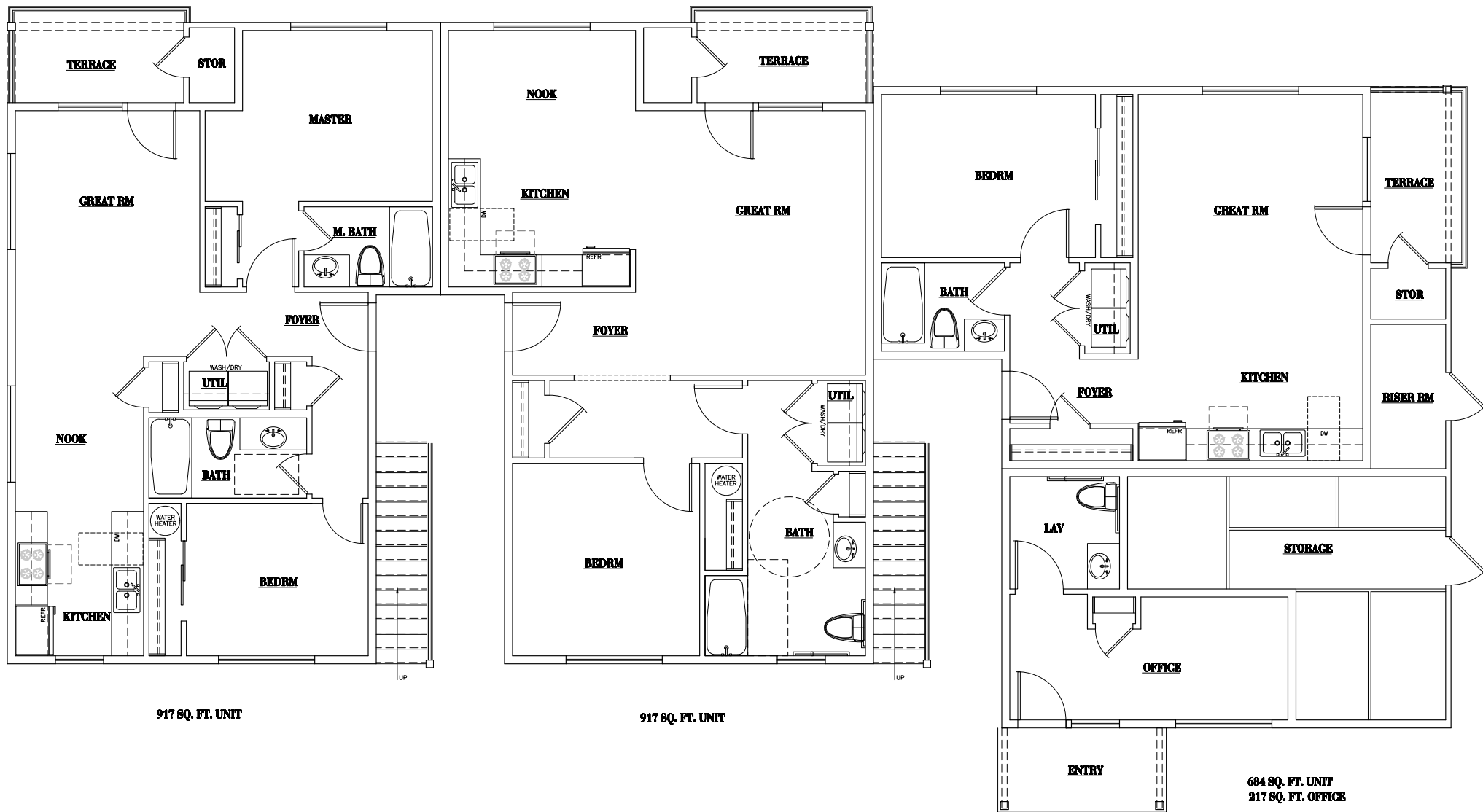


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PLAN NAME: WEST GROVE APTS - BLDG 3

DATE: 060622_EJH

2



917 SQ. FT. UNIT

917 SQ. FT. UNIT

684 SQ. FT. UNIT
217 SQ. FT. OFFICE

MAIN LEVEL FLOOR PLAN
SCALE: 1/4"=1'-0" 2,735 SQ. FT. TOTAL

BLDG 3

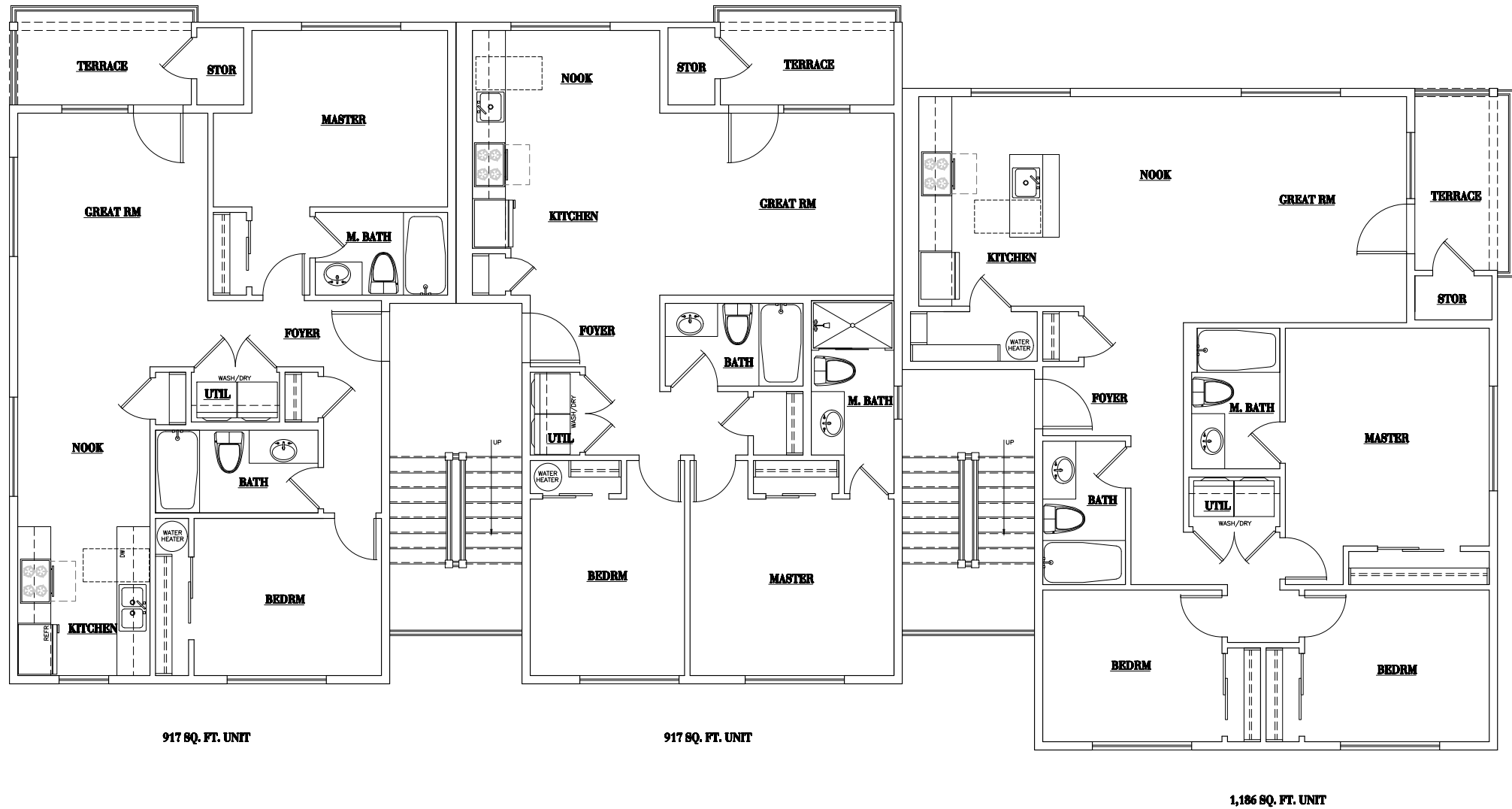
CREEKWOOD HOMES

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PLAN NAME: WEST GROVE APTS - BLDG 3
DATE: 060622_EJH



TYPICAL UPPER FLOOR PLAN
 SCALE: 1/4"=1'-0" 3,020 SQ. FT. TOTAL

BLDG 3

CREEKWOOD HOMES

WEST GROVE APARTMENTS



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PLAN NAME: WEST GROVE APTS - BLDG 3
 DATE: 060622_EJH



FRONT ELEVATION
SCALE: 1/4"=1'-0"



LEFT SIDE ELEVATION
SCALE: 1/4"=1'-0"

BLDG 4

CREEKWOOD HOMES

WEST GROVE APARTMENTS



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PLAN NAME: WEST GROVE APTS - BLDG 4
DATE: 060622_EJH



REAR ELEVATION
SCALE: 1/4"=1'-0"



RIGHT SIDE ELEVATION
SCALE: 1/4"=1'-0"

BLDG 4

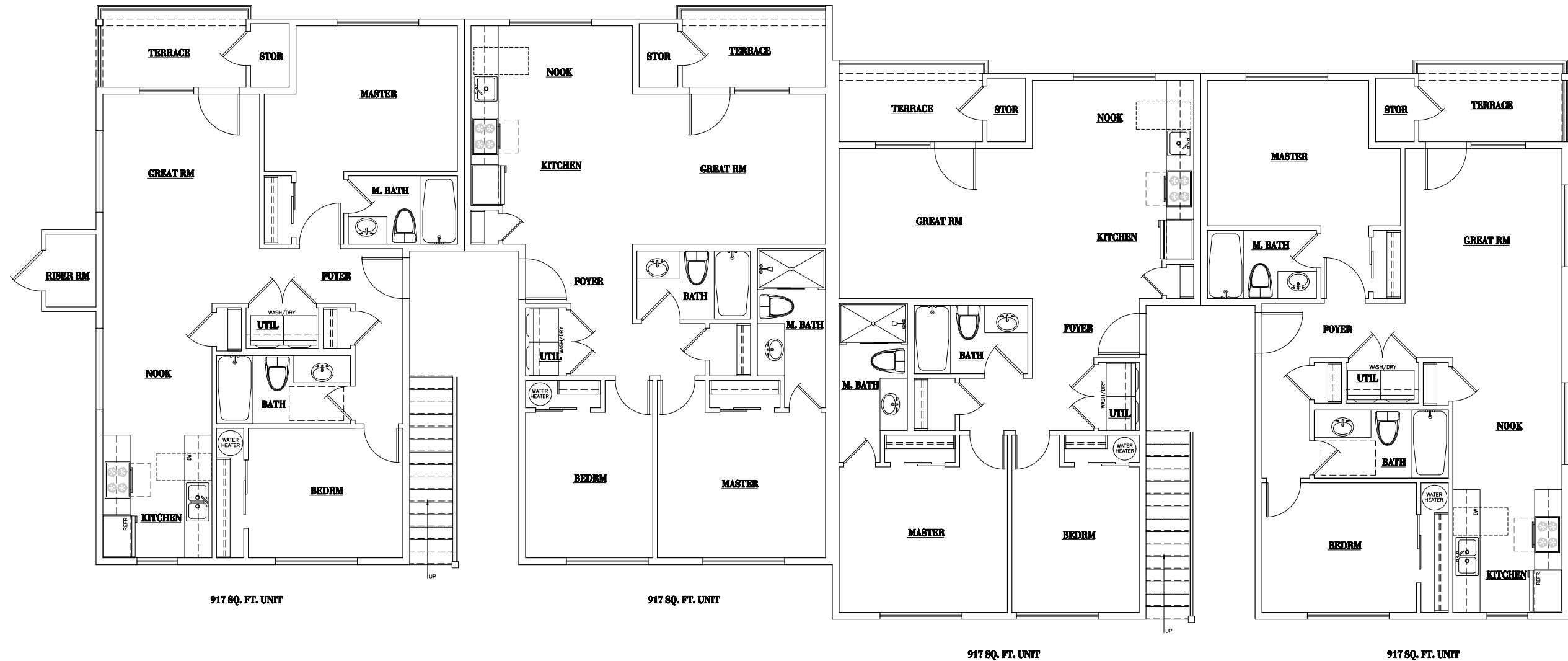
CREEKWOOD HOMES

WEST GROVE APARTMENTS



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PLAN NAME: WEST GROVE APTS - BLDG 4
DATE: 060622_EJH



TYPICAL FLOOR PLAN
 SCALE: 1/4"=1'-0" 3,668 SQ. FT. TOTAL

BLDG 4

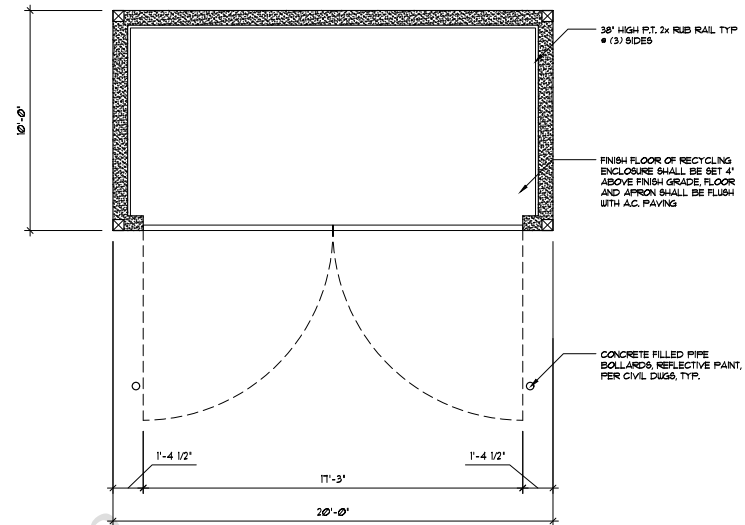
CREEKWOOD HOMES

WEST GROVE APARTMENTS

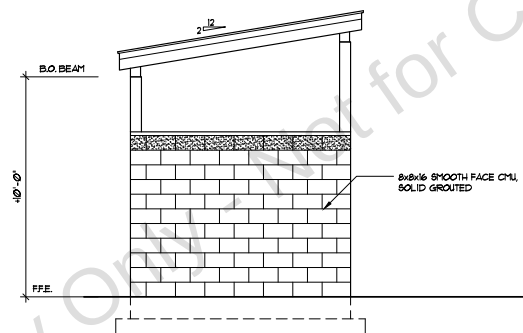


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PLAN NAME: WEST GROVE APTS - BLDG 4
 DATE: 060622_EJH

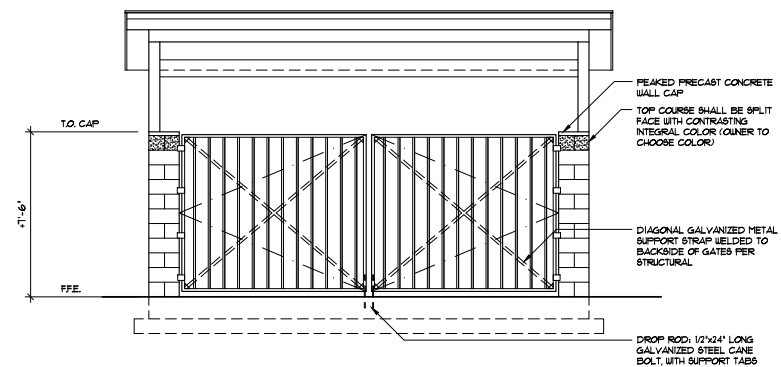


FLOOR PLAN
SCALE: 1/4"-1'-0"

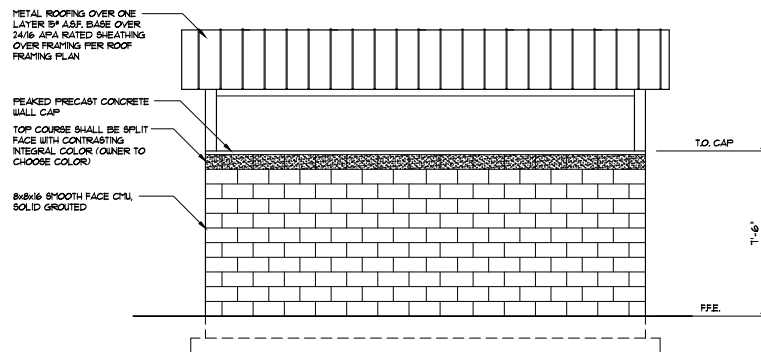


LEFT ELEVATION
SCALE: 1/4"-1'-0"

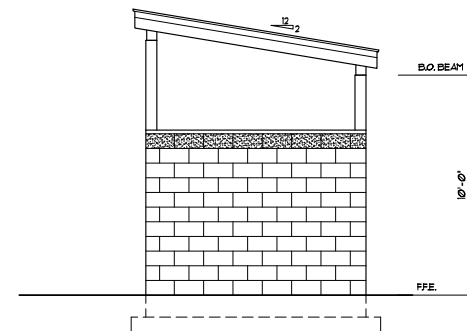
NOTE: ENCLOSURE SHALL BE SEALED AND TREATED INSIDE AND OUT TO RESIST SPRAY PAINTS AND GRAFFITI



FRONT ELEVATION
SCALE: 1/4"-1'-0"



REAR ELEVATION
SCALE: 1/4"-1'-0"



RIGHT ELEVATION
SCALE: 1/4"-1'-0"

CREEKWOOD HOMES

WEST GROVE APARTMENTS

Sintel
ENGINEERING
155 B Ave, Suite 105, Lake Oswego, Oregon 97034
Tel: (503) 624-0555
www.sintelengineering.com

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PLAN NAME: WEST GROVE APTS
DATE: 082422_EJH

D.0



Exhibit B: Washington County Assessor's Map

NE 1/4 SW1/4 SECTION 31 T1N R3W W.M.

WASHINGTON COUNTY OREGON

SCALE 1" = 100'

SEE MAP IN 3 31BD

IN 3 31CA
FOREST GROVE

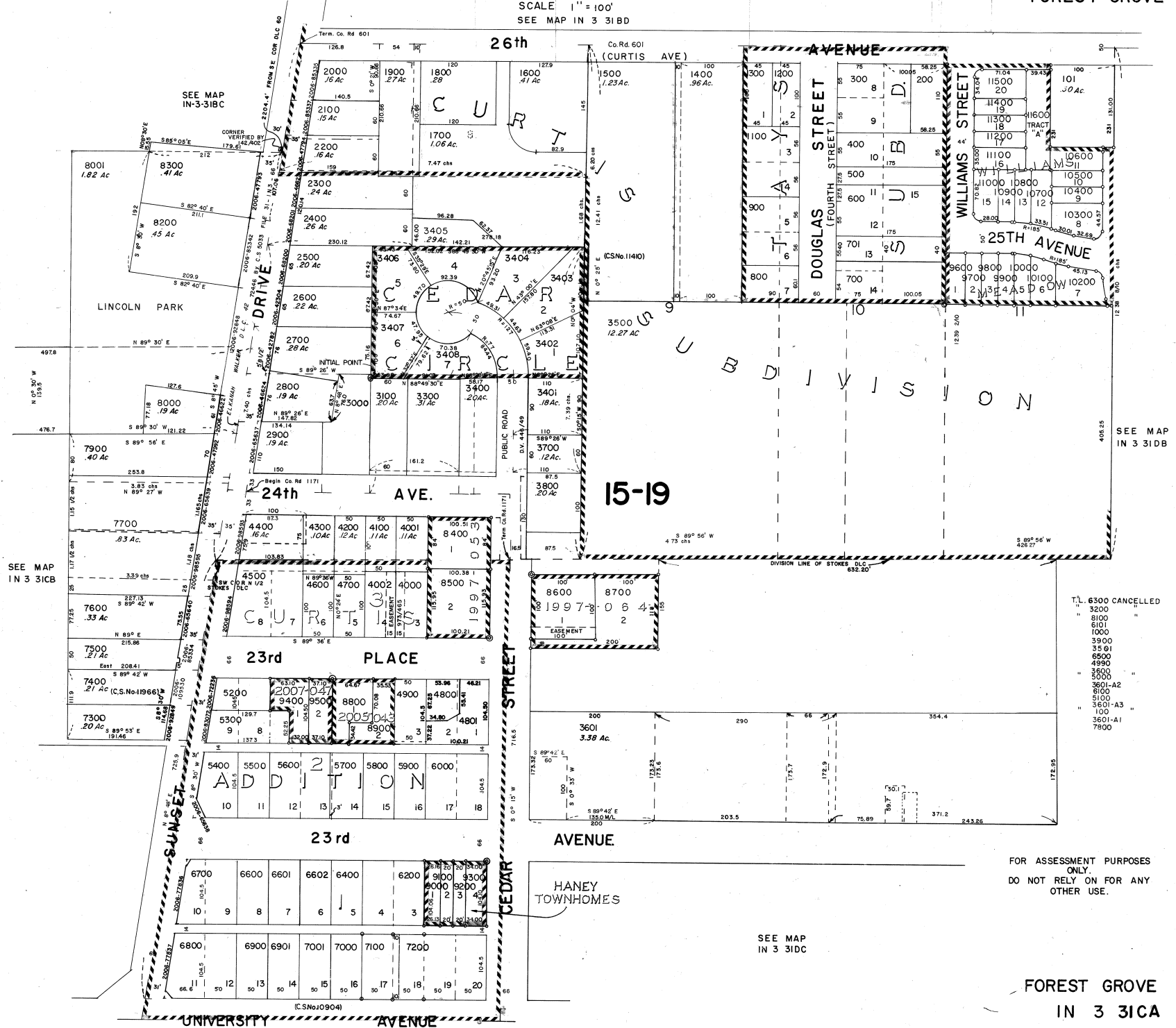




Exhibit C: City Land Use Application Form



Land Use Application

*A place where families and businesses thrive.***OFFICIAL USE ONLY**

Planning File Number: _____ Internal File Number: _____

Received By: _____ Date Received: _____ Receipt No.: _____

Application Fee: _____ Deposit - Rate per Hour: _____

APPLICATION TYPE:

- ☒ Site Plan Approval
☐ Conditional Use
☐ Variance
☐ Appeal of _____

Zoning Ordinance Amendment:

☐ Text ☐ Map

Land Division:

☐ Subdivision ☐ Partition
☐ Tentative Plat ☐ Final Plat
☐ Lot Line Adjustment

Establish a Planned Development:

☐ PRD ☐ CPD ☐ PID

Comprehensive Plan Amendment:

☐ Text ☐ MapOther: Design Review**APPLICANT INFORMATION:**Name: Evan Scesa, Creekwood Homes, Inc. Applicant's Consultant: Tony Mills, AKS Engineering & Forestry, LLCMailing Address: PO Box 1785, North Plains, OR 97133Phone: Phone: (503) 563-6151Email: Email: millst@aks-eng.com**PROPERTY OWNER INFORMATION:**Name: John LePari Aimee LePari Joseph LePari Hunter LePari

Mailing Address: _____

Phone: _____ Email: _____

SUBJECT SITE(S) INFORMATION:Property Address: 2320 & 2230 26th Avenue, Forest Grove, OR 97116Map & Tax Lot Numbers(s): 1N331CA01700, 1N331CA01500Current Zoning: Multi-Unit (High) Residential Total Size of Site: ±2.29 ACExisting Use: ResidentialProposed Use/Project Summary: Multi-unit Apartment Complex*Continued*

In order to expedite and complete the processing of this application, the Planning Division requires that all pertinent material required for review be submitted at the time application is made. If the application is found to be incomplete, review and processing of the request will not begin until the application is made complete. The submittal requirements relative to this application may be obtained from the specific sections of the Zoning or Land Division Ordinances pertaining to this application and from Planning Division staff. Pre- application conferences with Planning Division staff are encouraged. If there are any questions as to submittal requirements, contact the Planning Division prior to formal submission of the application. In submitting this application, the applicant should be prepared to give evidence and information which will justify the request. *The filing fee must be paid at the time of submission. This fee in no way assures approval and is non- refundable.*

I certify that the statements made in this application are complete and true to the best of my knowledge. I understand that any false statements may result in denial of this application.

Applicants Signature Evan Scesa Date 7/5/2022

Property Owner's Signature John LePari Joseph LePari Date 07/01/2022
Aimee LePari [Signature]



Exhibit D: Property Title Information



2430 NE John Olsen Avenue, Suite 125
Beaverton, OR 97006
Phone (503) 533-9510 Fax (503) 533-0908

WFG National Title Insurance Company
Krista Thorne
2430 NE John Olsen Avenue, Suite 125
Beaverton, OR 97006

Date Prepared: November 18, 2021

PRELIMINARY TITLE REPORT

Order Number: **21-312299**
Escrow Officer: Krista Thorne
Phone: (503) 533-9510
Fax: (503) 214-8725
Email: TeamKrista@wfgnationaltitle.com

Seller(s): John Lepari and Joseph Lepari
Buyer(s): Creekwood Homes Inc., an Oregon Corporation

Property: 2320 26th Avenue, Forest Grove, OR 97116

WFG National Title Insurance Company, is prepared to issue a title insurance policy, as of the effective date and in the form and amount shown on Schedule A, subject to the conditions, stipulations and exclusions from coverage appearing in the policy form and subject to the exceptions shown on Schedule B. This Report (and any Amendments) is preliminary to and issued solely for the purpose of facilitating the issuance of a policy of title insurance at the time the real estate transaction in question is closed and no liability is assumed in the Report. The Report shall become null and void unless a policy is issued and the full premium paid.

This report is for the exclusive use of the person to whom it is addressed. Title insurance is conditioned on recordation of satisfactory instruments that establish the interests of the parties to be insured; until such recordation, the Company may cancel or revise this report for any reason.

SCHEDULE A

1. The effective date of this preliminary title report is **8:00 A.M. on 12th day of November, 2021**
2. The policies and endorsements to be insured and the related charges are:

<u>Policy/Endorsement Description</u>	<u>Liability</u>	<u>Charge</u>
ALTA 2006 Owners Policy	\$800,000.00	\$1,170.00
Basic Owner's Rate		\$1,170.00

Proposed Insured: To Follow

<u>Policy/Endorsement Description</u>	<u>Liability</u>	<u>Charge</u>
ALTA 2006 Ext. Loan Policy	TBD	\$100.00
Basic Loan Rate		\$0.00
OTIRO 208.1-06 (enviro), 209.10-06 (Restric) and 222-06 (loc)		\$100.00

Proposed Insured: To Follow

Government Service Fee:	\$30.00
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This is a preliminary billing only, a consolidated statement of charges, credits and advances, if any, in connection with this order will be provided at closing.

3. Title to the land described herein is vested in:

**Joseph E. LePari and Sonia C. LePari, as tenants by the entirety and
John M. LePari and Aimee R. LePari, as tenants by the entirety,
all as tenants in common**

4. The estate or interest in land is:

Fee Simple

5. The land referred to in this report is described as follows:

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

EXHIBIT "A"
LEGAL DESCRIPTION

A tract of land in the City of Forest Grove, County of Washington and State of Oregon, more particularly described as follows:

Beginning at the Northwest corner of that tract of land in Section 31, Township 1 North, Range 3 West, of the Willamette Meridian, in the County of Washington and State of Oregon, conveyed to Gerald W. Engelen, et ux, by Deed recorded August 13, 1959 in Deed [BOOK 421, PAGE 177](#), said point being on the North line of Lot 9, Plat of Curtis Subdivisions, 110 feet West of the Northwest corner of Tays Subdivision; thence South along the West line of said Engelen Tract to the South line of the North one-half of said Lot 9; thence West along the South line of the North one-half of said Lot 9 to the West line of said Lot 9; thence North along the West line of said Lot 9 to the Northwest corner thereof; thence East along the North line of said Lot 9 to the point of beginning.

SCHEDULE B

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. 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 (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.
5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

SPECIAL EXCEPTIONS

6. Rights of the public in and to any portion of the herein described premises lying within the boundaries of streets, roads or highways.
7. City liens, if any, of the City of Forest Grove. We find none as of November 12, 2021.
8. Trust Deed, including the terms and provisions thereof to secure the amount noted below and other amounts secured thereunder, if any:

Grantor	:	Sonia C. Lepari and Joseph E. Lepari, wife and husband
Trustee	:	Ticor Title
Beneficiary	:	Mortgage Electronic Registration Systems, Inc. as nominee for
America's Wholesale Lender	:	
Dated	:	December 19, 2006
Recorded	:	December 27, 2006
Recording No(s)	:	2006-151553
Amount	:	\$308,000.00

The beneficial interest thereunder was assigned:

To	:	Green Tree Servicing LLC, a Delaware limited liability company
Recorded	:	July 18, 2014
Recording No(s)	:	2014-044034

The beneficial interest thereunder was assigned:

To	:	Wilmington Savings Fund Society, FSB, D/B/A Christiana Trust, as
owner Trustee on behalf of CSMC 2018-RPL12 Trust	:	
Recorded	:	February 8, 2019
Recording No(s)	:	2019-007661

9. Line of Credit Trust Deed, including the terms and provisions thereof to secure the amount noted below and other amounts secured thereunder, if any:
- | | | |
|-----------------|---|--|
| Grantor | : | Sonia C. Lepari and Joseph E. Lepari, as tenants by the entirety |
| Trustee | : | Stuart Title of Oregon, Inc. |
| Beneficiary | : | JPMorgan Chase Bank, N.A. |
| Dated | : | June 6, 2007 |
| Recorded | : | June 13, 2007 |
| Recording No(s) | : | 2007-065666 |
| Amount | : | \$43,000.00 |
10. Judgment in the State Circuit Court:
- | | | |
|----------|---|-----------------------------------|
| Debtor | : | Aimee R. Lepari |
| Creditor | : | Capital One Bank USA NA |
| Case No. | : | C152156CV |
| Entered | : | September 22, 2015 |
| Amount | : | \$3,751.30 plus interest, if any. |
11. Parties in possession, or claiming to be in possession, other than the vestees shown herein. For the purposes of ALTA Extended coverage, we will require an Affidavit of Possession be completed and returned to us. Exception may be taken to such matters as may be shown thereby.
12. Statutory liens for labor or materials, including liens for contributions due to the State of Oregon for unemployment compensation and for workmen's compensation, which have now gained or hereafter may gain priority over the lien of the insured mortgage where no notice of such liens appear of record.
13. Any unrecorded leases or rights of tenants in possession.

END OF EXCEPTIONS

NOTE: [Taxes](#) paid in full for 2021 -2021

Levied Amount	:	\$3,622.80
Property ID No.	:	R744216
Levy Code	:	015.19
Map Tax Lot No.	:	1N331CA-01500

NOTE: In no event shall WFG National Title Insurance Company have any liability for the tax assessor's imposition of any additional assessments for omitted taxes unless such taxes have been added to the tax roll and constitute liens on the property as of the date of closing. Otherwise, such omitted taxes shall be the sole, joint and several responsibility of seller(s) and buyer(s), as they may determine between themselves.

NOTE: The Corporation Division of the State of Oregon advises us that Creekwood Homes, Inc. is an active Oregon Corporation, whose President and Secretary is Evan Scesa.

NOTE: We find NO judgments or Federal Tax Liens against the name(s) of Creekwood Homes Inc., an Oregon Corporation.

NOTE: The following is incorporated herein for information purposes only and is not part of the exception from coverage (Schedule B-II of the prelim and Schedule B of the policy): The following instrument(s), affecting said property, is (are) the last instrument(s) conveying subject property filed for record within 24 months of the effective date of this preliminary title report: None of Record

NOTE: Link for additional supporting document: [Vesting Deed](#)

NOTE: Due to current conflicts or potential conflicts between state and federal law, which conflicts may extend to local law, regarding marijuana, if the transaction to be insured involves property which is currently used or is to be used in connection with a marijuana enterprise, including but not limited to the cultivation, storage, distribution, transport, manufacture, or sale of marijuana and/or products containing marijuana, the Company declines to close or insure the transaction, and this Preliminary Title Report shall automatically be considered null and void and of no force and effect.

