



**GLADSTONE PLANNING COMMISSION AGENDA
GLADSTONE CIVIC CENTER, 18505 PORTLAND AVENUE
Tuesday, May 17, 2022 – 6:30 p.m.**

The City of Gladstone is abiding by guidelines set forth in House Bill 2560, which requires the governing body of the public body, to extent reasonably possible, to make all meetings accessible remotely through technological means and provide opportunity for members of general public to remotely submit oral and written testimony during meetings to extent in-person oral and written testimony is allowed. Therefore, this meeting will be open to the public both in person and virtually using the Zoom platform.

Please click the link below to join the webinar:

<https://us06web.zoom.us/j/89401025628?pwd=QmxiRWE3UmhGQ0RvcVB4Nzlna2Vndz09>

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If members of the public would like to comment on an agenda item (either virtually or in person) please email your comments to bannick@ci.gladstone.or.us prior to 12:00 p.m. (noon) on May 17, 2022.

The Planning Commission will also have *Business from the Audience* at the end of the meeting. To speak during this time, (either virtually or in person) please email bannick@ci.gladstone.or.us prior to 12:00 p.m. (noon) on May 17, 2022 with your name, topic of discussion and city of residence.

(Zoom participant speaking instructions will be emailed to persons who request to speak and posted on the city's website)

6:30 P.M. CALL TO ORDER

ROLL CALL

FLAG SALUTE

OATH OF OFFICE – New Planning Commissioner Patrick Smith

CONSENT AGENDA

All items listed below are considered to be routine and will be enacted by one motion. There will be no separate discussion of these items unless a commission member or person in the audience requests specific items be

removed from the Consent Agenda for discussion prior to the time the commission votes on the motion to adopt the Consent Agenda.

1. Approval of April 19, 2022 Meeting Minutes (the March 15, 2022 meeting was a work session with the City Council - no minutes for approval)

REGULAR AGENDA

2. Monthly Planning Report – April 2022
3. **Public Hearing:** File Z0024-22-D – Webster Ridge Apartments construction of 16 new parking garages, 26 parking spaces and 4,000 sq. feet of landscaping with walking paths and a playground, 18181 Webster Road, Bob Sanders/Hans Thygeson.
4. **CONTINUED Public Hearing:** File TXT-2022-01. The Planning Commission will consider making a recommendation to the Gladstone City Council to approve amendments to housing in Chapter 17 of the Gladstone Municipal Code. These amendments are intended to bring the code into compliance with House Bill (HB) 2001.

BUSINESS FROM THE PUBLIC - Visitors: This is an opportunity for members of the audience to bring to the Commission's attention any item not otherwise listed on the Agenda. Comments will be limited to three (3) minutes per person. Speakers may not yield their time to others and must fill out a speaker card available in the back of the room prior to making a comment.

BUSINESS FROM THE PLANNING COMMISSION

ADJOURN

MEETING ACCESSIBILITY SERVICES AND AMERICANS WITH DISABILITIES ACT (ADA) NOTICE

The Civic Center is ADA accessible. Hearing devices may be requested from the City Recorder at least 48 hours prior to the meeting. Individuals requiring other assistance must make their request know 48 hours preceding the meeting by contacting the City Recorder at bannick@ci.gladstone.or.us. Staff will do their best to respond in a timely manner and to accommodate requests.



CONSENT AGENDA

GLADSTONE PLANNING COMMISSION MEETING MINUTES OF APRIL 19, 2022

Meeting was called to order at 6:30 P.M. (In Person and Zoom)

ROLL CALL:

Chair Natalie Smith, Commissioner Michael Milch, Commissioner Andrew Labonte, Commissioner Thomas Mersereau, Commissioner Jennifer Volbeda, Commissioner Andriel Langston

ABSENT:

None

STAFF:

Jacque Betz, City Administrator; Joy Fields, Senior Planner; John Southgate, Consultant; Tami Bannick, City Recorder

CONSENT AGENDA:

1. Approval of February 15, 2022 Meeting Minutes

Commissioner Milch made a motion to approve the Consent Agenda. Motion was seconded by Commissioners Mersereau and Langston. Ms. Bannick took a roll call vote: Commissioner Langston – yes. Commissioner Labonte – yes. Commissioner Labonte – yes. Commissioner Mersereau - yes. Commissioner Volbeda – yes. Chair Smith – yes. Motion passed unanimously.

REGULAR AGENDA:

2. MONTHLY PLANNING REPORTS – FEBRUARY AND MARCH 2022:

Ms. Fields went over the reports.

In February they had two members of the public come to the customer service counter, responded to 67 phone calls/emails, reviewed four building permits that required land use review, and held one administrative decision (land use compatibility statement for Tom’s Auto Sales). The Planning Commission considered and approved the Gladstone Library design review application, which has gone through the appeal period, so the decision is final. There is a new permitting software system at the County. There was a brief discussion regarding the building permit application from the Card Room/420 Portland Avenue.

In March they had one member of the public come to the customer service counter, responded to approximately 52 phone calls/emails, reviewed six building permits with land use review, and one administrative decision. The Planning Commission had a joint session with the City Council – a work session on the housing code amendments and no land use action was taken during that meeting. There was a sign permit for the 18000 Webster Road project.

3. PUBLIC HEARING: FILE TXT-2022-01 – AMENDMENTS TO HOUSING IN CHAPTER 17 OF THE GLADSTONE MUNICIPAL CODE (GMC):

Chair Smith opened the public hearing.

The proposed amendments are intended to bring the code into compliance with House Bill (HB) 2001. She went over the procedures that will be followed. She asked the members of the Planning Commission if they needed to declare any conflicts of interest – there were none. Ms. Fields went over the staff report (included in the packet). They will be discussing the draft

housing code amendments, looking at the municipal code, the statewide planning goals, Metro's functional plan, and looking at next steps. She went over the background information. The intent is to align local policies and standards to the recently adopted Housing Bill 2001 and clarify a few other housing related items in the current code. This is a legislative hearing because it impacts all the residential zoning districts in Gladstone. HB 2001 is required in the low-density residential zoning districts and Gladstone has to allow at least a duplex, as well as the middle housing types, in these areas. She went over the zoning map. The Planning Commission will be making a recommendation to the City Council – the Council will hold another public hearing and make the final decision. She went over the statewide planning goals/guidelines. The proposed amendments do not impact the goals in the Comprehensive Plan, but some of the policies. She went over the goals. The staff recommendation is for the Planning Commission to consider the amendments, discuss potential changes that may be needed, and draft a recommendation for City Council to consider.

CORRESPONDENCE:

Mr. Southgate said they received communication yesterday from the DLCD staff.

PUBLIC TESTIMONY:

None.

There was a presentation (included in the packet) by Jon Pheanis, project manager/planner and Sou Gardner from MIG – they are the consulting firm that has been assisting with the middle housing zoning code update. They have had a technical advisory committee, a needed housing advisory committee, and have had various opportunities for community engagement at each step. They shared what they learned from community input and the survey results. Mr. Pheanis went over some of the proposed changes. Mr. Pheanis went over the comments they received from the DLCD and options to consider (also included in the packet). Mr. Southgate went over the options as well.

Chair Smith asked the Commissioners how they wanted to proceed. Commissioner Mersereau recommended accepting the package the way it is and reviewing the comments/issues from citizens in the future. Commissioner Milch asked for clarification regarding compliance timelines – Mr. Southgate said with the changes the City should be compliant with HB2001. Commissioner Milch had a question regarding housing needs goals. Mr. Southgate responded. He also clarified questions regarding requirements for various housing types. Commissioner Labonte feels it would be wise to continue this until the meeting in May. Commissioner Volbeda agreed. Ms. Betz added that the public also needs an opportunity to review the comments from the DLCD. Chair Smith asked for a consensus to hold this over until the next meeting (May 17th) and hold another public hearing. Everyone agreed.

PUBLIC TESTIMONY:

None.

Ms. Fields said there are no glaring issues from her perspective, but there is an omission that she would like the Commission to consider/discuss: sidewalks. Sidewalks are required for design review applications and for land division applications. They are not required for a single-family home nor if someone resurrects historically platted lot lines to provide a building location for a new home. If we require sidewalks for middle housing we also have to require it for single-family homes because the middle housing bill has to be the same or less restrictive for middle housing than for single-family. She went over Section 17.50.020. She asked the Commissioners if they would like to provide that in our single-family residential zoning districts: Commissioner Mersereau – thinks there is going to be a lot of concerns if that is put in. Commissioner Milch –

wants to say yes. Commissioner Labonte – would like more guidance and discussion. Commissioner Langston – agreed with Commissioner Milch. Commissioner Volbeda – is leaning toward yes. Chair Smith – is leaning toward yes as well. She would like to see consistency. This will be discussed at the next meeting. Ms. Fields went over what Clackamas County requires.

Commissioner Milch made a motion to continue the public hearing/public testimony until the May 17th meeting. Motion was seconded by Commissioner Volbeda. Ms. Bannick took a roll call vote: Commissioner Langston – yes. Commissioner Milch – yes. Commissioner Labonte – yes. Commissioner Mersereau – yes. Commissioner Volbeda – yes. Chair Smith – yes. Motion passed with a unanimous vote.

Discussion:

Commissioner Milch asked if they needed to remove references to large scale planned unit development when it is no longer defined in the code. Ms. Gardner gave an explanation and options.

Commissioner Langston asked about the parking credit for off-site parking in 17.48.030. Mr. Pheanis said that is only related to an application/use that would require design review. The middle family housing they are discussing would not have that same requirement. Commissioner Langston asked for clarification on what defines a historic building – Ms. Gardner could not find a definition specifically for historic structures. Ms. Fields said there are registries for historic resources/buildings. Mr. Pheanis said if those *documented* historic resources are described as such there are additional measures and limitations outlined in the OARS for middle housing. Commissioner Milch asked for clarification regarding the new minimum size for ADU’s, which is equivalent to what the former maximum size was. He suggested adding a sentence in 7.2 and 5.0 similar to what Oregon City’s code says: “Conversion of an existing basement to an ADU shall be exempt from the size limits provided that no new floor area will be added with the conversion”.

4. UPDATE ON GLADSTONE HOUSING CODE INITIATIVES AND DOWNTOWN REVITALIZATION EFFORTS:

Mr. Southgate said they intended on giving a presentation regarding where this process is and decided to pull this item in order to spend more time discussing the previous agenda item. He suggests giving the presentation at a future meeting.

BUSINESS FROM THE PUBLIC:

None.

BUSINESS FROM THE PLANNING COMMISSION:

Commissioner Milch:

He said they are blessed to have Ms. Fields, who is very knowledgeable about our local codes, raises good issues, and has quick answers to questions on complex issues. He also appreciates the people at MIG.

Commissioner Langston:

He wanted to remind everyone that the Meldrum Bar Park site plan survey is online, and he encouraged everyone to participate.

Chair Smith:

She said Commissioner Poole has resigned his position so they will have a vacant seat. She said if any of the Commissioners know anyone who has good some background and might be interested in serving on the Planning Commission to have them apply through the City’s website.

ADJOURN:

Commissioner Langston made a motion to adjourn the meeting. Motion was seconded by Commissioner Milch. Ms. Bannick took a roll call vote: Commissioner Langston – yes. Commissioner Milch – yes. Commissioner Labonte – yes. Commissioner Mersereau – yes. Commissioner Volbeda – yes. Chair Smith – yes. Motion passed with a unanimous vote.

Meeting adjourned at approximately 8:08 P.M.

Minutes approved by the Planning Commission this _____ day of _____, 2022.

Natalie Smith, Chair



REGULAR AGENDA



City of Gladstone Monthly Planning Report April 2022

PUBLIC CONTACTS/PLANNING ACTIONS

CUSTOMER CONTACT/ Planning Actions	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	YEAR TOTALS
Customer Service Counter Contacts	1	2	1	1									5
Customer phone/email Contacts	47	67	52	68									234
Building Permits with Land Use Review	4	4	6	11									25
Pre-application Conferences	1	0	0	0									1
Administrative Decisions	0	1	1	1									2

PLANNING COMMISSION ACTIONS/DECISIONS

- Gladstone Middle Housing Zoning Code Amendments Public Hearing – Continued.

CITY COUNCIL LAND USE ACTIONS/DECISIONS

- None

PRE-APPLICATION CONFERENCES

- None

ADMINISTRATIVE PERMITS

- Z0161-22 – Sign Permit for Hollywood Beverage at 435 W Arlington

BUILDING PERMITS WITH LAND USE REVIEW

APRIL				
Date	Address	Building Permit #	Description	
04/07/22	135 E GLOUCESTER ST	B0155922	Interior remodel	
04/07/22	7675 CASON LN	B0176022	Interior remodel	
04/12/22	18135 PENNY CT	B0130422	Residential addition	
04/12/22	75 82ND DR	B0159822	Interior remodel of lobby	
04/19/22	740 82ND DR	B0193522	Interior remodel for bathrooms	
04/22/22	735 E CLARENDON ST	B0236122	On-Building Signs	
04/22/22	645 E HEREFORD ST	B0224722	Front Porch on home	
04/26/22	19575 RIVER RD	MH0002522	Mobile home placement permit	
04/26/22	160 PORTLAND AVE	B0046922	Interior remodel	
04/26/22	435 W ARLINGTON ST	B0104622	On-Building Sign	
04/26/22	370 BEVERLY LN	B0239322	Garage	

FUTURE ITEMS/PROPERTY UPDATES

Date	Topic
5/17/22	Webster Ridge Parking Garages



REGULAR AGENDA



Agenda Item No. 3

PC Meeting Date: 05/17/22

STAFF REPORT: DESIGN REVIEW

Application No.: Z0024-22-D;

Applicant: Matthew Robinson, Hans Thygeson, and Bob Sanders, Stony Ridge LLC

Project Location: 18181 WEBSTER RD; Tax Lot 22E17DC00800

Project Description: Construction of new parking garages, and playground to serve the Webster Ridge Apartments. As proposed, the development will include 16 parking garages, 26 parking spaces, and 4,000 square feet of landscaping with walking paths and a play area.

SUMMARY OF STAFF RECOMMENDATION

The planning staff are recommending **APPROVAL** of the Design Review application **Z0024-22-D** and recommend the following findings and following conditions in support of approval: (1) Landscaping; (2) Signage; (3) Building Façade; (4) Lighting; (5) ADA Access; (6) Pedestrian Access; (7) Water; (8) Storm Drainage; (9) Erosion Control; (10) Grading permit; (11) Construction Plans; (12) Pre-construction Conference, and (13) As-built Submittals.

The subject property, is comprised of one tax lot (22E17DC00800), that is approximately 5.12 acres in size. The property recently went through a property line adjustment with the neighboring property to the north to be in the current configuration (Z0507-20-PLA). The site is currently developed with 122 dwelling units that were approved through Z0249-15-D and is served by city water, storm sewer, and sewer. Z0249-15 approved the 122 dwelling units with 184 parking spaces, and landscaping to cover 20% of the site. Therefore, during the implementation of the land use approval 1.5 parking spaces per unit were built to serve the apartments as required by *Chapter 17.48 of the GMC*. The owners of the Webster Ridge Apartments rezoned (Z0149-20) and purchased 1.04 acres of the adjacent church property and are now proposing the development of additional parking and recreational area for the existing apartments.

As conditioned for the 1.04 acres rezoned through by Z0149-20, the proposed project would involve the use of the site for land uses customarily considered accessory to Multifamily residences per 17.14.030, in addition to recreational uses per 17.68.040.

As proposed and conditioned, planning staff find the application consistent with previous land use approvals and all applicable standards from Title 17 of the Gladstone Municipal Code (GMC). Therefore, staff are recommending the Planning Commission approve this Design Review application with 13 special conditions of approval. The standard of review for the proposed project is the City of Gladstone's Municipal Code Zoning and Development Title 17.

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EXHIBITS

- Exhibit 1. Location Map
- Exhibit 2. Aerial Image
- Exhibit 3. Exterior Renderings
- Exhibit 4. Site Plan Figure 1

APPENDIX: SUBSTANSIVE FILE DOCUMENTS

- A. Application Materials (Narrative, Site Plan)**
- B. Comments Received (Fire, WES and Public Works),**

I. REQUEST FOR COMMENTS

Sent to: Property owners within two hundred fifty (250) feet of the subject property, City of Gladstone, Public Works, Gladstone Fire, Gladstone PD, Engineering, Water Environment Services (WES), and Gladstone Disposal.

Responses Received: Comments were received directly from Gladstone Public Works and Engineering Departments, from Clackamas Fire District on behalf of Gladstone fire, and from WES. The comments are addressed in the Special Conditions of Approval and in the Notes. No comments were received from the public.

II. STANDARD CONDITIONS

- 1. EXPIRATION.** This approval shall remain valid for two years following the date of approval per 17.80.100. If the approved use has not commenced by that date, this approval shall expire unless a time extension is granted pursuant to chapter 17.66.015(4) of the Gladstone Municipal Code.
- 2. INTERPRETATION.** Any questions of intent or interpretation of any condition will be resolved by the Planning Director for the City of Gladstone,
- 3. ASSIGNMENT.** The permit may be assigned to any qualified person, provided assignee files with the City Planning Department an affidavit accepting all terms and conditions of the permit.
- 4. TERMS AND CONDITIONS RUN WITH THE LAND.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.
- 5. BUILDING PERMITS.** The applicant shall obtain required building permits from Clackamas County. The applicant shall comply with requirements of the permits.

III. RECOMMENDED SPECIAL CONDITIONS OF APPROVAL

- 1. LANDSCAPING.** Prior to planting, identification of the plant species will be provided to staff to ensure the species are not on the Gladstone Prohibited Plant List found in Ordinance 1333 and that the 5 foot landscaping strip along the northern property boundary sufficiently screens the adjacent residentially zoned property. The applicant shall also verify that the 20% landscaping required by Z0249-15 and Z0024-22-D is still being, and will be maintained per 17.80.080.

2. **SIGNAGE.** All signs shall meet the provisions of Subsection 17.52 of the GMC. Sign designs were not included with the submittal package. If existing signage is to be replaced with signage in the future a sign permit shall be filed separately at the time it is needed.
3. **Building façade.** The north wall of the proposed garage is visible from the adjacent R7.2 property and the design of that elevation will need to be modified to meet the requirements of 17.44.022(1). The north wall shall be modified to include a minimum of two of the following: (a) Windows; (b) Entries; (c) Balconies; (d) Bays; or (e) The use of two or more distinct materials to break up stretches longer than fifty lineal feet (50') of unbroken area.
4. **LIGHTING.** The project shall submit to the City Public Works Department and Planning offices a photometric analysis and lighting plan, or a master plan for on-site lighting, that includes the design, height, extent, and location of all proposed exterior lights per 17.44.020 (6). Any required lights shall be acquired through Portland General Electric and energized under PGE Option A.
5. **ADA ACCESS.** This approval is subject to the development complying with the provisions of the Americans with Disabilities Act (ADA) per GMC 17.50.020 (6)(f), including provisions for curb ramps, circulation within the site, and appropriate grades to the public entrances of the buildings.
6. **PEDESTRIAN ACCESS.** If the sidewalks along Webster Rd are damaged or removed during the construction of the new parking facilities, the repairs shall be installed and conform to current City and ADA standards per 17.50.040(15) and per 17.50.040(5). New ADA compliant markings shall be constructed on site to address the following:
 - Safe pedestrian access to and around the proposed development that provides a separation of motor vehicular, bicycle and pedestrian traffic.
 - New sidewalks shall generally replicate the existing sidewalk improvements in front of the apartments and around the playground.
7. **WATER.** The proposed development shall not develop structures that impede access to the water easement per 17.60.020 (5). Development shall protect the integrity and function of the existing backflow prevention device in the underground vault near the building on the east of the project site. The improvements installed around the existing vault shall meet the Gladstone Public Works Design Standards per 17.42.030, and 17.56.010. The improvements should also meet the plumbing code per Gladstone Municipal Code 13.05.150.
8. **STORM DRAINAGE.** The proposed development shall meet all storm drainage requirements pursuant to the Gladstone Public Works Design Standards per 17.56.010. The improvements should also meet the plumbing code per Gladstone Municipal Code 13.05.150. Storm drainage improvements for onsite development shall be permitted through Clackamas County Building Department. A revised storm drainage analysis and report shall be submitted to meet the requirements of the Gladstone Public Works Design Standards. The location and installation of the storm drainage shall meet the Gladstone Public Works Department Design Standards. Any revised storm drainage plans shall be provided to, and approved by, the Public Works Department and the Planning Department.

9. **EROSION CONTROL.** A sediment and Erosion Control Permit is required from WES prior to commencing site work per 17.56.020.
10. **GRADING.** A Grading Permit is required from Clackamas County Building Department prior to commencing site work per 17.56.020.
11. **CONSTRUCTION PLANS:** Plans detailing the installation of the garages, site grading, and other public and private improvements shall be submitted to the City of Gladstone Public Works Department for review and approval per 17.60.010 and 17.42.030. The design, location, and planned installation of all street and sidewalks, natural gas, power, street lighting, telephone, cable television, storm water, water, and sanitary sewer provisions are subject to approval by the appropriate agency/utility service provider. Construction plans shall be designed and stamped by a Professional Engineer registered in the State of Oregon. Plan submittal shall include (3) paper sets of plans, a pdf copy, an Engineer's Estimate for the public improvements, and a drainage report.
12. **PRE-CONSTRUCTION CONFERENCE.** Once grading/construction plans are ready to be approved by the City of Gladstone, a Pre-Construction Conference with final sign-off on the Construction Plans is required per 17.42.030.
13. **AS-BUILT SUBMITTALS.** Prior to the approval of the Certificate of Occupancy, the applicant shall provide the City Public Works Department of Planning offices with copies of the as-built submittals per 17.60.020 (7).

IV. NOTES:

1. **SYSTEM DEVELOPMENT CHARGES (SDC'S).** SDC's may be required due to the change of use of the property. The project shall provide all relevant information needed to calculate the SDC's to the Public Works Director. SDC calculation methodology is located on the Public Works page of the City of Gladstone website.
2. **STORMWATER STANDARDS.** The owner or their agent, contractor, or employee shall properly install, operate and maintain both temporary and permanent Erosion Protection and Sediment Control (EPSC) practices to protect the environment during the useful life of the project. No visible or measurable erosion shall leave the property during development, construction, grading, filling, excavating, clearing, or other activity that accelerates erosion, as required by water quality standards set forth in OAR 340-41-445 thru 470. EPSC measures shall be installed and inspected by a WES erosion control inspector prior to sign off on the building permit application. Monitoring inspections will occur periodically throughout the construction. The permittee shall request a Final Erosion Control inspection once the site has been permanently stabilized.
3. **BUILDING PERMITS.** Clackamas County Building Department will provide structural, mechanical, grading, and review of Fire & Life Safety, Plumbing, and Electrical Permits for this project.

4. **RIGHT OF WAY PERMITS.** Prior to initiating work within the right of way, the applicant will need a permit from the Gladstone Public Works Department.

V. FINDINGS

The City of Gladstone Planning Staff finds:

A. PROJECT LOCATION AND PROPOSED DEVELOPMENT

The subject property is comprised of tax lot 22E17DC00800, that is approximately 5.12 acres in size located at 18181 Webster Rd. The site is on the northwest side of Webster Road approximately 350 feet north of the intersection with Cason Rd. The subject property is zoned MR - MULTI-FAMILY RESIDENTIAL DISTRICT. The proposed project would involve building new accessory structures to serve the existing apartment complex. The existing apartments as approved through Z0249-15-D are an allowed use in the zoning district.

B. MR - MULTI-FAMILY RESIDENTIAL DISTRICT

17.14.020 Uses allowed outright.

In an MR zoning district, the following uses and their accessory uses are allowed outright:

- (1) *Two-family dwellings.*
- (2) *Multi-family dwellings.*

17.14.030 Accessory uses allowed.

Accessory uses shall comply with all the requirements of this zoning district, except as this section allows to the contrary. All accessory structures shall be subject to GMC Chapter 17.54 (clear vision). The following accessory uses shall be allowed in an MR Zoning district:

(1) Buildings. *Garages and carports, storage and other buildings, as follows:*

(a) Either the side, except a street side, or rear setback may be reduced to zero for one accessory structure provided such structure:

- (A) Is detached from other buildings;*
- (B) Does not exceed a height of one (1) story; and*
- (C) Does not exceed a floor area of four hundred-fifty (450) square feet;*

(b) A wall of rated, fire-resistive construction may be required by the Oregon Structural Specialty Code or its successor.

(c) When more than one accessory structure is present including a portable storage container as defined in Chapter 5.22, a setback does not apply to the portable storage container.

(2) Courtyards, Patios and Decks. *The minimum side, except street side, and rear setbacks for uncovered courtyards, patios and decks in excess of thirty inches (30") in height shall be five feet (5'). The minimum front and street side setbacks for such courtyards, patios and decks shall be fifteen feet (15'). No setback shall be required for uncovered courtyards, patios and decks*

thirty inches (30”) or less in height. When calculating the height of a courtyard, patio or deck, railings and benches shall be excluded from the calculation.

(3) Fences and Walls. *The following standards shall apply to fences and walls of all types whether open, solid, wood, metal, masonry or other material.*

(a) When located between the front lot line and the front building line, fences and walls shall not exceed three feet (3’) in height;

(b) Fences and walls not subject to Subsection (3)(a) of this Section shall not exceed six feet (6’) in height;

(c) An exception may be granted to the maximum fence or wall height standards pursuant to review of an application for conditional use; alteration, expansion or change of use of a nonconforming use; or design review and when an exception is found necessary to provide adequate screening for the use.

(4) Storage. *Storage of boats, trailers, pickup campers, coaches, motorhomes and similar recreation equipment. Occupancy of such equipment is subject to a temporary permit under GMC Chapter 15.28 (temporary dwellings).*

(5) Swimming Pools, Ponds and Hot Tubs. *The minimum side, street side and rear setbacks for swimming pools, ponds and hot tubs shall be three feet (3’). The minimum front setback for ponds no greater than five feet (5’) wide and no more than two feet (2’) deep shall be three feet (3’).*

(6) Home Occupations. *Home occupations shall be subject to GMC Chapter 17.78 (home occupations).*

Finding: The primary use of the land for apartments and the accessory uses proposed in Z0024-22 are allowed outright in the MR Zone. The proposed parking garages exceed a floor area of four hundred-fifty (450) square feet and thus they must meet the setback standards found in 17.14.050 and 17.48.040. This land use application was submitted to meet the Design Review requirements for new construction per 17.80.021. This criterion is met.

17.14.050 Dimensional standards.

Except as provided in GMC Chapter 17.38 (planned unit development), Chapter 17.72 (variances) and Chapter 17.76 (exceptions), the following dimensional standards shall apply in an MR zoning district:

(1) Lot area:

(a) For a single-family dwelling, the minimum lot area shall be five thousand (5,000) square feet;

(b) For a two-family or multi-family dwelling, the minimum lot area shall be three thousand square (3,000) feet plus one thousand (1,000) square feet per dwelling unit;

(c) For other uses, the lot area shall be a minimum of five thousand (5,000) square feet or as established by the Planning Commission as provided in GMC Chapter 17.70 (conditional uses).

(2) Setback Requirements:

- (a) A front setback shall be a minimum of twenty feet (20');*
- (b) A side setback shall be a minimum of five feet (5');*
- (c) A rear setback shall be a minimum of fifteen feet (15');*
- (d) A street side setback shall be a minimum of twenty feet (20');*
- (e) Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet (2') into a required setback area;*

(3) Building Height. *Maximum building height shall be thirty-five feet (35'). Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this Section.*

(4) Minimum Vegetation. *The minimum area that must be left or planted in trees, shrubs, grass, etc., shall be at least twenty percent (20%) of the total area of the lot.*

(5) Exceptions in Case of Large Scale PUD. *The dimensional standards of this section may be modified by the Planning Commission in the case of a plan and program for a large-scale planned unit development, providing modifications are not detrimental to the public health, safety and welfare and providing the Planning Commission determines there is provision for adequate public spaces and improvements for circulation, recreation, light, air and service needs of the developed tract and its relation to adjacent areas and for such covenants or other legal provisions as will assure conformity to the achievement of the plan.*

(6) Minimum Density.

- (a) Developments of two-family or multi-family dwellings shall provide a minimum density of eighty percent (80%) of the maximum number of units allowed under GMC Subsection 17.14.050(1). In no case shall the minimum density exceed thirty (30) units per net acre.*
- (b) Exception. Where an existing two-family or multi-family development is being altered or expanded, it shall not be required to comply with the minimum density standard provided the alteration or expansion does not result in a net loss of units.*
- (c) Mobile home parks shall provide a minimum density of eight (8) units per net acre.*

Finding: As proposed, the multifamily development is 5.12 acres in size. The minimum lot size is met. The front property boundary is along Webster Rd. Therefore, the northern property boundary is considered the side property boundary. The landscape plan (sheet No. S.9 dated 10/29/21) and site plan (C1.0 dated 2/4/2022) show that the proposed garages are set back from the northern property boundary by 5 feet. The proposed parking structures are less than 35 feet in height. The landscape plan provided for this project shows that a total of 16,378 square feet of the project site will be landscaped with 1,739 square feet in the parking area, and 1,144 square feet reserved for the playground. The proposed 16,378 square feet of landscaping exceeds the 7,358 square footage to meet the 20% requirement since project is a total of 36,790 square feet with approximately 22,800 square feet of impervious surface. Additional documentation is

needed to ensure the landscaping between Building 2 and the project site, and other landscaping that was required by Z0249-15 is planted and maintained. The proposed use is not a PUD. The density of the existing apartment complex was approved through Z0249-15 and the proposed alteration of the Webster Ridge Apartment development is not proposing to reduce the number of dwelling units. Therefore, the minimum density is met per 17.14.050 (6)(b). These criterion are met as conditioned.

C. DESIGN REVIEW FINDINGS PER CHAPTER 17.80

17.80.010 Objectives.

The following objectives of the regulations in this chapter are as follows:

- (1) To preserve the natural environment and protect and enhance the visual character of the city, and to ensure compliance with the goals, objectives and policies of the Gladstone Comprehensive Plan, zoning and subdivision ordinances.*
- (2) To encourage orderly development and to assure that structures, signs and other improvements are appropriately related to their site, and to surrounding sites and structures. Due regard shall be given to the aesthetic qualities of the terrain and landscaping, and proper attention given to exterior appearance of structures, signs, energy conservation and other improvements.*
- (3) To ensure significant site development will be compatible with land use on adjacent properties.*
- (4) To protect neighboring owners and users by assuring that reasonable provisions have been made for such matters as surface water drainage, the preservation of views, light, air and solar access and those effects on neighboring land uses.*

Finding: The site location has historically been a vacant portion of the church property located to the north of the apartment complex. The Gladstone Planning Commission and City Council approved the rezoning of 1.04 acres through Z0149-20 to enable the use of the property by the existing apartment buildings after a property line adjustment (Z0507-21) took place. These criterion are met. The applicant conducted outreach to neighbors during the rezoning process to ensure that they were aware of the ultimate plan for the property. As designed with open space to the west, and vacant church property to the north, there is a buffer between the proposed parking garages and residential neighborhoods. Alternatives to the surface water drainage plan may need to be considered if the proposed storm drainage system cannot be built to the plumbing code or Gladstone Public Works Design Standards. Additional modifications to the north wall of the parking garage structure, and landscaping along the northern property boundary, will need to be considered for sufficient buffering. As conditioned these criterion are met.

17.80.021 Applicability.

(1) This chapter shall apply to new structures; additions to existing structures; site development, such as grading, parking lot construction or commercial/industrial use of an undeveloped property; change of use; and major remodeling

Finding: The proposal is to construct new parking structures including the necessary site development that is needed for the construction. This criterion is met.

17.80.061 Submittal requirements.

(1) An application for design review shall include a minimum of twelve (12) copies of the following plans drawn to scale. A project summary shall accompany the application when necessary to describe special circumstances such as a request for a minor exception pursuant to GMC Section 17.80.090 (minor exceptions).

Finding: The applicant provided the application materials, including the narrative, site plan and elevations. Copies needed to thoroughly assess the criteria used for evaluation were also provided. This criterion is met.

17.80.090 Minor Exceptions.

(1) Authority. In conjunction with the design review plan approval, the Planning Commission may grant minor exceptions from the following requirements:

(a) Dimensional standards for yards required in the primary district;

(b) Dimensional standards for off-street parking as required in GMC Chapter 17.48 (Off-Street Parking and Loading);

(c) Minimum and maximum number of off-street parking spaces required in GMC Chapter 17.48 (Off-Street Parking and Loading).

(2) Limitations. No minor exceptions shall be greater than twenty-five percent (25%) of the requirement from which the exception is requested. Requests greater than twenty-five percent (25%) shall be subject to variance procedures.

Finding: The applicant is not requesting an exception. This is informational only. This criterion is not applicable as proposed.

17.80.100 Compliance.

(1) Approval of design review shall expire if construction has not begun within two years of the date of the final decision. Upon request and in accordance with GMC Section 17.66.015(4)(a), the two-year period may be renewed once by the City Administrator or designee for not more than one year.

(2) Prior to issuance of a final certificate of occupancy, the development site shall be checked by the City Administrator or designee to insure compliance with the approved design review plans. Approval of a final certificate of occupancy shall not be granted until all conditions of design review approval are met.

(3) Any departure from the approved design review plans may be cause for revocation of the building permit or denial of a final certificate of occupancy. Any changes in the approved design review plans shall be submitted to the City Administrator or designee for review and approval prior to execution. Changes to the substance of an approval or the substance of conditions of approval shall require the submittal of a new design review application.

Finding: This is informational only. The applicant has two years to meet this criterion.

D. DIVISION IV. DEVELOPMENT STANDARDS

CHAPTER 17.42 GENERAL PROVISIONS

17.42.020 Use of public right-of-way. *Use of public right-of-way for the sale, display or storage of goods and off-street parking is prohibited on interior side of curbs, however, this requirement may be waived upon City Council approval.*

17.42.030 Improvements. *Improvements installed by a developer, either as a requirement or at his or her option, shall conform to the standards of this title, GMC Chapter 12.02 (street excavation requirements) and to any supplemental design and construction specifications adopted by the city for such improvements. Improvements shall be installed in accordance with the following procedure:*

(1) Improvement work shall not begin until plans have been checked for adequacy and approved by the city.

(a) To the extent necessary for evaluation of the proposal, the plans may be required before land use approval is issued.

(b) Plans shall be prepared in accordance with the requirements of the city.

(2) Improvement work shall not begin until the city has been notified, and if work has been discontinued for any reason, it shall not be resumed until the city has been notified.

(3) Improvements shall be constructed under the inspection and to the satisfaction of the city.

(a) The city may require changes in typical sections and details in the public interest if unusual conditions arise during construction to warrant the change.

Finding: The application received comments from the Public Works and Engineering Departments. The special conditions of approval identify specific areas where the City has to review the construction plans, improvements, and as-built plans to ensure these criteria are addressed through the entire process of this development. These criterion are met as conditioned.

CHAPTER 17.44 BUILDING SITING AND DESIGN

17.44.020 General standards. *Building siting and design standards are as follows:*

(1) Siting. *Where there are no conflicts with other design standards or requirements in this Title, site buildings to maximize solar access where practical, using such techniques as:*

(a) Maximizing east-west street length so that principal building façades will face south;

(b) Orienting buildings within twenty degrees of true south as well as maximizing their south-facing dimension;

(c) Placing higher buildings on the north portion of the site, while protecting solar access for adjacent sites;

(d) Placing major yard spaces on south side of buildings.

(2) Energy Efficient Design. *Where there are no conflicts with other design standards or requirements in this Title, design buildings that are conducive to energy efficiency and conservation, using techniques including, but not limited to, those listed below which are most appropriate to the development:*

- (a) Concentrate window areas on the south side (within twenty degrees of true south) of buildings where there is good southern exposure, and provide overhangs, balconies, or other shading devices to prevent excessive summer heat gains;
- (b) Use architectural features, shapes or buildings, fences, natural landforms, berms and vegetation to catch and direct summer breezes for natural cooling and minimize effects of winter winds;
- (c) Provide skylights or clerestory windows to provide natural lighting and/or solar heating of interior spaces.

(3) Compatibility. Arrange structures and use areas to be compatible with adjacent developments and surrounding land uses, considering the following design and siting techniques:

- (a) Locate and design structures to protect scenic views or vistas from adjacent properties and public thoroughfares. Setbacks, building height and bulk should be considered;
- (b) Design structures to provide visual order and avoid monotony in layout and design;
- (c) Orient major service activity areas (e.g., loading and delivery areas) of the proposed project away from existing residences;
- (d) Provide opaque enclosures and gates for all refuse storage areas;
- (e) Screen mechanical equipment, except solar collection apparatus, from view or place such equipment in locations where it will not be viewed by the public. Screening shall be accomplished by the use of a sight-obscuring fence or hedge, a landscaped earth berm, building placement or other design techniques;
- (f) Buffering and/or screening shall be used to mitigate adverse visual impacts, dust, noise and pollution, and to provide for compatibility between dissimilar adjoining uses. Special consideration will be given to the buffering, screening and siting of commercial and industrial uses to ensure that noise and odors are not detectable to normal sensory perception on adjacent residential properties. All development shall comply with GMC Chapter 8.12 (noise control).

Finding: The proposed garages are accessory to multi-family dwellings. Therefore, energy efficiency and solar access are not primary considerations for the use of the structures as garages. The proposed garages are buffered from adjacent property in the R-7.2 zoning district by trees located on the open space area to the west of the project site as seen on the landscape plan provided by the applicant. The adjacent property in the R-7.2 zoning district to the north of the project site is currently vacant property with trees and natural vegetation that is owned by the adjacent church. The application narrative provides that “The western and northern property lines are screened from neighboring residentially zoned properties with boulder walls, ultra-block walls, and landscaping that will meet the six-foot minimum height requirement” (p26). Therefore, there will also be a 6-foot high visual barrier between the parking garages and northern property boundary per the narrative. These criterion related to Siting, Energy Efficient Design, and Compatibility are met as conditioned.

(4) Building Materials. Buildings shall be constructed using high-image exterior materials and finishes such as masonry, architecturally treated tilt-up concrete, glass, wood or stucco. Buildings shall not be constructed with metal siding material, except as approved by the design review committee for specific high-image materials, except for:

- (a) Canopies, awnings, screening for roof-mounted fixtures, or other architectural features;
- (b) Utility equipment cabinets;

- (c) Structures no greater than two hundred (200) square feet in floor area and ten (10) feet in height: and,
- (d) Buildings, the portions of buildings, that are not visible from a road or adjacent property.

(5) **Lighting.** Adequate exterior lighting shall be provided to protect public safety and shall be deflected so as not to shine on a lot in a residential district.

(6) **On-site Lighting.** All on-site lighting shall be designed, located, shielded, or deflected so as not to shine into off-site structures or impair the vision of the driver of any vehicle. When required, engineered site lighting plans shall be developed consistent with Illuminating Engineering Standards (IES) including, but not limited to, average maintained illumination and maximum to minimum ratios. A master plan for on-site lighting shall include the design, height, and location of all proposed exterior lights, including:

- (a) Parking and loading area lighting;
- (b) Pedestrian walkway lighting;
- (c) Internal access road lighting;
- (d) Lighting of public entrances into buildings;
- (e) Flood lights illuminating buildings or significant natural features.

(7) **Equipment and Facilities.** All utility lines shall be placed underground. All roof-mounted fixtures and utility cabinets or similar equipment which must be installed above ground shall be visually screened from public view.

Finding: The building is designed to have lap siding, batt and board siding, and cedar shake siding as seen on sheet G3.01 and verified by communication with applicant. Roofing will be composite shingles. A lighting plan was not provided with the application. The utilities are proposed to be located underground. These criterion are met as conditioned.

(8) **Trash Disposal and Recycling Collection.** In addition to the preceding standards, new construction requiring full site plan review shall incorporate functional and adequate space for on-site storage and efficient collection of mixed solid waste and source separated recyclables prior to pick-up and removal by haulers.

(a) Minimum storage area for trash and recyclables shall be established by one of the following methods: minimum standards method or franchise hauler review method.

(A) Franchise Hauler Review Method. The applicant shall submit plans for storage and collection of solid waste and recyclables that are acceptable to the city's franchise solid waste hauler; acceptance may be indicated on the site plan and/or by separate attachment; or

Finding: The applicant is not proposing to increase the number of dwelling units in the development. The accessory use of the site for garages is not anticipated to increase the waste generated by the existing and future residents. This criterion is not applicable.

17.44.022 Multi-family design standards.

New multi-family buildings, including accessory buildings, shall be subject to the following design standards:

(1) Façades. Building façades and exterior walls visible from a public street or pedestrian path or from adjacent property in an R-5 or R-7.2 zoning district shall not consist of a monotonous blank wall and shall include a minimum of two of the following:

(a) Windows;

(b) Entries;

(c) Balconies;

(d) Bays; or

(e) The use of two or more distinct materials to break up stretches longer than fifty lineal feet (50') of unbroken area.

(2) Windows.

(a) Window trim shall not be flush with exterior wall treatment.

(b) Windows shall be provided with an architectural surround at the jamb, head and sill.

(c) All windows facing the front lot line shall be double hung or casement windows.

(3) Roofs. Hipped, gambrel or gabled roofs shall be required. Flat roofs shall not be permitted except in areas where mechanical equipment is mounted.

Finding: The proposed garages are accessory to multi-family dwellings. Therefore, 17.44.022 applies. The proposed garages are not visible from a public street or pedestrian path. The proposed garages are buffered on the west from adjacent property in the R-7.2 zoning district by trees located on the open space area to the west of the project site. Currently the adjacent property to the north is a low density residential property also zoned R-7.2. Therefore, the north wall of the parking garages that measures over 95 feet long shall be modified to include a minimum of two of the following: (a) Windows; (b) Entries; (c) Balconies; (d) Bays; or (e) The use of two or more distinct materials to break up stretches longer than fifty lineal feet (50') of unbroken area. These criterion are met as conditioned.

CHAPTER 17.46 LANDSCAPING

Chapter 17.46 of the GMC regulates landscaping standards applicable to all development that is subject to design review.

17.46.020 Standards. *Landscaping requirements shall be as follows:*

(1) Minimum Requirement. *A minimum of 15 percent of the lot area shall be landscaped, except when a greater percentage is required elsewhere in this title.*

(2) Parking and Loading Areas. *The following landscape requirements shall apply to off-street parking and loading areas:*

(a) An off-street parking and loading area providing 10 or more parking spaces shall be improved with defined landscaped areas totaling no less than ten square feet per parking space;

(b) A parking or loading area shall be separated from any lot line adjacent to a street by a landscaped strip at least 10 feet in width, and any other lot line by a landscaped strip at least five feet in width;

(c) A landscaped strip separating a parking or loading area from a street shall contain:

(A) Street trees spaced as appropriate to the species, not to exceed 25 feet apart, on the average,

(B) Low shrubs not to reach a height greater than three feet spaced no more than five feet apart, on the average, and

(C) Vegetative ground cover;

(d) If a fence or wall is required or proposed, it shall be located behind required landscaped strips where such strips are adjacent to a street;

(e) In parking areas three acres and larger intended for use by the general public, pedestrian walkways shall be raised or separated from parking, parking aisles, and travel lanes by a raised curb, concrete bumpers, bollards, landscaping, or other physical barrier. If a raised pathway is used, curb ramps shall be provided in accordance with the Americans with Disabilities Act Accessibility Guidelines.

(3) Irrigation. *Provision shall be made for watering planting areas where such care is required.*

(4) Maintenance Required. *Landscaping shall be continuously maintained.*

(5) Plant Species. *The general characteristics of tree species shall be considered when planting under overhead utility lines or near sidewalks or curbs to assure that damage will not result when maturity is reached.*

(6) Grading. *The natural form of the site shall be preserved insofar as practicable unless berming or contouring of land is required.*

(7) Public Rights-of-Way. *Land within the public road right-of-way, not developed as sidewalks or driveways, shall be landscaped and maintained by the abutting property owners. Landscaping will be of the variety that would not create a road hazard or impair sight distance.*

(8) Street Trees. *Street tree planting may be required of any development and, if planted, shall be according to city requirements and of a species compatible with the width of the planting strip, and nearby street tree species.*

Finding: The application materials show that a total of 16,378 square feet of the project site will be landscaped with 1,739 square feet in the parking area, and 1,144 square feet reserved for the playground. The proposed 16,378 square feet of landscaping (that includes the playground and walking paths) exceeds the 7,358 square feet needed to meet the 20% requirement found in 17.14.050(4). Verification of the plant species proposed and maintenance of previous agreed upon landscaping required through Z0249-15-D and this application is required per special condition #1. The narrative on page 16 states that there will be a screen between the development and the residential neighbors, but sheet S.9 shows that the landscaping between the parking garages and the northern property boundary consists of ground cover. The development is not adjacent to a public street, near the right of way. These criterion are met as conditioned.

CHAPTER 17.48 OFF-STREET PARKING AND LOADING

Chapter 17.48 of the GMC regulates off-street parking and loading for all development permits.

17.48.030 Standards for developments subject to design review.

At the time of construction, enlargement, or change of use of any structure or development subject to GMC Chapter 17.80 (Design Review), except as provided in the C-2 district, off-street parking spaces shall be provided as follows unless greater requirements are otherwise established under this title:

Finding: The subject property is zoned Multifamily Residential and is subject to a Design Review application per Chapter 17.80. However, the minimum number of 1.5 parking spaces required to serve the existing apartment complex was approved through Z0249-15 and were constructed. The development proposed through this application is to expand the number of covered and uncovered parking spaces available for residents of the Webster Ridge Apartments. 17.48.030 Table 1 identifies that there is no maximum number of parking spaces for a multifamily development. Therefore, this chapter applies and this criterion is met.

17.48.040 Design requirements for permanent off-street parking and loading.

1) Parking and Loading:

- (a) Parking and loading areas shall be paved with asphalt and/or concrete meeting city standards, maintained adequately for all weather use and so drained as to avoid flow of water across public sidewalks;*
- (b) Off-street parking and loading areas shall be screened from abutting properties located in a residential zoning district unless such abutting properties are developed with nonresidential uses. Required screening shall be accomplished by building placement, a landscaped earth berm or a sight-obscuring fence or hedge. Required screening shall be a minimum of six feet high and shall not conflict with GMC Chapter 17.54 (clear vision).*
- (c) Areas for standing and maneuvering vehicles, other than for the off-street parking and storage of truck tractors and/or semitrailers, shall be paved with an asphalt and/or concrete surface meeting city standards. The parking of truck tractors and/or semitrailers in off-street parking areas used exclusively for the parking and/or storage of said vehicles may be allowed utilizing a durable and dustless surface other than an asphalt and/or concrete surface. Such surface must be graded, compacted and surfaced in such a manner that it will adequately support these vehicles, including trailer standing gear, will not produce dust, will not produce tracking of mud or other materials onto adjoining streets or properties, and otherwise complies with other applicable provisions of this code.*

Finding: The plans for proposed development identifies that the parking areas will be paved and storm water drainage is being planned to ensure the areas are drained to avoid the flow of water across sidewalks and existing pedestrian access through the apartments. The narrative provided by the applicant notes that there will be walls and landscaping to provide the six feet high screen between the development and low density residential property to the north. The landscape plan will need to be modified to show the screening along the northern property boundary. The construction plans for the

parking areas, including the markings, will be reviewed by the City during a pre-construction conference to ensure that the City's standards are met. As conditioned these criterion are met.

(2) Parking:

- (a) Required parking spaces shall be located not further than 200 feet from the building or use they are required to serve, measured in a straight line from the building;*
- (b) Required parking shall be provided in the same zoning district or a different zoning district of a more intensive use;*
- (c) In no case shall required parking for a commercial or industrial use be provided in a residential district, except for approved conditional uses;*
- (d) Groups of more than four parking spaces shall be permanently marked and so located and served by driveways that their use will require no backing movements or other maneuvering within a street right- of-way other than an alley;*
- (e) Parking spaces along the outer boundaries of a parking lot shall be contained by a curb at least four inches high and setback a minimum of five feet from the property line. A bumper rail may be substituted for a curb;*
- (f) Off-street parking and loading areas, including parking spaces and access aisles, shall meet or exceed the minimum dimensional standards identified in Tables 2 and 3 and Figure 1 (of this chapter). Access aisles shall be of sufficient width for all vehicular turning and maneuvering;*
- (g) Up to 50 percent of required parking spaces may be provided for compact cars;*
- (h) Parking areas shall be designed, to the maximum extent practicable, to avoid large, uninterrupted rows of parking spaces.*

Finding: The proposed development includes parking spaces that are within 200 feet of the apartment buildings that they will serve. The site of the parking spaces are such that maneuvering through the parking lot will not require any encroachment into the street right-of-way. The zoning district for this 1.04 acre parking development is zoned MR and is the same as the MR zoning that underlies the apartment complex that will be served by the parking development. As shown in the application materials the parking spaces will be permanently marked and the eastern parking lot boundary is contained by a curb that is proposed at 6 inches in height. The remainder of the parking spaces are contained in parking garages that do not require a curb due to the enclosed nature of the spaces. The applicant proposing to have parking spaces that are ten feet wide by 19 feet long with a drive aisle that is 26 feet across. The proposal does not include parking for compact cars. The rows of parking spaces are interrupted by landscaping and storm drainage infrastructure to have at most, 8 parking spaces in a row. These criterion are met.

(3) Loading:

- (a) A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers shall be located on the site of any school having a capacity greater than 25 students;*
- (b) Buildings or structures to be built or substantially altered which receive and distribute material or merchandise by truck shall provide and maintain off-street loading berths in*

sufficient numbers and size to adequately handle the needs of the particular use. If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately handle the needs of the particular use;

(c) Off-street parking areas used to fulfill the requirements of this section shall not be used for loading and unloading operations except during periods of the day when not required to take care of parking needs;

(d) Loading facilities shall be located at least 20 feet from residential property. Loading spaces shall be located on the site and directly accessible to the main structure.

(e) *Exceptions and Adjustments.* Loading areas within a street right-of-way in areas zoned mixed-use commercial in the C-2 zoning district may be approved when all of the following conditions are met:

(A) Loading areas must be signed to limit the duration of the activity, which may not exceed one hour for each loading operation.

(B) Proposed loading areas must support a use that requires infrequent loading activity. Infrequent loading activity is defined as less than three operations that occur daily between 5:00 a.m. and 12:00 a.m., or all operations that occur between 12:00 a.m. and 5:00 a.m. at a location that is not adjacent to a residential zone.

(C) The proposed loading area:

(i) Does not unreasonably obstruct traffic;

(ii) Will be limited to one loading activity at a time;

(iii) Notwithstanding Portland Avenue, does not obstruct a primary emergency response route; and

(iv) Is acceptable to the applicable roadway authority

Finding: The subject site is located in the MR 1 zoning district and the proposed use is not a school. The parking garages are not anticipated to receive and distribute material or merchandise by truck so loading and unloading are not a primary use of these parking garages that will serve the existing apartment dwelling units. These criterion are met.

17.48.050 Bicycle parking standards.

(1) General Provisions.

(a) *Applicability.* Standards for bicycle parking apply to full-site design review of new construction for multi-family residential (four units and larger) and new commercial/industrial developments. The Planning Commission may grant exemptions to bicycle parking requirements in connection with temporary uses or uses that are not likely to generate the need for bicycle parking.

(b) *Types of Spaces.* Bicycle parking facilities shall be provided in terms of short-term bicycle parking and long-term bicycle parking. Short-term bicycle parking is intended to encourage customers and other visitors to use bicycles by providing a convenient and readily accessible place to park bicycles. Long-term bicycle parking provides a weather-protected place to park

bicycles for employees, students, residents, commuters, and others who generally stay at a site for at least several hours.

(c) *Minimum Number of Spaces.* All developments required to comply with this section shall provide a minimum five percent bicycle parking spaces based on the city's required minimum number of automobile parking spaces. In addition, the following applies:

(A) All development shall have a minimum two short-term bicycle parking spaces; and

(B) If more than seven bicycle parking spaces are required, at least 50 percent of the spaces shall be provided as long-term bicycle parking.

(C) Notwithstanding subsection (1)(a)(A) of this section, 100 percent of all bicycle parking spaces for multi-family development of four units and more shall be provided as long-term bicycle parking.

(2) Location and Design.

(a) *Short-Term Bicycle Parking.* Short-term bicycle parking facilities are lockers or racks that meet the standards of this section and that are located inside a building, or located outside within 30 feet of the main entrance to the building or at least as close as the nearest vehicle parking space, whichever is closer;

(b) *Long-Term Bicycle Parking.* Long-term bicycle parking includes:

(A) Racks, storage rooms, or lockers in areas that are secure or monitored (e.g., visible to employees or customers or monitored by security).

(B) Covered outside bicycle parking spaces that meet the requirements of subsection (2)(g) of this section and are located within 100 feet of an entrance to the building;

(c) *Signs.* If the bicycle parking is not visible from the street or main building entrance, then a sign conforming to the city's standards for on-site traffic control, GMC Section 17.52.060(1), shall be posted indicating the location of the parking facilities;

(d) *Rack Type and Dimensions.*

(A) Bicycle racks must hold bicycles securely by the frame and be securely anchored;

(B) Bicycle racks must accommodate:

(i) Locking the frame and one wheel to the rack with a high-security U-shaped shackle lock, or approved substitute; or

(ii) Locking the frame and both wheels to the rack with a chain or cable not longer than six feet;

(C) The Planning Commission may approve alternate bicycle racks provided they are convenient and secure;

(e) Bicycle parking spaces must be at least six feet long and two feet wide. An aisle five feet wide for bicycle maneuvering must be provided;

(f) Areas set aside for required bicycle parking must be clearly marked and reserved for bicycle parking only;

Finding: The applicant is not required to provide off-street parking since the apartments were built with the required minimum amount of parking approved through Z0249-15-D. Therefore, the bicycle parking requirement is limited to temporary bicycle parking with a minimum of two spaces. The applicant is proposing to provide at a minimum two temporary uncovered bicycle parking spaces using new staple bike racks that are anchored to the ground between the playground and Building 2 as seen on Sheet S.9

dated 10/29/2021. The bike parking is visible from the drive aisle and the entrances to the accessory garage buildings. These criterion are met.

CHAPTER 17.50 VEHICULAR AND PEDESTRIAN CIRCULATION

17.50.010 Applicability. Vehicular and pedestrian circulation standards shall apply to all land divisions and to all development that is subject to design review.

17.50.020 Vehicular and pedestrian circulation generally.

Vehicular and pedestrian circulation facilities, including walkways, provisions for the handicapped, interior drives and parking as provided under GMC Chapter 17.48 (off-street parking and loading), shall be designated as follows:

*(1) **Impervious Surface.** Provide for least amount of impervious surface necessary to adequately serve the type and intensity of proposed land uses within developments as well as providing adequate access for service vehicles.*

*(2) **Traffic Separation.** Provide when feasible, a separation of motor vehicular, bicycle and pedestrian traffic.*

*(3) **Curbs and Sidewalks.** Provide curbs, associated drainage, and sidewalks within the right-of-way or easement for public roads and streets.*

*(4) **Traffic Volume Expansion.** Provision shall be made to accommodate any increased volume of traffic resulting from the development consistent with GMC Section 17.50.050. If streets adjacent to or serving the site are inadequate, widening, dedication of property for future widening, or other street improvements may be required. The development shall be designed to minimize traffic volume increases on minor streets and underdeveloped streets.*

*(5) **Handicapped Needs.** Provide for the special needs of the handicapped such as wheelchair ramps and Braille signs.*

*(6) **Pedestrian Circulation Standards.** An on-site pedestrian circulation system shall be provided for new nonresidential and multi-family developments and for new buildings added to existing nonresidential and multi-family developments. The system may include sidewalks as part of the public rights-of-way, walkways, and multi-use paths. (Walkways only provide for pedestrian circulation; multi-use pathways accommodate pedestrians and bicycles.) The system shall comply with the following standards:*

- (a) The system shall connect all adjacent streets to the main entrances of nonresidential buildings and to unit and/or building entrances of multi-family developments;*
- (b) The system shall connect all buildings and other areas of the site, such as parking areas, bicycle parking, recreational areas, common outdoor areas and any pedestrian amenities;*
- (c) The system shall be hard-surfaced and constructed in accordance with the public works standards. For nonresidential development, the walkways shall be a minimum of six feet wide. For multi-family residential development, walkways shall be a minimum of five feet wide;*

(d) The system and off-street parking and loading areas shall be designed to avoid, to the maximum extent possible, the system's crossing off-street parking and loading areas. Where the system crosses driveways or off-street parking and loading areas, the system shall be clearly identifiable through the use of elevation changes, speed bumps, a different paving material or other similar method. Striping shall not fulfill this requirement;

(e) Where the system is parallel and adjacent to an auto travel lane, the system shall be a raised path or be separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier. If a raised path is used, the ends of the raised portions shall be equipped with curb ramps;

(f) The system shall comply with the Americans with Disabilities Act (ADA);

(g) Walkways or multi-use paths shall be provided at or near midblock where the block length exceeds the length required by GMC Section 17.64.020. Multi-use paths shall also be provided where cul-de-sacs or dead-end streets are planned, to connect the ends of the streets together, to other streets, and/or to other developments, as applicable. Multi-use paths used to comply with these standards shall conform to all of the following criteria:

(A) Multi-use paths are required to be no less than 10 feet wide and located within a 20-foot-wide right-of-way or easement that allows access for emergency vehicles.

(B) The city may require landscaping within the pathway easement/right-of-way for screening and the privacy of adjoining properties.

(C) The Planning Commission may determine, based upon facts in the record, that a walkway or multi-use pathway is impracticable due to: physical or topographic conditions (e.g., freeways, railroads, extremely steep slopes, sensitive lands, and similar physical constraints); buildings or other existing development on adjacent properties that physically prevent a connection now or in the future, considering the potential for redevelopment; and sites where the provisions of recorded leases, easements, covenants, restrictions, or other agreements recorded as of the effective date of this code prohibit the pathway connection.

Finding: The applicant showed part of the on-site pedestrian circulation system, including the sidewalk between the parking area and the playground on the Hardscape plan Sheet C1.0 dated 2/4/2022. The proposed development does not include any additional dwelling units. For the rezoning of the 1.04 acres of land where the proposed development is located, a traffic analysis was conducted and it determined that no additional traffic impact is anticipated. Therefore, expansion of the existing drive and Webster Rd is not required. There are no street frontage improvement required unless the existing sidewalks along Webster Rd are damaged during construction. A multi-use pathway is not proposed in or adjacent to the subject property per the 2017 TSP. The curb ramps between the sidewalk and the parking spaces were not shown on Sheet C4.1 and there were discrepancies between the location of the sidewalks shown on the landscaping plan and the hardscape plan. Therefore, a detailed pedestrian access plan that serves the needs of all abilities is required and is Special Condition #6. These criterion are met as conditioned.

(7) Proposed new industrial, institutional, multi-family retail and office developments requiring full site design review that are adjacent to or incorporate transit streets shall provide transit improvements at any existing or planned transit stop located along the site's frontage consistent with the transit operator's adopted long-range plan.

Finding: The proposed use is related to a multi-family development. There is an existing transit stop on Webster Rd, approximately 160 feet to the south of the eastern property boundary. The design review application Z0024-22 does not require a full site design review for the 5.12 acre site since the majority of the site was reviewed and developed through Z0249-15 and this development does not proposed to incorporate transit streets. This criterion is not applicable.

CHAPTER 17.52 SIGNS

Establishes sign requirements.

Finding: Sign designs for the replacement of the current sign was not included in the application. This criterion is met with Special Condition #2.

CHAPTER 17.54 CLEAR VISION

17.54.020 Clear vision area.

(1) Obstruction Prohibited. On property at any corner formed by the intersection of two streets, or a street and a railroad, it is unlawful to install, set out or maintain, or to allow the installation, setting out or maintenance of any sign, fence, hedge, shrubbery, natural growth or other obstructions to the view higher than three feet above the level of the center of the adjacent intersection with that triangular area between the property line and a diagonal line joining points on the property lines at the distance from the intersection specified in this regulation. In the case of rounded corners, the triangular areas shall be between the lot lines extended in a straight line to a point of intersection and so measured, and a third side which is a line across the center of the lot joining the nonintersecting ends of the other two sides. The following measurements shall establish clear-vision areas:

Right-of-Way (in feet)	Measurement Each Lot Line (in feet)
80'	20'
60'	30'
50' or less	40'

(2) Exceptions. Provisions set out in Subsection (1) of this section shall not apply to:

- (a) Public utility poles; trees trimmed (to the trunk) to a line at least eight feet (8') above the level of the intersection; provided, that the remaining limbs and foliage of the trees must be trimmed as to leave, at all seasons, a clear and unobstructed cross-view of the intersection; saplings, or plant species of open growth habits and not planted in the form of a hedge, which are so planted and trimmed as to leave at all seasons a clear and unobstructed cross-view of the intersection, supporting members of appurtenances to permanent buildings existing on the date when this ordinance in this Chapter becomes effective; official warning signs or signals; places where the contour of the ground is such that there can be no cross-visibility at the intersection; or to signs mounted ten or more feet above the ground and whose supports do not constitute an obstruction as described in Subsection (1) of the section.

(d) At a driveway serving a parking lot with capacity of more than eight automobiles and at corners of an intersection of a street controlled by stop signs or a traffic signal if the street intersection or driveway has an unobstructed sight distance specified in a 2001 publication titled “A Policy on Geometric Design of Highways and Streets” prepared by the American Association of State Highway and Transportation Officials (AASHTO), summarized in the table below; however, the Planning Commission may approve a driveway location with less than minimum intersection sight distance if no other suitable location is available:

Finding: The property being developed is not located on the corner of two intersecting streets. The design of the proposed garages and site development is over 300 feet from the nearest street. The driveway used to access the existing apartments was approved through Z0249-15. This criterion is not applicable and is for informational purposes only.

CHAPTER 17.56 DRAINAGE

17.56.020 Standards.

Adequate provisions shall be made to ensure proper drainage of surface waters, to preserve natural flow of watercourses and springs and to prevent soil erosion and flooding of neighboring properties or streets. Such provisions shall include but not be limited to the following:

- (1) Generally. All development shall be planned, designed, constructed and maintained to:
 - (a) Protect and preserve existing drainage channels to the maximum practicable extent;*
 - (b) Protect development from flood hazards;*
 - (c) Provide a system by which water within the development will be controlled and managed without causing damage or harm to the natural environment, or to property or persons within the drainage basin;*
 - (d) Assure that waters drained from new or redevelopment sites are substantially free of pollutants, including sedimentary materials, through the use of stormwater treatment facilities as referenced herein and appropriate erosion and sediment control practices;*
 - (e) Assure that runoff drained from new and redevelopment sites is managed in accordance with criteria outlined in the City of Gladstone Stormwater Treatment and Detention Standards as to not cause erosion to any greater extent than would occur in the absence of development;*
 - (f) Avoid placement of surface detention or retention facilities in road rights of way.**
- (2) Watercourses. Where culverts cannot provide sufficient capacity without significant environmental degradation, the city may require the watercourse to be bridged or spanned.*
- (3) Easements. In the event that a development or any part thereof is traversed by any watercourse, channel, stream or creek, gulch or other natural drainage channel, adequate easements for storm drainage purposes shall be provided to the city. This does not imply maintenance by the city.*
- (4) Obstructions. Channel obstructions are not allowed, except as approved for the creation of a detention or retention facility. Fences with swing gates may be utilized.*
- (5) Surface Drainage and the Storm Sewer System.*

(a) Stormwater treatment and detention facilities shall be designed and installed in accordance with criteria outlined in the Gladstone Public Works Design Standards and the Gladstone Public Works Standard Construction Specifications.

(b) The street cross-sections found in the Gladstone transportation system plan may be modified to accommodate alternative stormwater management methods subject to the approval of the Public Works Supervisor. The Public Works Supervisor may require modification of the typical cross section to accommodate alternative stormwater management methods when associated with development proposals. Such modifications may be applied as conditions of development approval.

Finding: The subject property does not contain any known drainage ways, floodplains, or watercourses. Surface water drainage and treatment will be completed to City standards. If the proposed location of storm drainage infrastructure is not feasible due to bedrock, property boundaries, existing buildings, infiltration rates, or requirements of the plumbing code, alternative storm drainage systems shall be considered and the City Public Works Department shall approve the final designs. As conditioned these criterion are met.

CHAPTER 17.58 GRADING AND FILL

17.58.020 General provisions.

(1) Grading of Building Sites. Grading and fill of building sites shall conform to Chapter 70 of the Uniform Building Code. The character of soil for fill and the characteristics of lots and parcels made usable by fill shall be suitable for the purpose intended. When deemed necessary, the building official may require geological studies to determine the suitability of the site.

(2) U.B.C. Requirements. The building official shall enforce Chapter 70 of the U.B.C. and shall require soils reports and/or engineering studies before issuing a building permit for fill, excavation, construction or related activities involving soils with restrictive features such as instability, wetness, flooding or other limitations.

Finding: The proposed use is an accessory use to the existing Multifamily Residences on the site. It appears that grading of the building site has already begun based on aerial images from 2020 and 2022. Building permits and grading permits are required to ensure the requirements in the Uniform Building Code, or current predecessor, are met. As conditioned this criterion is met.

CHAPTER 17.60 UTILITIES

17.60.020 Standards.

Utility services and facilities shall be appropriate to the scale and type of development and consideration shall include, but not be limited to the following standards:

(1) Site Disturbance. The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site.

(2) Electricity. Gas. Communications. All development which has a need for electricity, gas and communications services shall install them pursuant to the requirements of the district or company

servicing the development. Except where otherwise prohibited by the utility district or company, all such facilities shall be underground.

(3) *Underground Facilities.* *The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.*

Finding: The City Public Works and Engineering Departments provided comments that highlight the concern of having storm drainage infrastructure below an existing water utility vault. The electrical, lighting, cable, communication and other utility connections will be installed following the requirements of the utility providers. These criterion are met as conditioned.

(4) *Sanitary Sewers.* *All development which has a need for sanitary sewers shall install the facilities pursuant to the requirements set forth by the public works department. Installation of such facilities shall be coordinated with the extension of necessary water services and storm drainage facilities. Requirements for development shall include the following:*

- (a) Sanitary sewers shall be installed to city standards to serve or be available to all development. Design shall take into account the capacity and grade to allow for desirable extension beyond the development. If required, sewer facilities will, without further sewer construction, be sized to directly serve property outside the development;*
- (b) If the area outside the development to be directly served by the sewer line has reached a state of development to justify sewer installation at the time, the Planning Commission may recommend to the City Council construction as an assessment project with such arrangement with the developer as is desirable to assure financing his share of the construction. If it is determined by the city that a larger sized line than normally required to serve the property is desirable to provide for future extension, the city will reimburse the developer the difference in cost of pipe between that required to serve the development and that stipulated by the city;*
- (c) In areas that will not be served by a public sewer, the minimum lot and parcel sizes shall permit compliance with the requirements of the department of environmental quality and shall take into consideration problems of sewage disposal, particularly problems of soil structure and water table as related to sewage disposal by septic tank.*

(5) *Water Services.* *All development which has a need for water service shall install water facilities and grant necessary easements pursuant to the requirements of the utility district serving the development. In addition, requirements for development shall include the following:*

- (a) Water lines to serve residential developments shall be a minimum six inch (6") nominal diameter and water lines to service commercial and industrial developments shall be a minimum eight inch nominal diameter with valves and fire hydrants serving each building site in the development and connecting the development to city mains shall be installed. Prior to starting building construction, the design shall take into account provisions for extension beyond the development and to adequately grid the city system. Hydrant spacing to be based on accessible area served according to A.I.A. recommendations and as approved by the Fire Chief;*
- (b) If the city determines that a water line size greater than the required minimum in diameter is required to provide for future extension of the water system, the city will reimburse the developer*

the difference in cost of pipe and valves between that of the minimum diameter and the size stipulated by the city.

(6) Coordination with Street Surfacing. *All underground utilities, sanitary sewers and storm drains installed in streets by the developer or by any utility company shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed to a length minimizing the necessity for disturbing the street improvements when service connections are made.*

(7) As-Built Submittals. *A map showing all public improvements, as built, shall be filed with the city engineer upon completion of the improvements.*

(8) Conditions for Refund to Developer.

(a) If required water mains or sewer facilities will without further construction other than individual laterals, directly serve properties outside the development, the city may enter into an agreement with the developer to require owners of the other benefiting properties to refund to the developer, a pro rata portion of the cost of the extension prior to allowing the benefiting property to connect thereto;

(b) Any such agreement shall contain a provision that the developer agrees to completely indemnify and hold harmless the city for any claim or injury or action arising from the city's administration of such agreement;

(c) The right to require such a refund shall not continue for more than 10 years after the date of installation of the extension;

(d) The amount to be refunded and the individual proration of the same shall be determined by the city and such determination shall be final.

Finding: The materials provided in the application will need to address the concerns voiced by the Public Works Department in their comments before the construction plans are provided to the City for review. Therefore, the plans for water, storm sewer, parking lot surfacing, and utility easements shall meet the City requirements as conditioned. These criterion are met as conditioned.

As such, the Planning staff recommend APPROVAL of the Design Review Application No. Z0024-22-D.

Pursuant to Section 17.92.020 of the Gladstone Municipal Code, the decision of the Planning Commission may be appealed to the City Council within 15 days of the mailing of the Planning Commission's written decision. In order to appeal a decision of the Planning Commission, a party must have appeared orally or in writing before the Planning Commission. The filing fee for the appeal is \$250.00. If no appeal is filed within 15 days, the decision of the Planning Commission shall be final.

EXHIBITS



EXHIBIT 1
Location Map
Z0024-22-D

Proposed location for open area.

Proposed location for garages and parking.

Existing Multi-household apartment units Z0249-15-D



12/02/2020



EXHIBIT 2
2020 Aerial Image
Z0024-22-D

Page 29 of 35

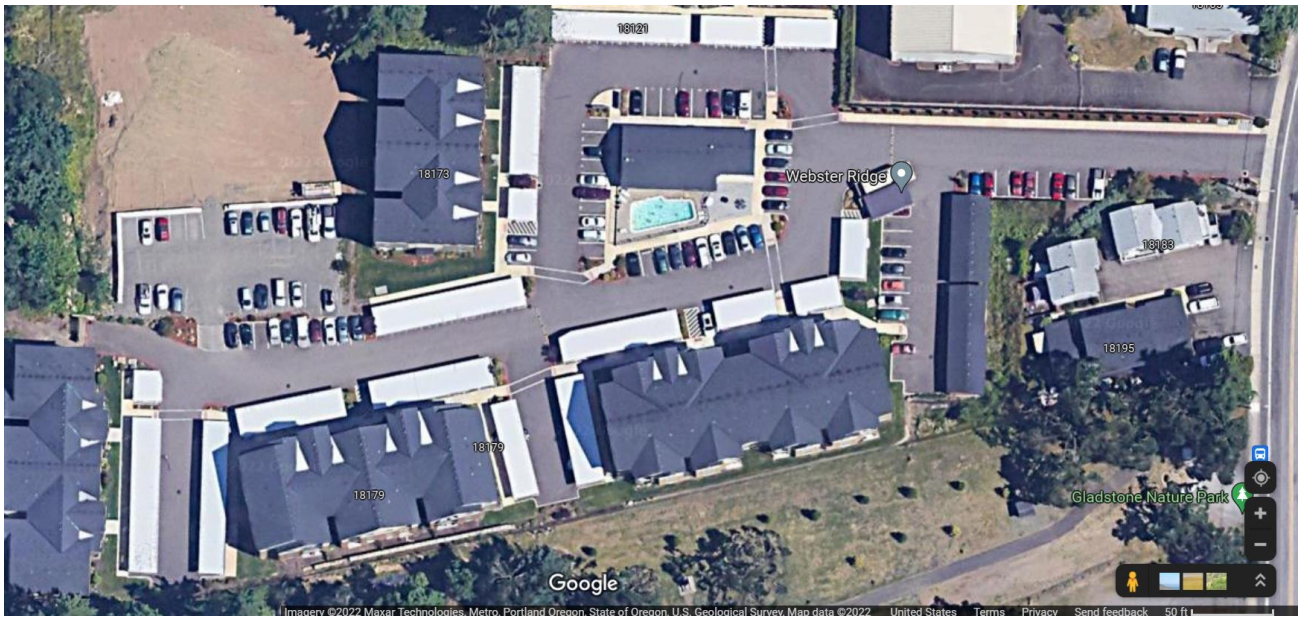
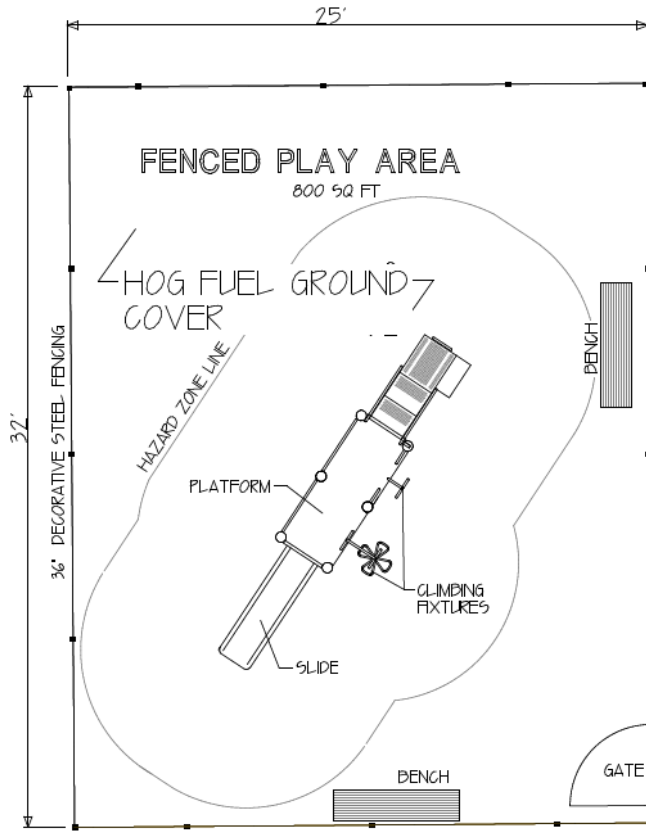


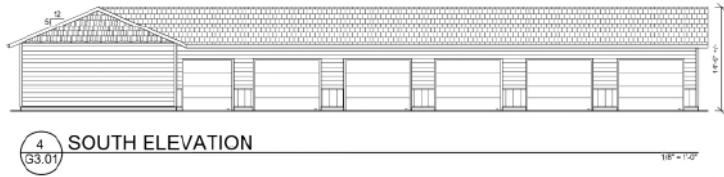
EXHIBIT 2
Aerial Image
2022 by Google
Z0024-22-D



PLAY GROUND PLAN

SCALE 1/4" = 1'-0"

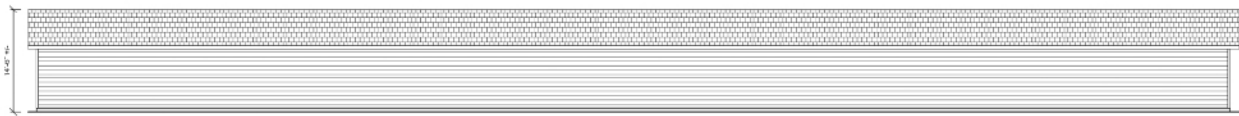
EXHIBIT 3
Playground Plan
Z0024-22-D



4 SOUTH ELEVATION
G3.01



3 NORTH ELEVATION
G3.01



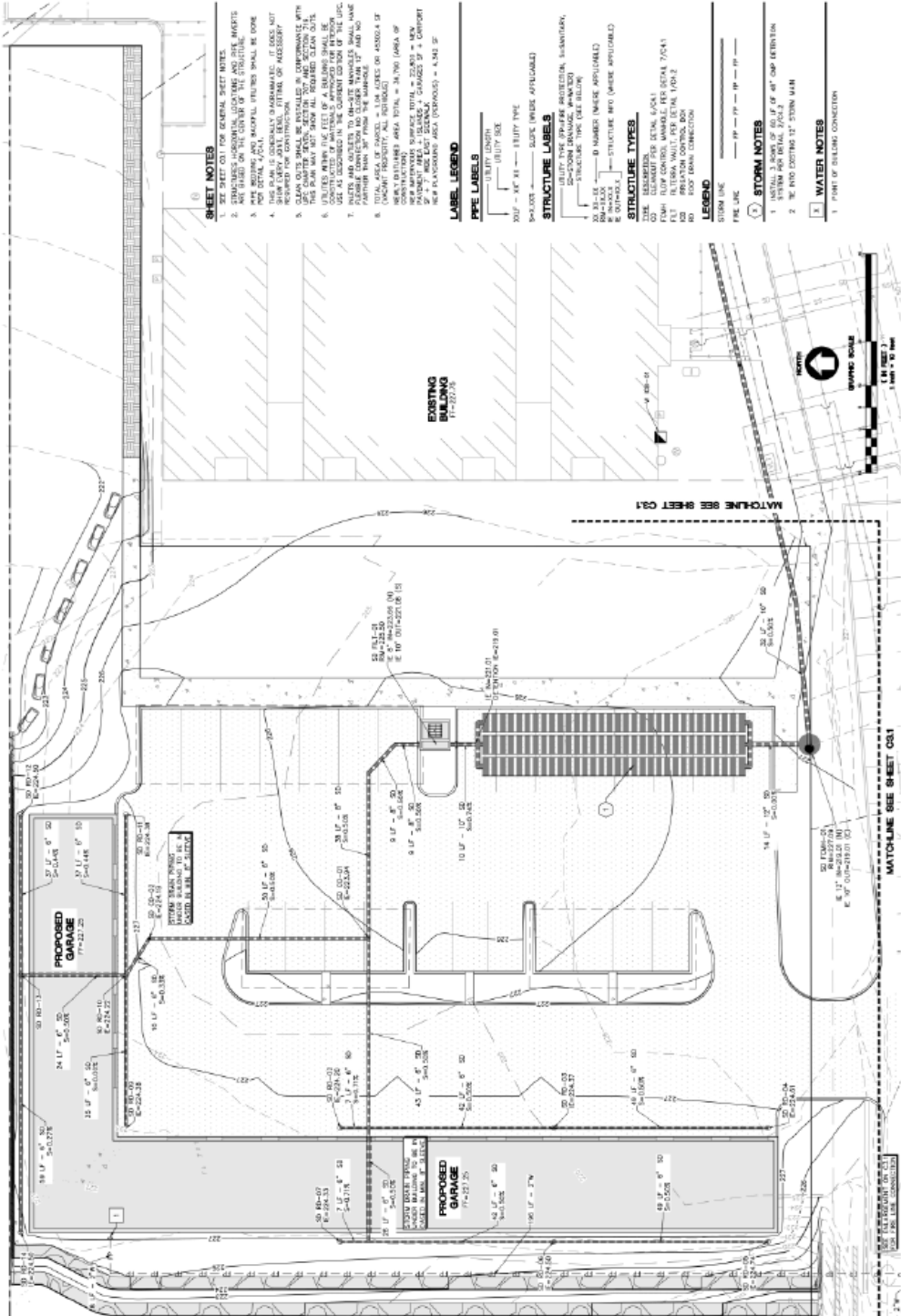
2 WEST ELEVATION
G3.01



1 EAST ELEVATION
G3.01

ARCHITECTURAL
COMPOSITE SHINGLES
CEDAR SHAKE SIDING
7 1/4\"/>

EXHIBIT 3
Exterior Renderings
Z0024-22-D



SHEET NOTES

- SEE SHEET C01 FOR GENERAL SHEET NOTES.
- ANY CHANGES TO THE CONCRETE OF THE STRUCTURE, MASONRY OR FINISHES SHALL BE DONE PER APPROVED ARCHITECTURAL DRAWINGS.
- THIS PLAN IS GENERALLY QUANTITATIVE. IT DOES NOT SHOW ALL REQUIRED DETAILS.
- THIS PLAN MAY NOT SHOW ALL REQUIRED DETAILS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DETAILS REQUIRED FOR CONSTRUCTION.
- GLASS DOORS SHALL BE INSTALLED AS DEMONSTRATED WITH APPROVED ARCHITECTURAL DRAWINGS.
- CONCRETE SHALL BE PLACED AND FINISHED PER THE CONTRACT SPECIFICATIONS.
- USE ALL DIMENSIONS IN THE CURRENT EDITION OF THE UFG.
- FLAT ROOF CONNECTION TO EXISTING SHALL BE AS SHOWN PER APPROVED ARCHITECTURAL DRAWINGS.
- TOTAL AREA OF GARAGE: 1,084 SQ. FEET OR AN EQUIVALENT CONSTRUCTION.
- CONCRETE AREA TOTAL = 24,790 (AREA OF EXISTING CONSTRUCTION).
- PERMANENT AREA IN EXCESS OF 1,000 SQ. FEET SHALL BE CONSIDERED AS A CONCRETE PERMANENT AREA. (CONCRETE AREA = 1,084 SQ. FEET)

PIPE LEGEND

PIPE LABELS
 1. UTILITY LENGTH
 2. UTILITY SIZE
 3. PIPE TYPE
 4. SIZES (WHERE APPLICABLE)

STRUCTURE LABELS

1. UTILITY TYPE (SPHERE, RECTANGULAR, TRIANGULAR, QUADRANGULAR, etc.)
 2. STRUCTURE TYPE (SEE SHEET C01)
 3. STRUCTURE SIZE (WHERE APPLICABLE)
 4. STRUCTURE ID (WHERE APPLICABLE)

STRUCTURE TYPES

1. RECTANGULAR
 2. TRIANGULAR
 3. QUADRANGULAR
 4. CIRCULAR
 5. POLYGONAL
 6. OTHER (SEE SHEET C01)

LEGEND

PIPE LINE
 STORM LINE
 FIRE LINE

STORM NOTES

- SYSTEM SHALL BE 48" CAP EXTERIOR.
- SEE EXISTING 12" STORM MAIN.

WATER NOTES

- POINT OF SELLING CONCRETE.

EXHIBIT 4
 Site Plan C3.0
 02/04/22

Location of discrepancy between hardscape plans and landscaping plan.

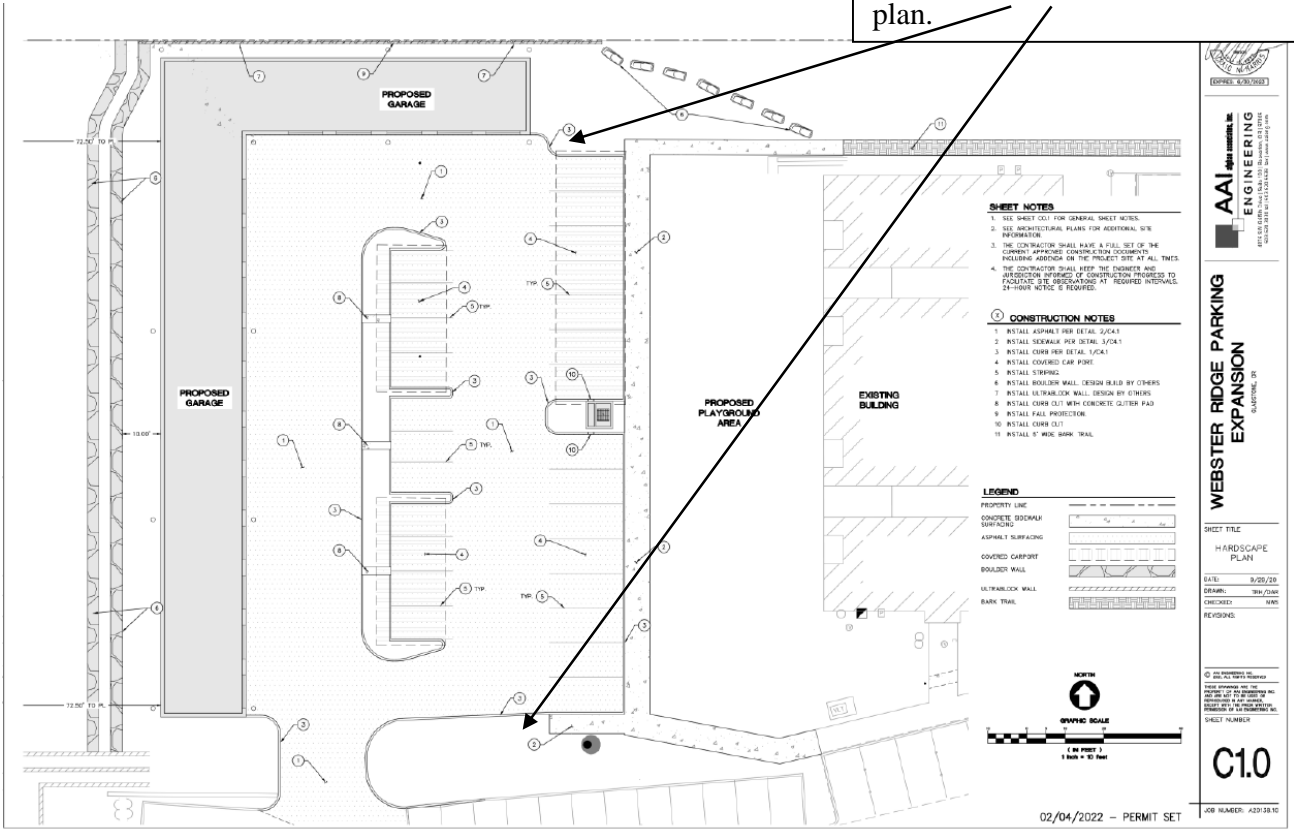
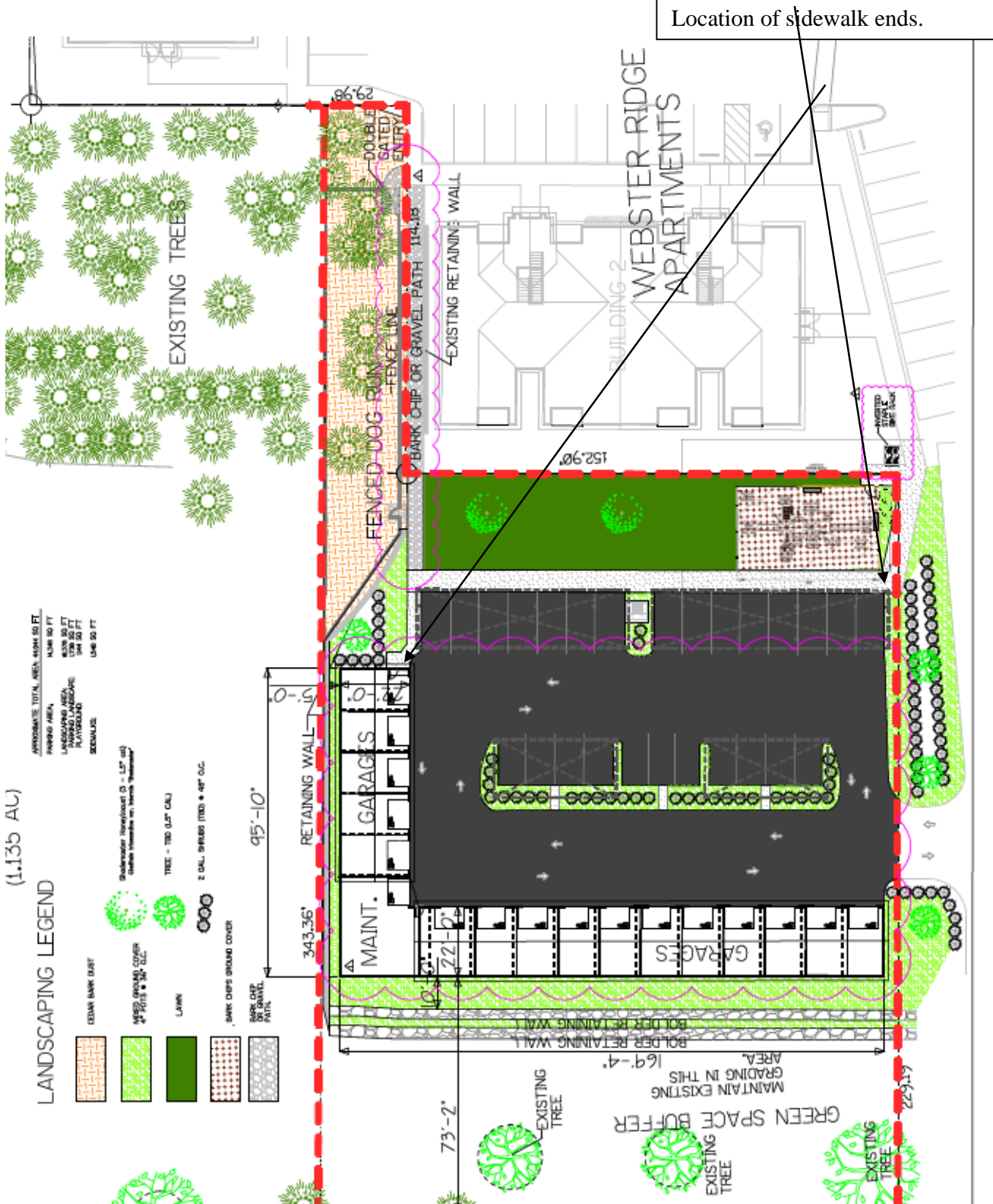


EXHIBIT 4
 Site Plan
 2/04/22



Location of sidewalk ends.

EXHIBIT 5
Landscaping Plans from 2022

Clackamas Fire District #1



Date: April 13, 2022

To: Joy Fields, Senior Planner Clackamas County

RE: Z0024-22, 18181 Webster Rd, Gladstone

A land use plan review was conducted for the listed property. It has been determined that this property is in an area with public water supply, and there are no site conditions that would prevent the applicant from constructing the proper access. Fire department access and water supply are reviewed in accordance with the 2019 edition of the Oregon Fire Code (OFC).

When submitting plans for fire department access and water supply approval please include the following information:

- Fire apparatus access
- Fire lanes
- Fire hydrants
- Fire lines
- Available fire flow
- FDC location (if applicable)
- Building square footage
- Construction type
- Fire flow test per NFPA 291 no older than 12 months

Access and water supply plans can be submitted to Clackamas Fire District #1 website www.clackamasfire.com Access/water supply submittal link.

For design assistance we provide additional information including the Fire Code Application Guide, please visit our new construction website at <http://www.clackamasfire.com/fire-prevention/new-construction-resources/>

Note: This review is to determine if the project can be designed and constructed to meet the requirements of the Oregon Fire Code, and should not be considered approval of the design as submitted.

Alex McGladrey
Clackamas Fire District #1
Deputy Fire Marshal
503-742-2662
alex.mcgladrey@clackamasfire.com



TO: **Joy Fields** / County Planning
FROM: **Erik Carr Bertram** / Water Environment Services (ecarr@clackamas.us, 503-936-3666)
DATE: April 7, 2022
SUBJECT: WES Conditions of Approval, Z0024-22 – Webster Ridge Apts Parking Lot Expansion

LOCATION: 18181 WEBSTER ROAD
TAX LOT: 22E17DC00800
WES LOG#: 170-22

Facts and Findings:

- Clackamas Water Environment Services (WES) is an intergovernmental entity formed pursuant to Oregon Revised Statutes Chapter 190 for the purpose of providing regional sewerage works, including all facilities necessary for collecting, pumping, treating, and disposing of sanitary or storm sewage within its boundaries.
- Per an IGA between the City of Gladstone and Water Environment Services, WES is the delegated erosion control authority within the City's boundaries for all development and redevelopment applications. Erosion control services shall include plan and permit review, fees, and inspection.

Conditions of Approval:

1. The proposed development is located within the service area of Water Environment Services (WES) and shall be subject to WES Rules and Regulations, and Standards ("WES RR&S"), in accordance with the following adopted ordinances:
 - a. Water Environment Services Rules and Regulations, July 2018, Ordinance No. 03-2018
 - b. Stormwater Standards, Clackamas County Service District No. 1, July 1, 2013.
2. Per Stormwater Standards, Section 6.1, the owner or their agent, contractor, or employee shall properly install, operate and maintain both temporary and permanent Erosion Protection and Sediment Control (EPSC) practices to protect the environment during the useful life of the project. No visible or measurable erosion shall leave the property during development, construction, grading, filling, excavating, clearing, or other activity that accelerates erosion, as required by water quality standards set forth in OAR 340-41-445 thru 470.
3. An EPSC Permit shall be required for development activities that result in land disturbance of 800 sq ft or greater. Before the start of any grading or construction activities, the applicant shall submit a Permit application and erosion control site plans to WES for review and approval, and pay applicable permit fees (\$460 + \$80/acre over 1 acre).
4. EPSC site plans shall delineate the total area of disturbance and note the square footage. Site plans shall identify adequate EPSC techniques and methods as prescribed in the current WES Erosion Prevention Planning and Design Manual.
5. A DEQ 1200-CN Construction Stormwater (Erosion Control) Permit shall be required for development activities that result in land disturbance of 1 acre to less than 5 acres. The applicant shall submit a WES EPSC Permit application and DEQ 1200-CN template style erosion control plans to WES for review and approval, and pay applicable permit fees (\$460 + \$80/acre over 1 acre). Plans shall be consistent with the substantive requirements of DEQ's 1200-C permit site erosion prevention and sediment control plans.



CLACKAMAS

WATER
ENVIRONMENT
SERVICES

6. Prior to issuance of building permits, EPSC measures shall be inspected by a WES erosion control inspector. Monitoring inspections will occur periodically throughout the construction. The permittee shall request a Final Erosion Control inspection once the site has been permanently stabilized.
 - a. Commercial and Other: To schedule an Initial or Final inspection, call WES at 503-742-4567 and request to speak with the erosion control inspector.



1. **Water.** Existing public and private water mains are located within the Webster Ridge Apartment complex. No domestic water is proposed for the new parking and garage facilities. Water for landscape irrigation shall be fed through the existing water meter and irrigation system for the apartment complex. Water for firefighting purposes, as indicated on the applicant's submitted Sheets C3.0 & C3.1, shall be fed from the existing private fire line. No new connections to the public water main on the site will be allowed without approval of Gladstone Public Works.

On submitted Sheet C3.0, the new storm drain pipe east of manhole SD FCMH-01 is shown crossing under an existing concrete vault containing a double check detector backflow prevention device for the existing private fire system. The elevation of the new storm drain pipe in the vicinity of the backflow vault will be approximately elevation 218.7+/- and will be several feet lower than the backflow prevention vault which has a lid elevation of 227.25+/- and which is likely approximately 5 feet tall, therefore having a base of approximately elevation 222.25+/-.

The new storm drain piping and trenching shall meet the requirements of the Oregon Plumbing Specialty Code (OPSC) as required by City of Gladstone Public Works Design Standards (GPWDS) Section 2.0016.H. Section 314.1 of the OPSC states, "*Trenches deeper than the footing of a building or structure, and paralleling the same, shall be located not less than 45 degrees (0.79 rad) from the bottom exterior edge of the footing, or as approved in Section 301.0*".

The applicant shall detail for Gladstone Public Works how the storm drain will be installed in the vicinity of the existing backflow prevention vault consistent with the requirements of the OPSC and without impacting the existing backflow prevention vault or the public water line serving the backflow prevention vault.

2. **Sanitary Sewer.** No sanitary sewer is needed for the parking garages.
3. **Storm Drainage.** The proposed development shall meet all storm drainage requirements pursuant to the GPWDS. Storm drainage improvements for onsite development shall be permitted through Clackamas County Building Department. A storm drainage analysis and plans were submitted for review detailing how storm water quality, quantity, and disposal are being addressed. Comments on the submittal are below:
 - a. The private storm water system shall meet the requirements of the Oregon Plumbing Specialty Code (OPSC) as required by City of Gladstone Public Works Design Standards (GPWDS) Section 2.0016.H.

The applicant's submitted Sheet C3.1 identifies the elevation of the new storm drain pipe south of existing Building #4 to be between 215 feet and 217 feet. Sheet C-2.0 of the as-built plans for the existing Webster Ridge Apartment complex (AAI Engineering dated 9/14/2017) indicates the finished floor elevation of Building #4 to be elevation 227.0 feet and Sheet C0.1 of the as-built plans identifies the separation between the rear of Building 4 and the southern property line to be 5.0 feet.

The geotechnical report included in the storm drain calculations (GeoPacific Engineering, May 12, 2015) identifies two test pits in the vicinity of Building 4, TP-4 and TP-5. TP-4 was terminated at 9 feet bgs due to practical refusal on medium hard basalt. The pre-development ground surface at TP-4 was in the vicinity of elevation 227.0, which places the practical refusal approximately at elevation 218.0. TP-5 was terminated at 3.5 feet bgs due to practical refusal on medium hard basalt. The pre-development ground surface at TP-5 was in the vicinity of elevation 223, which places the practical refusal approximately at elevation 219.5. Therefore, the surface of the hard rock layer is anticipated to be encountered between the elevations of 218.0 feet and 219.5 feet, and the bottom of the pipe is proposed being between 217 feet and 215 feet. Three to four feet of hard rock may have to be excavated from within the five-foot wide space south of Building #4.

Section 314.1 of the OPSC states, "*Trenches deeper than the footing of a building or structure, and paralleling the same, shall be located not less than 45 degrees (0.79 rad) from the bottom exterior edge of the footing, or as approved in Section 301.0*". The applicant shall demonstrate for the Public Works Department and Clackamas County Building Department how the new storm drain piping will be installed within the 5-foot-wide zone between Building 4 and the property line while meeting the requirements of the OPSC.

- b. The applicant's stormwater analysis shall be revised to meet the requirements of Section 2.0016.C.4 of the GPWDS. The stormwater analysis includes a one paragraph response for the downstream analysis. The downstream analysis shall be revised to demonstrate adequate conveyance capacity to the distance where the project site contributes less than 15% of the upstream drainage area OR 1,500 feet downstream of the project, whichever is greater. The downstream analysis should also address impacts to the Webster Road / Oatfield Road drainage system by having a portion of this site, which naturally drains west toward Stone Oaks Ct., drain east into the Webster Road / Oatfield Road storm drain system.
 - c. Storm drainage detention requirements are established by Section 2.0016.C.1 of the GPWDS. The less intense storm drainage detention requirement is to detain peak flows from the post-development 2-year storm to 50% of the peak runoff from the pre-development 2-year storm. The applicant's calculations indicate the existing peak runoff in a 2-year event as 0.06 cfs. The applicant's proposed peak release rate from the post-development 2-year storm event is 0.04 cfs, which fails to comply with the standard by 0.01 cfs. The applicant's report states that the standard cannot be met using orifices, due to clogging associated with orifices smaller than 1-inch diameter. We agree with this statement that a 1-inch orifice is a typical minimum diameter.
 - d. The higher intensity detention requirements of Section 2.0016.C.1 are modified in the case of identified downstream deficiencies by Section 2.016.C.3. The Gladstone Stormwater Master Plan identifies deficiencies downstream in the existing Webster Road / Oatfield Road storm drainage system in Oatfield Road and SE 82nd Drive. Due to the existing downstream deficiency and because the proposed plan will drain a portion of the site in a different direction than its natural drainage path, the project shall meet the detention standards of GPWDS Section 2.0016.C.3.
4. **Construction Plans Submittal.** Following land use approval, plans detailing the installation of the private utilities, impacts to any public facilities, and site grading shall be submitted to the City of Gladstone Public Works Department for review and approval. Construction plans shall be designed and stamped by a Professional Engineer registered in the State of Oregon. Plan submittal shall include (3) paper sets of plans, a pdf copy, an Engineer's Estimate for any public improvements, and a drainage report.

5. **Pre-Construction Conference.** Once grading/construction plans are ready to be approved by the City of Gladstone, a Pre-Construction Conference with final sign-off on the Construction Plans may be required at the discretion of the Public Works Director.
6. **As-Built Submittals and Stormwater Certification.** Prior to approval of the Certificate of Occupancy, the applicant shall provide the City with the following:
 - a. As-built plans.
 - b. A recorded copy of the Private Storm Drainage Facilities Maintenance Agreement for the private storm water system(s). The Maintenance Agreement shall be prepared using an approved City of Gladstone form.
 - c. A signed certification from the design engineer indicating that the surface water systems have been inspected and installed per the approved plans and that the systems are functioning as designed.

Webster Ridge Apartments Parking Lot Expansion

Gladstone, Oregon

A Land Use Application For:
Design Review

Submitted: March 9, 2022

Applicant:

Stony Ridge, LLC

14020 SE Johnson Creek Road; Suite 102

Milwaukie, Oregon 97267

Contact: Bob Sanders

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I. Introduction

General Information

Applicant and Owner: **Stony Ridge, LLC**
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Milwaukie, OR 97267
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Project Location 18181 Webster Road
Gladstone, OR 97027

Parcel ID Number: 22E17DC00800

Zoning: Multi-Family Residential (MR)

Comprehensive Plan: High-Density Housing

Project Site Area: 5.12 acres

II. Project Summary

Existing Conditions

The project site consists of an approximately 1.04 acres (44,044 square feet) portion of parcel 22E17DC00800 (tax lot 800), a roughly 5.12-acre property located on Webster Road in the City of Gladstone (City). Tax lot 800 is currently zoned Multi-Family Residential (MR) with a comprehensive plan designation of High-Density Housing. A vicinity map is included as Figure 1, and a zoning map is included as Figure 2 within this narrative.

Tax lot 800 is currently the site of the Webster Ridge apartment complex. The apartment complex was approved in the 2015 land use approval Z0249-15-D, and consists of 122 dwelling units, 184 parking spaces, and associated landscaping improvements and tenant amenities. Access to the site is provided from Webster Road via a two-way 26-foot private drive aisle. Surrounding uses and zoning designations are identified in Table 1 below.

Table 1: Surrounding Uses

	Zoning	Use
North	R-7.2	Single-family residential, Tri-City Baptist Temple
South	C2 (Community Commercial)	Gladstone Nature Park
East	R-7.2	Webster Road, LDS Milwaukie Oregon Stake
West	R-7.2	Single-family residential

Previous Approvals

The project site is subject to an October 2020 City approval of a comprehensive plan designation and zoning map amendment (Z0149-20-D). As a result of this approval, the project site was rezoned to MR from R-7.2 and its comprehensive plan designation changed from Low-Density Housing to High-Density Housing. Following this approval, a property line adjustment was also approved by the City under file Z0507-20-PLA, to adjust a segment of the common property line for tax lot 800 and tax lot 22E17DC00701 (tax lot 701), resulting in the 1.04-acre project area being transferred to tax lot 800 from tax lot 701. The property line adjustment was recorded with Clackamas County, and a copy is included as Exhibit C.

Development of the project site is subject to special conditions of approval outlined in Z0149-20-D, regarding future use, lighting and screening. These special conditions are as follows:

- 1. Future Use.** *The 1.04 acres that are rezoned shall be developed with land uses customarily considered accessory to Multifamily residences per 17.14.030 in addition to recreational uses per 17.68.040.*
- 2. Lighting.** *The future development of the site shall provide limited lighting per 17.44.020(5) and (6). Any lighting installed shall be the minimum amount required to meet the City of Gladstone Public Works requirements.*
- 3. Screening.** *The project currently has a retaining wall at the southwestern edge of the property closest to Stone Oaks Court. To provide screening from adjacent neighbors, an exception to 17.14.030, fence and wall height, will be granted by the Planning*

Commission and the applicants shall install a six foot (6') fence on top of the retaining wall prior to receiving building permits for additional development on the rezoned portion of the parcel per 17.68.040. A six foot (6') landscaping screen may be substituted for a fence if the integrity of the retaining wall can be maintained.

Project Description

Stony Ridge, LLC (the applicant) is requesting City approval of a design review application to construct a new asphalt parking area that includes additional parking stalls and garages. Some of the parking stalls will include covered carports. The applicant also proposes to retain a green space buffer west of the western boulder retaining walls and construct a lawn and playground space between the parking lot and the existing apartment buildings to the east.

The applicant submitted an initial design review application on January 18, 2022 (Z0024-22). This narrative serves as a response to the Notice of Incomplete Application included as Exhibit B, provided to the applicant by City staff on January 27, 2022. The narrative addresses project compliance with applicable sections of the Gladstone Municipal Code (GMC) as well as specific conditions of approval stemming from prior land use decisions, as detailed above. A Preliminary Site Plan included as Exhibit D and structural plans included as Exhibit E have also been provided to illustrate the proposed improvements.

Figure 1: Vicinity Map

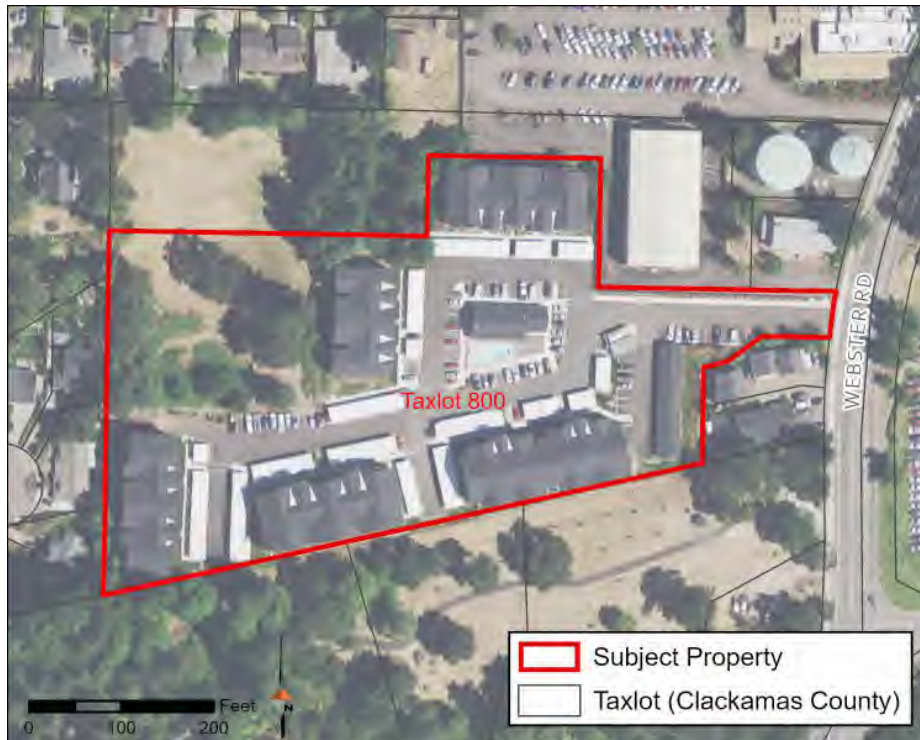
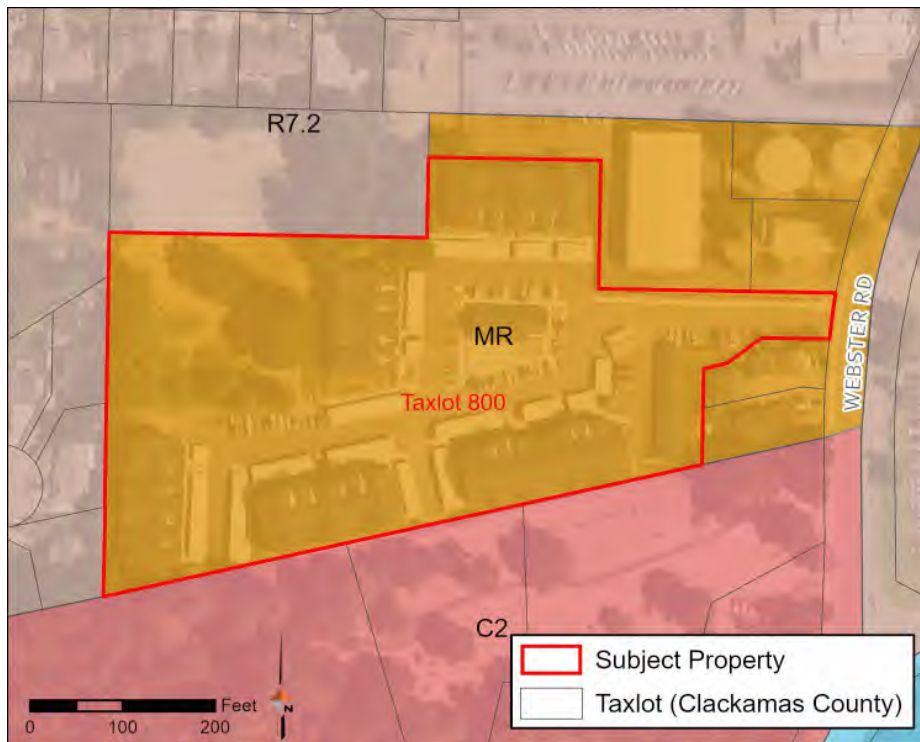


Figure 2: Zoning Map



III. Gladstone Municipal Code

The applicable Gladstone Municipal Code (GMC) provisions are set forth below with findings demonstrating the project's consistency with these provisions.

17.14 MR – Multi-Family Residential District

17.14.010 Purpose.

The purpose of an MR district is to: implement the comprehensive plan and to provide land for families and individuals desiring to live in an environment of high density multi-family dwellings with proximity to mass transit, shopping and service facilities.

17.14.020 Uses allowed outright.

In an MR zoning district, the following uses and their accessory uses are allowed outright:

- (1) Two-family dwellings.
- (2) Multi-family dwellings.

Response: The proposed parking area, garages, and carports will serve as an accessory use to an existing multi-family residential development. Pursuant to this section, the proposed improvements are allowed outright.

17.14.030 Accessory uses allowed.

Accessory uses shall comply with all the requirements of this zoning district, except as this section allows to the contrary. All accessory structures shall be subject to GMC Chapter 17.54 (clear vision). The following accessory uses shall be allowed in an MR Zoning district:

(1) Buildings. Garages and carports, storage and other buildings, as follows:

- (a) Either the side, except a street side, or rear setback may be reduced to zero for one accessory structure provided such structure:
 - (A) Is detached from other buildings;
 - (B) Does not exceed a height of one (1) story; and
 - (C) Does not exceed a floor area of four hundred-fifty (450) square feet;
- (b) A wall of rated, fire-resistive construction may be required by the Oregon Structural Specialty Code or its successor.
- (c) When more than one accessory structure is present including a portable storage container as defined in Chapter 5.22, a setback does not apply to the portable storage container.

Response: As shown on the site plan (Exhibit D), the garages and carports have a minimum side and rear setback in excess of five feet. Therefore, this standard is met.

(2) Courtyards, Patios and Decks. The minimum side, except street side, and rear setbacks for uncovered courtyards, patios and decks in excess of thirty inches (30") in height shall be five feet (5'). The minimum front and street side setbacks for such courtyards, patios and decks shall be fifteen feet (15'). No setback shall be required for uncovered courtyards, patios and decks thirty inches (30") or less in height. When

calculating the height of a courtyard, patio or deck, railings and benches shall be excluded from the calculation.

Response: No courtyards, patios, or decks are proposed with this application. Therefore, this provision is not applicable.

(3) Fences and Walls. The following standards shall apply to fences and walls of all types whether open, solid, wood, metal, masonry or other material.

(a) When located between the front lot line and the front building line, fences and walls shall not exceed three feet (3') in height;

(b) Fences and walls not subject to Subsection (3)(a) of this Section shall not exceed six feet (6') in height;

(c) An exception may be granted to the maximum fence or wall height standards pursuant to review of an application for conditional use; alteration, expansion or change of use of a nonconforming use; or design review and when an exception is found necessary to provide adequate screening for the use.

Response: As shown on the grading and erosion control plan (Exhibit D), the applicant plans to construct an ultra-block wall along the north property line and two low boulder walls behind the garages with a large natural green space between the boulder walls and the western property line, neither of which are situated between the front lot line and front building line, nor will they exceed six feet in height. Therefore, this standard is met.

(4) Storage. Storage of boats, trailers, pickup campers, coaches, motorhomes and similar recreation equipment. Occupancy of such equipment is subject to a temporary permit under GMC Chapter 15.28 (temporary dwellings).

(5) Swimming Pools, Ponds and Hot Tubs. The minimum side, street side and rear setbacks for swimming pools, ponds and hot tubs shall be three feet (3'). The minimum front setback for ponds no greater than five feet (5') wide and no more than two feet (2') deep shall be three feet (3').

(6) Home Occupations. Home occupations shall be subject to GMC Chapter 17.78 (home occupations).

Response: The applicant does not propose the storage of any recreation equipment, nor the installation of a swimming pool or hot tub. Home occupations are similarly not proposed. Therefore, these provisions are not applicable.

17.14.050 Dimension standards.

Except as provided in GMC Chapter 17.38 (planned unit development), Chapter 17.72 (variances) and Chapter 17.76 (exceptions), the following dimensional standards shall apply in an MR zoning district:

(1) Lot Area:

(b) For a two-family or multi-family dwelling, the minimum lot area shall be three thousand square (3,000) feet plus one thousand (1,000) square feet per dwelling unit;

Response: Tax lot 800 is approximately 5.12 acres. There are no additional dwelling units proposed with this application. Therefore, this standard is met.

(2) Setback Requirements:

- (a) A front setback shall be a minimum of twenty feet (20');**
- (b) A side setback shall be a minimum of five feet (5');**
- (c) A rear setback shall be a minimum of fifteen feet (15');**
- (d) A street side setback shall be a minimum of twenty feet (20');**
- (e) Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet (2') into a required setback area;**

Response: As shown on the site plan (Exhibit D), the proposed garage and carport structures have a side setback in excess of five feet, a rear setback of approximately 73 feet, and are approximately 280 feet from the front property line which is also the nearest street side property line. Therefore, this standard is met.

(3) Building Height. Maximum building height shall be thirty-five feet (35'). Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this Section.

Response: As shown on the structural plans (Exhibit E), the proposed garage and carport buildings measure 14 feet, six inches in height which is below the maximum building height standard. Therefore, this standard is met.

(4) Minimum Vegetation. The minimum area that must be left or planted in trees, shrubs, grass, etc., shall be at least twenty percent (20%) of the total area of the lot.

Response: As shown on the site plan (Exhibit D), the project site measures approximately 44,044 square feet and the proposed landscaping area measures approximately 16,378 square feet. This amounts to a landscaped area of approximately 37% which exceeds the minimum area requirement. Therefore, this standard is met.

(5) Exceptions in Case of Large Scale PUD. The dimensional standards of this section may be modified by the Planning Commission in the case of a plan and program for a large-scale planned unit development, providing modifications are not detrimental to the public health, safety and welfare and providing the Planning Commission determines there is provision for adequate public spaces and improvements for circulation, recreation, light, air and service needs of the developed tract and its relation to adjacent areas and for such covenants or other legal provisions as will assure conformity to the achievement of the plan.

Response: A large scale PUD is not proposed with this design review. Therefore, this standard does not apply.

(6) Minimum Density.

- (b) Developments of two-family or multi-family dwellings shall provide a minimum density of eighty percent (80%) of the maximum number of units allowed under GMC**

Subsection 17.14.050(1). In no case shall the minimum density exceed thirty (30) units per net acre.

Response: Per the identified special conditions for Z0149-20-D, this project site cannot be utilized for additional dwelling units and can only be utilized for accessory uses to multifamily developments or recreational uses (Special Condition #1). Therefore, the 1.04-acre area should not be factored into the density calculation for tax lot 800 and its conformance with this standard is not altered with this proposed design review.

(c) Exception. Where an existing two-family or multi-family development is being altered or expanded, it shall not be required to comply with the minimum density standard provided the alteration or expansion does not result in a net loss of units.

Response: No dwelling units are proposed to be eliminated with this application. Therefore, tax lot 800 and the existing Webster Ridge apartment complex is not required to comply with the minimum density standards of the MR zone.

(d) Mobile home parks shall provide a minimum density of eight (8) units per net acre.

Response: A mobile home park is not proposed with this design review. Therefore, this standard does not apply.

17.46 Landscaping

17.46.020 Standards.

Landscaping requirements shall be as follows:

(1) Minimum Requirement. A minimum of 15 percent of the lot area shall be landscaped, except when a greater percentage is required elsewhere in this title.

Response: As shown on the Landscape Plan (Exhibit F), the project site measures approximately 44,044 square feet and the proposed landscaping area measures approximately 16,378 square feet comprising roughly 37% of the site area which exceeds the minimum established by this section. Therefore, this standard is met.

(2) Parking and Loading Areas. The following landscape requirements shall apply to off-street parking and loading areas:

(a) An off-street parking and loading area providing 10 or more parking spaces shall be improved with defined landscaped areas totaling no less than ten square feet per parking space;

Response: The applicant is proposing 26 new off-street parking spaces and 16 garages which requires a minimum of 420 square feet. A total of roughly 1,739 square feet of landscaping is proposed within the new parking areas, therefore, this standard is met.

(b) A parking or loading area shall be separated from any lot line adjacent to a street by a landscaped strip at least 10 feet in width, and any other lot line by a landscaped strip at least five feet in width;

Response: There are no lot lines adjacent to a street within the project site. All other lot lines have a landscape strip that measure five feet along the north property line and approximately 73 feet on the western property line. Therefore, this standard is met.

(c) A landscaped strip separating a parking or loading area from a street shall contain:

(A) Street trees spaced as appropriate to the species, not to exceed 25 feet apart, on the average,

(B) Low shrubs not to reach a height greater than three feet spaced no more than five feet apart, on the average, and

(C) Vegetative ground cover;

Response: There are no lot lines adjacent to a street within the project site. Therefore, this provision is not applicable.

(d) If a fence or wall is required or proposed, it shall be located behind required landscaped strips where such strips are adjacent to a street;

Response: There are no lot lines adjacent to a street within the project site. Therefore, this provision is not applicable.

(e) In parking areas three acres and larger intended for use by the general public, pedestrian walkways shall be raised or separated from parking, parking aisles, and travel lanes by a raised curb, concrete bumpers, bollards, landscaping, or other physical barrier. If a raised pathway is used, curb ramps shall be provided in accordance with the Americans with Disabilities Act Accessibility Guidelines.

Response: The proposed development is not intended for use by the general public. Therefore, this provision is not applicable.

(3) Irrigation. Provision shall be made for watering planting areas where such care is required.

(4) Maintenance Required. Landscaping shall be continuously maintained.

(5) Plant Species. The general characteristics of tree species shall be considered when planting under overhead utility lines or near sidewalks or curbs to assure that damage will not result when maturity is reached.

Response: The applicant will take steps to ensure that landscape plantings will be maintained and irrigated if and when such care is required. As shown on the Landscape Plan (Exhibit F), the applicant has considered tree species that best fit the constraints of site conditions when planting near curbs or utility lines.

(6) Grading. The natural form of the site shall be preserved insofar as practicable unless berming or contouring of land is required.

Response: The applicant intends to maintain the natural form of the site as much as practicable with the proposed development. A Preliminary Grading and Erosion Control Plan has been

prepared and is included in Exhibit D reflecting the expected land disturbance for this project.

(7) Public Rights-of-Way. Land within the public road right-of-way, not developed as sidewalks or driveways, shall be landscaped and maintained by the abutting property owners. Landscaping will be of the variety that would not create a road hazard or impair sight distance.

Response: The project site and all the proposed developed land does not have frontage along a public road right-of-way. Therefore, this provision is not applicable.

(8) Street Trees. Street tree planting may be required of any development and, if planted, shall be according to city requirements and of a species compatible with the width of the planting strip, and nearby street tree species.

Response: The project site does not have any frontage along a public street. Therefore, this provision is not applicable.

(9) Exceptions. The following exceptions apply to properties with frontage on McLoughlin Blvd.:

(a) The use of sod along McLoughlin Blvd. shall be encouraged in landscape plans for development of McLoughlin Blvd.;

(b) The use of sod along McLoughlin Blvd. may be allowed in lieu of required street trees;

(c) The 10-foot-wide landscape strip along McLoughlin Blvd. may be allowed in the right-of-way if applicant agrees to relocate the 10-foot strip whenever the right-of-way is improved. This strip may be included in total landscape area calculations.

Response: The project site does not have any frontage on McLoughlin Boulevard. Therefore, this provision is not applicable.

(10) Nonconforming Uses and Nonconforming Development. Additions or alterations to nonconforming uses and nonconforming development on a commercial or industrial site which does not comply with the landscaping requirements of this title must provide landscaping in a scale with the modification, as follows:

(a) Major remodeling, or structural additions of less than 1,000 square feet, require at least an additional three percent landscaping, up to the minimum landscaping requirements for new development in the district.

(b) Structural additions of 1,000 to 1,999 square feet are required to landscape at least an additional five percent of the developed site area, up to the minimum landscaping requirements for new development in the district.

(c) Structural additions of 2,000 to 4,999 square feet are required to landscape at least an additional 10 percent of the developed site area, up to the minimum landscaping requirements for new development in the district.

(d) Structural additions of 5,000 square feet or more are required to meet the current minimum landscape requirements for new development.

(e) Where successive structural additions occur the landscape requirement shall accumulate until total conformance is reached.

Response: The proposed development is on a residential site and is an allowed use as discussed previously in this narrative. Therefore, this provision is not applicable.

17.48 Off-Street Parking and Loading

17.48.030 Standards for developments subject to design review.

At the time of construction, enlargement, or change of use of any structure or development subject to GMC Chapter 17.80 (Design Review), except as provided in the C-2 district, off-street parking spaces shall be provided as follows unless greater requirements are otherwise established under this title:

(2) Minimum and maximum permitted parking.

(a) The number of surface parking spaces provided at no charge for a particular use shall not be less than the minimum nor exceed the maximum parking ratios identified for that use in Table 1. Minimum parking ratios for those uses not identified in Table 1 (below) shall be determined by the Planning Commission during design review.

Response: Per GMC 17.48.030 Table 1, multi-family dwelling developments require a minimum of 1.5 parking spaces per dwelling unit. The Webster Ridge apartment complex currently has 122 dwelling units, requiring a minimum of 183 parking spaces. The apartment complex currently provides 184 parking spaces, and proposes an additional 26 parking spaces, and 16 garages for a total of 226 parking spaces, which exceeds the minimum required. As there is no maximum parking space limit for multi-family residential uses, this standard is met.

(c) The following types of parking spaces are exempt from the maximum parking ratios:

- (A) Parking spaces in parking structures;**
- (B) Fleet parking spaces;**
- (C) Parking spaces used to store vehicles that are for sale, lease or rent;**
- (D) Employee carpool parking spaces that are clearly delineated with signs;**
- (E) Dedicated valet parking spaces.**

Response: None of the parking space types identified are proposed with this application.

(e) Exceptions to the minimum and maximum parking ratios may be granted pursuant to GMC Section 17.80.090 (minor exception). Exceptions exceeding twenty-five percent (25%) of the requirement shall be subject to GMC Chapter 17.72 (variances).

Response: An exception to the minimum and maximum parking ratio is not required or requested.

17.48.040 Design requirements for permanent off-street parking and loading.

All structures and developments subject to design review shall provide permanent off-street parking and loading as follows:

(1) Parking and Loading:

(a) Parking and loading areas shall be paved with asphalt and/or concrete meeting city standards, maintained adequately for all weather use and so drained as to avoid flow of water across public sidewalks;

(b) Off-street parking and loading areas shall be screened from abutting properties located in a residential zoning district unless such abutting properties are developed with nonresidential uses. Required screening shall be accomplished by building placement, a landscaped earth berm or a sight-obscuring fence or hedge. Required screening shall be a minimum of six feet high and shall not conflict with GMC Chapter 17.54 (clear vision).

Response: As shown on the Hardscape Plan (Exhibit D), the proposed parking area will be paved with asphalt surfacing and serviced with adequate drainage. The western and northern property lines are screened from neighboring residentially zoned properties with boulder walls, ultra-block walls and landscaping that will meet the six-foot minimum height requirement. Therefore, this standard is met.

(2) Parking:

(a) Required parking spaces shall be located not further than 200 feet from the building or use they are required to serve, measured in a straight line from the building;

Response: Within the expanded parking area, the furthest vehicular parking space measures approximately 110 feet from the existing apartment building. Therefore, this standard is met.

(b) Required parking shall be provided in the same zoning district or a different zoning district of a more intensive use;

Response: As stated above, the proposed parking improvements will be constructed to provide additional parking for the existing Webster Ridge apartment complex. The existing development and proposed parking lot site are both zoned MR, thus complying with this criterion.

(d) Groups of more than four parking spaces shall be permanently marked and so located and served by driveways that their use will require no backing movements or other maneuvering within a street right- of-way other than an alley;

Response: The applicant proposes groups of more than four parking spaces. These groups will be permanently marked and private, internal drive aisles will be provided to eliminate any maneuvering within a street right-of-way. Therefore, this standard is met.

(e) Parking spaces along the outer boundaries of a parking lot shall be contained by a curb at least four inches high and setback a minimum of five feet from the property line. A bumper rail may be substituted for a curb;

Response: All proposed parking spaces along the outer boundaries will be installed with a six-inch curb and are setback approximately 30 feet from the nearest property line. Therefore, this standard is met.

(f) Off-street parking and loading areas, including parking spaces and access aisles, shall meet or exceed the minimum dimensional standards identified in Tables 2 and 3 and Figure 1 (of this chapter). Access aisles shall be of sufficient width for all vehicular turning and maneuvering;

Table 2: Standard Parking Dimensions in Feet

Parking Angle	Stall Width	Stall Depth	Aisle Width
45°	9.5'	18.0'	14.0'
60°	9.5'	18.0'	16.0'
90°	9.5'	18.0'	24.0'

Response: All proposed parking spaces are 90° angled spaces. The stalls measure approximately 10 feet wide by 19 feet long. The drive aisle measures approximately 26 feet across. Therefore, these parking dimension standards are met.

Table 3: Compact Parking Dimensions in Feet

Parking Angle	Stall Width	Stall Depth	Aisle Width
45°	8.5'	16.0'	14.0'
60°	8.5'	16.0'	16.0'
90°	8.5'	16.0'	24.0'

Response: There are no compact parking spaces proposed with this development. Therefore, this provision is not applicable.

(g) Up to 50 percent of required parking spaces may be provided for compact cars;

Response: No compact parking spaces are proposed with this development. Therefore, this provision is not applicable.

(h) Parking areas shall be designed, to the maximum extent practicable, to avoid large, uninterrupted rows of parking spaces.

Response: The largest proposed uninterrupted row of parking spaces measures eight parking stalls. The applicant has taken measures to install curbs and landscaping to avoid any larger rows of parking spaces. Therefore, this standard is met.

(3) Loading:

(a) A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers shall be located on the site of any school having a capacity greater than 25 students;

(b) Buildings or structures to be built or substantially altered which receive and distribute material or merchandise by truck shall provide and maintain off-street loading berths in sufficient numbers and size to adequately handle the needs of the particular use. If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately handle the needs of the particular use;

(c) Off-street parking areas used to fulfill the requirements of this section shall not be used for loading and unloading operations except during periods of the day when not required to take care of parking needs;

(d) Loading facilities shall be located at least 20 feet from residential property. Loading spaces shall be located on the site and directly accessible to the main structure.

Response: There are no loading areas required or proposed within the development. Therefore, this provision is not applicable.

17.48.050 Bicycle parking standards.

(1) General Provisions.

(a) Applicability. Standards for bicycle parking apply to full-site design review of new construction for multi-family residential (four units and larger) and new commercial/industrial developments. The Planning Commission may grant exemptions to bicycle parking requirements in connection with temporary uses or uses that are not likely to generate the need for bicycle parking.

Response: Applicable bicycle parking standards for the Webster Ridge apartment complex were met at the time of the development's original approval (Z0249-15-D). The parking lot expansion does not include additional dwelling units and is thus not considered a full-site design review, therefore this section is not applicable.

17.50 Vehicular and Pedestrian Circulation

17.50.020 Vehicular and pedestrian circulation generally.

Vehicular and pedestrian circulation facilities, including walkways, provisions for the handicapped, interior drives and parking as provided under GMC Chapter 17.48 (off-street parking and loading), shall be designated as follows:

(1) Impervious Surface. Provide for least amount of impervious surface necessary to adequately serve the type and intensity of proposed land uses within developments as well as providing adequate access for service vehicles.

Response: As shown on the Hardscape Plan (Exhibit D), proposed impervious surfaces are limited to those necessary for vehicular maneuvering and parking. Therefore, this standard is met.

(2) Traffic Separation. Provide when feasible, a separation of motor vehicular, bicycle and pedestrian traffic.

(3) Curbs and Sidewalks. Provide curbs, associated drainage, and sidewalks within the right-of-way or easement for public roads and streets.

Response: As shown on the Hardscape Plan (Exhibit D), the proposed parking lot addition is not within the public right-of-way. However, the applicant proposes the use of elevated sidewalks with curb to separate pedestrians and vehicular traffic within the site.

(5) Handicapped Needs. Provide for the special needs of the handicapped such as wheelchair ramps and Braille signs.

Response: Vehicular and pedestrian circulation facilities have been designed to meet and comply with applicable provisions of the Americans with Disabilities Act (ADA). Therefore, this standard is met.

(6) Pedestrian Circulation Standards. An on-site pedestrian circulation system shall be provided for new nonresidential and multi-family developments and for new buildings added to existing nonresidential and multi-family developments. The system may include sidewalks as part of the public rights-of-way, walkways, and multi-use paths. (Walkways only provide for pedestrian circulation; multi-use pathways accommodate pedestrians and bicycles.) The system shall comply with the following standards:

(a) The system shall connect all adjacent streets to the main entrances of nonresidential buildings and to unit and/or building entrances of multi-family developments;

(b) The system shall connect all buildings and other areas of the site, such as parking areas, bicycle parking, recreational areas, common outdoor areas and any pedestrian amenities;

(c) The system shall be hard-surfaced and constructed in accordance with the public works standards. For nonresidential development, the walkways shall be a minimum of six feet wide. For multi-family residential development, walkways shall be a minimum of five feet wide;

Response: The proposed pedestrian circulation system will be constructed with six-inch curbs and all sidewalks are proposed to be approximately seven feet in width. All proposed sidewalks will be constructed with concrete materials. The proposed pedestrian circulation system connects to the existing on-site pedestrian circulation system that connects all other site buildings and other areas to the rest of the development and to Webster Road.

(d) The system and off-street parking and loading areas shall be designed to avoid, to the maximum extent possible, the system's crossing off-street parking and loading areas. Where the system crosses driveways or off-street parking and loading areas, the system shall be clearly identifiable through the use of elevation changes, speed bumps, a different paving material or other similar method. Striping shall not fulfill this requirement;

(e) Where the system is parallel and adjacent to an auto travel lane, the system shall be a raised path or be separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier. If a raised path is used, the ends of the raised portions shall be equipped with curb ramps;

Response: The proposed circulation system, as shown on the Hardscape Plan (Exhibit D), avoids crossing any of the new proposed off-street parking and loading areas. The sidewalk is raised with a six-inch curb and measures approximately seven feet in width.

(f) The system shall comply with the Americans with Disabilities Act (ADA);

Response: Pedestrian circulation facilities have been designed to meet and comply with applicable ADA provisions. Therefore, this standard is met.

(g) Walkways or multi-use paths shall be provided at or near midblock where the block length exceeds the length required by GMC Section 17.64.020. Multi-use paths shall also be provided where cul-de-sacs or dead-end streets are planned, to connect the ends of the streets together,

to other streets, and/or to other developments, as applicable. Multi-use paths used to comply with these standards shall conform to all of the following criteria:

(A) Multi-use paths are required to be no less than 10 feet wide and located within a 20-foot-wide right-of-way or easement that allows access for emergency vehicles.

(B) The city may require landscaping within the pathway easement/right-of-way for screening and the privacy of adjoining properties.

(C) The Planning Commission may determine, based upon facts in the record, that a walkway or multi-use pathway is impracticable due to: physical or topographic conditions (e.g., freeways, railroads, extremely steep slopes, sensitive lands, and similar physical constraints); buildings or other existing development on adjacent properties that physically prevent a connection now or in the future, considering the potential for redevelopment; and sites where the provisions of recorded leases, easements, covenants, restrictions, or other agreements recorded as of the effective date of this code prohibit the pathway connection.

Response: There are no planned blocks, cul-de-sacs, or dead-end streets as part of the proposed development. Therefore, a walkway or multi-use path is not required to serve this specific function. This provision is not applicable.