NOTE: The following applicable recording fees will be charged by the county:

Multnomah County-First Page	\$86.00
Washington County-First Page	\$81.00
Clackamas County-First Page	\$93.00
Each Additional Page	\$ 5.00
Non-standard Document Fee	\$20.00
E-recording Fee	\$ 3.00

Washington County Ordinance No. 193, recorded May 13, 1977 in Washington County, Oregon imposes a tax of \$1.00 per \$1,000.00 or fraction thereof on the transfer of real property located within Washington County.

NOTE: IMPORTANT INFORMATION REGARDING PROPERTY TAX PAYMENTS

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

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.

NOTE: 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 THESE DOCUMENTS. IF YOU WISH TO REVIEW TRANSACTION DOCUMENTS THAT YOU HAVE NOT SEEN, CONTACT THE ESCROW AGENT.

End of Report

Your Escrow Officer

Krista Thorne

WFG National Title Insurance Company

2430 NE John Olsen Avenue, Suite 125

Beaverton, OR 97006

Phone: **(503) 533-9510**

Fax: **(503) 214-8725**

Email: **TeamKrista@wfgnationaltitle.com**

Your Title Officer

Michelle Laine Johnson

WFG National Title Insurance Company

12909 SW 68th Parkway, Suite 350

Portland, OR 97223

Phone: **(503) 431-8502**

Fax:

Email: **mjohnson@wfgnationaltitle.com**



WFG National Title Insurance Company is prepared to issue, as of the date specified in the attached Preliminary Title Report (the Report), a policy or policies of title insurance as listed in the Report and describing the land and the estate or interest set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as a General or Specific Exception or not excluded from coverage pursuant to the printed Exclusions and Conditions of the policy form(s).

The printed General Exceptions and Exclusions from the coverage of the policy or policies are listed in Exhibit One to the Report. In addition, the forms of the policy or policies to be issued may contain certain contract clauses, including an arbitration clause, which could affect the party's rights. Copies of the policy forms should be read. They are available from the office which issued the Report.

The Report (and any amendments) is preliminary to and issued solely for the purpose of facilitating the issuance of a policy of title insurance at the time the real estate transaction in question is closed and no liability is assumed in the Report.

The policy(s) of title insurance to be issued will be policy(s) of WFG National Title Insurance Company.

Please read the Specific Exceptions shown in the Report and the General Exceptions and Exclusions listed in Exhibit One carefully. The list of Specific and General Exceptions and Exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy to be issued and should be read and carefully considered.

It is important to note that the Report is not an abstract of title, a written representation as to the complete condition of the title of the property in question, and may not list all liens, defects and encumbrances affecting title to the land.

The Report is for the exclusive use of the parties to this transaction, and the Company does not have any liability to any third parties or any liability under the terms of the policy(s) to be issued until the full premium is paid. Until all necessary documents are recorded in the public record, the Company reserves the right to amend the Report.

Countersigned

Exhibit One
2006 American Land Title Association Loan Policy 6-17-06
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, permit, or governmental regulation (including those relating 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 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 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

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 (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.
5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

2006 AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY 6-17-06
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, permit, or governmental regulation (including those relating 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 vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. 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.

SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE

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 (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.

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.



Plain English Privacy Statement for Appraisal, Title & Escrow Customers

WFG believes it is important to protect your privacy and confidences. We recognize and respect the privacy expectations of our customers. We believe that making you aware of how we collect information about you, how we use that information, and with whom we share that information will form the basis for a relationship of trust between us. This Privacy Policy provides that explanation. We reserve the right to change this Privacy Policy from time to time.

Williston Financial Group, LLC, WFG National Title Insurance Co. and each of the affiliates listed below (collectively "WFG" or the "WFG Family") are obligated to comply with Federal and state privacy laws. While there are some common requirements to those laws, the definitions and duties differ significantly from law-to-law and state-to-state. A privacy statement drafted to comply with all of the applicable privacy laws and their differing definitions would likely be confusing. Therefore, in an attempt to better communicate our privacy policies, WFG designed this "Plain English" explanation, followed by the Gramm-Leach-Bliley Act model form and website links to State-Specific Privacy Notices in order to provide you with the complete, legal privacy notices and disclosures required under Federal and applicable State Laws.

WFG's primary business is providing appraisal, title insurance and, escrow services for the sale or refinance of real property. This can be a complicated process, involving multiple parties, many of whom have been selected by our customers, each filling a specialized role. In part, you have hired WFG to coordinate and smooth the passage of the information necessary for an efficient settlement or closing.

In the course of this process, WFG collects a significant amount of personal and identifying information about the parties to a transaction, including sensitive items that include but are not limited to: your contact information including email addresses, Social Security numbers, driver's license and, other identification numbers and information; financial, bank and insurance information; information about past and proposed mortgages and loans; about properties you currently or previously owned; your mortgage application package; and the cookie, IP address, and other information captured automatically by computer systems.

Much of this information is gathered from searches of public land records, tax, court and credit records to make certain that any liens, challenges, or title defects are addressed properly. Some of the information that is collected is provided by you, or the computer systems you use. We also may receive information from real estate brokers and agents, mortgage brokers and, others working to facilitate your transaction. We also may receive information from public, private or governmental databases including credit bureaus, 'no-fly' lists, and terrorist 'watch lists', as well as from your lenders and credit bureaus.

What Information is Shared?

WFG DOES NOT SELL any of your information to non-affiliated companies for marketing or any other purpose.

However, some of the same information does get shared with persons inside and outside the WFG Family in order to facilitate and complete your transaction.

For example:

- Information, draft documents, and closing costs will pass back and forth between WFG and your mortgage broker and lender to facilitate your transaction.
- Information, including purchase agreements and amendments, will pass back and forth between WFG and the real estate agents and brokers, the mortgage brokers and lenders, the lawyers and accountants, and others involved in facilitating the transaction.
- WFG may order property searches and examinations from title searchers, abstractors and title plants.
- WFG may use third parties to obtain tax information, lien information, payoff information, condominium and, homeowners' association information and payoff information.
- Third parties may be engaged to prepare documents in connection with your transaction.
- Surveys, appraisals and, inspections may be ordered.

- Within the WFG Family of companies, we may divide up the work to handle each closing in the most efficient manner possible and to meet specific legal and licensing requirements. Certain parts of your closing (for example a search or disbursement) may be handled by another division or company within the WFG Family.
- When it is time for signatures, your complete closing package may be sent to a notary, remote online notary, or notary service company who will arrange to meet with you to sign documents. The notary will, in turn, send signed copies back to us along with copies of your driver's license or other identity documents usually by mail, UPS, Federal Express or another courier service.
- Your deed, mortgage and other documents required to perfect title will be recorded with the local recorder of deeds.
- In some cases, we use an outside service to coordinate the recording or electronic-recording of those instruments, and they will receive copies of your deeds, mortgages and other recordable documents to process, scan and send on to the recording office.
- Various government agencies get involved. The law requires us to provide certain information to the IRS, the US Treasury, local and state tax authorities and other governmental agencies.

You have a choice in the selection of a mortgage broker, lender, real estate broker or agent and others that make up your 'transaction team.' Information flows to and from the members of the transaction team you have selected to facilitate an efficient transaction for you.

When WFG selects and engages a third-party provider, we limit the scope of the information shared with that third party to the information reasonably necessary for that service provider to provide the requested services. With most, we have entered into express agreements in which they expressly commit to maintain a WFG customer's information in strict confidence and use the information only for purposes of providing the requested services, clearing title, preventing fraud and addressing claims under our title insurance policies.

How does WFG use your Information?

We may use your personal information in a variety of ways, including but not limited to:

- Provide the products, services and title insurance you have requested and to close and facilitate your transaction.
- Coordinate and manage the appraisal process.
- Handle a claim or provide other services relating to your title insurance policies.
- Create and manage your account.
- Operate and improve WFG's applications and websites, including WFG MyHome®, WFG's secure communication and transaction portal. Your information is used for access management, payment processing, site administration, internal operations, troubleshooting, data analysis, testing, research, and for statistical purposes.
- Respond to your requests, feedback, or inquiries.
- Comply with laws, regulations, and other legal requirements.
- Comply with relevant industry standards and our policies, including managing WFG's risk profile through reinsurance.
- Protect and enforce your rights and the rights of other users against unlawful activity, including identity theft and fraud.
- Protect and enforce our collective rights arising under any agreements entered into between WFG and you or any other third party;
- Protect the integrity and maintain security of our applications, websites, and products;
- Operate, evaluate, and improve our business; and
- Provide you with information about products, services, and promotions, from WFG or third parties that may interest you.

How Do We Store and Protect Your Personal Information?

Although no system can guarantee the complete security of your personal information, we will use our best efforts to maintain commercially reasonable technical, organizational, and physical safeguards, consistent with applicable law, to protect your personal information and our systems and sites from malicious intrusions or hacking.

How Long Do We Keep Your Personal Information?

We keep your personal information for as long as necessary to comply with the purpose for which it was collected, our business needs, and our legal and regulatory obligations. We may store some personal information indefinitely. If we dispose of your personal information, we will do so in a way that is secure and appropriate to the nature of the information subject to disposal.

Computer Information

When you access a WFG website, or communicate with us by e-mail, we may automatically collect and store more information than you are expressly providing when you fill out a survey or send an email. This may include:

- Your IP Address.
- Your email address, your alias and, social media handles.
- The type of browser and operating system you use.
- The time of your visit.
- The pages of our site you visit.
- Cookies.

In order to provide you with customized service, we make use of Web browser cookies. Cookies are files that help us identify your computer and personalize your online experience. You may disable cookies on your computer, but you may not be able to download online documents or access certain sites unless cookies are enabled.

The technical information we collect is used for administrative and technical purposes and to prevent fraud and provide identity verification. For instance, we may use it to count the number of visitors to our site and determine the most popular pages. We may also use it to review types of technology you are using, determine which link brought you to our Web site, assess how our advertisements on other sites are working, help with maintenance, and improve our customers' experience.

We may compare information gathered on previous visits to verify that we are interacting with the same parties and not a potential imposter.

If we ask you to fill out any forms or surveys, we will use the information we receive only for the specific purposes indicated in those forms or surveys.

The information you and your transaction team send us in emails or attached to an email, or provide through any of our online tools, is used for purposes of providing title, escrow and appraisal management services and used for the purposes described above.

Links to Third Party Sites

Our Applications and Websites may contain links to third-party websites and services. Please note that these links are provided for your convenience and information, and the websites and services may operate independently from us and have their own privacy policies or notices, which we strongly suggest you review. This Privacy Notice applies to WFG's applications and websites only.

Do Not Track

Because there is not an industry-standard process or defined criteria to permit a user to opt-out of tracking their online activities (Do Not Track or DNT), our websites do not currently change the way they operate based upon detection of a "Do Not Track" or similar signal. Likewise, we cannot assure that third parties are not able to collect information about your online activities on WFG websites or applications.

Social Media Integration

Our applications, websites, and products contain links to and from social media platforms. You may choose to connect to us through a social media platform, such as Facebook, Twitter, Google, etc. When you do, we may collect additional information from or about you, such as your screen names, profile picture, contact information, contact list, and the profile pictures of your contacts, through the social media platform. The social media platforms may also collect information from you.

When you click on a social plug-in, such as Facebook's "Like" button, Twitter's "tweet" button or the Google+, that particular social network's plugin will be activated and your browser will directly connect to that provider's servers. Your action in clicking on the social plug-in causes information to be passed to the social media platform.

We do not have control over the collection, use and sharing practices of social media platforms. We, therefore, encourage you to review their usage and disclosure policies and practices, including their data security practices, before using social media platforms.

How Can You “Opt-Out?”

We do not sell your information; therefore there is no need to opt-out of such reselling. Under various laws, you can opt-out of the sharing of your information for more narrow purposes. For additional detail, consult the Links under the “Legal” Notices attached below.

The “Legal” Notices

To comply with various federal and state laws, we are required to provide more complete legal notices and disclosures. In reviewing these, you will find that these notices incorporate the definitions and terminology used in the respective privacy laws which can often be somewhat convoluted and may even seem inconsistent with the descriptions above. The state-specific statutes may also give residents of those states additional rights and remedies.

Privacy Notice for California Residents - <https://national.wfgnationaltitle.com/privacy-notice-california>

Privacy Notice for Oregon Residents - <https://national.wfgnationaltitle.com/privacy-notice-oregon>

How to Contact Us

If you have any questions about WFG’s privacy policy or how we protect your information, please contact WFG:

- By email: Consumerprivacy@willistonfinancial.com
- By telephone: 833-451-5718
- By fax: 503-974-9596
- By mail: 12909 SW 68th Pkwy, Suite 350, Portland, OR 97223
- In-person: 12909 SW 68th Pkwy, Suite 350, Portland, OR 97223

WFG FAMILY

WILLISTON FINANCIAL GROUP LLC
WFG NATIONAL TITLE INSURANCE COMPANY
WFG LENDER SERVICES, LLC
WFGLS TITLE AGENCY OF UTAH, LLC
WFG NATIONAL TITLE COMPANY OF WASHINGTON, LLC
WFG NATIONAL TITLE COMPANY OF CALIFORNIA
WFG NATIONAL TITLE COMPANY OF TEXAS, LLC D/B/A WFG NATIONAL TITLE COMPANY
UNIVERSAL TITLE PARTNERS, LLC
VALUTRUST SOLUTIONS, LLC
WILLISTON ENTERPRISE SOLUTIONS & TECHNOLOGY, LLC
WFG NATIONAL TITLE COMPANY OF CLARK COUNTY, WA, LLC D/B/A WFG NATIONAL TITLE

Revised 6.12.20

FACTS		WHAT DOES WILLISTON FINANCIAL GROUP DO WITH YOUR PERSONAL INFORMATION?
Why?	Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.	
What?	The types of personal information we collect and share depend on the product or service you have with us. This information can include: • Social Security number and other government identification information • Your name, address, phone, and email • Information about the property, any liens and restrictions • Financial Information including credit history and other debt • Financial account information, including wire transfer instructions.	
How?	All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers' personal information; the reasons Williston Financial Group chooses to share; and whether you can limit this sharing.	
Reasons we can share your personal information	Does Williston Financial Group share?	Can you limit this sharing?
For our everyday business purposes—such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus	Yes	No
For our marketing purposes—to offer our products and services to you	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes—information about your transactions and experiences	Yes	No
For our affiliates' everyday business purposes—information about your creditworthiness	No	We don't share
For our affiliates to market to you	No	We don't share
For nonaffiliates to market to you	No	We don't share
To limit our sharing	• Call 833-451-5718—our menu will prompt you through your choice(s) • Visit us online: http://bit.ly/WFGsConsumerPrivacyInformationRequestPage or e-mailing us at consumerprivacy@willistonfinancial.com • Mail the form below Please note: If you are a new customer, we can begin sharing your information from the date we sent this notice. When you are no longer our customer, we continue to share your information as described in this notice. However, you can contact us at any time to limit our sharing.	
Questions?	Call 833-451-5718 or Email consumerprivacy@willistonfinancial.com	

Mail-In Form										
If you have a joint policy, your choices will apply to everyone on your account.	Mark any/all you want to limit:									
	☐ Do not share information about my creditworthiness with your affiliates for their everyday business purposes.									
	☐ Do not allow your affiliates to use my personal information to market to me.									
	☐ Do not share my personal information with nonaffiliates to market their products and services to me.									
	<table border="1"> <tr> <td>Name</td> <td></td> </tr> <tr> <td>Address</td> <td></td> </tr> <tr> <td>City, State, Zip</td> <td></td> </tr> <tr> <td>File Number</td> <td></td> </tr> </table>	Name		Address		City, State, Zip		File Number		Mail to: Williston Financial Group PRIVACY DEPT 12909 SW 68 th Pkwy, #350 Portland, OR 97223
Name										
Address										
City, State, Zip										
File Number										

Who we are	
Who is providing this notice	Williston Financial Group, LLC and its affiliates and subsidiaries as listed below:
What we do	
How does Williston Financial Group protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings. We limit access to your information to employees that need to use the information to process or protect transaction. We take industry standard (IPSEC) measures to protect against malicious intrusions or hacking
How does Williston Financial Group collect my personal information?	We collect your personal information, for example, when you • Apply for insurance • Engage us to provide appraisal, title and escrow services • Give us your contact information • Provide your mortgage information • Show your driver's license We also collect your personal information from others, such as real estate agents and brokers, mortgage brokers, lenders, credit bureaus, affiliates, and others
Why can't I limit all sharing?	Federal law gives you the right to limit only • sharing for affiliates' everyday business purposes—information about your creditworthiness • affiliates from using your information to market to you • sharing for nonaffiliates to market to you State laws and individual companies may give you additional rights to limit sharing. See below for more on your rights under state law.
What happens when I limit sharing for an account I hold jointly with someone else?	Your choices will apply to everyone on your policy.
Definitions	
Affiliates	Companies related by common ownership or control. They can be financial and nonfinancial companies. Our affiliates include companies with a common corporate identity, including those listed below.
Nonaffiliates	Companies not related by common ownership or control. They can be financial and nonfinancial companies. Nonaffiliates we share with can include real estate agents and brokers, mortgage brokers, lenders, appraisers, abstractors and title searchers and others as appropriate to facilitate your transaction.
Joint marketing	A formal agreement between nonaffiliated financial companies that together market financial products or services to you. Williston Financial Group does not jointly market.
Other important information	
As a resident or citizen of certain states, we may have to provide additional state specific privacy notices and you may have rights other than as set forth above. The links below will provide state specific information: Privacy Notice for California Residents - https://national.wfgnationaltitle.com/privacy-notice-california Privacy Notice for Oregon Residents - https://national.wfgnationaltitle.com/privacy-notice-oregon	



2430 NE John Olsen Avenue, Suite 125
Beaverton, OR 97006
Phone (503) 533-9510 Fax (503) 533-0908

WFG National Title Insurance Company
Krista Thorne
2430 NE John Olsen Avenue, Suite 125
Beaverton, OR 97006

Date Prepared: November 16, 2021

PRELIMINARY TITLE REPORT

Order Number: **21-312200**
Escrow Officer: Krista Thorne
Phone: (503) 533-9510
Fax: (503) 214-8725
Email: TeamKrista@wfgnationaltitle.com

Seller(s): John Lepari and Hunter Lepari
Buyer(s): Creekwood Homes Inc., an Oregon Corporation

Property: 2230 26th Avenue, Forest Grove, OR 97116

WFG National Title Insurance Company, is prepared to issue a title insurance policy, as of the effective date and in the form and amount shown on Schedule A, subject to the conditions, stipulations and exclusions from coverage appearing in the policy form and subject to the exceptions shown on Schedule B. This Report (and any Amendments) is preliminary to and issued solely for the purpose of facilitating the issuance of a policy of title insurance at the time the real estate transaction in question is closed and no liability is assumed in the Report. The Report shall become null and void unless a policy is issued and the full premium paid.

This report is for the exclusive use of the person to whom it is addressed. Title insurance is conditioned on recordation of satisfactory instruments that establish the interests of the parties to be insured; until such recordation, the Company may cancel or revise this report for any reason.

SCHEDULE A

1. The effective date of this preliminary title report is **8:00 A.M. on 9th day of November, 2021**
2. The policies and endorsements to be insured and the related charges are:

<u>Policy/Endorsement Description</u>	<u>Liability</u>	<u>Charge</u>
ALTA 2006 Owners Policy	\$575,000.00	\$1,097.00
Short Term Rate		\$1,097.00

Proposed Insured: Creekwood Homes Inc., an Oregon Corporation

<u>Policy/Endorsement Description</u>	<u>Liability</u>	<u>Charge</u>
ALTA 2006 Ext. Loan Policy	\$550,000.00	\$628.00
Basic Loan Rate		\$528.00
OTIRO 208.1-06 (enviro), 209.10-06 (Restric) and 222-06 (loc)		\$100.00

Proposed Insured: To Follow

Government Service Fee:	\$30.00
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This is a preliminary billing only, a consolidated statement of charges, credits and advances, if any, in connection with this order will be provided at closing.

3. Title to the land described herein is vested in:

John LePari and Hunter LePari, not as tenants in common but with rights of survivorship

4. The estate or interest in land is:

Fee Simple

5. The land referred to in this report is described as follows:

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

EXHIBIT "A"
LEGAL DESCRIPTION

Part of Lot 8, Curtis Subdivision, and part of Section 31, Township 1 North, Range 3 West of the Willamette Meridian, Washington County, Oregon, and being more particularly described as follows:

Beginning on the West line of the William Stokes Donation Land Claim No. 61, Township 1 North, Range 3 West of the Willamette Meridian, N09°00'00"E, 7.40 chains from the Southwest corner of the North one-half of said claim; thence East 230.12 feet to the TRUE POINT OF BEGINNING; thence East 278.18 feet to an iron pipe; thence North 330.66 feet to a point on the North line of Lot 8, Curtis Subdivision; thence West on the North line of said Curtis Subdivision 278.18 feet to a point; thence South to the place of beginning.

EXCEPT that tract conveyed to Elson H. Emmerson and wife by Deed Book 290, Page 278.

ALSO EXCEPT that tract conveyed to James W. Baldwin, Jr. and wife by Deed Book 290, Page 475.

ALSO EXCEPT that tract conveyed to H.A. Tays and wife by Deed Book 335, page 78.

ALSO EXCEPT Part of Lot 8, Curtis Subdivision, and part of Section 31, Township 1 North, Range 3 West of the Willamette Meridian, Washington County, Oregon, and being a portion of that tract of land conveyed to Bradley P Durham and Katherine M. Durham, Trustees of the Durham Family revocable Trust, dated 9/15/06, described in Document No. 2007-084883 Washington County, Oregon, Deed Records, being more particularly described as follows:

Beginning on the West line of the William Stokes Donation Land Claim No. 61, Township 1 North, Range 3 West of the Willamette Meridian, N09°00'00"E, 7.40 chains from the Southwest corner of the North one-half of said claim; thence East 230.12 feet to the TRUE POINT OF BEGINNING, said point being on the North line of Cedar Circle, a plat of record in said County and being N88°49'30"E 9.21 feet from the Northwest corner of Lot 4, Cedar Circle, a 1/2-inch iron pipe bears N0°06'42"W 1.29 feet; thence N0°06'42"W along the West line of said Durham tract 46.00 feet to a 5/8-inch iron rod with yellow plastic cap stamped "Spear PLS 2221"; thence S89°17'21"E 96.28 feet to a 5/8-inch iron rod with yellow plastic cap stamped "Spear PLS 2221"; thence S47°48'30"E 62.37 feet to the Northeast corner of Lot 4, said Cedar Circle; thence S88°49'30"W 142.41 feet to the place of beginning.

SCHEDULE B

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. 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 (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.
5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

SPECIAL EXCEPTIONS

6. Rights of the public in and to any portion of the herein described premises lying within the boundaries of streets, roads or highways.
7. City liens, if any, of the City of Forest Grove. We find none as of November 9, 2021.
8. Trust Deed, including the terms and provisions thereof to secure the amount noted below and other amounts secured thereunder, if any:

Grantor	:	Hunter Lepari and John Lepari
Trustee	:	Clear Recon Corp.
Beneficiary	:	Mortgage Electronic Registration Systems, Inc., solely as nominee for Guild Mortgage Company LLC
Dated	:	February 3, 2021
Recorded	:	February 10, 2021
Recording No(s)	:	2021-017635
Amount	:	\$401,300.00
9. Any unrecorded leases or rights of tenants in possession.
10. Parties in possession, or claiming to be in possession, other than the vestees shown herein. For the purposes of ALTA Extended coverage, we will require an Affidavit of Possession be completed and returned to us. Exception may be taken to such matters as may be shown thereby.
11. Statutory liens for labor or materials, including liens for contributions due to the State of Oregon for unemployment compensation and for workmen's compensation, which have now gained or hereafter may gain priority over the lien of the insured mortgage where no notice of such liens appear of record.

END OF EXCEPTIONS

NOTE: [Taxes](#) paid in full for 2021-2022

Levied Amount	:	\$2,685.54
Property ID No.	:	R744234
Levy Code	:	015.19

[Map](#) Tax Lot No. : 1N331CA-01700

NOTE: In no event shall WFG National Title Insurance Company have any liability for the tax assessor's imposition of any additional assessments for omitted taxes unless such taxes have been added to the tax roll and constitute liens on the property as of the date of closing. Otherwise, such omitted taxes shall be the sole, joint and several responsibility of seller(s) and buyer(s), as they may determine between themselves.

NOTE: The following is incorporated herein for information purposes only and is not part of the exception from coverage (Schedule B-II of the prelim and Schedule B of the policy): The following instrument(s), affecting said property, is (are) the last instrument(s) conveying subject property filed for record within 24 months of the effective date of this preliminary title report:

None of Record

NOTE: We find NO judgments or Federal Tax Liens against the name(s) of Creekwood Homes Inc., an Oregon Corporation.

NOTE: Link for additional supporting documents:

[Vesting Deed](#)

NOTE: Due to current conflicts or potential conflicts between state and federal law, which conflicts may extend to local law, regarding marijuana, if the transaction to be insured involves property which is currently used or is to be used in connection with a marijuana enterprise, including but not limited to the cultivation, storage, distribution, transport, manufacture, or sale of marijuana and/or products containing marijuana, the Company declines to close or insure the transaction, and this Preliminary Title Report shall automatically be considered null and void and of no force and effect.

NOTE: The following applicable recording fees will be charged by the county:

Multnomah County-First Page	\$86.00
Washington County-First Page	\$81.00
Clackamas County-First Page	\$93.00
Each Additional Page	\$ 5.00
Non-standard Document Fee	\$20.00
E-recording Fee	\$ 3.00

Washington County Ordinance No. 193, recorded May 13, 1977 in Washington County, Oregon imposes a tax of \$1.00 per \$1,000.00 or fraction thereof on the transfer of real property located within Washington County.

NOTE: IMPORTANT INFORMATION REGARDING PROPERTY TAX PAYMENTS

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

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.

NOTE: 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 THESE DOCUMENTS. IF YOU WISH TO REVIEW TRANSACTION DOCUMENTS THAT YOU HAVE NOT SEEN, CONTACT THE ESCROW AGENT.

End of Report

Your Escrow Officer

Krista Thorne
WFG National Title Insurance Company
2430 NE John Olsen Avenue, Suite 125
Beaverton, OR 97006
Phone: **(503) 533-9510**
Fax: **(503) 214-8725**
Email: **TeamKrista@wfgnationaltitle.com**

Your Title Officer

Michelle Laine Johnson
WFG National Title Insurance Company
12909 SW 68th Parkway, Suite 350
Portland, OR 97223
Phone: **(503) 431-8502**
Fax:
Email: **mjohnson@wfgnationaltitle.com**



WFG National Title Insurance Company is prepared to issue, as of the date specified in the attached Preliminary Title Report (the Report), a policy or policies of title insurance as listed in the Report and describing the land and the estate or interest set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as a General or Specific Exception or not excluded from coverage pursuant to the printed Exclusions and Conditions of the policy form(s).

The printed General Exceptions and Exclusions from the coverage of the policy or policies are listed in Exhibit One to the Report. In addition, the forms of the policy or policies to be issued may contain certain contract clauses, including an arbitration clause, which could affect the party's rights. Copies of the policy forms should be read. They are available from the office which issued the Report.

The Report (and any amendments) is preliminary to and issued solely for the purpose of facilitating the issuance of a policy of title insurance at the time the real estate transaction in question is closed and no liability is assumed in the Report.

The policy(s) of title insurance to be issued will be policy(s) of WFG National Title Insurance Company.

Please read the Specific Exceptions shown in the Report and the General Exceptions and Exclusions listed in Exhibit One carefully. The list of Specific and General Exceptions and Exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy to be issued and should be read and carefully considered.

It is important to note that the Report is not an abstract of title, a written representation as to the complete condition of the title of the property in question, and may not list all liens, defects and encumbrances affecting title to the land.

The Report is for the exclusive use of the parties to this transaction, and the Company does not have any liability to any third parties or any liability under the terms of the policy(s) to be issued until the full premium is paid. Until all necessary documents are recorded in the public record, the Company reserves the right to amend the Report.

Countersigned

Exhibit One
2006 American Land Title Association Loan Policy 6-17-06
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, permit, or governmental regulation (including those relating 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 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 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

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 (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.
5. Any lien, or right to a lien, for services, labor, material, equipment rental or workers compensation heretofore or hereafter furnished, imposed by law and not shown by the public records.

2006 AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY 6-17-06
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, permit, or governmental regulation (including those relating 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 vesting the Title as shown in Schedule A, is
 - (a) a fraudulent conveyance or fraudulent transfer; or
 - (b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. 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.

SCHEDULE B - GENERAL EXCEPTIONS FROM COVERAGE

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 (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.

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.



Plain English Privacy Statement for Appraisal, Title & Escrow Customers

WFG believes it is important to protect your privacy and confidences. We recognize and respect the privacy expectations of our customers. We believe that making you aware of how we collect information about you, how we use that information, and with whom we share that information will form the basis for a relationship of trust between us. This Privacy Policy provides that explanation. We reserve the right to change this Privacy Policy from time to time.

Williston Financial Group, LLC, WFG National Title Insurance Co. and each of the affiliates listed below (collectively "WFG" or the "WFG Family") are obligated to comply with Federal and state privacy laws. While there are some common requirements to those laws, the definitions and duties differ significantly from law-to-law and state-to-state. A privacy statement drafted to comply with all of the applicable privacy laws and their differing definitions would likely be confusing. Therefore, in an attempt to better communicate our privacy policies, WFG designed this "Plain English" explanation, followed by the Gramm-Leach-Bliley Act model form and website links to State-Specific Privacy Notices in order to provide you with the complete, legal privacy notices and disclosures required under Federal and applicable State Laws.

WFG's primary business is providing appraisal, title insurance and, escrow services for the sale or refinance of real property. This can be a complicated process, involving multiple parties, many of whom have been selected by our customers, each filling a specialized role. In part, you have hired WFG to coordinate and smooth the passage of the information necessary for an efficient settlement or closing.

In the course of this process, WFG collects a significant amount of personal and identifying information about the parties to a transaction, including sensitive items that include but are not limited to: your contact information including email addresses, Social Security numbers, driver's license and, other identification numbers and information; financial, bank and insurance information; information about past and proposed mortgages and loans; about properties you currently or previously owned; your mortgage application package; and the cookie, IP address, and other information captured automatically by computer systems.

Much of this information is gathered from searches of public land records, tax, court and credit records to make certain that any liens, challenges, or title defects are addressed properly. Some of the information that is collected is provided by you, or the computer systems you use. We also may receive information from real estate brokers and agents, mortgage brokers and, others working to facilitate your transaction. We also may receive information from public, private or governmental databases including credit bureaus, 'no-fly' lists, and terrorist 'watch lists', as well as from your lenders and credit bureaus.

What Information is Shared?

WFG DOES NOT SELL any of your information to non-affiliated companies for marketing or any other purpose.

However, some of the same information does get shared with persons inside and outside the WFG Family in order to facilitate and complete your transaction.

For example:

- Information, draft documents, and closing costs will pass back and forth between WFG and your mortgage broker and lender to facilitate your transaction.
- Information, including purchase agreements and amendments, will pass back and forth between WFG and the real estate agents and brokers, the mortgage brokers and lenders, the lawyers and accountants, and others involved in facilitating the transaction.
- WFG may order property searches and examinations from title searchers, abstractors and title plants.
- WFG may use third parties to obtain tax information, lien information, payoff information, condominium and, homeowners' association information and payoff information.
- Third parties may be engaged to prepare documents in connection with your transaction.
- Surveys, appraisals and, inspections may be ordered.

- Within the WFG Family of companies, we may divide up the work to handle each closing in the most efficient manner possible and to meet specific legal and licensing requirements. Certain parts of your closing (for example a search or disbursement) may be handled by another division or company within the WFG Family.
- When it is time for signatures, your complete closing package may be sent to a notary, remote online notary, or notary service company who will arrange to meet with you to sign documents. The notary will, in turn, send signed copies back to us along with copies of your driver's license or other identity documents usually by mail, UPS, Federal Express or another courier service.
- Your deed, mortgage and other documents required to perfect title will be recorded with the local recorder of deeds.
- In some cases, we use an outside service to coordinate the recording or electronic-recording of those instruments, and they will receive copies of your deeds, mortgages and other recordable documents to process, scan and send on to the recording office.
- Various government agencies get involved. The law requires us to provide certain information to the IRS, the US Treasury, local and state tax authorities and other governmental agencies.

You have a choice in the selection of a mortgage broker, lender, real estate broker or agent and others that make up your 'transaction team.' Information flows to and from the members of the transaction team you have selected to facilitate an efficient transaction for you.

When WFG selects and engages a third-party provider, we limit the scope of the information shared with that third party to the information reasonably necessary for that service provider to provide the requested services. With most, we have entered into express agreements in which they expressly commit to maintain a WFG customer's information in strict confidence and use the information only for purposes of providing the requested services, clearing title, preventing fraud and addressing claims under our title insurance policies.

How does WFG use your Information?

We may use your personal information in a variety of ways, including but not limited to:

- Provide the products, services and title insurance you have requested and to close and facilitate your transaction.
- Coordinate and manage the appraisal process.
- Handle a claim or provide other services relating to your title insurance policies.
- Create and manage your account.
- Operate and improve WFG's applications and websites, including WFG MyHome®, WFG's secure communication and transaction portal. Your information is used for access management, payment processing, site administration, internal operations, troubleshooting, data analysis, testing, research, and for statistical purposes.
- Respond to your requests, feedback, or inquiries.
- Comply with laws, regulations, and other legal requirements.
- Comply with relevant industry standards and our policies, including managing WFG's risk profile through reinsurance.
- Protect and enforce your rights and the rights of other users against unlawful activity, including identity theft and fraud.
- Protect and enforce our collective rights arising under any agreements entered into between WFG and you or any other third party;
- Protect the integrity and maintain security of our applications, websites, and products;
- Operate, evaluate, and improve our business; and
- Provide you with information about products, services, and promotions, from WFG or third parties that may interest you.

How Do We Store and Protect Your Personal Information?

Although no system can guarantee the complete security of your personal information, we will use our best efforts to maintain commercially reasonable technical, organizational, and physical safeguards, consistent with applicable law, to protect your personal information and our systems and sites from malicious intrusions or hacking.

How Long Do We Keep Your Personal Information?

We keep your personal information for as long as necessary to comply with the purpose for which it was collected, our business needs, and our legal and regulatory obligations. We may store some personal information indefinitely. If we dispose of your personal information, we will do so in a way that is secure and appropriate to the nature of the information subject to disposal.

Computer Information

When you access a WFG website, or communicate with us by e-mail, we may automatically collect and store more information than you are expressly providing when you fill out a survey or send an email. This may include:

- Your IP Address.
- Your email address, your alias and, social media handles.
- The type of browser and operating system you use.
- The time of your visit.
- The pages of our site you visit.
- Cookies.

In order to provide you with customized service, we make use of Web browser cookies. Cookies are files that help us identify your computer and personalize your online experience. You may disable cookies on your computer, but you may not be able to download online documents or access certain sites unless cookies are enabled.

The technical information we collect is used for administrative and technical purposes and to prevent fraud and provide identity verification. For instance, we may use it to count the number of visitors to our site and determine the most popular pages. We may also use it to review types of technology you are using, determine which link brought you to our Web site, assess how our advertisements on other sites are working, help with maintenance, and improve our customers' experience.

We may compare information gathered on previous visits to verify that we are interacting with the same parties and not a potential imposter.

If we ask you to fill out any forms or surveys, we will use the information we receive only for the specific purposes indicated in those forms or surveys.

The information you and your transaction team send us in emails or attached to an email, or provide through any of our online tools, is used for purposes of providing title, escrow and appraisal management services and used for the purposes described above.

Links to Third Party Sites

Our Applications and Websites may contain links to third-party websites and services. Please note that these links are provided for your convenience and information, and the websites and services may operate independently from us and have their own privacy policies or notices, which we strongly suggest you review. This Privacy Notice applies to WFG's applications and websites only.

Do Not Track

Because there is not an industry-standard process or defined criteria to permit a user to opt-out of tracking their online activities (Do Not Track or DNT), our websites do not currently change the way they operate based upon detection of a "Do Not Track" or similar signal. Likewise, we cannot assure that third parties are not able to collect information about your online activities on WFG websites or applications.

Social Media Integration

Our applications, websites, and products contain links to and from social media platforms. You may choose to connect to us through a social media platform, such as Facebook, Twitter, Google, etc. When you do, we may collect additional information from or about you, such as your screen names, profile picture, contact information, contact list, and the profile pictures of your contacts, through the social media platform. The social media platforms may also collect information from you.

When you click on a social plug-in, such as Facebook's "Like" button, Twitter's "tweet" button or the Google+, that particular social network's plugin will be activated and your browser will directly connect to that provider's servers. Your action in clicking on the social plug-in causes information to be passed to the social media platform.

We do not have control over the collection, use and sharing practices of social media platforms. We, therefore, encourage you to review their usage and disclosure policies and practices, including their data security practices, before using social media platforms.

How Can You “Opt-Out?”

We do not sell your information; therefore there is no need to opt-out of such reselling. Under various laws, you can opt-out of the sharing of your information for more narrow purposes. For additional detail, consult the Links under the “Legal” Notices attached below.

The “Legal” Notices

To comply with various federal and state laws, we are required to provide more complete legal notices and disclosures. In reviewing these, you will find that these notices incorporate the definitions and terminology used in the respective privacy laws which can often be somewhat convoluted and may even seem inconsistent with the descriptions above. The state-specific statutes may also give residents of those states additional rights and remedies.

Privacy Notice for California Residents - <https://national.wfgnationaltitle.com/privacy-notice-california>

Privacy Notice for Oregon Residents - <https://national.wfgnationaltitle.com/privacy-notice-oregon>

How to Contact Us

If you have any questions about WFG’s privacy policy or how we protect your information, please contact WFG:

- By email: Consumerprivacy@willistonfinancial.com
- By telephone: 833-451-5718
- By fax: 503-974-9596
- By mail: 12909 SW 68th Pkwy, Suite 350, Portland, OR 97223
- In-person: 12909 SW 68th Pkwy, Suite 350, Portland, OR 97223

WFG FAMILY

WILLISTON FINANCIAL GROUP LLC
WFG NATIONAL TITLE INSURANCE COMPANY
WFG LENDER SERVICES, LLC
WFGLS TITLE AGENCY OF UTAH, LLC
WFG NATIONAL TITLE COMPANY OF WASHINGTON, LLC
WFG NATIONAL TITLE COMPANY OF CALIFORNIA
WFG NATIONAL TITLE COMPANY OF TEXAS, LLC D/B/A WFG NATIONAL TITLE COMPANY
UNIVERSAL TITLE PARTNERS, LLC
VALUTRUST SOLUTIONS, LLC
WILLISTON ENTERPRISE SOLUTIONS & TECHNOLOGY, LLC
WFG NATIONAL TITLE COMPANY OF CLARK COUNTY, WA, LLC D/B/A WFG NATIONAL TITLE

Revised 6.12.20

FACTS	WHAT DOES WILLISTON FINANCIAL GROUP DO WITH YOUR PERSONAL INFORMATION?	
Why?	Financial companies choose how they share your personal information. Federal law gives consumers the right to limit some but not all sharing. Federal law also requires us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand what we do.	
What?	The types of personal information we collect and share depend on the product or service you have with us. This information can include: • Social Security number and other government identification information • Your name, address, phone, and email • Information about the property, any liens and restrictions • Financial Information including credit history and other debt • Financial account information, including wire transfer instructions.	
How?	All financial companies need to share customers' personal information to run their everyday business. In the section below, we list the reasons financial companies can share their customers' personal information; the reasons Williston Financial Group chooses to share; and whether you can limit this sharing.	
Reasons we can share your personal information	Does Williston Financial Group share?	Can you limit this sharing?
For our everyday business purposes—such as to process your transactions, maintain your account(s), respond to court orders and legal investigations, or report to credit bureaus	Yes	No
For our marketing purposes—to offer our products and services to you	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes—information about your transactions and experiences	Yes	No
For our affiliates' everyday business purposes—information about your creditworthiness	No	We don't share
For our affiliates to market to you	No	We don't share
For nonaffiliates to market to you	No	We don't share
To limit our sharing	• Call 833-451-5718—our menu will prompt you through your choice(s) • Visit us online: http://bit.ly/WFGsConsumerPrivacyInformationRequestPage or e-mailing us at consumerprivacy@willistonfinancial.com • Mail the form below Please note: If you are a new customer, we can begin sharing your information from the date we sent this notice. When you are no longer our customer, we continue to share your information as described in this notice. However, you can contact us at any time to limit our sharing.	
Questions?	Call 833-451-5718 or Email consumerprivacy@willistonfinancial.com	

Mail-In Form		
If you have a joint policy, your choices will apply to everyone on your account.	Mark any/all you want to limit:	
	☐ Do not share information about my creditworthiness with your affiliates for their everyday business purposes.	
	☐ Do not allow your affiliates to use my personal information to market to me.	
	☐ Do not share my personal information with nonaffiliates to market their products and services to me.	
	Name	Mail to: Williston Financial Group PRIVACY DEPT 12909 SW 68 th Pkwy, #350 Portland, OR 97223
	Address	
	City, State, Zip	
	File Number	

Who we are	
Who is providing this notice	Williston Financial Group, LLC and its affiliates and subsidiaries as listed below:
What we do	
How does Williston Financial Group protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer safeguards and secured files and buildings. We limit access to your information to employees that need to use the information to process or protect transaction. We take industry standard (IPSEC) measures to protect against malicious intrusions or hacking
How does Williston Financial Group collect my personal information?	We collect your personal information, for example, when you • Apply for insurance • Engage us to provide appraisal, title and escrow services • Give us your contact information • Provide your mortgage information • Show your driver's license We also collect your personal information from others, such as real estate agents and brokers, mortgage brokers, lenders, credit bureaus, affiliates, and others
Why can't I limit all sharing?	Federal law gives you the right to limit only • sharing for affiliates' everyday business purposes—information about your creditworthiness • affiliates from using your information to market to you • sharing for nonaffiliates to market to you State laws and individual companies may give you additional rights to limit sharing. See below for more on your rights under state law.
What happens when I limit sharing for an account I hold jointly with someone else?	Your choices will apply to everyone on your policy.
Definitions	
Affiliates	Companies related by common ownership or control. They can be financial and nonfinancial companies. Our affiliates include companies with a common corporate identity, including those listed below.
Nonaffiliates	Companies not related by common ownership or control. They can be financial and nonfinancial companies. Nonaffiliates we share with can include real estate agents and brokers, mortgage brokers, lenders, appraisers, abstractors and title searchers and others as appropriate to facilitate your transaction.
Joint marketing	A formal agreement between nonaffiliated financial companies that together market financial products or services to you. Williston Financial Group does not jointly market.
Other important information	
As a resident or citizen of certain states, we may have to provide additional state specific privacy notices and you may have rights other than as set forth above. The links below will provide state specific information: Privacy Notice for California Residents - https://national.wfgnationaltitle.com/privacy-notice-california Privacy Notice for Oregon Residents - https://national.wfgnationaltitle.com/privacy-notice-oregon	



Exhibit E: Service Provider Letters

February 15, 2022

AKS ENGINEERING
12965 SW HERMAN RD. SUITE 100
TUALATIN, OR 97062

Re: CWS file 22-000082 (Tax map 1N331CA Tax lot 01500, 01700); 2230 & 2320 SW 26th Avenue, Forest Grove

Clean Water Services has reviewed your proposal for the above referenced activity on your site. Staff has conducted a pre-screen review and requested completion of a Sensitive Areas Certification Form. Following review of submitted materials it appears that Sensitive Areas do not exist on-site or within 200' from your project. In light of this result, this document will serve as your Service Provider letter as required by Resolution and Order 19-5, Section 3.02.1, as amended by Resolution and Order 19-22. All required permits and approvals must be obtained and completed under applicable local, state, and federal law.

This concurrence letter does NOT eliminate the need to protect Sensitive Areas if they are subsequently identified on your site.

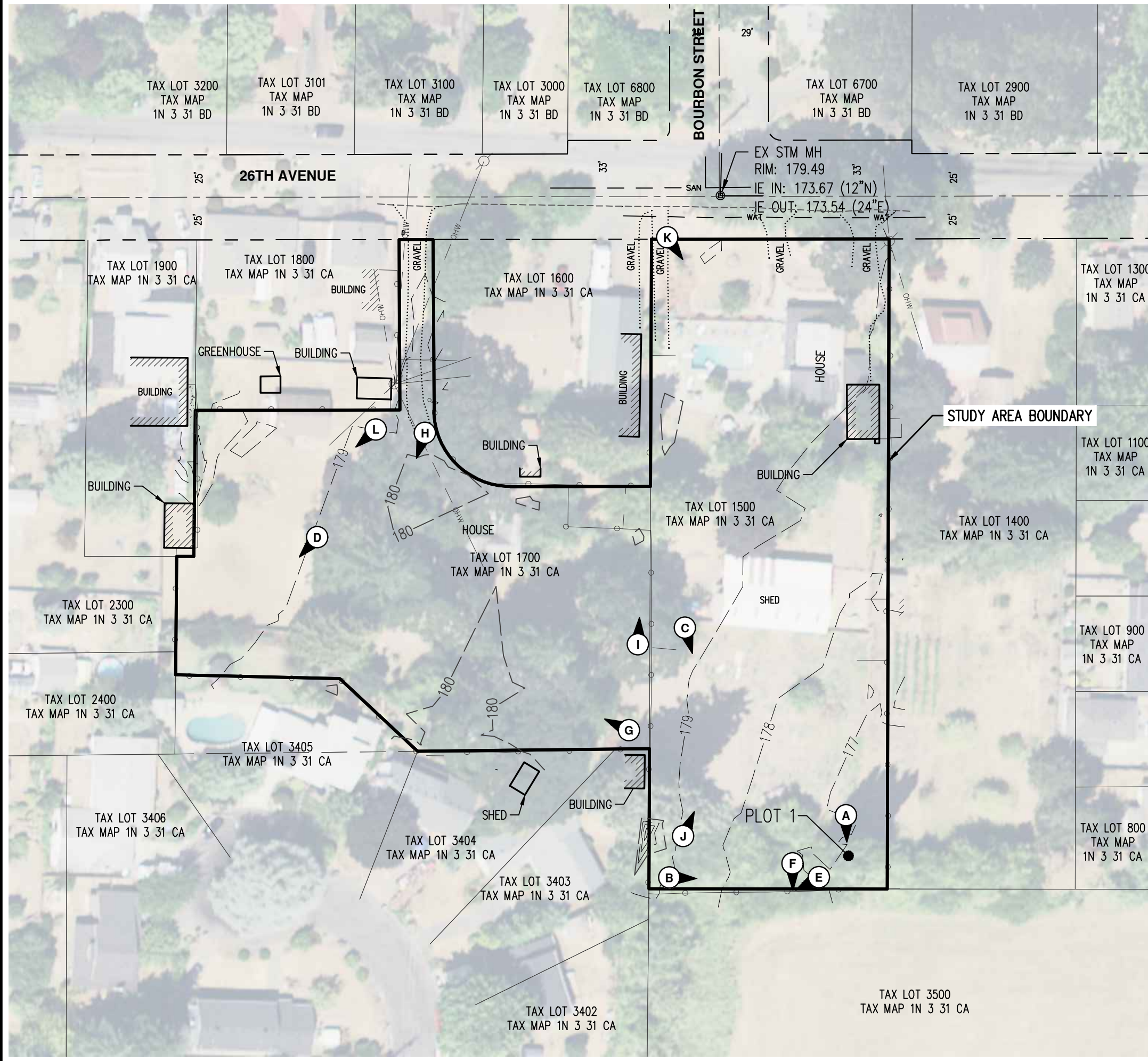
Sincerely,



Stacy Benjamin
Environmental Plan Review

Attachment (1)

DWG: 9240 NRA EXCOND | FIGURE 5

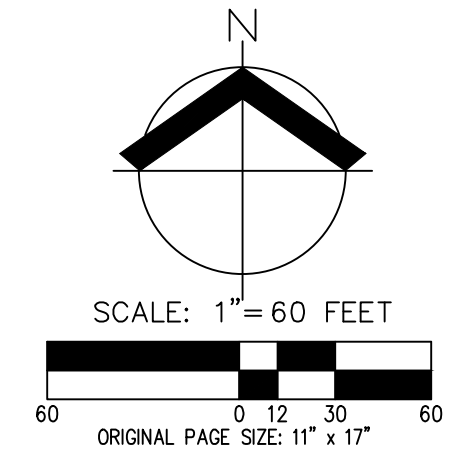


GOOGLE EARTH AERIAL (2018)

LEGEND

- A** PHOTO POINT ORIENTATION AND LOCATION
- PLOT SHOWN WAS LOCATED BY AKS ENGINEERING & FORESTRY, LLC ON JANUARY 19, 2022 AND WERE LOCATED USING A TRIMBLE GEO 7X HANDHELD GPS RECEIVER WITH SUB-METER ACCURACY.
- 1-FOOT INTERVAL GROUND CONTOURS DERIVED FROM NOAA LIDAR.
- THE STUDY AREA BOUNDARY, EXISTING CONDITIONS AND TREE SURVEY WERE PROFESSIONALLY LAND SURVEYED ALONG THE BOUNDARY OF THE SITE BY AKS ENGINEERING & FORESTRY, LLC. A COMPLETE EXISTING CONDITIONS SURVEY AND TREE SURVEY WAS NOT CONDUCTED.

CWS FILE NO. 22-000082
Approved
Clean Water Services
FOR ENVIRONMENTAL REVIEW
By SNB Date 2/15/2022
SPL ATTACHMENT 1 OF 1



DATE: 02/01/2022

NATURAL RESOURCES EXISTING CONDITIONS		FIGURE
2230 SW 26TH AVENUE SITE ASSESSMENT REPORT		5
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: RAS CHKD: MVH AKS JOB: 9240





Exhibit F: Geotechnical Engineering Report



Real-World Geotechnical Solutions
Investigation • Design • Construction Support

Geotechnical Engineering Report

West Grove Apartments
2230 & 2320 26th Avenue
Forest Grove, Oregon

GeoPacific Engineering, Inc. Project No. 22-6007
June 15, 2022



Real-World Geotechnical Solutions
Investigation • Design • Construction Support

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- 2 Site Plan and Exploration Locations



Real-World Geotechnical Solutions
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June 15, 2022
Project No. 22-6007

Evan Scesa
Creekwood Homes
P.O. Box 1785
North Plains, Oregon 97133
Email: evan@creekwoodhomes.net

CC: Darko Simic, AKS Engineering & Forestry, LLC. via email: darkos@aks-eng.com

SUBJECT: GEOTECHNICAL ENGINEERING REPORT
WEST GROVE APARTMENTS
2230 & 2320 26TH AVENUE
FOREST GROVE, OREGON

1.0 PROJECT INFORMATION

This report presents the results of a geotechnical engineering study conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above-referenced project. The purpose of our investigation was to evaluate subsurface conditions at the site, and to provide geotechnical recommendations for site development. This geotechnical study was performed in accordance with GeoPacific Proposal No. P-8023, dated February 18, 2019, and your subsequent authorization of our proposal and *General Conditions for Geotechnical Services*.

Site Location:	2230 & 2320 26 th Avenue Forest Grove, Oregon (Figures 1 and 2)
Developer:	Creekwood Homes P.O. Box 1785 North Plains, Oregon 97133 Phone: (503) 307-1019
Jurisdictional Agency:	City of Forest Grove, Oregon
Civil Engineer:	Darko Simic AKS Engineering & Forestry, LLC. 12965 SW Herman Road, Unit 100 Tualatin, Oregon 97062 Tel (503) 563-6151

2.0 SITE AND PROJECT DESCRIPTION

The subject site is located on the south side of 26th Avenue in Forest Grove, Washington County, Oregon (Figures 1 and 2). The property is composed of two tax lots totaling approximately 2.3 acres in size. Topography is flat to very gently sloping to the northeast at grades of less than 5 percent. The property is currently occupied by two homes and several outbuildings. Vegetation consists primarily of short grasses and sparse trees.

Site plans indicate the proposed development will include 4 apartment structures, access driveway, parking lots, and associated underground utilities (Figure 2). It is our understanding the structures will be wood framed and up to three stories in height with concrete slab-on-grade floors. The preliminary grading plan provided for our review indicates maximum cuts and fills will be on the order of approximately 3 feet or less.

3.0 REGIONAL GEOLOGIC SETTING

Regionally, the subject site lies within the Willamette Valley/Puget Sound lowland, a broad structural depression situated between the Coast Range on the west and the Cascade Range on the east. A series of discontinuous faults subdivide the Willamette Valley into a mosaic of fault-bounded, structural blocks (Yeats et al., 1996). Uplifted structural blocks form bedrock highlands, while down-warped structural blocks form sedimentary basins.

The site is underlain by the Quaternary age (last 1.6 million years) Willamette Formation, a catastrophic flood deposit associated with repeated glacial outburst flooding of the Willamette Valley (Schlicker and Deacon, 1967; Gannett and Caldwell, 1998). The last of these outburst floods occurred about 10,000 years ago. These deposits typically consist of fluvial and lacustrine horizontally layered, micaceous, silt to coarse sand forming poorly-defined to distinct beds less than 3 feet thick.

The Willamette Formation is underlain by residual soil formed by in place weathering of the underlying unnamed marine sedimentary rocks deposited during the middle to late Eocene to middle Miocene (approximately 14 to 40 million years ago). The unnamed geologic formation typically consists of tuffaceous marine siltstone, claystone, and sandstone (Schlicker and Deacon, 1967; Yeats et al., 1996; Gannett and Caldwell, 1998). These rocks include the Tyee, Yamhill, Eugene, Spencer, and Nestucca Formations (Gannett and Caldwell, 1998). Regional geologic mapping indicate the bedding strata dip approximately 35 degrees to the east (Schlicker and Deacon, 1967).

4.0 REGIONAL SEISMIC SETTING

At least three potential source zones capable of generating damaging earthquakes are thought to exist in the region. These include the Portland Hills Fault Zone, the Gales Creek-Newberg-Mt. Angel Structural Zone, and the Cascadia Subduction Zone, as discussed below.

4.1 Portland Hills Fault Zone

The Portland Hills Fault Zone is a series of NW-trending faults that include the central Portland Hills Fault, the western Oatfield Fault, and the eastern East Bank Fault. These faults occur in a

northwest-trending zone that varies in width between 3.5 and 5.0 miles. The combined three faults vertically displace the Columbia River Basalt by 1,130 feet and appear to control thickness changes in late Pleistocene (approx. 780,000 years) sediment (Madin, 1990). The Portland Hills Fault occurs along the Willamette River at the base of the Portland Hills and is approximately 15.7 miles northeast of the site. The Oatfield Fault occurs along the western side of the Portland Hills and is approximately 14 miles northeast of the site. The East Bank Fault occurs along the eastern margin of the Willamette River and is located approximately 16.5 miles northeast of the site. The accuracy of the fault mapping is stated to be within 500 meters (Wong, et al., 2000). No historical seismicity is correlated with the mapped portion of the Portland Hills Fault Zone, but in 1991 a M3.5 earthquake occurred on a NW-trending shear plane located 1.3 miles east of the fault (Yelin, 1992). Although there is no definitive evidence of recent activity, the Portland Hills Fault Zone is assumed to be potentially active (Geomatrix Consultants, 1995).

4.2 Gales Creek-Newberg-Mt. Angel Structural Zone

The Gales Creek-Newberg-Mt. Angel Structural Zone is a 50-mile-long zone of discontinuous, NW-trending faults that lies approximately 2.4 miles southwest of the subject site. These faults are recognized in the subsurface by vertical separation of the Columbia River Basalt and offset seismic reflectors in the overlying basin sediment (Yeats et al., 1996; Werner et al., 1992). A recent geologic reconnaissance and photogeologic analysis study conducted for the Scoggins Dam site in the Tualatin Basin revealed no evidence of deformed geomorphic surfaces along the structural zone (Unruh et al., 1994). No seismicity has been recorded on the Gales Creek or Newberg Faults (the faults closest to the subject site); however, these faults are considered to be potentially active because they may connect with the seismically active Mount Angel Fault and the rupture plane of the 1993 M5.6 Scotts Mills earthquake (Werner et al. 1992; Geomatrix Consultants, 1995).

4.3 Cascadia Subduction Zone

The Cascadia Subduction Zone is a 680-mile-long zone of active tectonic convergence where oceanic crust of the Juan de Fuca Plate is subducting beneath the North American continent at a rate of 4 cm per year (Goldfinger et al., 1996). A growing body of geologic evidence suggests that prehistoric subduction zone earthquakes have occurred (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). This evidence includes: (1) buried tidal marshes recording episodic, sudden subsidence along the coast of northern California, Oregon, and Washington, (2) burial of subsided tidal marshes by tsunami wave deposits, (3) paleoliquefaction features, and (4) geodetic uplift patterns on the Oregon coast. Radiocarbon dates on buried tidal marshes indicate a recurrence interval for major subduction zone earthquakes of 250 to 650 years with the last event occurring 300 years ago (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). The inferred seismogenic portion of the plate interface lies approximately along the Oregon Coast at depths of between 20 and 40 kilometers below the surface.

5.0 FIELD EXPLORATION AND SUBSURFACE CONDITIONS

Our site-specific exploration for this report was conducted on March 7, 2022. Three exploratory test pits (designated TP-1 through TP-3) were excavated with a medium sized trackhoe to depths ranging between 9.5 and 10.5 feet at the approximate locations presented on Figure 2. It should be noted that exploration locations were located in the field by pacing or taping distances from apparent property corners and other site features shown on the plans provided. As such, the locations of the explorations should be considered approximate.

A GeoPacific Engineering Geologist continuously monitored the field exploration program and logged the test pits. Soils observed in the explorations were classified in general accordance with the Unified Soil Classification System (USCS). During exploration, our geologist also noted geotechnical conditions such as soil consistency, moisture, and groundwater conditions. Logs of test pits are attached to this report. The following report sections are based on the exploration program and summarize subsurface conditions encountered at the site.

5.1 Soil Descriptions

Undocumented Fill: The topsoil horizon at the location of test pit TP-1 was possibly thickened by organic fill placement. Undocumented fill consisting of brick fragments was encountered within the topsoil horizon in test pit TP-2. It is possible that other areas of undocumented fill may be present outside our test pit locations – especially in the vicinity of the existing structures and driveways.

Topsoil Horizon: The ground surface in test pits TP-1 through TP-3 was directly underlain by a moderately to highly organic topsoil horizon. The topsoil horizon consisted of brown silt (OL-ML) that was loose and contained fine roots throughout. In test pits, the topsoil horizon extended to a depth of 9 to 18 inches.

Willamette Formation: Underlying the topsoil horizon in test pits was clayey silt (ML) belonging to the Willamette Formation. The light brown, clayey silt was generally stiff and exhibited subtle to strong orange and gray mottling. In explorations, the clayey silt transitioned to stiff silt below depths of 5 to 7 feet. In test pits, material belonging to the Willamette Formation extended beyond the maximum depth of exploration (9.5 to 10.5 feet).

5.2 Groundwater and Soil Moisture

On March 7, 2022, observed soil moisture conditions were generally moist to wet in areas of seepage. Perched groundwater seepage was encountered within the explorations at depths of 3 to 9 feet. Discharge was visually estimated at ½ to 1 gallon per minute. According to our review of nearby Water Well logs, static groundwater may present at a depth of less than 20 feet below the ground surface (Oregon Water Resources Department, 2022). It is anticipated that groundwater conditions will vary depending on the season, local subsurface conditions, changes in site utilization, and other factors. Perched groundwater may be encountered in localized areas. Seeps and springs may exist in areas not explored and may become evident during site grading. If the seasonal fluctuation of the static groundwater table underlying the subject site require detailed understanding, piezometers may be installed and periodically monitored.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Our site investigation indicates that the proposed construction appears to be geotechnically feasible, provided that the recommendations of this report are incorporated into the design and construction phases of the project. Our explorations indicate the native soils on site are stiff to very stiff and are suitable for development utilizing conventional spread footing foundations. The primary geotechnical conditions detrimental to development include:

1. Shallow, perched groundwater conditions that could make utility trenching difficult, especially in the winter months. Some minor caving was encountered in test pits. Adequate shoring should be maintained.

2. The presence of undocumented fill. Inorganic fill and possible organic fill was encountered within the topsoil horizon in test pits TP-1 and TP-2. The fill material will likely be removed during stripping processes; however, other areas of fill may be present – especially in the vicinity of the existing structures and driveways.
3. The preparation of pavement subgrade may require extensive aeration and compaction.

6.1 Site Preparation Recommendations

Areas of proposed construction and areas to receive fill should be cleared of any organic and inorganic debris. Inorganic debris and organic materials from clearing should be removed from the site. Organic-rich soils and root zones should then be stripped from construction areas of the site or where engineered fill is to be placed. Depth of stripping of existing topsoil is estimated to be approximately 6 to 9 inches across the majority of the site, however depth of organic soil layers may increase in areas. The final depth of soil removal will be determined because of a site inspection after the stripping/excavation has been performed. Stripped topsoil should be removed from areas proposed for placement of engineered fill. Any remaining topsoil should be stockpiled only in designated areas and stripping operations should be observed and documented by the geotechnical engineer or his representative.

If encountered, undocumented fills and any subsurface structures (dry wells, basements, driveway and landscaping fill, old utility lines, septic leach fields, field drain tiles, etc.) should be completely removed and the excavations backfilled with engineered fill. Field drain tiles should be intercepted at the high end of the site and routed to the storm drain system. Undocumented fill was encountered within the topsoil horizon in test pits TP-1 and TP-2. Other areas of fill may be present, especially in the vicinity of the existing structures and driveways.

We recommend that areas proposed for placement of engineered fill are scarified to a minimum depth of 12 inches and recompacted prior to placement of structural fill. Prior to placement of engineered fill, the underlying soils be over-excavated, ripped, aerated to optimum moisture content, and recompacted to project specifications for engineered fill as determined by the Standard Proctor (ASTM D698).

Areas proposed to be left at grade may require additional over-excavation of foundation areas in order to reach soils which will provide adequate bearing support for the proposed foundations. Site earthwork may be impacted by shallow groundwater. Stabilization of subgrade soils will require aeration and recompaction. If subgrade soils are found to be difficult to stabilize, over-excavation, placement of granular soils, or cement treatment of subgrade soils may be feasible options. GeoPacific should be onsite to observe preparation of subgrade soil conditions prior to placement of engineered fill.