17.58 Grading and Fill

17.58.020 General Provisions.

(1) **Grading of Building Sites.** Grading and fill of building sites shall conform to Chapter 70 of the Uniform Building Code. The character of soil for fill and the characteristics of lots and parcels made usable by fill shall be suitable for the purpose intended. When deemed necessary, the building official may require geological studies to determine the suitability of the site.

(2) **U.B.C. Requirements.** The building official shall enforce Chapter 70 of the U.B.C. and shall require soils reports and/or engineering studies before issuing a building permit for fill, excavation, construction or related activities involving soils with restrictive features such as instability, wetness, flooding or other limitations.

Response: A Grading and Erosion Control Plan is attached to this application as Exhibit D. Compliance with Chapter 70 of the Uniform Building Code can be addressed at the time of building permit submittal, if required.

17.60 Utilities

17.60.020 Standards.

Utility services and facilities shall be appropriate to the scale and type of development and consideration shall include, but not be limited to the following standards:

(1) **Site Disturbance.** The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site.

Response: The applicant plans to carry out all locating, design, and installation of utility lines and facilities with minimum disturbance of soil and site.

(2) Electricity. Gas. Communications. All development which has a need for electricity, gas and communications services shall install them pursuant to the requirements of the district or company servicing the development. Except where otherwise prohibited by the utility district or company, all such facilities shall be underground.

(3) Underground Facilities. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.

Response: The applicant plans to locate all electrical facilities underground and will install them pursuant to all requirements of the electrical company. Therefore, these standards are met.

(4) Sanitary Sewers. All development which has a need for sanitary sewers shall install the facilities pursuant to the requirements set forth by the public works department. Installation of such facilities shall be coordinated with the extension of necessary water services and storm drainage facilities. Requirements for development shall include the following:

(a) Sanitary sewers shall be installed to city standards to serve or be available to all development. Design shall take into account the capacity and grade to allow for desirable extension beyond the development. If required, sewer facilities will, without further sewer construction, be sized to directly serve property outside the development;

(b) If the area outside the development to be directly served by the sewer line has reached a state of development to justify sewer installation at the time, the Planning Commission may recommend to the City Council construction as an assessment project with such arrangement with the developer as is desirable to assure financing his share of the construction. If it is determined by the city that a larger sized line than normally required to serve the property is desirable to provide for future extension, the city will reimburse the developer the difference in cost of pipe between that required to serve the development and that stipulated by the city;

(c) In areas that will not be served by a public sewer, the minimum lot and parcel sizes shall permit compliance with the requirements of the department of environmental quality and shall take into consideration problems of sewage disposal, particularly problems of soil structure and water table as related to sewage disposal by septic tank.

Response: The proposed development does not have a need for sanitary sewers and does not propose the installation of such facilities. Therefore, this provision is not applicable.

(5) Water Services. All development which has a need for water service shall install water facilities and grant necessary easements pursuant to the requirements of the utility district serving the development. In addition, requirements for development shall include the following:

(a) Water lines to serve residential developments shall be a minimum six inch (6") nominal diameter and water lines to service commercial and industrial developments shall be a minimum eight inch nominal diameter with valves and fire hydrants serving each building site in the development and connecting the development to city mains shall be installed. Prior to starting building construction, the design shall take into account provisions for extension beyond the

development and to adequately grid the city system. Hydrant spacing to be based on accessible area served according to A.I.A. recommendations and as approved by the Fire Chief;

(b) If the city determines that a water line size greater than the required minimum in diameter is required to provide for future extension of the water system, the city will reimburse the developer the difference in cost of pipe and valves between that of the minimum diameter and the size stipulated by the city.

Response: The proposed development does not have a need for water services. Therefore, this provision is not applicable.

(6) Coordination with Street Surfacing. All underground utilities, sanitary sewers and storm drains installed in streets by the developer or by any utility company shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities and sanitary sewers shall be placed to a length minimizing the necessity for disturbing the street improvements when service connections are made.

Response: There are no proposed utility installation in streets, therefore no surfacing of streets is required, thus this provision is not applicable.

(7) As-Built Submittals. A map showing all public improvements, as built, shall be filed with the city engineer upon completion of the improvements.

Response: As-builts can be provided, if necessary, to show any public improvements. Therefore, this standard can be met.

(8) Conditions for Refund to Developer.

(a) If required water mains or sewer facilities will without further construction other than individual laterals, directly serve properties outside the development, the city may enter into an agreement with the developer to require owners of the other benefiting properties to refund to the developer, a pro rata portion of the cost of the extension prior to allowing the benefiting property to connect thereto;

(b) Any such agreement shall contain a provision that the developer agrees to completely indemnify and hold harmless the city for any claim or injury or action arising from the city's administration of such agreement;

(c) The right to require such a refund shall not continue for more than 10 years after the date of installation of the extension;

(d) The amount to be refunded and the individual proration of the same shall be determined by the city and such determination shall be final.

Response: The applicant does not propose any new water mains or sewer facilities to serve properties outside the proposed development. Therefore, this provision is not applicable.

17.80 Design Review

17.80.021 Applicability.

(1) This chapter shall apply to new structures; additions to existing structures; site development, such as grading, parking lot construction or commercial/industrial use of an undeveloped property; change of use; and major remodeling, with the following exceptions:

- (a) Single-family dwellings and their allowed accessory uses;**
- (b) Duplexes and their allowed accessory uses in the R-7.2 and R-5 zoning districts;**
- (c) Utility lines and equipment cabinets, not including towers or substations, provided such equipment cabinets are no greater than one hundred twenty (120) square feet in area and ten feet (10') in height;**
- (d) Fences unless associated with a primary, accessory or conditional use in the Office Park District or unless design review is required to grant an exception to the maximum fence height standard of the zoning district;**
- (e) Fabric-covered awnings;**
- (f) Playground equipment;**
- (g) Grading that does not require a permit under the Clackamas County Excavation and Grading Code;**
- (h) Signs reviewed by the City Administrator or designee pursuant to GMC Chapter 17.52 (signs);**
- (i) Vehicular or pedestrian right-of-way improvements provided such improvements are not associated with additional development that is subject to design review;**
- (j) Changes of use where:**
 - (A) The proposed change is not from a residential, commercial/industrial or institutional use to a use in a different one of these categories;**
 - (B) The new use is not required by this title to have a greater number of off-street parking spaces than the previous use or at least the minimum number of off-street parking spaces required by this title for the new use currently exists. However, where applicable parking requirements are not identified in Table 1 of GMC Section 17.48.030 (standards for developments subject to design review) or where on-street parking is proposed to fulfill a portion of the minimum off-street parking requirement, design review shall be required;**
- (k) Normal maintenance of structures and premises provided there are no significant use or structural alterations. Normal maintenance may include painting, roofing, siding, interior remodeling, electrical work, plumbing work, re-paving of access roads and parking/loading areas, replacement of landscaping elements or other similar tasks. Normal maintenance does not include increasing the number of dwelling units, constructing new structures or constructing additions to existing structures except to the extent that an addition is necessary to render a structure accessible to the disabled. Normal maintenance performed shall be consistent with previous design review approvals for the site.**

(2) If a design review application is required, no building, sign, grading or blasting permit shall be issued until design review approval has been granted.

(3) An application for design review shall be reviewed pursuant to GMC Division VII (administrative procedures) and shall be reviewed for compliance with standards of the underlying zoning district and GMC Division IV (development standards).

Response: The proposed garage and carport accessory buildings do not qualify for any of the exceptions listed in GMC 17.80.021. Therefore, a design review application is required for approval. The applicant will not apply for building, sign, grading, or blasting permits before design review approval has been granted. Therefore, these standards have been met.

17.80.061 Submittal Requirements.

(1) An application for design review shall include a minimum of twelve (12) copies of the following plans drawn to scale. A project summary shall accompany the application when necessary to describe special circumstances such as a request for a minor exception pursuant to GMC Section 17.80.090 (minor exceptions).

(a) Vicinity Map: The vicinity map shall show the location of the subject property relative to well-known landmarks in all directions and shall be at least four inches (4") by four inches (4") in size.

Response: A vicinity map is included within this narrative as Figure 1.

(b) Site Plan: The site plan shall include the following:

(A) The applicant's entire property and the surrounding area to a distance sufficient to determine the relationship between the applicant's property and proposed development and adjacent property and development;

(B) Lot lines, dimensions and area of the subject property;

(C) Complete names, addresses and telephone numbers of the property owner, applicant and project designer;

(D) Natural features including, but not limited to, individual trees greater than six inches (6") in diameter at five feet (5') above the ground (identify the species), wooded areas, wildlife habitat areas, streams and stream corridors, marsh and wetland areas, underground springs, surface features such as earth mounds and large rock outcroppings, significant views, natural drainage on the subject property and adjacent properties, areas of special flood hazard and potential geologic hazards such as areas of mass movement and soil hazards. Identify proposed alterations to natural features;

(E) Location, dimensions and names of all proposed rights-of-way and all existing rights-of-way within or adjacent to the subject property. Include proposed new curbs and sidewalks. Include existing curbs and sidewalks where necessary to show a connection to new curbs and sidewalks;

(F) Location and dimensions of existing and proposed easements, to which property they are conveyed and for what purpose(s). Include easements on the subject property and off-site easements conveyed to the subject property;

(G) Identification of existing uses of the subject property, including the location and exterior dimensions of existing structures. Identify whether existing structures will remain on the property or be removed;

(H) Location of proposed and existing utilities on the subject property and the location of adjacent off-site utilities to which on-site utilities will connect. Include water, sanitary sewer, storm drainage, gas, electric (including power poles) and other utilities;

(I) Location and exterior dimensions of all proposed structures;

(J) Relation of the subject property to nearby transit stops;

(K) Location and dimensions of individual parking spaces, parking lot access aisles, driveways and pedestrian and bicycle circulation;

(L) Lighting (include type);

(M) Service areas for trash disposal, recycling, loading and delivery and bicycle parking;

(N) Location of potential noise sources in the proposed development;

(O) Information about significant climatic variables including, but not limited to, solar potential, wind direction and wind velocity.

(c) Grading Plan: The preliminary grading plan shall indicate where and to what extent grading will occur and shall include approximate proposed contour lines, slope ratios, slope stabilization proposals and natural resources protection proposals. Existing contour lines shall also be shown. Proposed and existing contour lines shall be shown at maximum intervals of two feet (2') for slopes less than ten percent (10%), five feet (5') for slopes between ten (10) and twenty percent (20%) and ten feet (10') for slopes exceeding twenty percent (20%). A slope analysis shall be provided showing portions of the site according to the following slope ranges: less than ten percent (10%), ten (10) to less than twenty percent (20%), twenty (20) to less than thirty-five percent (35%), thirty five percent (35%) to less than fifty percent (50%) and fifty percent (50%) or greater. Approximate area calculations shall be provided for each of these slope ranges.

Response: A site plan and grading plan are included with this narrative as Exhibit D.

(d) Architectural Drawings:

(A) Building elevations and sections;

(B) Building materials, including color and type;

(C) Sufficient architectural details pertaining to exterior building materials, including samples and views from roads and other properties, as determined by the City Administrator or designee, to assure compliance with 17.44.020(4);

(D) Floor plans.

Response: Building elevations and details on building materials are shown on the structural plans included with this narrative as Exhibit E.

(e) Landscape Plan: The landscape plan shall be at the same scale as the site plan and shall include:

(A) Lot lines and adjacent rights-of-way;

- (B) Proposed structures and existing structures to remain;**
- (C) Parking and loading areas and driveways;**
- (D) Locations of proposed plants and existing plants to remain, keyed to a legend identifying botanical names, common names, sizes at planting and numbers;**
- (E) Description of soil conditions and plans for soil treatment such as stockpiling of topsoil. Include plant selection requirements relating to soil conditions;**
- (F) Erosion controls, including plant materials and soil stabilization, if any;**
- (G) Irrigation systems;**
- (H) Landscape-related structures such as fences, terraces, decks, patios, shelters, play areas, etc.;**
- (I) Boundaries of open space, recreation or reserved areas to remain, access to open space and any alterations proposed;**
- (J) Locations of pedestrian and bikeway circulation within landscaped areas;**
- (K) Method of planting and maintenance.**

Response: Landscape plans are included with this narrative as Exhibit F.

(f) Signs:

(A) Freestanding signs:

- (i) Location on-site plan;**
- (ii) Elevation drawing (indicate size, total height, height between bottom of sign and ground, color, materials and means of illumination).**

(B) On-building signs:

- (i) Building elevation with location of sign (indicate size, color, materials and means of illumination);**
- (ii) Site plan showing location of on-building sign in relation to adjoining property.**

Response: There are no signs proposed as part of this development therefore this section is not applicable.

(2) A transportation impact analysis shall be submitted if deemed necessary by the City Administrator or designee to assess the impacts of the proposed development.

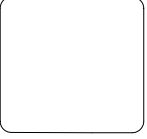
(3) The City Administrator or designee may waive any submittal requirements of this chapter if they are deemed not necessary or not applicable due to the scale or nature of the development proposal.

Response: The additional parking spaces and garage buildings will be utilized by existing tenants within the Webster Ridge apartment complex. The project will not increase the number of dwelling units within the development therefore additional trips will not be generated by this proposal. Pursuant to GMC 17.80.061(3) the applicant requests the City Administrator waive the requirement to provide a transportation impact analysis given the limited scope of the project.

IV. Conclusion

As evidenced throughout this narrative and associated documents, the proposed design review meets the governing approval criteria. Therefore, the applicant respectfully requests City approval of this request.

REVISIONS	DATE
PLANNING	1/3/22
UPDATES	



Creations Northwest, LLC
 1020 SE Johnson Rd #102
 Medford, OR 97504
 Office: 503-908-0563
 Cell: 503-908-0563

WEBSTER RIDGE
 ADDITION
 Gladstone, Oregon

APARTMENT COMPLEX
ADDITIONAL PARKING & LANDSCAPING

CADD NAME: PHASE 2 PARKING
 DATE: 10-29-21
 SCALE: 1" = 20'-0"
 DRAWN BY: R.L.H.
 PROJECT #:

SHEET No. **S.9**
 of

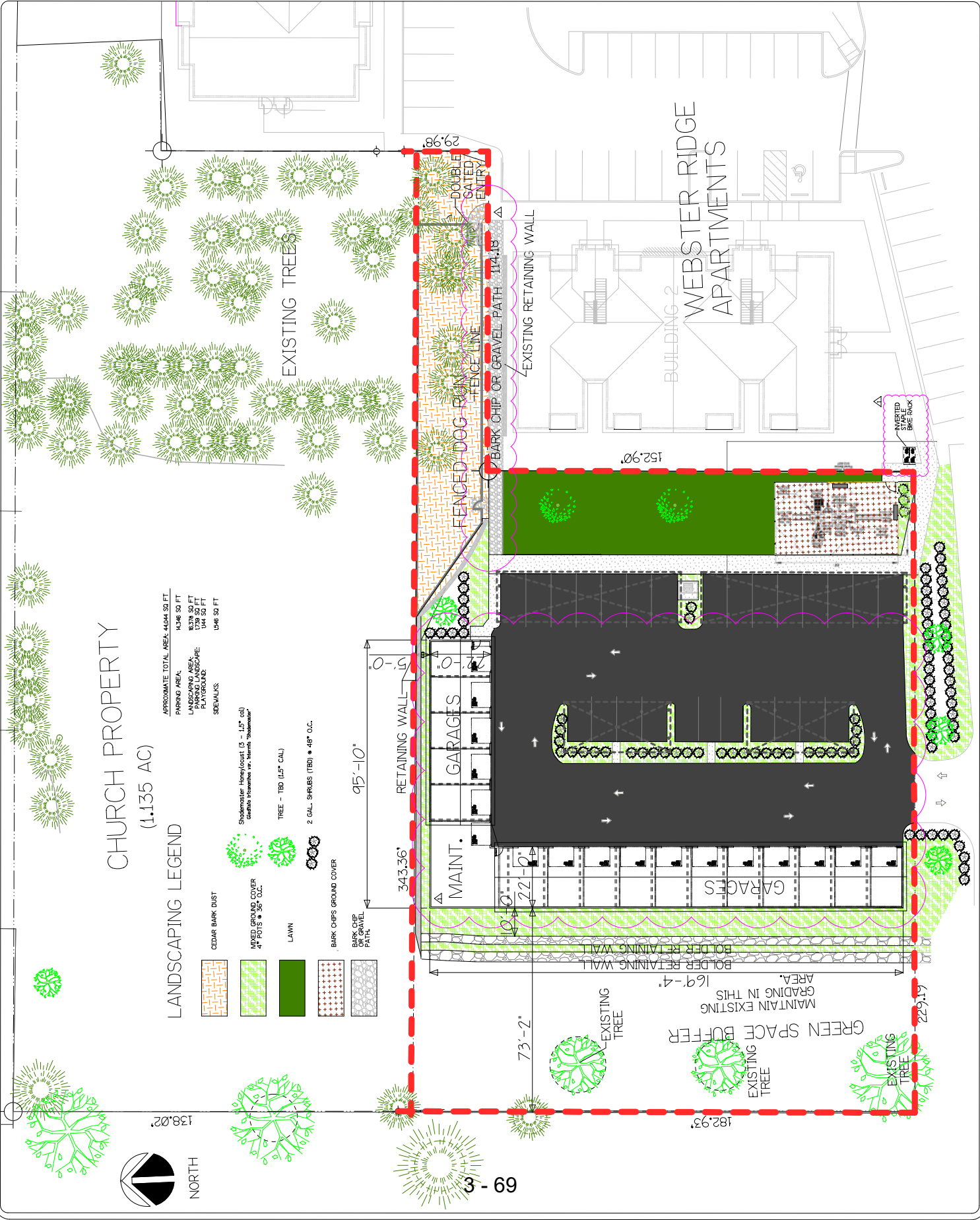
CHURCH PROPERTY

(1.135 AC)

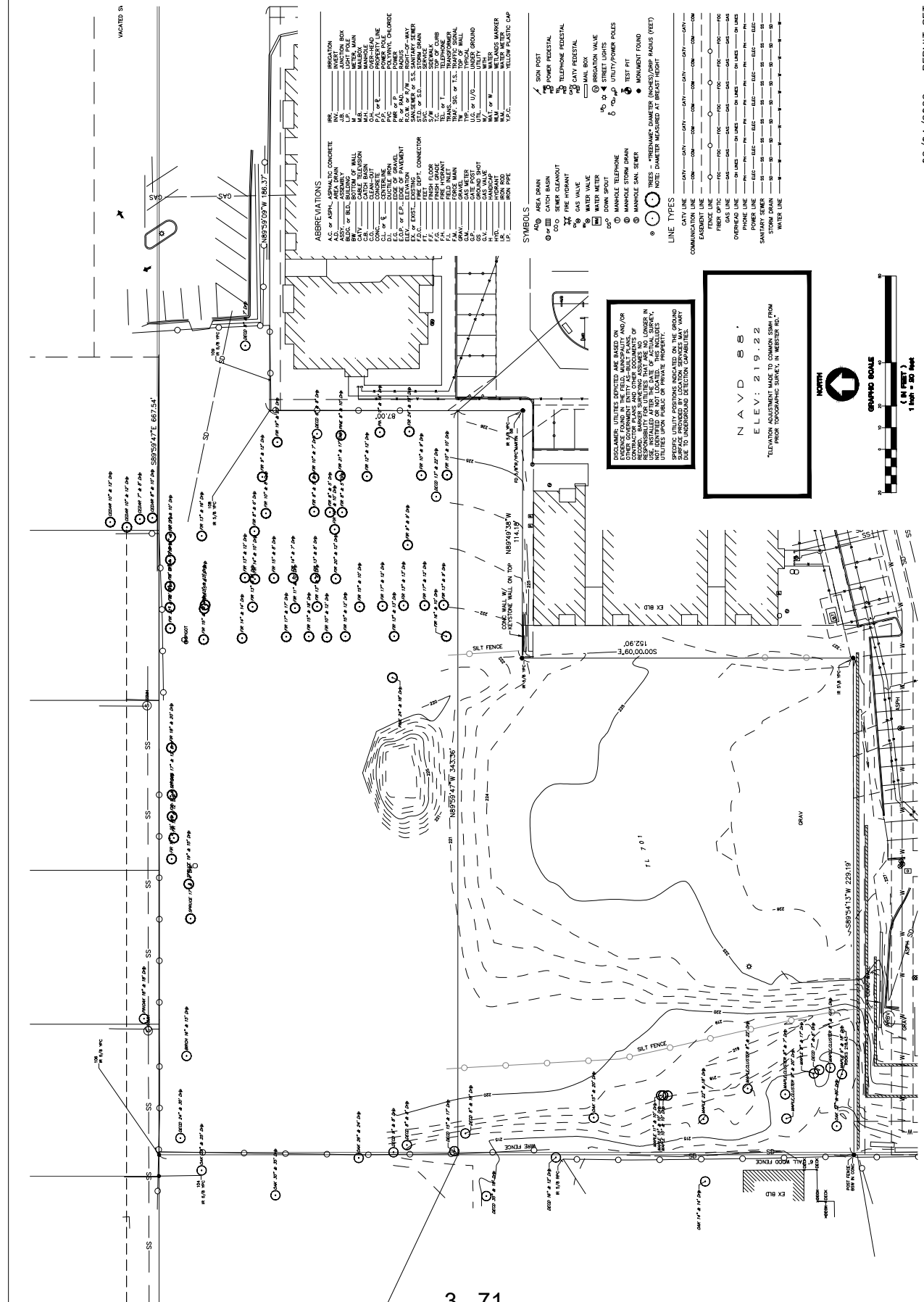
APPROXIMATE TOTAL AREA: 41644 SQ. FT.
 PARKING AREA: 14346 SQ. FT.
 LANDSCAPING AREA: 8378 SQ. FT.
 PLAYGROUND: 1148 SQ. FT.
 SEVENAILS: 1548 SQ. FT.

LANDSCAPING LEGEND

- CEDAR BARK DUST
- MIXED GROUND COVER
4" POTS @ 36" O.C.
- LAWN
- BARK CHIPS GROUND COVER
- BARK CHIP GRAVEL PATH
- Shademaster Honeysuckle (S - 1.5" cal)
Gaultheria procumbens var. hirsuta "Shademaster"
- TREE - TBD (1.5" CAL)
- 2 GAL. SHRUBS (TBD) @ 48" O.C.



Z:\30-Development\1162\1162-Webster Ridge Phase II Property\Phase 2 parking revised 11-3-21.dwg -- 12:47 PM -- Scale 1:100





AAI ENGINEERING, INC.
 10000 N. 100th Ave., Suite 100, Edina, MN 55424
 (763) 551-1111

WEBSTER RIDGE PARKING EXPANSION

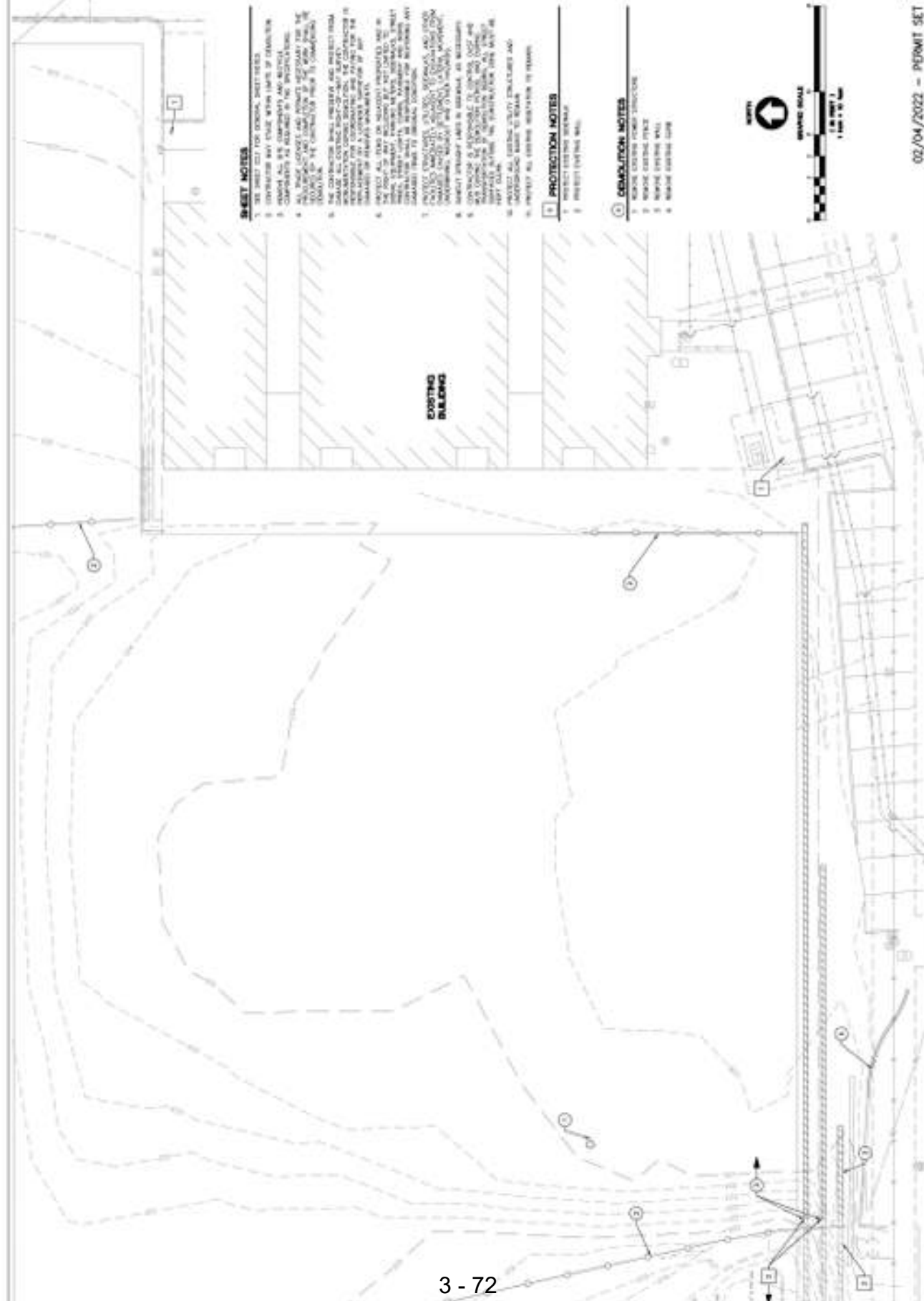
PROJECT NO. 2022-001

DATE	02/04/2022
DRAWN	ML/SLM
CHECKED	ML
REVISIONS	

SCALE: AS SHOWN
 SHEET NUMBER: C0.3
 TOTAL SHEETS: 03

C0.3

02/04/2022 - PERMIT SET



SHEET NOTES

1. SEE SHEET C01 FOR OTHER SHEET NOTES.
2. CONTRACTOR MAY VARY WITHIN LIMITS OF DIMENSION.
3. VERIFY ALL S/S CONDITIONS AND NOTES.
4. CONSIDER ALL S/S CONDITIONS AS SHOWN IN THE SPECIFICATIONS.
5. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
6. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
7. VERIFY ALL DIMENSIONS AND NOTES.
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100. VERIFY ALL DIMENSIONS AND NOTES.

PROTECTION NOTES

1. PROTECT EXISTING UTILITIES.
2. PROTECT EXISTING WALLS.

CONSTRUCTION NOTES

1. REMOVE EXISTING PAVED SURFACE.
2. REMOVE EXISTING FENCE.
3. REMOVE EXISTING WALL.
4. REMOVE EXISTING CURB.

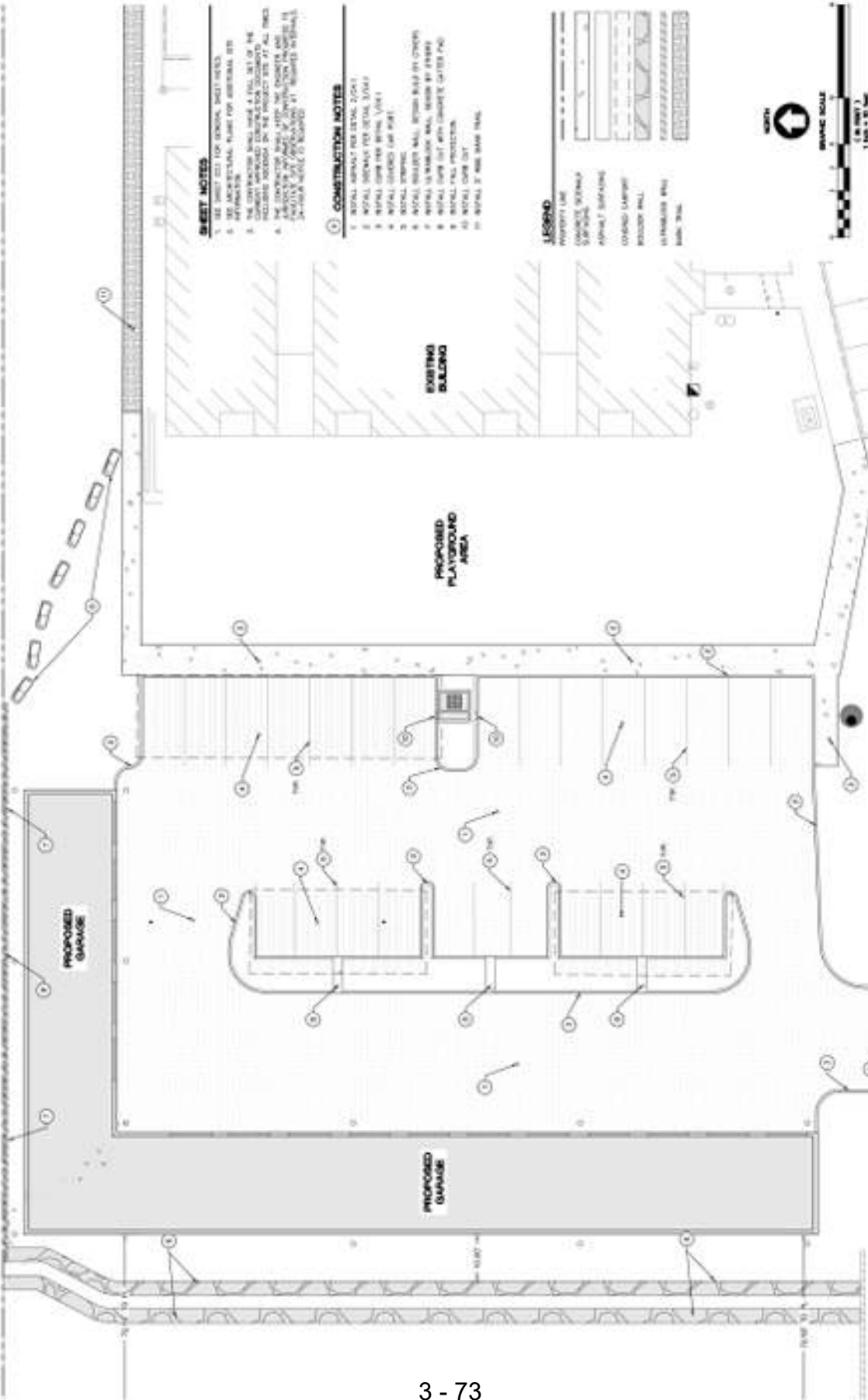


WEBSTER RIDGE PARKING EXPANSION

SHEET TITLE: Hardscape Plan
DATE: 10/27/2021
DRAWN: T.J. BAKER
CHECKED: J.M. BAKER
REVISIONS:

PROJECT NUMBER: C1.0
PROJECT LOCATION: Webster Ridge Parking Expansion, 10001 E. Main Street, Tulsa, Oklahoma 74116

C1.0



SHEET NOTES

- 1. SEE SHEET SET FOR GENERAL SHEET NOTES
- 2. SEE ARCHITECTURAL PLAN FOR GENERAL SET
- 3. THE CONTRACTOR SHALL FURNISH A FULL SET OF THE COMPLETE UNBIDDED CONSTRUCTION DOCUMENTS, INCLUDING ALL DETAILS, TO THE CONTRACTOR AT THE PROJECT SITE AT ALL TIMES.
- 4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND MATERIALS TO BE USED IN CONSTRUCTION ARE CORRECT AND COMPLETELY ACCORDANT WITH THE CONTRACT DOCUMENTS AND ANY CORRECTIONS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY UPON DISCOVERY.

CONSTRUCTION NOTES

- 1. DETAIL APPROVAL FOR DETAIL 205A1
- 2. DETAIL APPROVAL FOR DETAIL 205A2
- 3. DETAIL APPROVAL FOR DETAIL 205A3
- 4. DETAIL APPROVAL FOR DETAIL 205A4
- 5. DETAIL APPROVAL FOR DETAIL 205A5
- 6. DETAIL APPROVAL FOR DETAIL 205A6
- 7. DETAIL APPROVAL FOR DETAIL 205A7
- 8. DETAIL APPROVAL FOR DETAIL 205A8
- 9. DETAIL APPROVAL FOR DETAIL 205A9
- 10. DETAIL APPROVAL FOR DETAIL 205A10
- 11. DETAIL APPROVAL FOR DETAIL 205A11
- 12. DETAIL APPROVAL FOR DETAIL 205A12
- 13. DETAIL APPROVAL FOR DETAIL 205A13
- 14. DETAIL APPROVAL FOR DETAIL 205A14
- 15. DETAIL APPROVAL FOR DETAIL 205A15
- 16. DETAIL APPROVAL FOR DETAIL 205A16
- 17. DETAIL APPROVAL FOR DETAIL 205A17
- 18. DETAIL APPROVAL FOR DETAIL 205A18
- 19. DETAIL APPROVAL FOR DETAIL 205A19
- 20. DETAIL APPROVAL FOR DETAIL 205A20
- 21. DETAIL APPROVAL FOR DETAIL 205A21

LEGEND

PROPERTY LINE	CONCRETE	GRANITE	STONE	PAVER	STONE WALL	WALKWAY
---	▬	▨	▩	▧	▥	▦



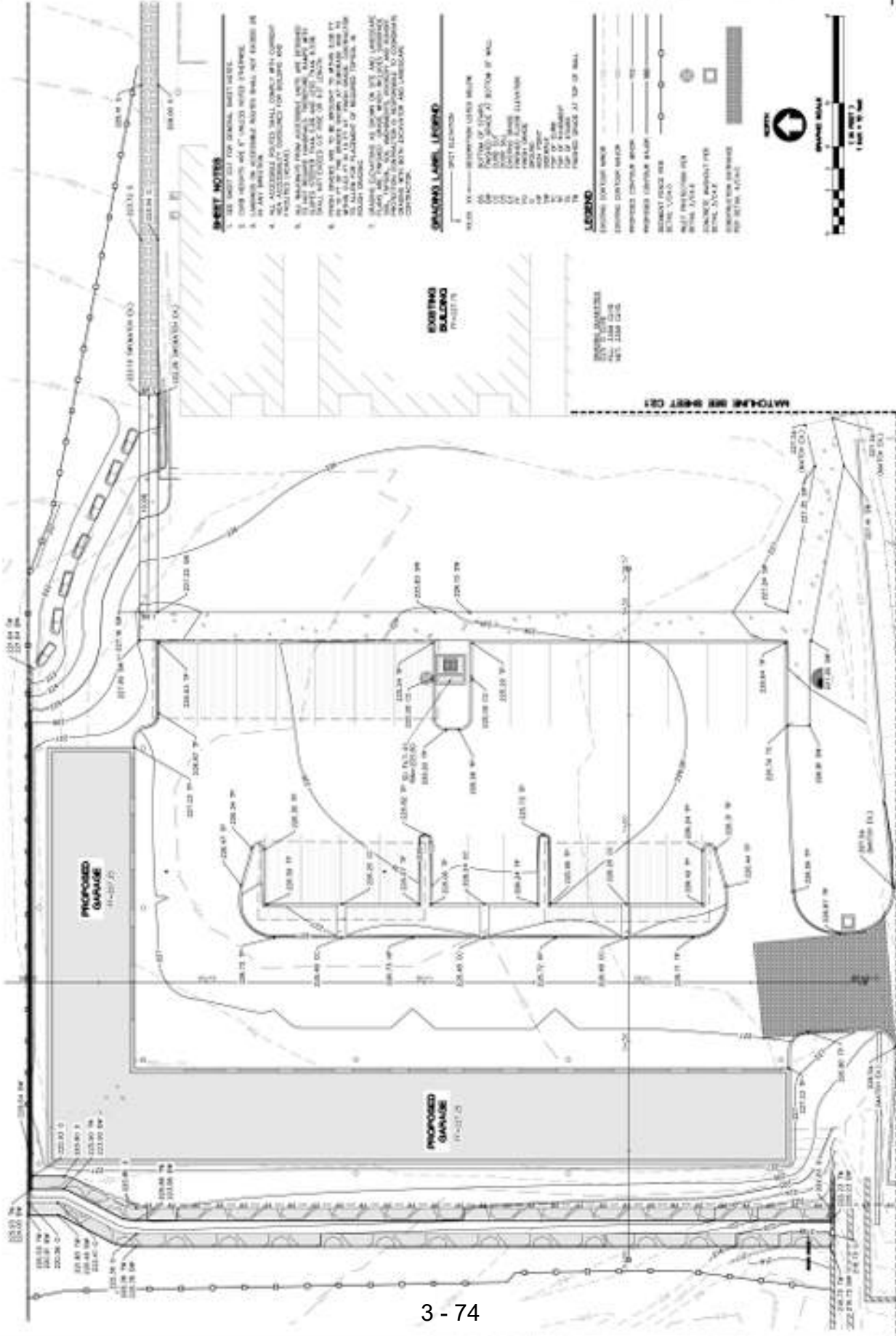
AAI ENGINEERING, INC.
 10000 W. 10th Ave., Suite 100, Denver, CO 80202
 303.751.1100
 www.aai-engineering.com

WEBSTER RIDGE PARKING EXPANSION

PROJECT TITLE
 DRAWING AND DESIGN CONTROL PLAN
 SHEET NO. 30703.03
 SCALE 1/8" = 1'-0"
 DATE 02/04/2022

PROJECT NUMBER
 C2.0

02/04/2022 - PERMIT SET





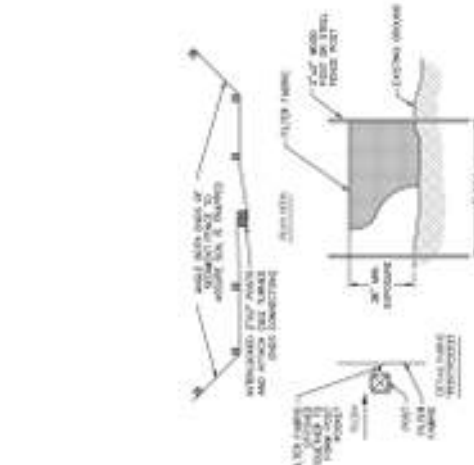
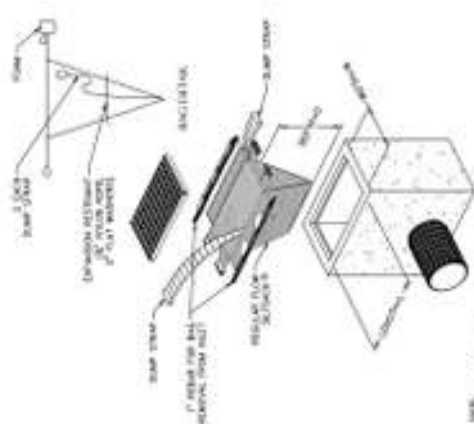
SHEET TITLE

DETAILS

DATE	02/04/2022
DRAWN	TRC/SLM
CHECKED	WBE
REVISIONS	

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C4.0
 SHEET NUMBER



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

2 INLET SEDIMENT PROTECTION
 SCALE: 1/8" = 1'-0"



3 CONCRETE WASHOUT
 SCALE: 1/8" = 1'-0"

4 CONSTRUCTION ENTRANCE
 SCALE: 1/8" = 1'-0"

NOTES:
 1. CONCRETE SHALL BE VERIFIED AS A CONCRETE THAT WILL PREVENT FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE TO ADJACENT AREAS.
 2. CONCRETE SHALL BE VERIFIED AS A CONCRETE THAT WILL PREVENT FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE TO ADJACENT AREAS.
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1 SEDIMENT FENCE
 SCALE: 1/8" = 1'-0"

2 INLET SEDIMENT PROTECTION
 SCALE: 1/8" = 1'-0"

3 CONCRETE WASHOUT
 SCALE: 1/8" = 1'-0"

4 CONSTRUCTION ENTRANCE
 SCALE: 1/8" = 1'-0"



PLAN VIEW

CROSS SECTION (STANDARD DEPTH TANK)

PERVAPE DETAIL

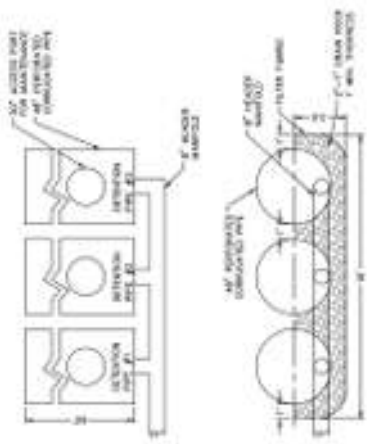
12" DIA. STORMWATER INFILTRATION PIPE
 4" THICK FILTER FABRIC
 12" THICK AGGREGATE
 12" THICK COMPACTED SUBGRADE

CONTECH
 PERVAPE DETAIL

PERVAPE DETAIL

12" DIA. STORMWATER INFILTRATION PIPE
 4" THICK FILTER FABRIC
 12" THICK AGGREGATE
 12" THICK COMPACTED SUBGRADE

3-81



2 48" CMP DETENTION PIPING
 SCALE: N/A

1 FILTERRA PEAK DIVERSION DETAIL
 SCALE: N/A



May 2022 Planning Commission Meeting Agenda Item No. 3

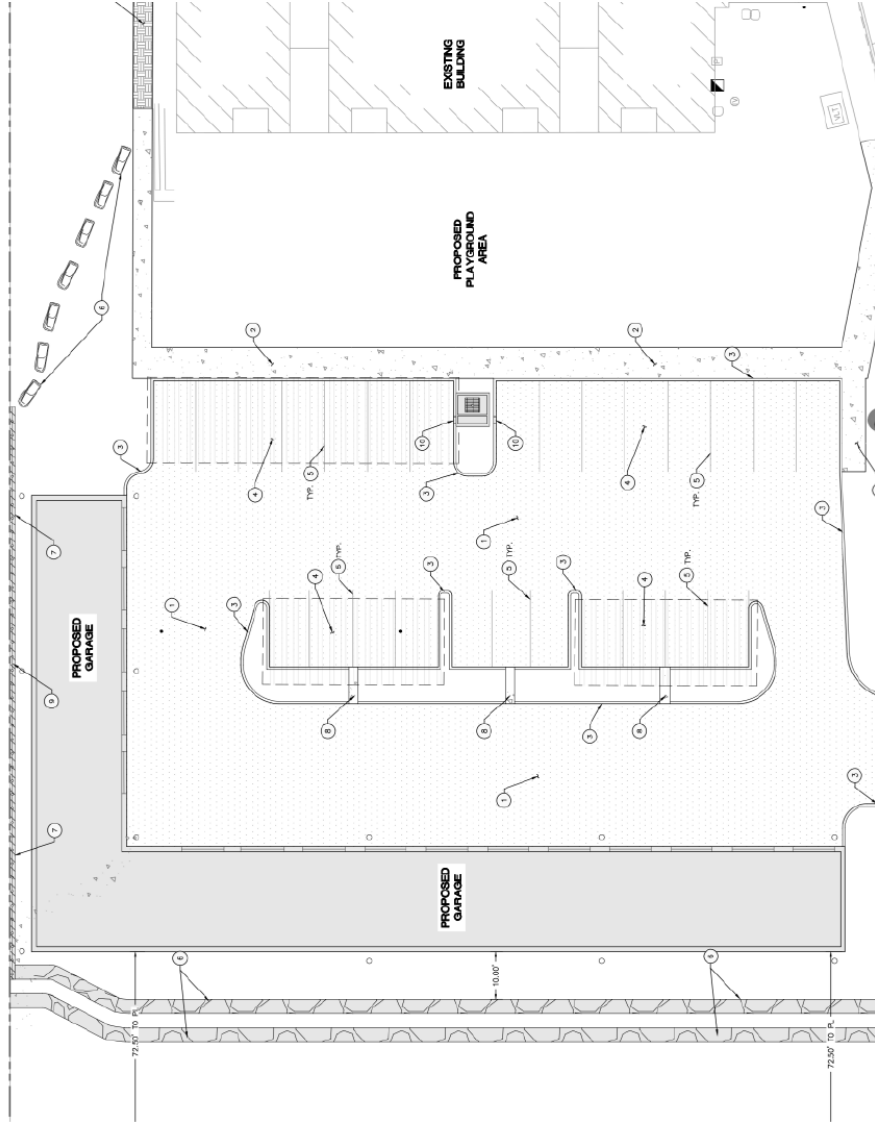
Design Review Application – 18181 WEBSTER RD

Public Hearing

- Project overview
- Previous approvals
- Design Review
 - Key Findings
- Next steps

3 - 83

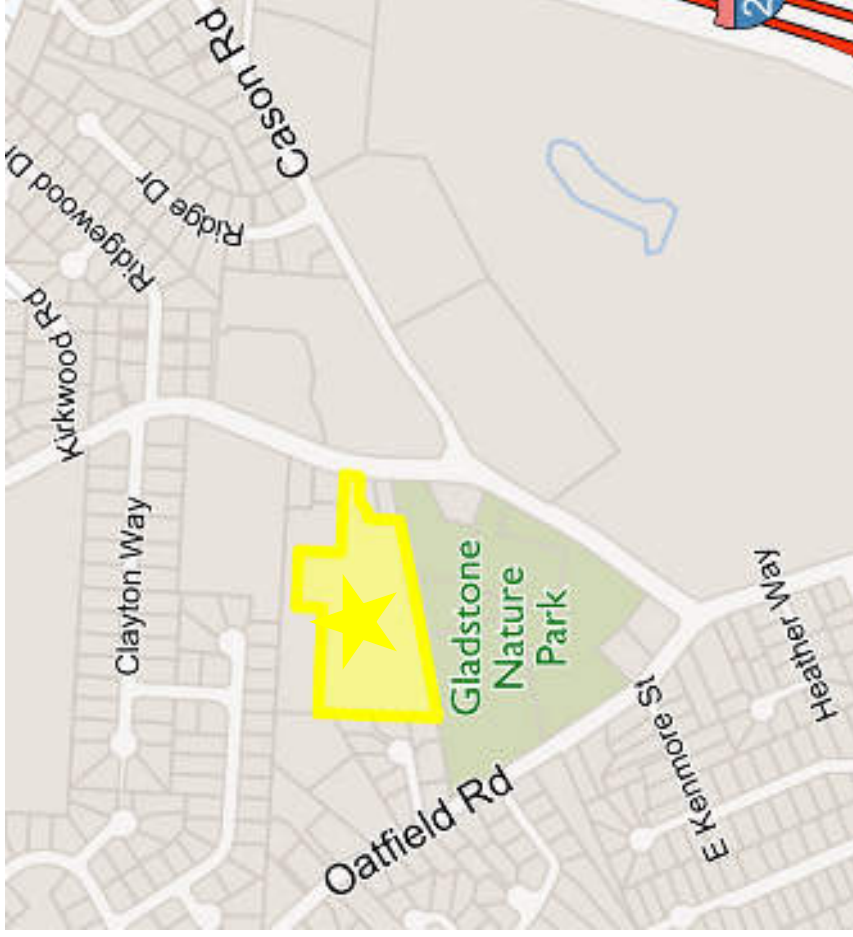
Slide 2



Project Location: 18181 WEBSTER RD

Proposed Project: Construction of new parking garages, and playground to serve the Webster Ridge Apartments. As proposed, the development will include 16 parking garages, 26 parking spaces, and 4,000 square feet of landscaping with walking paths and a play area.

3 - 84



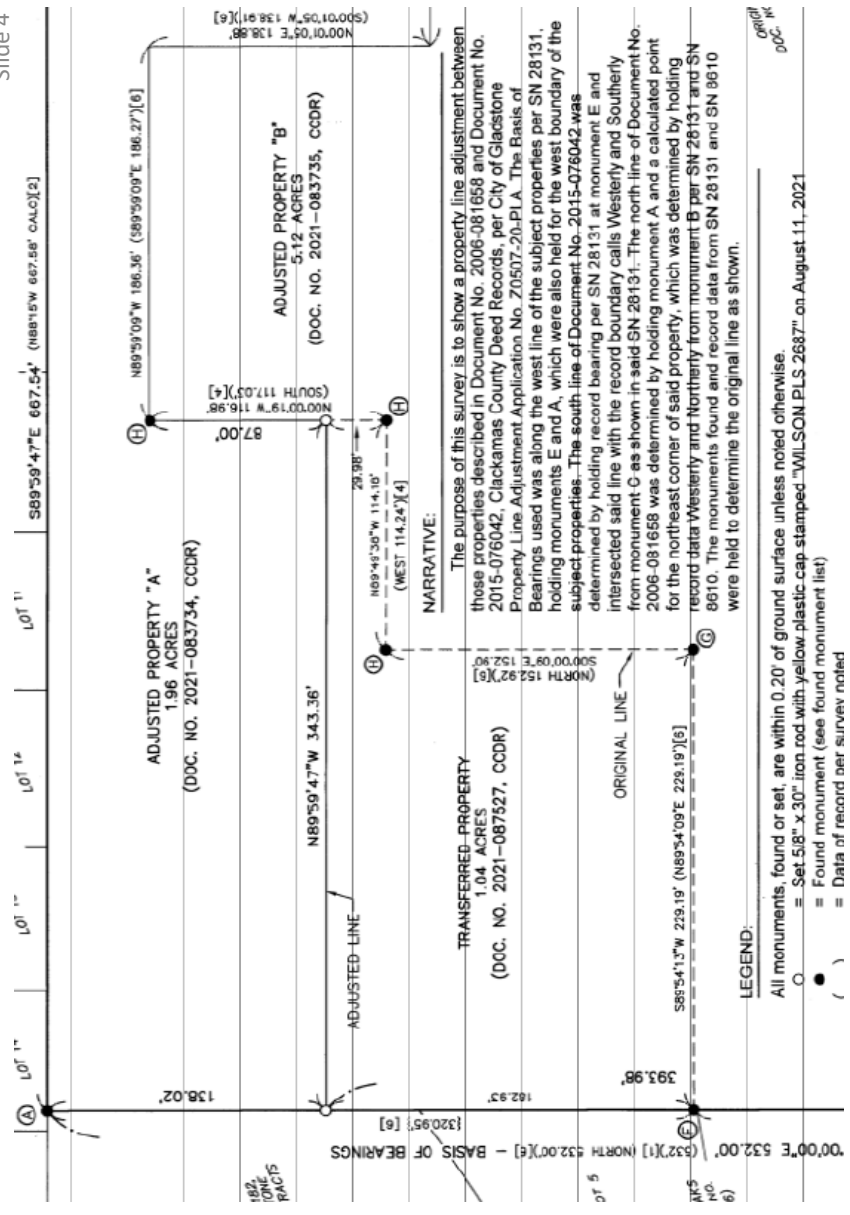
Previous Land Use Approvals:

Apartments: Z0249-15

Zone Change: Z0149-20

Property Line Adjustment: Z0507-20

1. Future Use. The 1.04 acres that are to be rezoned shall be developed expressly with land uses customarily considered accessory to Multifamily residences per 17.14.030 in addition to recreational uses per 17.68.040.



Project Site

- Zoning Designation: MR
- Comprehensive Plan Designation: Multifamily Residential
- Property size: 5.12 acres

↑ Property is not subject to any environmental overlays



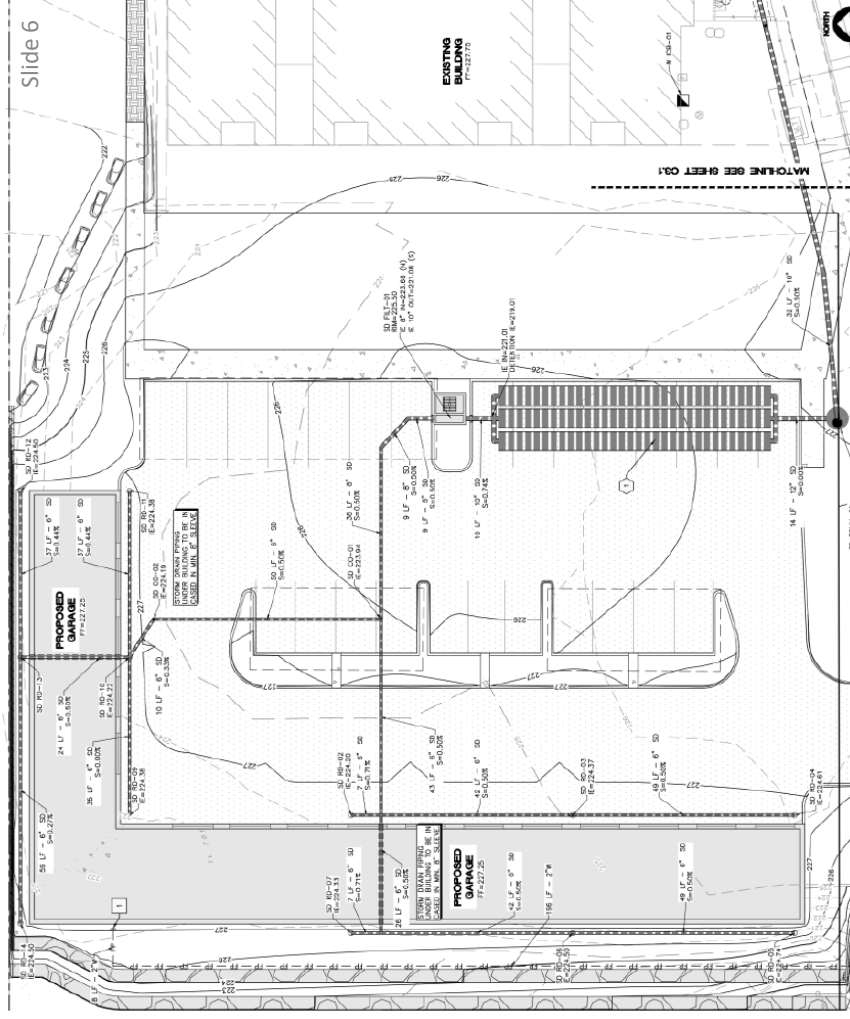
Proposed Site

Public Noticing:

- Sent to the applicant, the owner of the subject property and owners of record as identified on the most recent Clackamas County property tax assessment roll of property located within two hundred fifty (250) feet of the subject property.
- City of Gladstone, Public Works, Gladstone Fire, Gladstone PD, Engineering, WES

Comments Received:

Public Works, and Engineering provided joint comments, WES, and Fire provided comments.

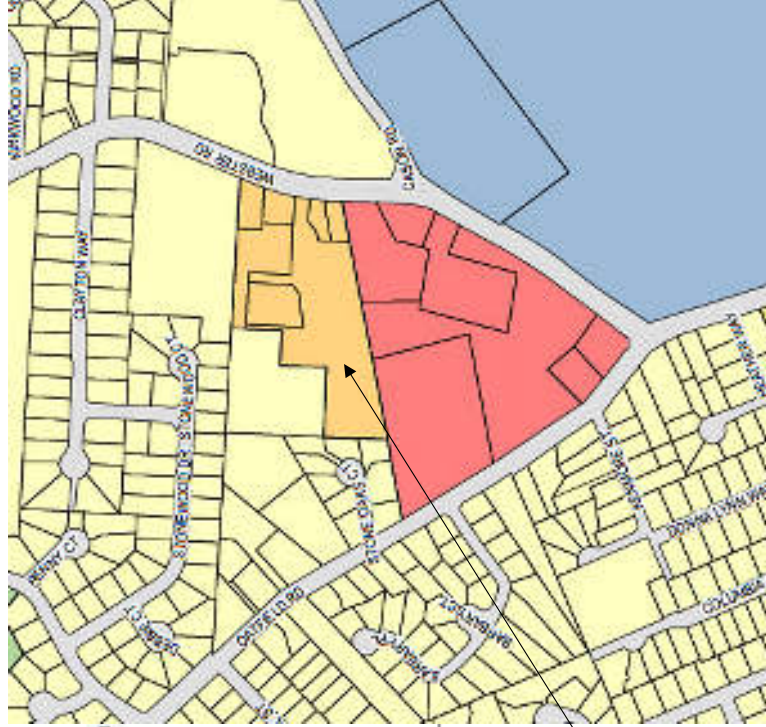


Current Zoning Map- Excerpt showing MR Zoning District along Webster Rd

CITY OF GLADSTONE ZONING

- Local Commercial - C1
- Community Commercial - C2
- General Commercial - C3
- Light Industrial - LI
- Multi-Family Residential - MR
- Office Park - OP
- Open Space - OS
- Single-Family Residential - R5
- Single-Family Residential - R7.2

- City Limits
- Urban Growth
- Parcels
- Railroad
- Rivers



Subject Property

Slide 7



GLADSTONE

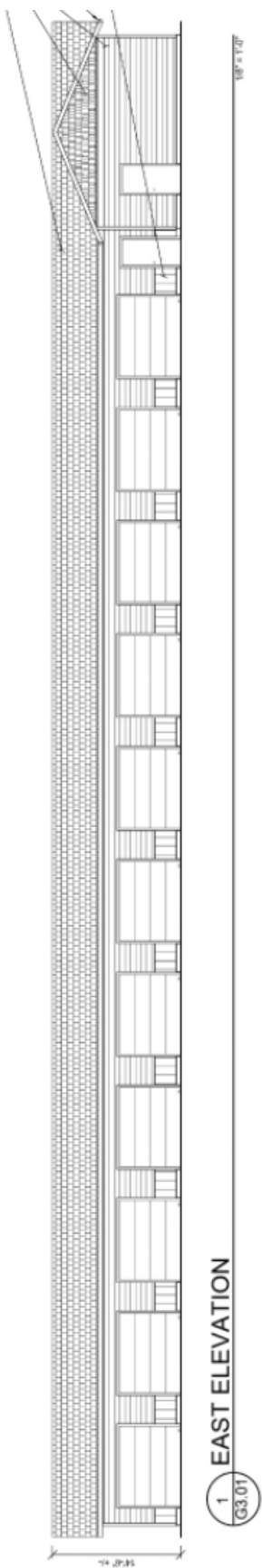
Oregon

Section 17.14.020

Uses allowed outright

(1) Buildings. Garages and carports, storage and other buildings,

- 2. ELECTRICAL IS DESIGNED BY OTHER
- 3. SEE 08.01 FOR TYPICAL ASSEMBLY C



Section 17.18.060 Dimensional standards.

(17.14.050 Dimensional standards.

(1) Lot area:

(b) For a two-family or multi-family dwelling, the minimum lot area shall be three thousand square (3,000) feet plus one thousand (1,000) square feet per dwelling unit;

(2) Setback Requirements:

- (a) A front setback shall be a minimum of twenty feet (20');*
- (b) A side setback shall be a minimum of five feet (5');*
- (c) A rear setback shall be a minimum of fifteen feet (15');*
- (d) A street side setback shall be a minimum of twenty feet (20');*
- (e) Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet (2') into a required setback area;*

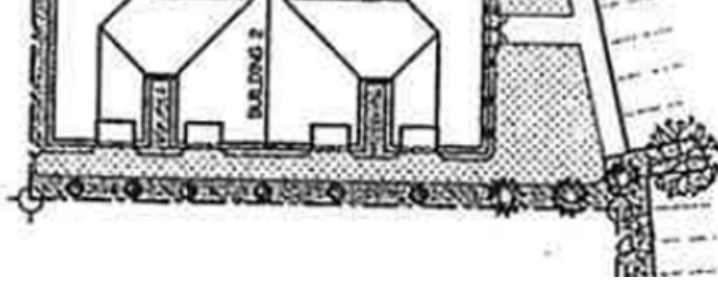
The subject property is 5.12 acres in size. Webster Road is the front of the property with the western boundary as the rear and the north and south property boundaries as the side.

Section 17.18.060 Dimensional standards.

- (3) Building Height.** The maximum building height shall be thirty-five feet (35').
- (4) Minimum Vegetation.** The minimum area that must be left or planted in trees, shrubs, grass, etc., shall be at least twenty percent (20%) of the total area of the lot.



Special Condition #1 Landscaping.



Z0249-15 approved/required shrubs and perennials in addition to lawn

Slide 11

2020 CONNEXplorer aerial

2022 Google Aerial

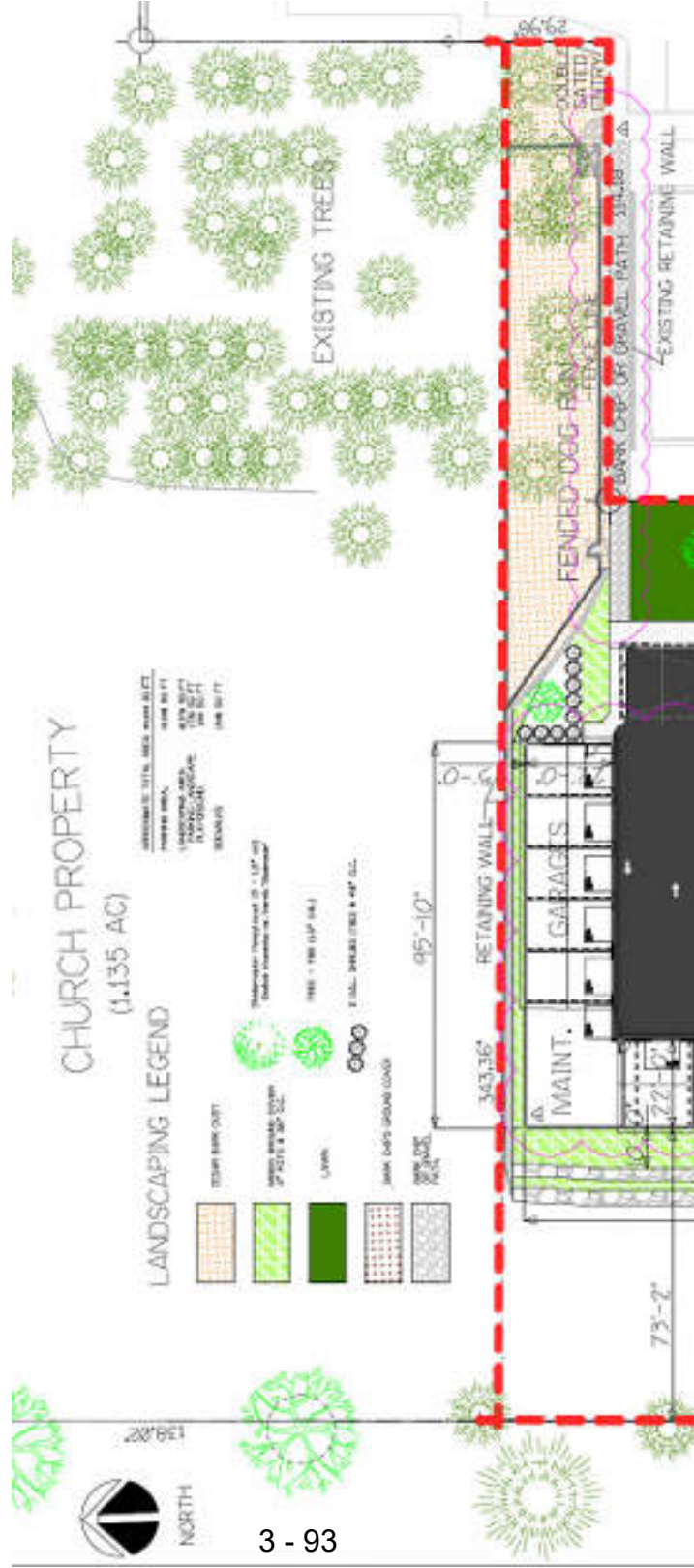
2015 Landscape plan.

May 17, 2022

Z0024-22-D



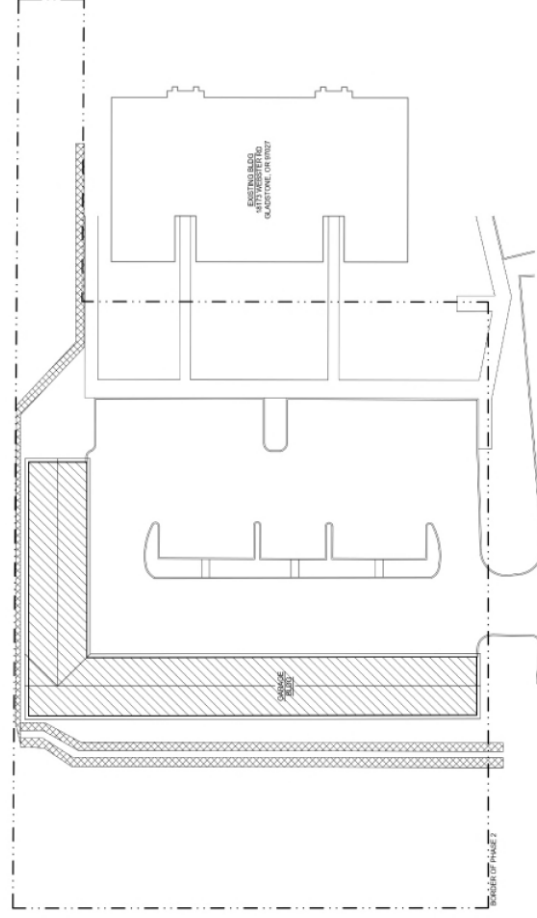
Special Condition #1 Landscaping.