6.2 Engineered Fill

In general, we anticipate that soils from planned cuts and utility trench excavations will be suitable for use as engineered fill provided they are adequately moisture conditioned prior to compacting. Imported fill material should be reviewed by GeoPacific prior to being imported to the site. Oversize material greater than 6 inches in size should not be used within 3 feet of foundation footings, and material greater than 12 inches in diameter should not be used in engineered fill.

All grading for the proposed construction should be performed as engineered grading in accordance with the applicable building code at the time of construction with the exceptions and

additions noted herein. Site grading should be conducted in accordance with the requirements outlined in the 2015 International Building Code (IBC), Chapter 18 and Appendix J. Areas proposed for fill placement should be prepared as described in the *Site Preparation Recommendations* section. Surface soils should then be scarified and recompacted prior to placement of structural fill. Site preparation, soil stripping, and grading activities should be observed and documented by a geotechnical engineer or his representative. Proper test frequency and earthwork documentation usually requires daily observation and testing during stripping, rough grading, and placement of engineered fill.

Engineered fill should be compacted in horizontal lifts not exceeding 12 inches using standard compaction equipment. We recommend that engineered fill be compacted to at least 95 percent of the maximum dry density determined by ASTM D698 (Standard Proctor) or equivalent. Field density testing should conform to ASTM D2922 and D3017, or D1556. All engineered fill should be observed and tested by the project geotechnical engineer or his representative. Typically, one density test is performed for at least every 2 vertical feet of fill placed or every 500 yd³, whichever requires more testing. Because testing is performed on an on-call basis, we recommend that the earthwork contractor be held contractually responsible for test scheduling and frequency.

Site earthwork may be impacted by shallow groundwater, soil moisture and wet weather conditions. Earthwork in wet weather would likely require extensive use of additional crushed aggregate, cement or lime treatment, or other special measures, at considerable additional cost compared to earthwork performed under dry-weather conditions.

6.3 Excavating Conditions and Utility Trench Backfill

Subsurface test pit exploration indicates that, in general, utility trenches can be excavated using conventional heavy equipment such as dozers and trackhoes. Shallow, perched groundwater conditions could cause sidewall caving in excavations and moderate caving was observed in test pit TP-2. These conditions could make utility trenching difficult, especially in the winter months, and adequate shoring should be maintained.

Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Actual slope inclinations at the time of construction should be determined based on safety requirements and actual soil and groundwater conditions. All temporary cuts in excess of 4 feet in height should be sloped in accordance with U.S. Occupational Safety and Health Administration (OSHA) regulations (29 CFR Part 1926) or be shored. The existing near surface native soils classify as Type B Soil and temporary excavation side slope inclinations as steep as 1H:1V may be assumed for planning purposes. These cut slope inclinations are applicable to excavations above the water table only.

Shallow, perched groundwater and saturated soils may be encountered during the wet weather season and should be anticipated in excavations and utility trenches. We anticipate that dewatering systems consisting of ditches, sumps and pumps would be adequate for control of perched groundwater. Regardless of the dewatering system used, it should be installed and operated such that in-place soils are prevented from being removed along with the groundwater. Trench bottom stabilization, such as one to two feet of compacted crushed aggregate base, may be necessary in deeper trenches.

Vibrations created by traffic and construction equipment may cause some caving and raveling of excavation walls. In such an event, lateral support for the excavation walls should be provided by the contractor to prevent loss of ground support and possible distress to existing or previously constructed structural improvements.

Underground utility pipes should be installed in accordance with the procedures specified in ASTM D2321 and City of Forest Grove standards. We recommend that structural trench backfill be compacted to at least 95 percent of the maximum dry density obtained by the Standard Proctor (ASTM D698) or equivalent. Initial backfill lift thicknesses for a ¾"-0 crushed aggregate base may need to be as great as 4 feet to reduce the risk of flattening underlying flexible pipe. Subsequent lift thickness should not exceed 1 foot. If imported granular fill material is used, then the lifts for large vibrating plate-compaction equipment (e.g. hoe compactor attachments) may be up to 2 feet, provided that proper compaction is being achieved and each lift is tested. Use of large vibrating compaction equipment should be carefully monitored near existing structures and improvements due to the potential for vibration-induced damage.

Adequate density testing should be performed during construction to verify that the recommended relative compaction is achieved. Typically, at least one density test is taken for every 4 vertical feet of backfill on each 100-lineal-foot section of trench.

6.4 Erosion Control Considerations

During our field exploration program, we did not observe soil conditions that are considered to be susceptible to erosion. In our opinion, the primary concern regarding erosion potential will occur during construction in areas that have been stripped of vegetation. Erosion at the site during construction can be minimized by implementing the project erosion control plan, which should include judicious use of straw wattles, fiber rolls, and silt fences. If used, these erosion control devices should remain in place throughout site preparation and construction.

Erosion and sedimentation of exposed soils can also be minimized by quickly re-vegetating exposed areas of soil, and by staging construction such that large areas of the project site are not denuded and exposed at the same time. Areas of exposed soil requiring immediate and/or temporary protection against exposure should be covered with either mulch or erosion control netting/blankets. Areas of exposed soil requiring permanent stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

6.5 Wet Weather Earthwork

Soils underlying the site are likely to be moisture sensitive and will be difficult to handle or traverse with construction equipment during periods of wet weather. Earthwork is typically most economical when performed under dry weather conditions. Earthwork performed during the wet-weather season will require expensive measures such as cement treatment or imported granular material to compact areas where fill may be proposed to the recommended engineering specifications. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is difficult to control, the following recommendations should be incorporated into the contract specifications.

- Earthwork should be performed in small areas to minimize exposure to wet weather. Excavation or the removal of unsuitable soils should be followed promptly by the placement and compaction of clean engineered fill. The size and type of construction equipment used may have to be limited to prevent soil disturbance. Under some circumstances, it may be necessary to excavate soils with a backhoe to minimize subgrade disturbance caused by equipment traffic.
- The ground surface within the construction area should be graded to promote run-off of surface water and to prevent the ponding of water.

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- Material used as engineered fill should consist of clean, granular soil containing less than 5 percent passing the No. 200 sieve. The fines should be non-plastic. Alternatively, cement treatment of on-site soils may be performed to facilitate wet weather placement.
- The ground surface within the construction area should be sealed by a smooth drum vibratory roller, or equivalent, and under no circumstances should be left uncompacted and exposed to moisture. Soils which become too wet for compaction should be removed and replaced with clean granular materials.
- Excavation and placement of fill should be observed by the geotechnical engineer to verify that all unsuitable materials are removed and suitable compaction and site drainage is achieved.
- Geotextile silt fences, straw wattles, and fiber rolls should be strategically located to control erosion.

If cement or lime treatment is used to facilitate wet weather construction, GeoPacific should be contacted to provide additional recommendations and field monitoring.

6.6 Spread Foundations

Based on our understanding of the proposed project and the results of our exploration program, and assuming our recommendations for site preparation are followed, native deposits and/or engineered fill soils should be encountered at or near the foundation level of the proposed structures. These soils are generally stiff and should provide adequate support of the structural loads.

Shallow, conventional isolated or continuous spread footings may be used to support the proposed structures, provided they are founded on competent native soils, or compacted engineered fill placed directly upon the competent native soils. The anticipated allowable soil bearing pressure is 1,500 lbs/ft² for footings bearing on competent, native soil and/or engineered fill.

The recommended maximum allowable bearing pressures may be increased by 1/3 for short term transient conditions such as wind and seismic loading. All footings should be founded at least 18 inches below the lowest adjacent finished grade. Minimum footing widths should be determined by the project engineer/architect in accordance with applicable design codes.

Assuming construction is accomplished as recommended herein, and for the foundation loads anticipated, we estimate total settlement of spread foundations of less than about 1 inch and differential settlement between two adjacent load-bearing components supported on competent soil of less than about ½ inch. We anticipate that the majority of the estimated settlement will occur during construction, as loads are applied.

Wind, earthquakes, and unbalanced earth loads will subject the proposed structure to lateral forces. Lateral forces on a structure will be resisted by a combination of sliding resistance of its base or footing on the underlying soil and passive earth pressure against the buried portions of the structure. For use in design, a coefficient of friction of 0.42 may be assumed along the interface between the base of the footing and subgrade soils. Passive earth pressure for buried portions of structures may be calculated using an equivalent fluid weight of 320 pounds per cubic foot (pcf), assuming footings are cast against dense, natural soils or engineered fill. The recommended coefficient of friction and passive earth pressure values do not include a safety factor. The upper 12 inches of soil should be neglected in passive pressure computations unless it is protected by pavement or slabs on grade.

Footing excavations should be trimmed neat and the bottom of the excavation should be carefully prepared. Loose, wet or otherwise softened soil should be removed from the footing excavation prior to placing reinforcing steel bars.

The above foundation recommendations are for dry weather conditions. Due to the high moisture sensitivity of on-site soils, construction during wet weather may require overexcavation of footings and backfill with compacted, crushed aggregate. GeoPacific should observe foundation excavations prior to placing formwork and reinforcing steel, to verify that adequate bearing soils have been reached.

6.7 Concrete Slabs-on-Grade

Preparation of areas beneath concrete slab-on-grade floors should be performed as recommended in the *Site Preparation Recommendations* section. Care should be taken during excavation for foundations and floor slabs, to avoid disturbing subgrade soils. If subgrade soils have been adversely impacted by wet weather or otherwise disturbed, the surficial soils should be scarified to a minimum depth of 8 inches, moisture conditioned to within about 3 percent of optimum moisture content, and compacted to engineered fill specifications. Alternatively, disturbed soils may be removed and the removal zone backfilled with additional crushed rock.

For evaluation of the concrete slab-on-grade floors using the beam on elastic foundation method, a modulus of subgrade reaction of 150 kcf (87 pci) should be assumed for the medium stiff, fine-grained soils anticipated to be present at foundation subgrade elevation following adequate site preparation as described above. This value assumes the concrete slab system is designed and constructed as recommended herein, with a minimum thickness of 8 inches of 1½"-0 crushed aggregate beneath the slab. The total thickness of crushed aggregate will be dependent on the subgrade conditions at the time of construction, and should be verified visually by proof-rolling. Under-slab aggregate should be compacted to at least 95 percent of its maximum dry density as determined by ASTM D1557 (Modified Proctor) or equivalent.

In areas where moisture will be detrimental to floor coverings or equipment inside the proposed structure, appropriate vapor barrier and damp-proofing measures should be implemented. A commonly applied vapor barrier system consists of a 10-mil polyethylene vapor barrier placed directly over the capillary break material. Other damp/vapor barrier systems may also be feasible. Appropriate design professionals should be consulted regarding vapor barrier and damp proofing systems, ventilation, building material selection and mold prevention issues, which are outside GeoPacific's area of expertise.

6.8 Footing and Roof Drains

Construction should include typical measures for controlling subsurface water beneath the structure. Down spouts and roof drains should collect roof water in a system separate from the perimeter drains to reduce the potential for clogging. Roof drain water should be directed to an appropriate discharge point and storm system well away from structural foundations. Grades should be sloped downward and away from buildings to reduce the potential for ponded water near structures.

Perimeter footing drains should consist of 3 or 4-inch diameter, perforated plastic pipe embedded in a minimum of 1 ft³ per lineal foot of clean, free-draining drain rock. The drainpipe and surrounding drain rock should be wrapped in non-woven geotextile (Mirafi 140N, or approved equivalent) to minimize the potential for clogging and/or ground loss due to piping. A minimum 0.5 percent fall should be maintained throughout the drain and non-perforated pipe outlet. In our

opinion, footing drains may outlet at the curb, or to the storm drain system where sufficient fall is not available to allow drainage to meet the street.

Footing drains are recommended to prevent detrimental effects of surface water runoff on foundations – not to dewater groundwater. Footing drains should not be expected to eliminate all potential sources of water entering a basement or beneath a slab-on-grade. Underslab drains are sometimes added beneath the slab when placed over soils of low permeability and shallow, perched groundwater.

6.9 Permanent Below-Grade Walls

Lateral earth pressures against below-grade retaining walls will depend upon the inclination of any adjacent slopes, type of backfill, degree of wall restraint, method of backfill placement, degree of backfill compaction, drainage provisions, and magnitude and location of any adjacent surcharge loads. At-rest soil pressure is exerted on a retaining wall when it is restrained against rotation. In contrast, active soil pressure will be exerted on a wall if its top is allowed to rotate or yield a distance of roughly 0.001 times its height or greater.

If the subject retaining walls will be free to rotate at the top, they should be designed for an active earth pressure equivalent to that generated by a fluid weighing 35 pcf for level backfill against the wall. For restrained wall, an at-rest equivalent fluid pressure of 55 pcf should be used in design, again assuming level backfill against the wall. These values assume that the recommended drainage provisions are incorporated, and hydrostatic pressures are not allowed to develop against the wall.

During a seismic event, lateral earth pressures acting on below-grade structural walls will increase by an incremental amount that corresponds to the earthquake loading. Based on the Mononobe-Okabe equation and peak horizontal accelerations appropriate for the site location, seismic loading should be modeled using the active or at-rest earth pressures recommended above, plus an incremental rectangular-shaped seismic load of magnitude $6.5H$, where H is the total height of the wall.

We assume relatively level ground surface below the base of the walls. As such, we recommend passive earth pressure of 300 pcf for use in design, assuming wall footings are cast against competent native soils or engineered fill. If the ground surface slopes down and away from the base of any of the walls, a lower passive earth pressure should be used and GeoPacific should be contacted for additional recommendations.

A coefficient of friction of 0.42 may be assumed along the interface between the base of the wall footing and subgrade soils. The recommended coefficient of friction and passive earth pressure values do not include a safety factor, and an appropriate safety factor should be included in design. The upper 12 inches of soil should be neglected in passive pressure computations unless it is protected by pavement or slabs on grade.

The above recommendations for lateral earth pressures assume that the backfill behind the subsurface walls will consist of properly compacted structural fill, and no adjacent surcharge loading. If the walls will be subjected to the influence of surcharge loading within a horizontal distance equal to or less than the height of the wall, the walls should be designed for the additional horizontal pressure. For uniform surcharge pressures, a uniformly distributed lateral pressure of 0.3 times the surcharge pressure should be added. Traffic surcharges may be estimated using an additional vertical load of 250 psf (2 feet of additional fill), in accordance with local practice.

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The recommended equivalent fluid densities assume a free-draining condition behind the walls so that hydrostatic pressures do not build-up. This can be accomplished by placing a 12 to 18-inch wide zone of sand and gravel containing less than 5 percent passing the No. 200 sieve against the walls. A 3-inch minimum diameter perforated, plastic drain pipe should be installed at the base of the walls and connected to a suitable discharge point to remove water in this zone of sand and gravel. The drain pipe should be wrapped in filter fabric (Mirafi 140N or other as approved by the geotechnical engineer) to minimize clogging.

Wall drains are recommended to prevent detrimental effects of surface water runoff on foundations – not to dewater groundwater. Drains should not be expected to eliminate all potential sources of water entering a basement or beneath a slab-on-grade. An adequate grade to a low point outlet drain in the crawlspace is required by code. Underslab drains are sometimes added beneath the slab when placed over soils of low permeability and shallow, perched groundwater.

Water collected from the wall drains should be directed into the local storm drain system or other suitable outlet. A minimum 0.5 percent fall should be maintained throughout the drain and non-perforated pipe outlet. Down spouts and roof drains should not be connected to the wall drains in order to reduce the potential for clogging. The drains should include clean-outs to allow periodic maintenance and inspection. Grades around the proposed structure should be sloped such that surface water drains away from the building.

GeoPacific should be contacted during construction to verify subgrade strength in wall keyway excavations, to verify that backslope soils are in accordance with our assumptions, and to take density tests on the wall backfill materials.

Structures should be located a horizontal distance of at least 1.5H away from the back of the retaining wall, where H is the total height of the wall. GeoPacific should be contacted for additional foundation recommendations where structures are located closer than 1.5H to the top of any wall.

6.10 Pavement Design

For design purposes, we used an estimated resilient modulus of 9,000 for compacted native soil. Table 1 presents our recommended minimum pavement section for dry weather construction.

Table 1. Recommended Minimum Dry-Weather Pavement Section

Material Layer	Light-duty Public Streets	Compaction Standard
Asphaltic Concrete (AC)	3 in.	92% of Rice Density AASHTO T-209
Crushed Aggregate Base ¾"-0 (leveling course)	2 in.	95% of Modified Proctor AASHTO T-180
Crushed Aggregate Base 1½"-0	8 in.	95% of Modified Proctor AASHTO T-180
Subgrade	12 in.	95% of Standard Proctor AASHTO T-99

Any pockets of organic debris or loose fill encountered during ripping or tilling should be removed and replaced with engineered fill (see *Site Preparation* Section). In order to verify subgrade strength, we recommend proof-rolling directly on subgrade with a loaded dump truck during dry weather and on top of base course in wet weather. Soft areas that pump, rut, or weave should be

stabilized prior to paving. If pavement areas are to be constructed during wet weather, the subgrade and construction plan should be reviewed by the project geotechnical engineer at the time of construction so that condition specific recommendations can be provided. The moisture sensitive subgrade soils make the site a difficult wet weather construction project.

During placement of pavement section materials, density testing should be performed to verify compliance with project specifications. Generally, one subgrade, one base course, and one asphalt compaction test is performed for every 100 to 200 linear feet of paving.

6.11 Wet Weather Construction Pavement Section

This section presents our recommendations for wet weather pavement section and construction for new pavement sections at the project. These wet weather pavement section recommendations are intended for use in situations where it is not feasible to compact the subgrade soils to Washington County requirements, due to wet subgrade soil conditions, and/or construction during wet weather.

Based on our site review, we recommend a wet weather section with a minimum subgrade deepening of 6 inches to accommodate a working subbase of additional 1½"-0 crushed rock. Geotextile fabric, Mirafi 500x or equivalent, should be placed on subgrade soils prior to placement of base rock.

In some instances, it may be preferable to use Special Treated Base (STB) in combination with over-excavation and increasing the thickness of the rock section. GeoPacific should be consulted for additional recommendations regarding use of STB in wet weather pavement sections if it is desired to pursue this alternative. Cement treatment of the subgrade may also be considered instead of over-excavation. For planning purposes, we anticipate that treatment of the onsite soils would involve mixing cement powder to approximately 6 percent cement content and a mixing depth on the order of 12 to 18 inches.

With implementation of the above recommendations, it is our opinion that the resulting pavement section will provide equivalent or greater structural strength than the dry weather pavement section currently planned. However, it should be noted that construction in wet weather is risky and the performance of pavement subgrades depend on a number of factors including the weather conditions, the contractor's methods, and the amount of traffic the road is subjected to. There is a potential that soft spots may develop even with implementation of the wet weather provisions recommended in this letter. If soft spots in the subgrade are identified during roadway excavation, or develop prior to paving, the soft spots should be over-excavated and backfilled with additional crushed rock.

During subgrade excavation, care should be taken to avoid disturbing the subgrade soils. Removals should be performed using an excavator with a smooth-bladed bucket. Truck traffic should be limited until an adequate working surface has been established. We suggest that the crushed rock be spread using bulldozer equipment rather than dump trucks, to reduce the amount of traffic and potential disturbance of subgrade soils.

Care should be taken to avoid over-compaction of the base course materials, which could create pumping, unstable subgrade soil conditions. Heavy and/or vibratory compaction efforts should be applied with caution. Following placement and compaction of the crushed rock to project specifications (95 percent of Modified Proctor), a finish proof-roll should be performed before paving.

The above recommendations are subject to field verification. GeoPacific should be on-site during construction to verify subgrade strength and to take density tests on the engineered fill, base rock and asphaltic pavement materials.

7.0 SEISMIC DESIGN

The Oregon Department of Geology and Mineral Industries (Dogami), Oregon HazVu: 2022 Statewide GeoHazards Viewer indicates that the site is in an area where severe ground shaking is anticipated during an earthquake. Structures should be designed to resist earthquake loading in accordance with the methodology described in the 2018 International Building Code (IBC) with applicable Oregon Structural Specialty Code (OSSC) revisions (current 2020). We recommend Site Class D be used for design as defined in ASCE 7, Chapter 20, Table 20.3-1. Design values determined for the site using the ATC (Applied Technology Council) *ASCE7-16 Hazards by Location online Tool* website are summarized in Table 2.

Table 2. Recommended Earthquake Ground Motion Parameters (ATC 2022)

Parameter	Value
Location (Lat, Long), degrees	45.527, -123.106
Mapped Spectral Acceleration Values (MCE):	
Peak Ground Acceleration PGA_M	0.502
Short Period, S_s	0.922 g
1.0 Sec Period, S_1	0.453 g
Soil Factors for Site Class D:	
F_a	1.131
F_v	*1.847
$SD_s = 2/3 \times F_a \times S_s$	0.695 g
$SD_1 = 2/3 \times F_v \times S_1$	*0.558 g
Residential Seismic Design Category	D

* The F_v value reported in the above table is a straight-line interpolation of mapped spectral response acceleration at 1-second period, S_1 per Table 1613.2.3(2) of OSSC 2019 with the assumption that Exception 2 of ASCE 7-16 Chapter 11.4.8 is met. SD_1 is based on the F_v value. The structural engineer should evaluate exception 2 and determine whether or not the exception is met. If Exception 2 is not met, and the long-period site coefficient (F_v) is required for design, GeoPacific Engineering can be consulted to provide a site-specific procedure as per ASCE 7-16, Chapter 21.

7.1 Soil Liquefaction

The Oregon Department of Geology and Mineral Industries (DOGAMI), Oregon HazVu: 2022 Statewide GeoHazards Viewer indicates that the site is in an area considered to be at *low* risk for soil liquefaction during an earthquake. Soil liquefaction is a phenomenon wherein saturated soil deposits temporarily lose strength and behave as a liquid in response to ground shaking caused by strong earthquakes. Soil liquefaction is generally limited to loose sands and granular soils located below the water table, and fine-grained soils with a plasticity index less than 15. The upper 10 feet of the site was observed to be underlain by stiff, low plasticity, SILT located above the static water

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table. Based upon the results of our study, it is our opinion that the risk of soil liquefaction in the upper 10 feet of the ground surface during a seismic event at the subject site should be considered to be low.

8.0 UNCERTAINTIES AND LIMITATIONS

We have prepared this report for the owner and their consultants for use in design of this project only. This report should be provided in its entirety to prospective contractors for bidding and estimating purposes; however, the conclusions and interpretations presented in this report should not be construed as a warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations that may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, GeoPacifc should be notified for review of the recommendations of this report, and revision of such if necessary.

Sufficient geotechnical monitoring, testing and consultation should be provided during construction to confirm that the conditions encountered are consistent with those indicated by explorations. The checklist attached to this report outlines recommended geotechnical observations and testing for the project. Recommendations for design changes will be provided should conditions revealed during construction differ from those anticipated, and to verify that the geotechnical aspects of construction comply with the contract plans and specifications.

Within the limitations of scope, schedule and budget, GeoPacifc attempted to execute these services in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology at the time the report was prepared. No warranty, expressed or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

We appreciate this opportunity to be of service.

Sincerely,

GEOPACIFIC ENGINEERING, INC.



Beth K. Rapp, C.E.G.
Senior Engineering Geologist



James D. Imbrie, G.E., C.E.G.
Principal Geotechnical Engineer

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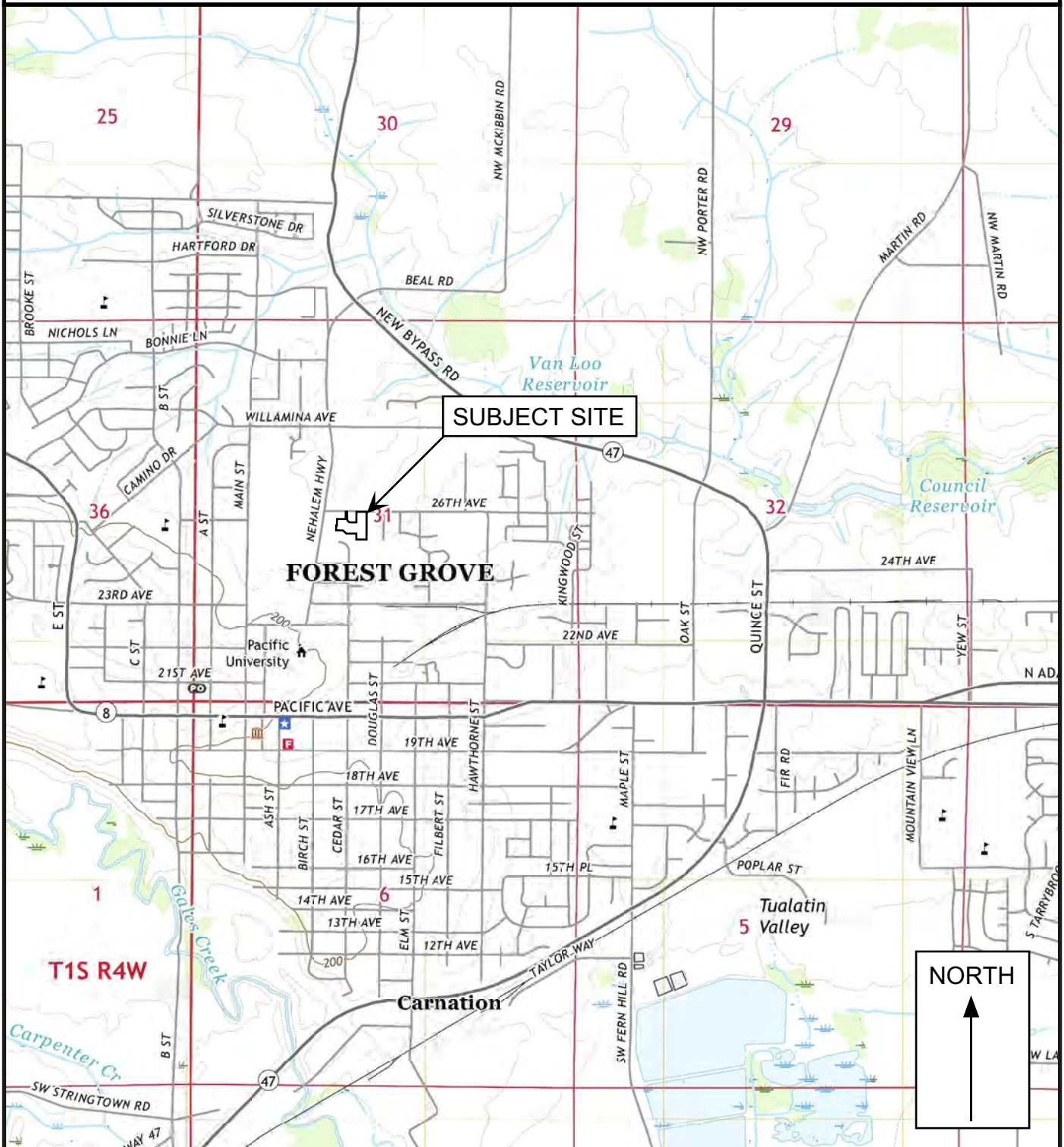
CHECKLIST OF RECOMMENDED GEOTECHNICAL TESTING AND OBSERVATION

Item No.	Procedure	Timing	By Whom	Done
1	Preconstruction meeting	Prior to beginning site work	Contractor, Developer, Civil and Geotechnical Engineers	
2	Fill removal from site or sorting and stockpiling	Prior to mass stripping	Soil Technician/ Geotechnical Engineer	
3	Stripping, aeration, and root-picking operations	During stripping	Soil Technician	
4	Compaction testing of engineered fill (95% of Standard Proctor)	During filling, tested every 2 vertical feet	Soil Technician	
5	Retaining Wall Keyway and Subbase	During Excavation	Soil Technician/ Geotechnical Engineer	
6	Retaining Wall Backfill and Geogrid Placement	During Construction	Soil Technician/ Geotechnical Engineer	
7	Compaction testing of trench backfill (95% of Standard Proctor)	During backfilling, tested every 4 vertical feet for every 200 linear feet	Soil Technician	
8	Street Subgrade Inspection (95% of Standard Proctor)	Prior to placing base course	Soil Technician	
9	Base course compaction (95% of Modified Proctor)	Prior to paving, tested every 200 linear feet	Soil Technician	
10	Asphalt Compaction (92% Rice Value)	During paving, tested every 100 linear feet	Soil Technician	
11	Final Geotechnical Engineer's Report	Completion of project	Geotechnical Engineer	



14835 SW 72nd Avenue
Portland, Oregon 97224
Tel: (503) 598-8445

VICINITY MAP



Legend

Approximate Scale 1 in = 2,000 feet

Date: 6/15/2022
Drawn by: EKR

Base map: U.S. Geological Survey 7.5 minute Topographic Map Series, Forest Grove, Oregon Quadrangle, 2020.

Project: West Grove Apartments
Forest Grove, Oregon

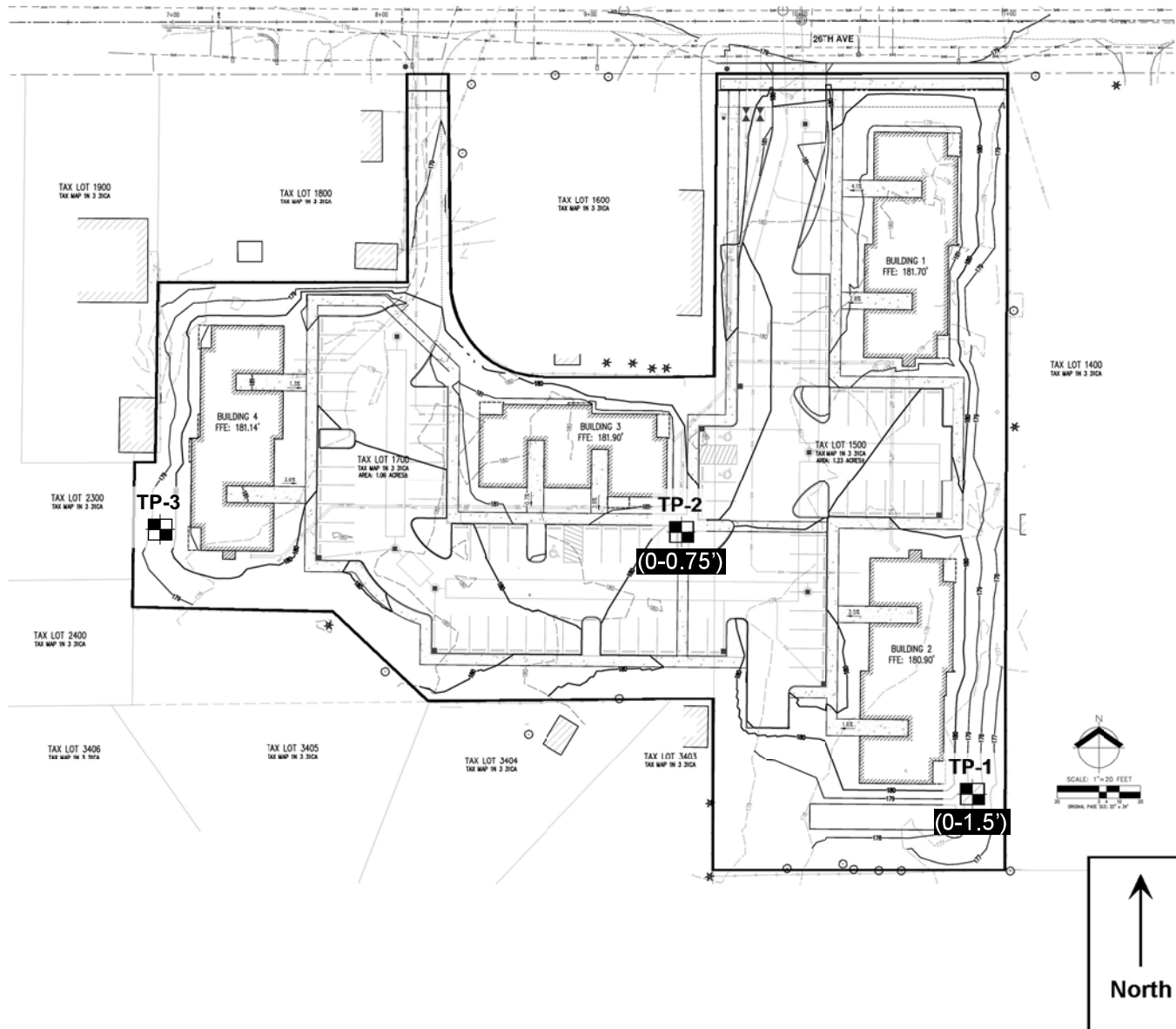
Project No. 22-6007

FIGURE 1



14835 SW 72nd Avenue
Portland, Oregon 97224
Tel: (503) 598-8445

SITE PLAN AND EXPLORATION LOCATIONS



Legend



Test Pit Designation and Approximate Location

(0-1.5')

Depth of Undocumented Fill Encountered

Date: 6/15/2022

Drawn by: EKR

0 80'

APPROXIMATE SCALE 1"=80'

Project: West Grove Apartments
Forest Grove, Oregon

Project No. 22-6007

FIGURE 2



14835 SW 72nd Avenue
Portland, Oregon 97224
Tel: (503) 598-8445

TEST PIT LOG

Project: West Grove Apartments
Forest Grove, Oregon

Project No. 22-6007

Test Pit No. **TP-1**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	1.0					Moderately to highly organic SILT (OL-ML), dark brown, fine roots throughout, loose, possibly thickened by organic fill placement, moist (Topsoil Horizon)
2	2.0					
3	2.0					Stiff, clayey SILT (ML), light brown, micaceous, trace roots to 4 feet, subtle orange and gray mottling, moist to wet in zones of seepage (Willamette Formation)
4	2.0					
5						
6						
7						Grades to SILT (ML)
8						
9						
10						
11						Test Pit Terminated at 10.5 Feet.
12						Note: Groundwater seepage encountered at 3.5 to 9 feet. Discharge visually estimated at 1 gallon per minute.