Section 17.80 DESIGN REVIEW

- 17.42 General Provisions
- 17.44 Building Siting and Design
- 17.46 Landscaping
- 17.48 Off-Street Parking and Loading
- 17.50 Vehicular and Pedestrian Circulation
- 17.52 Signs
- 17.53 Billboards
- 17.54 Clear Vision
- 17.56 Drainage
- 17.58 Grading and Fill
- 17.60 Utilities
- 17.61 Wireless Communications Facilities
- 17.62 Special Uses

DIVISION IV. DEVELOPMENT STANDARDS



1 PHASE 2 SITE PLAN
 (60/00) NOTE: SEE CIVIL DRAWINGS FOR SPECIFIC BUILDING SETBACKS, PARKING, AND OTHER NON-BUILDING ELEMENTS

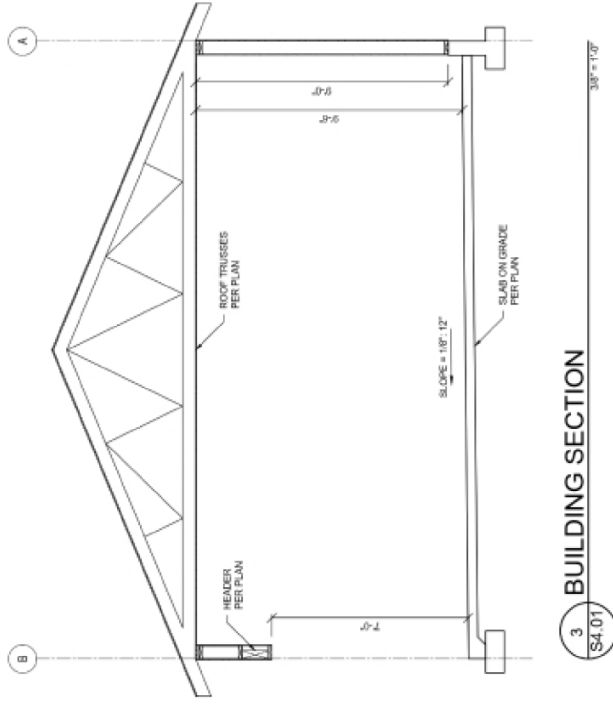
Design Standards for Land Divisions and Property Line Adjustments

[Section 17.44.020](#) Building Siting and Design

- (1) Siting.
- (2) Energy Efficient Design.
- (3) Compatibility.
- (4) Building Materials.

Buildings shall be constructed using high-image exterior materials and finishes such as masonry, architecturally treated tilt-up concrete, glass, wood or stucco. Buildings shall not be constructed with metal siding material, except as approved by the design review committee for specific high-image materials, except for:

- (a) Canopies, awnings, screening for roof-mounted fixtures, or other architectural features;
- (b) Utility equipment cabinets;
- (c) Structures no greater than two hundred (200) square feet in floor area and ten (10) feet in height; and,
- (d) Buildings, the portions of buildings, that are not visible from a road or adjacent property.



Section 17.44.022 Multi-family Design Standards

New multi-family buildings, including accessory buildings, shall be subject to the following design standards:

(1) Façades. Building façades and exterior walls **visible from** a public street or pedestrian path **or from adjacent property in an R-5 or R-7.2** zoning district shall not consist of a monotonous blank wall and shall include a minimum of two of the following:

- (a) Windows;
- (b) Entries;
- (c) Balconies;
- (d) Bays; or

(e) The use of two or more distinct materials to break up stretches longer than fifty lineal feet (50') of unbroken area.

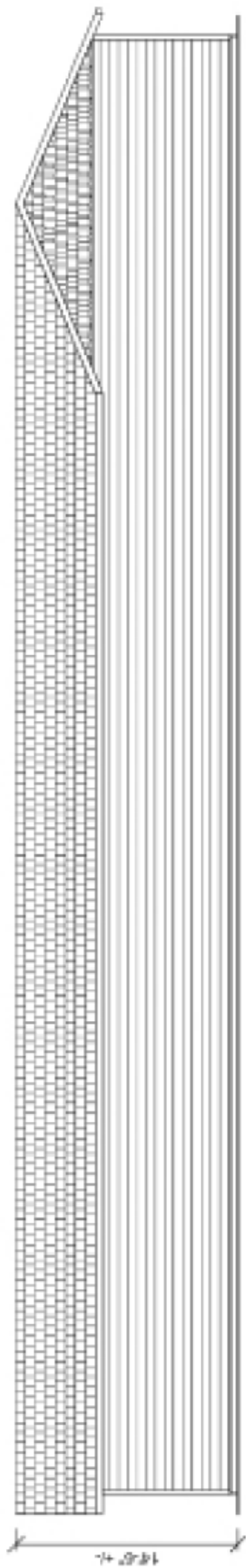
(2) Windows.

- (a) Window trim shall not be flush with exterior wall treatment.
- (b) Windows shall be provided with an architectural surround at the jamb, head and sill.
- (c) All windows facing the front lot line shall be double hung or casement windows.

(3) Roofs. Hipped, gambrel or gabled roofs shall be required. Flat roofs shall not be permitted except in areas where mechanical equipment is mounted.

Special Condition #3 Building façade.

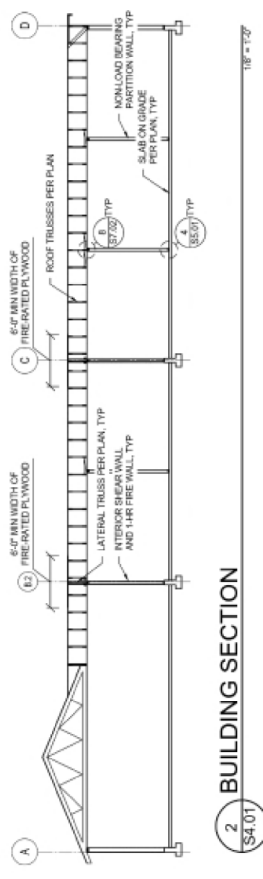
17.44.022 applies. The proposed garages are adjacent to low density residential property to the north and west. Therefore, the north wall of the parking garages that measures over 95 feet long shall be modified to include a minimum of two of the following: (a) Windows; (b) Entries; (c) Balconies; (d) Bays; or (e) The use of two or more distinct materials to break up stretches longer than fifty lineal feet (50') of unbroken area.



3 NORTH ELEVATION
G3.01

Section 17.44.020 Building Siting and Design

- (5) Lighting. Adequate exterior lighting shall be provided to protect public safety and shall be deflected so as not to shine on a lot in a residential district.
- (6) On-site Lighting. All on-site lighting shall be designed, located, shielded, or deflected so as not to shine into off-site structures or impair the vision of the driver of any vehicle. When required, engineered site lighting plans shall be developed consistent with Illuminating Engineering Standards (IES) including, but not limited to, average maintained illumination and maximum to minimum ratios. A master plan for on-site lighting shall include the design, height, and location of all proposed exterior lights, including:
- Parking and loading area lighting;
 - Pedestrian walkway lighting;
 - Internal access road lighting;
 - Lighting of public entrances into buildings;
 - Flood lights illuminating buildings or significant natural features.

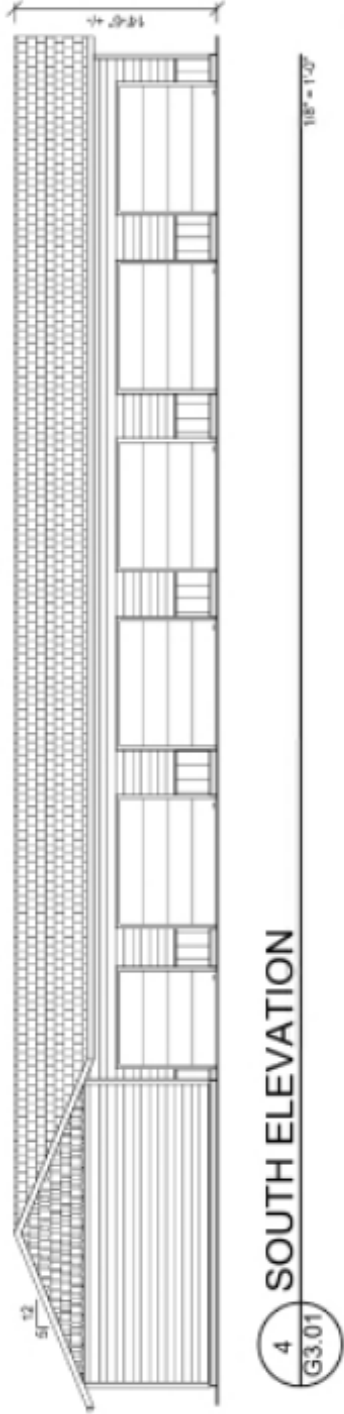


Z0024-22 Potential Special Condition #4 Lighting.

4. A photometric analysis and lighting plan, or a master plan for on-site lighting, that includes the design, height, extent, and location of all proposed exterior lights per 17.44.020 (6).

Z0149-20 Special Condition #2

2. Lighting. The future development of the site shall provide limited lighting per 17.44.020(5) and (6). Any lighting installed shall be the minimum amount required to meet the City of Gladstone Public Works requirements.

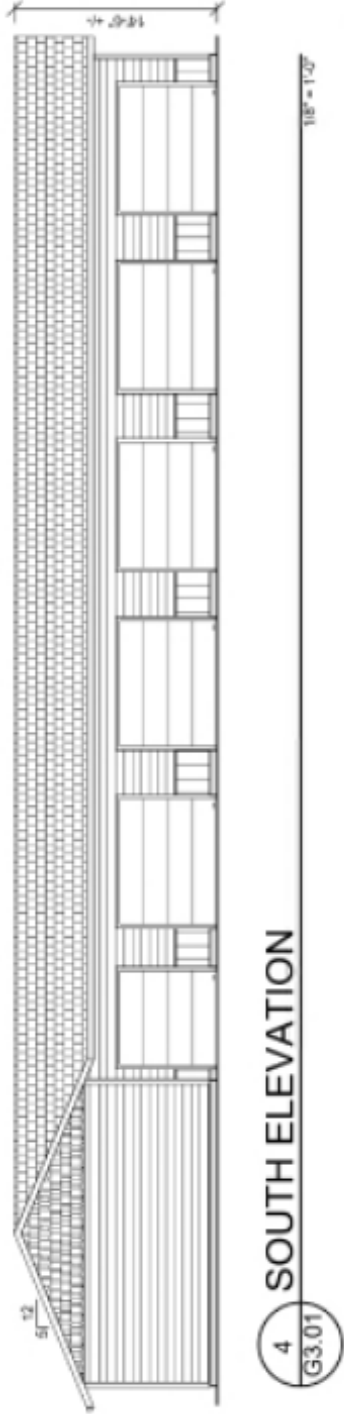


Z0024-22 Potential Special Condition #4 Lighting.

4. A photometric analysis and lighting plan, or a master plan for on-site lighting, that includes the design, height, extent, and location of all proposed exterior lights per 17.44.020 (6).

Z0149-20 Special Condition #2

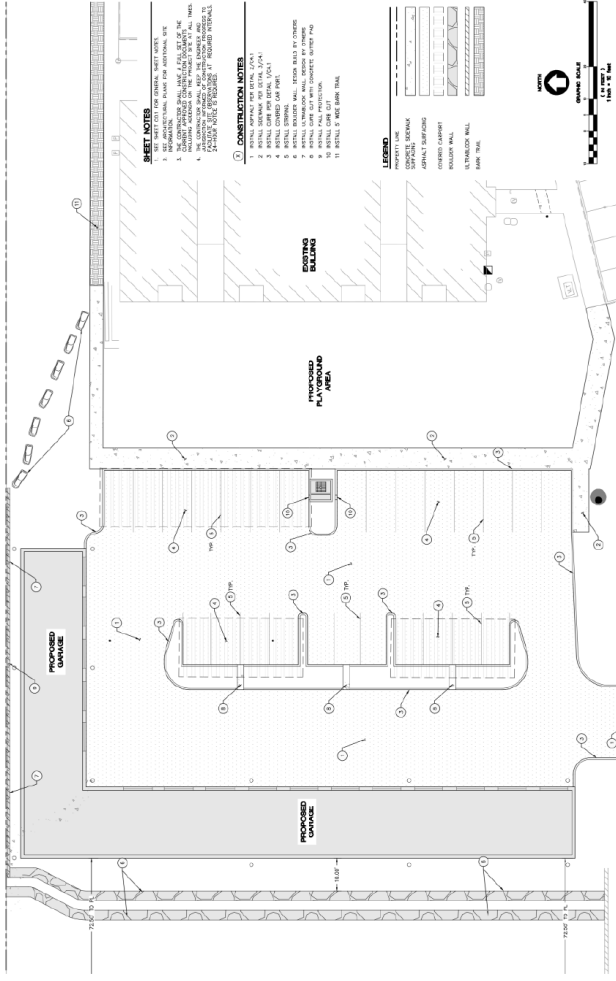
2. Lighting. The future development of the site shall provide limited lighting per 17.44.020(5) and (6). Any lighting installed shall be the minimum amount required to meet the City of Gladstone Public Works requirements.



Z0024-22 Potential Special Condition #5 & #6 ADA and Pedestrian Access.

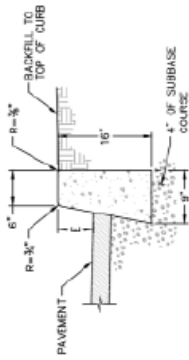
17.50.020 Vehicular and pedestrian circulation generally.

- (5) Handicapped Needs. Provide for the special needs of the handicapped such as wheelchair ramps and Braille signs.
- (6) Pedestrian Circulation Standards. An on-site pedestrian circulation system shall be provided for new nonresidential and multi-family developments and for new buildings added to existing nonresidential and multi-family developments. The system may include sidewalks as part of the public rights-of-way, walkways, and multi-use paths. (Walkways only provide for pedestrian circulation; multi-use pathways accommodate pedestrians and bicycles.) The system shall comply with the following standards:



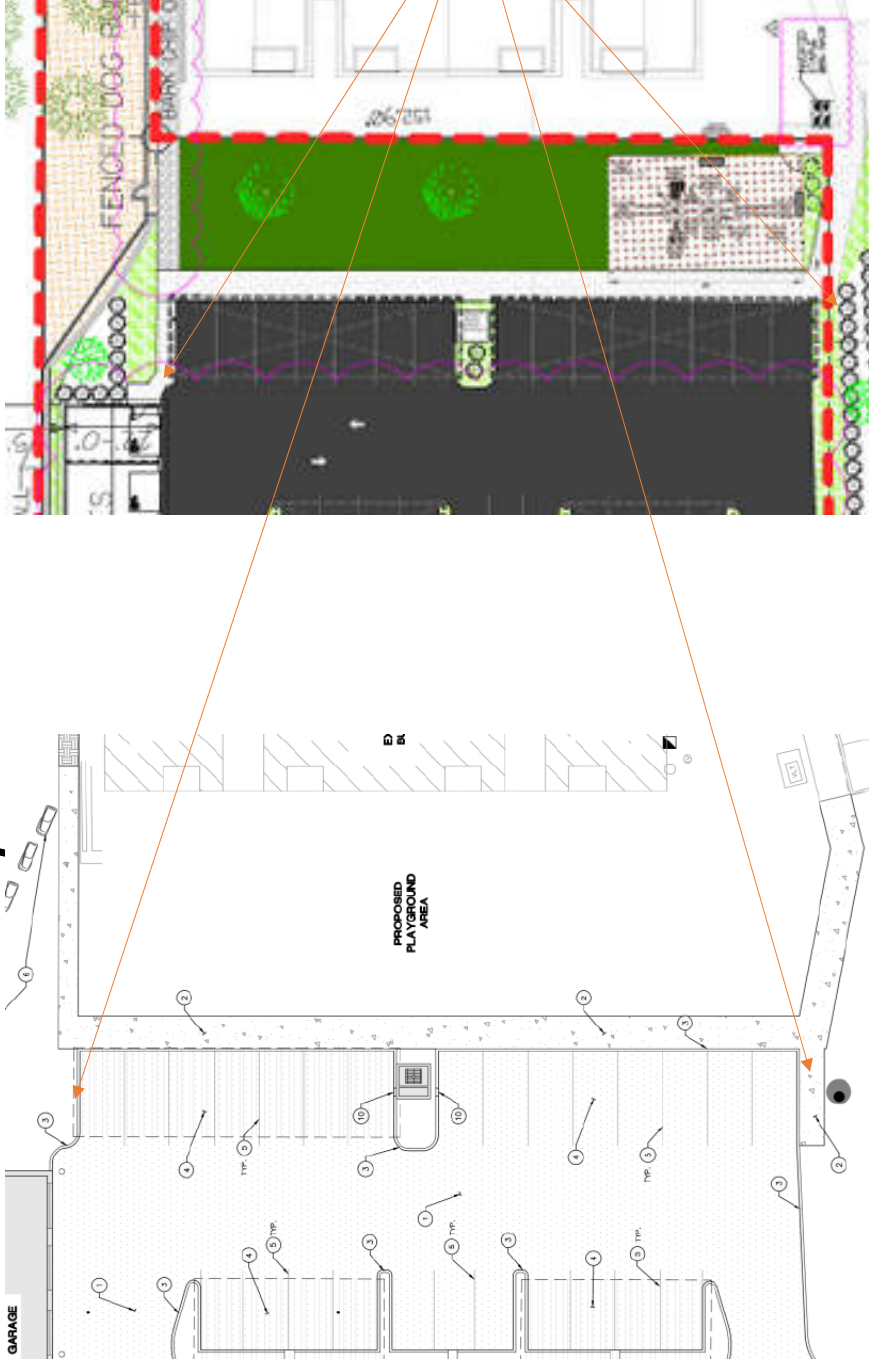
Z0024-22 Potential Special Condition #5 & #6 ADA and Pedestrian Access.

- (6) Pedestrian Circulation Standards..... shall comply with the following standards:
- (a) The system shall connect all adjacent streets to the main entrances of nonresidential buildings and to unit and/or building entrances of multi-family developments;
 - (b) The system shall connect all buildings and other areas of the site, such as parking areas, bicycle parking, recreational areas, common outdoor areas and any pedestrian amenities;
 - (c) The system shall be hard-surfaced and constructed in accordance with the public works standards. For nonresidential development, the walkways shall be a minimum of six feet wide. For multi-family residential development, walkways shall be a minimum of five feet wide;
 - (d) The system and off-street parking and loading areas shall be designed to avoid, to the maximum extent possible, the system's crossing off-street parking and loading areas. Where the system crosses driveways or off-street parking and loading areas, the system shall be clearly identifiable through the use of elevation changes, speed bumps, a different paving material or other similar method. Striping shall not fulfill this requirement;
 - (e) Where the system is parallel and adjacent to an auto travel lane, the system shall be a raised path or be separated from the auto travel lane by a raised curb, bollards, landscaping or other physical barrier. If a raised path is used, the ends of the raised portions shall be equipped with curb ramps;
 - (f) The system shall comply with the Americans with Disabilities Act (ADA);



- NOTES:
1. CURB EXPOSURE "H" = 6". TYP. VARY AS SHOWN ON PLANS OR AS DIRECTED.
 2. CONSTRUCT CONSTRUCTION JOINTS AT 15' MAX. SPACING AND AT RAMPES, CURB EXPANSION JOINTS, 200' MAX. SPACING AT POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY.
 3. TOPS OF ALL CURBS SHALL SLOPE TOWARD THE ROADWAY AT 2% UNLESS OTHERWISE SHOWN OR AS DIRECTED.
 4. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM WITH CURB MACHINE AS APPROVED BY THE ENGINEER.
- 1** CONCRETE CURB - STANDARD
SCALE: NTS

Z0024-22 Potential Special Condition #5 & #6 ADA and Pedestrian Access.



Sidewalks and pedestrian access plans need to be uniform and provide access to amenities including Garages, playground, parking spaces



RECOMMENDATION

The Gladstone Planning Staff are recommending Approval of the Design Review application, with 13 Special Conditions of approval.

III. RECOMMENDED SPECIAL CONDITIONS OF APPROVAL.

1. Landscaping.....
2. Signage
4. Lighting
5. ADA Access.....
6. Pedestrian Access.....
7. Water.....
8. Storm Drainage.....
9. Erosion Control.....
10. Grading.....
11. Construction Plans.....
12. Pre-construction Conference.....
13. As-Built Submittals



EXHIBIT A
Application Forms



LAND USE APPLICATION

Gladstone planning services are provided by Clackamas County.
 Submit all land use applications and correspondence to:
 Clackamas County Planning Division, 150 Beaver Creek Road, Oregon City, OR 97045
 Phone: 503-742-4510 E-Mail: jfields@clackamas.us

A completed application includes the LAND USE APPLICATION and the items identified in the appropriate SUPPLEMENTAL APPLICATION.

- ✓ Please answer all questions. If a question is not applicable to your project, indicate "N.A."
- ✓ Incomplete applications will not be accepted for filing.
- ✓ All exhibits must be legible.

● FOR STAFF USE ONLY ●

File No: _____ Other Related Permit Applications: _____
 Pre-app: Staff _____ Date _____ Staff Member: _____
 Date Received: _____ Fee _____ Zone: _____
 Hearing Date: _____ Comp. Plan: _____

● APPLICANT INFORMATION ●

PLEASE TYPE OR PRINT IN BLACK INK ONLY

SECTION I. APPLICANT/ PROPERTY OWNER

NAME OF APPLICANT THYGESON HANS
 LAST FIRST

MAILING ADDRESS 14020 SE JOHNSON RD, STE 102 CITY MILWAUKIE ST OR ZIP 97267

APPLICANT IS: LEGAL OWNER CONTRACT BUYER OPTION BUYER AGENT

NAME OF CONTACT PERON (if other than applicant) BOB SANDERS

MAILING ADDRESS OF CONTACT SAME AS ABOVE

PHONE NUMBERS OF: APPLICANT: WK 503-908-0563 HM _____ CONTACT PERSON: WK: _____ HM _____

EMAIL OF APPLICANT: BOB@HTIPLLC.COM

SITE ADDRESS: 18081 WEBSTER ROAD, GLADSTONE OR TOTAL LAND AREA: 1.04 ACRES

LEGAL DESCRIPTION: T _____ R _____ SECTION 02 1/4 Sec 17, T26, R2E WM TAX LOT(S) 22E17DD0701

ADJACENT PROPERTIES UNDER SAME OWNERSHIP: T _____ R _____ SECTION _____ TAX LOT(S) _____
 22E17DC00700 and 22E17DC00800

OTHER PERSONS (IF ANY) TO BE MAILED NOTICES REGARDING THIS APPLICATION:

NAME	ADDRESS	ZIP	RELATIONSHIP

NAME	ADDRESS	ZIP	RELATIONSHIP

I hereby certify the statements contained herein, along with the evidence submitted, are in all respects true and correct to the best of my knowledge.

OWNER'S SIGNATURE: Hans Thygeson APPLICANT'S SIGNATURE: Hans Thygeson
 OWNER'S NAME (Print): Hans Thygeson APPLICANT'S NAME (Print): Hans Thygeson

Contacts

Planning, Building and Development

Planning Staff Main Number: 503-742-4500
Joy Fields, JFields@clackamas.us or 503-742-4510 and Lizbeth Dance, LDance@clackamas.us
Gladstone Municipal Code: <https://www.codepublishing.com/OR/Gladstone>
GIS Mapping: https://maps.orcity.org/Html5Viewer_2_12_1/index.html?viewer=Gladstone.Gladstone

<p>City Hall 525 Portland Avenue, Gladstone, OR 97027 Office Hours: Monday – Friday, 8:00 a.m. to 5:00 p.m.</p>	<p>Administrator, Jacque Betz betz@ci.gladstone.or.us Tami Bannick bannick@ci.gladstone.or.us 503-656-5225</p>
<p>Public Works Department 18595 Portland Avenue, Gladstone, OR 97027 Hours: Monday – Friday, 8:00 a.m. to 3:30 p.m.:</p>	<p>Director, Jim Whynot: whynot@ci.gladstone.or.us 503-656-7957</p>
<p>Fire Department 555 Portland Avenue, Gladstone, OR 97027 Business Hours: Monday – Friday, 8:00 a.m. to 5:00 p.m.</p>	<p>Chief, Mike Funk: funk@ci.gladstone.or.us 503-557-2775</p>
<p>Clackamas County Building Codes Division Building information: www.clackamas.us/building/</p>	<p>503-742-4240</p>
<p>Building Permit Inspection Line</p>	<p>503-742-4720</p>
<p>Building Permit Specialist</p>	<p>503-742-4240</p>
<p>Richard Carlson Structural Review</p>	<p>richardcar@clackamas.us 503-742-4769</p>
<p>Doug Rudisel Electrical Plan Review</p>	<p>dougrud@clackamas.us 503-742-4764</p>
<p>Wayne Seiffert Plumbing Inspector Supervisor</p>	<p>waynesel@clackamas.us 503-742-4777</p>
<p>Police Department 535 Portland Avenue, Gladstone, OR 97027 Business Hours: Monday – Friday, 8:00 a.m. to 5:00 p.m.</p>	<p>Nuisance Concerns 503-557-2763</p>
<p>CLACKAMAS COUNTY SURVEYOR Surveys, Plats, Partitions and Public Land Corners: www.clackamas.us/surveyor/</p>	<p>503-742-4475</p>



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Phone: 503-742-4510 E-Mail: jfields@clackamas.us

DESIGN REVIEW INFORMATION SHEET

WHAT IS DESIGN REVIEW?

Design review is required for all institutional, commercial, industrial and multifamily developments except as specifically exempted by Section 17.80.021 of the Gladstone Municipal Code (GMC). Design review provides a process for evaluating such elements as building design, landscaping, parking, street improvements and utilities.

WHAT IS NEEDED FOR APPROVAL?

All design review applications are discretionary and may be approved after evaluation according to criteria in the GMC. The city must make written findings to support the decision. The applicant is responsible for providing evidence to support a design review request, according to the following chapters of the GMC: Chapter 17.80, the chapter regulating the underlying zoning district of the subject property and the chapters of Division IV of Title 17.

WHAT ARE CHANCES FOR APPROVAL?

Staff cannot predetermine the decision on any application. A decision will only be made after the complete application is processed. This includes review of citizen and agency comments. The decision is based on criteria appropriate to the application as listed in the GMC. To address the necessary criteria, the information requested in the application form and required to be included on submitted plans should be as thorough as possible.

APPLICATION PROCESS

Design review applications are subject to the quasijudicial process and public notice. Public comments received from property owners, agencies, and other interested parties may affect the decision on the application. Special conditions may be attached to an approval. All design review applications are reviewed at a public hearing before the Gladstone Planning Commission. The Planning Commission's decision may be appealed to the City Council, where an additional public hearing will be held. The City Council's decision may be appealed to the Oregon Land Use Board of Appeals.

HOW DO I MAKE A DESIGN REVIEW APPLICATION?

- Complete a City of Gladstone Land Use Application- attached.
- Provide plans according to the requirements of Chapter 17.80.061 of the GMC.
- Submit the application form, plans and application fee of 0.384% of the construction cost (minimum fee is \$785, maximum fee is \$36,835) to the Clackamas County Planning Division. Provide a statement giving the estimated cost of construction (labor and materials). Once your application is deemed complete, **submit a minimum of twelve copies of large plans or other items that cannot easily be reproduced by the Planning Division.**
- Although not required, it is strongly suggested that you attend the Planning Commission and, if applicable, the City Council hearings to speak on behalf of your proposal.



DESIGN REVIEW LAND USE APPLICATION

Gladstone planning services are provided by Clackamas County.
 Submit all land use applications and correspondence to:
 Clackamas County Planning Division,
 150 Beaver Creek Road, Oregon City, OR 97045
 Phone: 503-742-4510 E-Mail: jfields@clackamas.us

• FOR STAFF USE ONLY •

File No: _____ Other Related Permit Applications _____
 Pre-app: Staff _____ Date _____ Staff Member: _____
 Date Received: _____ Fee _____ Zone: _____
 Hearing Date: _____ Comp. Plan: _____

• APPLICANT INFORMATION •

PLEASE TYPE OR PRINT IN BLACK INK ONLY

Contact Information:	<input checked="" type="checkbox"/> Owner	<input type="checkbox"/> Architect	<input type="checkbox"/> Engineer	<input type="checkbox"/> Other
Contact/Applicant's Name: BOB SANDERS, HANS THYGESON, _____				
Mailing Address: 14020 SE JOHNSON RD, STE 102 _____		City/State/Zip: MILWAUKIE OR 97267 _____		
E-Mail: BOB@HTIPLLC.COM; HANS@HTIPLLC.COM _____		Phone: 503-908-0563 _____		
Contact Information:	<input type="checkbox"/> Owner	<input type="checkbox"/> Architect	<input type="checkbox"/> Engineer	<input type="checkbox"/> Other
Contact/Applicant's Name: same as above _____				
Mailing Address: _____		City/State/Zip: _____		
E-Mail: _____		Phone: _____		
Property Information				
Site Address: NO SITE ADDRESS, WEBSTER RD, GLADSTONE OR 97027 (NEAREST: 18181 WEBSTER RD, GLADSTONE) _____				
Total Land Area: 1.04 ACRES SE 1/4 Sect 17, T2S, R2E WM _____				
Legal Description: T _____ S, R _____ E/W/Q, Section _____ Tax Lot(s) Tax Lot 22E17DC00701 _____ <i>(For property legal description, contact Planning at 503-742-4500)</i>				
Adjacent Properties under Same Ownership: T _____ S, R _____ E/W/Q, Section _____ Tax Lot(s) _____				
Project Description:				
per Z0149-20-D; applicant to construct a new asphalted parking area to include 16 garages, 26 additional stalls, some with overhead carports; _____				
Prelim landscape & drip irrigation plan submitted; 4,000+ SF of site will be a play area w/play equipment; walking paths to the parking area from adjacent apartment complex; exterior lighting provided; _____				
garages will have fire suppression system (sprinklers) _____				
Current Zoning: MR Multi-Family Residential District _____		Existing Use of Site: vacant/undeveloped _____		
Construction Cost: \$375,000 _____		Proposed Square Footage: 36,790SF _____		

Method of Sewage Disposal: no sewer is needed

Water Supply: Pipe, City system

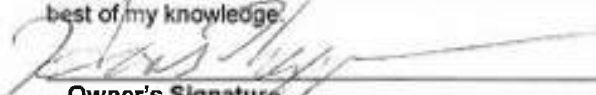
Commercial/Industrial/Institutional Development:
 Number of employees/students/occupants: 0 Days of operation: 24/7
 Estimated hours of daily operation: _____ am - _____ pm

Is the property under enforcement action for a violation of the Gladstone Municipal Code? No Yes

Other Persons (If Any) To Be Mailed Notices Regarding This Application:

Name	Address	Zip	Relationship

I hereby certify the statements contained herein, along with the evidence submitted, are in all respects true and correct to the best of my knowledge.


 Owner's Signature
 Hans Thylson
 Owner's Name (Print)


 Applicant's Signature
 Applicant's Name (Print)

● SUPPLEMENTAL QUESTIONS ●

Describe your proposed development. Identify the number of people associated with the use (employees, students, congregation members, clients, etc.); days and hours of operation; building materials, including type and color; and additional information about the buildings, vehicles, equipment, and square footage associated with the use: _____

TO CONSTRUCT 16 GARAGES AND A TOTAL OF 26 PARKING STALLS, 15 PARKING STALLS WITH COVERED STEEL CARPORTS AND 11 UNCOVERED PARKING STALLS; LIGHTING (APPROX 22,800 sf OF IMPREVIOUS SURFACE)

TO CONSTRUCT A 4,000+ SF PLAY AREA WITH PLAY EQUIPMENT; 9,000 sf OF OPEN AREA WEST OF THE GARAGES; RENTAL GARAGES AND PARKING SPACES WILL ONLY BE USED BY WEBSTER RIDGE RESIDENTS ON AN ASSIGNED BASIS

Identify how your proposal meets the building siting and design standards pursuant to GMC Chapter 17.44.

garages are non-residential buildings; garage and carport sizes, color, height will be compatible with adjacent apartment buildings and existing garages;

Identify how your proposal meets the landscaping requirements pursuant to GMC Chapter 17.46.

See site and landscape plan; 15% min. landscaping of area of disturbance provided; parking islands will be landscaped; parking area is not adjacent to a street; Landscape irrigation will be by drip irrigation system installed in the field with the plantings; See Grading plan;

Identify how your proposal meets the off-street parking and loading standards pursuant to GMC Chapter 17.48

~~See Decision Z0149-20-D;~~

Identify how your proposal meets the vehicular and pedestrian circulation standards pursuant to GMC Chapter 17.50.

~~Private parking lot - ADA walkways provided; see site plan for impervious surfaces, traffic separation, curbs & sidewalks;~~

If your proposal includes the installation or modification of a sign, identify the dimensions and explain how it meets the standards pursuant to GMC Chapter 17.52.

see Decision Z0149-20-D; The "departure from present development policies or land use patterns" associated with the Application is limited. The subject property is unlikely to be developed for its zoned use. The proposed use is consistent with the zoning and does not require any special connections available to it from outside of the church property. Utilizing the proposed
Page 7 of 17
City of Gladstone Planning Decision File No: 20074-20-C
part of the Church property closed to the apartment complex for an accessory multi-tenancy

Explain why the use is suitable for the proposed site, considering size, shape, location, topography, existence of improvements and natural features: _____

~~See Decision Z0149-20-D;~~

Explain why the use will not alter the character of the surrounding area in a manner that substantially limits, impairs or precludes the use of surrounding properties for the primary uses listed in the underlying zoning district:

~~See Decision Z0149-20-D;~~

Provide additional information regarding clear vision, drainage, grading, utilities, or other items relevant to new construction or site development:

~~see submitted site civil plans; storm drainage report, landscaping plan, play area plan;~~

(Use additional sheets to answer questions if necessary)

EXHIBIT B

Notice of Incomplete Application



Gladstone planning services are provided by Clackamas County. Submit all land use applications and correspondence to: Clackamas County Planning Division, 150 Beavercreek Road, Oregon City, OR 97045
Phone: 503-742-4500 E-Mail: jfields@clackamas.us

NOTICE OF INCOMPLETE APPLICATION

ORIGINAL DATE SUBMITTED: <u>January 18, 2022</u>
FILE NUMBER: <u>Z0024-22</u>
APPLICATION TYPE: <u>Design Review</u>
STAFF CONTACT: <u>Joy Fields, jfields@clackamas.us</u>
DATE OF THIS NOTICE: <u>1/27/22</u>

IMPORTANT

Failure to respond completely to this request within 180 days of this mailing will be deemed a refusal to comply with this written request. At such time the city will treat the application as complete for purposes of ORS 227.178(2) and render a final decision on your application based on available information at the time.

MAILED TO APPLICANT: 14020 SE Johnson Rd, Ste 102, Milwaukie OR 97267
Bob Sanders <Bob@htiplc.com>; Matthew Robinson <mrobinson@dowl.com>
OWNER: Hans Thygeson <hans@htiplc.com>

MISSING INFORMATION REQUIRED FOR COMPLETE APPLICATION: _____

The garages are an accessory use to the apartments and have to be on the same property as the apartments. Please submit evidence that the adjusted deeds and the final plat has been recorded.
17.48.040 and 17.48.050 were not addressed in the application. Z0149-20 did not address these sections of the code.
17.46.020(2) Standards need to be addressed in narrative or on landscaping plan.
17.50.020 (5) & (6) Standards need to be addressed in the application.
Z0149-20 did not address how the proposed development is suitable for the site (topography, natural features, etc) Please address that section of the application on page 4 of the application.

Applicant, please check one of the following and return this notice to the above address.

- Yes, I will be submitting the requested information within 180 calendar days or my application will be processed in its present state.
- No, I will not be submitting the requested information. Please accept the application as submitted.

Matt Robinson

Signature

3/9/22

Date

EXHIBIT C
Recorded PLA Survey

SN2022-047

SHEET 1 OF 1

SURVEY REFERENCES:
 GLADSTONE ACRE TRACTS (SN1909-001)
 SN 8670
 R.D. WHITMAN'S ADDITION (PLAT NO. 2269)
 SN 20859
 STONE OAKS (PLAT NO. 2876)
 SN 28130
 PARTITION PLAT 2000-044

DEED REFERENCES:
 R1 DOCUMENT NO. 2006-081658, CDDR
 SN 8670
 R2 DOCUMENT NO. 2015-076042, CDDR

PROPERTY LINE ADJUSTMENT
 FOR: STONY RIDGE, LLC
 LOCATED IN THE S.E. 1/4 OF SECTION 17, T. 2 S., R. 2 E., W.M.
 CITY OF GLADSTONE, CLACKAMAS COUNTY, OREGON
 AUGUST 11, 2021

RECORD OF SURVEY

PROPERTY LINE ADJUSTMENT DEEDS RECORDED AS
 DOCUMENT NO. 2021-087527, DOCUMENT NO.
 2021-083734, AND DOCUMENT NO. 2021-083735
 CLACKAMAS COUNTY OFFICIAL RECORDS.

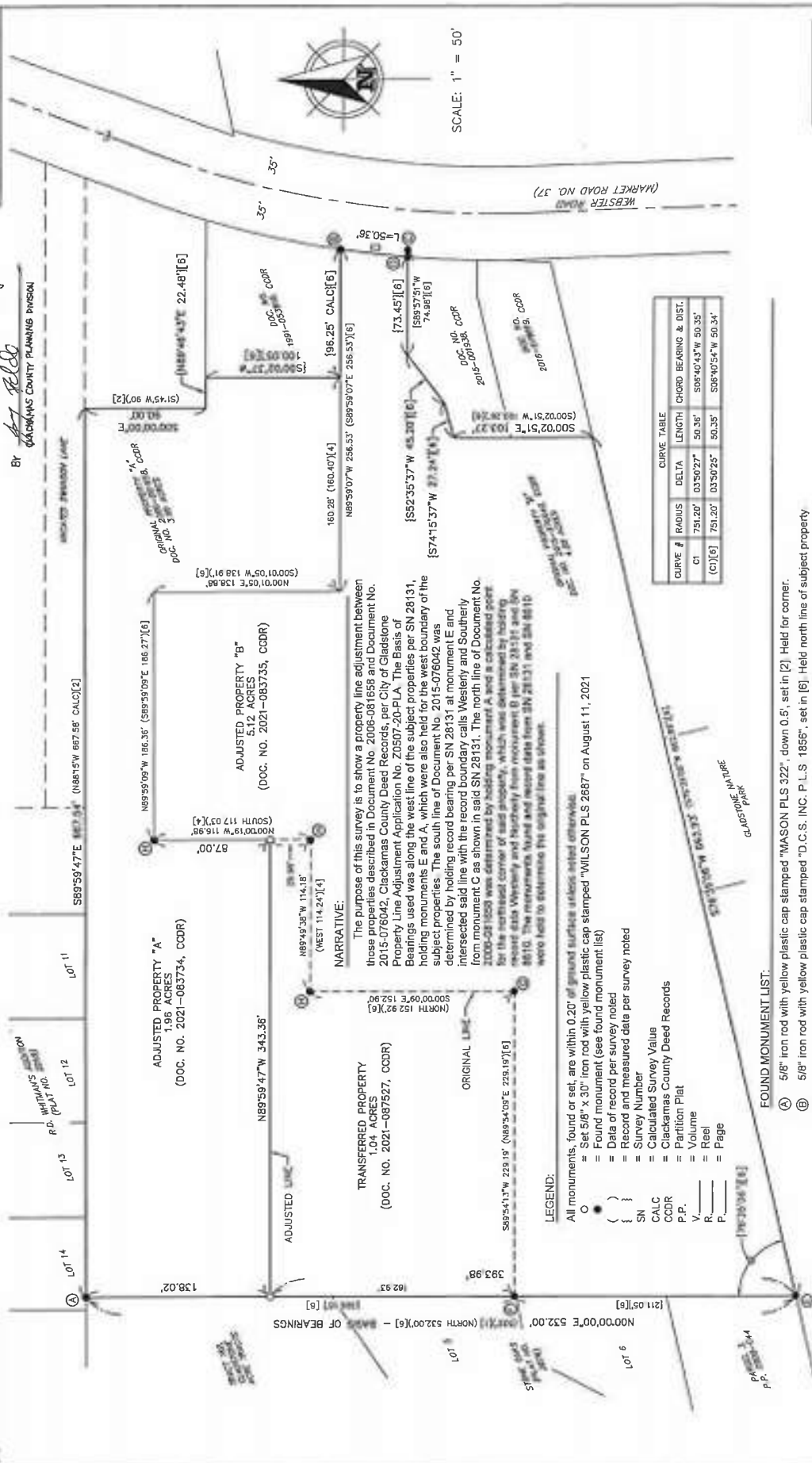
APPROVAL

CLACKAMAS COUNTY PLANNING
 FILE NO. 20207-20-PLA

APPROVED THIS 11th DAY OF FEBRUARY 2022

By *[Signature]*
 CLACKAMAS COUNTY PLANNING DIVISION

CLACKAMAS COUNTY SURVEYOR
 DATE RECEIVED: 8-16-2021
 DATE ACCEPTED FILED: 2-23-2022
 SURVEY NUMBER: SN2022-047



NARRATIVE:
 The purpose of this survey is to show a property line adjustment between those properties described in Document No. 2006-081658 and Document No. 2015-076042, Clackamas County Deed Records, per City of Gladstone Property Line Adjustment Application No. 202007-20-PLA. The Basis of Bearings used was along the west line of the subject properties per SN 28131, holding monuments E and A, which were also held for the east boundary of the subject properties. The south line of Document No. 2015-076042 was determined by holding second bearing per SN 28131 at monument E and intersected said line with the record boundary calls Westerly and Southerly from monument C as shown in said SN 28131. The north line of Document No. 2006-081658 was determined by holding monument A and a calculated point for the northward corner of said property, which was determined by holding monument A to Westery and Northery from monument B per SN 28131 and by 8810. The monuments found and record data from SN 28131 and SN 8670 were held to determine the original line as shown.

- LEGEND:**
- All monuments, found or set, are within 0.20' of ground surface unless noted otherwise.
 - = Set 5/8" x 30" iron rod with yellow plastic cap stamped "WILSON PLS 2687" on August 11, 2021
 - () = Found monument (see found monument list)
 - { } = Data of record per survey noted
 - [] = Record and measured data per survey noted
 - SN = Survey Number
 - CALC = Calculated Survey Value
 - CDDR = Clackamas County Deed Records
 - P.P. = Partition Plat
 - V. = Volume
 - = Reel
 - P. = Page

FOUND MONUMENT LIST:

- A 5/8" iron rod with yellow plastic cap stamped "MASON PLS 322", down 0.5', set in [2]. Held for corner.
- B 5/8" iron rod with yellow plastic cap stamped "D.C.S. INC. P.L.S. 1856", set in [6]. Held north line of subject property
- C 5/8" iron rod with yellow plastic cap stamped "MASON PLS 322", set in [2]. Held for south line of subject property. Bears N89°57'51"E 1.53' from monument D.
- D 5/8" iron rod with yellow plastic cap stamped "D.C.S. INC. P.L.S. 1856", set in [6]. Held for west right of way of Webster Road (Market Road No. 37).
- E 5/8" iron rod with yellow plastic cap stamped "D.C.S. INC. P.L.S. 1856", set in [6]. Held for southwest corner of subject property
- F Brass screw with washer, set in [6]. Held for original line
- G 5/8" iron rod with yellow plastic cap stamped "D.C.S. INC. P.L.S. 1856", set in [6]. Held for angle point in original line.
- H 5/8" iron rod with yellow plastic cap stamped "MARTIN ENG LS 818", set in [4]. Held for angle points in original line

CURVE #	RADIUS	DELTA	LENGTH	CHORD BEARING & DIST.
C1	751.20'	03°30'25"	50.35'	S08°40'43"W 50.35'
(C)[6]	751.20'	03°30'25"	50.35'	S08°40'54"W 50.34'

BARKER SURVEYING
 3657 KASHMIR WAY SE
 PORTLAND, OREGON 97202
 PHONE: (503) 243-2466
 FAX: (503) 243-2466
 E-MAIL: barker@barker-surveying.com
 EXPIRES: 8/23/2022

REGISTERED PROFESSIONAL LAND SURVEYOR
 JULY 11, 1994
 WILSON

RECORDING COVER SHEET
ALL TRANSACTIONS, PER ORS 205.234

THIS COVER SHEET HAS BEEN PREPARED BY THE PERSON PRESENTING THE ATTACHED INSTRUMENT FOR RECORDING ANY ERRORS IN THIS COVER SHEET DO NOT AFFECT THE TRANSACTION(S) CONTAINED IN THE INSTRUMENT ITSELF.

This Space For County recording Use Only

AFTER RECORDING RETURN TO
 (Name and address of the person authorized to receive the Instrument after recording, as required by ORS 205.180(4) and ORS 205.238)

Hans Thygeson
 Stony Ridge, LLC, an Oregon limited liability company
 14020 SE Johnson Rd Ste 102
 Milwaukie, OR 97267

Clackamas County Official Records Sherry Hall, County Clerk	2021-087527
	09/27/2021 01:47:01 PM
D-D \$35.00 \$16.00 \$10.00 \$62.00	Cnt=1 Stn=75 TIFFANY \$123.00

Fidelity National Title of Oregon 45141925411-07

- 1. NAME(S) OF THE TRANSACTION(S),** described in the attached instrument and required by ORS 205.234(a). (i.e Warranty Deed)
Note: Transaction as defined by ORS 205.010 " means any action required or permitted by state law or rule or federal law or regulation to be recorded including, but not limited to, any transfer, encumbrance or release affecting title to or an interest in real property. "

Statutory Warranty Deed

- 2. DIRECT PARTY, name(s) of the person(s) described in ORS 205.125(l)(b) or GRANTOR,** as described in ORS 205.160.

Tri City Baptist Temple of Milwaukie, Inc., an Oregon non-profit Organization

- 3. INDIRECT PARTY, name(s) of the person(s) described in ORS 205.125(l)(a) or GRANTEE,** as described in ORS 205.160.

Stony Ridge, LLC, an Oregon limited liability company

- 4. TRUE AND ACTUAL CONSIDERATION PAID** for instruments conveying or contracting to convey fee title to any real-estate and all memoranda of such instruments, reference ORS 93.030.

\$266,500

- 5. UNTIL A CHANGE IS REQUESTED, ALL TAX STATEMENTS SHALL BE SENT TO THE FOLLOWING ADDRESS** for instruments conveying or contracting to convey fee title to any real estate, reference ORS 93.260.

Stony Ridge, LLC, an Oregon limited liability company
 14020 SE Johnson Rd Ste 102
 Milwaukie, OR 97267

- 6. RERECORDED AT THE REQUEST OF Fidelity National Title TO CORRECT** Add legal description to deed **PREVIOUSLY RECORDED IN BOOK AND PAGE OR FEE NUMBER 2021-083654.**

RECORDING REQUESTED BY:
Fidelity National Title
Company of Oregon

12809 SE 93rd Avenue
Clackamas, OR 97015

Clackamas County Official Records **2021-083654**
Sherry Hall, County Clerk
09/13/2021 01:39:01 PM
D-D Cnt=1 SIn=73 LESLIE
\$20.00 \$16.00 \$10.00 \$62.00 **\$108.00**

GRANTOR'S NAME:
Tri City Baptist Temple of Milwaukie, Inc., an Oregon non-profit Organization

GRANTEE'S NAME:
Stony Ridge, LLC, an Oregon limited liability company

AFTER RECORDING RETURN TO:
Order No.: 45141925411-MM
Hans Thygeson
Stony Ridge, LLC, an Oregon limited liability company
14020 SE Johnson Rod, Suite 102
Milwaukie, OR 97267

SEND TAX STATEMENTS TO:
Stony Ridge, LLC, an Oregon limited liability company
14020 SE Johnson Rod, Suite 102
Milwaukie, OR 97267

SPACE ABOVE THIS LINE FOR RECORDER'S USE

STATUTORY WARRANTY DEED

Tri City Baptist Temple of Milwaukie, Inc., an Oregon non-profit Organization, Grantor, conveys and warrants to

Stony Ridge, LLC, an Oregon limited liability company, Grantee, the following described real property, free and clear of encumbrances except as specifically set forth below, situated in the County of Clackamas, State of Oregon:

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

THE TRUE AND ACTUAL CONSIDERATION FOR THIS CONVEYANCE IS TWO HUNDRED SIXTY-SIX THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$266,500.00). (See ORS 93.030).

Subject to:

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

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

Prior deeds 2006-081658 and 2015-076042

45141925411-07
Fidelity National Title of Oregon

EXHIBIT "B"
Exceptions

Subject to:

Covenants, conditions and restrictions but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: July 22, 1912
Recorded in: Book: 126 Page: 111

Amendment of said covenants, conditions and restrictions

Recording Date: March 11, 1981
Recording No.: 81-008530

Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: City of Gladstone, a municipal corporation
Purpose: Water Pipe
Recording Date: September 3, 1925
Recording No.: Book: 179 Page: 349

Terms, provisions and conditions, including, but not limited to, maintenance provisions, and a covenant to share the costs of maintenance, contained in Storm Drain Easement

Recording Date: November 5, 2001
Recording No.: 2001-092274
Reference is hereby made to said document for full particulars

Amendment of said Storm Drain Easement, including the terms and provisions thereof

Recording Date: January 30, 2002
Recording No.: 2002-009619

Terms, provisions and conditions, including, but not limited to, maintenance provisions, and a covenant to share the costs of maintenance, contained in Storm Drain Easement

Recording Date: January 7, 2002
Recording No.: 2002-001582

Terms, provisions and conditions, including, but not limited to, maintenance provisions, and a covenant to share the costs of maintenance, contained in Sewer Easement

Recording Date: November 27, 2002
Recording No.: 2002-028912

Property taxes in an undetermined amount, which are a lien but not yet payable, including any assessments collected with taxes to be levied for the fiscal year 2021-2022.

STATUTORY WARRANTY DEED

(continued)

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

Dated 13 September 2021; if a corporate grantor, it has caused its name to be signed by order of its board of directors.

Tri City Baptist Temple of Milwaukie, Inc., an Oregon non-profit Organization

BY Kenneth R. McCormick
Kenneth R. McCormick, Pastor Emeritus

State of Oregon
County of Clackamas

This instrument was acknowledged before me on September 13, 2021

by Kenneth R. McCormick, Pastor Emeritus
of Tri City Baptist Temple of Milwaukie, Inc., an Oregon non-profit Organization

[Signature]
Notary Public - State of Oregon
My Commission Expires: July 17, 2022



Dated this 13 day of September 2021.

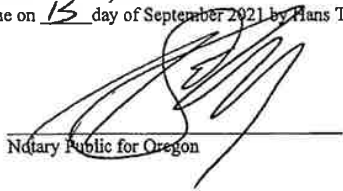
Stony Ridge LLC


Hans Thygeson
Manager

STATE OF OREGON, County of Clackamas)ss

This instrument was acknowledged be for me on 13 day of September 2021 by Hans Thygeson
as Manager of Stony Ridge LLC.




Notary Public for Oregon

STATE OF OREGON }
COUNTY OF CLACKAMAS } ss.

I, SHERRY HALL, County Clerk of the State of Oregon for the County of Clackamas, do hereby certify that the foregoing copy of DEED RECORD PGS 4
2018-83654

has been by me compared with the original, and that is a correct transcript therefrom, and the whole of such original, as the name appears on file and of record in my office and in my care and custody.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal this 14th day of September, 2021

By: SHERRY HALL, Clerk
Brad Chapin, Deputy Clerk



EXHIBIT A

Order No.: 45141925411

A tract of land situated in the southeast one-quarter of Section 17, Township 2 South, Range 2 West of the Willamette Meridian, in the City of Gladstone, Clackamas County, Oregon, and being a portion of that property that instrument recorded in Document No. 2006-081658, Clackamas County Deed Records, said tract being more particularly described as follows:

Beginning at the most easterly southeast corner of the property described in Memorandum of Contract to the Tri-City Baptist Temple of Milwaukie, Inc., recorded January 8, 1985 as Fee No. 85-000670, Clackamas County Deed Records, said point recorded as being West 605.8 feet and South 660.6 feet and East 299.58 feet and South 90.00 feet and East 22.39 feet and South 100.00 feet from the northeasterly corner of the Fendal C. Cason Donation Land Claim No. 50 in said Township; thence along the boundary of said property described in Document No. 2006-081658 the following four courses: thence North 89°59'07" West 160.28 feet; thence North 00°01'05" East 138.88 feet; thence North 89°59'09" West 186.36 feet; thence South 00°00'19" East 87.00 feet to a 5/8-inch iron rod with yellow plastic cap stamped "WILSON PLS 2687" at the TRUE POINT OF BEGINNING of this description; and running thence along the boundary of said property the following five courses:

thence South 00°00'19" East 29.98 feet;
thence North 89°49'38" West 114.18 feet;
thence South 00°00'09" East 152.90 feet;
thence South 89°54'13" West 229.19 feet;
thence North 00°00'00" East 182.93 feet to a like iron rod;
thence leaving the west line of said property, South 89°59'47" East 343.36 feet
to the TRUE POINT OF BEGINNING.

EXHIBIT D

Site Plans



WEBSTER RIDGE PARKING EXPANSION

CLATSOP, OR

SHEET TITLE
 GENERAL NOTES

DATE: 9/29/20
 DRAWN: TRH/DAE
 CHECKED: NWS
 REVISIONS:

© 2011 AAI Engineering, Inc.
 THESE DRAWINGS ARE THE PROPERTY OF AAI ENGINEERING, INC. AND ARE TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. ANY REUSE OR REPRODUCTION OF THESE DRAWINGS WITHOUT THE WRITTEN PERMISSION OF AAI ENGINEERING, INC. IS STRICTLY PROHIBITED.

SHEET NUMBER
C0.1

JOB NUMBER: A20138.10

MATERIAL NOTES

1. GENERAL MATERIALS SHALL BE NEW. THE USE OF MANUFACTURER'S NAMES, MODELS, AND NUMBERS IS REQUIRED. ALL MATERIALS SHALL BE OF THE HIGHEST QUALITY AND USEFULNESS. PROPOSED SUBSTITUTIONS WILL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
2. STORM PIPING SHALL BE PVC PIPE AS INDICATED IN THE PLANS. PIPES WITH LESS THAN 2' OF COVER SHALL BE 12" DIA. UNLESS OTHERWISE SPECIFIED. MANHOLE PIPES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION OF ALL EXISTING AC, CURBS, SIDEWALKS AND DRIVEWAYS WITHIN THE SITE AREA IDENTIFIED IN THE PLANS.
2. EXCEPT FOR MATERIALS INDICATED TO BE STOPPLED OR REUSED, ALL EXISTING MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
3. ITEMS INDICATED TO BE SALVAGED SHALL BE CAREFULLY REMOVED AND STORED AT THE PROJECT SITE AS DIRECTED BY THE OWNER.
4. ALL LANDSCAPING, PAVEMENT, CURBS AND SIDEWALKS, SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF THE CONSTRUCTION SHALL BE REPLACED TO THEIR ORIGINAL CONDITION OR BETTER.
5. CONCRETE SIDEWALKS SHOWN FOR DEMOLITION SHALL BE REPLACED WITH NEW CONCRETE TO MATCH EXISTING. SAMCUT SURFACE MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING AND NEW PAVEMENT.

UTILITIES

1. ADJUST ALL INCIDENTAL STRUCTURES, MANHOLES, VALVE CHAMBERS, RINGS, FRAMES AND COVERS, ETC. TO FINISHED GRADE.
2. CONTRACTOR SHALL ADJUST ALL EXISTING AND/OR NEW UTILITIES TO MEET THE REQUIREMENTS OF THE PLANS (SEWER, SANITARY SEWER, ETC.) IF CONFLICT OCCURS.
3. CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE INSTALLATION OF OR ADJUSTMENT TO GAS, ELECTRICAL, POWER AND TELEPHONE SERVICE.
4. BEFORE BACKFILLING ANY SURGRADE UTILITY IMPROVEMENTS CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH AND SUBMIT TO ENGINEER AND OWNER.

SEWER

1. CONNECTIONS TO EXISTING STORM SEWERS SHALL CONFORM TO THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 05490, "WORK ON EXISTING SEWERS".
2. BEGIN LAYING STORM BRAN sewer PIPE AT THE LOW POINT OF THE SYSTEM, TRUE TO GRADE AND ALIGNMENT THROUGHOUT THE ENTIRE LENGTH. CONTRACTOR SHALL ESTABLISH LINE AND GRADE FOR THE STORM SEWER PIPE USING A LASER.

BACKFILLS

1. CONTRACTOR SHALL PREVENT SEDIMENTS AND SOILS FROM ENTERING THE STORM DRAINAGE SYSTEM.
2. TRENCH BEDDING AND BACKFILL SHALL BE AS SHOWN ON THE PLANS. CONTRACTOR SHALL VERIFY THE SOILS REPORT SPECIFICATIONS AND AS REQUIRED IN THE SOILS REPORT, FLOODING OR WETTING THE BACKFILLED TRENCHES WITH WATER.
3. SURGRADE AND TRENCH BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS SPECIFIED IN THE SOILS REPORT. CONTRACTOR SHALL BACKFILL TRENCHES WITH WATER IS NOT PERMITTED.

PAVING

1. SEE ARCHITECTURAL PLANS FOR SIDEWALK FINISHING AND SCORING PATTERNS.

GENERAL NOTES

1. CONSTRUCTION LAYOUT (ALL ACTUAL LINES AND GRADES) SHALL BE STAKED BY A PROFESSIONAL SURVEYOR. ALL COORDINATES, DIMENSIONS, BEARINGS, AND ELEVATIONS, AS SHOWN, ON THE PLANS, SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE HORIZONTAL POSITION PRIOR TO BEGINNING CONSTRUCTION LAYOUT.
3. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED PRIOR TO BEGINNING CONSTRUCTION. BENCHMARK STATION HEREON, PRIOR TO BEGINNING CONSTRUCTION LAYOUT.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CORRESPONDING LOCAL ORDINANCES AND REGULATIONS OF THE JURISDICTION. CONTRACTOR SHALL HOLD OVER ALL EXISTING UTILITIES TO REMAIN UNDISTURBED UNLESS OTHERWISE SPECIFIED. CONTRACTOR SHALL VERIFY ALL PROPERTY LINES SHALL HOLD OVER ALL OTHER CALLOUTS. PROPERTY LINES AND ASSOCIATED UTILITY LOCATIONS SHALL BE VERIFIED PRIOR TO CONSTRUCTION LAYOUT.
6. CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING MONUMENTATION DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT OF ANY MONUMENTATION DAMAGED DURING CONSTRUCTION. NEW MONUMENTS SHALL BE REESTABLISHED BY A LICENSED SURVEYOR.
7. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2017 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND ALL APPLICABLE LOCAL ORDINANCES AND REGULATIONS.
8. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS, ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY THE GOVERNING AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO WORK. WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
9. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO EXCAVATE UNDER THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OUR 822-001-0010 CENTER. CONTRACTOR SHALL NOTIFY THE OREGON UTILITY NOTIFICATION CENTER BY CALLING THE CENTER. (NOTE: THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1887). EXCAVATORS MUST NOTIFY ALL PERTINENT COMPANIES OR AGENCIES WITH AT LEAST 48 BUSINESS-DAY HOURS, BUT NOT MORE THAN 14 BUSINESS-DAY HOURS BEFORE COMMENCING AN EXCAVATION. 80 UNITS OF WATER WILL BE COLLECTED AND STORED ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT TO BE USED FOR ANYTHING OTHER THAN TO VERIFY FACTOR SHALL VERIFY ELEVATIONS, PIPE SIZE, AND MATERIAL COPIES OF ALL UNDERGROUND UTILITIES PRIOR TO THE DISBURSAL OF ANY CONTRACTOR SHALL VERIFY THE DISCREPANCIES TO THE ATTENTION OF AN ENGINEERING, 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL VERIFY THE ATTENTION OF AN ENGINEERING, 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL VERIFY THE ATTENTION OF AN ENGINEERING, 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL VERIFY THE ATTENTION OF AN ENGINEERING, 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT TO BE USED FOR ANYTHING OTHER THAN TO VERIFY FACTOR SHALL VERIFY ELEVATIONS, PIPE SIZE, AND MATERIAL COPIES OF ALL UNDERGROUND UTILITIES PRIOR TO THE DISBURSAL OF ANY CONTRACTOR SHALL VERIFY THE DISCREPANCIES TO THE ATTENTION OF AN ENGINEERING, 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL VERIFY THE ATTENTION OF AN ENGINEERING, 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
11. THE ENGINEER OR OWNER IS NOT RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR OR HIS CREW. ALL O.S.H.A. REGULATIONS AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS SHALL BE STRICTLY ADHERED TO IN THE PERFORMANCE OF THE WORK.
12. TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, CONTRACTOR SHALL PROVIDE TEMPORARY EROSION CONTROL MEASURES TO PREVENT SOIL EROSION AND TO ENSURE THAT SEDIMENT AND SOILS DO NOT ENTER THE STORM DRAINAGE SYSTEM.
13. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ROADWAYS, KEEPING THEM CLEAN AND FREE OF SEDIMENT AND SOILS. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED.
14. TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PERIOD. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH THE OWNER.
16. THE CONTRACTOR SHALL HAVE A FULL SET OF THE CURRENT APPROVED CONSTRUCTION DOCUMENTS INCLUDING AN APPENDIX ON THE PROJECT SITE AT ALL TIMES.
17. THE CONTRACTOR SHALL KEEP THE ENGINEER AND OWNER ADVISED OF SITE OBSERVATIONS AT REQUIRED INTERVALS. 24-HOUR NOTICE IS REQUIRED.
18. DURING CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND MAINTAINING ALL NECESSARY PERMITS IN ACCORDANCE WITH OREGON REVISED STATUTES 208.140 - 208.155.

ATTENTION:
 OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THESE RULES ARE SET FORTH IN OUR 822-001-0010 CENTER. CONTRACTOR SHALL NOTIFY THE OREGON UTILITY NOTIFICATION CENTER BY CALLING THE CENTER. (NOTE: THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1887).

POTENTIAL UNDERGROUND FACILITY OWNERS
DIG SAFELY
 CALL THE OREGON ONE-CALL CENTER
 1-800-332-2344
 EMERGENCY TELEPHONE NUMBERS

NATURAL GAS 503-226-4211 EXT.4313
 WATER 503-226-4211
 REE 503-464-7777
 VERIZON 1-800-483-1000



Know what's below.
 Call before you dig.



WEBSTER RIDGE PARKING EXPANSION

GLASTONE, OR

SHEET TITLE
 DEMOLITION PLAN

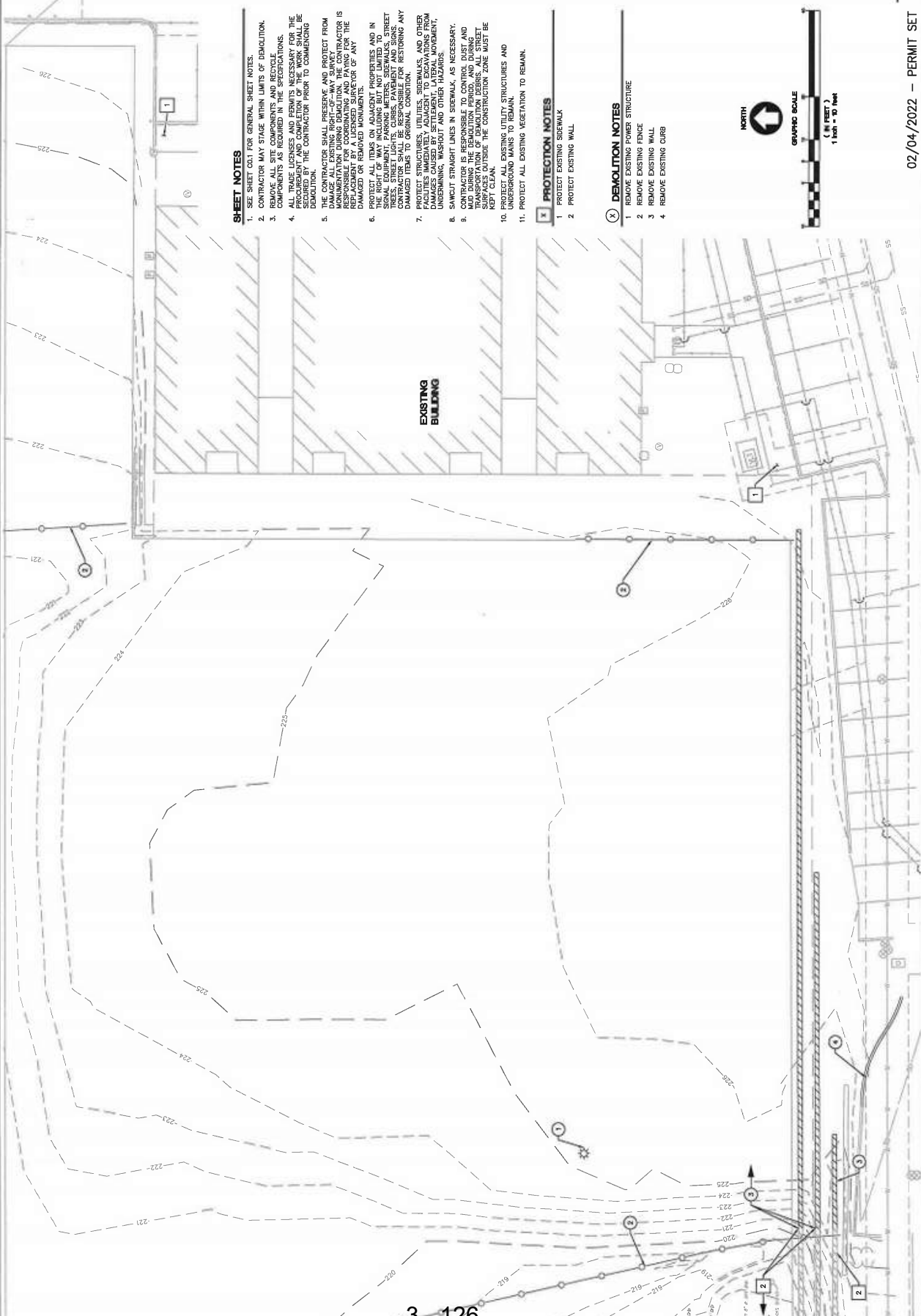
DATE: 9/29/20
 DRAWN: TBI/DAR
 CHECKED: NKS

REVISIONS

SEE THESE DRAWINGS FOR THE LOCATION OF ALL UTILITIES AND THE LOCATION OF ALL EXISTING AND PROPOSED CONSTRUCTION. THESE DRAWINGS ARE THE PROPERTY OF AAI ENGINEERING ASSOCIATES, INC. AND ARE NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

SHEET NUMBER
C0.3

JOB NUMBER: A20138.10



SHEET NOTES

1. SEE SHEET C0.1 FOR GENERAL SHEET NOTES.
2. CONTRACTOR MAY STAGE WITHIN LIMITS OF DEMOLITION.
3. REMOVE ALL SITE COMPONENTS AND RECYCLE COMPONENTS AS REQUIRED IN THE SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROCEDURE AND COMPLETION OF THE WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING WORK.
5. THE CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING RIGHT-OF-WAY SURVEY MONUMENTS AND ADJACENT PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAING FOR THE REPLACEMENT BY A LICENSED SURVEYOR OF ANY MONUMENTS DAMAGED OR REMOVED.
6. PROTECT ALL ITEMS ON ADJACENT PROPERTIES AND IN THE RIGHT OF WAY INCLUDING BUT NOT LIMITED TO TREES, STREET LIGHTS, CURBS, PAVEMENT AND SIDEWALKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY DAMAGED ITEMS TO ORIGINAL CONDITION.
7. PROTECT ALL UTILITIES, GAS, AND OTHER FACILITIES IMMEDIATELY ADJACENT TO EXCAVATIONS FROM DAMAGE. MARK ALL UTILITIES AND OTHER FACILITIES IMMEDIATELY ADJACENT TO EXCAVATIONS WITH SWACUT STRAIGHT LINES IN SIDEWALK, AS NECESSARY.
8. CONTRACTOR IS RESPONSIBLE TO CONTROL DUST AND MUD DURING THE DEMOLITION PERIOD, AND DURING SURFACES OUTSIDE THE CONSTRUCTION ZONE MUST BE KEPT CLEAN.
9. PROTECT ALL EXISTING UTILITY STRUCTURES AND UNDERGROUND MAINS TO REMAIN.
10. PROTECT ALL EXISTING VEGETATION TO REMAIN.

PROTECTION NOTES

1. PROTECT EXISTING SIDEWALK
2. PROTECT EXISTING WALL

DEMOLITION NOTES

1. REMOVE EXISTING POWER STRUCTURE
2. REMOVE EXISTING FENCE
3. REMOVE EXISTING WALL
4. REMOVE EXISTING CURB

NORTH



02/04/2022 - PERMIT SET



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 ENGINEERING
 4875 SW Green Drive, Suite 100 | Beaverton, OR | 97005
 503.620.0300 | 503.620.0599 | www.aaieng.com

WEBSTER RIDGE PARKING EXPANSION
 GARDING, OR

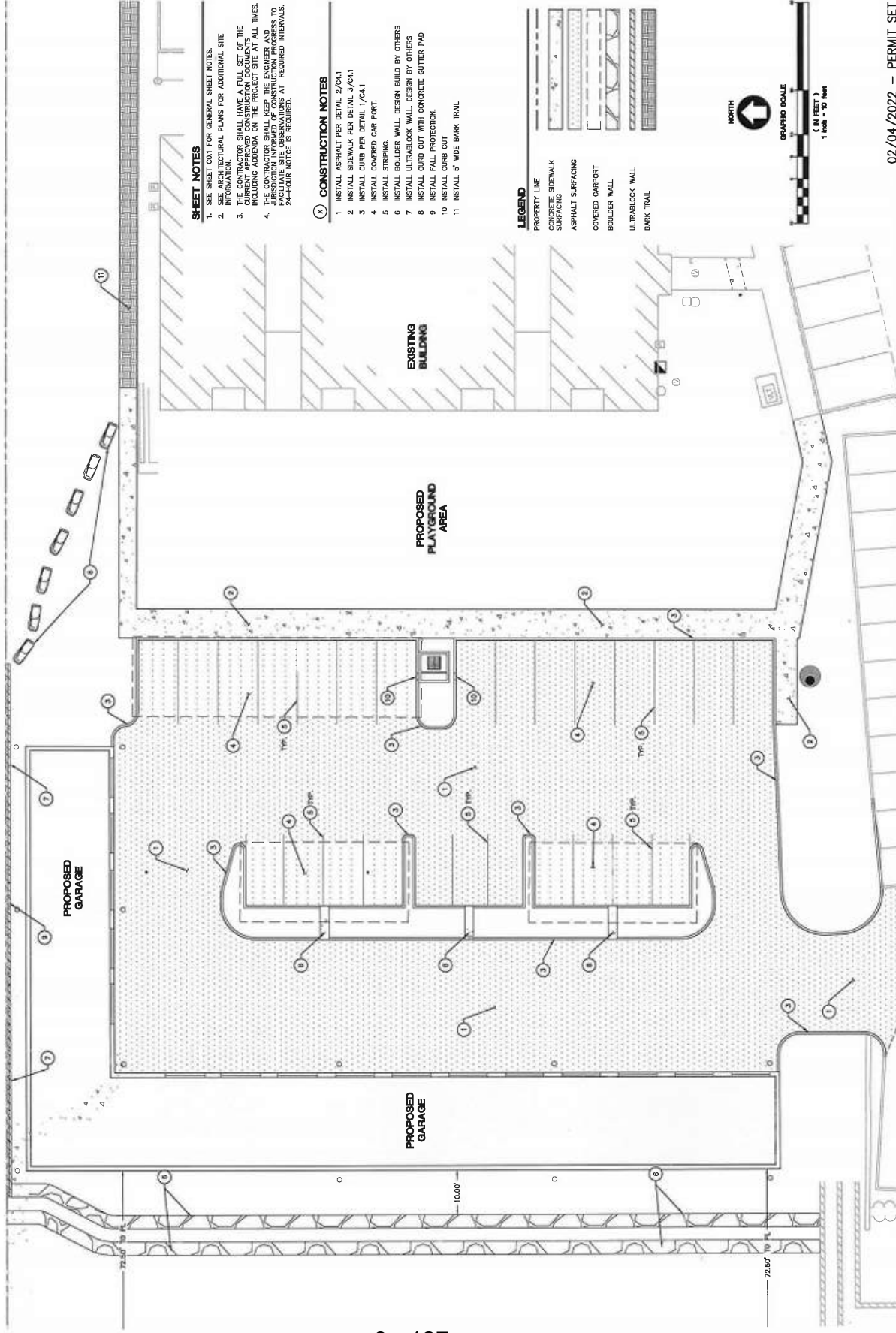
SHEET TITLE
HARDSCAPE PLAN

DATE: 9/29/20
 DRAWN: TRH/DAR
 CHECKED: NWS
 REVISIONS:

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SHEET NUMBER
C1.0

JOB NUMBER: A2018E.10



SHEET NOTES

1. SEE SHEET C01 FOR GENERAL SHEET NOTES.
2. SUBMIT FORMAL PLANS FOR ADDITIONAL SITE INFORMATION.
3. THE CONTRACTOR SHALL HAVE A FULL SET OF THE CURRENT APPROVED CONSTRUCTION DOCUMENTS ON SITE AT ALL TIMES.
4. THE CONTRACTOR SHALL KEEP THE ENGINEER AND ARCHITECT INFORMED OF CONSTRUCTION PROGRESS TO MAINTAIN THE SCHEDULE. 24-HOUR NOTICE IS REQUIRED.

CONSTRUCTION NOTES

1. INSTALL ASPHALT PER DETAIL 2/CA.1
2. INSTALL SIDEWALK PER DETAIL 3/CA.1
3. INSTALL CURB PER DETAIL 1/CA.1
4. INSTALL COVERED CAR PORT.
5. INSTALL STRIPING.
6. INSTALL BOLDER WALL DESIGN BUILD BY OTHERS
7. INSTALL ULTRABLOCK WALL DESIGN BY OTHERS
8. INSTALL CURB OUT WITH CONCRETE GUTTER PAD
9. INSTALL FALL PROTECTION.
10. INSTALL CURB OUT
11. INSTALL 5" WIDE BARK TRAIL

LEGEND

- PROPERTY LINE
- CONCRETE SIDEWALK SURFACING
- ASPHALT SURFACING
- COVERED CARPORT
- BOLDER WALL
- ULTRABLOCK WALL
- BARK TRAIL



GRAPHIC SCALE
 (IN FEET)
 1 inch = 30 feet



WEBSTER RIDGE PARKING EXPANSION

CLATSOP, OR

SHEET TITLE: GRADING AND EROSION CONTROL PLAN
 DATE: 9/29/20
 DRAWN: TRH/DAR
 CHECKED: NWS
 REVISIONS:

C2.0
 SHEET NUMBER

JOB NUMBER: A20138.10

- SHEET NOTES**
- SEE SHEET C03 FOR GENERAL SHEET NOTES
 - CURB HEIGHTS ARE 4" UNLESS NOTED OTHERWISE
 - LANDINGS ON ACCESSIBLE ROUTES SHALL NOT EXCEED 24" IN ANY DIRECTION.
 - ALL ACCESSIBLE ROUTES SHALL COMPLY WITH CURRENT ADA GUIDELINES FOR BUILDING AND FACILITIES (ADAAG).
 - ALL WALKWAYS FROM ACCESSIBLE UNITS ARE DESIGNED TO NOT REQUIRE HANDRAILS. THEREFORE, RAMPS WITH GRADIENTS GREATER THAN 1:12 SHALL NOT EXCEED 30' LENGTH. FINISH GRADERS ARE TO BE BROUGHT TO WITHIN 0.08 FT WITHIN 0.03 FT IN 100 FT FINISH GRADE CONTRACTOR TO ALLOW FOR PLACEMENT OF REQUIRED TOPSOIL IN FINISH GRADING.
 - FINISH GRADERS AS SHOWN ON SITE AND LANDSCAPE PLANS ARE FINISHED GRADE WHICH INCLUDES SUBGRADE PREPARATION AND FINISH GRADING. CONTRACTOR SHALL VERIFY PROTECTION CONTRACTOR IS RESPONSIBLE TO COORDINATE GRADING WITH BOTH EXCAVATOR AND LANDSCAPE CONTRACTOR.

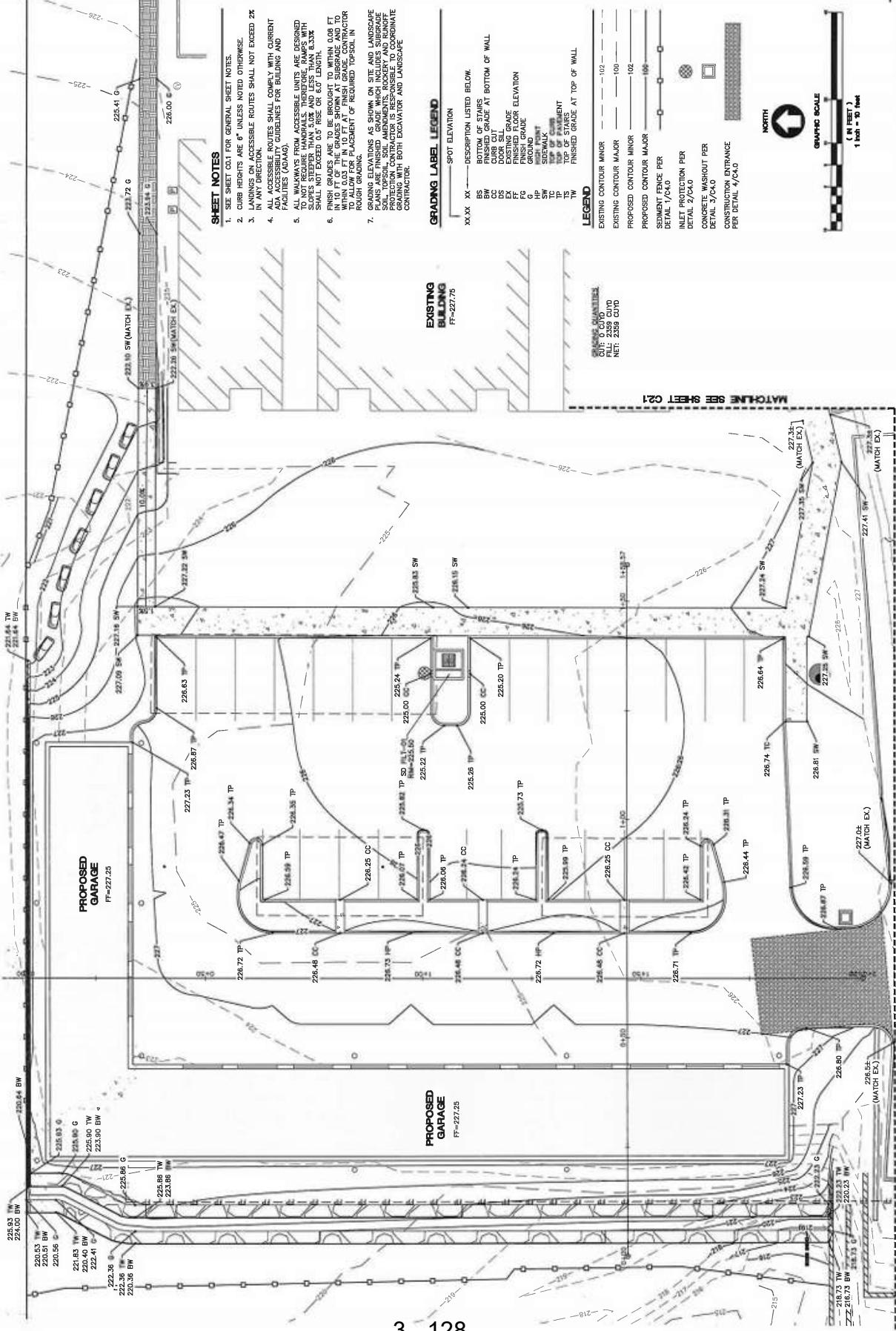
GRADING LABEL LEGEND

XX.XX XX SPOT ELEVATION

BR BUILDING GRADE AT BOTTOM OF WALL
 CC CURB CUT
 EX EXISTING GRADE
 FC FINISHED FLOOR ELEVATION
 G GROUND GRADE
 SW SIDEWALK
 TP TOP OF CURB
 TS TOP OF STAIRS
 TW FINISHED GRADE AT TOP OF WALL

LEGEND

EXISTING CONTOUR MINOR --- 102
 EXISTING CONTOUR MAJOR --- 100
 PROPOSED CONTOUR MINOR --- 102
 PROPOSED CONTOUR MAJOR --- 100
 SEDIMENT FENCE PER DETAIL 1/3-0.0
 INLET PROTECTION PER DETAIL 1/3-0.0
 CURB AND WASHOUT PER DETAIL 1/3-0.0
 CONSTRUCTION ENTRANCE PER DETAIL 4/2-0.0



02/04/2022 - PERMIT SET



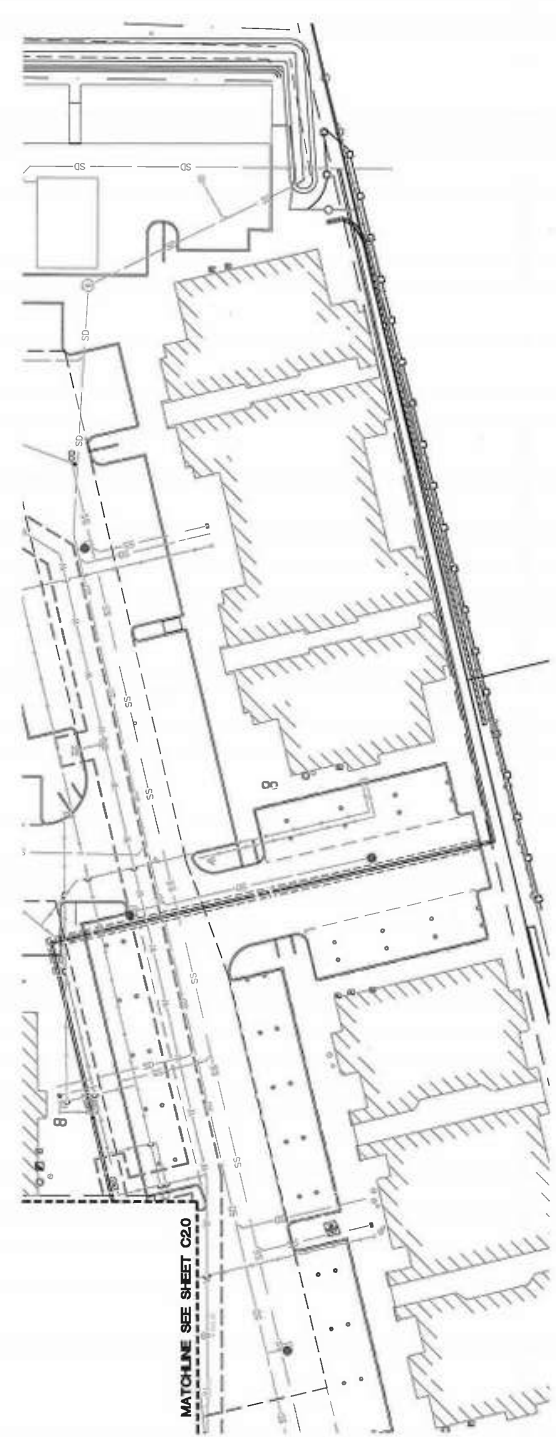
WEBSTER RIDGE PARKING EXPANSION
 CLATSOP, OR

SHEET TITLE
 GRADING AND EROSION CONTROL PLAN

DATE: 9/29/20
DRAWN: TRV/DAR
CHECKED: MWS
REVISIONS:

SHEET NUMBER
 C2.1

JOB NUMBER: A20138.10



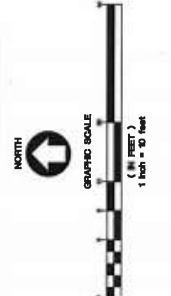
- SHEET NOTES**
- SEE SHEET C01 FOR GENERAL SHEET NOTES.
 - CURB HEIGHTS ARE 6" UNLESS NOTED OTHERWISE.
 - WALKABLE ROUTES SHALL NOT EXCEED 24" IN ANY DIRECTION.
 - ALL ACCESSIBLE ROUTES SHALL COMPLY WITH CURRENT FACILITIES (ADAAG), GUIDELINES FOR BUILDING AND TOILETS (ADAAG).
 - ALL WALKWAYS FROM ACCESSIBLE UNITS ARE DESIGNED TO NOT REQUIRE HANDRAILS, THEREFORE, RAMP WITH FINISH GRADE SHALL NOT EXCEED 0.5' RISE OR 4.5' LENGTH, 1:33% SLOPE.
 - FINISH GRADES ARE TO BE BROUGHT TO WITHIN 0.08 FT WITHIN 0.05' OF THE GRADES SHOWN AT SURGRADE AND TO ALLOW FOR PLACEMENT OF REQUIRED TOPSOIL IN ROUGH GRADING.
 - FINISH GRADES AS SHOWN ON SITE AND LANDSCAPE PLANS ARE FINISHED GRADE WHICH INCLUDES SURGRADE TOPSOIL, SOIL ADJUSTMENTS, ROCKERY AND RUNOFF DETENTION. CONTRACTOR SHALL VERIFY APPROPRIATE GRADING WITH BOTH EXCAVATOR AND LANDSCAPE CONTRACTOR.

GRADING LABEL LEGEND

XX.XX	XX	DESCRIPTION LISTED BELOW
BR	---	BOTTOM OF STAIRS
CC	---	CURB OUT GRADE AT BOTTOM OF WALL
CG	---	EXISTING GRADE
EX	---	EXISTING GRADE
FF	---	FINISHED FLOOR ELEVATION
GA	---	GRADE AT GARAGE
G	---	GRADING
IS	---	INLET PROTECTION
SW	---	SIDEWALK
TC	---	TOP OF CURB
TS	---	TOP OF STAIRS
TW	---	FINISHED GRADE AT TOP OF WALL

LEGEND

---	EXISTING CONTOUR MINOR
---	EXISTING CONTOUR MAJOR
---	PROPOSED CONTOUR MINOR
---	PROPOSED CONTOUR MAJOR
---	SEDIMENT FENCE PER DETAIL 1/C&D
---	INLET PROTECTION PER DETAIL 2/C&D
---	CONCRETE WASHOUT PER DETAIL 3/C&D
---	SEDIMENTATION ENTRANCE PER DETAIL 4/C&D



02/04/2022 - PERMIT SET



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**WEBSTER RIDGE PARKING
 EXPANSION**
 GLADSTONE, OR

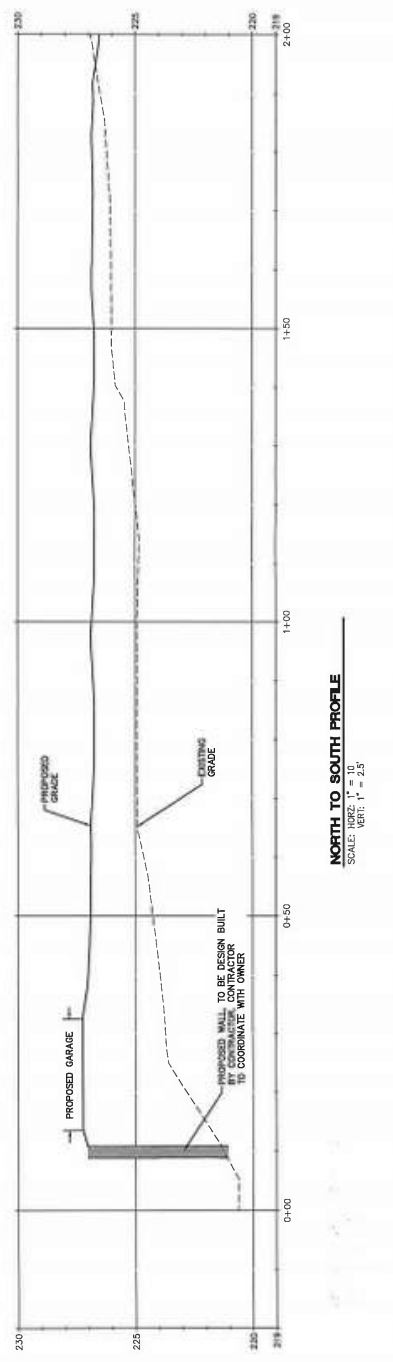
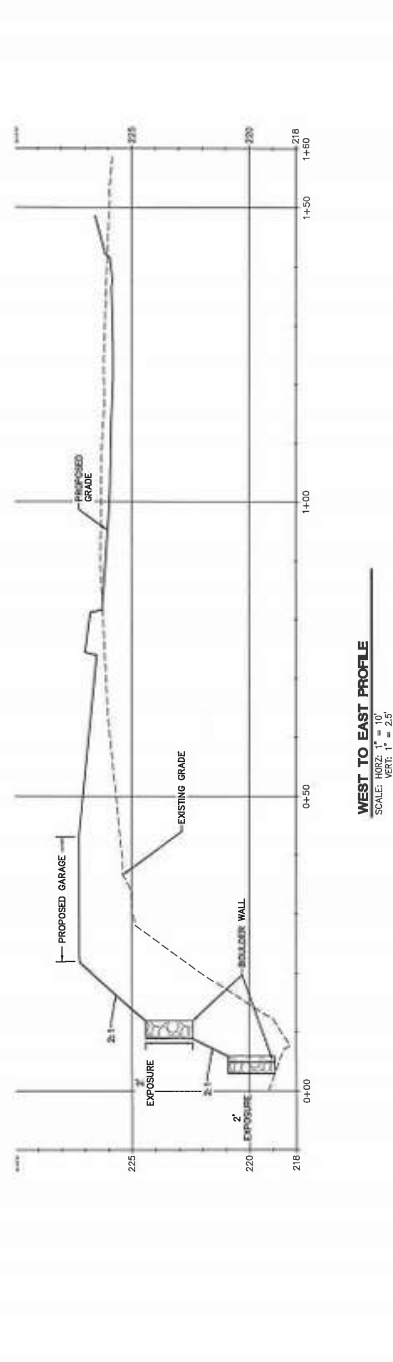
SHEET TITLE: **GRADING PROFILES**
 DATE: 9/29/20
 DRAWN: TRH/DAR
 CHECKED: NWS
 REVISIONS:

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C2.2

JOB NUMBER: A20138.10

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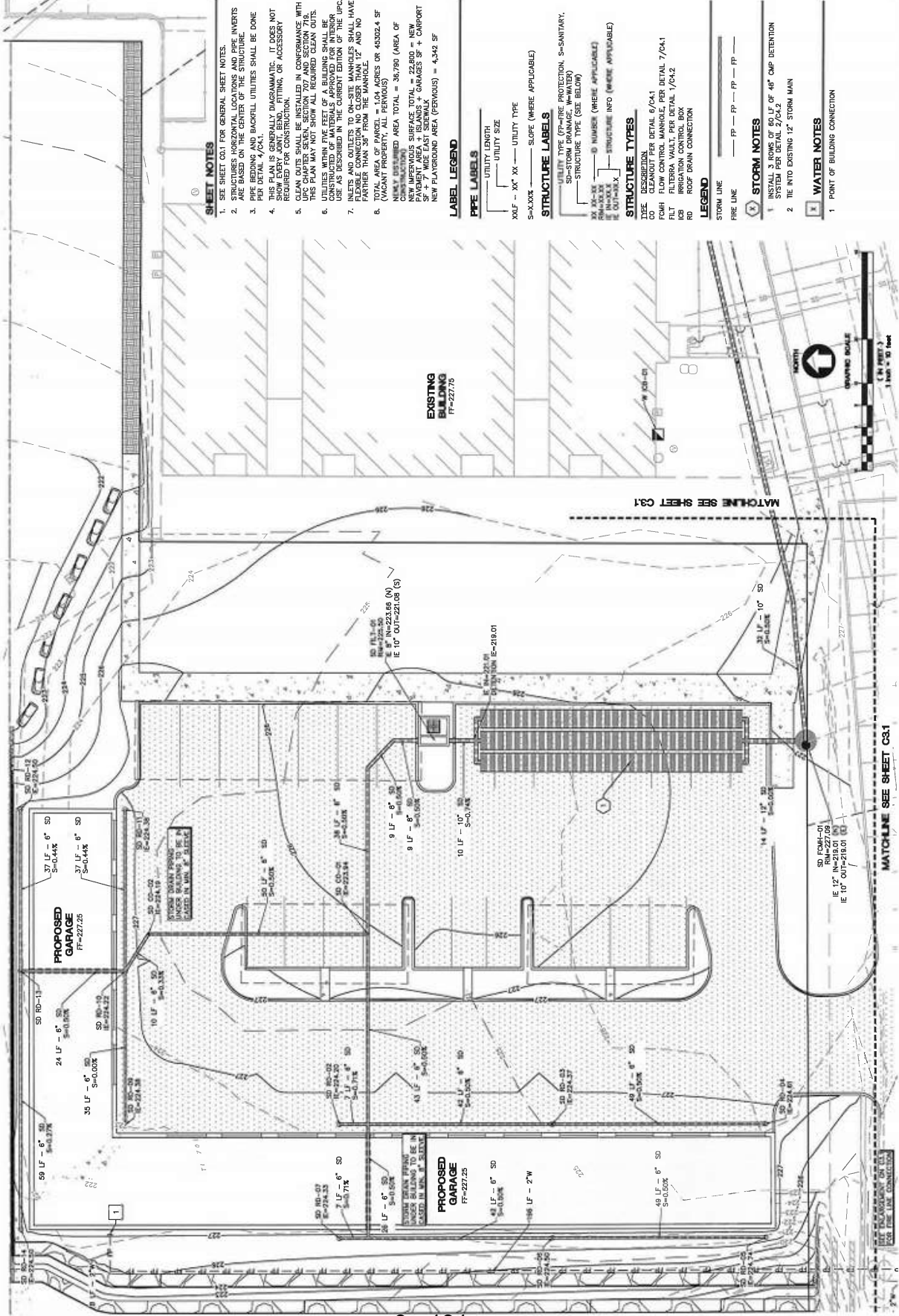
**WEBSTER RIDGE PARKING
 EXPANSION**

SHEET TITLE
 UTILITY PLAN

DATE: 9/29/20
 DRAWN: TRH/DAR
 CHECKED: NWS
 REVISIONS:

SHEET NUMBER
C3.0

JOB NUMBER: A20136.10



SHEET NOTES

- SEE SHEET C01 FOR GENERAL SHEET NOTES.
- STRUCTURES HORIZONTAL LOCATIONS AND PIPE INVERTS ARE SHOWN ON THE CENTER OF THE STRUCTURE PER DETAIL 4/C4.1.
- PIPE SIZES AND BACKFILL UTILITIES SHALL BE DONE PER DETAIL 4/C4.1.
- THIS PLAN IS GENERALLY DIAGNAMATIC. IT DOES NOT REPRESENT ANY CONTRACTING OR ACCESSORY WORK.
- CLEAN OUTS SHALL BE INSTALLED IN CONFORMANCE WITH UPC CHAPTER SEVEN, SECTION 707 AND SECTION 718. THIS PLAN MAY NOT SHOW ALL REQUIRED CLEAN OUTS.
- CONSTRUCTION OF MATERIALS APPROVED FOR INTERIOR USE AS DESCRIBED IN THE CURRENT EDITION OF THE UPC.
- NEVER LOCATE ANY CURB MANHOLES SHALL HAVE A MINIMUM 36" FROM THE MANHOLE TO ANY ADJACENT PROPERTY, ALL PERVIOUS.
- TOTAL AREA OF PARCEL = 104 ACRES OR 45302.4 SF (VACANT PROPERTY, ALL PERVIOUS)
- CONTRACTED AREA TOTAL = 36,790 (AREA OF NEW IMPROVED SURFACE TOTAL = 22,600 = NEW 5' x 7' WIDE EAST SIDEWALK GARAGES 3' x 4' CURBPORT NEW PLAYGROUND AREA (PREVIOUS) = 4,442 SF

LABEL LEGEND

PIPE LABELS
 U --- UTILITY LENGTH
 X --- UTILITY SIZE
 XALF --- X" X' --- UTILITY TYPE
 S-X-XXX --- SLOPE (WHERE APPLICABLE)

STRUCTURE LABELS
 U --- UTILITY TYPE (FP-FIRE PROTECTION, S-SANITARY, SD-STORM DRAINAGE, W-WATER)
 S --- STRUCTURE TYPE (SEE BELOW)
 XX-XX-XX --- ID NUMBER (WHERE APPLICABLE)
 XX-XX-XX --- ID NUMBER (WHERE APPLICABLE)
 XX-XX-XX --- ID NUMBER (WHERE APPLICABLE)

STRUCTURE TYPES
 TOE --- DESCRIPTION
 CO --- CLEANOUT PER DETAIL 6/C4.1
 FMH --- FLOW CONTROL MANHOLE, PER DETAIL 7/C4.1
 FLT --- FILTER VAULT, PER DETAIL 1/C4.2
 RD --- ROOF DRAIN CONNECTION
 RO --- ROOF DRAIN CONNECTION

LEGEND
 STORM LINE --- FP --- FF --- FF --- FF --- FF ---
 FIRE LINE --- FP --- FF --- FF --- FF --- FF ---

STORM NOTES

- INSTALL 3 ROWS OF 60 LF OF 48" CMP DETENTION SYSTEM PER DETAIL 2/C4.2
- IE INTO EXISTING 12" STORM MAIN

WATER NOTES

- POINT OF BUILDING CONNECTION

02/04/2022 - PERMIT SET



WEBSTER RIDGE PARKING EXPANSION
 (LASTING: 9)

C3.1

JOB NUMBER: A20136.10

- SHEET NOTES**
- SEE SHEET C0.1 FOR GENERAL SHEET NOTES.
 - STRUCTURES HORIZONTAL LOCATIONS AND PIPE INVERTS TO BE SHOWN ON THE CENTERLINE OF THE STRUCTURE.
 - PIPE BEINGS AND MANHOLE UTILITIES SHALL BE DONE PER DETAIL 4/C4.1.
 - THIS PLAN IS GENERALLY DIAGRAMMATIC. IT DOES NOT REPRESENT THE EXACT LOCATIONS, DEPTHS, OR ACCESSORIES REQUIRED FOR CONSTRUCTION.
 - CLEAN OUTS SHALL BE INSTALLED IN CONFORMANCE WITH UPC CHAPTER 5.0. SECTION 707 AND SECTION 718. CLEAN OUTS SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:
 - UTILITIES WITHIN THE FEET OF BUILDINGS SHALL BE CONSTRUCTED OF MATERIALS APPROVED FOR INTERIOR USE AS DESCRIBED IN THE CURRENT EDITION OF THE UPC.
 - IF A CLEAN OUT IS TO BE INSTALLED IN A MANHOLE, IT SHALL HAVE A FLEXIBLE CONNECTION TO A CLEAN OUT MANHOLE THAT SHALL HAVE A CLEARANCE OF 36" FROM THE MANHOLE.

PIPE LABELS

- UTILITY LENGTH
 UTILITY SIZE
 XX LF - XX" XX" UTILITY TYPE
- S-X-XXX - SLOPE (WHERE APPLICABLE)

STRUCTURE LABELS

- UTILITY TYPE (P=PIPE PROTECTION, S=SANITARY, SD=STORM DRAINAGE, M=MANHOLE)
- STRUCTURE TYPE (SEE BELOW)
- XX-XX-XX - TO NUMBER (WHERE APPLICABLE)
- E-000-XXX - STRUCTURE INFO (WHERE APPLICABLE)

STRUCTURE TYPES

- TYPE DESCRIPTION
- CO CLEANOUT PER DETAIL 6/C4.1
- FOH FLOW CONTROL MANHOLE PER DETAIL 7/C4.1
- IRI IRRIGATION CONTROL BOX PER DETAIL 1/C4.2
- RD ROOF DRAIN CONNECTION

LEGEND

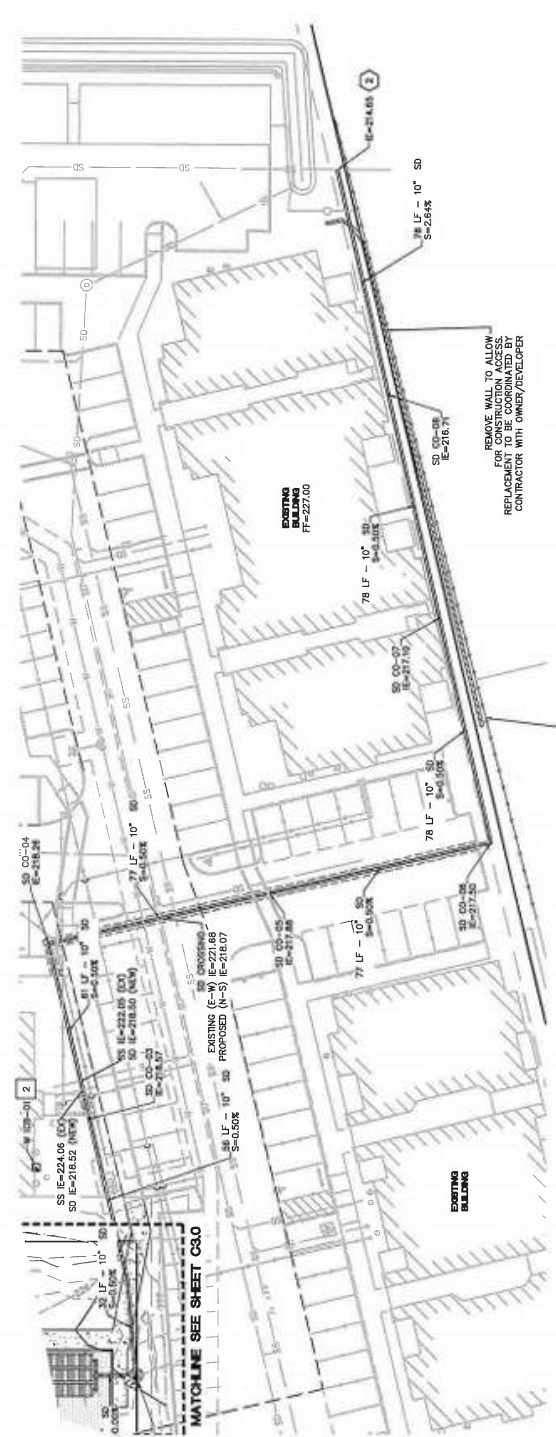
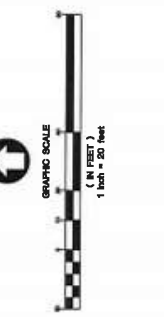
- STORM LINE ——— FP — FP — FP — FP — FP —
- FIRE LINE ——— FP — FP — FP — FP — FP —

STORM NOTES

- INSTALL 3 BONES OF 18" LF OF 48" CMP DETENTION SYSTEM PER DETAIL 2/C4.2
- TE INTO EXISTING 12" STORM MAIN

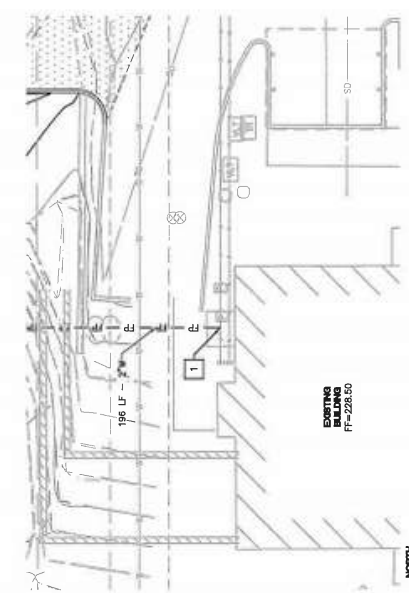
WATER NOTES

- INSTALL TIE INTO EXISTING WATER LINE
- INSTALL IRRIGATION CONTROL BOX



REMOVE WALL TO ALLOW FOR CONSTRUCTION ACCESS. REPAIR AS NEEDED BY CONTRACTOR WITH OWNER/DEVELOPER

REMOVE FENCE AS NEEDED TO ALLOW FOR CONSTRUCTION ACCESS. REPAIR AS NEEDED BY CONTRACTOR WITH OWNER/DEVELOPER



NORTH ↑

FIRE LINE ENLARGEMENT
 SCALE: 1" = 10'

P:\2020\1018.10 - Webster Ridge Parking Expansion\Job C3\Permit\02042022\UTILITY PLANS.dwg | Rev. 4. 22 - 2:40 PM | Page 3



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 503.620.3030 | Fax | 503.620.5539 | www.aaieng.com

WEBSTER RIDGE PARKING EXPANSION
 CLATSOP, OR

SHEET TITLE
DETAILS

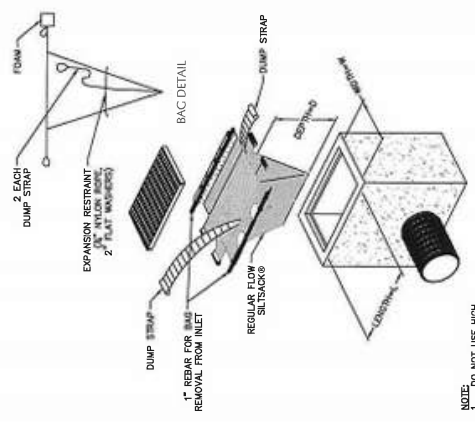
DATE: 9/29/20
 DRAWN: TRH/DAR
 CHECKED: MNS
 REVISIONS:

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SHEET NUMBER

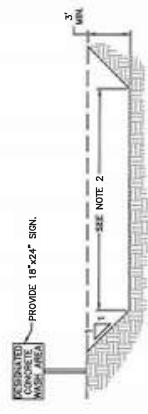
C4.0

JOB NUMBER: A20138.10



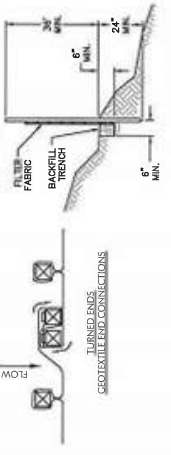
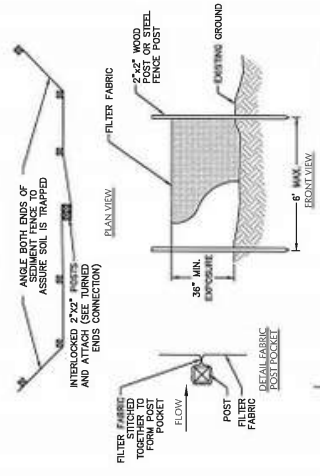
NOTE:
 1. DO NOT USE HIGH FLOW INSERT BASINS.

2 INLET SEDIMENT PROTECTION
 SCALE: NTS



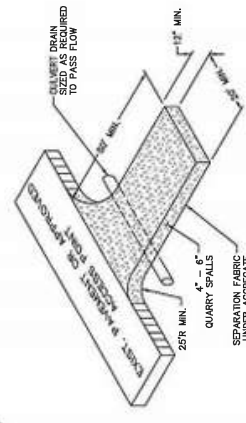
NOTES:
 1. INSTALL A CONCRETE WASH OUT PIT AND A VISIBLE SIGN STATING "DESIGNATED CONCRETE WASHOUT AREA" THAT WILL BE ACCESSIBLE TO CONCRETE TRUCKS SIZE TO THE PROJECT.
 2. PROVIDE 3' X 3' MINIMUM WASHOUT AREA, INCREASE SIZE OR PROVIDE ADDITIONAL WASHOUTS AS REQUIRED TO ACCOMMODATE PROJECT CONDITIONS.
 3. LOCATE WASHOUTS IN AREAS THAT WILL BE ACCESSIBLE TO CONCRETE TRUCKS.
 4. FOR WASHOUTS LOCATED IN AREAS DESIGNATED TO RECEIVE HARDSHORE SOLIDS MAY BE BURIED IN PLACE. FOR OTHER APPLICATIONS, REMOVE AND DISPOSE OF SOLIDS.

3 CONCRETE WASHOUT
 SCALE: NTS



NOTES:
 1. THE FILTER FABRIC SHALL BE (6\"/>
 2. WHERE FEASIBLE, THE FENCE POSTS SHALL BE SPACED A MAXIMUM OF 8- FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24-INCHES.
 3. THE FILTER FABRIC SHALL HAVE A MINIMUM VERTICAL BURIAL OF 6-INCHES. ALL JOINTS AND NECESSARY FILTER FABRIC SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST. WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY ATTACHED TO THE POST, OR OVERLAP 2-4\"/>
 4. STANDARD OR HEAVY DUTY FILTER FABRIC SHALL HAVE MANUFACTURED STITCHED LOOPS FOR 2\"/>
 5. FILTER FABRIC ENDS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR PURPOSE AND THE SLOPE AREA HAS BEEN PERMANENTLY PROTECTED AND STABILIZED.
 6. FILTER FABRIC FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

1 SEDIMENT FENCE
 SCALE: NTS



NOTES:
 1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY INCLUDE CLEANING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS.
 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH SEDIMENT BASK.
 4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA AN APPROVED FILTERING SYSTEM, THE SYSTEM SHALL BE PERMANENTLY IMPLEMENTED TO LONG BY 2\"/>
 5. DOWNSTREAM AUTHORITY MAY REQUIRE SEPARATE FIBING TO PREVENT SUB-SOIL PUMPING.

4 CONSTRUCTION ENTRANCE
 SCALE: NTS

02/04/2022 - PERMIT SET



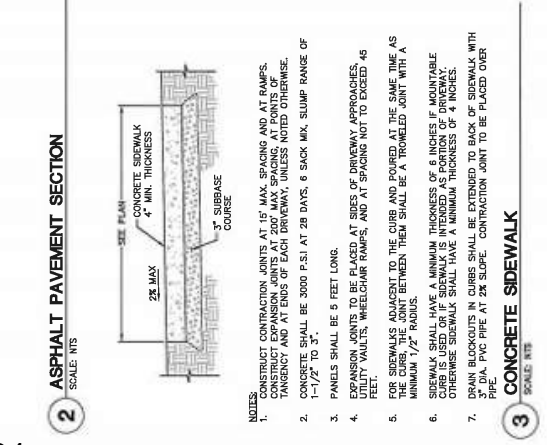
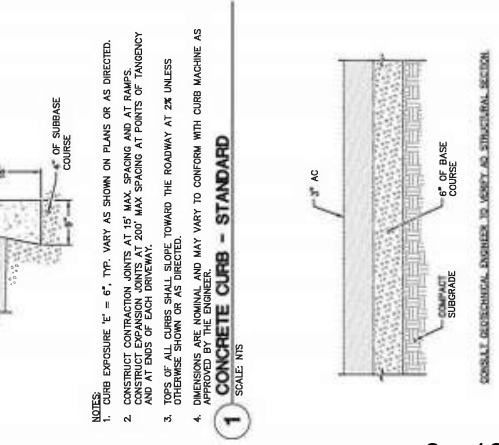
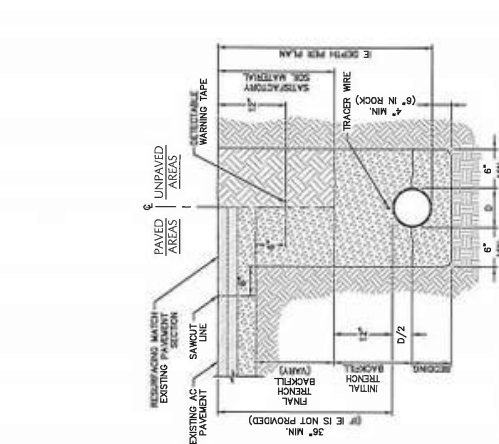
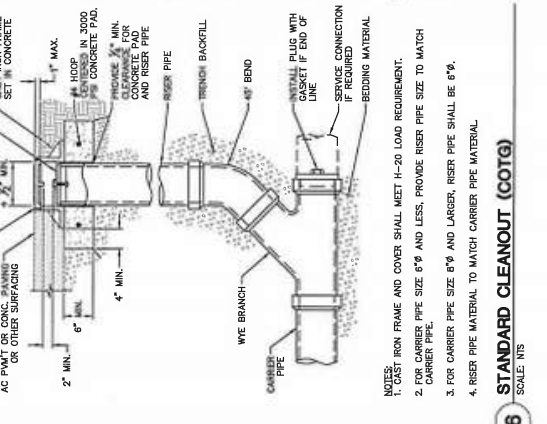
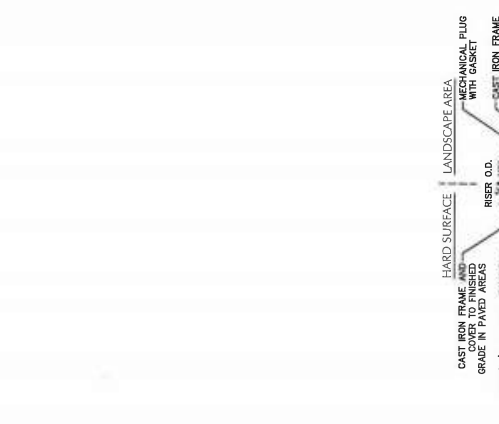
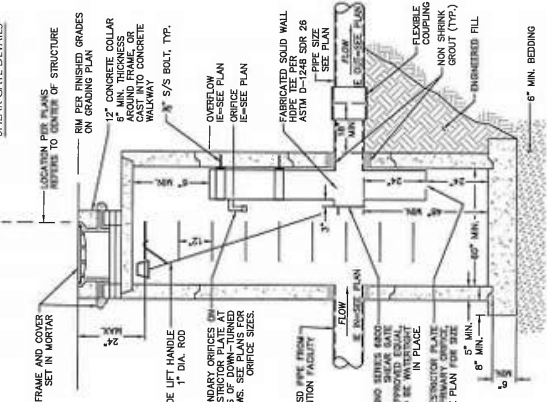
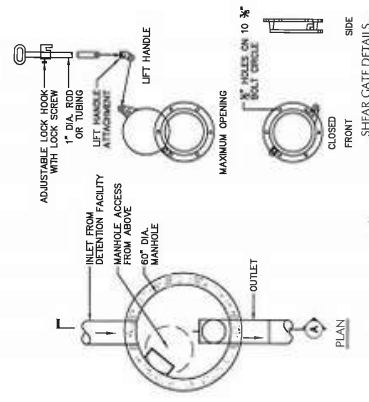
AAI *engineering associates, inc.*
 ENGINEERING
 5075 SW Green Drive Suite 100 | Gresham, OR 97030
 503.620.3030 | 503.620.5539 | www.aaieng.com

WEBSTER RIDGE PARKING
 EXPANSION
 CLATSOP, OR

SHEET TITLE
 PRIVATE DETAILS
 DATE: 9/29/20
 DRAWN: TRV/DAB
 CHECKED: WNK
 REVISIONS:
 SHEET NUMBER

C4.1
 JOB NUMBER: A20138.10

FLOW CONTROL ORIFICE SIZING			
STRUCTURE	2-R	10/25-R	EMERGENCY OVERFLOW
FORMH-01	1.0' x 217.01	2.7' x 221.15	24" x 232.80



NOTES:
 1. CURB EXPOSURE 'E' = 6", TYP. VARY AS SHOWN ON PLANS OR AS DIRECTED.
 2. CONTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMP, TANGENCY AND AT ENDS OF EACH DRIVEWAY.
 3. TOPS OF ALL CURBS SHALL SLOPE TOWARD THE ROADWAY AT 2% UNLESS OTHERWISE SHOWN OR AS DIRECTED.
 4. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM WITH CURB MACHINE AS APPROVED BY THE ENGINEER.

1 CONCRETE CURB - STANDARD
 SCALE: NTS

2 ASPHALT PAVEMENT SECTION
 SCALE: NTS

3 CONCRETE SIDEWALK
 SCALE: NTS

4 TYPICAL PIPE BEDDING AND BACKFILL
 SCALE: NTS

5 NOT USED
 SCALE: NTS

6 STANDARD CLEANOUT (COTG)
 SCALE: NTS

7 FLOW CONTROL MANHOLE
 SCALE: NTS

8 FLOW CONTROL MANHOLE
 SCALE: NTS



AAI
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3075 SW 10th Ave | Suite 100 | Beaverton, OR 97005
503.620.3030 | 503.620.5539 | aai@www.aaieng.com

WEBSTER RIDGE PARKING EXPANSION

GLASTON, OR

SHEET TITLE
PRIVATE DETAILS

DATE: 9/29/20
DRAWN: TRH/PAS
CHECKED: NMS
REVISIONS:

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SHEET NUMBER

C4.2

JOB NUMBER: A20136.10

02/04/2022 – PERMIT SET

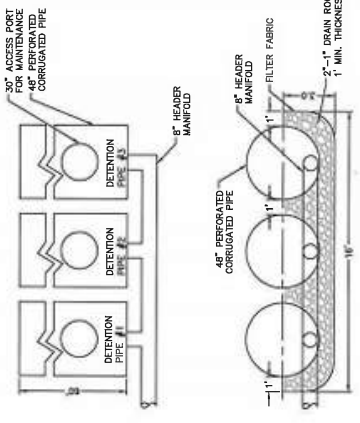
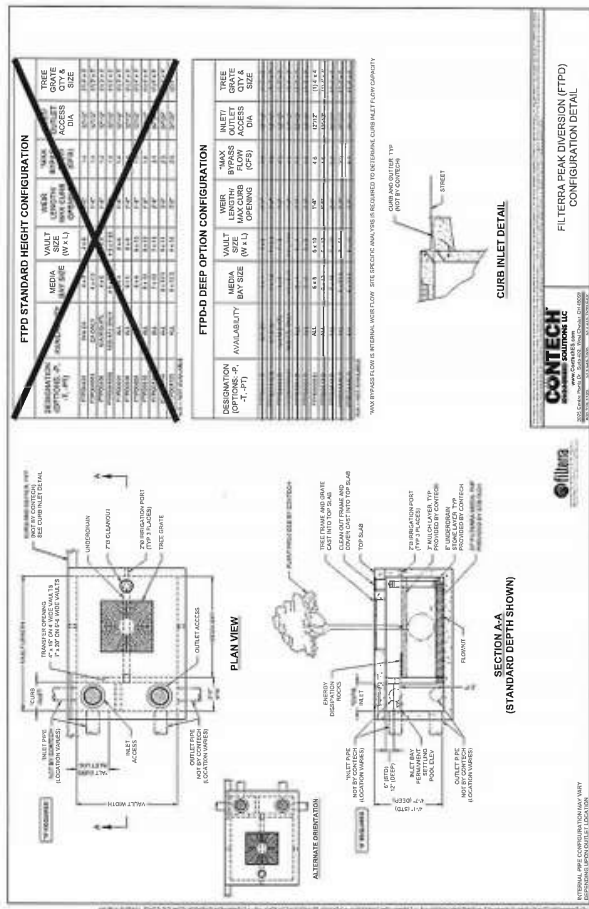


EXHIBIT E
Structural Plans



MILLER CONSULTING ENGINEERS
 9802 SW 34th St, Suite 400
 Miami, FL 33155, USA
 TEL: 305.443.1111 FAX: 305.443.1112

GARAGE BUILDING

WEBSTER RIDGE APARTMENTS - PHASE 2
 CREATIONS NW, LLC
 GLADSTONE, OR

COPYRIGHT 2022
 Miller Consulting Engineers, Inc.
 1000 N. W. 11th St.
 Ft. Lauderdale, FL 33304
 954.578.2222
 FAX: 954.578.2222

DESIGNED BY: NWS
 DRAWN BY: NWS
 DATE: 01.20.22
 PROJECT NO: 20000

REV	DATE	DESCRIPTION

SHEET CONTENT
 FLOOR PLAN

SHEET
G1.01

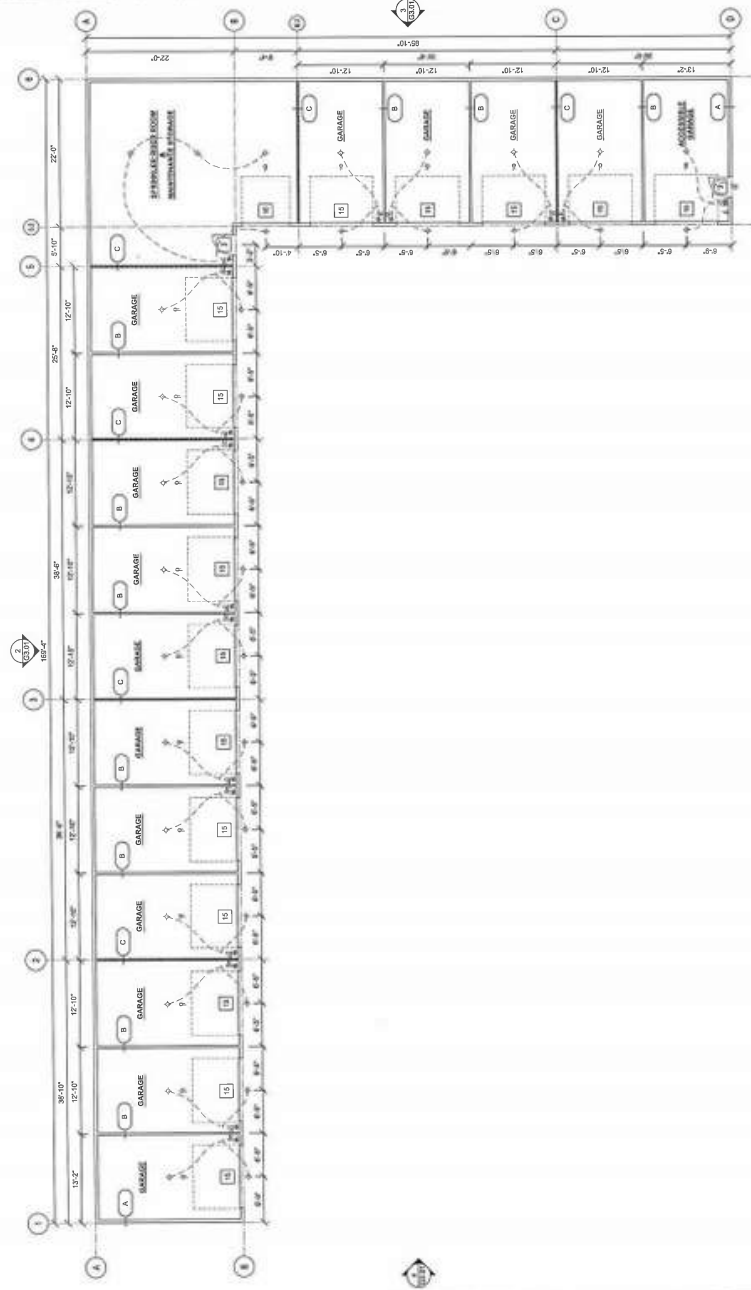
WALL SCHEDULE	
SYMBOL	DESCRIPTION
(A)	24" CMU @ 16" OC
(B)	24" CMU @ 16" OC
(C)	24" CMU @ 16" OC

DOOR SCHEDULE	
SYMBOL	DESCRIPTION
(1)	30" x 6'6"
(15)	6'6" x 7'0"
(16)	7'0" x 7'0"

ELECTRICAL SCHEDULE	
SYMBOL	DESCRIPTION
(SW)	SINGLE POLE SWITCH
(C)	10' x 10' PANEL
(L)	RECEILING LIGHT FIXTURE
(F)	EXTERIOR LIGHT FIXTURE

LEGEND
 1/2" RATED FIRE WALL

- NOTES:
 1. SEE SET OF STRUCTURAL PLANS FOR DIMENSIONS AND FINISHES ARE ESCORDED BY OTHERS
 2. ELECTRICAL ESCORDED BY OTHERS



FLOOR PLAN





MILLER CONSULTING ENGINEERS
 9600 SW Old St. Suite 400
 Gladstone, OR 97030
 503.246.1925 | miller@me.com

GARAGE BUILDING

WEBSTER RIDGE APARTMENTS - PHASE 2
 CREATIONS NW, LLC
 GLADSTONE, OREGON

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 Gladstone, OR 97030
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REV.	DATE	DESCRIPTION

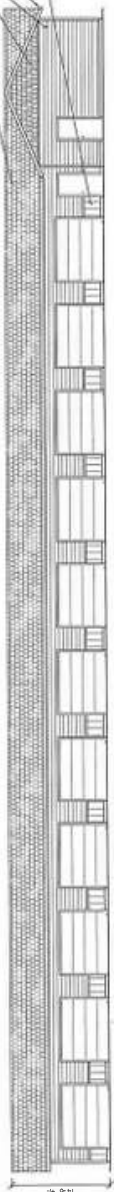
SHEET CONTENT

ELEVATIONS

SHEET
G3.01

- NOTES: 1. MATERIALS, FINISHES, FLASHING, AND FINISHES ARE DESIGNATED BY OTHERS.
 2. ELECTRICAL IS DESIGNED BY OTHERS.
 3. USE CRAFTY FOR TYPICAL FASTENER DETAILS.

- NON-FERROUS
- CEMENTitious
- COMPOSITE SPRINKLES
- CEILING SHIMME BEING
- 7" W/4" LAP BEING
- GUTTER AND DOWNSPOUTS
- DESIGNED BY OTHERS
- BOND AND BATT BEING



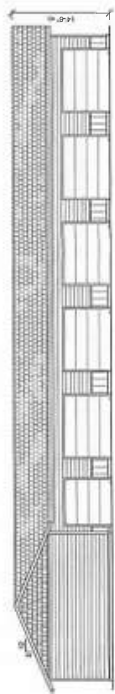
1 EAST ELEVATION
 G3.01



2 WEST ELEVATION
 G3.01



3 NORTH ELEVATION
 G3.01



4 SOUTH ELEVATION
 G3.01



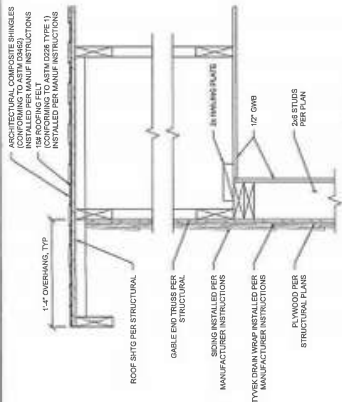
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 9500 SW Oaks St. Suite 400
 Gladstone, OR 97030
 503.246.3251 | miller@mceng.com

GARAGE BUILDING

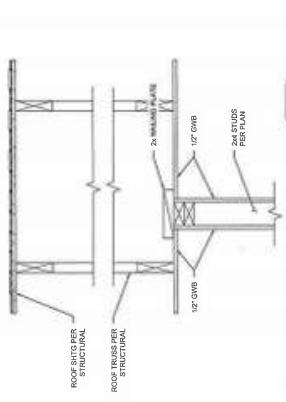
WEBSTER RIDGE APARTMENTS - PHASE 2
 CREATIONS NW, LLC

GLADSTONE, OREGON

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Miller Consulting Engineers, Inc.		
100% COMPLETE		
PROJECT NO. 2019-1001		
DRAWN BY: NWS		
CHECKED BY: NWS		
DATE PLOTTED: 01/20/22		
ISSUE DATE: 01/20/22		
REV	DATE	DESCRIPTION
SHEET CONTENT WALL ASSEMBLIES		
SHEET G5.01		



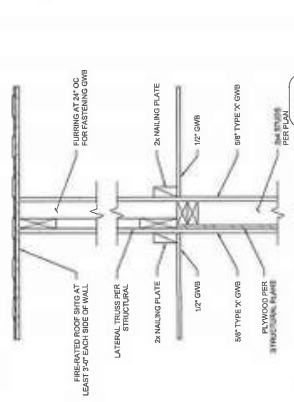
1 WALL-ROOF ASSEMBLY A
 1/2" x 1/2"



2 WALL-ROOF ASSEMBLY B
 1/2" x 1/2"

FIRE RATED ASSEMBLY, REQUIRED.

- 2x4 WOOD STUDS AT 16" OC
- 2x WALLING PLATE
- WITH END JOINTS ON WALLING MEMBERS
- STRONGER JOINTS EACH SIDE



3 WALL-ROOF ASSEMBLY C
 1/2" x 1/2"

WESTERN RIDGE APARTMENTS - PHASE 2

CREATIONS NW, LLC
WEBSTER RIDGE APARTMENTS - PHASE 2
GLADSTONE, OREGON

GARAGE BUILDING 1

MAX Consulting Engineers, Inc.
DATE: 08/21/2022
DRAWN BY: MMS
CHECKED BY: MMS
SCALE: 1/8" = 1'-0"
PROJECT NO. 22000
DATE: 12/08/21

SHEET CONTENT	REV.	DATE	DESCRIPTION
STRUCTURAL NOTES			

S0.01
SHEET

GENERAL NOTES

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL ITEMS AND WORK NECESSARY TO COMPLY WITH THE DESIGN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES.

STRUCTURAL DESIGN CRITERIA

ITEM	SUBMITTAL	SHOP DRAWINGS	DESIGN	BRITRAL
CONCRETE REINFORCING STEEL	X	X	X	X
MANUFACTURED WOOD TRUSSES				

RISK CATEGORY	DEAD LOAD	ROOF LIVE LOAD	ROOF SNOW LOAD	WIND DESIGN DATA
ROOF TOTAL INCLUDING ROOFRAISED AND ROOF RISERS (SEE DETAIL)	15 PSF			
ROOF LIVE LOAD	20 PSF	20 PSF	15 PSF	
WIND DESIGN DATA				V = 85 MPH Kz = 1.0 Kd = 0.85 Kzt = 1.0 Ks = 1.0 Kd = 0.85 Kzt = 1.0 Ks = 1.0

CONCRETE MIX DESIGN REQUIREMENTS

MEMBER TYPE/LOCATION	MINIMUM STRENGTH PER ACI 308	MAXIMUM AGGREGATE PARTICLE SIZE	MAXIMUM WATER/CEMENT RATIO	MINIMUM AIR CONTENT	MINIMUM MODULUS OF ELASTICITY
FOUNDATION	3000	1"	0.50	5%	3,000,000 PSI
SLABS ON GRADE	3000	1"	0.45	5%	3,000,000 PSI

CONCRETE MIX DESIGN

CONCRETE MIX DESIGNS SHALL MEET THE FOLLOWING REQUIREMENTS:
1. ALL EXTERIOR CONCRETE SUBJECT TO FREEZE/THAW CYCLES, AND/OR CONTINUOUS WET/DRY CYCLES, SHALL BE DESIGNED TO MEET THE FOLLOWING REQUIREMENTS:
a. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: FC = 4,500 PSI AND SHALL MEET THE FOLLOWING AIR CONTENT REQUIREMENTS:
b. MAXIMUM AGGREGATE SIZE: 3/8"
c. MAXIMUM W/WATER-CEMENT RATIO: 0.45
d. MAXIMUM AIR CONTENT: 6%
e. MAXIMUM MODULUS OF ELASTICITY: 3,000,000 PSI

SOIL DESIGN DATA

PARAMETER	VALUE
ALLOWABLE BEARING CAPACITY	1500 PSF
ALLOWABLE SETTLING	0.5 INCH
ALLOWABLE LATERAL FORCE	1500 LBS

FOUNDATION CRITERIA

FOUNDATION CRITERIA SHALL BE BASED ON THE FOLLOWING:
1. FOUNDATION DESIGN SHALL BE BASED ON THE FOLLOWING ASSUMPTIONS:
a. ALL FOUNDATIONS SHALL BE DESIGNED TO BEAT THE MAXIMUM ALLOWABLE SETTLEMENT OF 0.5 INCH.
b. ALL FOUNDATIONS SHALL BE DESIGNED TO BEAT THE MAXIMUM ALLOWABLE LATERAL FORCE OF 1500 LBS.
c. ALL FOUNDATIONS SHALL BE DESIGNED TO BEAT THE MAXIMUM ALLOWABLE BEARING CAPACITY OF 1500 PSF.

CONCRETE REINFORCING STEEL

REINFORCING STEEL SHALL BE SUPPLIED BY A MANUFACTURER WHO IS A MEMBER OF THE REINFORCING STEEL INSTITUTE (RSI). ALL REINFORCING STEEL SHALL BE SUPPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A630 AND SHALL BE IDENTIFIED BY THE MANUFACTURER'S BRAND NAME AND TRADE MARK.