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/7/2022

Logged By: B. Rapp

Surface Elevation:



14835 SW 72nd Avenue
Portland, Oregon 97224
Tel: (503) 598-8445

TEST PIT LOG

Project: West Grove Apartments
Forest Grove, Oregon

Project No. 22-6007

Test Pit No. **TP-2**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	2.0					Moderately to highly organic SILT (OL-ML), dark brown, fine roots throughout, loose, trace fill within topsoil (brick fragments), moist (Topsoil Horizon)
2	1.5					
3	2.5					Stiff, clayey SILT (ML), light brown, micaceous, trace fine roots to 5 feet, subtle orange and gray mottling, manganese mineralization at 3.5 feet, moist to wet in zones of seepage (Willamette Formation)
4	2.5					
5						Grades to SILT (ML), minor sidewall caving below 5 feet.
6						
7						
8						
9						
10						Test Pit Terminated at 10 Feet.
11						Note: Groundwater seepage encountered at 3.5 to 6 feet. Discharge visually estimated at 1 gallon per minute.
12						

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/7/2022

Logged By: B. Rapp

Surface Elevation:



14835 SW 72nd Avenue
Portland, Oregon 97224
Tel: (503) 598-8445

TEST PIT LOG

Project: West Grove Apartments
Forest Grove, Oregon

Project No. 22-6007

Test Pit No. **TP-3**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1	1.5					Moderately organic SILT (OL-ML), dark brown, fine roots throughout, loose, moist (Topsoil Horizon)
2	1.5					
3	2.0					Stiff, clayey SILT (ML), light brown, micaceous, subtle to strong orange and gray mottling, trace black staining, moist to wet in zones of seepage (Willamette Formation)
4	2.5					
5						Grades to SILT (ML)
6						
7						
8						
9						
10						Test Pit Terminated at 9.5 Feet.
11						Note: Groundwater seepage encountered at 3 to 6 feet. Discharge visually estimated at 1/2 to 1 gallon per minute.
12						

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 3/7/2022

Logged By: B. Rapp

Surface Elevation:



Exhibit G: Preliminary Stormwater Report

West Grove Apartments Forest Grove, Oregon

Preliminary Stormwater Report

Date:	July 2022
Client:	Creekwood Homes, Inc. PO Box 1785 North Plains, OR 97133
Engineering Contact:	Darko Simic, PE DarkoS@aks-eng.com
Engineering Firm:	AKS Engineering & Forestry, LLC
AKS Job Number:	9240



12965 SW Herman Road, Suite 100
Tualatin, OR 97062
P: (503) 563-6151
www.aks-eng.com

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Appendices

APPENDIX A	HydroCAD Reports for Pre-Developed Condition Storm Events
APPENDIX B	HydroCAD Reports for Post-Developed Condition Storm Events
APPENDIX C	Stormwater Quality Calculation
APPENDIX D	USDA-NRCS Soil Resource Report
APPENDIX E	TR55 Runoff Curve Numbers

Preliminary Stormwater Report

WEST GROVE APARTMENTS FOREST GROVE, OREGON

1.0 Purpose of Report

This report analyzes the effects of the proposed development with respect to the existing and proposed stormwater conveyance system. Evaluation of the stormwater system includes documentation of regulatory criteria, methodology, and informational sources used to design/evaluate the stormwater system. The results of the preliminary hydraulic analysis are presented.

2.0 Project Location/Description

The proposed West Grove multi-family development will be located south of the 26th Avenue and Bourbon Street intersection in Forest Grove, Oregon. Subject site consists of two parcels (Washington County Tax Lot 1500 and 1700, 1N 3 31CA).

Site improvements will include construction of 4 multi-family residential buildings with associated management/mail building, parking lot area, underground utilities, and a Bocce ball court. Additionally, 26th Avenue frontage improvements will be developed along the subject site frontage.

The subject site is located south of 26th Avenue and Bourbon Street with site stormwater runoff draining into the existing 26th Avenue stormwater system. Onsite stormwater treatment and detention will be provided by private storm filter catch basins and an underground detention facility. Due to existing topography and developed site grade, stormwater runoff from the 26th Avenue frontage improvements and a portion of the site entrance road will be addressed via fee-in-lieu.

3.0 Regulatory Design Criteria

3.1 STORMWATER QUANTITY

Per *Clean Water Services (CWS) Design and Construction Standards Manual for Sanitary Sewer and Surface Water Management (R&O 19-05)*, Section 4.02, *Quantity Control Requirements for Conveyance Capacity*; on-site detention for conveyance capacity is required when any of the following conditions exist:

1. *There is an identified downstream deficiency and the District or City determines that detention rather than conveyance system enlargement is the more effective solution.*
2. *There is an identified regional detention site within the boundary of the development.*
3. *Water quantity facilities are required by District-adopted watershed management plans or adopted subbasin master plans.*

The proposed project has elected to provide stormwater detention up to the 25-year storm event, utilizing an on-site detention system designed per CWS standards.

3.2 STORMWATER HYDROMODIFICATION

Per (CWS) *Design and Construction Standards (R&O 19-05)*, Section 4.03, *Hydromodification Approach Requirements*; stormwater hydromodification is required unless the project meets any of the following criteria:

1. *The project results in the addition and/or modification of less than 12,000 square feet of impervious surface.*
2. *The project is located in an area with a District approved subbasin strategy with an identified regional stormwater management approach for hydromodification.*

Per listed criteria in the Hydromodification Approach Project Category Table 4-2, the project is identified as Category 2. Therefore, the project will meet CWS hydromodification requirements by providing peak-flow matching detention, using the design criteria established within CWS Section 4.08.6, and a fee-in-lieu for the 26th Avenue improvements.

3.3 STORMWATER QUALITY

Stormwater quality management for this project will be provided by Contech StormFilter catch basins, based on CWS standards for proprietary treatment requirements and flow rates. Due to existing street topography, the 26th Avenue frontage improvements and a portion of the on-site entrance road will address the required stormwater quality requirements (per CWS Section 4.04.2) with a fee-in-lieu payment.

4.0 Design Methodology

The Santa Barbara Urban Hydrograph (SBUH) Method was used to analyze stormwater runoff from the site. This method utilizes the SCS Type 1A 24-hour design storm. HydroCAD 10.0 computer software aided in the analysis. Representative CN numbers were obtained from the USDA-NCRS Technical Release 55 (TR-55) and are included in Appendix E.

5.0 Design Parameters

5.1 DESIGN STORMS

Per CWS requirements, the following rainfall intensities and durations were used in analyzing the existing and proposed hydrologic site conditions:

Table 5-1: Rainfall Intensities		
Recurrence Interval (Years)	Storm Period (hours)	Total Precipitation Depth (Inches)
WQ	4	0.36
2	24	2.50
5	24	3.10
10	24	3.45
25	24	3.90

5.2 PRE-DEVELOPED SITE CONDITIONS

5.2.1 Site Topography

Existing on-site grades vary from $\pm 1\%$ to $\pm 5\%$, with a high point of ± 185 feet located within the southeast portion of tax lot 1700 and a low point of ± 181 feet at the southeast property corner of tax lot 1500. Tax lot 1500 slopes from west to east and tax lot 1700 slopes mostly east to west. The existing

road grade along 26th Avenue has a high point approximately located at the intersection of 26th Avenue and Bourbon Street.

5.2.2 Land Use

The existing site consists of single-family residences with grass, gravel driveways, storage structures, and several dozen trees.

5.3 SOIL TYPE

The soils beneath the project site and the associated drainage basins are classified as silt loams according to the USDA Soil Survey for Washington County. The following table outlines the Hydrologic Soil Group rating for the soil type:

Table 5-2: Hydrologic Soil Group Ratings		
NRCS Map Unit Identification	NRCS Soil Classification	Hydrologic Soil Group Rating
45A	Woodburn Silt Loam	C

5.4 POST-DEVELOPED SITE CONDITIONS

5.4.1 Site Topography

The onsite slopes will be modified with cuts, fills, and walls to accommodate the construction of the proposed residential buildings and parking lot. The proposed site grading will not alter existing site drainage paths.

5.4.2 Land Use

The site land-use will consist of multi-family residential buildings, with associated parking lot, sidewalk, and amenities. Site frontage improvements will consist of street widening improvements with the associated sidewalk.

5.4.3 Post-Developed Input Parameters

Appendix A and B provide the HydroCAD reports that were generated for the analyzed storm events with respect to the drainage basins contributing to the site. These reports include all the input parameters (e.g., impervious/pervious areas, time of concentration, etc.) used to model the site hydrology.

5.4.4 Description of Off-Site Contributing Basins

No major off-site contributory basins drain onto the subject site proposed impervious improvements or storm system.

6.0 Stormwater Analyses

6.1 PROPOSED STORMWATER CONDUIT SIZING

The proposed on-site and off-site storm system pipes will be analyzed and sized during final engineering, using Manning's equation to convey the peak flows from the 25-year storm event.

6.2 PROPOSED STORMWATER QUALITY MANAGEMENT

The proposed project will provide stormwater treatment for impervious surface runoff generated from the site development, via CWS approved Contech StormFilter catch basins. The on-site project encompasses the entire privately owned portion of proposed development. Therefore, this project meets CWS Stormwater Management Approach Sizing requirement (Section 4.08) by providing

stormwater treatment to all impervious surfaces to be privately owned. The Contech StormFilter catch basins have been sized per CWS standard for treatment areas and flows rates. The following table below summarizes On-site Basin treatment areas and proposed facilities.

Table 6-1: On-site Basin Impervious Areas and WQ Facility Sizing					
Impervious Area Draining to Structure (sq. ft)	Water Quality Flow (cfs)	StormFilter Media Type	StormFilter Height (inches)	Maximum Allowable Flow Rate (cfs)	Required Number of Filters
6,378	0.013	ZPG	18	0.033	1
6,933	0.014	ZPG	18	0.033	1
8,500	0.018	ZPG	18	0.033	1
9,277	0.019	ZPG	18	0.033	1
5,546	0.012	ZPG	18	0.033	1
4,724	0.010	ZPG	18	0.033	1
12,970	0.027	ZPG	18	0.033	1

A portion of the site entrance road of the project site is situated at grades and elevations which will not allow stormwater runoff to be directed and discharged into the proposed StormFilter catch basins. Additionally, the project proposes not to treat the small amount of 26th Avenue proposed improvements as it would place a burden on city maintenance for a public facility designed for an insignificant amount of impervious area. Therefore, a fee-in-lieu payment is proposed to address the untreated runoff created by 26th Avenue and site entrance improvements.

6.3 STORMWATER HYDROMODIFICATION MANAGEMENT

The proposed site will generate approximately 55,768 square feet of impervious area, thus classifying as a Medium Project. Per CWS Hydromod Planning Tool, the subject site is located within a developed region, discharging into the existing storm drainage system. Based on these parameters and CWS Table 4-2, the subject site is identified as a Category 2 Hydromodification approach.

Per CWS Category 2, the subject basin will provide peak-flow matching detention, using design criteria listed in CWS Section 4.08.6. Specifically, the subject site post-developed 2, 5, and 10-year storm event runoff flows will not exceed the site pre-developed 50% of 2, 5, and 10-year storm event peak runoff flows.

The proposed project will provide hydromodification management by utilizing an underground detention chamber system, located within the entirety of the parking lot, constructed to CWS standards.

The following table outlines results of the proposed project which will limit the post-development peak flows to less than the allowable pre-development peak flows for each storm event, as outlined within CWS stormwater detention and hydromodification management requirements.

Table 6-2: Total Pre and Post Developed Flows			
Recurrence Interval (Years)	Peak Pre-Development Flows (cfs)	Peak Post-Development Flows (cfs)	Peak Flow Increase or (Decrease) – (cfs)
2	*0.13	0.13	(0.0)
5	0.48	0.28	(0.20)
10	0.61	0.44	(0.18)

*Peak pre-developed flow for 2-year storm event is calculated by subtracting 50% of the subject site (Basins 10S and 20S) peak flow from the total pre-developed peak flow.

Approximately 5,050 square feet of impervious area from the frontage improvements and a portion of the on-site entrance discharge into the existing storm drainage system. To address the hydromodification requirements, the site underground detention facility will over-detain the on-site runoff flows.

6.4 STORMWATER QUANTITY MANAGEMENT

The proposed project will provide stormwater quantity management by utilizing storm chambers, designed per CWS standards. The following table outlines the results of the detention facility outflow which limits the post-development peak flows to equal to or less than the allowable pre-developed flows.

Table 6-3: Total Pre and Post Developed Flows			
Recurrence Interval (Years)	Peak Pre-Development Flows (cfs)	Peak Post-Development Flows (cfs)	Peak Flow Increase or (Decrease) – (cfs)
25	0.80	0.66	(0.14)

The flow control detention chamber system has been designed per CWS requirements to have 1-foot of freeboard during the 25-year storm event and detain the post-developed flows to equal or less than pre-developed flows.

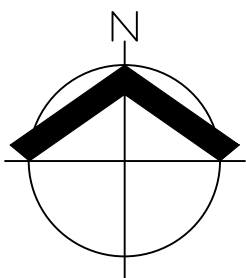
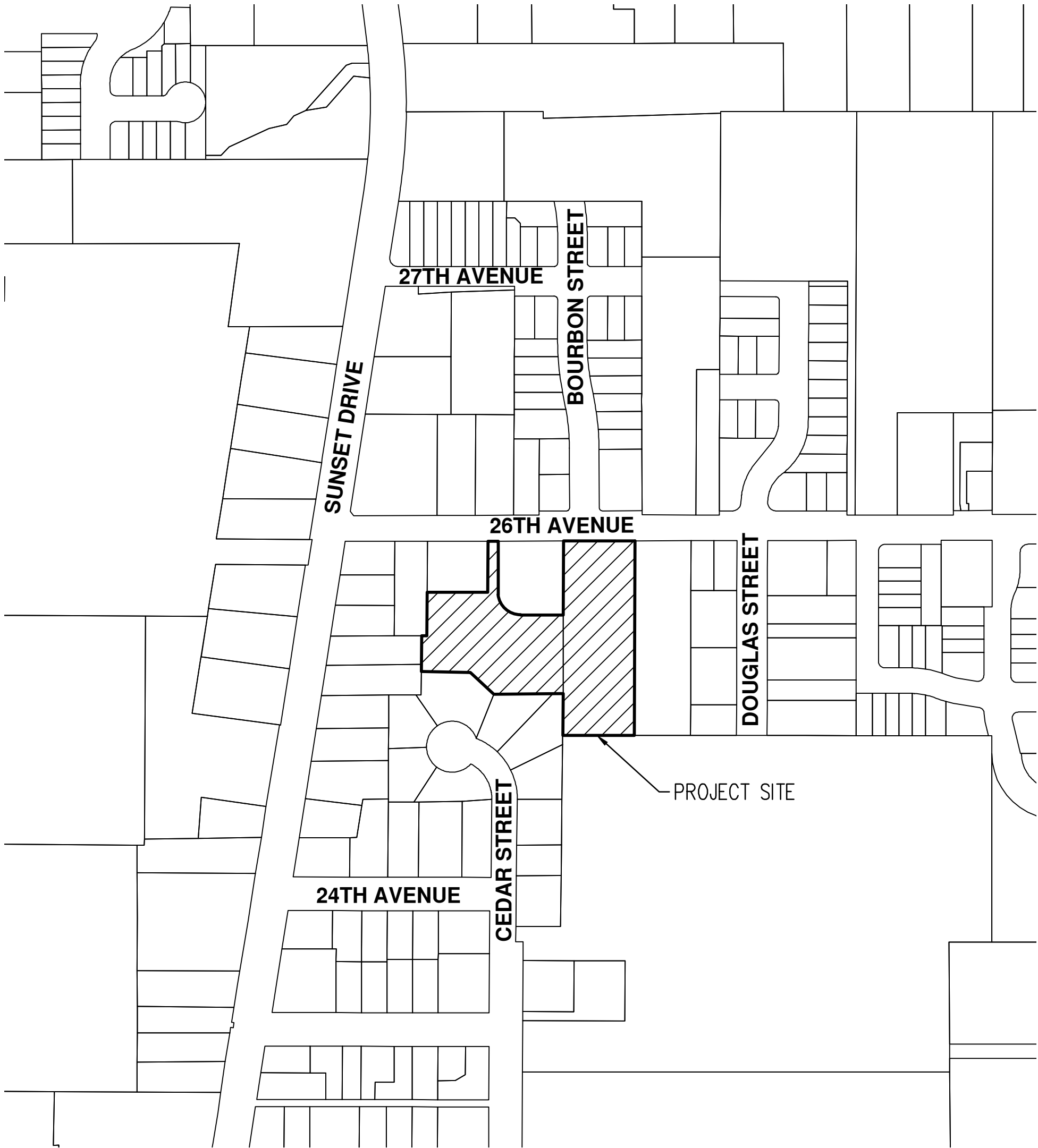
6.5 DOWNSTREAM ANALYSIS

After treatment and detention, stormwater runoff from the project site will be conveyed into the existing 20" storm main located along 26th Avenue. Per CWS standards, the proposed project will detain the on-site basin post-developed 25-year peak flows to the allowable pre-developed 25-year peak flows.

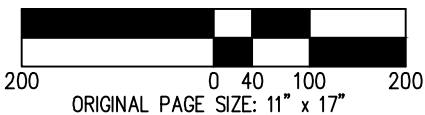
Stormwater runoff at the 26th Avenue frontage improvements travels east along 26th Avenue and conveyed into Stites Park via the existing stormwater system.

A visual investigation of the downstream storm system for a quarter mile will be performed during final engineering.

Figure 1: Site Vicinity Map



SCALE: 1"= 200 FEET

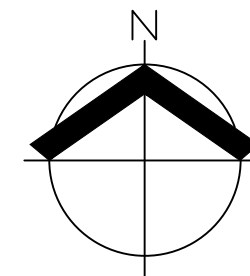
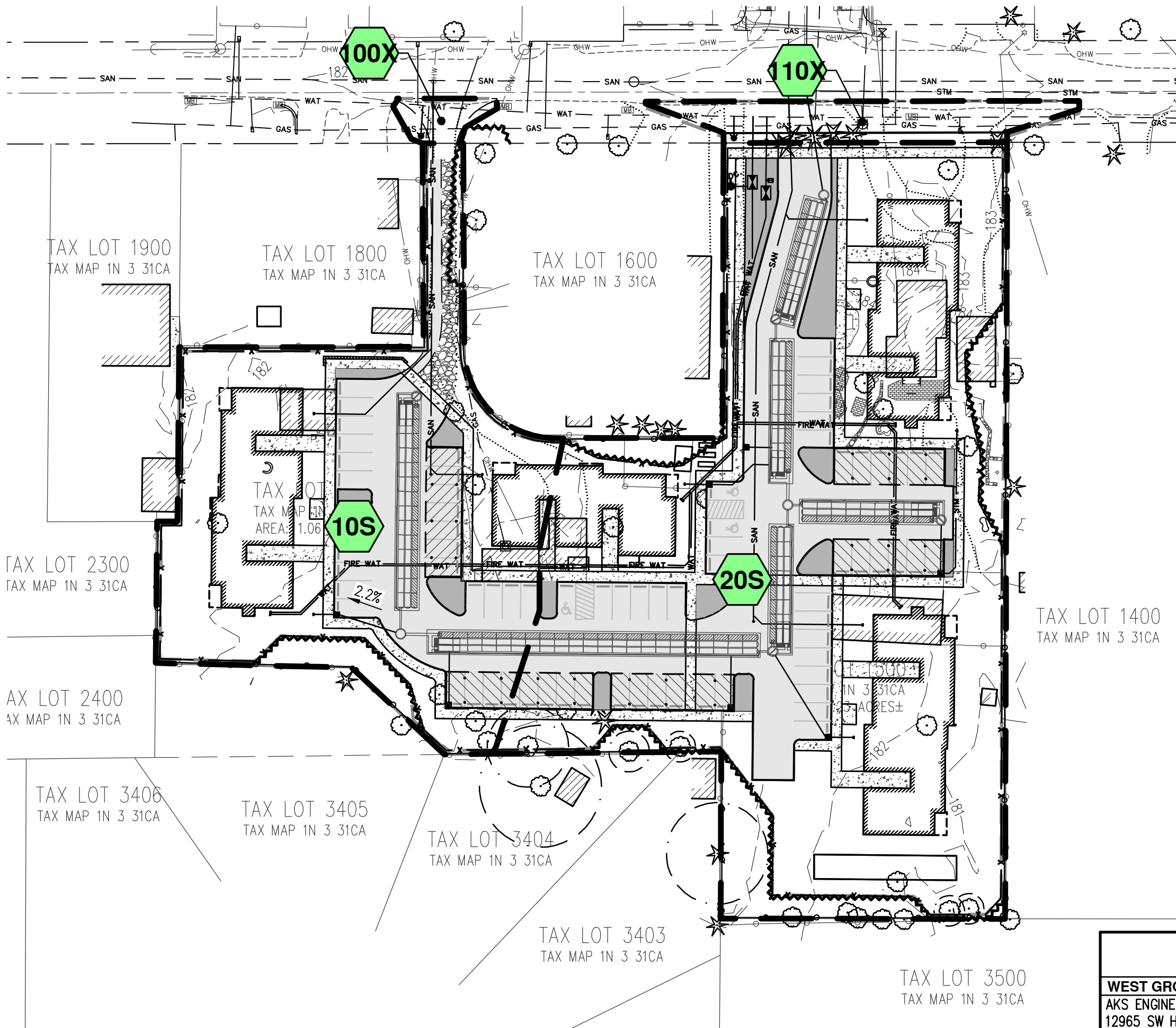


DATE: 7/1/2022

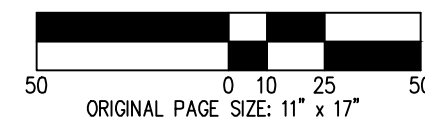
VICINITY MAP		FIGURE
WEST GROVE APARTMENTS		1
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: JSM CHKD: DS AKS JOB: 9240



Figure 2: Pre-Developed Basin Delineation



SCALE: 1" = 50 FEET



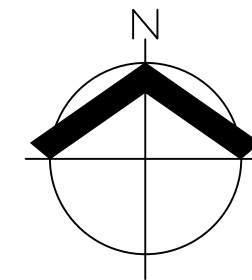
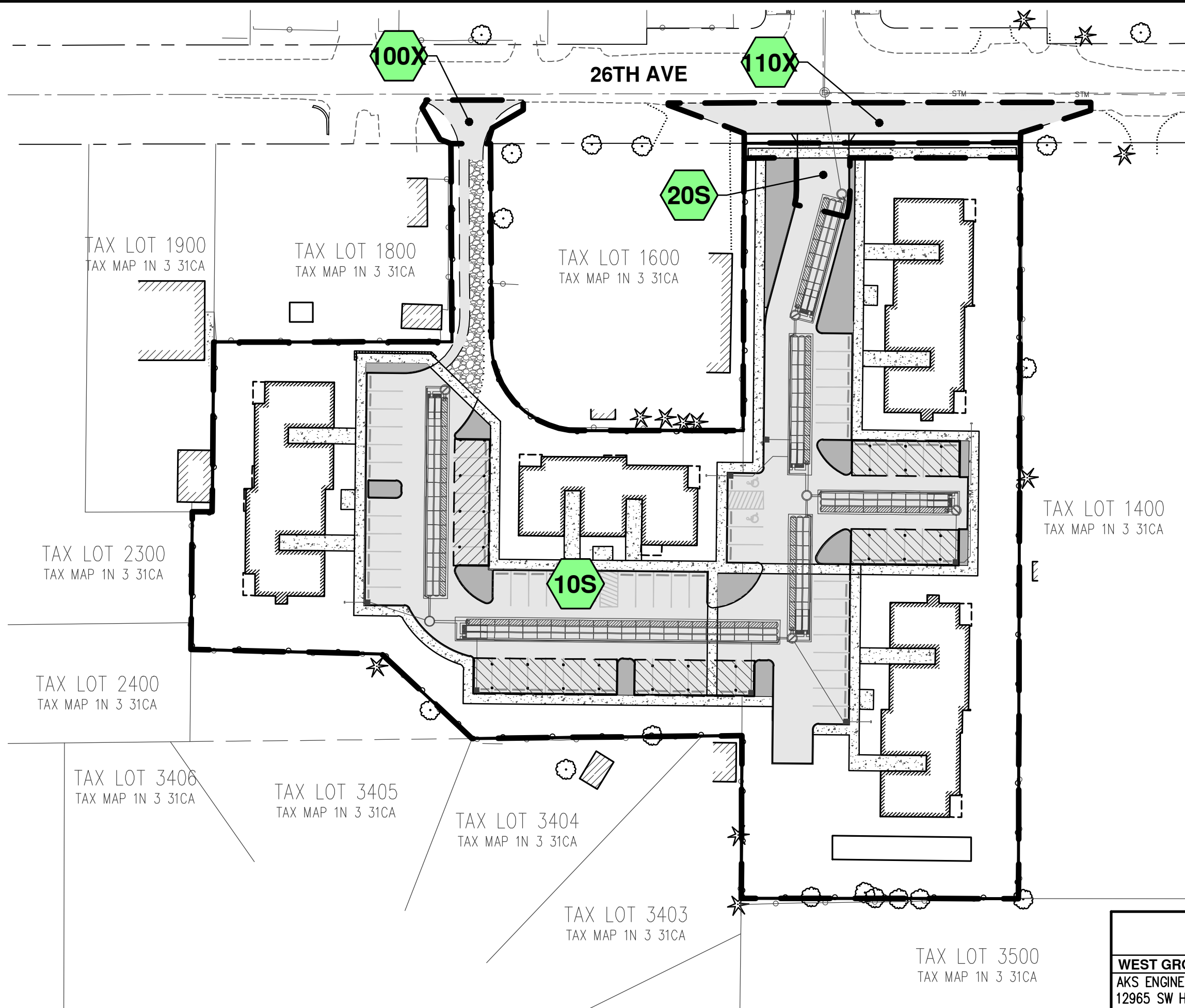
DATE: 7/1/2022

PRE-DEVELOPED BASIN DELINEATION		FIGURE
WEST GROVE APARTMENTS		2
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: JSM CHKD: DS AKS JOB: 9240

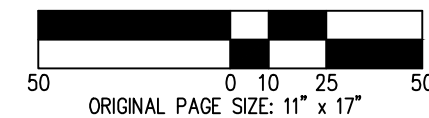


Figure 3: Post-Developed Basin Delineation

DWG: 9240 - POST-DEVELOPED | LAYOUT1



SCALE: 1"= 50 FEET



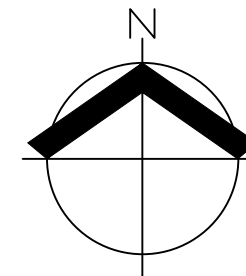
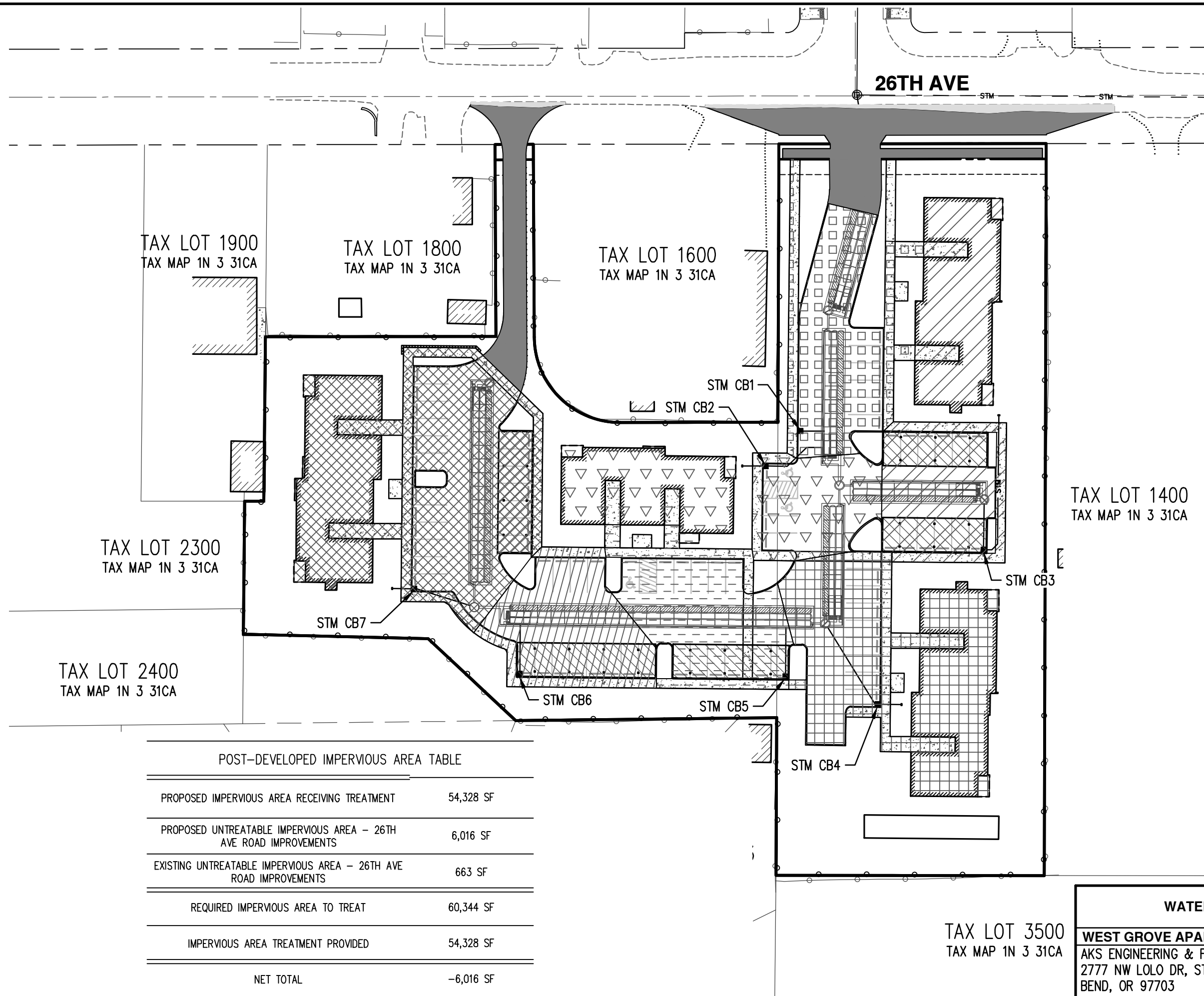
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PRE-DEVELOPED BASIN DELINEATION		FIGURE
WEST GROVE APARTMENTS		3
AKS ENGINEERING & FORESTRY, LLC 12965 SW HERMAN RD, STE 100 TUALATIN, OR 97062 503.563.6151 WWW.AKS-ENG.COM		DRWN: JSM CHKD: DS AKS JOB: 9240