WOOD FRAMING

WOOD FRAMING SHALL BE SUPPLIED BY A MANUFACTURER WHO IS A MEMBER OF THE NATIONAL WOOD FRAMING ASSOCIATION (NWFA). ALL WOOD FRAMING SHALL BE SUPPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NWFA NATIONAL WOOD FRAMEWORKING SPECIFICATIONS (NWFA NWFWS).

WOOD TRUSSES

WOOD TRUSSES SHALL BE SUPPLIED BY A MANUFACTURER WHO IS A MEMBER OF THE NATIONAL WOOD TRUSS ASSOCIATION (NWTA). ALL WOOD TRUSSES SHALL BE SUPPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NWTA NATIONAL WOOD TRUSS MANUFACTURING SPECIFICATIONS (NWTA NWTMS).

WIND DESIGN

WIND DESIGN SHALL BE BASED ON THE FOLLOWING ASSUMPTIONS:
1. WIND SPEED: 85 MPH
2. EXPOSURE: B
3. WIND DIRECTION: AS NOTED ON PLANS (IF OCCURS)
4. WIND PRESSURE COEFFICIENT: AS NOTED ON PLANS (IF OCCURS)

ROOF DESIGN

ROOF DESIGN SHALL BE BASED ON THE FOLLOWING ASSUMPTIONS:
1. ROOF TYPE: GROUND LEVEL
2. ROOF SLOPE: 0%
3. ROOF SNOW LOAD: 15 PSF
4. ROOF LIVE LOAD: 20 PSF

WIND DESIGN DATA

WIND SPEED (MPH)	WIND DIRECTION
85	AS NOTED ON PLANS (IF OCCURS)

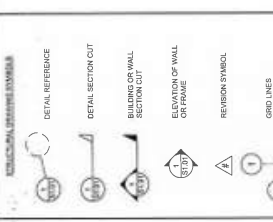
INTERNAL PRESSURE COEFFICIENT

WIND DIRECTION	INTERNAL PRESSURE COEFFICIENT
AS NOTED ON PLANS (IF OCCURS)	0.85

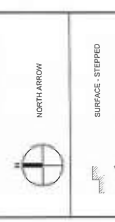
WIND DESIGN DATA

ZONE	WIND PRESSURE
ZONE 1	-14 PSF / 18.7 PSF
ZONE 2	-18 PSF / 24.8 PSF
ZONE 3	-18 PSF / 24.8 PSF
ZONE 4	-18 PSF / 24.8 PSF
ZONE 5	-18 PSF / 24.8 PSF

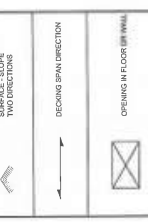
REINFORCING STEEL SYMBOLS



WOOD TRUSS SYMBOLS



WOOD FRAMING SYMBOLS



SYMBOL	DESCRIPTION
MSA	MISCELLANEOUS
MSC	METAL SHEET CONNECTION
NSA	NON-SHEAR ANCHOR
NMC	NON-METAL CONNECTION
NMA	NON-METAL ANCHOR
NMS	NON-METAL STRUT
NBT	NON-BRICK TIE
OCG	OPEN CHANNEL GIRDER
OGC	OPEN CHANNEL GIRDER CONNECTION
OWR	OPEN CHANNEL GIRDER CONNECTION
OWS	OPEN CHANNEL GIRDER CONNECTION
OWT	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION
OWM	OPEN CHANNEL GIRDER CONNECTION
OWL	OPEN CHANNEL GIRDER CONNECTION
OWK	OPEN CHANNEL GIRDER CONNECTION
OWJ	OPEN CHANNEL GIRDER CONNECTION
OWI	OPEN CHANNEL GIRDER CONNECTION
OWH	OPEN CHANNEL GIRDER CONNECTION
OWG	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWE	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION
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OWK	OPEN CHANNEL GIRDER CONNECTION
OWJ	OPEN CHANNEL GIRDER CONNECTION
OWI	OPEN CHANNEL GIRDER CONNECTION
OWH	OPEN CHANNEL GIRDER CONNECTION
OWG	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWE	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION

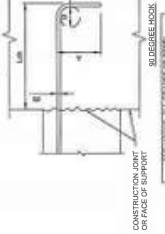
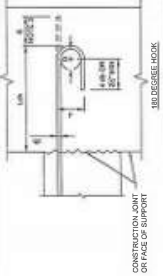
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OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION
OWM	OPEN CHANNEL GIRDER CONNECTION
OWL	OPEN CHANNEL GIRDER CONNECTION
OWK	OPEN CHANNEL GIRDER CONNECTION
OWJ	OPEN CHANNEL GIRDER CONNECTION
OWI	OPEN CHANNEL GIRDER CONNECTION
OWH	OPEN CHANNEL GIRDER CONNECTION
OWG	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWE	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION

SYMBOL	DESCRIPTION
MSA	MISCELLANEOUS
MSC	METAL SHEET CONNECTION
NSA	NON-SHEAR ANCHOR
NMC	NON-METAL CONNECTION
NMA	NON-METAL ANCHOR
NMS	NON-METAL STRUT
NBT	NON-BRICK TIE
OCG	OPEN CHANNEL GIRDER
OGC	OPEN CHANNEL GIRDER CONNECTION
OWR	OPEN CHANNEL GIRDER CONNECTION
OWS	OPEN CHANNEL GIRDER CONNECTION
OWT	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION
OWM	OPEN CHANNEL GIRDER CONNECTION
OWL	OPEN CHANNEL GIRDER CONNECTION
OWK	OPEN CHANNEL GIRDER CONNECTION
OWJ	OPEN CHANNEL GIRDER CONNECTION
OWI	OPEN CHANNEL GIRDER CONNECTION
OWH	OPEN CHANNEL GIRDER CONNECTION
OWG	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWE	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
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SYMBOL	DESCRIPTION
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MSC	METAL SHEET CONNECTION
NSA	NON-SHEAR ANCHOR
NMC	NON-METAL CONNECTION
NMA	NON-METAL ANCHOR
NMS	NON-METAL STRUT
NBT	NON-BRICK TIE
OCG	OPEN CHANNEL GIRDER
OGC	OPEN CHANNEL GIRDER CONNECTION
OWR	OPEN CHANNEL GIRDER CONNECTION
OWS	OPEN CHANNEL GIRDER CONNECTION
OWT	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION
OWM	OPEN CHANNEL GIRDER CONNECTION
OWL	OPEN CHANNEL GIRDER CONNECTION
OWK	OPEN CHANNEL GIRDER CONNECTION
OWJ	OPEN CHANNEL GIRDER CONNECTION
OWI	OPEN CHANNEL GIRDER CONNECTION
OWH	OPEN CHANNEL GIRDER CONNECTION
OWG	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWE	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION

SYMBOL	DESCRIPTION
MSA	MISCELLANEOUS
MSC	METAL SHEET CONNECTION
NSA	NON-SHEAR ANCHOR
NMC	NON-METAL CONNECTION
NMA	NON-METAL ANCHOR
NMS	NON-METAL STRUT
NBT	NON-BRICK TIE
OCG	OPEN CHANNEL GIRDER
OGC	OPEN CHANNEL GIRDER CONNECTION
OWR	OPEN CHANNEL GIRDER CONNECTION
OWS	OPEN CHANNEL GIRDER CONNECTION
OWT	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
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OWJ	OPEN CHANNEL GIRDER CONNECTION
OWI	OPEN CHANNEL GIRDER CONNECTION
OWH	OPEN CHANNEL GIRDER CONNECTION
OWG	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWE	OPEN CHANNEL GIRDER CONNECTION
OWD	OPEN CHANNEL GIRDER CONNECTION
OWC	OPEN CHANNEL GIRDER CONNECTION
OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION

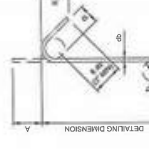
SYMBOL	DESCRIPTION
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MSC	METAL SHEET CONNECTION
NSA	NON-SHEAR ANCHOR
NMC	NON-METAL CONNECTION
NMA	NON-METAL ANCHOR
NMS	NON-METAL STRUT
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OWS	OPEN CHANNEL GIRDER CONNECTION
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OWD	OPEN CHANNEL GIRDER CONNECTION
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OWK	OPEN CHANNEL GIRDER CONNECTION
OWJ	OPEN CHANNEL GIRDER CONNECTION
OWI	OPEN CHANNEL GIRDER CONNECTION
OWH	OPEN CHANNEL GIRDER CONNECTION
OWG	OPEN CHANNEL GIRDER CONNECTION
OWF	OPEN CHANNEL GIRDER CONNECTION
OWE	OPEN CHANNEL GIRDER CONNECTION
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OWB	OPEN CHANNEL GIRDER CONNECTION
OWA	OPEN CHANNEL GIRDER CONNECTION



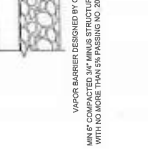
REINFORCING BARS		CONCRETE		TYPICAL		MINIMUM		MAXIMUM	
BAR SIZE	BAR SPACING	MIN. THICKNESS	MIN. COVER	MIN. THICKNESS	MIN. COVER	MIN. THICKNESS	MIN. COVER	MIN. THICKNESS	MIN. COVER
#5	18"	4"	1.5"	4"	1.5"	4"	1.5"	4"	1.5"
#6	18"	4"	1.5"	4"	1.5"	4"	1.5"	4"	1.5"
#7	18"	4"	1.5"	4"	1.5"	4"	1.5"	4"	1.5"
#8	18"	4"	1.5"	4"	1.5"	4"	1.5"	4"	1.5"
#9	18"	4"	1.5"	4"	1.5"	4"	1.5"	4"	1.5"
#10	18"	4"	1.5"	4"	1.5"	4"	1.5"	4"	1.5"
#11	18"	4"	1.5"	4"	1.5"	4"	1.5"	4"	1.5"
#12	18"	4"	1.5"	4"	1.5"	4"	1.5"	4"	1.5"

1 STANDARD REBAR DIMENSIONS

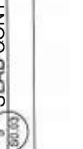
BAR SIZE	MIN. THICKNESS	MIN. COVER	MIN. THICKNESS	MIN. COVER
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#6	4"	1.5"	4"	1.5"
#7	4"	1.5"	4"	1.5"
#8	4"	1.5"	4"	1.5"
#9	4"	1.5"	4"	1.5"
#10	4"	1.5"	4"	1.5"
#11	4"	1.5"	4"	1.5"
#12	4"	1.5"	4"	1.5"



2 STIRRUP HOOKS AND TIE BENDS



3 STANDARD HOOKS AND EMBED



4 TYPICAL REBAR LAP SPlice LENGTH SCHEDULE

BAR SIZE	BAR SPACING	MIN. THICKNESS	MIN. COVER	MIN. THICKNESS	MIN. COVER
#5	18"	4"	1.5"	4"	1.5"
#6	18"	4"	1.5"	4"	1.5"
#7	18"	4"	1.5"	4"	1.5"
#8	18"	4"	1.5"	4"	1.5"
#9	18"	4"	1.5"	4"	1.5"
#10	18"	4"	1.5"	4"	1.5"
#11	18"	4"	1.5"	4"	1.5"
#12	18"	4"	1.5"	4"	1.5"

5 FOUNDATION REINFORCING AT CORNERS AND INTERSECTIONS



6 SLAB CONTROL JOINT





MILLER
CONSULTING
ENGINEERS
1802 SW Oak St. Suite 400
Portland, OR 97201
503.246.1200 miller@ce.com

GARAGE BUILDING

WEBSTER RIDGE APARTMENTS - PHASE 2
CREATIONS NW, LLC
GLADSTONE, OREGON

COPYRIGHT 2022
Mills Consulting Engineers, Inc.
Project No. 22-03
Drawn by: [Name]
Checked by: [Name]
Scale: AS SHOWN
Issue No. 20003
Issue Date: 01.20.22

REV.	DATE	DESCRIPTION

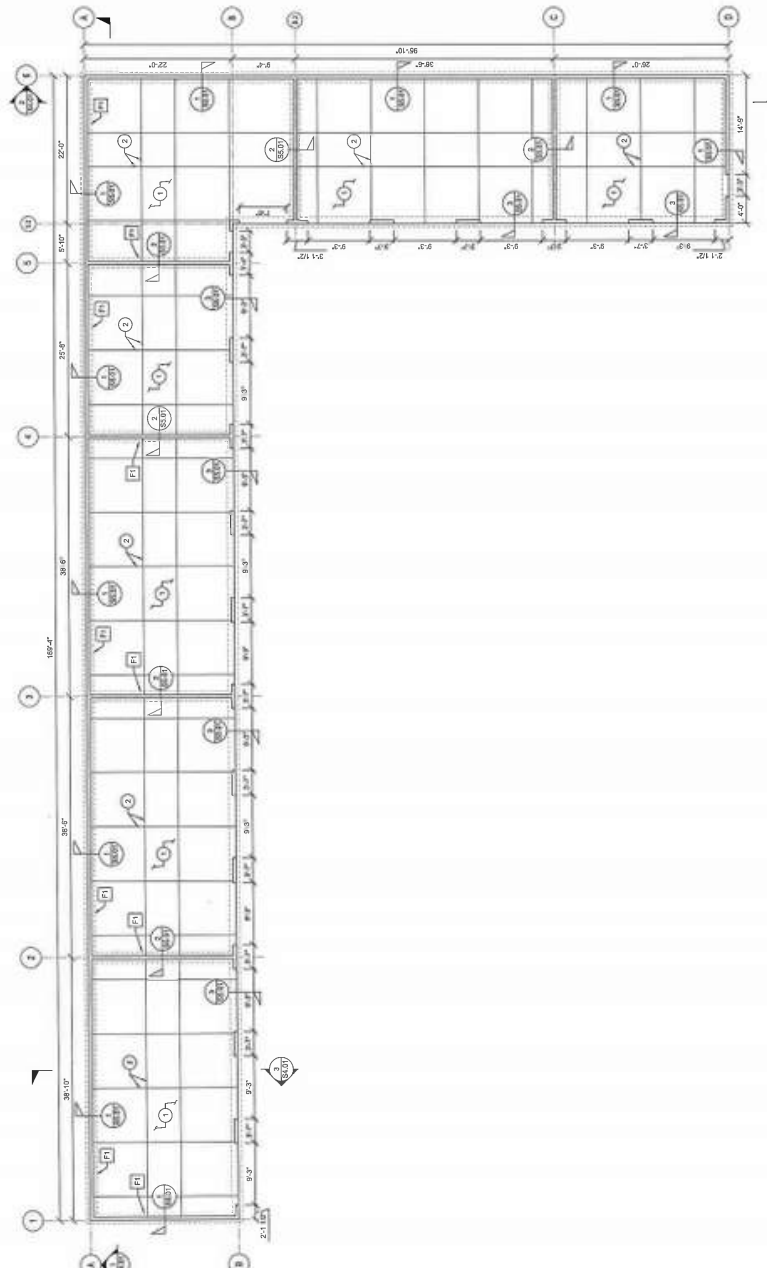
FOUNDATION PLAN

SHEET
S1.01

SYMBOL	PLAN SIZE	THICKNESS	REINFORCING	NOTES
(F)	18" WIDE	8"	(3) #4 LONGITUDINAL	8" STEM (AS SHOWN)

REMARKS:

- 1 FLOOR ON GROUND
- 2 SLAB CONTROL JOINTS AT 8' 0" ON LONGER WAY. SEE DETAIL S101.03



FOUNDATION PLAN





MILLER CONSULTING ENGINEERS
 9000 SW Oak St | Suite 400
 Beaverton, OR 97005
 503.241.1212 | info@mceng.com

GARAGE BUILDING

WEBSTER RIDGE APARTMENTS - PHASE 2
 CREATIONS MW, LLC
 GLADSTONE, OREGON

COMPONENT # 203
 Miller Consulting Engineers, Inc.
 10/11/2023
 DRAWN BY: NWS
 CHECKED BY: JMS
 DATE PROJECT NO. 20003
 ISSUE DATE: 07/20/23

REV	DATE	DESCRIPTION

SHEET CONTENT
FRAMING PLAN

SHEET
S1.02

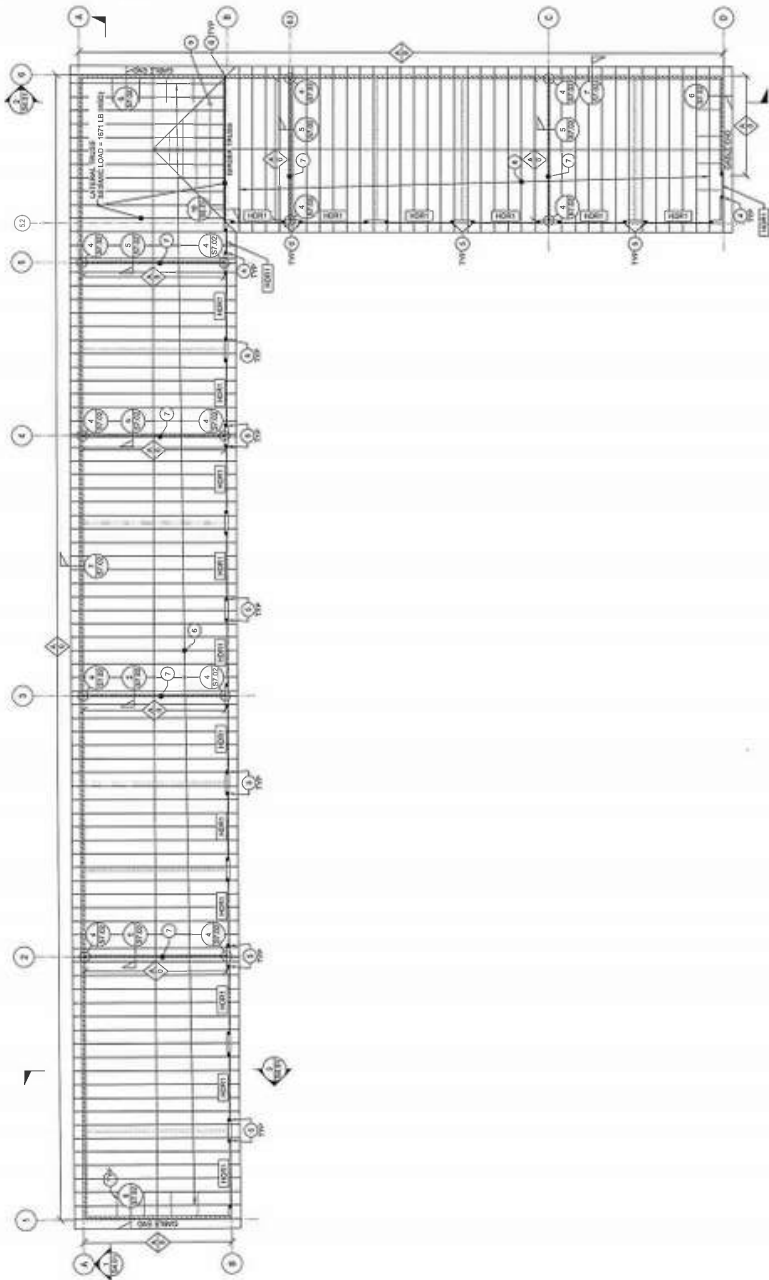
HEADER SCHEDULE			
MARK	SIZE	GRADE	NOTES
1	4X12	DN, R2	

REMARKS	
1	GABLE END BRACING SEE DETAIL 702.02
2	2x6 DFL TRIMMER STUD AND (2) 2x6 DFL KING STUD
3	(2) 2x6 DFL TRIMMER STUD AND (2) 2x6 DFL KING STUD
4	MANUFACTURED ROOF TRUSSES AT 24" OC
5	LATERAL TRUSS SUBRAISED LOAD = 1000 LB (ASD), WIND LOAD = 2200 LB (ASD)
6	(2) 2x4 COLUMN BELOW GIRDER TRUSS
7	ROOF OVERBUILD PER DETAIL 902.02

LEGEND
 SHERAR WALL
 NON-LOAD BEARING PARTITION WALL

TOP LETTER: SHERAR WALL TYPE PER TABLE 1 ON SHEET 07.01
 BOTTOM NUMBER: INCLINATION TYPE PER TABLE 2 ON SHEET 07.01

NOTES:
 1. SEE SHEET 08.01 FOR TYPICAL WOOD FRAMING DETAILS
 2. SEE SHEET 08.02 FOR TYPICAL WOOD TRUSS DETAILS
 3. ROOF BRACING TO BE TYPE 3 PER TABLE 2 ON SHEET 07.01



1 FRAMING PLAN
 S1.02



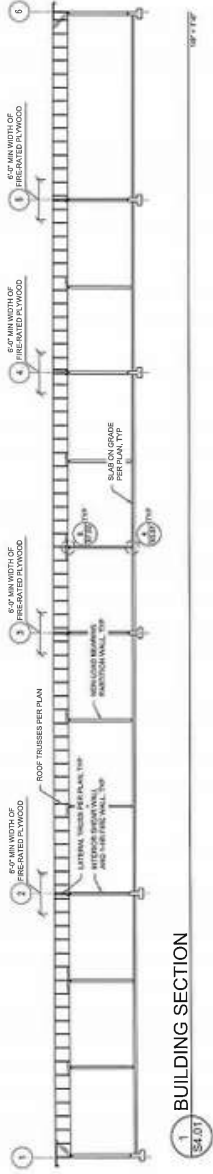
**MILLER
CONSULTING
ENGINEERS**
1800 SW Oak St. Suite 400
Portland, Oregon 97204
503.241.1200 millerclae.com

WEBSTER RIDGE APARTMENTS - PHASE 2
CREATIONS NW, LLC
GLADSTONE, OREGON

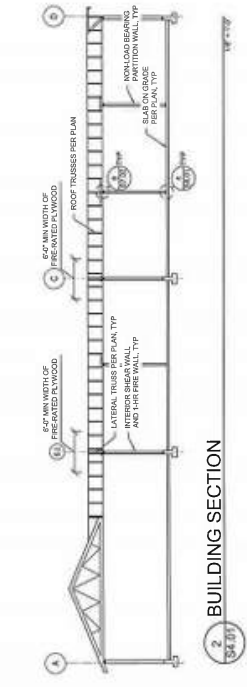
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DATE: 01/20/23
DESIGNER: NWS
DRAWN BY: JWS
CHECKED BY: JWS
SCALE: PER PLAN, TYP.

REV	DATE	DESCRIPTION

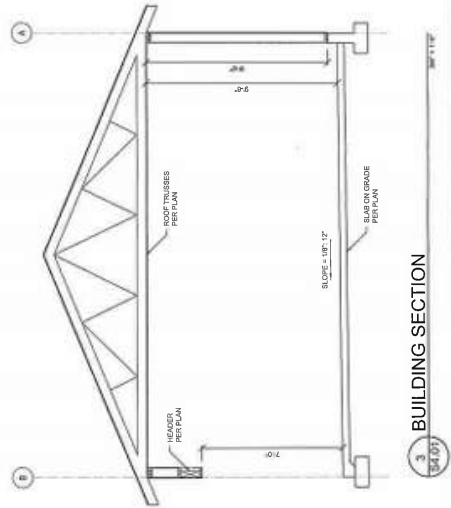
SHEET S4.01
BUILDING SECTIONS



1 BUILDING SECTION



2 BUILDING SECTION



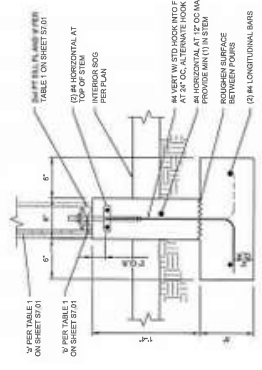
3 BUILDING SECTION



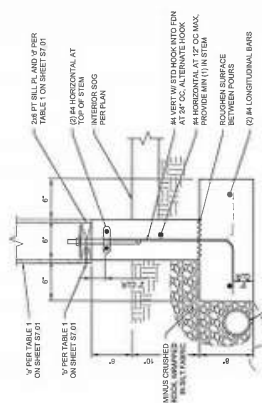
GARAGE BUILDING
 WEBSTER RIDGE APARTMENTS - PHASE 2
 CREATIONS NM, LLC
 CLATSOP COUNTY, OREGON

COMPILED BY:	MW
DESIGNED BY:	JSC
CHECKED BY:	JSC
DATE:	07.2018
PROJECT NO.:	20060
DATE:	07.2018

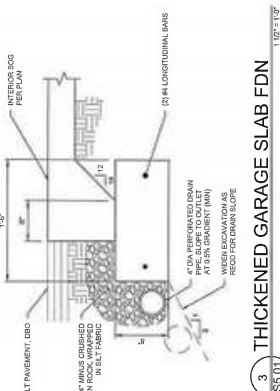
REV.	DATE	DESCRIPTION



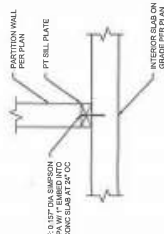
1 EXTERIOR WALL FDN
 1/2" = 1'-0"



2 INTERIOR SHEAR WALL FDN
 1/2" = 1'-0"



3 THICKENED GARAGE SLAB FDN
 1/2" = 1'-0"



4 NON-BEARING WALL TO SLAB
 1/2" = 1'-0"

SHEET **S5.01**



MILLER
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ARCHITECTS
PLANNERS
900 SW 5th St, Suite 400
Portland, OR 97233
503.463.6371 miller@cmiller.com

WEBSTER RIDGE APARTMENTS - PHASE 2
CREATIONS MM, LLC
GLADSTONE, OREGON

COMPANY NO. 1000
Mills Consulting Engineers, Inc.
DATE: 01/20/22
DRAWN BY: NWS
CHECKED BY: JSC
ISSUE PROJECT NO. 20003
ISSUE DATE: 01/20/22

REV.	DATE	DESCRIPTION

SHEET CONTENT
SHEAR WALL SCHED
HOLD-DOWN SCHED
DIAPHRAGM SCHED

SHEET
S7.01

TABLE 1. SHEAR WALL SCHEDULE (PARTS 1, 2, 3 & 4)

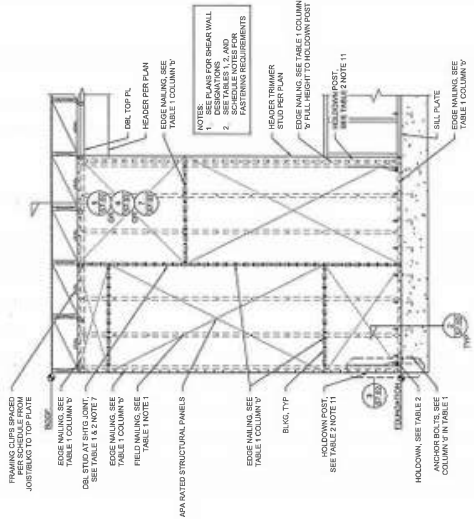
WALL TYPE	#	b	d	g	h	i

TABLE 2. HOLD-DOWN SCHEDULE (PART 5)

HOLD-DOWN TYPE	HOLD-DOWN REQUIRED	FASTENERS

TABLE 3. DIAPHRAGM SCHEDULE (PARTS 6, 8 & 9)

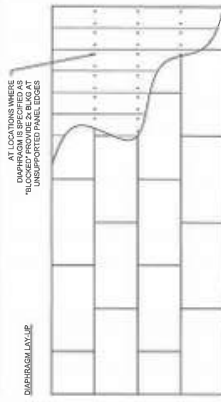
DIAPHRAGM TYPE	DIMENSIONS	FASTENERS	WALL TYPE	WALL TYPE	WALL TYPE	WALL TYPE

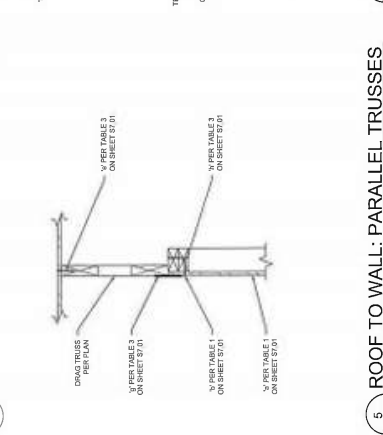
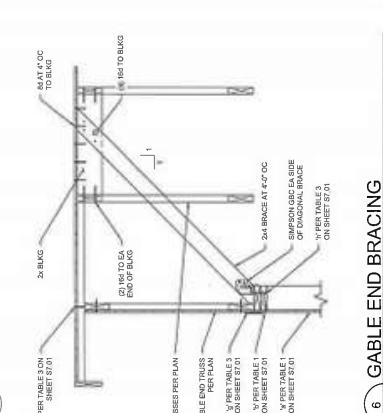
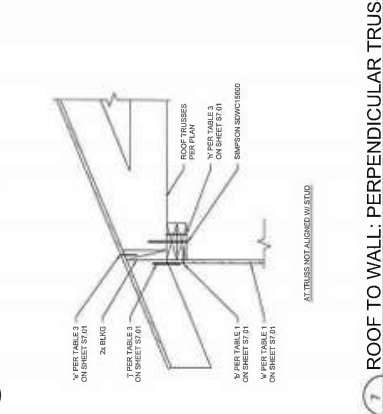
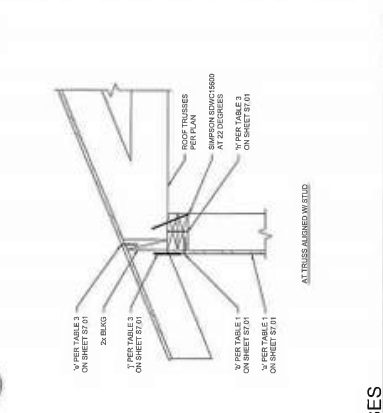
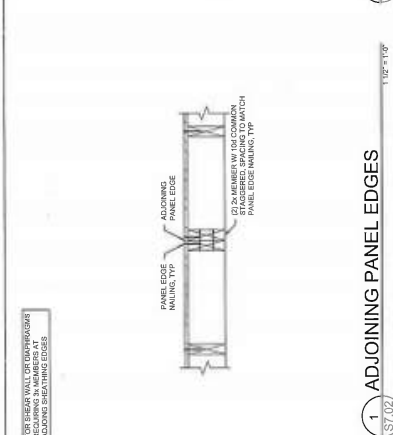
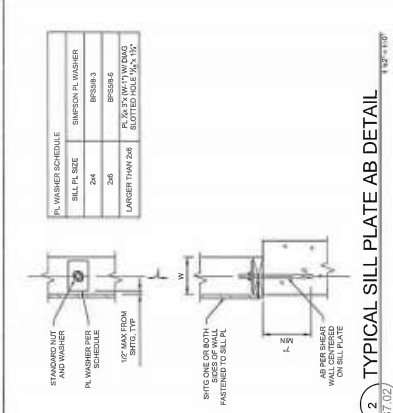
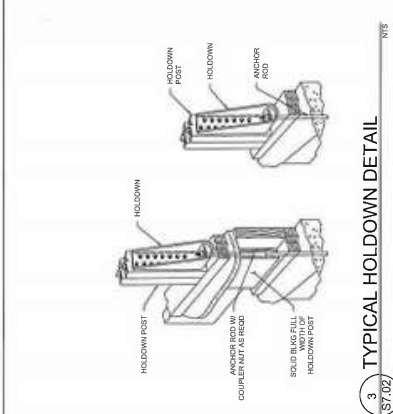
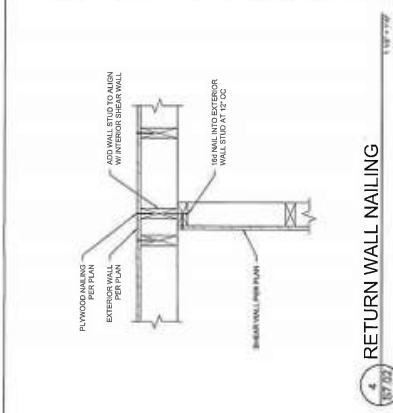


EXAMPLE SHEAR WALL ELEVATION

NOTES

- AT LOCATIONS WHERE "BLOCKED" PROVIDE 2x BLOCK AT UNSUPPORTED PANEL EDGES
- D1. MINIMUM NAIL SPACING SHALL BE 6" OC AT INTERMEDIATE FRAMING MEMBERS.
 - D2. OTHERWISE FIELD NAILS TO BE SPACED AT 12" OC.
 - D3. NAIL SPACING SHALL BE 12" OC AT TOP AND BOTTOM EDGES.
 - D4. NAILS SHALL BE DRIVEN WITH THE HEAD OF THE NAIL FLUSH WITH THE SURFACE OF THE SHEATING.





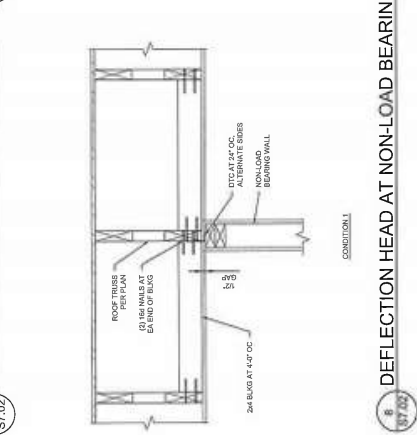
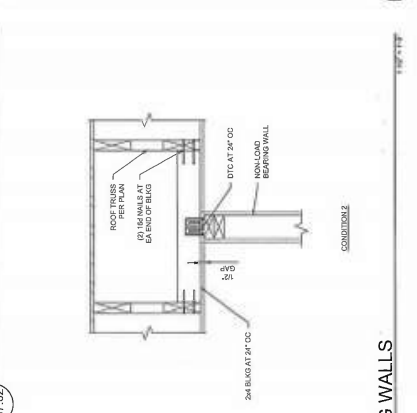
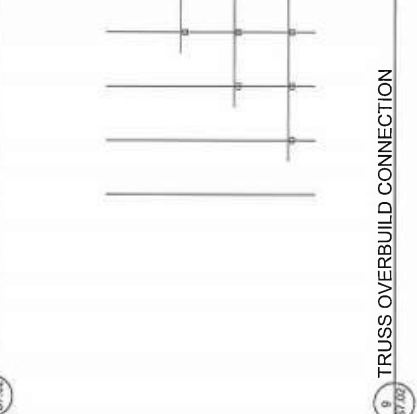
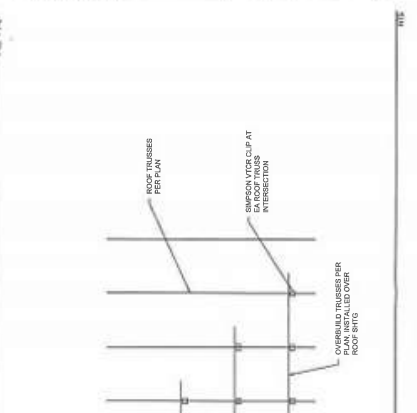
1 ADJOINING PANEL EDGES

2 TYPICAL SILL PLATE AB DETAIL

3 TYPICAL HOLDOWN DETAIL

4 RETURN WALL NAILING

5 ROOF TO WALL: PARALLEL TRUSSES



6 GABLE END BRACING

7 ROOF TO WALL: PERPENDICULAR TRUSSES

8 TRUSS OVERBUILD CONNECTION

9 DEFLECTION HEAD AT NON-LOAD BEARING WALLS

10 SHEAR WALL DETAILS

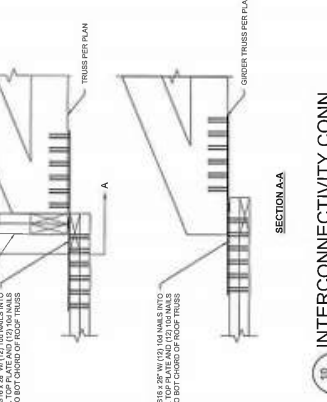
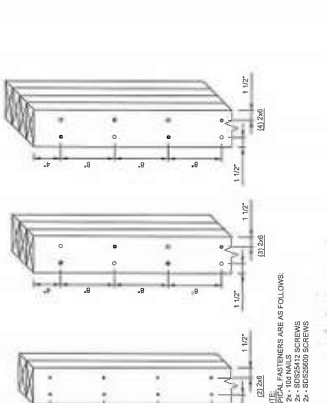
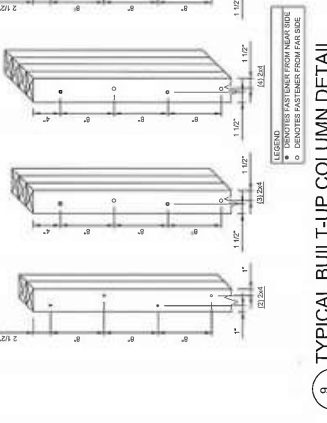
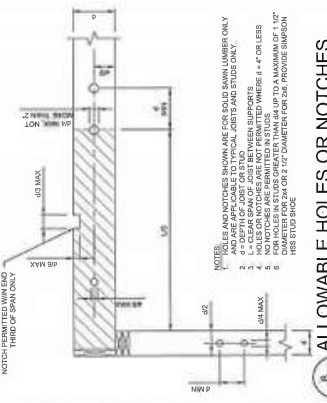
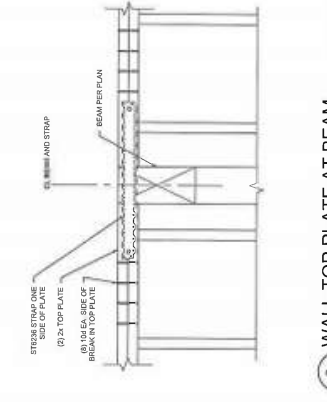
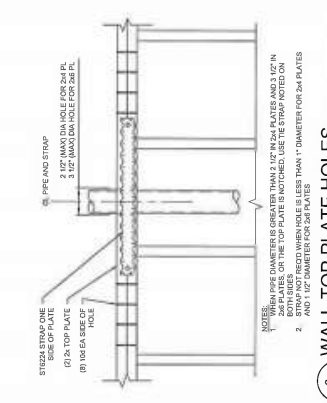
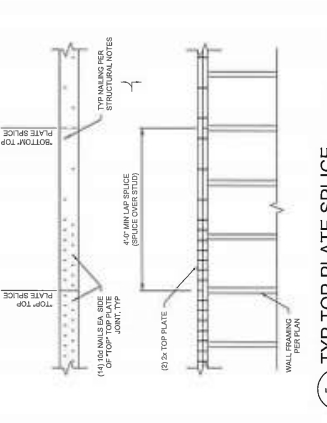
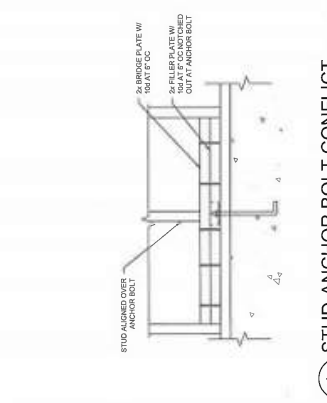
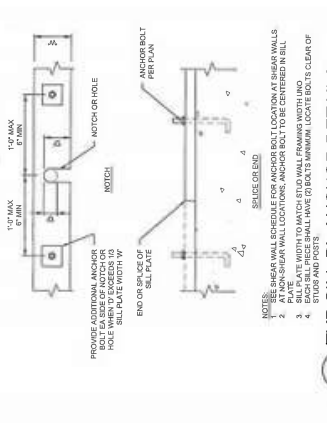
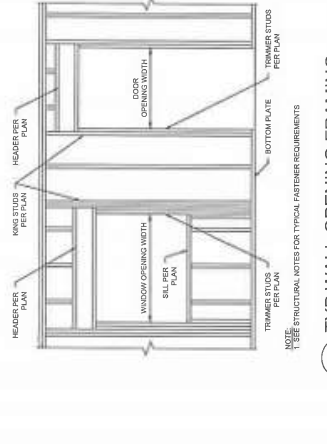
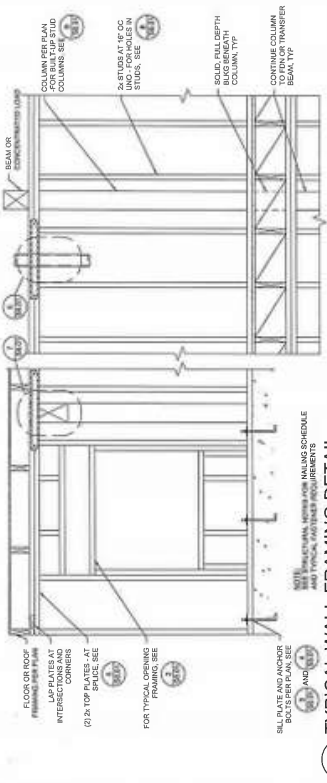


EXHIBIT F
Landscape Plan

REV/SIONS	DATE	DESCRIPTION
1	10/23/21	PLANNING ISSUES



WEBSTER RIDGE
ADDITION
Gladstone, Oregon

APARTMENT COMPLEX
ADDITIONAL PARKING,
LANDSCAPING &
PLAY GROUND

CLIENT NO.
S.9

SCALE: 1" = 20'-0"

DRAWN BY: R.L.H.

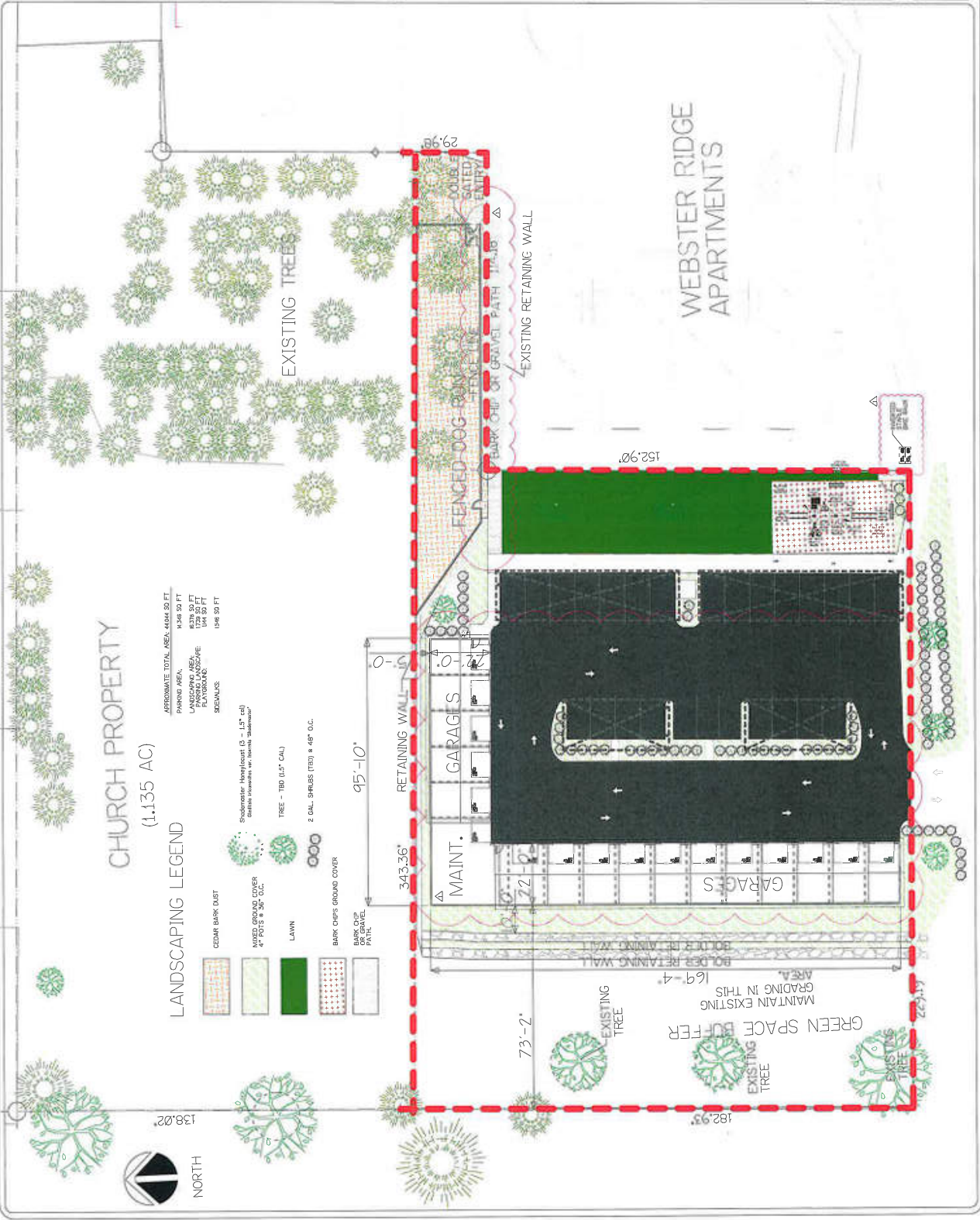


EXHIBIT G
Stormwater Report

Webster Ridge Parking Expansion

Stormwater Report and Calculations

18121 Webster Road
Gladstone, OR

Revised April 04, 2021

Revised October 28, 2021

September 30, 2020

The information contained in this report was prepared by
and under direct supervision of the undersigned:



EXPIRES: 6/30/2023

Craig Harris, PE
AAI Engineering
4875 S.W. Griffith Drive
Suite 100
Beaverton, Oregon 97005
PH 503.620.3030 FX 503.620.5539
criagh@aaieng.com
AAI Project Number: A20138.10

Webster Ridge Parking Expansion

TABLE OF CONTENTS

- I. Project Overview
- II. Infiltration
- III. Water Quality Design
- IV. Water Quantity Design
- V. HydroCAD Calculations
- VI. Conveyance Pipe Design and Diagram
- VII. Downstream Analysis
- VIII. Details
- IX. Soils Data
- X. O&M

Webster Ridge Parking Expansion

I. Project Overview

Webster Ridge Parking Expansion

Project Overview

The proposed Webster Ridge Parking Expansion project is located at 18121 Webster Road in Gladstone, Oregon. The current site is mostly grassy area with a few scattered trees. The proposed project will disturb ~36,790SF and includes two garage buildings, covered parking stalls with maneuvering aisles. Currently, there are no water quantity or quality facilities on this site. The proposed project has approximately 22,800SF of impervious area that will be collected for water quality and quantity. Water quality is proposed to be provided by using a Filterra treatment unit. Water quantity is proposed to be provided using underground detention and flow control. According to the "Web Soil Survey", the soil is classified as a hydrologic group 'C'. The project is designed as outlined in the City of Gladstone Stormwater Treatment and Detention Standards.

Conveyance pipe sizing was performed using the 25-year, 24-hour design storm event (3.90in/hr). Conveyance pipe sizing was performed using Manning's Equation ($Q = \frac{0.463D^{8/3}S^{1/2}}{n}$), where D is pipe diameter in feet, S is pipe slope in feet/feet, and n is the Manning's Coefficient and is based on the pipe material. A value of 0.009 (PVC) was used for this project.

Please see the attached calculations showing that the stormwater system meets the said requirement.

Webster Ridge Parking Expansion

II. Infiltration

Webster Ridge Parking Expansion

Infiltration

Per City of Gladstone, the site is required to infiltrate all runoff from storm events up to one-half inch of rainfall in 24 hours unless infiltration rates prove otherwise. An on-site geotechnical investigation was performed for the construction of the apartment complex in 2015, and was recommended that due to the shallow depths to hard rock and the high risk of biological and sediment clogging infiltration should not be considered. Therefore, no infiltration will be provided for this project.

The Geotechnical Report for this project has been included in Section IX of this report.

Webster Ridge Parking Expansion

III. Water Quality Design

Webster Ridge Parking Expansion

Water Quality Design

The runoff from the proposed improvements will be collected and conveyed to a Filterra Bioretention System for treatment. This system was sized using the Washington Ecology General Use Level Designation for Basic Treatment for Contech Filterra systems. According to this document, the Filterra treatment media is approved for an infiltration rate of 175 in/hr. The required treatment capacity is the peak flow from the developed site in a 1" rain event, 0.18 cfs. After unit conversion, $0.18 \text{ cfs} / 0.004 \text{ ft/s} = 44.4$ square feet of treatment area. Please see attached HydroCAD calculations (Section V) and details (Section VIII) to verify adequacy of water quality design.

WQ - Q (cfs)	Infiltration Rate (in/hr)	Infiltration Rate (ft/s)	Required Infiltration Area (SF)
0.18	175	0.004	44.4

Webster Ridge Parking Expansion

IV. Water Quantity Design

Webster Ridge Parking Expansion

Water Quantity Design

The proposed flow control system has been designed per the City of Gladstone Standards using Santa Barbara Urban Hydrograph methodology in the HydroCAD software. The proposed flow control system has been designed to capture runoff so that the 2-yr, 24-hr post-developed runoff rate is reduced below the 24-hr pre-developed discharge rate and to match the pre-developed 10-yr and 25-yr storm flows for the corresponding post construction storm events. The 2-yr design flow results from a 1" orifice at the invert elevation of the detention pipe. While it does not reduce the flow to ½ the pre-developed 2-year event, it is not feasible by orifice flow control to reduce it further. Storm events above the 25-yr storm event are designed to pass through the top of the standpipes and be conveyed to the existing public storm conveyance system located in Webster Road.

Storm Event	Pre-Developed Q (cfs)	Total Post-Developed Q (cfs)	Meet Requirements
2-yr	0.06	0.05	Y
10-yr	0.14	0.14	Y
25-yr	0.20	0.20	Y

See HydroCAD calculations for design verification.

Webster Ridge Parking Expansion

V. HydroCAD Calculations



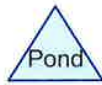
Predeveloped



Post Developed



Detention



Routing Diagram for Webster Ridge Parking Expansion
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Webster Ridge Parking Expansion

Type IA 24-hr 2 Y Rainfall=2.60"

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Page 2

Summary for Subcatchment 1S: Predeveloped

Runoff = 0.06 cfs @ 8.30 hrs, Volume= 0.038 af, Depth= 0.67"

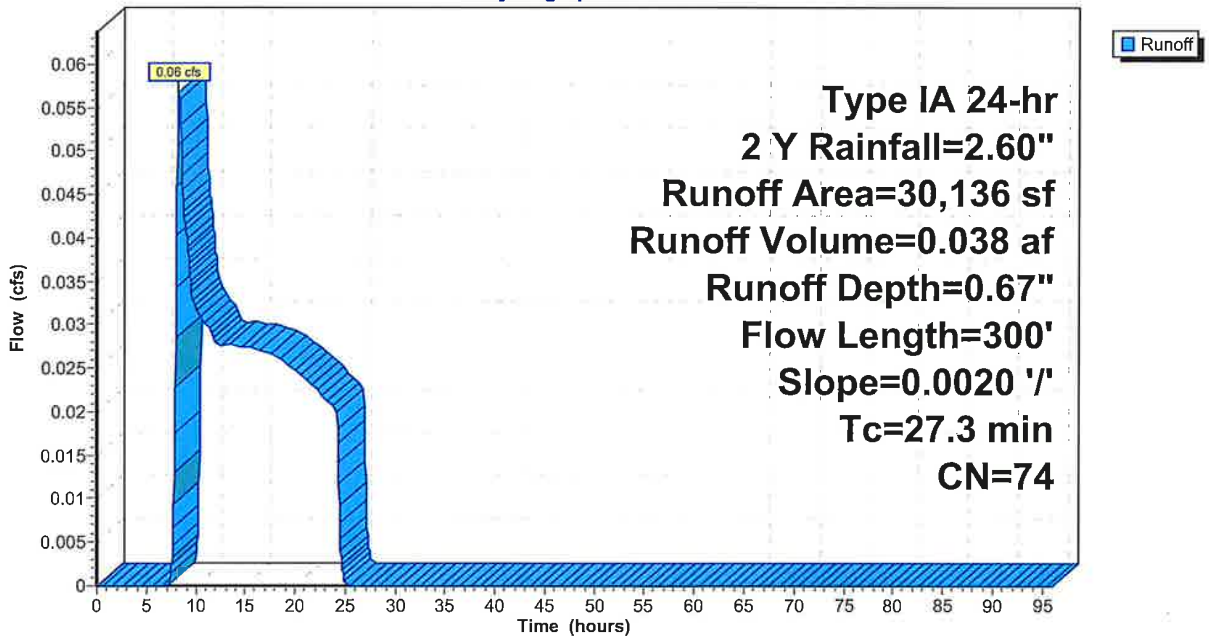
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type IA 24-hr 2 Y Rainfall=2.60"

Area (sf)	CN	Description
30,136	74	>75% Grass cover, Good, HSG C
30,136		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.3	300	0.0020	0.18		Sheet Flow, Fallow n= 0.050 P2= 2.60"

Subcatchment 1S: Predeveloped

Hydrograph



Webster Ridge Parking Expansion

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Type IA 24-hr 2 Y Rainfall=2.60"

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Page 3

Summary for Subcatchment 2S: Post Developed

Runoff = 0.32 cfs @ 7.91 hrs, Volume= 0.103 af, Depth= 1.79"

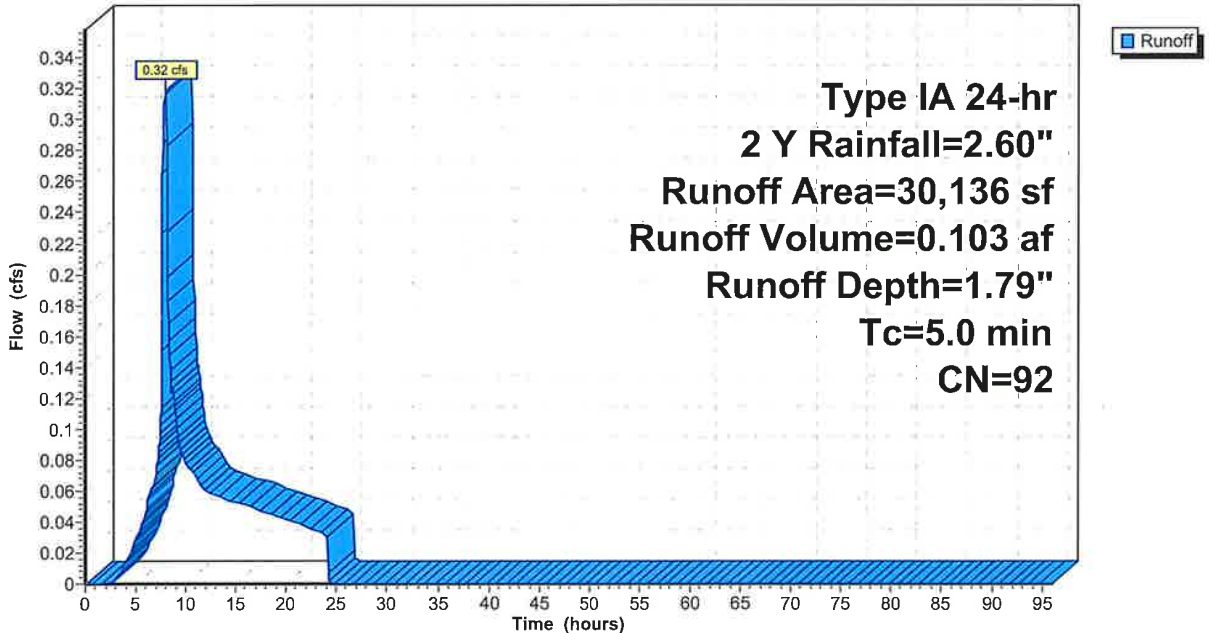
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
 Type IA 24-hr 2 Y Rainfall=2.60"

Area (sf)	CN	Description
4,516	98	Roofs, HSG C
18,284	98	Paved parking, HSG A
7,336	74	>75% Grass cover, Good, HSG C
30,136	92	Weighted Average
7,336		24.34% Pervious Area
22,800		75.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Developed

Hydrograph



Webster Ridge Parking Expansion

Type IA 24-hr 2 Y Rainfall=2.60"

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Summary for Pond 2P: Detention

Inflow Area = 0.692 ac, 75.66% Impervious, Inflow Depth = 1.79" for 2 Y event
 Inflow = 0.32 cfs @ 7.91 hrs, Volume= 0.103 af
 Outflow = 0.04 cfs @ 18.65 hrs, Volume= 0.103 af, Atten= 86%, Lag= 644.3 min
 Primary = 0.04 cfs @ 18.65 hrs, Volume= 0.103 af

Routing by Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
 Peak Elev= 221.93' @ 18.65 hrs Surf.Area= 661 sf Storage= 1,827 cf

Plug-Flow detention time= 526.8 min calculated for 0.103 af (100% of inflow)
 Center-of-Mass det. time= 527.0 min (1,270.7 - 743.7)

Volume	Invert	Avail.Storage	Storage Description
#1	219.01'	2,337 cf	48.0" Round Pipe Storage L= 186.0'

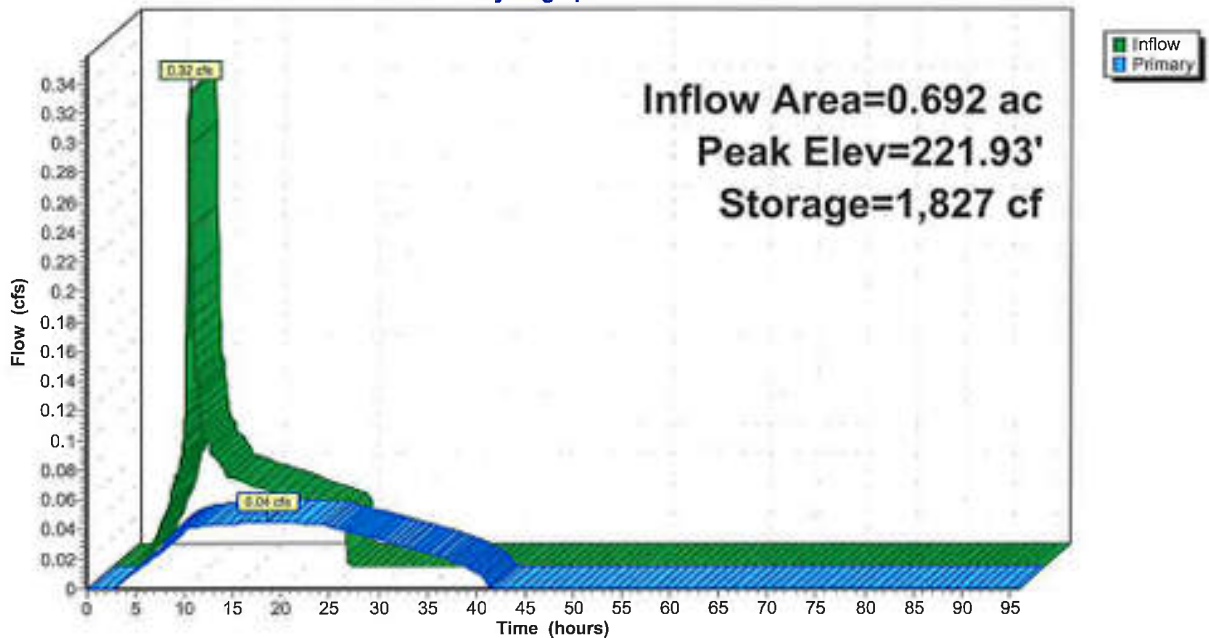
Device	Routing	Invert	Outlet Devices
#1	Device 4	217.01'	1.0" Horiz. 2yr C= 0.600 Limited to weir flow at low heads
#2	Device 4	222.15'	2.7" Vert. Orifice/Grate C= 0.600
#3	Device 4	222.90'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Primary	219.01'	10.0" Round Culvert L= 460.0' Ke= 0.400 Inlet / Outlet Invert= 219.01' / 216.71' S= 0.0050 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.55 sf

Primary OutFlow Max=0.04 cfs @ 18.65 hrs HW=221.93' (Free Discharge)

- 4=Culvert (Passes 0.04 cfs of 2.61 cfs potential flow)
- 1=2yr (Orifice Controls 0.04 cfs @ 8.23 fps)
- 2=Orifice/Grate (Controls 0.00 cfs)
- 3=Orifice/Grate (Controls 0.00 cfs)

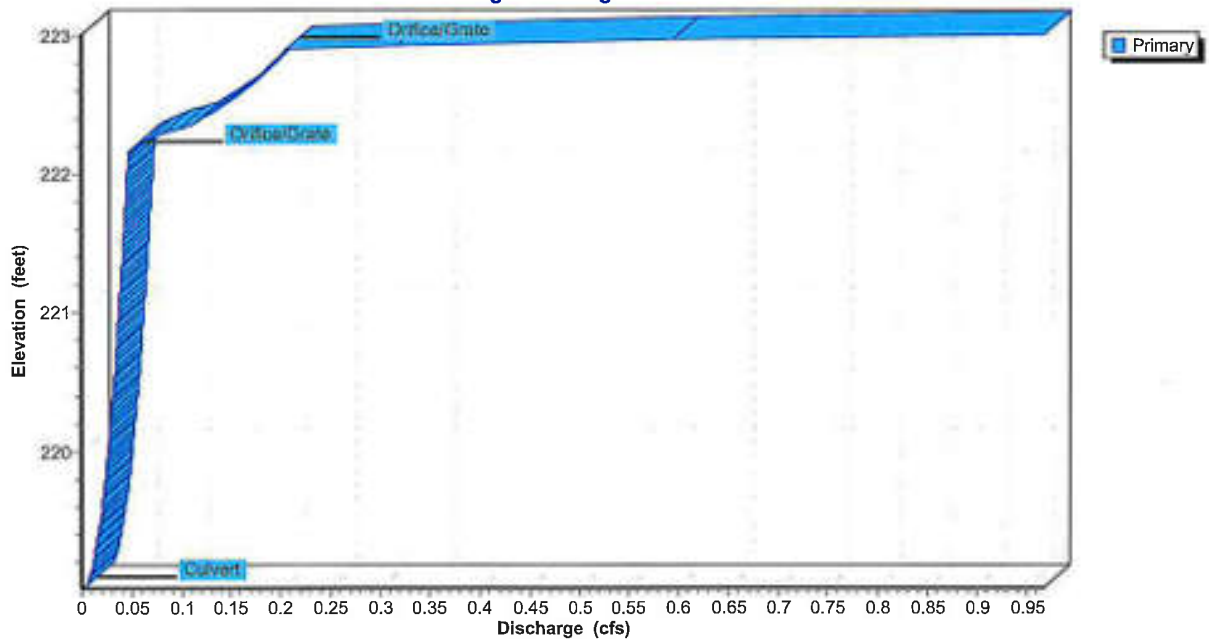
Pond 2P: Detention

Hydrograph



Pond 2P: Detention

Stage-Discharge



Webster Ridge Parking Expansion

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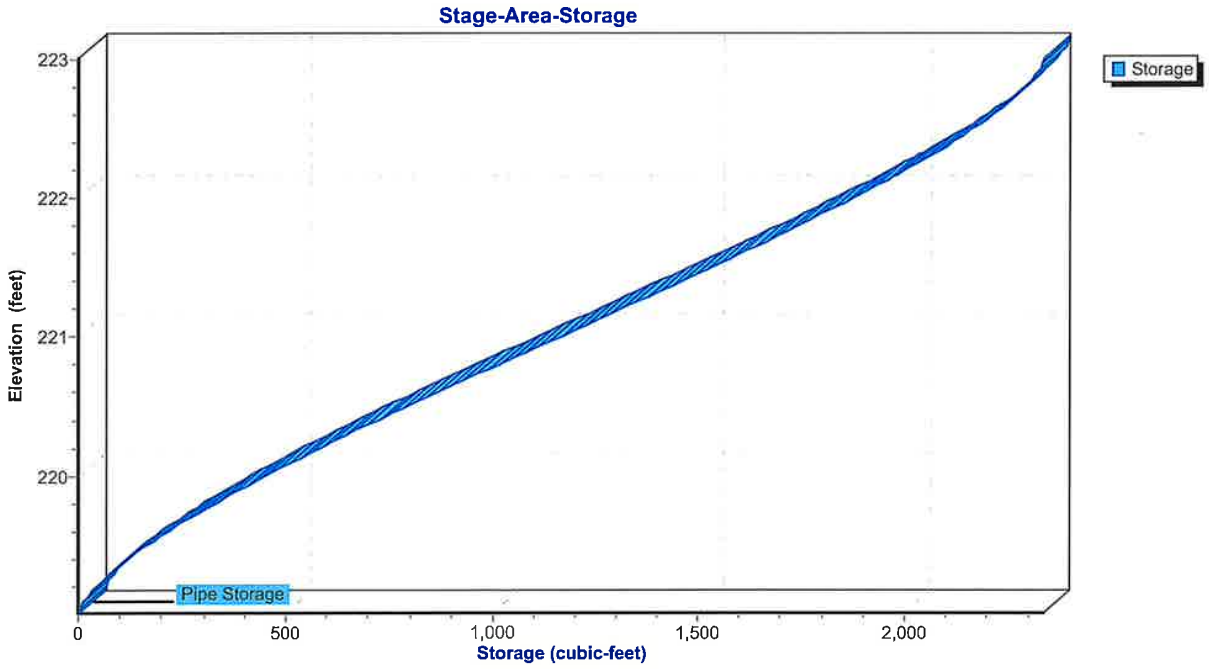
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Type IA 24-hr 2 Y Rainfall=2.60"

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Pond 2P: Detention



Webster Ridge Parking Expansion

Type IA 24-hr 2 Y Rainfall=2.60"

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Stage-Discharge for Pond 2P: Detention