Figure 4: Stormwater Treatment Map

DWG: 9240 - TREATMENT MAP | LAYOUT



SCALE: 1" = 50 FEET
50 0 10 25 50
ORIGINAL PAGE SIZE: 22" x 34"

- STM FILTER CB1 - 6,378 SF
- STM FILTER CB2 - 6,933 SF
- STM FILTER CB3 - 8,500 SF
- STM FILTER CB4 - 9,277 SF
- STM FILTER CB5 - 5,546 SF
- STM FILTER CB6 - 4,724 SF
- STM FILTER CB7 - 12,970 SF
- PROPOSED IMPERVIOUS AREA UNABLE TO BE TREATED - 6,016 SF
- EXISTING IMPERVIOUS AREA UNABLE TO BE TREATED - 663 SF

POST-DEVELOPED IMPERVIOUS AREA TABLE

PROPOSED IMPERVIOUS AREA RECEIVING TREATMENT	54,328 SF
PROPOSED UNTREATABLE IMPERVIOUS AREA - 26TH AVE ROAD IMPROVEMENTS	6,016 SF
EXISTING UNTREATABLE IMPERVIOUS AREA - 26TH AVE ROAD IMPROVEMENTS	663 SF
REQUIRED IMPERVIOUS AREA TO TREAT	60,344 SF
IMPERVIOUS AREA TREATMENT PROVIDED	54,328 SF
NET TOTAL	-6,016 SF

TAX LOT 3500
TAX MAP 1N 3 31CA

DATE: 7/1/2022

WATER QUALITY TREATMENT MAP

WEST GROVE APARTMENTS

AKS ENGINEERING & FORESTRY, LLC
2777 NW LOLO DR, STE 150
BEND, OR 97703
541.317.8429 WWW.AKS-ENG.COM

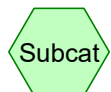
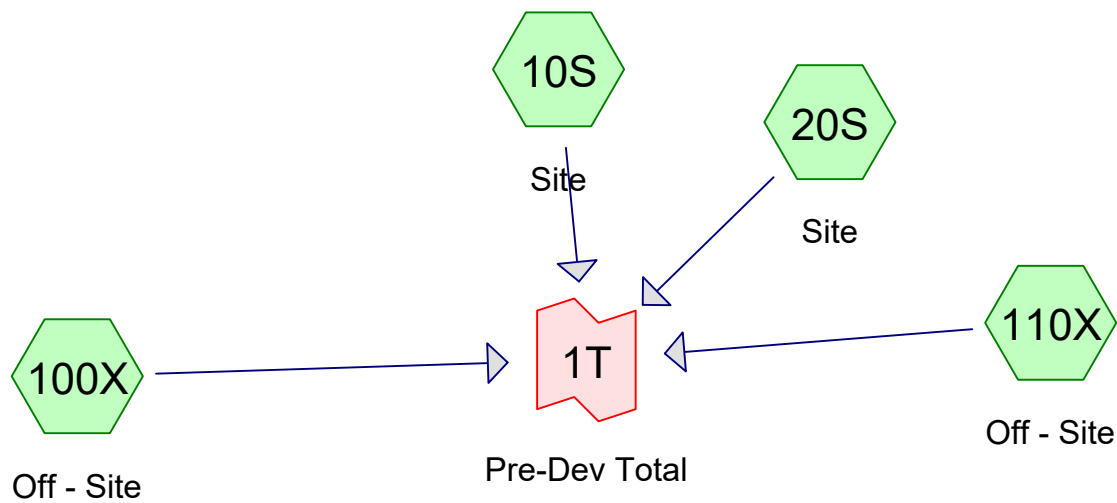
AKS

FIGURE

4

DRWN: JSM
CHKD: DS
AKS JOB:
9240

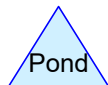
**Appendix A: HydroCAD Reports for
Pre-Developed Condition Storm Events
(25-Year Storm Event Analysis)
(10-Year Storm Event Summary)
(5-Year Storm Event Summary)
(2-Year Storm Event Summary)**



Subcat



Reach



Pond



Link

Routing Diagram for 9240 - Pre-Dev

Prepared by AKS Engineering and Forestry, Printed 7/1/2022
HydroCAD® 10.00-22 s/n 05096 © 2018 HydroCAD Software Solutions LLC

9240 - Pre-Dev

Prepared by AKS Engineering and Forestry

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Printed 7/1/2022

Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
76,483	79	50-75% Grass cover, Fair, HSG C (10S, 20S)
2,647	75	Concrete (10S, 20S)
2,558	75	Dirt roads, HSG C (100X, 110X)
16,057	75	Gravel surface, HSG C (10S, 20S, 100X, 110X)
666	75	Paved roads, HSG C (100X, 110X)
5,338	75	Unconnected roofs, HSG C (10S, 20S)
103,749	78	TOTAL AREA

9240 - Pre-Dev*Type IA 24-hr 25-YEAR Rainfall=3.90"*

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link 1T: Pre-Dev Total

Inflow=0.79 cfs 15,591 cf

Primary=0.79 cfs 15,591 cf

Subcatchment10S: Site

Runoff Area=31,885 sf 0.00% Impervious Runoff Depth>1.86"

Flow Length=150' Slope=0.0130 '/' Tc=18.2 min CN=79/0 Runoff=0.26 cfs 4,954 cf

Subcatchment20S: Site

Runoff Area=67,548 sf 0.00% Impervious Runoff Depth>1.79"

Flow Length=150' Slope=0.0110 '/' Tc=19.5 min CN=78/0 Runoff=0.50 cfs 10,066 cf

Subcatchment100X: Off - Site

Runoff Area=817 sf 0.00% Impervious Runoff Depth>1.59"

Tc=5.0 min CN=75/0 Runoff=0.01 cfs 108 cf

Subcatchment110X: Off - Site

Runoff Area=3,499 sf 0.00% Impervious Runoff Depth>1.59"

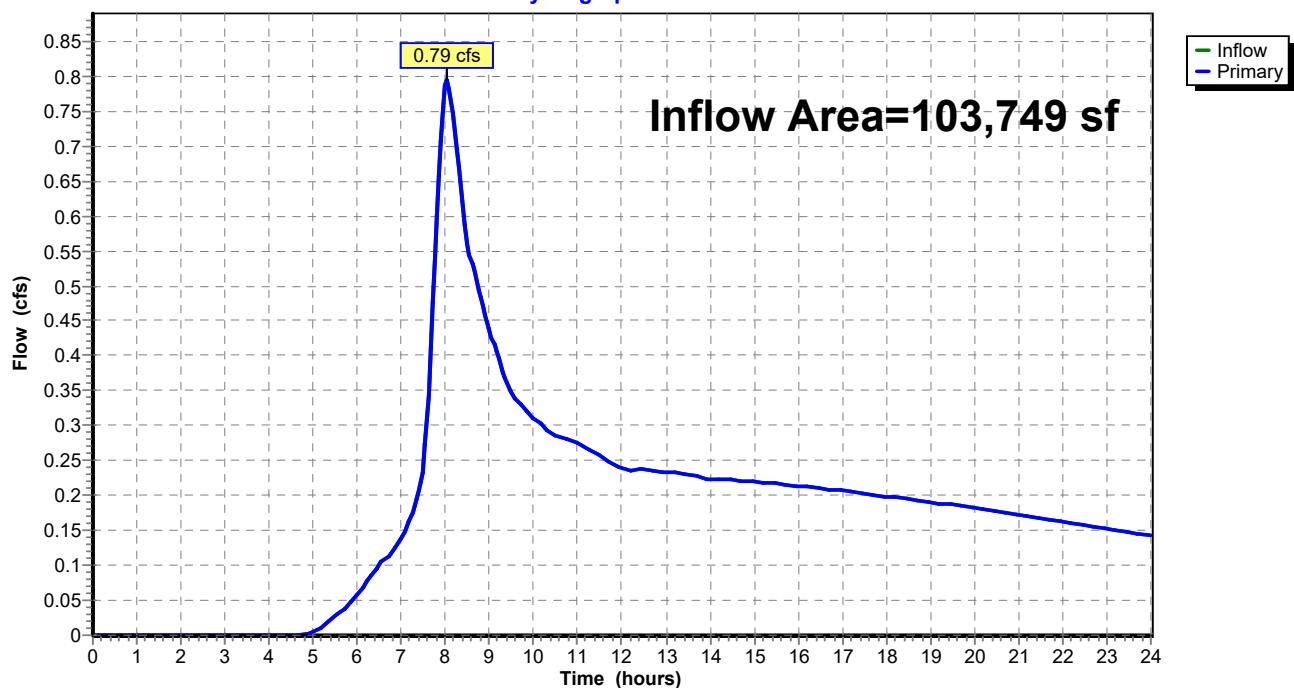
Tc=5.0 min CN=75/0 Runoff=0.03 cfs 463 cf

Total Runoff Area = 103,749 sf Runoff Volume = 15,591 cf Average Runoff Depth = 1.80"**100.00% Pervious = 103,749 sf 0.00% Impervious = 0 sf**

Summary for Link 1T: Pre-Dev Total

Inflow Area = 103,749 sf, 0.00% Impervious, Inflow Depth > 1.80" for 25-YEAR event
Inflow = 0.79 cfs @ 8.03 hrs, Volume= 15,591 cf
Primary = 0.79 cfs @ 8.03 hrs, Volume= 15,591 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 1T: Pre-Dev Total**Hydrograph**

Summary for Subcatchment 10S: Site

Runoff = 0.26 cfs @ 8.04 hrs, Volume= 4,954 cf, Depth> 1.86"

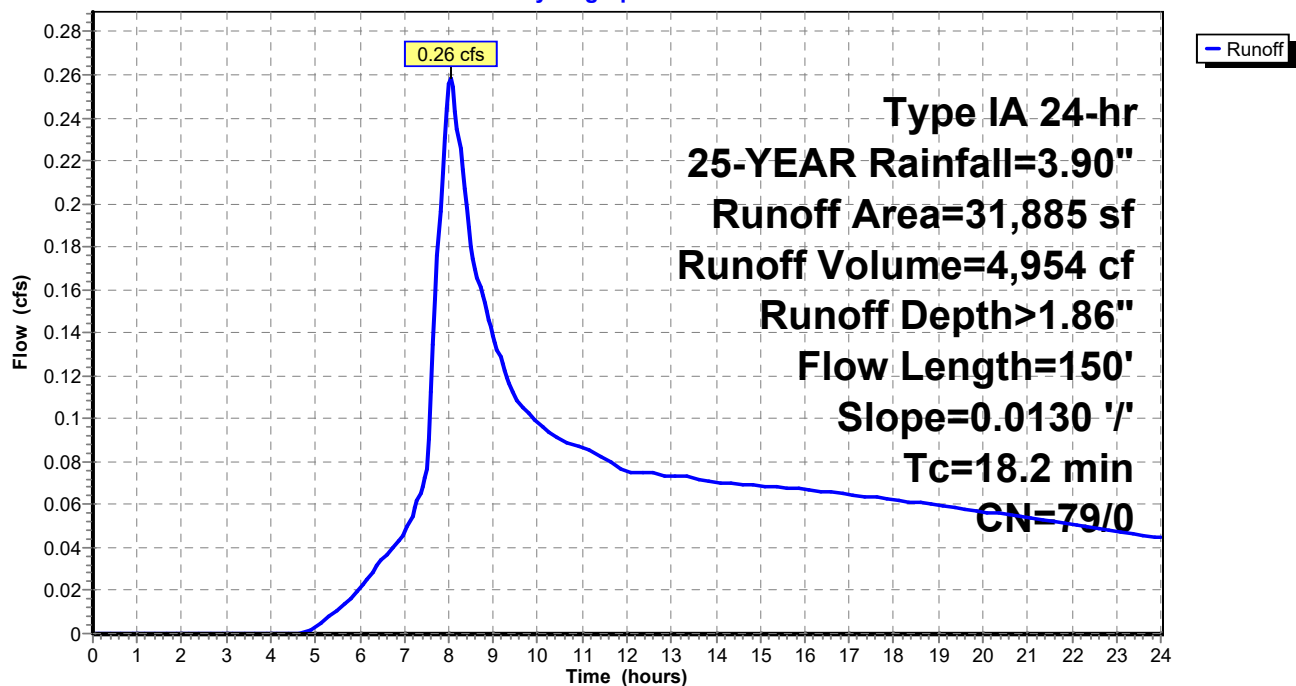
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-YEAR Rainfall=3.90"

	Area (sf)	CN	Description
*	1,468	75	Unconnected roofs, HSG C
*	1,995	75	Gravel surface, HSG C
*	475	75	Concrete
	27,947	79	50-75% Grass cover, Fair, HSG C
	31,885	79	Weighted Average
	31,885	79	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.2	150	0.0130	0.14		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"

Subcatchment 10S: Site

Hydrograph



Summary for Subcatchment 20S: Site

Runoff = 0.50 cfs @ 8.04 hrs, Volume= 10,066 cf, Depth> 1.79"

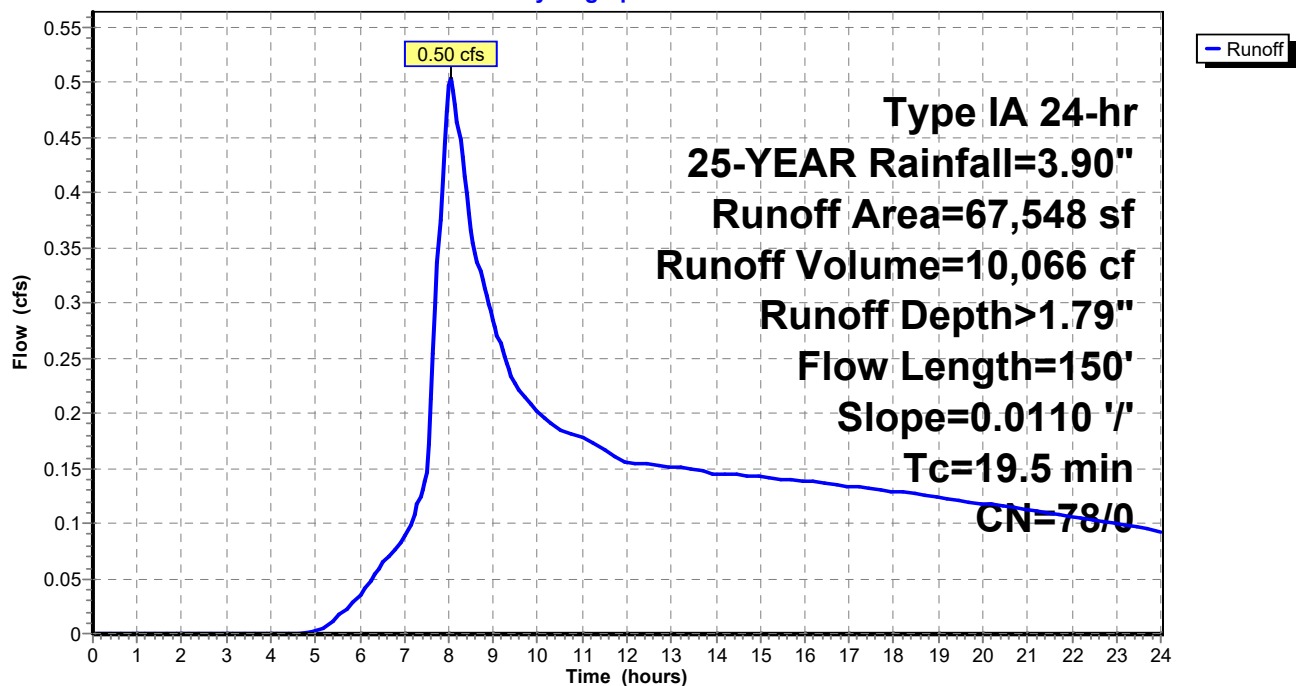
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-YEAR Rainfall=3.90"

	Area (sf)	CN	Description
*	3,870	75	Unconnected roofs, HSG C
*	12,970	75	Gravel surface, HSG C
*	2,172	75	Concrete
	48,536	79	50-75% Grass cover, Fair, HSG C
	67,548	78	Weighted Average
	67,548	78	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.5	150	0.0110	0.13		Sheet Flow, Grass: Short n= 0.150 P2= 2.50"

Subcatchment 20S: Site

Hydrograph



Summary for Subcatchment 100X: Off - Site

Runoff = 0.01 cfs @ 7.98 hrs, Volume= 108 cf, Depth> 1.59"

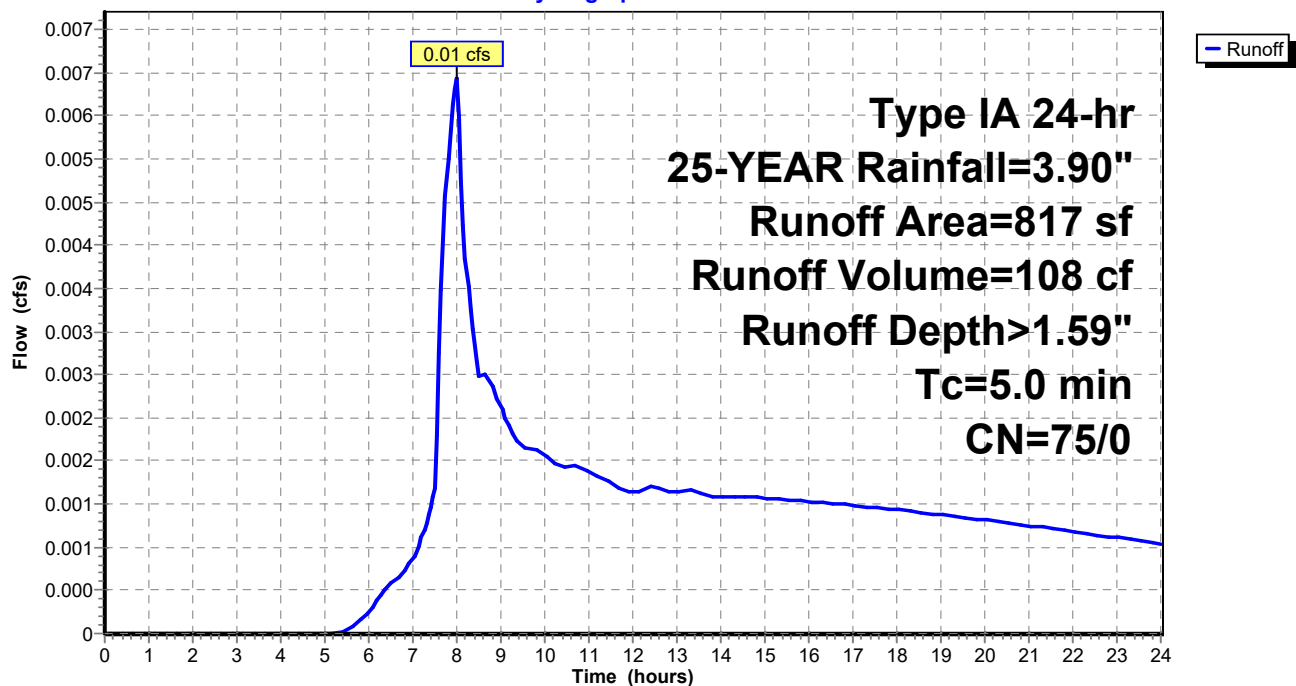
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-YEAR Rainfall=3.90"

Area (sf)	CN	Description
* 290	75	Gravel surface, HSG C
* 426	75	Dirt roads, HSG C
* 101	75	Paved roads, HSG C
817	75	Weighted Average
817	75	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 100X: Off - Site

Hydrograph



Summary for Subcatchment 110X: Off - Site

Runoff = 0.03 cfs @ 7.98 hrs, Volume= 463 cf, Depth> 1.59"

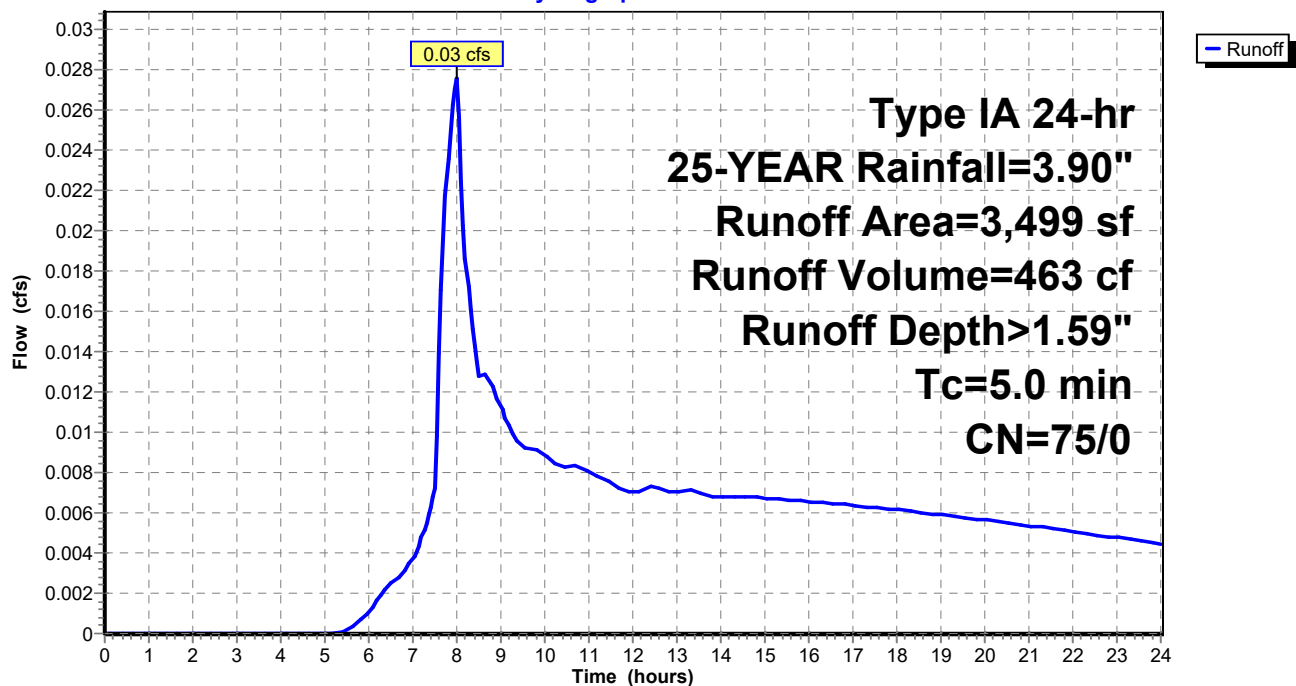
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-YEAR Rainfall=3.90"

Area (sf)	CN	Description
* 802	75	Gravel surface, HSG C
* 2,132	75	Dirt roads, HSG C
* 565	75	Paved roads, HSG C
3,499	75	Weighted Average
3,499	75	100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 110X: Off - Site

Hydrograph



9240 - Pre-Dev*Type IA 24-hr 10-YEAR Rainfall=3.45"*

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link 1T: Pre-Dev Total

Inflow=0.61 cfs 12,595 cf

Primary=0.61 cfs 12,595 cf

Subcatchment10S: Site

Runoff Area=31,885 sf 0.00% Impervious Runoff Depth>1.51"

Flow Length=150' Slope=0.0130 '/' Tc=18.2 min CN=79/0 Runoff=0.20 cfs 4,017 cf

Subcatchment20S: Site

Runoff Area=67,548 sf 0.00% Impervious Runoff Depth>1.44"

Flow Length=150' Slope=0.0110 '/' Tc=19.5 min CN=78/0 Runoff=0.39 cfs 8,124 cf

Subcatchment100X: Off - Site

Runoff Area=817 sf 0.00% Impervious Runoff Depth>1.26"

Tc=5.0 min CN=75/0 Runoff=0.00 cfs 86 cf

Subcatchment110X: Off - Site

Runoff Area=3,499 sf 0.00% Impervious Runoff Depth>1.26"

Tc=5.0 min CN=75/0 Runoff=0.02 cfs 368 cf

Total Runoff Area = 103,749 sf Runoff Volume = 12,595 cf Average Runoff Depth = 1.46"**100.00% Pervious = 103,749 sf 0.00% Impervious = 0 sf**

9240 - Pre-Dev*Type IA 24-hr 5-YEAR Rainfall=3.10"*

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link 1T: Pre-Dev Total

Inflow=0.48 cfs 10,365 cf

Primary=0.48 cfs 10,365 cf

Subcatchment10S: Site

Runoff Area=31,885 sf 0.00% Impervious Runoff Depth>1.25"

Flow Length=150' Slope=0.0130 '/' Tc=18.2 min CN=79/0 Runoff=0.16 cfs 3,318 cf

Subcatchment20S: Site

Runoff Area=67,548 sf 0.00% Impervious Runoff Depth>1.19"

Flow Length=150' Slope=0.0110 '/' Tc=19.5 min CN=78/0 Runoff=0.30 cfs 6,679 cf

Subcatchment100X: Off - Site

Runoff Area=817 sf 0.00% Impervious Runoff Depth>1.02"

Tc=5.0 min CN=75/0 Runoff=0.00 cfs 70 cf

Subcatchment110X: Off - Site

Runoff Area=3,499 sf 0.00% Impervious Runoff Depth>1.02"

Tc=5.0 min CN=75/0 Runoff=0.02 cfs 298 cf

Total Runoff Area = 103,749 sf Runoff Volume = 10,365 cf Average Runoff Depth = 1.20"**100.00% Pervious = 103,749 sf 0.00% Impervious = 0 sf**

9240 - Pre-Dev*Type IA 24-hr 2-YEAR Rainfall=2.50"*

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link 1T: Pre-Dev Total

Inflow=0.27 cfs 6,811 cf

Primary=0.27 cfs 6,811 cf

Subcatchment10S: Site

Runoff Area=31,885 sf 0.00% Impervious Runoff Depth>0.83"

Flow Length=150' Slope=0.0130 '/' Tc=18.2 min CN=79/0 Runoff=0.09 cfs 2,199 cf

Subcatchment20S: Site

Runoff Area=67,548 sf 0.00% Impervious Runoff Depth>0.78"

Flow Length=150' Slope=0.0110 '/' Tc=19.5 min CN=78/0 Runoff=0.17 cfs 4,378 cf

Subcatchment100X: Off - Site

Runoff Area=817 sf 0.00% Impervious Runoff Depth>0.65"

Tc=5.0 min CN=75/0 Runoff=0.00 cfs 44 cf

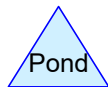
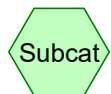
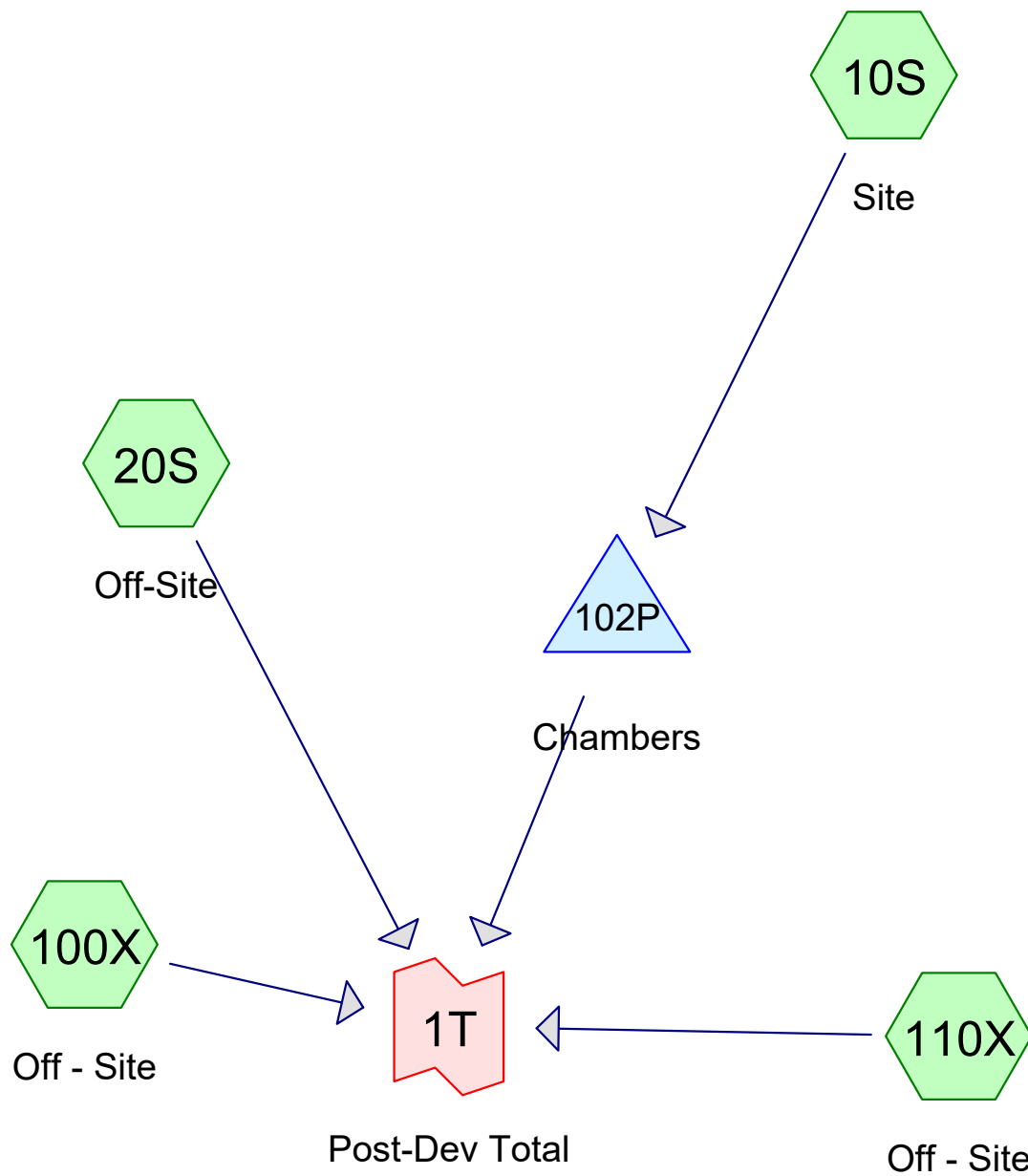
Subcatchment110X: Off - Site