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
219.01	0.00	220.05	0.03	221.09	0.04	222.13	0.05
219.03	0.00	220.07	0.03	221.11	0.04	222.15	0.05
219.05	0.00	220.09	0.03	221.13	0.04	222.17	0.05
219.07	0.01	220.11	0.03	221.15	0.04	222.19	0.05
219.09	0.01	220.13	0.03	221.17	0.04	222.21	0.05
219.11	0.01	220.15	0.03	221.19	0.04	222.23	0.06
219.13	0.01	220.17	0.03	221.21	0.04	222.25	0.07
219.15	0.01	220.19	0.03	221.23	0.04	222.27	0.07
219.17	0.01	220.21	0.03	221.25	0.04	222.29	0.08
219.19	0.01	220.23	0.03	221.27	0.04	222.31	0.09
219.21	0.01	220.25	0.03	221.29	0.04	222.33	0.10
219.23	0.01	220.27	0.03	221.31	0.04	222.35	0.10
219.25	0.01	220.29	0.03	221.33	0.04	222.37	0.11
219.27	0.01	220.31	0.03	221.35	0.04	222.39	0.12
219.29	0.01	220.33	0.03	221.37	0.04	222.41	0.12
219.31	0.01	220.35	0.03	221.39	0.04	222.43	0.13
219.33	0.01	220.37	0.03	221.41	0.04	222.45	0.13
219.35	0.02	220.39	0.03	221.43	0.04	222.47	0.14
219.37	0.02	220.41	0.03	221.45	0.04	222.49	0.14
219.39	0.02	220.43	0.03	221.47	0.04	222.51	0.14
219.41	0.02	220.45	0.03	221.49	0.04	222.53	0.15
219.43	0.02	220.47	0.03	221.51	0.04	222.55	0.15
219.45	0.02	220.49	0.03	221.53	0.04	222.57	0.16
219.47	0.02	220.51	0.03	221.55	0.04	222.59	0.16
219.49	0.02	220.53	0.03	221.57	0.04	222.61	0.16
219.51	0.02	220.55	0.03	221.59	0.04	222.63	0.17
219.53	0.02	220.57	0.03	221.61	0.04	222.65	0.17
219.55	0.02	220.59	0.03	221.63	0.04	222.67	0.17
219.57	0.02	220.61	0.03	221.65	0.04	222.69	0.18
219.59	0.02	220.63	0.03	221.67	0.04	222.71	0.18
219.61	0.02	220.65	0.03	221.69	0.04	222.73	0.18
219.63	0.02	220.67	0.03	221.71	0.04	222.75	0.18
219.65	0.02	220.69	0.03	221.73	0.04	222.77	0.19
219.67	0.02	220.71	0.03	221.75	0.04	222.79	0.19
219.69	0.02	220.73	0.03	221.77	0.04	222.81	0.19
219.71	0.02	220.75	0.03	221.79	0.04	222.83	0.20
219.73	0.02	220.77	0.03	221.81	0.04	222.85	0.20
219.75	0.02	220.79	0.04	221.83	0.04	222.87	0.20
219.77	0.02	220.81	0.04	221.85	0.04	222.89	0.20
219.79	0.02	220.83	0.04	221.87	0.04	222.91	0.23
219.81	0.02	220.85	0.04	221.89	0.04	222.93	0.32
219.83	0.02	220.87	0.04	221.91	0.04	222.95	0.44
219.85	0.02	220.89	0.04	221.93	0.04	222.97	0.59
219.87	0.02	220.91	0.04	221.95	0.05	222.99	0.77
219.89	0.02	220.93	0.04	221.97	0.05	223.01	0.97
219.91	0.02	220.95	0.04	221.99	0.05		
219.93	0.03	220.97	0.04	222.01	0.05		
219.95	0.03	220.99	0.04	222.03	0.05		
219.97	0.03	221.01	0.04	222.05	0.05		
219.99	0.03	221.03	0.04	222.07	0.05		
220.01	0.03	221.05	0.04	222.09	0.05		
220.03	0.03	221.07	0.04	222.11	0.05		

Webster Ridge Parking Expansion

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Type IA 24-hr 2 Y Rainfall=2.60"

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Stage-Area-Storage for Pond 2P: Detention

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
219.01	0	221.61	1,608
219.06	6	221.66	1,644
219.11	16	221.71	1,679
219.16	28	221.76	1,713
219.21	44	221.81	1,748
219.26	61	221.86	1,781
219.31	80	221.91	1,815
219.36	100	221.96	1,848
219.41	122	222.01	1,880
219.46	145	222.06	1,912
219.51	169	222.11	1,944
219.56	194	222.16	1,974
219.61	220	222.21	2,005
219.66	247	222.26	2,034
219.71	275	222.31	2,063
219.76	303	222.36	2,090
219.81	333	222.41	2,117
219.86	363	222.46	2,144
219.91	394	222.51	2,169
219.96	425	222.56	2,193
220.01	457	222.61	2,216
220.06	489	222.66	2,237
220.11	522	222.71	2,258
220.16	556	222.76	2,277
220.21	590	222.81	2,294
220.26	624	222.86	2,309
220.31	659	222.91	2,322
220.36	694	222.96	2,332
220.41	729	223.01	2,337
220.46	765		
220.51	801		
220.56	837		
220.61	873		
220.66	910		
220.71	946		
220.76	983		
220.81	1,020		
220.86	1,057		
220.91	1,094		
220.96	1,131		
221.01	1,169		
221.06	1,206		
221.11	1,243		
221.16	1,280		
221.21	1,317		
221.26	1,354		
221.31	1,391		
221.36	1,428		
221.41	1,464		
221.46	1,501		
221.51	1,537		
221.56	1,573		

Webster Ridge Parking Expansion

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Type IA 24-hr 10 Y Rainfall=3.50"

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Summary for Subcatchment 1S: Predeveloped

Runoff = 0.14 cfs @ 8.24 hrs, Volume= 0.071 af, Depth= 1.24"

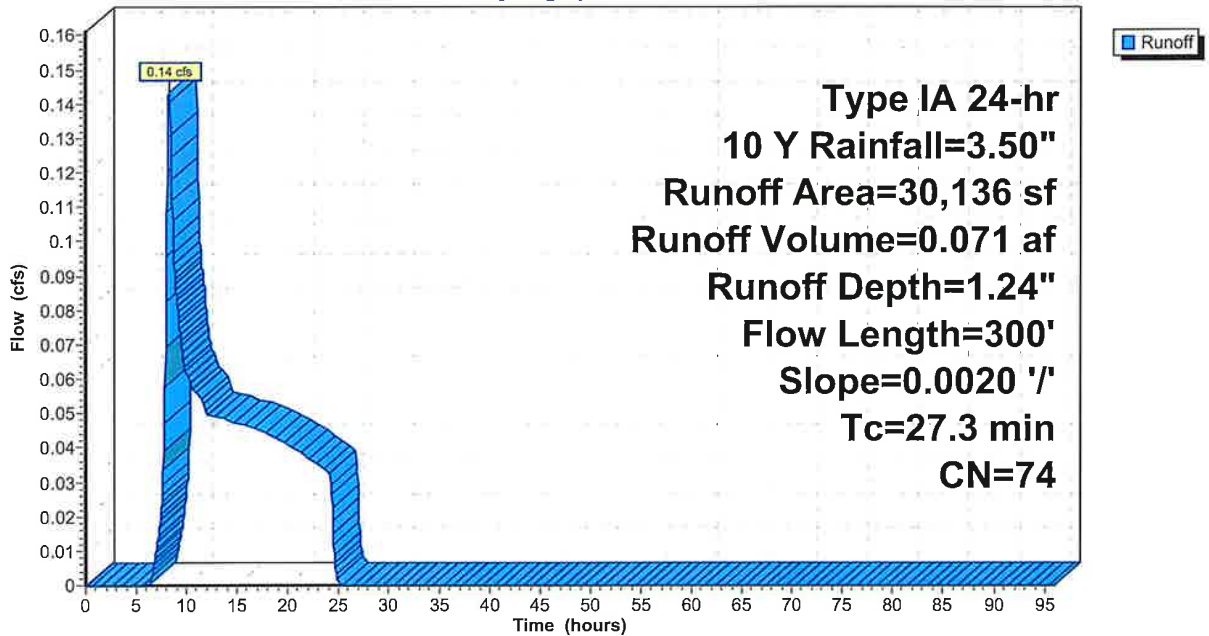
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type IA 24-hr 10 Y Rainfall=3.50"

Area (sf)	CN	Description
30,136	74	>75% Grass cover, Good, HSG C
30,136		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.3	300	0.0020	0.18		Sheet Flow, Fallow n= 0.050 P2= 2.60"

Subcatchment 1S: Predeveloped

Hydrograph



Webster Ridge Parking Expansion

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Type IA 24-hr 10 Y Rainfall=3.50"

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Summary for Subcatchment 2S: Post Developed

Runoff = 0.48 cfs @ 7.89 hrs, Volume= 0.152 af, Depth= 2.64"

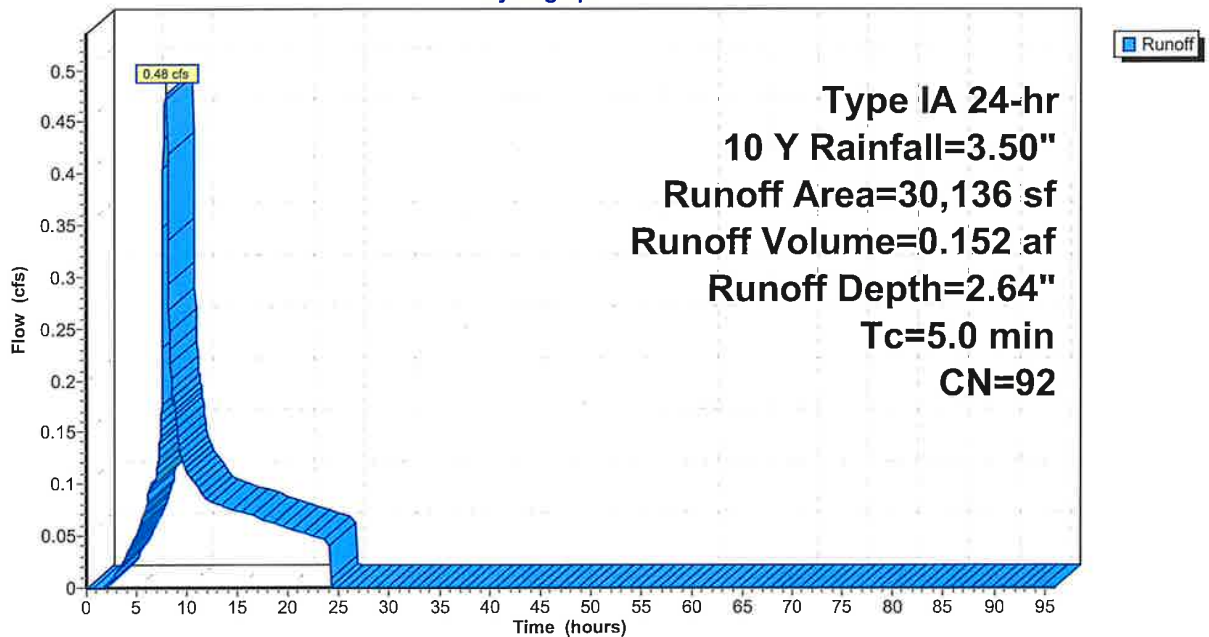
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type IA 24-hr 10 Y Rainfall=3.50"

Area (sf)	CN	Description
4,516	98	Roofs, HSG C
18,284	98	Paved parking, HSG A
7,336	74	>75% Grass cover, Good, HSG C
30,136	92	Weighted Average
7,336		24.34% Pervious Area
22,800		75.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Developed

Hydrograph



Webster Ridge Parking Expansion

Type IA 24-hr 10 Y Rainfall=3.50"

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Summary for Pond 2P: Detention

Inflow Area = 0.692 ac, 75.66% Impervious, Inflow Depth = 2.64" for 10 Y event
Inflow = 0.48 cfs @ 7.89 hrs, Volume= 0.152 af
Outflow = 0.12 cfs @ 9.72 hrs, Volume= 0.152 af, Atten= 75%, Lag= 109.5 min
Primary = 0.12 cfs @ 9.72 hrs, Volume= 0.152 af

Routing by Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Peak Elev= 222.40' @ 9.72 hrs Surf.Area= 533 sf Storage= 2,115 cf

Plug-Flow detention time= 443.9 min calculated for 0.152 af (100% of inflow)
Center-of-Mass det. time= 443.8 min (1,167.4 - 723.6)

Volume	Invert	Avail.Storage	Storage Description
#1	219.01'	2,337 cf	48.0" Round Pipe Storage L= 186.0'

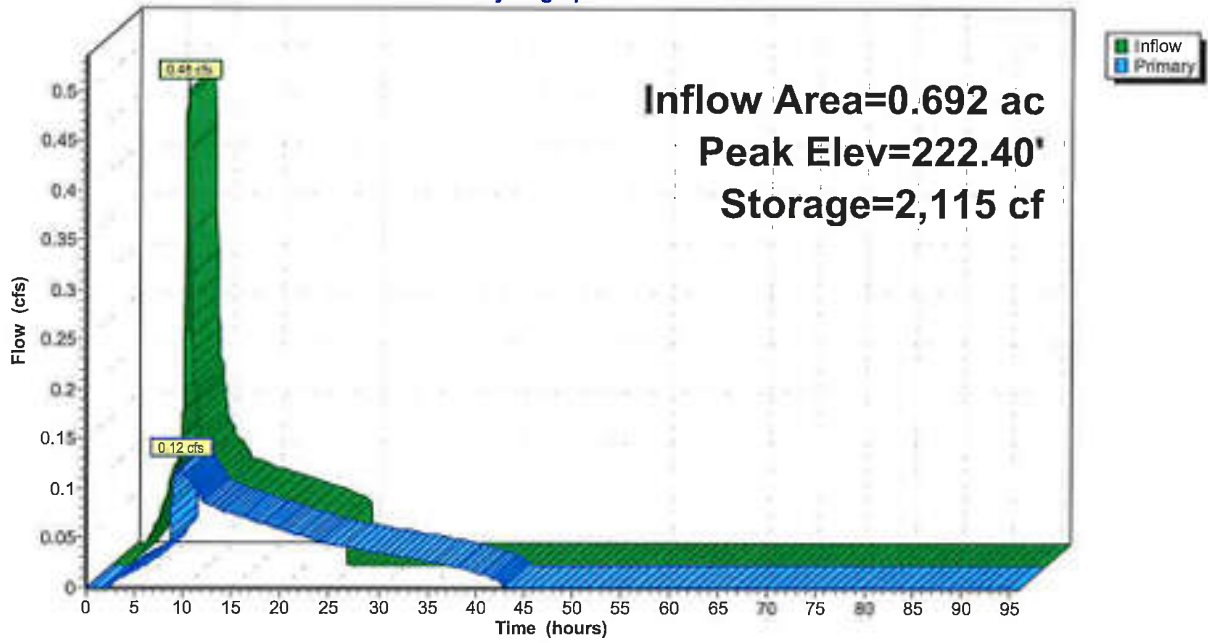
Device	Routing	Invert	Outlet Devices
#1	Device 4	217.01'	1.0" Horiz. 2yr C= 0.600 Limited to weir flow at low heads
#2	Device 4	222.15'	2.7" Vert. Orifice/Grate C= 0.600
#3	Device 4	222.90'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Primary	219.01'	10.0" Round Culvert L= 460.0' Ke= 0.400 Inlet / Outlet Invert= 219.01' / 216.71' S= 0.0050 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.55 sf

Primary OutFlow Max=0.12 cfs @ 9.72 hrs HW=222.40' (Free Discharge)

- 4=Culvert (Passes 0.12 cfs of 2.75 cfs potential flow)
- 1=2yr (Orifice Controls 0.05 cfs @ 8.87 fps)
- 2=Orifice/Grate (Orifice Controls 0.07 cfs @ 1.81 fps)
- 3=Orifice/Grate (Controls 0.00 cfs)

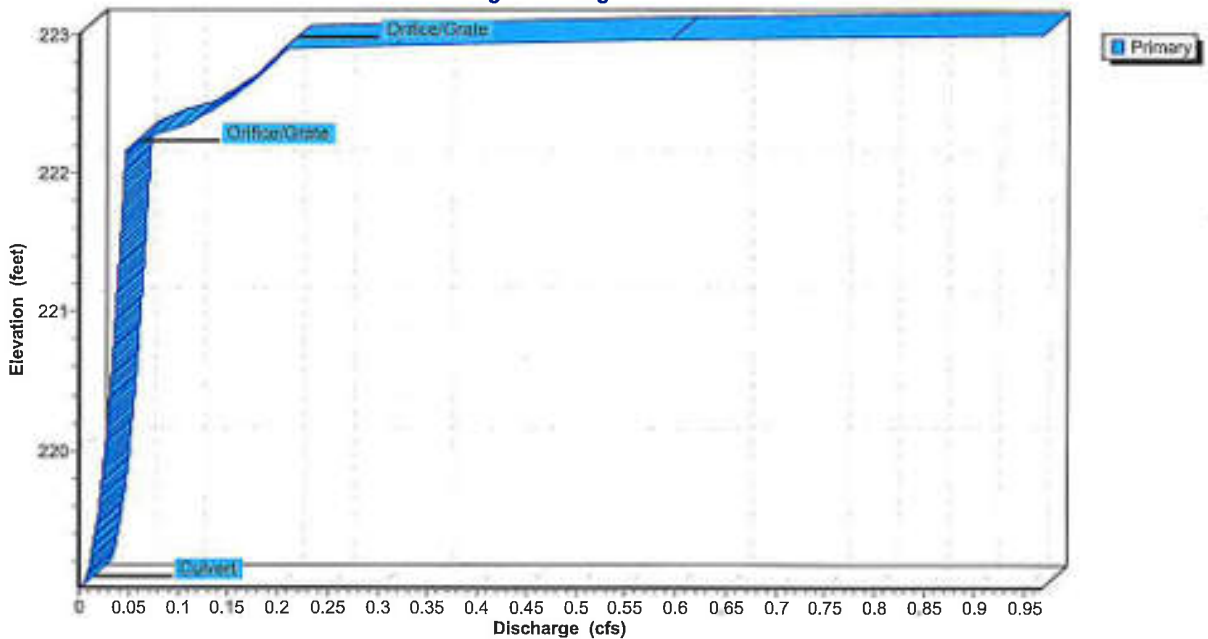
Pond 2P: Detention

Hydrograph



Pond 2P: Detention

Stage-Discharge



Webster Ridge Parking Expansion

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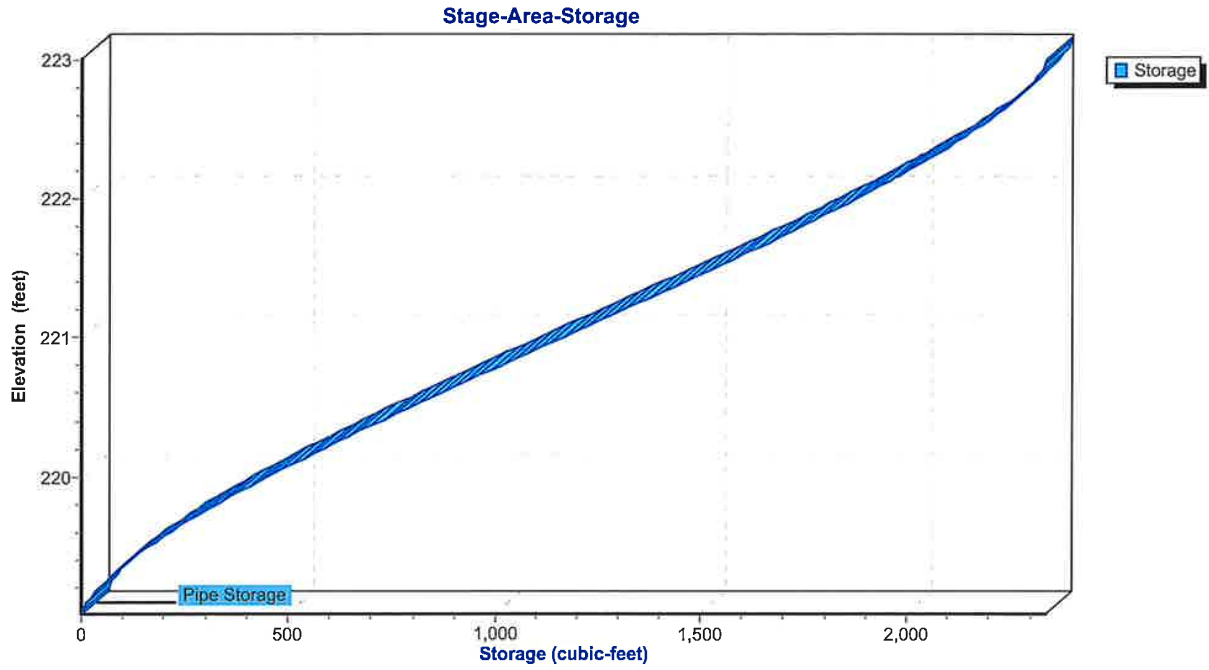
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Type IA 24-hr 10 Y Rainfall=3.50"

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Pond 2P: Detention



Webster Ridge Parking Expansion

Type IA 24-hr 10 Y Rainfall=3.50"

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Stage-Discharge for Pond 2P: Detention

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
219.01	0.00	220.05	0.03	221.09	0.04	222.13	0.05
219.03	0.00	220.07	0.03	221.11	0.04	222.15	0.05
219.05	0.00	220.09	0.03	221.13	0.04	222.17	0.05
219.07	0.01	220.11	0.03	221.15	0.04	222.19	0.05
219.09	0.01	220.13	0.03	221.17	0.04	222.21	0.05
219.11	0.01	220.15	0.03	221.19	0.04	222.23	0.06
219.13	0.01	220.17	0.03	221.21	0.04	222.25	0.07
219.15	0.01	220.19	0.03	221.23	0.04	222.27	0.07
219.17	0.01	220.21	0.03	221.25	0.04	222.29	0.08
219.19	0.01	220.23	0.03	221.27	0.04	222.31	0.09
219.21	0.01	220.25	0.03	221.29	0.04	222.33	0.10
219.23	0.01	220.27	0.03	221.31	0.04	222.35	0.10
219.25	0.01	220.29	0.03	221.33	0.04	222.37	0.11
219.27	0.01	220.31	0.03	221.35	0.04	222.39	0.12
219.29	0.01	220.33	0.03	221.37	0.04	222.41	0.12
219.31	0.01	220.35	0.03	221.39	0.04	222.43	0.13
219.33	0.01	220.37	0.03	221.41	0.04	222.45	0.13
219.35	0.02	220.39	0.03	221.43	0.04	222.47	0.14
219.37	0.02	220.41	0.03	221.45	0.04	222.49	0.14
219.39	0.02	220.43	0.03	221.47	0.04	222.51	0.14
219.41	0.02	220.45	0.03	221.49	0.04	222.53	0.15
219.43	0.02	220.47	0.03	221.51	0.04	222.55	0.15
219.45	0.02	220.49	0.03	221.53	0.04	222.57	0.16
219.47	0.02	220.51	0.03	221.55	0.04	222.59	0.16
219.49	0.02	220.53	0.03	221.57	0.04	222.61	0.16
219.51	0.02	220.55	0.03	221.59	0.04	222.63	0.17
219.53	0.02	220.57	0.03	221.61	0.04	222.65	0.17
219.55	0.02	220.59	0.03	221.63	0.04	222.67	0.17
219.57	0.02	220.61	0.03	221.65	0.04	222.69	0.18
219.59	0.02	220.63	0.03	221.67	0.04	222.71	0.18
219.61	0.02	220.65	0.03	221.69	0.04	222.73	0.18
219.63	0.02	220.67	0.03	221.71	0.04	222.75	0.18
219.65	0.02	220.69	0.03	221.73	0.04	222.77	0.19
219.67	0.02	220.71	0.03	221.75	0.04	222.79	0.19
219.69	0.02	220.73	0.03	221.77	0.04	222.81	0.19
219.71	0.02	220.75	0.03	221.79	0.04	222.83	0.20
219.73	0.02	220.77	0.03	221.81	0.04	222.85	0.20
219.75	0.02	220.79	0.04	221.83	0.04	222.87	0.20
219.77	0.02	220.81	0.04	221.85	0.04	222.89	0.20
219.79	0.02	220.83	0.04	221.87	0.04	222.91	0.23
219.81	0.02	220.85	0.04	221.89	0.04	222.93	0.32
219.83	0.02	220.87	0.04	221.91	0.04	222.95	0.44
219.85	0.02	220.89	0.04	221.93	0.04	222.97	0.59
219.87	0.02	220.91	0.04	221.95	0.05	222.99	0.77
219.89	0.02	220.93	0.04	221.97	0.05	223.01	0.97
219.91	0.02	220.95	0.04	221.99	0.05		
219.93	0.03	220.97	0.04	222.01	0.05		
219.95	0.03	220.99	0.04	222.03	0.05		
219.97	0.03	221.01	0.04	222.05	0.05		
219.99	0.03	221.03	0.04	222.07	0.05		
220.01	0.03	221.05	0.04	222.09	0.05		
220.03	0.03	221.07	0.04	222.11	0.05		

Webster Ridge Parking Expansion

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Type IA 24-hr 10 Y Rainfall=3.50"

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Stage-Area-Storage for Pond 2P: Detention

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
219.01	0	221.61	1,608
219.06	6	221.66	1,644
219.11	16	221.71	1,679
219.16	28	221.76	1,713
219.21	44	221.81	1,748
219.26	61	221.86	1,781
219.31	80	221.91	1,815
219.36	100	221.96	1,848
219.41	122	222.01	1,880
219.46	145	222.06	1,912
219.51	169	222.11	1,944
219.56	194	222.16	1,974
219.61	220	222.21	2,005
219.66	247	222.26	2,034
219.71	275	222.31	2,063
219.76	303	222.36	2,090
219.81	333	222.41	2,117
219.86	363	222.46	2,144
219.91	394	222.51	2,169
219.96	425	222.56	2,193
220.01	457	222.61	2,216
220.06	489	222.66	2,237
220.11	522	222.71	2,258
220.16	556	222.76	2,277
220.21	590	222.81	2,294
220.26	624	222.86	2,309
220.31	659	222.91	2,322
220.36	694	222.96	2,332
220.41	729	223.01	2,337
220.46	765		
220.51	801		
220.56	837		
220.61	873		
220.66	910		
220.71	946		
220.76	983		
220.81	1,020		
220.86	1,057		
220.91	1,094		
220.96	1,131		
221.01	1,169		
221.06	1,206		
221.11	1,243		
221.16	1,280		
221.21	1,317		
221.26	1,354		
221.31	1,391		
221.36	1,428		
221.41	1,464		
221.46	1,501		
221.51	1,537		
221.56	1,573		

Webster Ridge Parking Expansion

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Type IA 24-hr 25 Y Rainfall=4.00"

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Summary for Subcatchment 1S: Predeveloped

Runoff = 0.20 cfs @ 8.23 hrs, Volume= 0.092 af, Depth= 1.60"

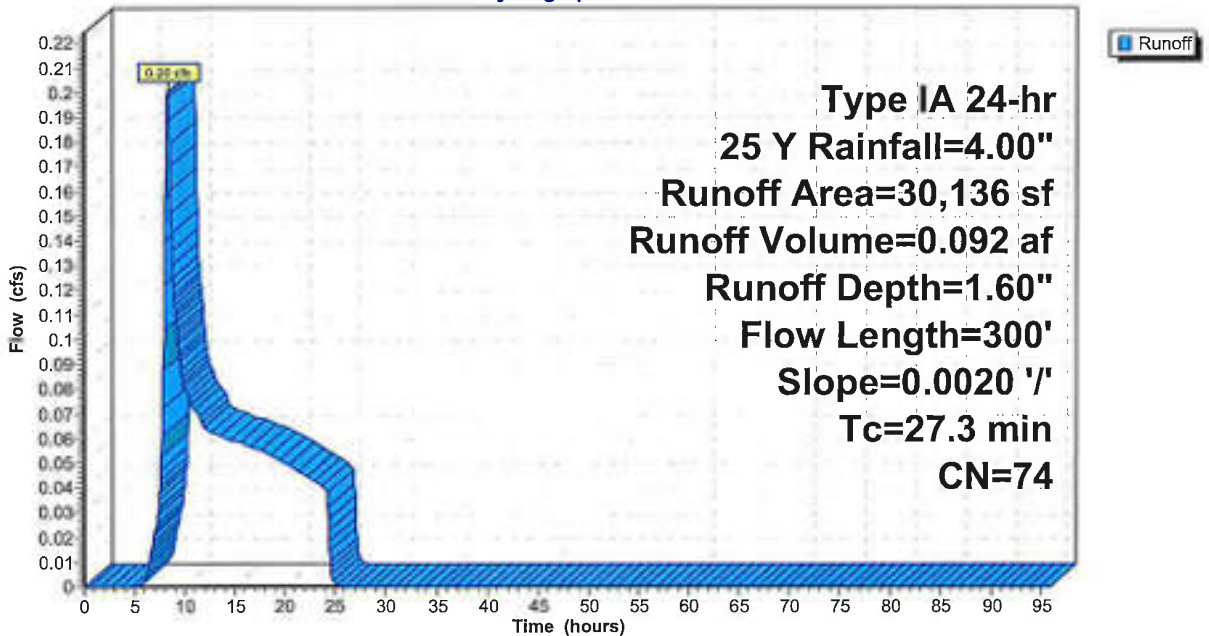
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25 Y Rainfall=4.00"

Area (sf)	CN	Description
30,136	74	>75% Grass cover, Good, HSG C
30,136		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.3	300	0.0020	0.18		Sheet Flow, Fallow n= 0.050 P2= 2.60"

Subcatchment 1S: Predeveloped

Hydrograph



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Type IA 24-hr 25 Y Rainfall=4.00"

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Summary for Subcatchment 2S: Post Developed

Runoff = 0.57 cfs @ 7.89 hrs, Volume= 0.180 af, Depth= 3.12"

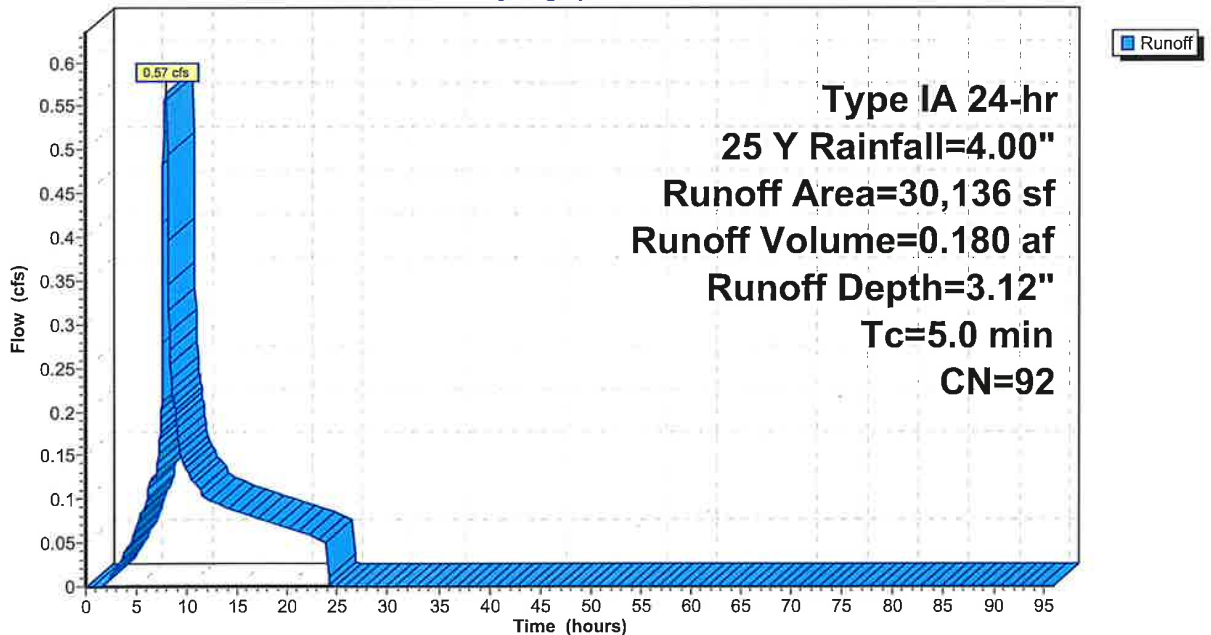
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type IA 24-hr 25 Y Rainfall=4.00"

Area (sf)	CN	Description
4,516	98	Roofs, HSG C
18,284	98	Paved parking, HSG A
7,336	74	>75% Grass cover, Good, HSG C
30,136	92	Weighted Average
7,336		24.34% Pervious Area
22,800		75.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Developed

Hydrograph



Webster Ridge Parking Expansion

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Type IA 24-hr 25 Y Rainfall=4.00"

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Summary for Pond 2P: Detention

Inflow Area = 0.692 ac, 75.66% Impervious, Inflow Depth = 3.12" for 25 Y event
 Inflow = 0.57 cfs @ 7.89 hrs, Volume= 0.180 af
 Outflow = 0.18 cfs @ 8.98 hrs, Volume= 0.180 af, Atten= 68%, Lag= 65.5 min
 Primary = 0.18 cfs @ 8.98 hrs, Volume= 0.180 af

Routing by Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
 Peak Elev= 222.73' @ 8.98 hrs Surf.Area= 377 sf Storage= 2,267 cf

Plug-Flow detention time= 387.3 min calculated for 0.180 af (100% of inflow)
 Center-of-Mass det. time= 387.6 min (1,103.2 - 715.6)

Volume	Invert	Avail. Storage	Storage Description
#1	219.01'	2,337 cf	48.0" Round Pipe Storage L= 186.0'

Device	Routing	Invert	Outlet Devices
#1	Device 4	217.01'	1.0" Horiz. 2yr C= 0.600 Limited to weir flow at low heads
#2	Device 4	222.15'	2.7" Vert. Orifice/Grate C= 0.600
#3	Device 4	222.90'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Primary	219.01'	10.0" Round Culvert L= 460.0' Ke= 0.400 Inlet / Outlet Invert= 219.01' / 216.71' S= 0.0050 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.55 sf

Primary OutFlow Max=0.18 cfs @ 8.98 hrs HW=222.73' (Free Discharge)

- ↳ 4=Culvert (Passes 0.18 cfs of 2.84 cfs potential flow)
- ↳ 1=2yr (Orifice Controls 0.05 cfs @ 9.29 fps)
- ↳ 2=Orifice/Grate (Orifice Controls 0.13 cfs @ 3.31 fps)
- ↳ 3=Orifice/Grate (Controls 0.00 cfs)

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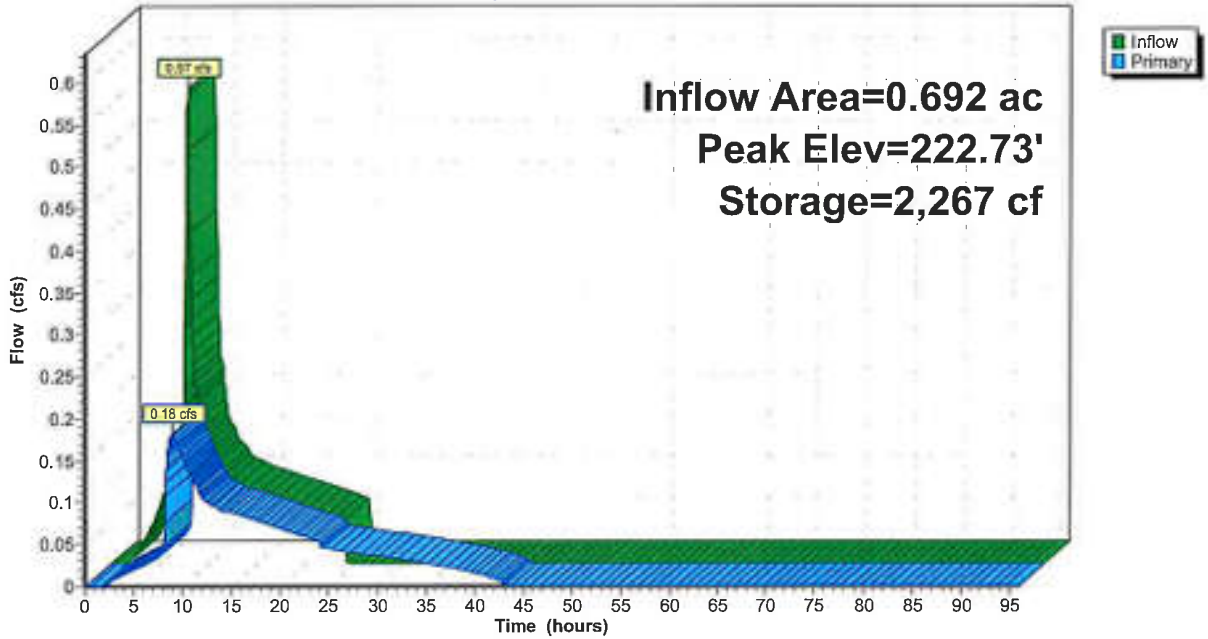
Type IA 24-hr 25 Y Rainfall=4.00"

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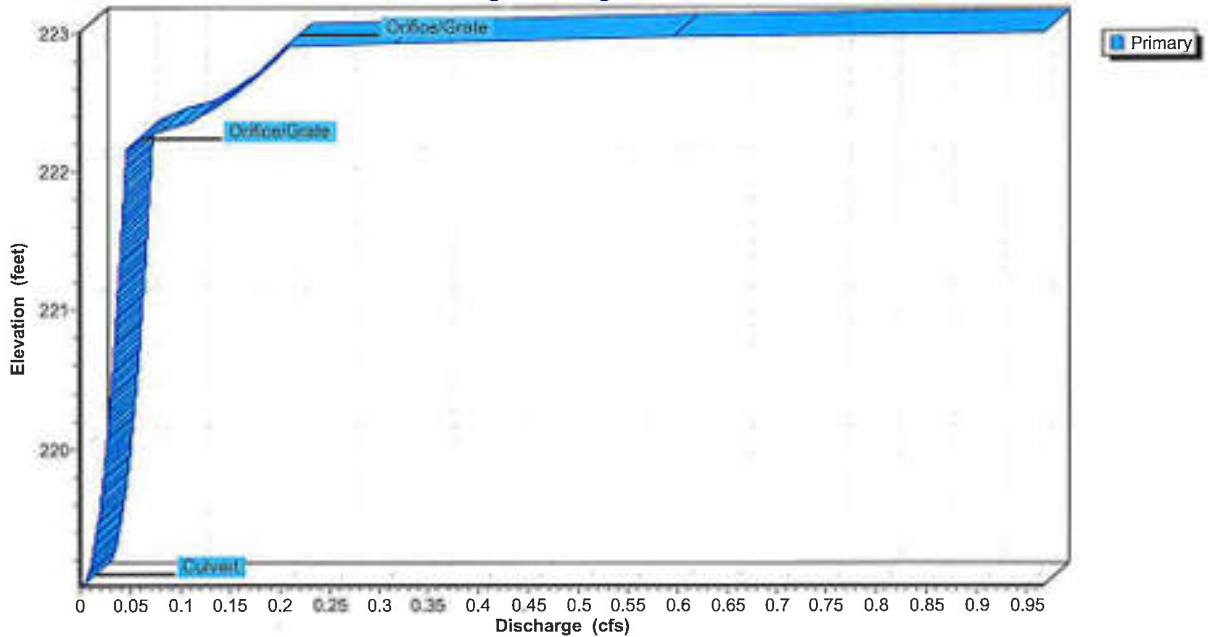
Pond 2P: Detention

Hydrograph



Pond 2P: Detention

Stage-Discharge



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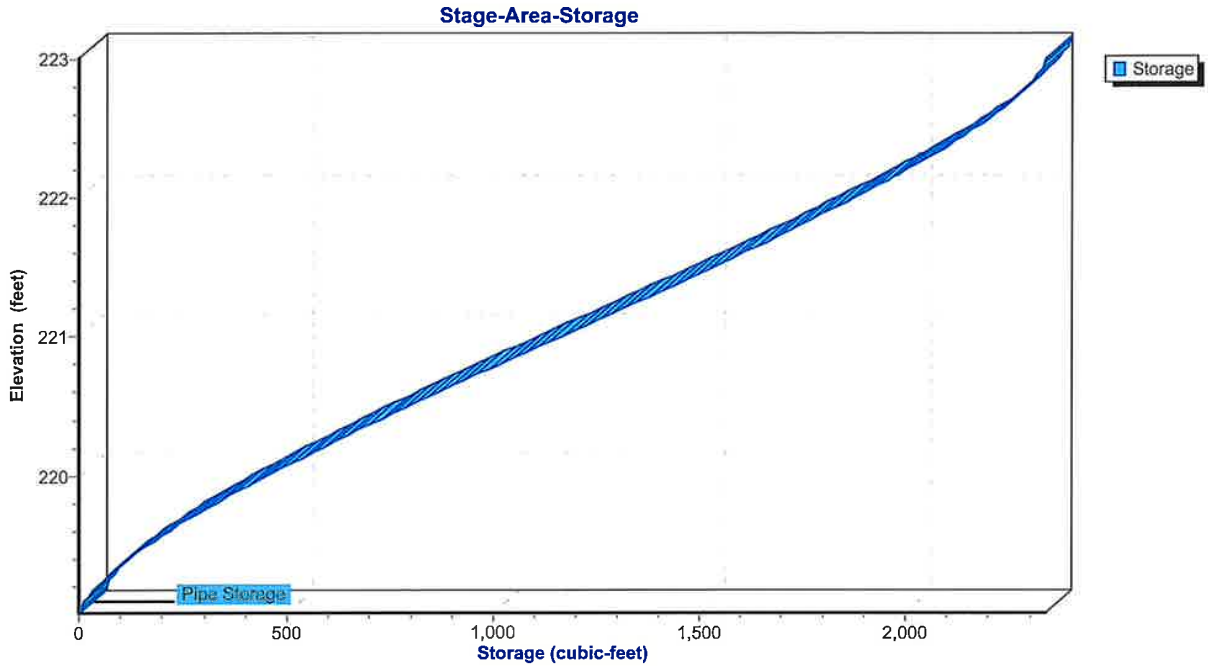
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Type IA 24-hr 25 Y Rainfall=4.00"

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Pond 2P: Detention



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Type IA 24-hr 25 Y Rainfall=4.00"

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Stage-Discharge for Pond 2P: Detention

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
219.01	0.00	220.05	0.03	221.09	0.04	222.13	0.05
219.03	0.00	220.07	0.03	221.11	0.04	222.15	0.05
219.05	0.00	220.09	0.03	221.13	0.04	222.17	0.05
219.07	0.01	220.11	0.03	221.15	0.04	222.19	0.05
219.09	0.01	220.13	0.03	221.17	0.04	222.21	0.05
219.11	0.01	220.15	0.03	221.19	0.04	222.23	0.06
219.13	0.01	220.17	0.03	221.21	0.04	222.25	0.07
219.15	0.01	220.19	0.03	221.23	0.04	222.27	0.07
219.17	0.01	220.21	0.03	221.25	0.04	222.29	0.08
219.19	0.01	220.23	0.03	221.27	0.04	222.31	0.09
219.21	0.01	220.25	0.03	221.29	0.04	222.33	0.10
219.23	0.01	220.27	0.03	221.31	0.04	222.35	0.10
219.25	0.01	220.29	0.03	221.33	0.04	222.37	0.11
219.27	0.01	220.31	0.03	221.35	0.04	222.39	0.12
219.29	0.01	220.33	0.03	221.37	0.04	222.41	0.12
219.31	0.01	220.35	0.03	221.39	0.04	222.43	0.13
219.33	0.01	220.37	0.03	221.41	0.04	222.45	0.13
219.35	0.02	220.39	0.03	221.43	0.04	222.47	0.14
219.37	0.02	220.41	0.03	221.45	0.04	222.49	0.14
219.39	0.02	220.43	0.03	221.47	0.04	222.51	0.14
219.41	0.02	220.45	0.03	221.49	0.04	222.53	0.15
219.43	0.02	220.47	0.03	221.51	0.04	222.55	0.15
219.45	0.02	220.49	0.03	221.53	0.04	222.57	0.16
219.47	0.02	220.51	0.03	221.55	0.04	222.59	0.16
219.49	0.02	220.53	0.03	221.57	0.04	222.61	0.16
219.51	0.02	220.55	0.03	221.59	0.04	222.63	0.17
219.53	0.02	220.57	0.03	221.61	0.04	222.65	0.17
219.55	0.02	220.59	0.03	221.63	0.04	222.67	0.17
219.57	0.02	220.61	0.03	221.65	0.04	222.69	0.18
219.59	0.02	220.63	0.03	221.67	0.04	222.71	0.18
219.61	0.02	220.65	0.03	221.69	0.04	222.73	0.18
219.63	0.02	220.67	0.03	221.71	0.04	222.75	0.18
219.65	0.02	220.69	0.03	221.73	0.04	222.77	0.19
219.67	0.02	220.71	0.03	221.75	0.04	222.79	0.19
219.69	0.02	220.73	0.03	221.77	0.04	222.81	0.19
219.71	0.02	220.75	0.03	221.79	0.04	222.83	0.20
219.73	0.02	220.77	0.03	221.81	0.04	222.85	0.20
219.75	0.02	220.79	0.04	221.83	0.04	222.87	0.20
219.77	0.02	220.81	0.04	221.85	0.04	222.89	0.20
219.79	0.02	220.83	0.04	221.87	0.04	222.91	0.23
219.81	0.02	220.85	0.04	221.89	0.04	222.93	0.32
219.83	0.02	220.87	0.04	221.91	0.04	222.95	0.44
219.85	0.02	220.89	0.04	221.93	0.04	222.97	0.59
219.87	0.02	220.91	0.04	221.95	0.05	222.99	0.77
219.89	0.02	220.93	0.04	221.97	0.05	223.01	0.97
219.91	0.02	220.95	0.04	221.99	0.05		
219.93	0.03	220.97	0.04	222.01	0.05		
219.95	0.03	220.99	0.04	222.03	0.05		
219.97	0.03	221.01	0.04	222.05	0.05		
219.99	0.03	221.03	0.04	222.07	0.05		
220.01	0.03	221.05	0.04	222.09	0.05		
220.03	0.03	221.07	0.04	222.11	0.05		

Webster Ridge Parking Expansion

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Type IA 24-hr 25 Y Rainfall=4.00"

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Stage-Area-Storage for Pond 2P: Detention

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
219.01	0	221.61	1,608
219.06	6	221.66	1,644
219.11	16	221.71	1,679
219.16	28	221.76	1,713
219.21	44	221.81	1,748
219.26	61	221.86	1,781
219.31	80	221.91	1,815
219.36	100	221.96	1,848
219.41	122	222.01	1,880
219.46	145	222.06	1,912
219.51	169	222.11	1,944
219.56	194	222.16	1,974
219.61	220	222.21	2,005
219.66	247	222.26	2,034
219.71	275	222.31	2,063
219.76	303	222.36	2,090
219.81	333	222.41	2,117
219.86	363	222.46	2,144
219.91	394	222.51	2,169
219.96	425	222.56	2,193
220.01	457	222.61	2,216
220.06	489	222.66	2,237
220.11	522	222.71	2,258
220.16	556	222.76	2,277
220.21	590	222.81	2,294
220.26	624	222.86	2,309
220.31	659	222.91	2,322
220.36	694	222.96	2,332
220.41	729	223.01	2,337
220.46	765		
220.51	801		
220.56	837		
220.61	873		
220.66	910		
220.71	946		
220.76	983		
220.81	1,020		
220.86	1,057		
220.91	1,094		
220.96	1,131		
221.01	1,169		
221.06	1,206		
221.11	1,243		
221.16	1,280		
221.21	1,317		
221.26	1,354		
221.31	1,391		
221.36	1,428		
221.41	1,464		
221.46	1,501		
221.51	1,537		
221.56	1,573		

Webster Ridge Parking Expansion

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Type IA 24-hr 100Y Rainfall=4.80"

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Summary for Subcatchment 1S: Predeveloped

Runoff = 0.30 cfs @ 8.21 hrs, Volume= 0.127 af, Depth= 2.21"

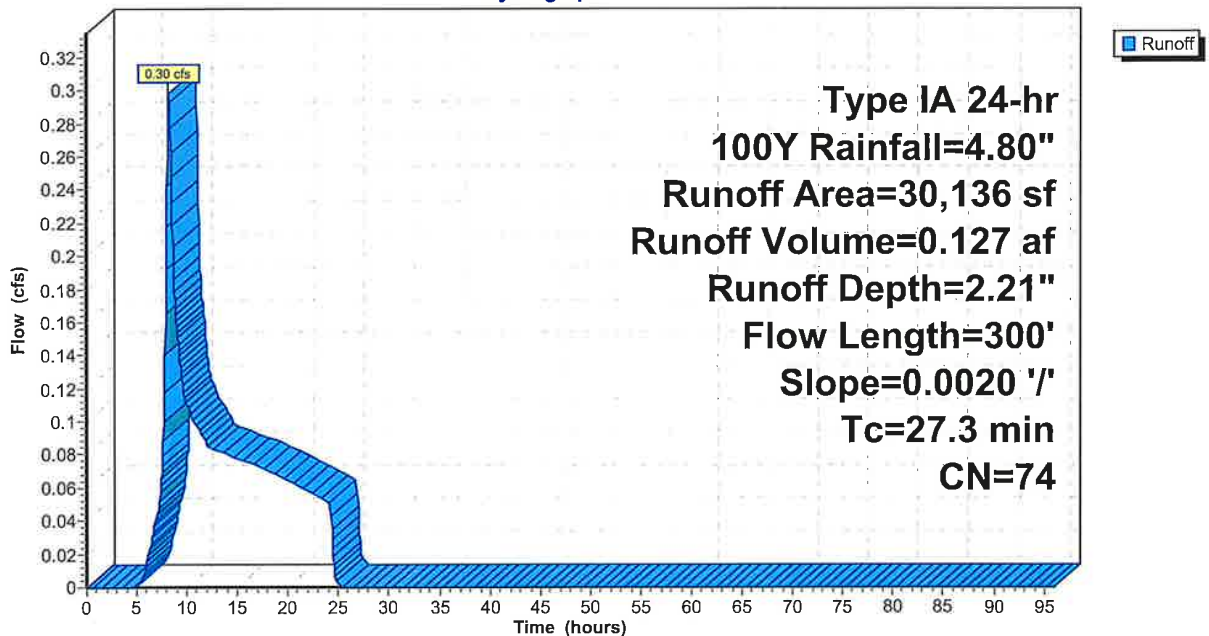
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
 Type IA 24-hr 100Y Rainfall=4.80"

Area (sf)	CN	Description
30,136	74	>75% Grass cover, Good, HSG C
30,136		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.3	300	0.0020	0.18		Sheet Flow, Fallow n= 0.050 P2= 2.60"

Subcatchment 1S: Predeveloped

Hydrograph



Webster Ridge Parking Expansion

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Type IA 24-hr 100Y Rainfall=4.80"

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Summary for Subcatchment 2S: Post Developed

Runoff = 0.71 cfs @ 7.88 hrs, Volume= 0.225 af, Depth= 3.89"

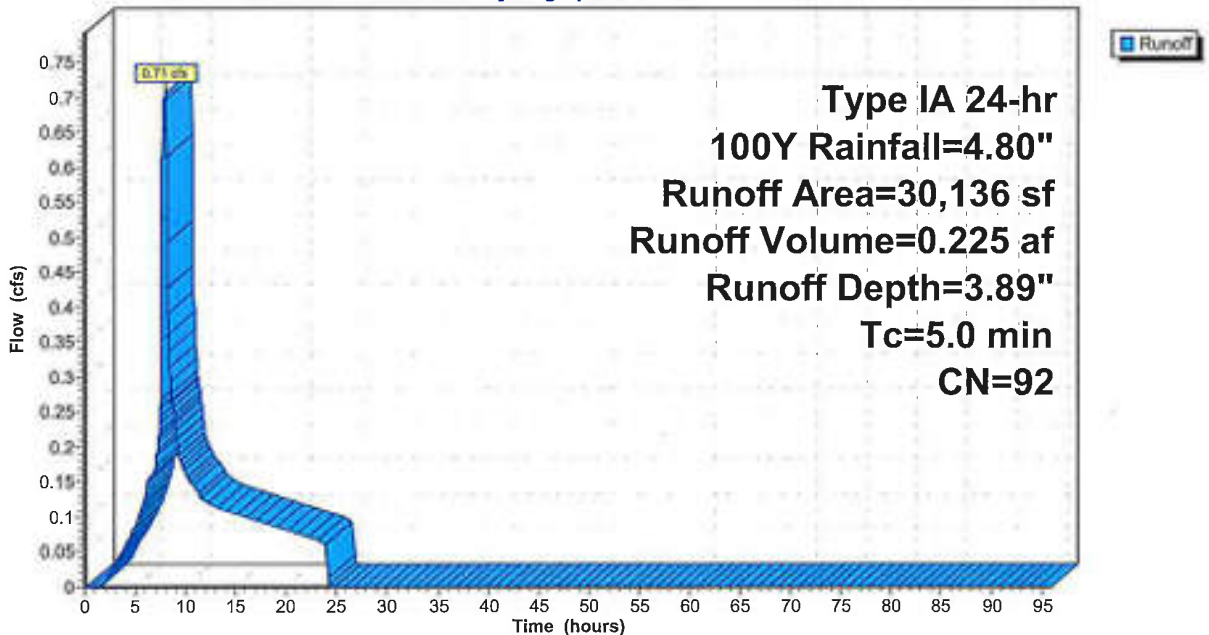
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
 Type IA 24-hr 100Y Rainfall=4.80"

Area (sf)	CN	Description
4,516	98	Roofs, HSG C
18,284	98	Paved parking, HSG A
7,336	74	>75% Grass cover, Good, HSG C
30,136	92	Weighted Average
7,336		24.34% Pervious Area
22,800		75.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Developed

Hydrograph



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Type IA 24-hr 100Y Rainfall=4.80"

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Summary for Pond 2P: Detention

Inflow Area = 0.692 ac, 75.66% Impervious, Inflow Depth = 3.89" for 100Y event
Inflow = 0.71 cfs @ 7.88 hrs, Volume= 0.225 af
Outflow = 0.84 cfs @ 8.01 hrs, Volume= 0.225 af, Atten= 0%, Lag= 7.8 min
Primary = 0.84 cfs @ 8.01 hrs, Volume= 0.225 af

Routing by Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Peak Elev= 223.00' @ 8.02 hrs Surf.Area= 57 sf Storage= 2,337 cf

Plug-Flow detention time= 322.6 min calculated for 0.225 af (100% of inflow)
Center-of-Mass det. time= 322.5 min (1,028.0 - 705.5)

Volume	Invert	Avail.Storage	Storage Description
#1	219.01'	2,337 cf	48.0" Round Pipe Storage L= 186.0'

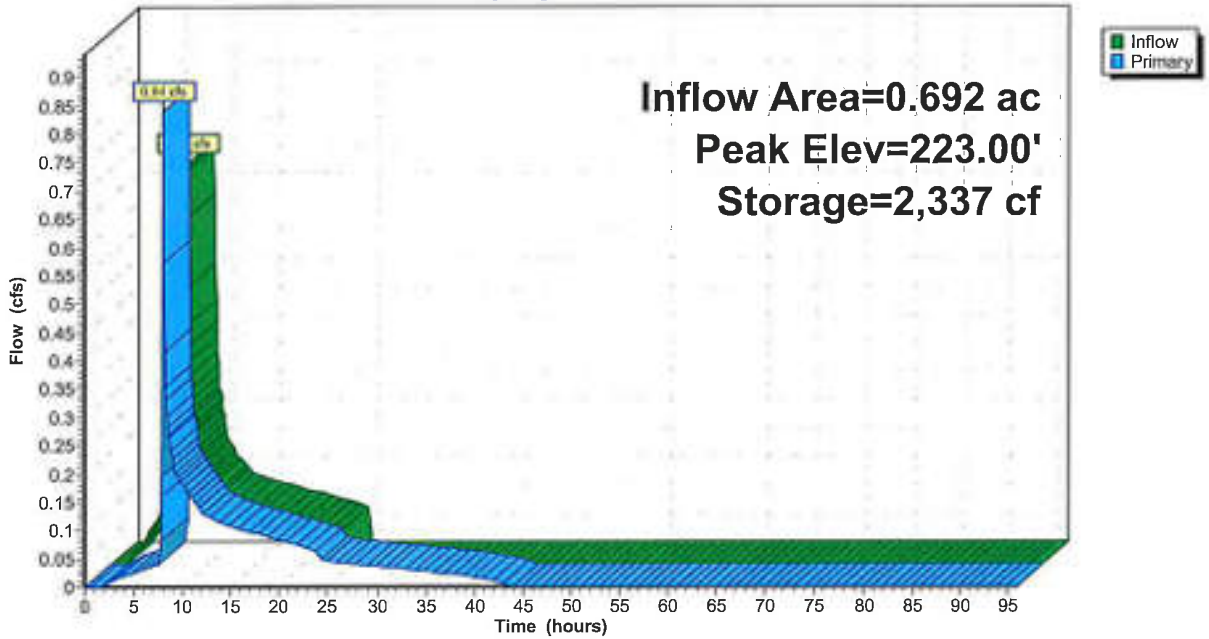
Device	Routing	Invert	Outlet Devices
#1	Device 4	217.01'	1.0" Horiz. 2yr C= 0.600 Limited to weir flow at low heads
#2	Device 4	222.15'	2.7" Vert. Orifice/Grate C= 0.600
#3	Device 4	222.90'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Primary	219.01'	10.0" Round Culvert L= 460.0' Ke= 0.400 Inlet / Outlet Invert= 219.01' / 216.71' S= 0.0050 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.55 sf

Primary OutFlow Max=0.76 cfs @ 8.01 hrs HW=222.99' (Free Discharge)

- 4=Culvert (Passes 0.76 cfs of 2.91 cfs potential flow)
- 1=2yr (Orifice Controls 0.05 cfs @ 9.60 fps)
- 2=Orifice/Grate (Orifice Controls 0.16 cfs @ 4.10 fps)
- 3=Orifice/Grate (Weir Controls 0.54 cfs @ 0.97 fps)

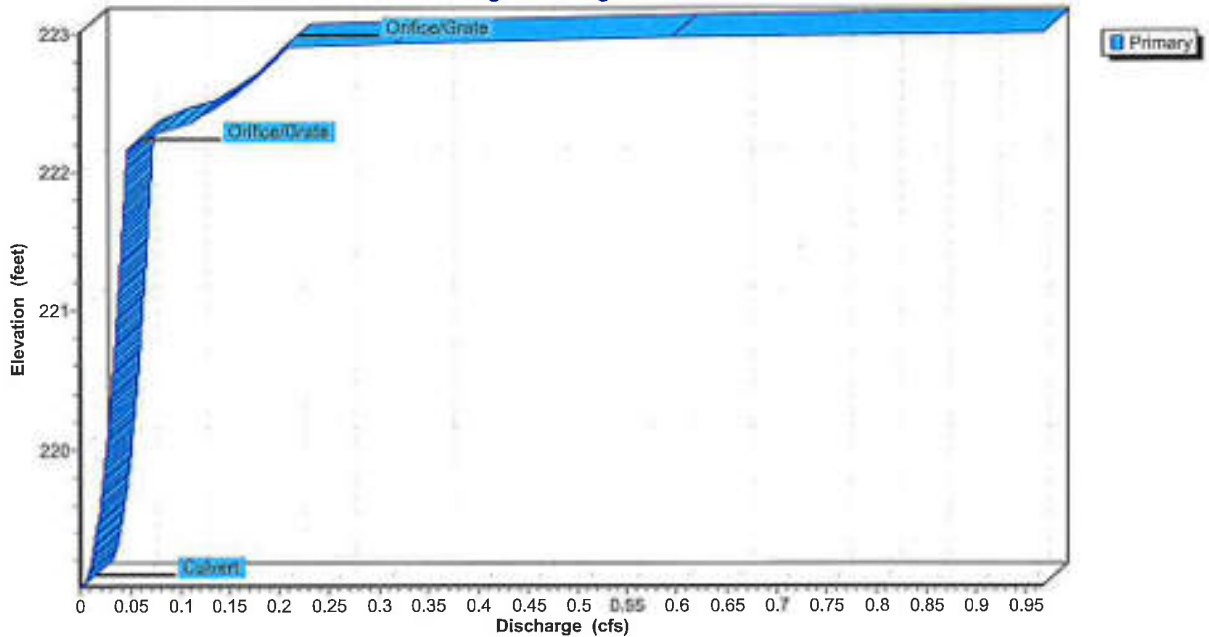
Pond 2P: Detention

Hydrograph



Pond 2P: Detention

Stage-Discharge



Webster Ridge Parking Expansion

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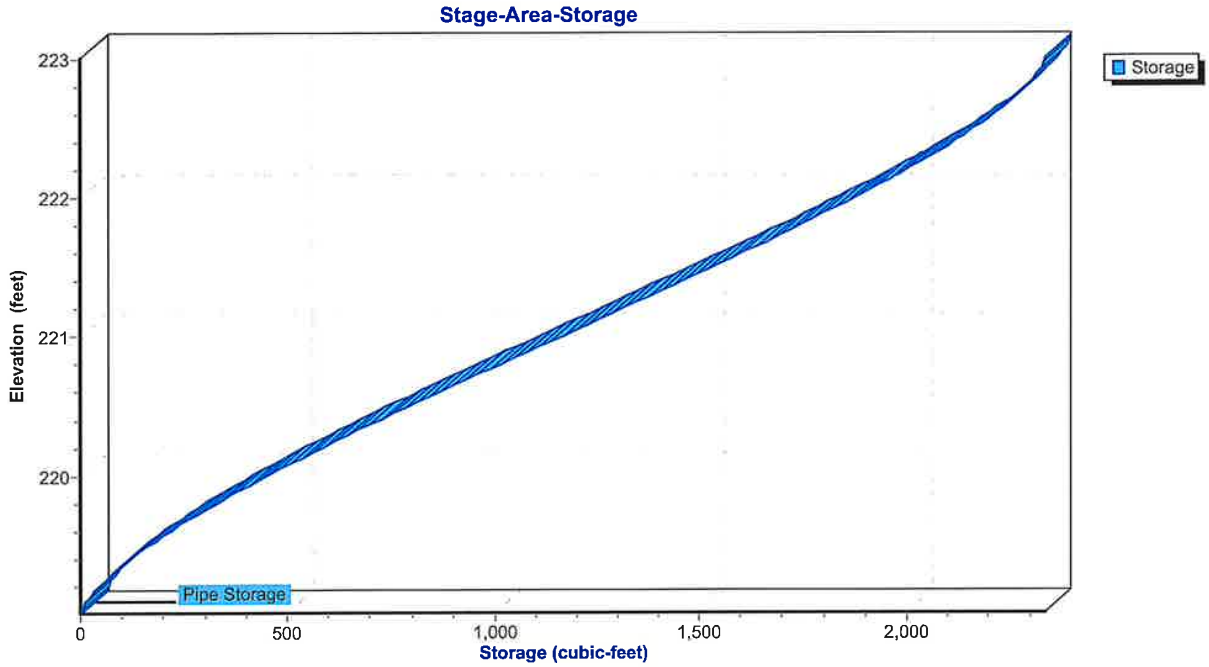
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Type IA 24-hr 100Y Rainfall=4.80"

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Pond 2P: Detention



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Type IA 24-hr 100Y Rainfall=4.80"

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Stage-Discharge for Pond 2P: Detention

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
219.01	0.00	220.05	0.03	221.09	0.04	222.13	0.05
219.03	0.00	220.07	0.03	221.11	0.04	222.15	0.05
219.05	0.00	220.09	0.03	221.13	0.04	222.17	0.05
219.07	0.01	220.11	0.03	221.15	0.04	222.19	0.05
219.09	0.01	220.13	0.03	221.17	0.04	222.21	0.05
219.11	0.01	220.15	0.03	221.19	0.04	222.23	0.06
219.13	0.01	220.17	0.03	221.21	0.04	222.25	0.07
219.15	0.01	220.19	0.03	221.23	0.04	222.27	0.07
219.17	0.01	220.21	0.03	221.25	0.04	222.29	0.08
219.19	0.01	220.23	0.03	221.27	0.04	222.31	0.09
219.21	0.01	220.25	0.03	221.29	0.04	222.33	0.10
219.23	0.01	220.27	0.03	221.31	0.04	222.35	0.10
219.25	0.01	220.29	0.03	221.33	0.04	222.37	0.11
219.27	0.01	220.31	0.03	221.35	0.04	222.39	0.12
219.29	0.01	220.33	0.03	221.37	0.04	222.41	0.12
219.31	0.01	220.35	0.03	221.39	0.04	222.43	0.13
219.33	0.01	220.37	0.03	221.41	0.04	222.45	0.13
219.35	0.02	220.39	0.03	221.43	0.04	222.47	0.14
219.37	0.02	220.41	0.03	221.45	0.04	222.49	0.14
219.39	0.02	220.43	0.03	221.47	0.04	222.51	0.14
219.41	0.02	220.45	0.03	221.49	0.04	222.53	0.15
219.43	0.02	220.47	0.03	221.51	0.04	222.55	0.15
219.45	0.02	220.49	0.03	221.53	0.04	222.57	0.16
219.47	0.02	220.51	0.03	221.55	0.04	222.59	0.16
219.49	0.02	220.53	0.03	221.57	0.04	222.61	0.16
219.51	0.02	220.55	0.03	221.59	0.04	222.63	0.17
219.53	0.02	220.57	0.03	221.61	0.04	222.65	0.17
219.55	0.02	220.59	0.03	221.63	0.04	222.67	0.17
219.57	0.02	220.61	0.03	221.65	0.04	222.69	0.18
219.59	0.02	220.63	0.03	221.67	0.04	222.71	0.18
219.61	0.02	220.65	0.03	221.69	0.04	222.73	0.18
219.63	0.02	220.67	0.03	221.71	0.04	222.75	0.18
219.65	0.02	220.69	0.03	221.73	0.04	222.77	0.19
219.67	0.02	220.71	0.03	221.75	0.04	222.79	0.19
219.69	0.02	220.73	0.03	221.77	0.04	222.81	0.19
219.71	0.02	220.75	0.03	221.79	0.04	222.83	0.20
219.73	0.02	220.77	0.03	221.81	0.04	222.85	0.20
219.75	0.02	220.79	0.04	221.83	0.04	222.87	0.20
219.77	0.02	220.81	0.04	221.85	0.04	222.89	0.20
219.79	0.02	220.83	0.04	221.87	0.04	222.91	0.23
219.81	0.02	220.85	0.04	221.89	0.04	222.93	0.32
219.83	0.02	220.87	0.04	221.91	0.04	222.95	0.44
219.85	0.02	220.89	0.04	221.93	0.04	222.97	0.59
219.87	0.02	220.91	0.04	221.95	0.05	222.99	0.77
219.89	0.02	220.93	0.04	221.97	0.05	223.01	0.97
219.91	0.02	220.95	0.04	221.99	0.05		
219.93	0.03	220.97	0.04	222.01	0.05		
219.95	0.03	220.99	0.04	222.03	0.05		
219.97	0.03	221.01	0.04	222.05	0.05		
219.99	0.03	221.03	0.04	222.07	0.05		
220.01	0.03	221.05	0.04	222.09	0.05		
220.03	0.03	221.07	0.04	222.11	0.05		