Runoff Area=3,499 sf 0.00% Impervious Runoff Depth>0.65"

Tc=5.0 min CN=75/0 Runoff=0.01 cfs 189 cf

Total Runoff Area = 103,749 sf Runoff Volume = 6,811 cf Average Runoff Depth = 0.79"**100.00% Pervious = 103,749 sf 0.00% Impervious = 0 sf**

**Appendix B: HydroCAD Reports for
Post-Developed Condition Storm Events
(25-Year Storm Event Analysis)
(10-Year Storm Event Summary)
(5-Year Storm Event Summary)
(2-Year Storm Event Summary)**



Routing Diagram for 9240 - Post-Dev

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9240 - Post-Dev

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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
496	74	>75% Grass cover, Good, HSG C (110X)
536	98	AC Path (10S)
840	98	Concrete pad (Bocce Ball) (10S)
16,795	98	Connected roofs, HSG C (10S)
256	87	Dirt roads, HSG C (100X)
989	89	Gravel roads, HSG C (10S)
3,438	74	Islands, >75% Grass cover, Good, HSG C (10S)
37,765	74	Open Space, >75% Grass cover, Good, HSG C (10S, 20S)
561	98	Paved driveway, HSG C (100X)
39,069	98	Paved parking, Sidewalks HSG C (10S, 20S)
3,003	98	Paved roads, HSG C (110X)
103,748	88	TOTAL AREA

9240 - Post-Dev*Type IA 24-hr 25-YEAR Rainfall=3.90"*

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link 1T: Post-Dev Total

Inflow=0.66 cfs 17,858 cf

Primary=0.66 cfs 17,858 cf

Subcatchment10S: Site

Runoff Area=97,665 sf 57.10% Impervious Runoff Depth>2.74"

Tc=5.0 min CN=74/98 Runoff=1.47 cfs 22,309 cf

Subcatchment20S: Off-Site

Runoff Area=1,767 sf 83.31% Impervious Runoff Depth>3.30"

Tc=5.0 min CN=74/98 Runoff=0.03 cfs 486 cf

Subcatchment100X: Off - Site

Runoff Area=817 sf 68.67% Impervious Runoff Depth>3.31"

Tc=5.0 min CN=87/98 Runoff=0.02 cfs 225 cf

Pond 102P: Chambers

Peak Elev=180.17' Storage=6,626 cf Inflow=1.47 cfs 22,309 cf

Outflow=0.62 cfs 16,168 cf

Subcatchment110X: Off - Site

Runoff Area=3,499 sf 85.82% Impervious Runoff Depth>3.36"

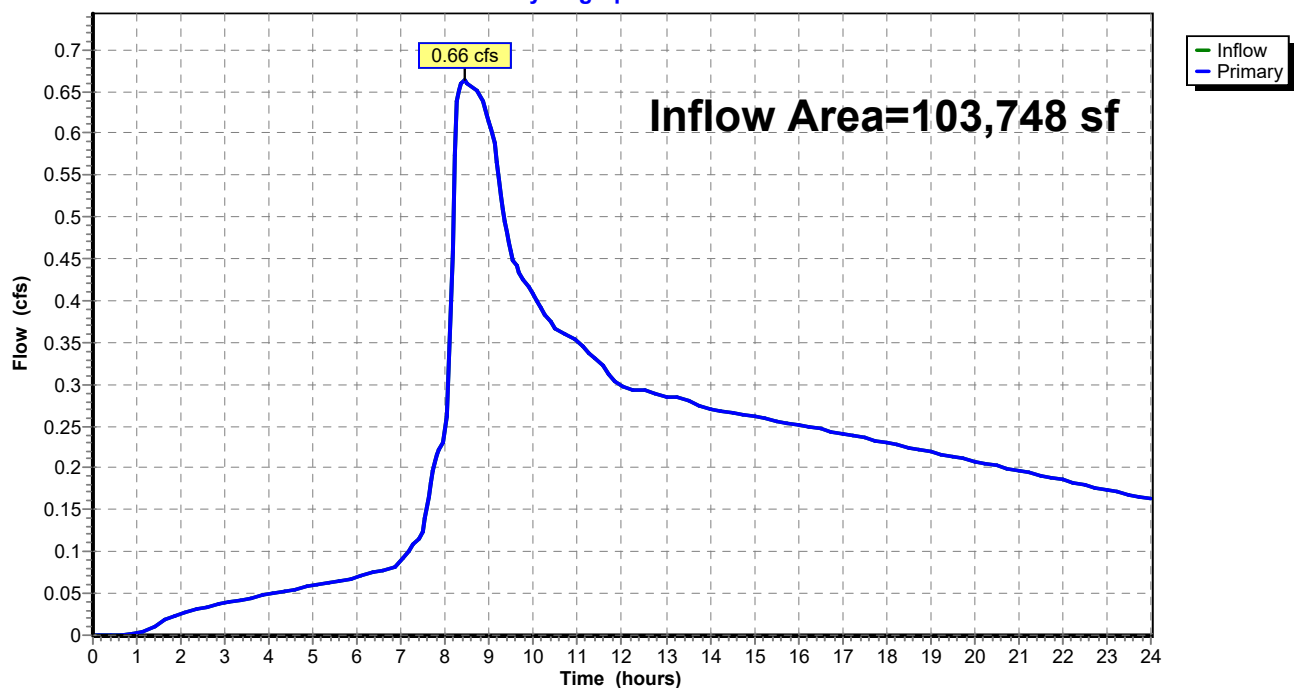
Tc=5.0 min CN=74/98 Runoff=0.07 cfs 978 cf

Total Runoff Area = 103,748 sf Runoff Volume = 23,999 cf Average Runoff Depth = 2.78"
41.39% Pervious = 42,944 sf 58.61% Impervious = 60,804 sf

Summary for Link 1T: Post-Dev Total

Inflow Area = 103,748 sf, 58.61% Impervious, Inflow Depth > 2.07" for 25-YEAR event
Inflow = 0.66 cfs @ 8.42 hrs, Volume= 17,858 cf
Primary = 0.66 cfs @ 8.42 hrs, Volume= 17,858 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 1T: Post-Dev Total**Hydrograph**

9240 - Post-Dev

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Type IA 24-hr 25-YEAR Rainfall=3.90"

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Summary for Subcatchment 10S: Site

Runoff = 1.47 cfs @ 7.93 hrs, Volume= 22,309 cf, Depth> 2.74"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

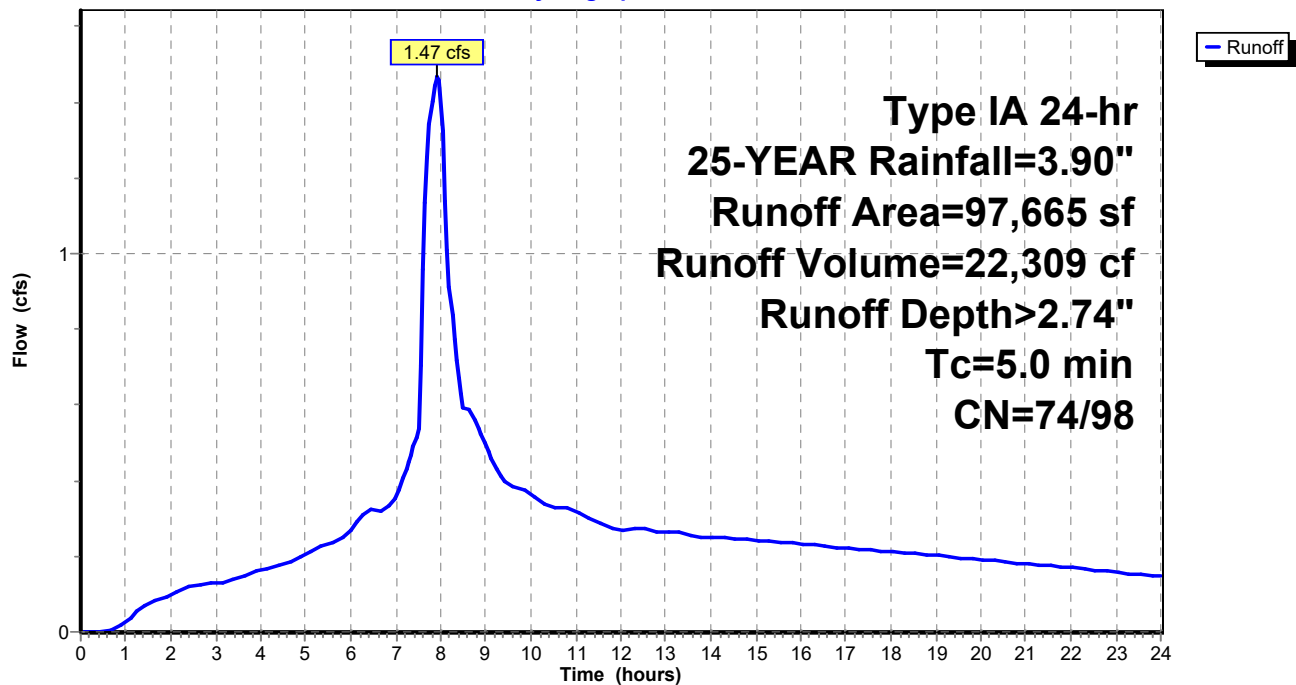
Type IA 24-hr 25-YEAR Rainfall=3.90"

	Area (sf)	CN	Description
*	16,795	98	Connected roofs, HSG C
*	37,597	98	Paved parking, Sidewalks HSG C
*	3,438	74	Islands, >75% Grass cover, Good, HSG C
*	37,470	74	Open Space, >75% Grass cover, Good, HSG C
*	840	98	Concrete pad (Bocce Ball)
	989	89	Gravel roads, HSG C
*	536	98	AC Path
	97,665	88	Weighted Average
	41,897	74	42.90% Pervious Area
	55,768	98	57.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 10S: Site

Hydrograph



9240 - Post-Dev

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Type IA 24-hr 25-YEAR Rainfall=3.90"

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Summary for Subcatchment 20S: Off-Site

Runoff = 0.03 cfs @ 7.91 hrs, Volume= 486 cf, Depth> 3.30"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

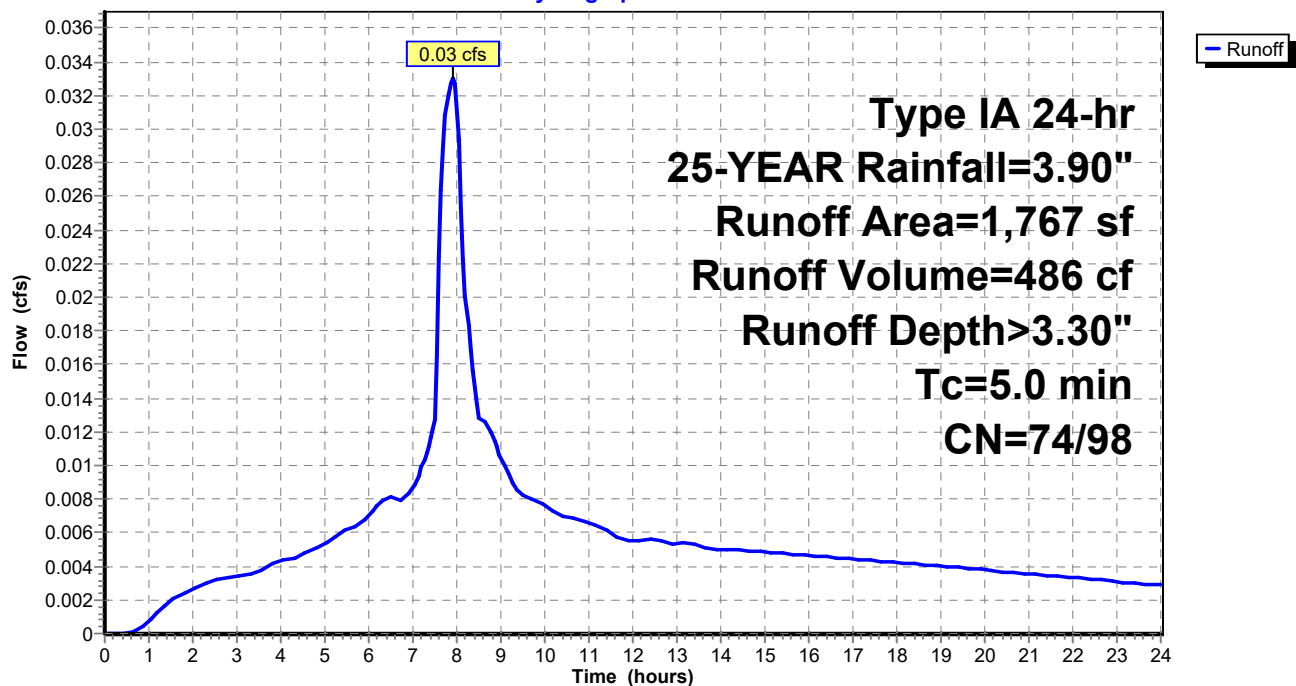
Type IA 24-hr 25-YEAR Rainfall=3.90"

	Area (sf)	CN	Description
*	1,472	98	Paved parking, Sidewalks HSG C
*	295	74	Open Space, >75% Grass cover, Good, HSG C
	1,767	94	Weighted Average
	295	74	16.69% Pervious Area
	1,472	98	83.31% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 20S: Off-Site

Hydrograph



9240 - Post-Dev

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Type IA 24-hr 25-YEAR Rainfall=3.90"

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Summary for Subcatchment 100X: Off - Site

Runoff = 0.02 cfs @ 7.91 hrs, Volume= 225 cf, Depth> 3.31"

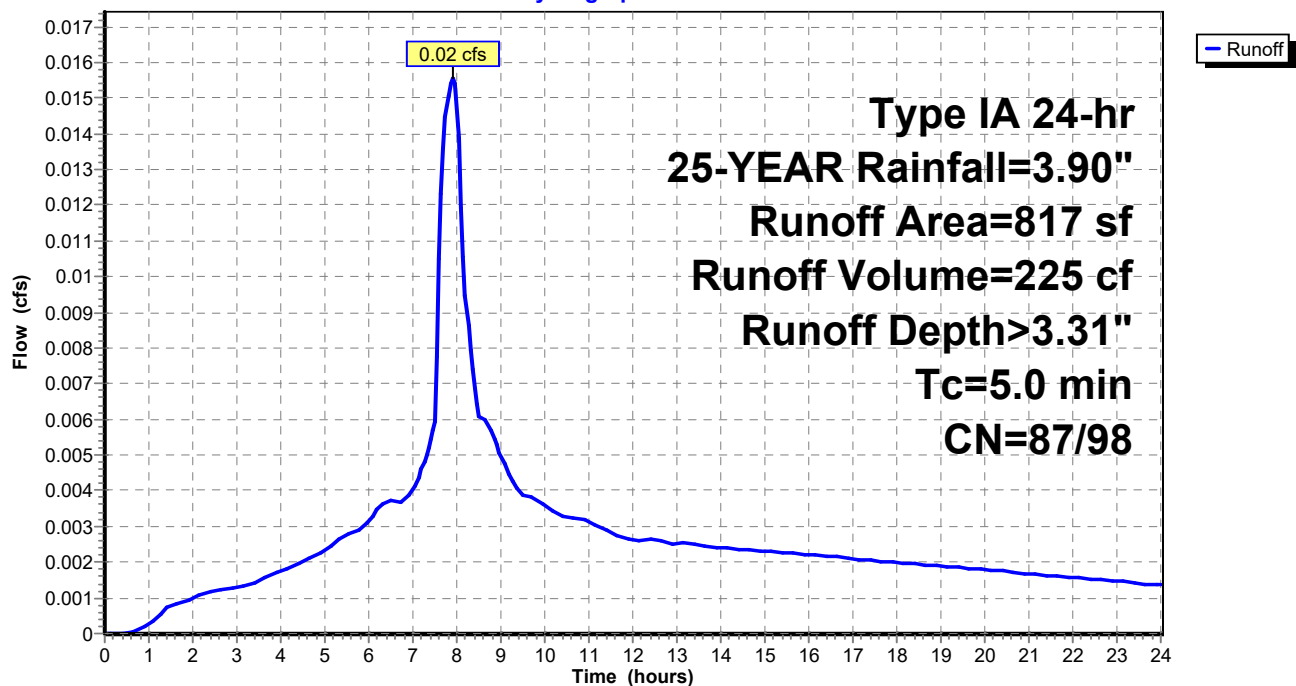
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25-YEAR Rainfall=3.90"

Area (sf)	CN	Description
* 561	98	Paved driveway, HSG C
256	87	Dirt roads, HSG C
817	95	Weighted Average
256	87	31.33% Pervious Area
561	98	68.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 100X: Off - Site

Hydrograph



Summary for Pond 102P: Chambers

Inflow Area = 97,665 sf, 57.10% Impervious, Inflow Depth > 2.74" for 25-YEAR event
 Inflow = 1.47 cfs @ 7.93 hrs, Volume= 22,309 cf
 Outflow = 0.62 cfs @ 8.47 hrs, Volume= 16,168 cf, Atten= 58%, Lag= 32.5 min
 Primary = 0.62 cfs @ 8.47 hrs, Volume= 16,168 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
 Peak Elev= 180.17' @ 8.47 hrs Surf.Area= 5,768 sf Storage= 6,626 cf

Plug-Flow detention time= 306.2 min calculated for 16,168 cf (72% of inflow)
 Center-of-Mass det. time= 133.2 min (835.3 - 702.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	178.10'	4,146 cf	11.50'W x 501.60'L x 2.33'H Field A 13,460 cf Overall - 3,096 cf Embedded = 10,364 cf x 40.0% Voids
#2A	178.60'	3,096 cf	ADS_StormTech SC-310 +Cap x 210 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 3 Rows of 70 Chambers
		7,241 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	178.10'	12.0" Round Culvert L= 45.0' Ke= 0.500 Inlet / Outlet Invert= 178.10' / 177.70' S= 0.0089 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	178.10'	1.4" Horiz. 1st Orifice C= 0.620 Limited to weir flow at low heads
#3	Device 1	179.00'	1.5" Vert. 2st Orifice C= 0.620
#4	Device 1	179.93'	6.0" Horiz. Overflow C= 0.620 Limited to weir flow at low heads

Primary OutFlow Max=0.62 cfs @ 8.47 hrs HW=180.17' TW=0.00' (Dynamic Tailwater)

- ↑ **1=Culvert** (Passes 0.62 cfs of 4.47 cfs potential flow)
- ↑ **2=1st Orifice** (Orifice Controls 0.08 cfs @ 7.15 fps)
- ↑ **3=2st Orifice** (Orifice Controls 0.06 cfs @ 5.23 fps)
- ↑ **4=Overflow** (Orifice Controls 0.47 cfs @ 2.42 fps)

Pond 102P: Chambers - Chamber Wizard Field A**Chamber Model = ADS_StormTechSC-310 +Cap (ADS StormTech®SC-310 with cap length)**

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

70 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 499.60' Row Length +12.0" End Stone x 2 = 501.60' Base Length

3 Rows x 34.0" Wide + 6.0" Spacing x 2 + 12.0" Side Stone x 2 = 11.50' Base Width

6.0" Base + 16.0" Chamber Height + 6.0" Cover = 2.33' Field Height

210 Chambers x 14.7 cf = 3,095.8 cf Chamber Storage

13,459.6 cf Field - 3,095.8 cf Chambers = 10,363.8 cf Stone x 40.0% Voids = 4,145.5 cf Stone Storage

Chamber Storage + Stone Storage = 7,241.3 cf = 0.166 af

Overall Storage Efficiency = 53.8%

Overall System Size = 501.60' x 11.50' x 2.33'

210 Chambers

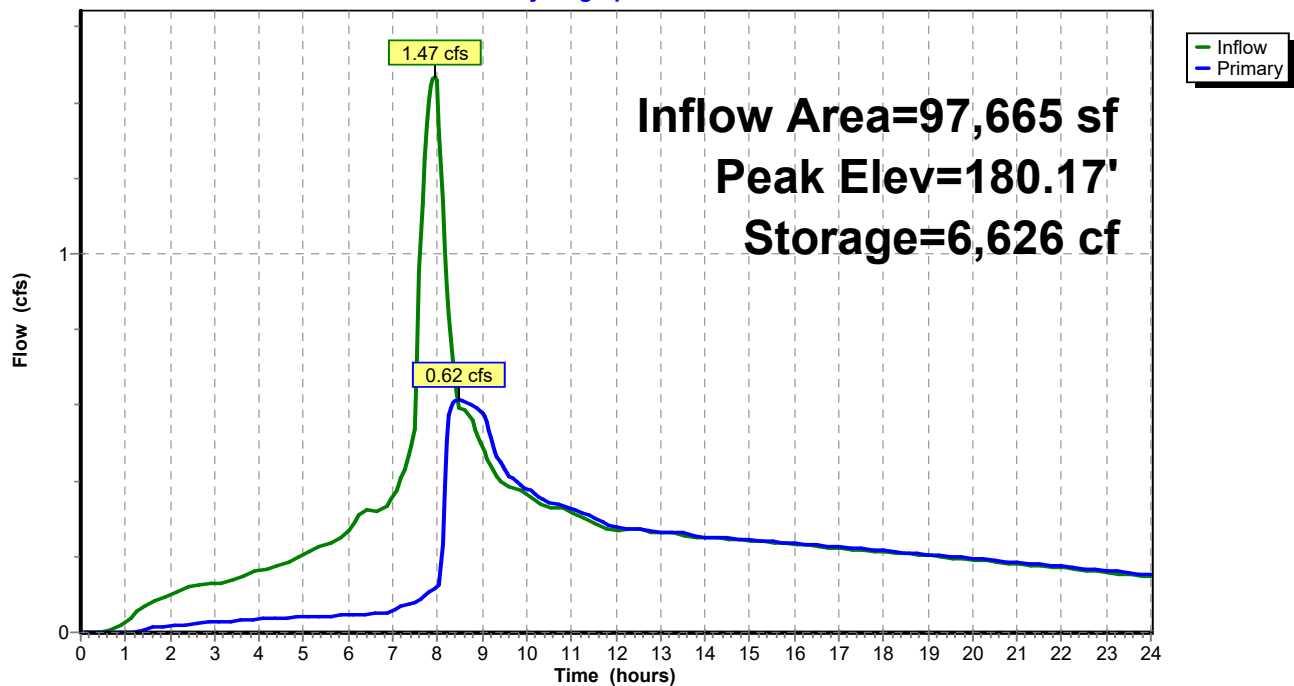
498.5 cy Field

383.8 cy Stone



Pond 102P: Chambers

Hydrograph



9240 - Post-Dev

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Type IA 24-hr 25-YEAR Rainfall=3.90"

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Summary for Subcatchment 110X: Off - Site

Runoff = 0.07 cfs @ 7.90 hrs, Volume= 978 cf, Depth> 3.36"

Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

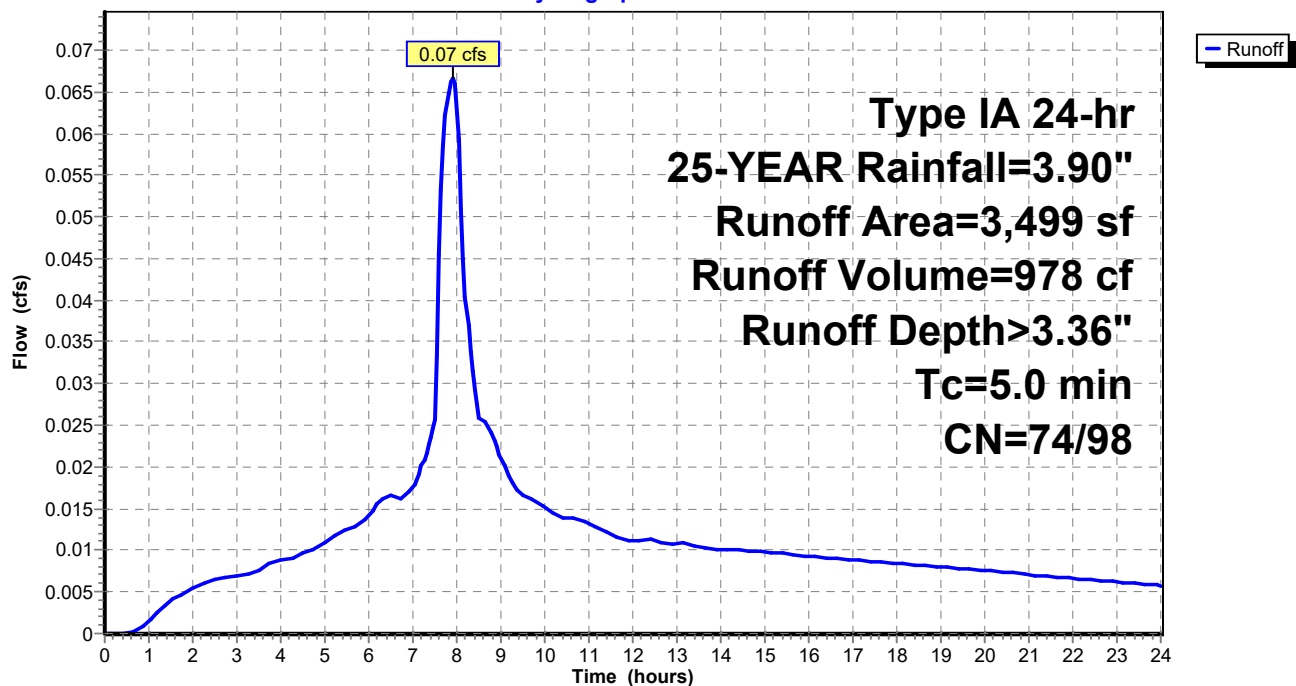
Type IA 24-hr 25-YEAR Rainfall=3.90"

	Area (sf)	CN	Description
*	3,003	98	Paved roads, HSG C
	496	74	>75% Grass cover, Good, HSG C
	3,499	95	Weighted Average
	496	74	14.18% Pervious Area
	3,003	98	85.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 110X: Off - Site

Hydrograph



9240 - Post-Dev*Type IA 24-hr 10-YEAR Rainfall=3.45"*

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link 1T: Post-Dev Total

Inflow=0.44 cfs 14,491 cf

Primary=0.44 cfs 14,491 cf

Subcatchment10S: Site

Runoff Area=97,665 sf 57.10% Impervious Runoff Depth>2.35"

Tc=5.0 min CN=74/98 Runoff=1.25 cfs 19,120 cf

Subcatchment20S: Off-Site

Runoff Area=1,767 sf 83.31% Impervious Runoff Depth>2.88"

Tc=5.0 min CN=74/98 Runoff=0.03 cfs 423 cf

Subcatchment100X: Off - Site

Runoff Area=817 sf 68.67% Impervious Runoff Depth>2.87"

Tc=5.0 min CN=87/98 Runoff=0.01 cfs 196 cf

Pond 102P: Chambers

Peak Elev=180.07' Storage=6,406 cf Inflow=1.25 cfs 19,120 cf

Outflow=0.41 cfs 13,018 cf

Subcatchment110X: Off - Site

Runoff Area=3,499 sf 85.82% Impervious Runoff Depth>2.93"

Tc=5.0 min CN=74/98 Runoff=0.06 cfs 853 cf

Total Runoff Area = 103,748 sf Runoff Volume = 20,592 cf Average Runoff Depth = 2.38"
41.39% Pervious = 42,944 sf 58.61% Impervious = 60,804 sf

9240 - Post-Dev*Type IA 24-hr 5-YEAR Rainfall=3.10"*

Prepared by AKS Engineering and Forestry

Printed 7/1/2022

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Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link 1T: Post-Dev Total

Inflow=0.28 cfs 11,956 cf

Primary=0.28 cfs 11,956 cf

Subcatchment10S: Site

Runoff Area=97,665 sf 57.10% Impervious Runoff Depth>2.05"

Tc=5.0 min CN=74/98 Runoff=1.08 cfs 16,689 cf

Subcatchment20S: Off-Site

Runoff Area=1,767 sf 83.31% Impervious Runoff Depth>2.55"

Tc=5.0 min CN=74/98 Runoff=0.03 cfs 375 cf

Subcatchment100X: Off - Site

Runoff Area=817 sf 68.67% Impervious Runoff Depth>2.54"

Tc=5.0 min CN=87/98 Runoff=0.01 cfs 173 cf

Pond 102P: Chambers

Peak Elev=180.01' Storage=6,273 cf Inflow=1.08 cfs 16,689 cf

Outflow=0.26 cfs 10,652 cf

Subcatchment110X: Off - Site

Runoff Area=3,499 sf 85.82% Impervious Runoff Depth>2.59"

Tc=5.0 min CN=74/98 Runoff=0.05 cfs 757 cf

Total Runoff Area = 103,748 sf Runoff Volume = 17,993 cf Average Runoff Depth = 2.08"
41.39% Pervious = 42,944 sf 58.61% Impervious = 60,804 sf

9240 - Post-Dev*Type IA 24-hr 2-YEAR Rainfall=2.50"*

Prepared by AKS Engineering and Forestry

Printed 7/1/2022

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Page 3

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SBUH method, Split Pervious/Imperv.
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link 1T: Post-Dev Total

Inflow=0.13 cfs 8,223 cf
Primary=0.13 cfs 8,223 cf

Subcatchment10S: Site

Runoff Area=97,665 sf 57.10% Impervious Runoff Depth>1.55"
Tc=5.0 min CN=74/98 Runoff=0.81 cfs 12,651 cf

Subcatchment20S: Off-Site

Runoff Area=1,767 sf 83.31% Impervious Runoff Depth>1.99"
Tc=5.0 min CN=74/98 Runoff=0.02 cfs 293 cf

Subcatchment100X: Off - Site

Runoff Area=817 sf 68.67% Impervious Runoff Depth>1.97"
Tc=5.0 min CN=87/98 Runoff=0.01 cfs 134 cf

Pond 102P: Chambers

Peak Elev=179.79' Storage=5,748 cf Inflow=0.81 cfs 12,651 cf
Outflow=0.12 cfs 7,204 cf

Subcatchment110X: Off - Site

Runoff Area=3,499 sf 85.82% Impervious Runoff Depth>2.03"
Tc=5.0 min CN=74/98 Runoff=0.04 cfs 592 cf

Total Runoff Area = 103,748 sf Runoff Volume = 13,670 cf Average Runoff Depth = 1.58"
41.39% Pervious = 42,944 sf 58.61% Impervious = 60,804 sf

Appendix C: Stormwater Quality Calculations



STORMWATER QUALITY CALCULATIONS

Client: Creekwood Homes
Project: West Grove Apartments
AKS Job No.: 9240
Date: 6/27/2022
Done By: JSM
Checked By: DS

IMPERVIOUS AREA

Total Site Area: 2.28 acres
Total Site Area: 99,158 square feet (sf)

Storm Filter CB1 Impervious Area: 6,378 sf
Storm Filter CB2 Impervious Area: 6,933 sf
Storm Filter CB3 Impervious Area: 8,500 sf
Storm Filter CB4 Impervious Area: 9,277 sf
Storm Filter CB5 Impervious Area: 5,546 sf
Storm Filter CB6 Impervious Area: 4,724 sf
Storm Filter CB7 Impervious Area: 12,970 sf

Total Impervious Area: 54,328 sf

CWS approved Contech 18" ZPG media Cartridge flow rate = 0.033 cfs
CWS approved Contech 27" ZPG media Cartridge flow rate = 0.05 cfs

CB1 WATER QUALITY FLOW (WQF)

(Per CWS 4.08.5a3 - R&O 19-05)

0.013 cfs - 1 - 18" Cartridge CB

$$WQF = \frac{0.36 \text{'' Area (sf)}}{4 \times 60 \times 60} =$$

CB2 WATER QUALITY FLOW (WQF)

(Per CWS 4.08.5a3 - R&O 19-05)

0.014 cfs - 1 - 18" Cartridge CB

$$WQF = \frac{0.36 \text{'' Area (sf)}}{4 \times 60 \times 60} =$$

CB3 WATER QUALITY FLOW (WQF)

(Per CWS 4.08.5a3 - R&O 19-05)

0.018 cfs - 1 - 18" Cartridge CB

$$WQF = \frac{0.36 \text{'' Area (sf)}}{4 \times 60 \times 60} =$$

CB4 WATER QUALITY FLOW (WQF)

(Per CWS 4.08.5a3 - R&O 19-05)

0.019 cfs - 1 - 18" Cartridge CB

$$WQF = \frac{0.36 \text{'' Area (sf)}}{4 \times 60 \times 60} =$$

CB5 WATER QUALITY FLOW (WQF)

(Per CWS 4.08.5a3 - R&O 19-05)

0.012 cfs - 1 - 18" Cartridge CB

$$WQF = \frac{0.36 \text{'' Area (sf)}}{4 \times 60 \times 60} =$$

CB6 WATER QUALITY FLOW (WQF)

(Per CWS 4.08.5a3 - R&O 19-05)

0.010 cfs - 1 - 18" Cartridge CB

$$WQF = \frac{0.36 \text{'' Area (sf)}}{4 \times 60 \times 60} =$$

CB6 WATER QUALITY FLOW (WQF)

(Per CWS 4.08.5a3 - R&O 19-05)

0.027 cfs - 1 - 18" Cartridge CB

$$WQF = \frac{0.36 \text{'' Area (sf)}}{4 \times 60 \times 60} =$$

Appendix D: USDA-NRCS Soil Resource Report

Custom Soil Resource Report Soil Map



Map Scale: 1:971 if printed on A portrait (8.5" x 11") sheet.

0 10 20 40 60 Meters
0 45 90 180 270 Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
45A	Woodburn silt loam, 0 to 3 percent slopes	4.2	100.0%
Totals for Area of Interest		4.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Washington County, Oregon

45A—Woodburn silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2208
Elevation: 150 to 400 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 50 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Woodburn and similar soils: 85 percent
Minor components: 1 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodburn

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Old alluvium

Typical profile

H1 - 0 to 16 inches: silt loam
H2 - 16 to 31 inches: silty clay loam
H3 - 31 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 25 to 32 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: R002XC008OR - Valley Terrace Group
Forage suitability group: Moderately Well Drained < 15% Slopes (G002XY004OR)
Other vegetative classification: Moderately Well Drained < 15% Slopes (G002XY004OR)
Hydric soil rating: No

Minor Components

Dayton

Percent of map unit: 1 percent

Appendix E: TR55 Runoff Curve Numbers

TR55 RUNOFF CURVE NUMBERS

Table 2-2a Runoff curve numbers for urban areas^{1/}

Cover description		Curve numbers for hydrologic soil group			
Cover type and hydrologic condition	Average percent impervious area ^{2/}	A	B	C	D
<i>Fully developed urban areas (vegetation established)</i>					
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) ^{4/}		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
<i>Developing urban areas</i>					
Newly graded areas					
(pervious areas only, no vegetation) ^{5/}		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

¹ Average runoff condition, and $I_a = 0.2S$.² The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.³ CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.⁴ Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN=98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.⁵ Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.



Exhibit H: Neighborhood Meeting Documents

June 6, 2022



**RE: Neighborhood Review Meeting
 Design Review**

Dear Property Owner/Neighbor:

AKS Engineering & Forestry, LLC, is holding a neighborhood meeting regarding a ± 1.29 -acre site located at 2230 & 2320 26th Avenue (Tax Lots 1500 & 1700 of Washington County Assessor's Map 1N331CA) in the City of Forest Grove's Residential Multifamily High (RMH) zone. You can see a map of the location on the back of this letter. The project involves requesting a Design Review land use application for a multi-family apartment complex. Before applying to the City of Forest Grove, we would like to discuss the project with you in more detail.

This meeting aims to provide a forum for surrounding property owners to review and discuss the project before applying to the City. This meeting will allow you to share specific information about the property involved. We will attempt to answer questions relevant to meeting development standards consistent with the City of Forest Grove Development Code. This neighborhood meeting date is:

June 20th, 2022 at 6:00 p.m.

Virtual Meeting

Please go to the project website to register for the meeting:

<https://www.aks-eng.com/westgroveapartments/>

Please note that this meeting will be an informational meeting discussing preliminary plans. Alterations to these plans may occur before the submittal of the application to the City. Depending upon the type of land use action required, you may receive official notice from the City of Forest Grove requesting that you participate with written comments, and/or you may have the opportunity to attend a public hearing.

I look forward to discussing this project with you. If you have questions but cannot attend, please feel free to contact me at **503-563-6151** or by email at **millst@aks-eng.com**.

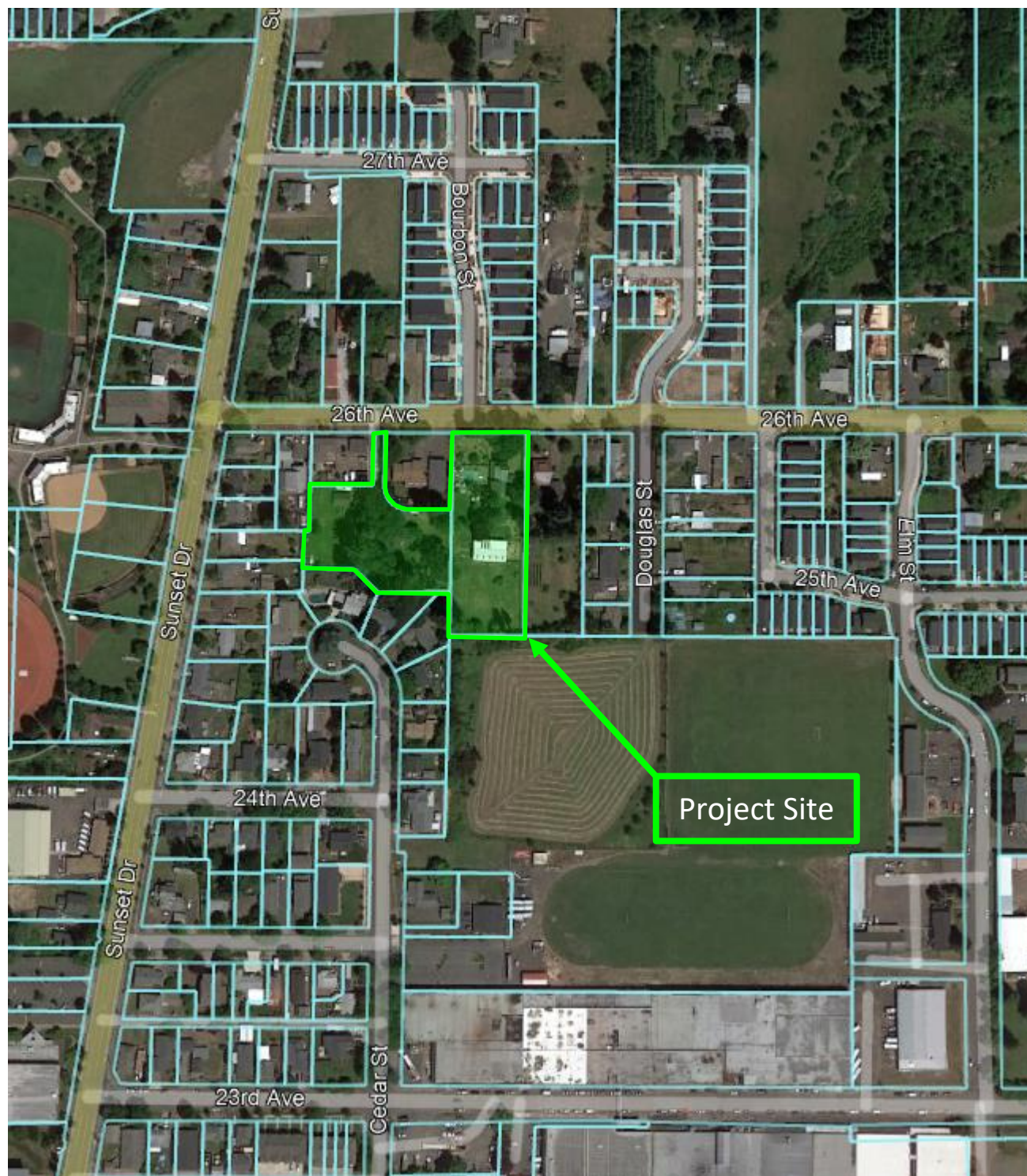
Sincerely,

AKS ENGINEERING & FORESTRY, LLC

A handwritten signature in black ink that reads 'Anthony B. Mills'.

Tony Mills
12965 SW Herman Road, Suite 100
Tualatin, OR 97062
503-563-6151 | millst@aks-eng.com

Enclosure: Map



NEIGHBORHOOD MEETING AFFIDAVIT OF POSTING NOTICE

STATE OF OREGON)

SS

County of Washington)

I, Mitchell Godwin, being duly sworn, state that I am (represent) the party initiating interest in a proposed Design Review affecting the land located at 2230 & 2320 26th Avenue- Forest Grove, OR 97116 and that pursuant to Ordinance No. 5778, did on the 6th day of June, 20 22 personally post the notice indicating that the site may be proposed for a Design Review application.

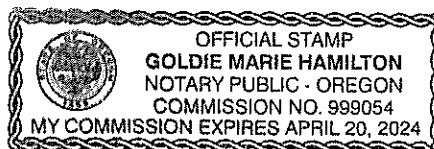
The sign was posted at 2230 & 2320 26th Avenue- Forest Grove, OR 97116.
(state location of sign on property)

This 6th day of June, 20 22.

Mitchell Godwin
Signature

Subscribed and sworn to, or affirmed, before me this 6th day of June, 20 22.

Goldie Marie Hamilton
Notary Public for the State of Oregon
County of Washington
My Commission expires: 4/20/2024



NEIGHBORHOOD MEETING AFFIDAVIT OF MAILING

June

STATE OF OREGON)

SS

County of Washington)

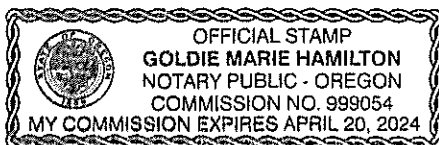
I, Mitchell Godwin, being duly sworn, say that on the 6th day of June, 2022 I caused to have mailed, to each of the persons on the attached list, a notice of a meeting to discuss a proposed development at 2230 & 2320 26th Avenue- Forest Grove, OR 97116, a copy of which notice so mailed is attached hereto and made a part thereof.

I further state that said notices were enclosed in envelopes plainly addressed to said persons and were deposited on the date indicated above in the United States Post Office with postage prepaid thereon.

Mitchell Godwin

Signature

Subscribed and sworn to, or affirmed, before me this 6th day of June, 2022.



Notary Public for the State of Oregon

County of Washington

My Commission expires: 4/20/2024

June 21, 2022

Neighborhood Meeting Summary: Creekwood Homes Inc., Design Review Permit

Meeting Date: June 20, 2022

Time: 6:00 PM

Location: Virtual Meeting via Zoom Webinar

The following serves as a summary of the Neighborhood Meeting process. On June 20th, 2022, property owners within 300 feet of the proposed development site were sent notification of the planned Creekwood Homes Inc. application. This notification included the project location, project details, and the neighborhood meeting date and time. Information on how to join the meeting remotely was provided in the notification letter. Signs were posted on the subject property on June 6th, 2022, to notify the public of the proposed project and upcoming meeting.

On June 20th, 2022, Mimi Doukas, Tony Mills, and Paul Selke from AKS Engineering & Forestry, LLC were the meeting presenters. Evan Scesa Creekwood Homes Inc. attended the meeting and were available to answer questions. The meeting began with Tony Mills giving an overview of the West Grove Apartments and the planned land use applications. He provided details on the City's review process and opportunities for public input.

Following the presentation, attendees were given the opportunity to ask questions live or write questions in the Q&A dialog box. Seven members of the public joined the meeting. There were several questions from the public; in general, discussion points included:

- Neighbors asked questions about the preservation of the existing trees. Darko Simic walked the participants through the surveyed trees and which trees will be preserved in this plan.
- A property owner asked what the rental price of the average unit would be. Evan Scesa responded that he planned for them to be rented at market rate.
- Neighbors discussed the location of the recreation/children's play area. Tony Mills outlined the requirements. Darko Simic talked about the site limitations which resulted in the location.
- Neighbors asked about the size scale and screening of the buildings. Project team members discussed the applicable standards and outlined some additional setbacks and screening that the project provides.
- A property owner had questions about the site and emergency access. Project team members discussed the applicable requirements and outlined how the project meets these requirements.

The meeting concluded at approximately 6:35 pm.

Sincerely,

A handwritten signature in black ink that reads 'Anthony B. Mills'.

Tony Mills

AKS ENGINEERING & FORESTRY, LLC

12965 SW Herman Road, Suite 100 | Tualatin, OR 97062

P: 503.563.6151 | www.aks-eng.com | millst@aks-eng.com



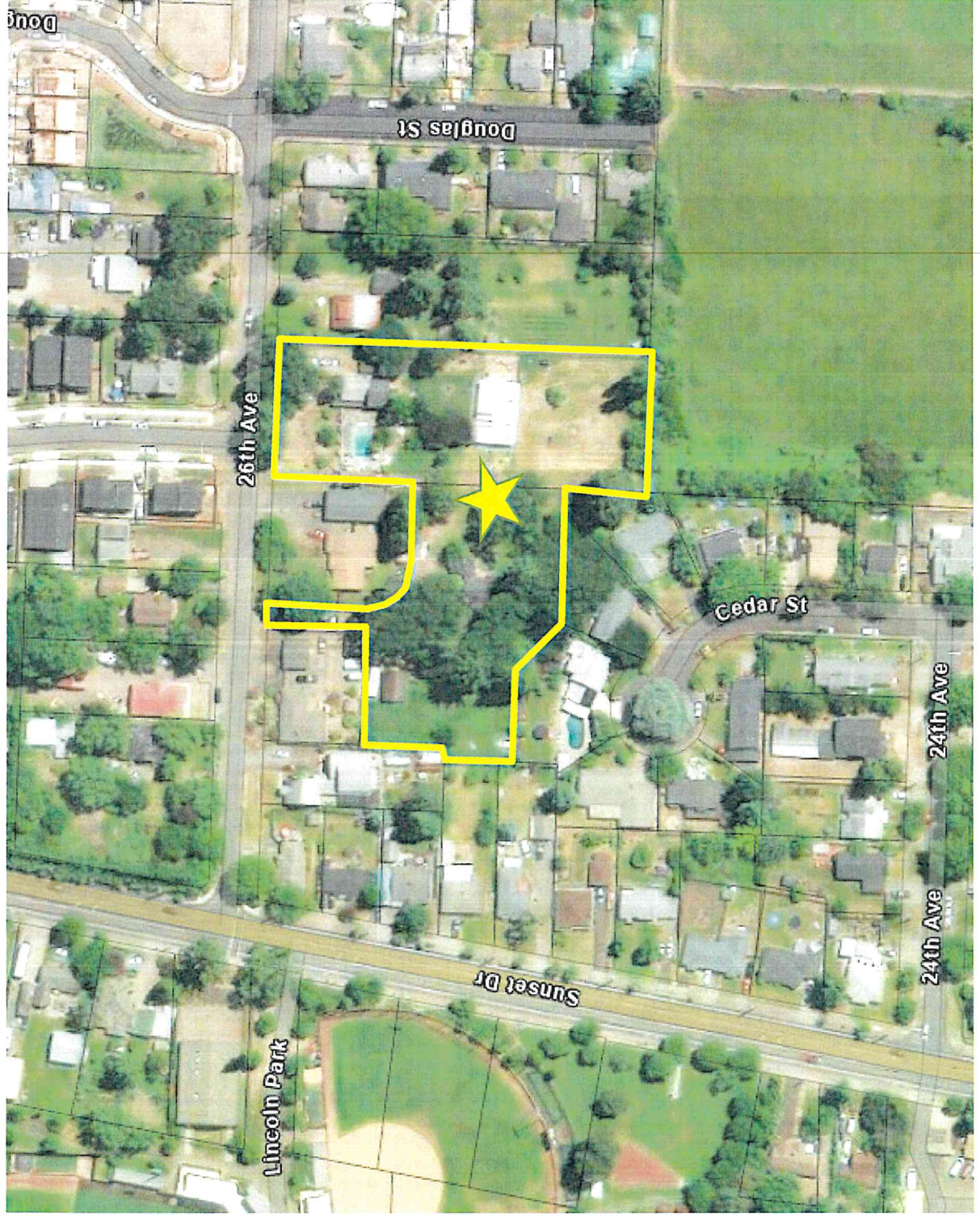
West Grove Apartments Design & Site Development Review

Amy Kreimeier, AICP
Senior Planner

12/19/22



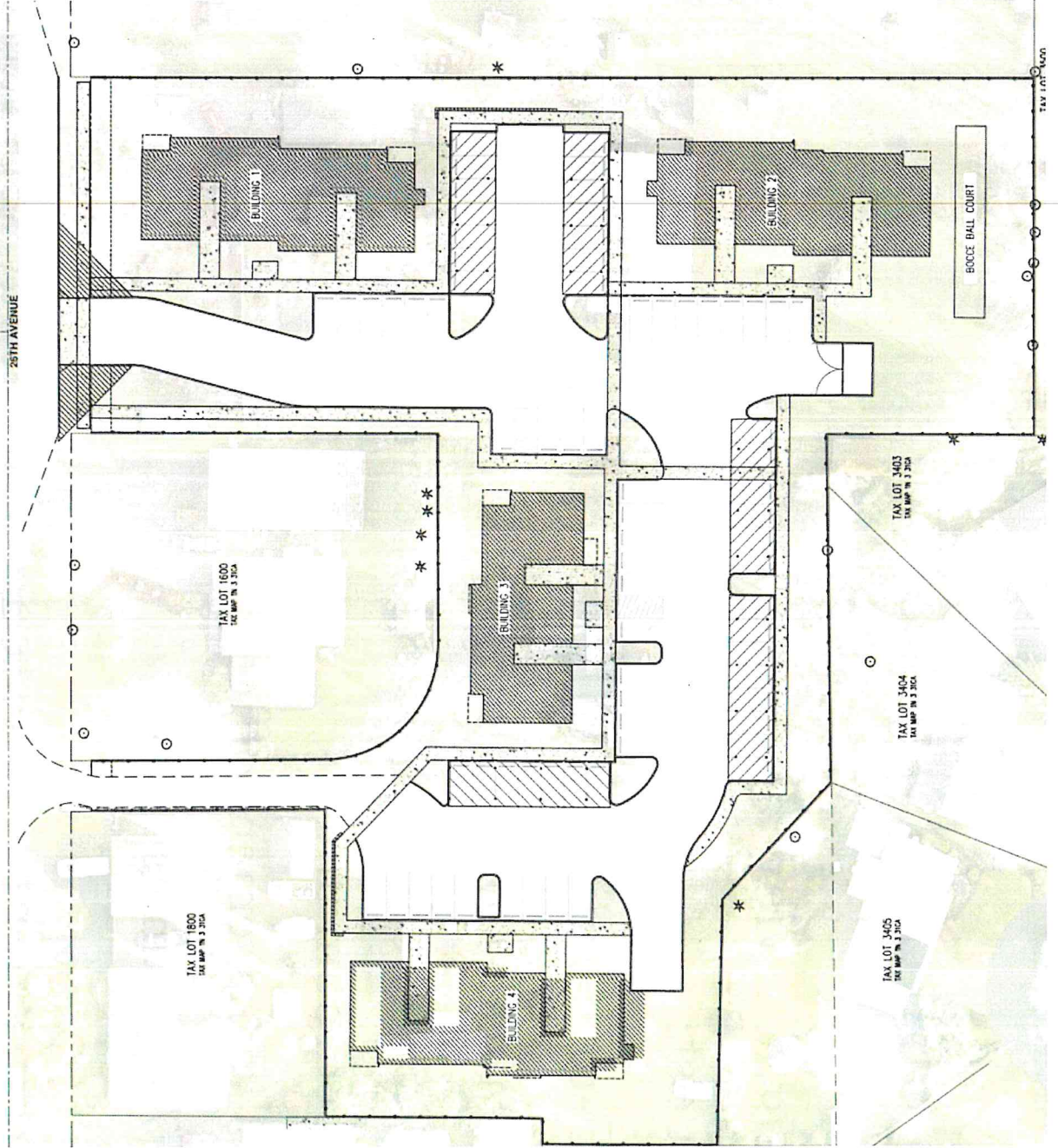
Aerial View - Site & Vicinity



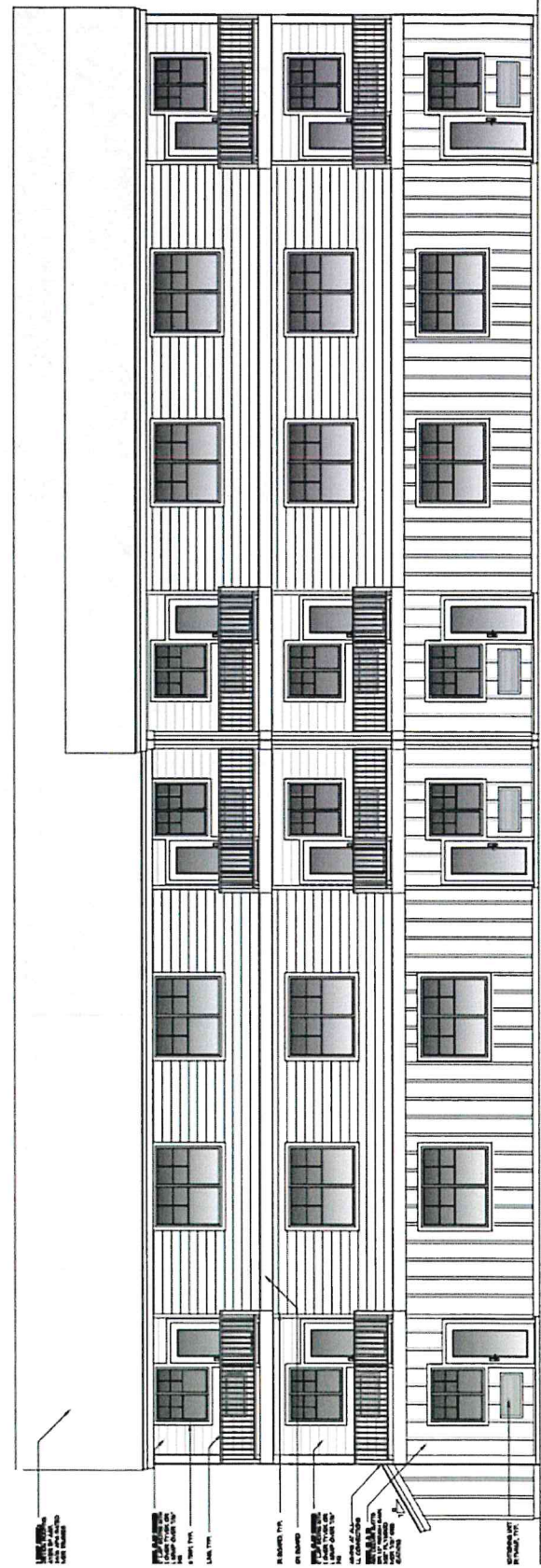
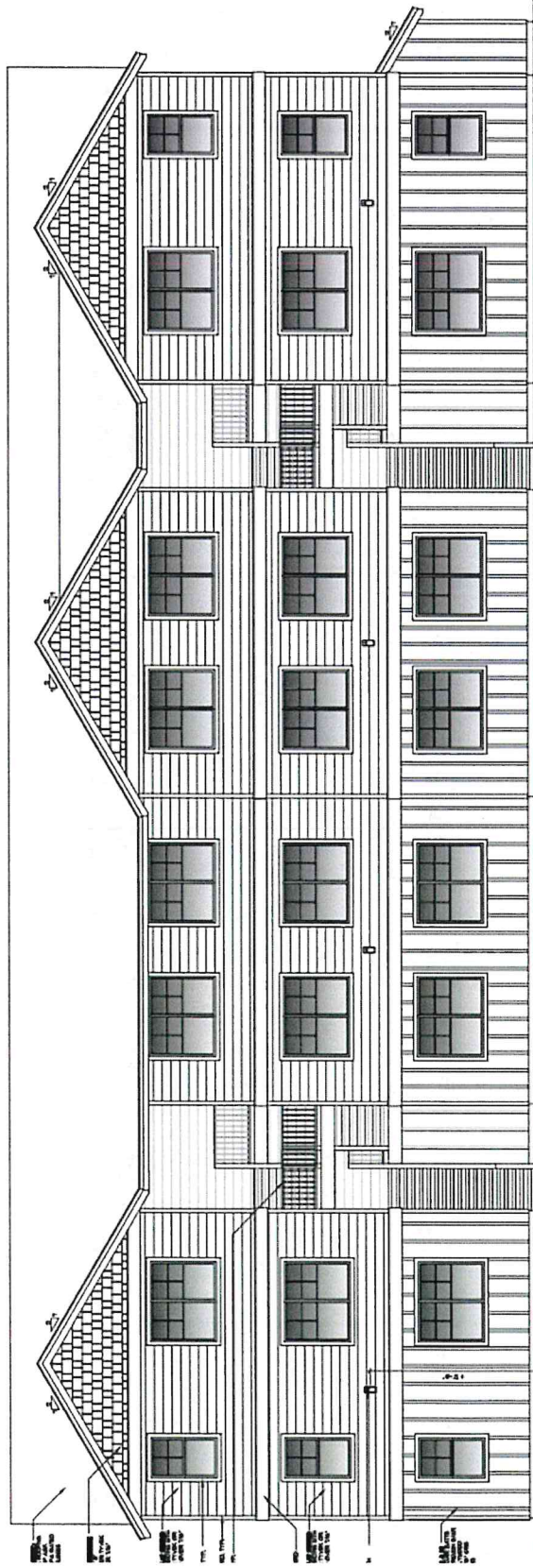
Project Description

- Design Review and Site Development Review request:
 - 45-unit multi-family apartment project
 - 4 three-story buildings
 - 2 one-bedroom, 41 two-bedroom, and 2 three-bedroom units
 - 1 management office
 - 72 parking spaces
 - Adjustment requested for walkway separation from dwellings

Site Plan



Elevations

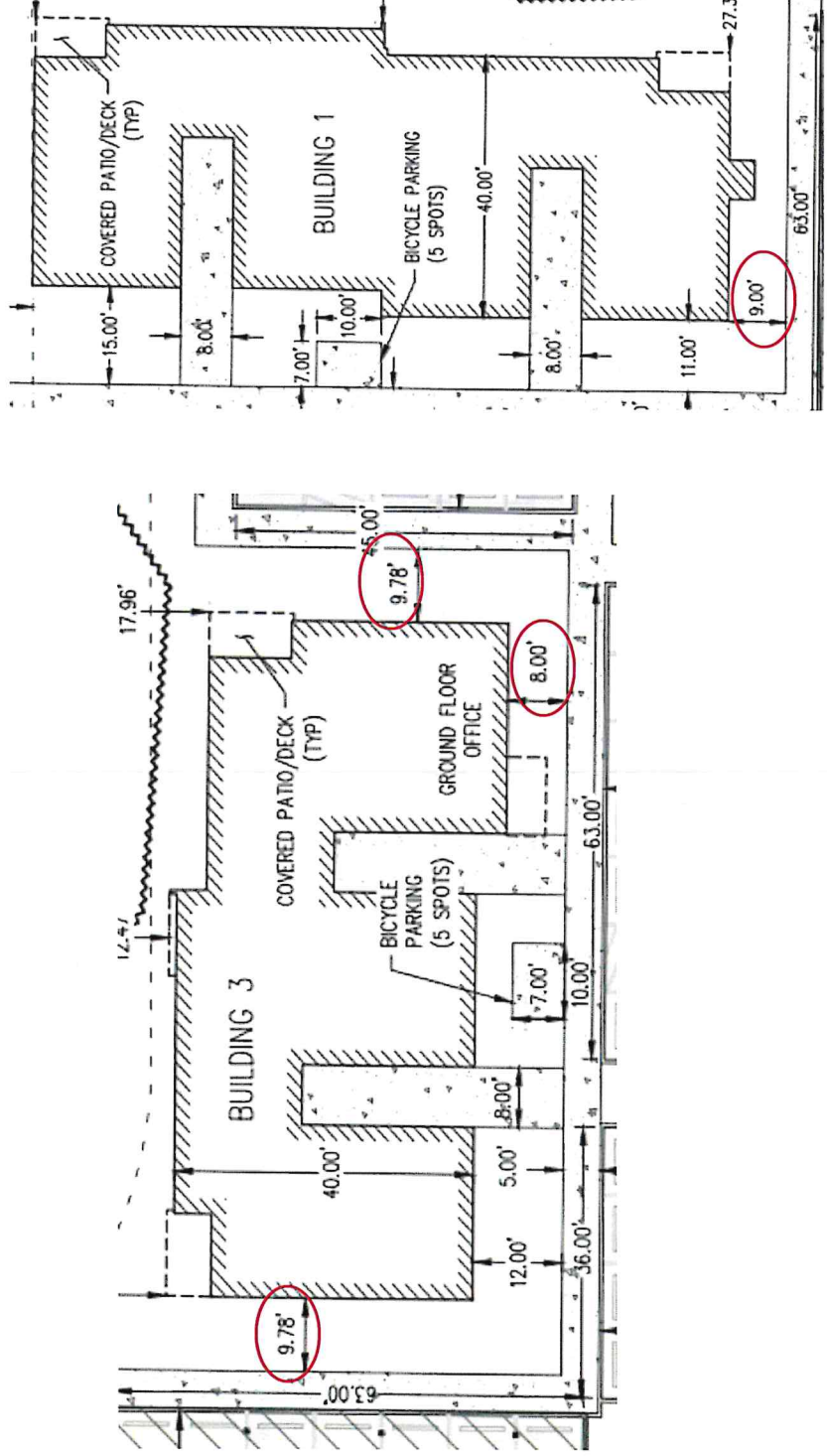


Elevations



Adjustment

- 10-foot minimum required separation between walkways and dwellings (DC §17.8.140(A)(1)(b))
- Buildings 1 & 3 do not meet
- Type 2 adjustment requested, 20% (DC §17.2.100)



Conditions of Approval

- Frontage improvements shall be provided in accordance with code requirements and in coordination with the 26th Avenue Improvement Project.
- The 12-foot-wide western access drive aisle shall be striped and signed as a one-way exit only lane for residents and emergency vehicle access and egress.
- Pathways separation requirement may be reduced by up to a maximum of two feet adjacent to Building 3 and along the southern elevation of Building 1.
- A children's play area shall be provided on site.
- A minimum of 20% of the spaces in the new parking area shall be required to have electric vehicle charging infrastructure.

Recommendation

- Staff recommends that the Planning Commission approve the Design Review, Site Development Review and Adjustment application for the West Grove Apartments, as conditioned.