Webster Ridge Parking Expansion

Type IA 24-hr 100Y Rainfall=4.80"

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Printed 10/28/2021

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Stage-Area-Storage for Pond 2P: Detention

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
219.01	0	221.61	1,608
219.06	6	221.66	1,644
219.11	16	221.71	1,679
219.16	28	221.76	1,713
219.21	44	221.81	1,748
219.26	61	221.86	1,781
219.31	80	221.91	1,815
219.36	100	221.96	1,848
219.41	122	222.01	1,880
219.46	145	222.06	1,912
219.51	169	222.11	1,944
219.56	194	222.16	1,974
219.61	220	222.21	2,005
219.66	247	222.26	2,034
219.71	275	222.31	2,063
219.76	303	222.36	2,090
219.81	333	222.41	2,117
219.86	363	222.46	2,144
219.91	394	222.51	2,169
219.96	425	222.56	2,193
220.01	457	222.61	2,216
220.06	489	222.66	2,237
220.11	522	222.71	2,258
220.16	556	222.76	2,277
220.21	590	222.81	2,294
220.26	624	222.86	2,309
220.31	659	222.91	2,322
220.36	694	222.96	2,332
220.41	729	223.01	2,337
220.46	765		
220.51	801		
220.56	837		
220.61	873		
220.66	910		
220.71	946		
220.76	983		
220.81	1,020		
220.86	1,057		
220.91	1,094		
220.96	1,131		
221.01	1,169		
221.06	1,206		
221.11	1,243		
221.16	1,280		
221.21	1,317		
221.26	1,354		
221.31	1,391		
221.36	1,428		
221.41	1,464		
221.46	1,501		
221.51	1,537		
221.56	1,573		

Webster Ridge Parking Expansion

Type IA 24-hr WQ Rainfall=1.77"

Prepared by AAI Engineering

Printed 10/28/2021

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Summary for Subcatchment 1S: Predeveloped

Runoff = 0.01 cfs @ 17.21 hrs, Volume= 0.014 af, Depth= 0.25"

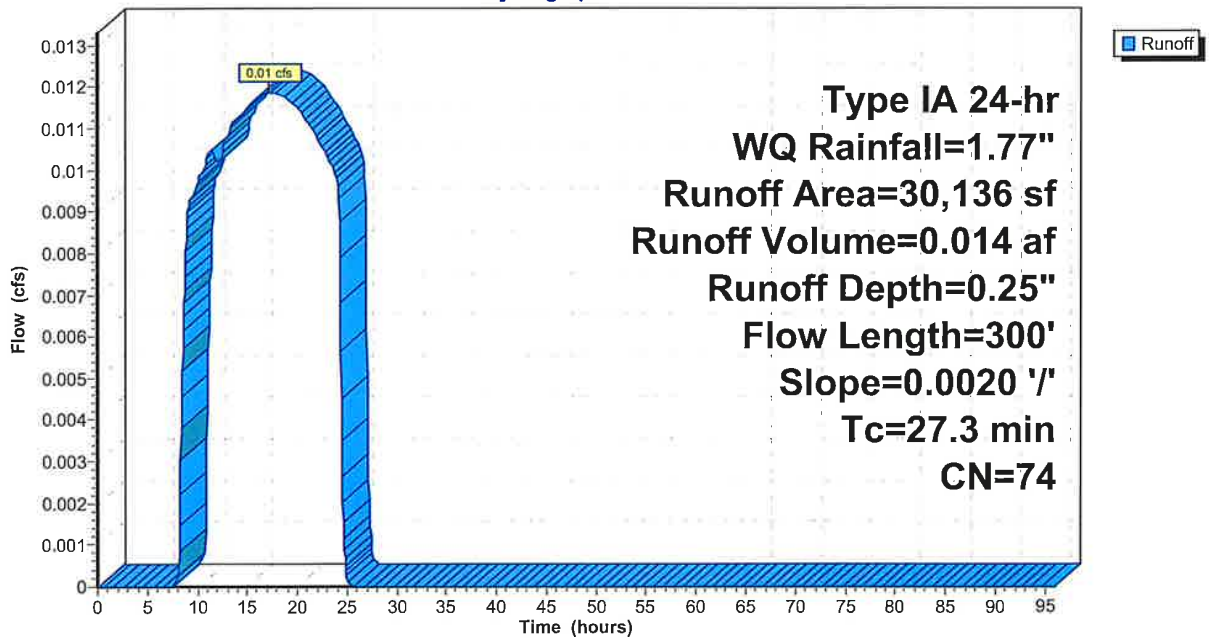
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type IA 24-hr WQ Rainfall=1.77"

Area (sf)	CN	Description
30,136	74	>75% Grass cover, Good, HSG C
30,136		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
27.3	300	0.0020	0.18		Sheet Flow, Fallow n= 0.050 P2= 2.60"

Subcatchment 1S: Predeveloped

Hydrograph



Webster Ridge Parking Expansion

Prepared by AAI Engineering

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Type IA 24-hr WQ Rainfall=1.77"

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Summary for Subcatchment 2S: Post Developed

Runoff = 0.18 cfs @ 7.94 hrs, Volume= 0.060 af, Depth= 1.03"

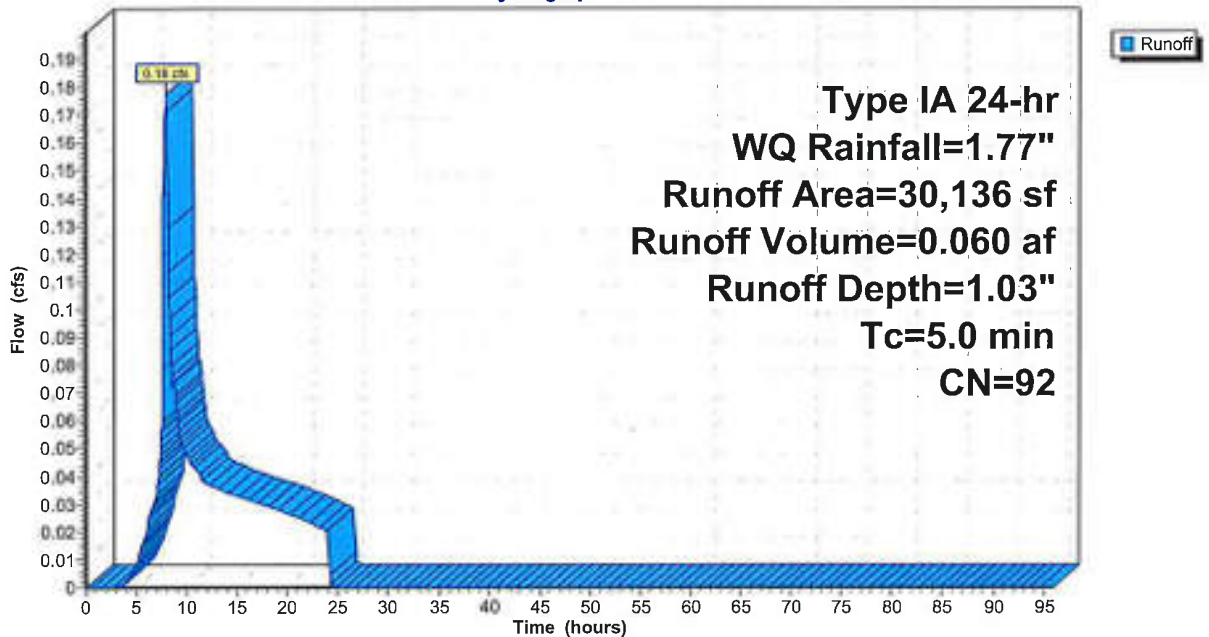
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
Type IA 24-hr WQ Rainfall=1.77"

Area (sf)	CN	Description
4,516	98	Roofs, HSG C
18,284	98	Paved parking, HSG A
7,336	74	>75% Grass cover, Good, HSG C
30,136	92	Weighted Average
7,336		24.34% Pervious Area
22,800		75.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Developed

Hydrograph



Webster Ridge Parking Expansion

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Type IA 24-hr WQ Rainfall=1.77"

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Summary for Pond 2P: Detention

Inflow Area = 0.692 ac, 75.66% Impervious, Inflow Depth = 1.03" for WQ event
 Inflow = 0.18 cfs @ 7.94 hrs, Volume= 0.060 af
 Outflow = 0.03 cfs @ 15.93 hrs, Volume= 0.060 af, Atten= 82%, Lag= 479.6 min
 Primary = 0.03 cfs @ 15.93 hrs, Volume= 0.060 af

Routing by Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.05 hrs
 Peak Elev= 220.49' @ 15.93 hrs Surf.Area= 718 sf Storage= 785 cf

Plug-Flow detention time= 329.2 min calculated for 0.060 af (100% of inflow)
 Center-of-Mass det. time= 329.3 min (1,103.7 - 774.3)

Volume	Invert	Avail.Storage	Storage Description
#1	219.01'	2,337 cf	48.0" Round Pipe Storage L= 186.0'

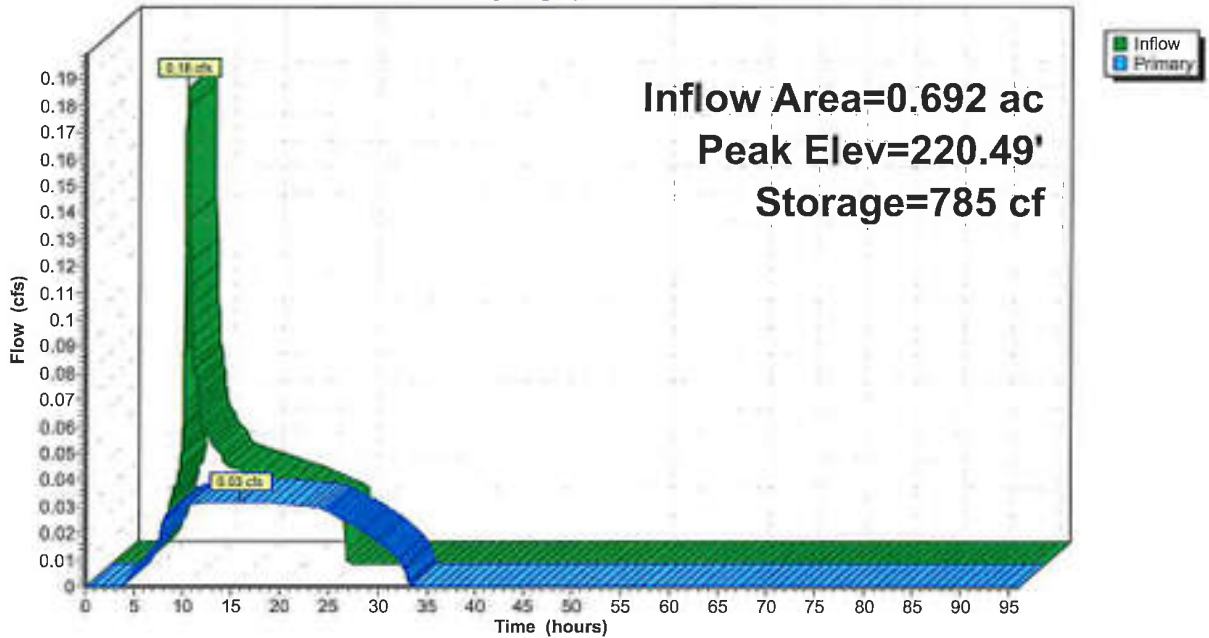
Device	Routing	Invert	Outlet Devices
#1	Device 4	217.01'	1.0" Horiz. 2yr C= 0.600 Limited to weir flow at low heads
#2	Device 4	222.15'	2.7" Vert. Orifice/Grate C= 0.600
#3	Device 4	222.90'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Primary	219.01'	10.0" Round Culvert L= 460.0' Ke= 0.400 Inlet / Outlet Invert= 219.01' / 216.71' S= 0.0050 '/ Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.55 sf

Primary OutFlow Max=0.03 cfs @ 15.93 hrs HW=220.49' (Free Discharge)

- 4=Culvert (Passes 0.03 cfs of 2.14 cfs potential flow)
- 1=2yr (Orifice Controls 0.03 cfs @ 5.86 fps)
- 2=Orifice/Grate (Controls 0.00 cfs)
- 3=Orifice/Grate (Controls 0.00 cfs)

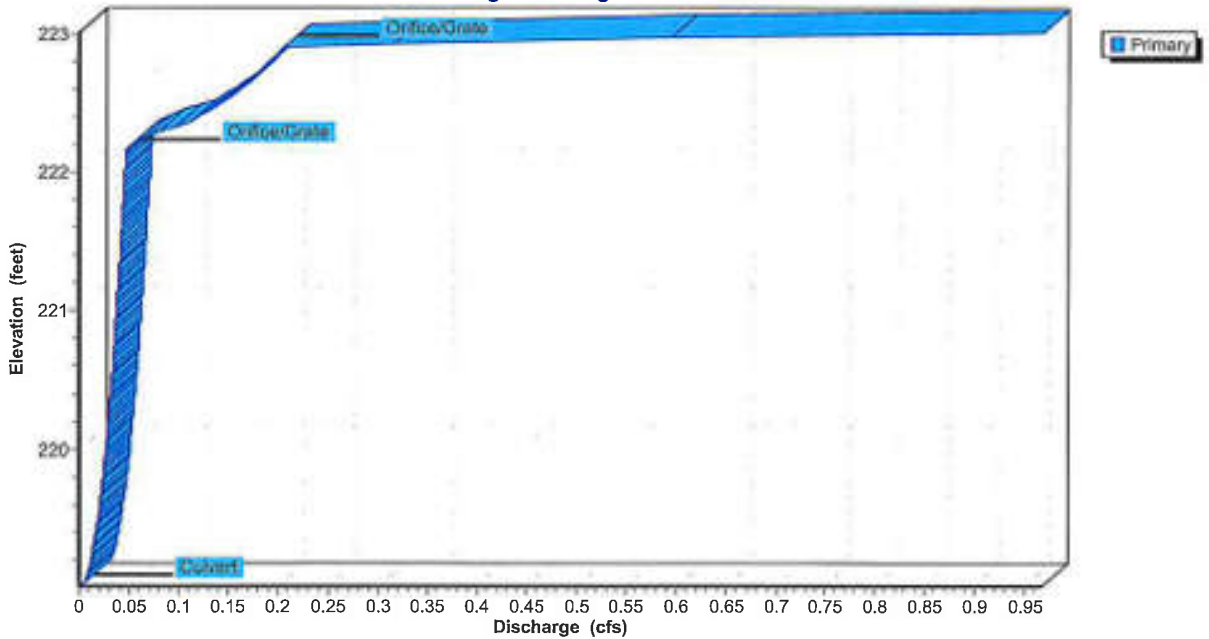
Pond 2P: Detention

Hydrograph



Pond 2P: Detention

Stage-Discharge



Webster Ridge Parking Expansion

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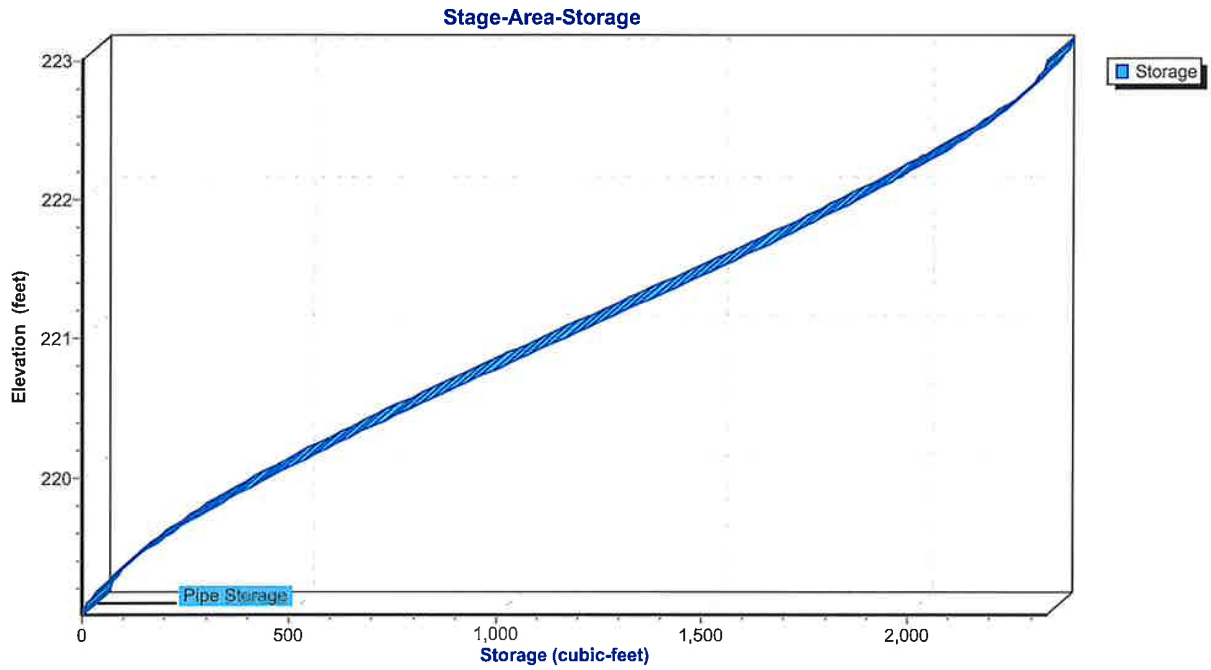
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Type IA 24-hr WQ Rainfall=1.77"

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Pond 2P: Detention



Webster Ridge Parking Expansion

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Type IA 24-hr WQ Rainfall=1.77"

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Stage-Discharge for Pond 2P: Detention

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
219.01	0.00	220.05	0.03	221.09	0.04	222.13	0.05
219.03	0.00	220.07	0.03	221.11	0.04	222.15	0.05
219.05	0.00	220.09	0.03	221.13	0.04	222.17	0.05
219.07	0.01	220.11	0.03	221.15	0.04	222.19	0.05
219.09	0.01	220.13	0.03	221.17	0.04	222.21	0.05
219.11	0.01	220.15	0.03	221.19	0.04	222.23	0.06
219.13	0.01	220.17	0.03	221.21	0.04	222.25	0.07
219.15	0.01	220.19	0.03	221.23	0.04	222.27	0.07
219.17	0.01	220.21	0.03	221.25	0.04	222.29	0.08
219.19	0.01	220.23	0.03	221.27	0.04	222.31	0.09
219.21	0.01	220.25	0.03	221.29	0.04	222.33	0.10
219.23	0.01	220.27	0.03	221.31	0.04	222.35	0.10
219.25	0.01	220.29	0.03	221.33	0.04	222.37	0.11
219.27	0.01	220.31	0.03	221.35	0.04	222.39	0.12
219.29	0.01	220.33	0.03	221.37	0.04	222.41	0.12
219.31	0.01	220.35	0.03	221.39	0.04	222.43	0.13
219.33	0.01	220.37	0.03	221.41	0.04	222.45	0.13
219.35	0.02	220.39	0.03	221.43	0.04	222.47	0.14
219.37	0.02	220.41	0.03	221.45	0.04	222.49	0.14
219.39	0.02	220.43	0.03	221.47	0.04	222.51	0.14
219.41	0.02	220.45	0.03	221.49	0.04	222.53	0.15
219.43	0.02	220.47	0.03	221.51	0.04	222.55	0.15
219.45	0.02	220.49	0.03	221.53	0.04	222.57	0.16
219.47	0.02	220.51	0.03	221.55	0.04	222.59	0.16
219.49	0.02	220.53	0.03	221.57	0.04	222.61	0.16
219.51	0.02	220.55	0.03	221.59	0.04	222.63	0.17
219.53	0.02	220.57	0.03	221.61	0.04	222.65	0.17
219.55	0.02	220.59	0.03	221.63	0.04	222.67	0.17
219.57	0.02	220.61	0.03	221.65	0.04	222.69	0.18
219.59	0.02	220.63	0.03	221.67	0.04	222.71	0.18
219.61	0.02	220.65	0.03	221.69	0.04	222.73	0.18
219.63	0.02	220.67	0.03	221.71	0.04	222.75	0.18
219.65	0.02	220.69	0.03	221.73	0.04	222.77	0.19
219.67	0.02	220.71	0.03	221.75	0.04	222.79	0.19
219.69	0.02	220.73	0.03	221.77	0.04	222.81	0.19
219.71	0.02	220.75	0.03	221.79	0.04	222.83	0.20
219.73	0.02	220.77	0.03	221.81	0.04	222.85	0.20
219.75	0.02	220.79	0.04	221.83	0.04	222.87	0.20
219.77	0.02	220.81	0.04	221.85	0.04	222.89	0.20
219.79	0.02	220.83	0.04	221.87	0.04	222.91	0.23
219.81	0.02	220.85	0.04	221.89	0.04	222.93	0.32
219.83	0.02	220.87	0.04	221.91	0.04	222.95	0.44
219.85	0.02	220.89	0.04	221.93	0.04	222.97	0.59
219.87	0.02	220.91	0.04	221.95	0.05	222.99	0.77
219.89	0.02	220.93	0.04	221.97	0.05	223.01	0.97
219.91	0.02	220.95	0.04	221.99	0.05		
219.93	0.03	220.97	0.04	222.01	0.05		
219.95	0.03	220.99	0.04	222.03	0.05		
219.97	0.03	221.01	0.04	222.05	0.05		
219.99	0.03	221.03	0.04	222.07	0.05		
220.01	0.03	221.05	0.04	222.09	0.05		
220.03	0.03	221.07	0.04	222.11	0.05		

Webster Ridge Parking Expansion

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Type IA 24-hr WQ Rainfall=1.77"

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Stage-Area-Storage for Pond 2P: Detention

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
219.01	0	221.61	1,608
219.06	6	221.66	1,644
219.11	16	221.71	1,679
219.16	28	221.76	1,713
219.21	44	221.81	1,748
219.26	61	221.86	1,781
219.31	80	221.91	1,815
219.36	100	221.96	1,848
219.41	122	222.01	1,880
219.46	145	222.06	1,912
219.51	169	222.11	1,944
219.56	194	222.16	1,974
219.61	220	222.21	2,005
219.66	247	222.26	2,034
219.71	275	222.31	2,063
219.76	303	222.36	2,090
219.81	333	222.41	2,117
219.86	363	222.46	2,144
219.91	394	222.51	2,169
219.96	425	222.56	2,193
220.01	457	222.61	2,216
220.06	489	222.66	2,237
220.11	522	222.71	2,258
220.16	556	222.76	2,277
220.21	590	222.81	2,294
220.26	624	222.86	2,309
220.31	659	222.91	2,322
220.36	694	222.96	2,332
220.41	729	223.01	2,337
220.46	765		
220.51	801		
220.56	837		
220.61	873		
220.66	910		
220.71	946		
220.76	983		
220.81	1,020		
220.86	1,057		
220.91	1,094		
220.96	1,131		
221.01	1,169		
221.06	1,206		
221.11	1,243		
221.16	1,280		
221.21	1,317		
221.26	1,354		
221.31	1,391		
221.36	1,428		
221.41	1,464		
221.46	1,501		
221.51	1,537		
221.56	1,573		

Webster Ridge Parking Expansion

VI. Conveyance Pipe Design and Diagram



WEBSTER RIDGE PARKING EXPANSION

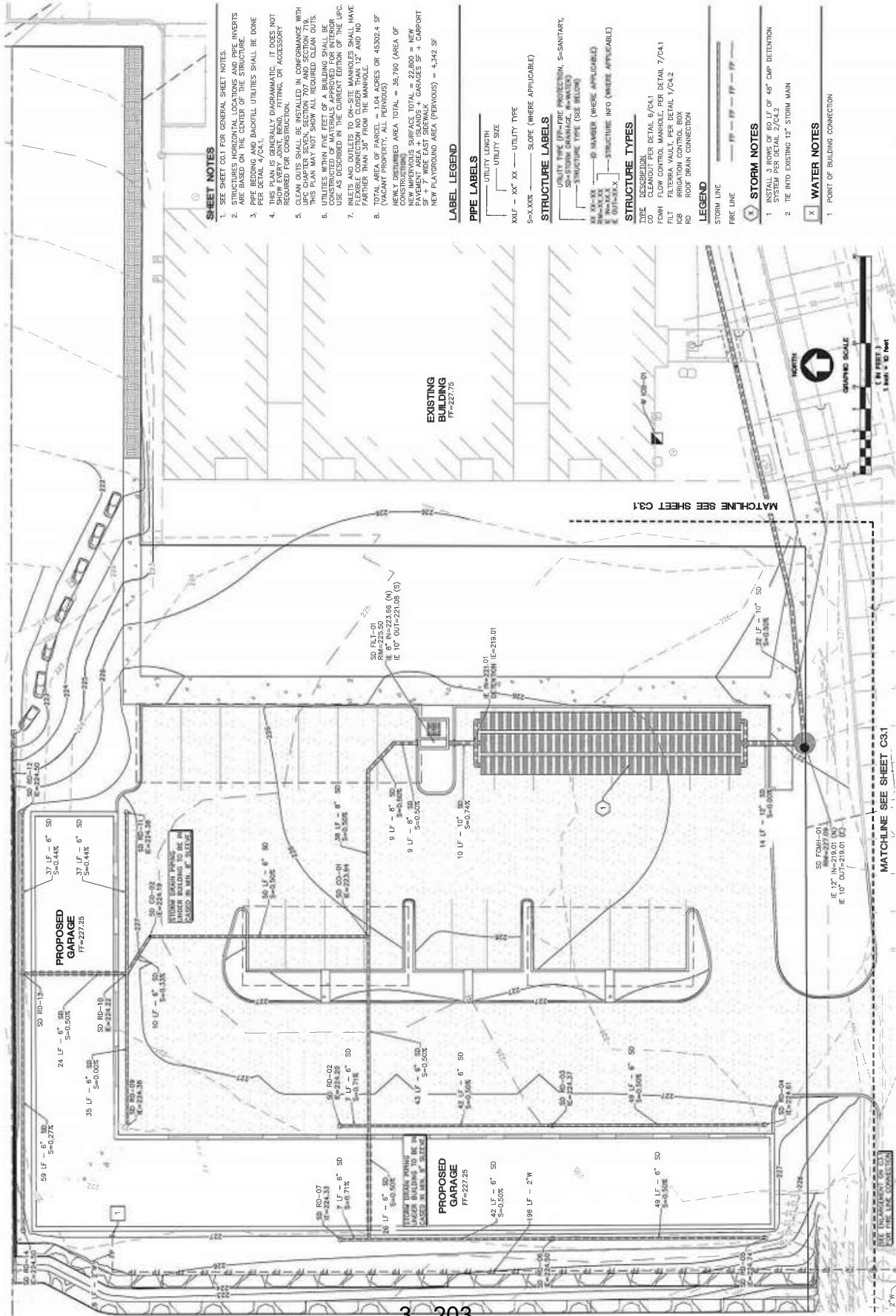
SHEET TITLE
UTILITY PLAN

DATE: 9/29/20
 DRAWN: TRH/DAR
 CHECKED: NWS
 REVISIONS:

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 PROJECT NO. 2020-0100-0001-0001
 SHEET NO. 104 OF 104
 PREPARED BY AAI ENGINEERING, INC.
 REVIEWED BY AAI ENGINEERING, INC.
 PERMITTED BY AAI ENGINEERING, INC.
 SHEET NUMBER

C3.0

JOB NUMBER: A30138.10



SHEET NOTES

- SEE SHEET C3.0 FOR GENERAL SHEET NOTES.
- STRUCTURES LOCATED AT CORNERS AND FIRE INVENTS ARE BASED ON THE CENTER OF THE STRUCTURE.
- PIPE BEDDING AND BACKFILL UTILITIES SHALL BE DONE PER DETAIL 7/04.1.
- THIS PLAN SHOWS ONLY DISAPPEARING UTILITY DECKS. NOT SHOW EVERY JOINT, BEND, FITTING, OR ACCESSORY REQUIRED FOR CONSTRUCTION.
- CLEAN OUTS SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF BEAVERTON CODES AND ALL OTHER APPLICABLE REGULATIONS. CLEAN OUTS SHALL BE INSTALLED AT THE POINT OF ENTRY TO THE STRUCTURE. THIS PLAN MAY NOT SHOW ALL REQUIRED CLEAN OUTS.
- UTILITIES WITHIN FIVE FEET OF A BUILDING SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF BEAVERTON CODES AND ALL OTHER APPLICABLE REGULATIONS. SEE DETAIL 7/04.1 FOR UTILITY DECK CONSTRUCTION AND DETAIL 7/04.2 FOR UTILITY DECK CONNECTIONS TO THE BUILDING.
- INLETS AND OUTLETS TO ON-SITE MANHOLES SHALL HAVE A FLEXIBLE CONNECTION NO CLOSER THAN 12" AND NO MORE THAN 36" FROM THE MANHOLE. SEE DETAIL 7/04.1 (VACANT PROPERTY, ALL PREVIOUS) OR 45302.4 SF NEWLY DISTURBED AREA TOTAL = 36,796 (AREA OF EXISTING DISTURBED AREA) + 4,345 (NEW PAVEMENT AREA + ISLANDS + GARAGES SF + CARPORT NEW PLAYGROUND AREA (PERVIOUS)) = 4,345 SF

PIPE LEGEND

- PIPE LABELS**
- UTILITY LENGTH
 - UTILITY SIZE
 - XX" - XX" XX" - UTILITY TYPE
 - XX"X-XX" - SLOPE (WHERE APPLICABLE)
- STRUCTURE LABELS**
- UTILITY TYPE (F= FIRE PROTECTION, S= SANITARY, S-SANITARY, S-SANITARY, S-SANITARY, S-SANITARY)
 - STRUCTURE TYPE (SEE BELOW)
 - XX"X-XX" - SLOPE (WHERE APPLICABLE)
 - XX"X-XX" - SLOPE (WHERE APPLICABLE)

STRUCTURE TYPES

- TYPE DESCRIPTION
- FOAM FLOOR CONTROL MANHOLE PER DETAIL 7/04.1
 - FILT FILTERVAULT PER DETAIL 1/04.2
 - IGB IRRIGATION CONTROL BOX
 - RD ROOF DRAIN CONNECTION

LEGEND

- STORM LINE
- FIRE LINE
- STORM NOTES**
- INSTALL STORM CONTROL SYSTEM PER DETAIL 2/04.2
 - SEE INTO EXISTING 12" STORM MAN

WATER NOTES

- POINT OF BUILDING CONNECTION

02/04/2022 - PERMIT SET



WEBSTER RIDGE PARKING EXPANSION

SHEET TITLE
 UTILITY PLAN

DATE: 9/29/20
 DRAWN: TRB/DAR
 CHECKED: NMS
 REVISIONS:

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C3.1
 SHEET NUMBER

JOB NUMBER: A201381.0

- SHEET NOTES**
- SEE SHEET C3.0 FOR GENERAL SHEET NOTES
 - STORM CONTROL DEVICES AND FIRE INVENTS ARE BASED ON THE CENTER OF THE STRUCTURE.
 - PIPE BEDDING AND BACKFILL UTILITIES SHALL BE DONE PER DETAIL 7/04.1
 - ALL PIPES SHALL BE INSTALLED IN CONFORMANCE WITH THE 2018 OREGON PLUMBING CODE, UNLESS NOTED OTHERWISE. IF PIPES ARE NOT SHOWN EXACTLY AS NOTED, THEY SHALL BE INSTALLED AS NOTED FOR CONSTRUCTION.
 - CLEAN OUTS SHALL BE INSTALLED IN CONFORMANCE WITH THE 2018 OREGON PLUMBING CODE, UNLESS NOTED OTHERWISE. THIS PLAN MAY NOT SHOW ALL REQUIRED CLEAN OUTS.
 - UTILITIES WITHIN FIVE FEET OF A BUILDING SHALL BE INSTALLED IN CONFORMANCE WITH THE 2018 OREGON PLUMBING CODE, UNLESS NOTED OTHERWISE.
 - INLETS AND OUTLETS TO ON-SITE MANHOLES SHALL HAVE FLEXIBLE CONNECTION NO CLOSER THAN 12" AND NO FARTHER THAN 36" FROM THE MANHOLE.

PIPE LABELS

- UTILITY TYPE
- UTILITY SIZE
- UTILITY TYPE
- SLOPE (WHERE APPLICABLE)

STRUCTURE LABELS

- UTILITY TYPE (PP=PIPE, P=PIPE, S=SANITARY, F=FLOW, M=MANHOLE, etc.)
- STRUCTURE TYPE (SEE BELOW)
- ID NUMBER (WHERE APPLICABLE)
- STRUCTURE INFO (WHERE APPLICABLE)

STRUCTURE TYPES

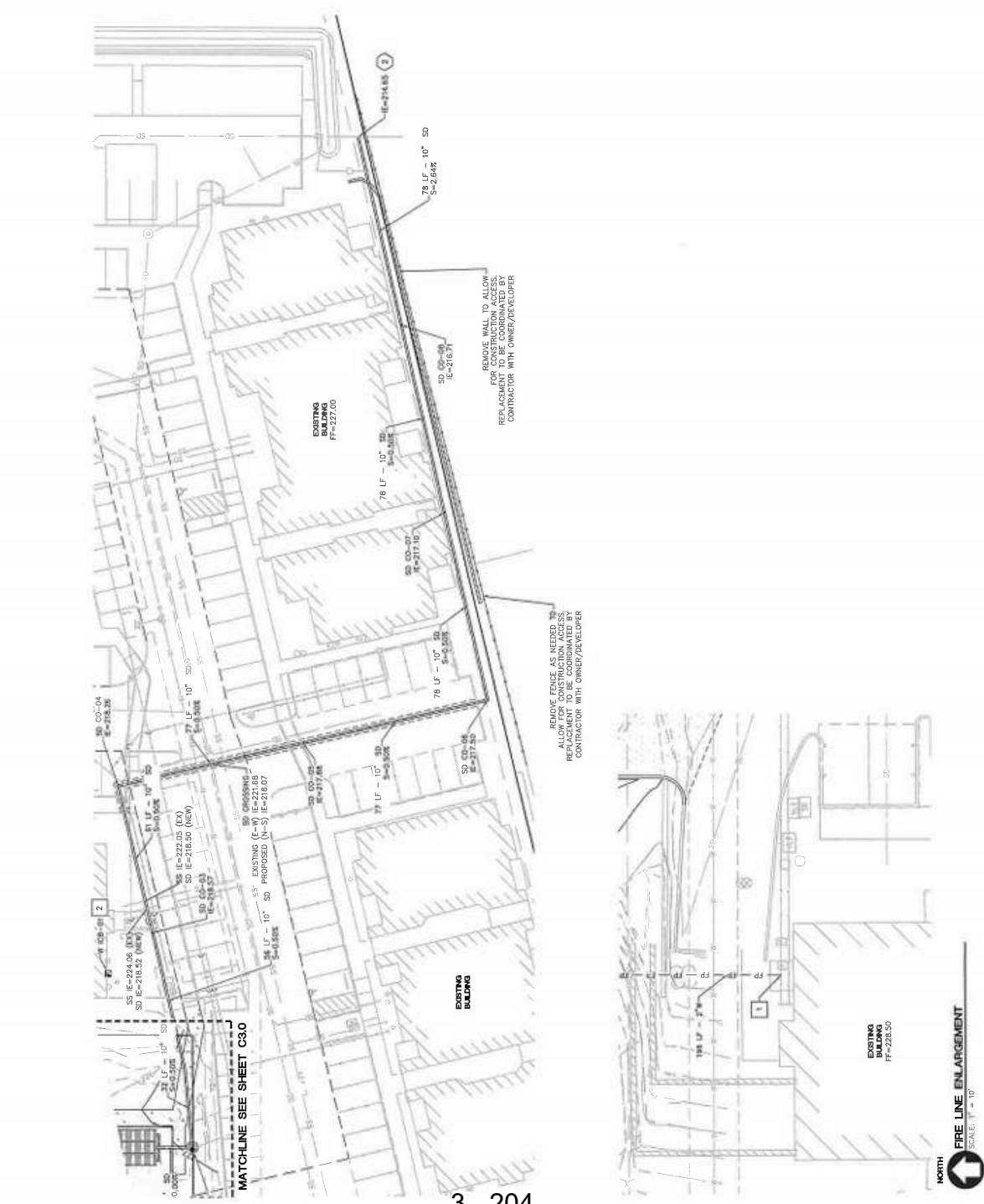
- JOGE DESCRIPTION
- PER DETAIL 6/C4.1
- FOAM FLOW CONTROL MANHOLE PER DETAIL 7/04.1
- FILT FILTER VAULT, PER DETAIL 1/04.2
- IGB IRRIGATION CONTROL BOX
- RD ROOF DRAIN CONNECTION

LEGEND

- STORM LINE
- FIRE LINE
- STORM NOTES
- WATER NOTES

- STORM NOTES**
- INSTALL 3 ROWS OF 60 LF OF 48" CMP DETENTION SYSTEM PER DETAIL 2/C4.2
 - TE INTO EXISTING 12" STORM MAIN

- WATER NOTES**
- INSTALL TE INTO EXISTING WATER LINE
 - INSTALL IRRIGATION CONTROL BOX



02/04/2022 - PERMIT SET

Webster Ridge Parking Expansion

VII. Downstream Analysis

Webster Ridge Parking Expansion

Downstream Analysis

Our project, as designed, will release the required detained discharge volume to the public system in Webster Road at levels that are below those of the current rates for up to and including the 25-yr, 24-hour storm event. The project has proposed to convey the storm to the public system in Webster Road.

Webster Ridge Parking Expansion

VIII. Details



AAI
 ENGINEERING
 5025 SW 67th Drive | Suite 100 | Beaverton, OR 97005
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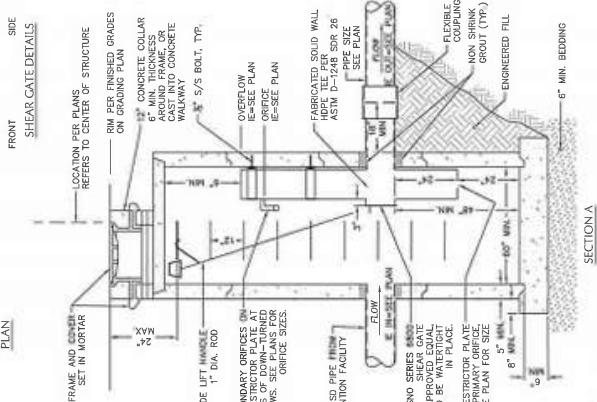
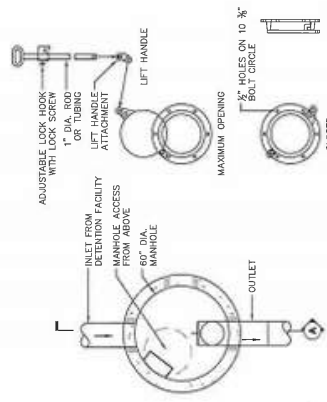
WEBSTER RIDGE PARKING
EXPANSION

SHEET TITLE
 PRIVATE DETAILS
 DATE: 8/29/20
 DRAWN: TRH/DJS
 CHECKED: NMS
 REVISIONS:
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 SHEET NUMBER

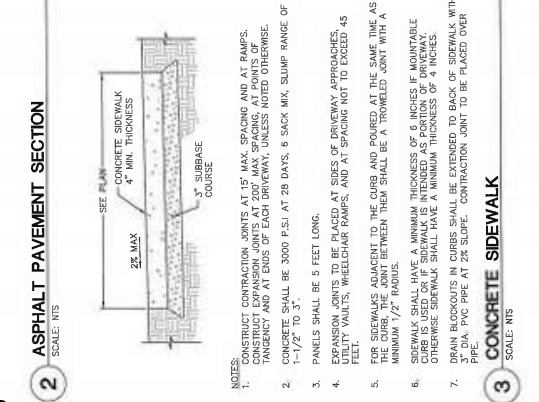
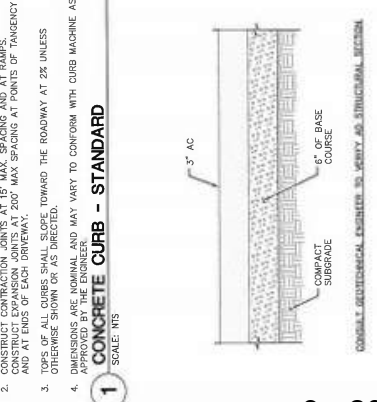
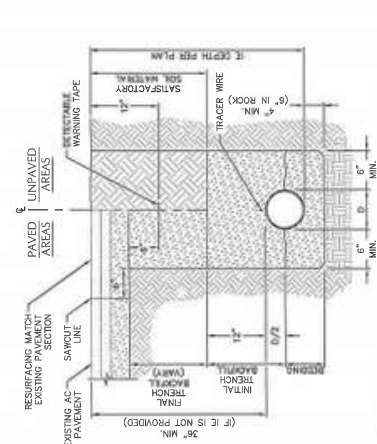
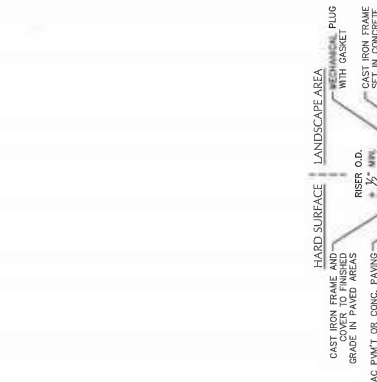
C4.1

JOB NUMBER: A00138.10

FLOW CONTROL ORIFICE SIZING			
STRUCTURE	2-YR	10/25-YR	EMERGENCY CAPTURE
FORM-01	1.0" @ 217.01	2.7" @ 221.15	24" @ 222.90



02/04/2022 - PERMIT SET



- NOTES:
 1. CURB EXPOSURE 'E' = 6". TYP. VARY AS SHOWN ON PLANS OR AS DIRECTED.
 2. CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMP, TRENCH, DRIVEWAY, AND AT ENDS OF EACH DRIVEWAY. 200' MAX SPACING AT POINTS OF VARIATION AND AT ENDS OF EACH DRIVEWAY.
 3. TOPS OF ALL CURBS SHALL SLOPE TOWARD THE ROADWAY AT 2% UNLESS OTHERWISE SHOWN OR AS DIRECTED.
 4. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM WITH CURB MACHINE AS APPROVED BY THE ENGINEER.

- NOTES:
 1. CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMP, TRENCH, DRIVEWAY, AND AT ENDS OF EACH DRIVEWAY, UNLESS NOTED OTHERWISE. CONCRETE SHALL BE 3000 P.S.I. AT 28 DAYS. 6 SACK MIX. SLUMP RANGE OF 1-1/2" TO 3".
 2. PANELS SHALL BE 5 FEET LONG.
 3. EXPANSION JOINTS TO BE PLACED AT SIDES OF DRIVEWAY APPROACHES, DRIVEWAY TRENCHES, DRIVEWAY RAMP, AND AT SPACING NOT TO EXCEED 45 FEET.
 4. FOR SIDEWALKS ADJACENT TO THE CURB AND POURED AT THE SAME TIME AS THE CURB, THE JOINT BETWEEN THEM SHALL BE A TROWELED JOINT WITH A MINIMUM 1/2" RADIUS.
 5. SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES IF MOUNTABLE AND 4 INCHES IF NOT MOUNTABLE. OTHERSIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 4 INCHES.
 6. DRAIN BODIES IN CURBS SHALL BE EXTENDED TO BACK OF SIDEWALK WITH 3" DIA. PVC PIPE AT 2% SLOPE. CONTRACTION JOINT TO BE PLACED OVER PIPE.
 7. CONCRETE SHALL BE 3000 P.S.I. AT 28 DAYS. 6 SACK MIX. SLUMP RANGE OF 1-1/2" TO 3".

3 - 208



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WEBSTER RIDGE PARKING
 EXPANSION
 CLATSOP, OR

SHEET TITLE
 PRIVATE DETAILS

DATE: 9/29/20
 DRAWN: TBT/DRC
 CHECKED: NMS
 REVISIONS:

C4.2

JOB NUMBER: A20138.10

02/04/2022 -- PERMIT SET

FTPD STANDARD HEIGHT CONFIGURATION

REVISION	DATE	DESCRIPTION	BY	CHKD
1	09/29/20	ISSUED FOR PERMIT	TBT	DRC

FTPD DEEP OPTION CONFIGURATION

REVISION	DATE	DESCRIPTION	BY	CHKD
1	09/29/20	ISSUED FOR PERMIT	TBT	DRC

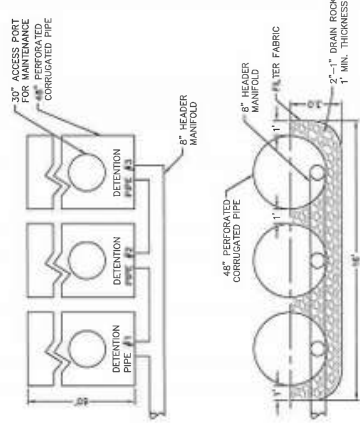
PLAN VIEW

SECTION A-A (STANDARD DEPTH SHOWN)

CURB INLET DETAIL

FILTERRA PEAK DIVERSION (FTPD) CONFIGURATION DETAIL

3 - 209



2 48" CMP DETENTION PIPING
 SCALE: NTS

1 FILTERRA PEAK DIVERSION DETAIL
 SCALE: NTS



June 2020

**GENERAL USE LEVEL DESIGNATION FOR BASIC (TSS), ENHANCED,
PHOSPHORUS & OIL TREATMENT**

For

CONTECH Engineered Solutions Filterra®

Ecology's Decision:

Based on Contech's submissions, including the Final Technical Evaluation Reports, dated August 2019, March 2014, December 2009, and additional information provided to Ecology dated October 9, 2009, Ecology hereby issues the following use level designations:

1. A General Use Level Designation for Basic, Enhanced, Phosphorus, and Oil Treatment for the Filterra® system constructed with a minimum media thickness of 21 inches (1.75 feet), at the following water quality design hydraulic loading rates:

Treatment	Infiltration Rate (in/hr) for use in Sizing
Basic	175
Phosphorus	100
Oil	50
Enhanced	175

2. The Filterra is not appropriate for oil spill-control purposes.
3. Ecology approves Filterra systems for treatment at the hydraulic loading rates listed above, and sized based on the water quality design flow rate for an off-line system. Calculate the water quality design flow rates using the following procedures:
 - Western Washington: for treatment installed upstream of detention or retention, the water quality design flow rate is the peak 15-minute flow rate as calculated using the latest version of the Western Washington Hydrology Model or other Ecology-approved continuous runoff model.
 - Eastern Washington: For treatment installed upstream of detention or retention, the water quality design flow rate is the peak 15-minute flow rate as calculated using one of the three flow rate based methods described in Chapter 2.7.6 of the Stormwater Management Manual for Eastern Washington (SWMMEW) or local manual.
 - Entire State: For treatment installed downstream of detention, the water quality design flow rate is the full 2-year release rate of the detention facility.

4. This General Use Level Designation has no expiration date, but Ecology may revoke or amend the designation, and is subject to the conditions specified below.

Ecology's Conditions of Use:

Filtterra systems shall comply with these conditions shall comply with the following conditions:

1. Design, assemble, install, operate, and maintain the Filtterra systems in accordance with applicable Contech Filtterra manuals and this Ecology Decision.
2. The minimum size filter surface-area for use in Washington is determined by using the design water quality flow rate (as determined in this Ecology Decision, Item 3, above) and the Infiltration Rate from the table above (use the lowest applicable Infiltration Rate depending on the level of treatment required). Calculate the required area by dividing the water quality design flow rate (cu-ft/sec) by the Infiltration Rate (converted to ft/sec) to obtain required surface area (sq-ft) of the Filtterra unit.
3. Each site plan must undergo Contech Filtterra review before Ecology can approve the unit for site installation. This will ensure that design parameters including site grading and slope are appropriate for use of a Filtterra unit.
4. Filtterra media shall conform to the specifications submitted to and approved by Ecology and shall be sourced from Contech Engineered Solutions, LLC with no substitutions.
5. Maintenance includes removing trash, degraded mulch, and accumulated debris from the filter surface and replacing the mulch layer. Use inspections to determine the site-specific maintenance schedules and requirements. Follow maintenance procedures given in the most recent version of the Filtterra Operation and Maintenance Manual.
6. Maintenance: The required maintenance interval for stormwater treatment devices is often dependent upon the degree of pollutant loading from a particular drainage basin. Therefore, Ecology does not endorse or recommend a "one size fits all" maintenance cycle for a particular model/size of manufactured treatment device.
 - Contech designs Filtterra systems for a target maintenance interval of 6 months in the Pacific Northwest. Maintenance includes removing and replacing the mulch layer above the media along with accumulated sediment, trash, and captured organic materials therein, evaluating plant health, and pruning the plant if deemed necessary.
 - Conduct maintenance following manufacturer's guidelines.
7. Filtterra systems come in standard sizes.
8. Install the Filtterra in such a manner that flows exceeding the maximum Filtterra operating rate are conveyed around the Filtterra mulch and media and will not resuspend captured sediment.
9. Discharges from the Filtterra units shall not cause or contribute to water quality standards violations in receiving waters.

Approved Alternate Configurations

Filterra Internal Bypass - Pipe (FTIB-P)

1. The Filterra® Internal Bypass – Pipe allows for piped-in flow from area drains, grated inlets, trench drains, and/or roof drains. Design capture flows and peak flows enter the structure through an internal slotted pipe. Filterra® inverted the slotted pipe to allow design flows to drop through to a series of splash plates that then disperse the design flows over the top surface of the Filterra® planter area. Higher flows continue to bypass the slotted pipe and convey out the structure.
2. To select a FTIB-P unit, the designer must determine the size of the standard unit using the sizing guidance described above.

Filterra Internal Bypass – Curb (FTIB-C)

1. The Filterra® Internal Bypass –Curb model (FTIB-C) incorporates a curb inlet, biofiltration treatment chamber, and internal high flow bypass in one single structure. Filterra® designed the FTIB-C model for use in a “Sag” or “Sump” condition and will accept flows from both directions along a gutter line. An internal flume tray weir component directs treatment flows entering the unit through the curb inlet to the biofiltration treatment chamber. Flows in excess of the water quality treatment flow rise above the flume tray weir and discharge through a standpipe orifice; providing bypass of untreated peak flows. Americast manufactures the FTIB-C model in a variety of sizes and configurations and you may use the unit on a continuous grade when a single structure providing both treatment and high flow bypass is preferred. The FTIB-C model can also incorporate a separate junction box chamber to allow larger diameter discharge pipe connections to the structure.
2. To select a FTIB-C unit, the designer must determine the size of the standard unit using the sizing guidance described above.

Filterra® Shallow

1. The Filterra Shallow provides additional flexibility for design engineers and designers in situations where various elevation constraints prevent application of a standard Filterra configuration. Engineers can design this system up to six inches shallower than any of the previous Filterra unit configurations noted above.
2. Ecology requires that the Filterra Shallow provide a media contact time equivalent to that of the standard unit. This means that with a smaller depth of media, the surface area must increase.
3. To select a Filterra Shallow System unit, the designer must first identify the size of the standard unit using the modeling guidance described above.
4. Once the size of the standard Filterra unit is established using the sizing technique described above, use information from the following table to select the appropriate size Filterra Shallow System unit.

Shallow Unit Basic, Enhanced, Phosphorus, and Oil Treatment Sizing

Standard Depth	Equivalent Shallow Depth
4x4	4x6 or 6x4
4x6 or 6x4	6x6
4x8 or 8x4	6x8 or 8x6
6x6	6x10 or 10x6
6x8 or 8x6	6x12 or 12x6
6x10 or 10x6	13x7

Notes:

1. Shallow Depth Boxes are less than the standard depth of 3.5 feet but no less than 3.0 feet deep (TC to INV).

Applicant: Contech Engineered Solutions, LLC.

Applicant's Address: 11815 NE Glenn Widing Drive
Portland, OR 97220

Application Documents:

- State of Washington Department of Ecology Application for Conditional Use Designation, Americast (September 2006)
- Quality Assurance Project Plan Filterra® Bioretention Filtration System Performance Monitoring, Americast (April 2008)
- Quality Assurance Project Plan Addendum Filterra® Bioretention Filtration System Performance Monitoring, Americast (June 2008)
- Draft Technical Evaluation Report Filterra® Bioretention Filtration System Performance Monitoring, Americast (August 2009)
- Final Technical Evaluation Report Filterra® Bioretention Filtration System Performance Monitoring, Americast (December 2009)
- Technical Evaluation Report Appendices Filterra® Bioretention Filtration System Performance Monitoring, Americast, (August 2009)
- Memorandum to Department of Ecology Dated October 9, 2009 from Americast, Inc. and Herrera Environmental Consultants
- Quality Assurance Project Plan Filterra® Bioretention System Phosphorus treatment and Supplemental Basic and Enhanced Treatment Performance Monitoring, Americast (November 2011)
- Filterra® letter August 24, 2012 regarding sizing for the Filterra® Shallow System.
- University of Virginia Engineering Department Memo by Joanna Crowe Curran, Ph. D dated March 16, 2013 concerning capacity analysis of Filterra® internal weir inlet tray.
- Terraphase Engineering letter to Jodi Mills, P.E. dated April 2, 2013 regarding Terraflume Hydraulic Test, Filterra® Bioretention System and attachments.
- Technical Evaluation Report, Filterra® System Phosphorus Treatment and Supplemental Basic Treatment Performance Monitoring. March 27th, 2014.
- State of Washington Department of Ecology Application for Conditional Use Level Designation, Contech Engineered Solutions (May 2015)

- Quality Assurance Project Plan Filterra® Bioretention System, Contech Engineered Solutions (May 2015)
- Filterra Bioretention System Armco Avenue General Use Level Designation Technical Evaluation Report, Contech Engineered Solutions (August 2019)

Applicant’s Use Level Request:

General Level Use Designation for Basic (175 in/hr), Enhanced (175 in/hr), Phosphorus (100 in/hr), and Oil Treatment (50 in/hr).

Applicant’s Performance Claims:

Field-testing and laboratory testing show that the Filterra® unit is promising as a stormwater treatment best management practice and can meet Ecology’s performance goals for basic, enhanced, phosphorus, and oil treatment.

Findings of Fact:

Field Testing 2015-2019

1. Contech completed field testing of a 4 ft. x 4 ft. Filterra® unit at one site in Hillsboro, Oregon from September 2015 to July 2019. Throughout the monitoring period a total of 24 individual storm events were sampled, of which 23 qualified for TAPE sampling criteria.
2. Contech encountered several unanticipated events and challenges that prevented them from collecting continuous flow and rainfall data. An analysis of the flow data from the sampled events, including both the qualifying and non-qualifying events, demonstrated the system treated over 99 % of the influent flows. Peak flows during these events ranged from 25 % to 250 % of the design flow rate of 29 gallons per minute.
3. Of the 23 TAPE qualified sample events, 13 met requirements for TSS analysis. Influent concentrations ranged from 20.8 mg/L to 83 mg/L, with a mean concentration of 46.3 mg/L. The UCL95 mean effluent concentration was 15.9 mg/L, meeting the 20 mg/L performance goal for Basic Treatment.
4. All 23 TAPE qualified sample events met requirements for dissolved zinc analysis. Influent concentrations range from 0.0384 mg/L to 0.2680 mg/L, with a mean concentration of 0.0807 mg/L. The LCL 95 mean percent removal was 62.9 %, meeting the 60 % performance goal for Enhanced Treatment.
5. Thirteen of the 23 TAPE qualified sample events met requirements for dissolved copper analysis. Influent concentrations ranged from 0.00543 mg/L to 0.01660 mg/L, with a mean concentration of 0.0103 mg/L. The LCL 95 mean percent removal was 41.2 %, meeting the 30 % performance goal for Enhanced Treatment.
6. Total zinc concentrations were analyzed for all 24 sample events. Influent EMCs for total zinc ranged from 0.048 mg/L to 5.290 mg/L with a median of 0.162 mg/L. Corresponding effluent EMCs for total zinc ranged from 0.015 mg/L to 0.067 mg/L with a median of

0.029 mg/L. Total event loadings for the study for total zinc were 316.85 g at the influent and 12.92 g at the effluent sampling location, resulting in a summation of loads removal efficiency of 95.9 %.

7. Total copper concentrations were analyzed for all 24 sample events. Influent EMCs for total copper ranged from 0.003 mg/L to 35.600 mg/L with a median value of 0.043 mg/L. Corresponding effluent EMCs for total copper ranged from 0.002 mg/L to 0.015 mg/L with a median of 0.004 mg/L. Total event loadings for total copper for the study were 1,810.06 g at the influent and 1.90 g at the effluent sampling location, resulting in a summation of loads removal efficiency of 99.9 %.

Field Testing 2013

1. Filterra completed field-testing of a 6.5 ft x 4 ft. unit at one site in Bellingham, Washington. Continuous flow and rainfall data collected from January 1, 2013 through July 23, 2013 indicated that 59 storm events occurred. Water quality data was obtained from 22 storm events. Not all the sampled storms produced information that met TAPE criteria for storm and/or water quality data.
2. The system treated 98.9 % of the total 8-month runoff volume during the testing period. Consequently, the system achieved the goal of treating 91 % of the volume from the site. Stormwater runoff bypassed Filterra treatment during four of the 59 storm events.
3. Of the 22 sampled events, 18 qualified for TSS analysis (influent TSS concentrations ranged from 25 to 138 mg/L). The data were segregated into sample pairs with influent concentration greater than and less than 100 mg/L. The UCL95 mean effluent concentration for the data with influent less than 100 mg/L was 5.2 mg/L, below the 20-mg/L threshold. Although the TAPE guidelines do not require an evaluation of TSS removal efficiency for influent concentrations below 100 mg/L, the mean TSS removal for these samples was 90.1 %. Average removal of influent TSS concentrations greater than 100 mg/L (three events) was 85 %. In addition, the system consistently exhibited TSS removal greater than 80 % at flow rates equivalent to a 100 in/hr infiltration rate and was observed at 150 in/hr.
4. Ten of the 22 sampled events qualified for TP analysis. Americast augmented the dataset using two sample pairs from previous monitoring at the site. Influent TP concentrations ranged from 0.11 to 0.52 mg/L. The mean TP removal for these twelve events was 72.6 %. The LCL95 mean percent removal was 66.0, well above the TAPE requirement of 50 %. Treatment above 50 % was evident at 100 in/hr infiltration rate and as high as 150 in/hr. Consequently, the Filterra test system met the TAPE Phosphorus Treatment goal at 100 in/hr. Influent ortho-P concentrations ranged from 0.005 to 0.012 mg/L; effluent ortho-P concentrations ranged from 0.005 to 0.013 mg/L. The reporting limit/resolution for the ortho-P test method is 0.01 mg/L, therefore the influent and effluent ortho-P concentrations were both at and near non-detect concentrations.

Field Testing 2008-2009

1. Filterra completed field-testing at two sites at the Port of Tacoma. Continuous flow and rainfall data collected during the 2008-2009 monitoring period indicated that 89 storm events occurred. The monitoring obtained water quality data from 27 storm events. Not all the sampled storms produced information that met TAPE criteria for storm and/or water quality data.
2. During the testing at the Port of Tacoma, 98.96 to 99.89 % of the annual influent runoff volume passed through the POT1 and POT2 test systems respectively. Stormwater runoff bypassed the POT1 test system during nine storm events and bypassed the POT2 test system during one storm event. Bypass volumes ranged from 0.13 % to 15.3% of the influent storm volume. Both test systems achieved the 91 % water quality treatment-goal over the 1-year monitoring period.
3. Consultants observed infiltration rates as high as 133 in/hr during the various storms. Filterra did not provide any paired data that identified percent removal of TSS, metals, oil, or phosphorus at an instantaneous observed flow rate.
4. The maximum storm average hydraulic loading rate associated with water quality data is <40 in/hr, with the majority of flow rates < 25 in/hr. The average instantaneous hydraulic loading rate ranged from 8.6 to 53 in/hr.
5. The field data showed a removal rate greater than 80 % for TSS with an influent concentration greater than 20 mg/L at an average instantaneous hydraulic loading rate up to 53 in/hr (average influent concentration of 28.8 mg/L, average effluent concentration of 4.3 mg/L).
6. The field data showed a removal rate generally greater than 54 % for dissolved zinc at an average instantaneous hydraulic loading rate up to 60 in/hr and an average influent concentration of 0.266 mg/L (average effluent concentration of 0.115 mg/L).
7. The field data showed a removal rate generally greater than 40 % for dissolved copper at an average instantaneous hydraulic loading rate up to 35 in/hr and an average influent concentration of 0.0070 mg/L (average effluent concentration of 0.0036 mg/L).
8. The field data showed an average removal rate of 93 % for total petroleum hydrocarbon (TPH) at an average instantaneous hydraulic loading rate up to 53 in/hr and an average influent concentration of 52 mg/L (average effluent concentration of 2.3 mg/L). The data also shows achievement of less than 15 mg/L TPH for grab samples. Filterra provided limited visible sheen data due to access limitations at the outlet monitoring location.
9. The field data showed low percentage removals of total phosphorus at all storm flows at an average influent concentration of 0.189 mg/L (average effluent concentration of 0.171 mg/L). We may relate the relatively poor treatment performance of the Filterra system at this location to influent characteristics for total phosphorus that are unique to the Port of Tacoma site. It appears that the Filterra system will not meet the 50 % removal performance goal when the majority of phosphorus in the runoff is expected to be in the dissolved form.

Laboratory Testing

1. Filterra performed laboratory testing on a scaled down version of the Filterra unit. The lab data showed an average removal from 83-91 % for TSS with influents ranging from 21 to 320 mg/L, 82-84 % for total copper with influents ranging from 0.94 to 2.3 mg/L, and 50-61 % for orthophosphate with influents ranging from 2.46 to 14.37 mg/L.
2. Filterra conducted permeability tests on the soil media.
3. Lab scale testing using Sil-Co-Sil 106 showed removals ranging from 70.1 % to 95.5 % with a median removal of 90.7 %, for influent concentrations ranging from 8.3 to 260 mg/L. Filterra ran these laboratory tests at an infiltration rate of 50 in/hr.
4. Supplemental lab testing conducted in September 2009 using Sil-Co-Sil 106 showed an average removal of 90.6 %. These laboratory tests were run at infiltration rates ranging from 25 to 150 in/hr for influent concentrations ranging from 41.6 to 252.5 mg/L. Regression analysis results indicate that the Filterra system’s TSS removal performance is independent of influent concentration in the concentration range evaluated at hydraulic loading rates of up to 150 in/hr.

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Applicant’s Website: <http://www.conteches.com>

Ecology web link: <http://www.ecy.wa.gov/programs/wq/stormwater/newtech/index.html>

Ecology: Douglas C. Howie, P.E.
Department of Ecology
Water Quality Program
(360) 407-6444
douglas.howie@ecy.wa.gov

Date	Revision
December 2009	GULD for Basic, Enhanced, and Oil granted, CULD for Phosphorus
September 2011	Extended CULD for Phosphorus Treatment
September 2012	Revised design storm discussion, added Shallow System.
January 2013	Revised format to match Ecology standards, changed Filterra contact information
February 2013	Added FTIB-P system
March 2013	Added FTIB-C system
April 2013	Modified requirements for identifying appropriate size of unit

June 2013	Modified description of FTIB-C alternate configuration
March 2014	GULD awarded for Phosphorus Treatment. GULD updated for a higher flow-rate for Basic Treatment.
June 2014	Revised sizing calculation methods
March 2015	Revised Contact Information
June 2015	CULD for Basic and Enhanced at 100 in/hr infiltration rate
September 2019	GULD for Basic and Enhanced at 175 in/hr infiltration rate
February 2020	Revised sizing language to note sizing based on off-line calculations
June 2020	Added Phosphorus to Filterra Shallow sizing table

Webster Ridge Parking Expansion

IX. Soils Data



Real-World Geotechnical Solutions
Investigation • Design • Construction Support

May 12, 2015
Project No. 15-3655

HT Investment Properties, LLC

Attn: Hans Thygeson
1962 Wallace Road, NW
Salem, OR 97304

Via e-mail with hard copies mailed on request

Copy: John Howorth, 3J Consulting, Inc. (john.howorth@3j-consulting.com)

**SUBJECT: GEOTECHNICAL ENGINEERING REPORT
GLADSTONE APARTMENTS
18121 WEBSTER ROAD
GLADSTONE, OREGON**

This report presents the results of a geotechnical exploration conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above-referenced project. The purpose of our work was to evaluate subsurface conditions at the site and provide recommendations for site development. This geotechnical exploration was performed in accordance with GeoPacific Proposal No. P-4709 dated December 27, 2013 and your subsequent authorization of our proposals and *General Conditions for Geotechnical Services*.

SITE DESCRIPTION AND PROPOSED DEVELOPMENT

The subject site is located on the west side of Webster Road in Clackamas County, Oregon as shown on the attached Vicinity Map (Figure 1). The site is approximately 4.1 acres in size and is comprised of two Clackamas County tax lots (22E17DC00700 and 22E17DC00800). The site is currently developed with one single-family home and several associated outbuildings, as shown on the attached Site Plan (Figure 2). Vegetation at the site consists of field grasses, bushes, and multiple trees of various sizes. The regional topography is variable with moderate to steep slopes; however, the topography at the subject site is relatively level, with gently sloping grades of less than 15 percent.

Based on our review of the preliminary site plan, it is our understanding that the proposed development will consist of five multi-unit apartment buildings, a club house, a playground area, driving lanes, and parking spaces. It also appears from the site plan that the existing structures will be razed as part of the new development. A grading plan has not yet been provided for the proposed development, however we do not anticipate cuts or fills in excess of 5 feet. The proposed multi-family residential buildings will likely be wood frame construction utilizing conventional spread footings with raised wood floors and crawl spaces.

SITE GEOLOGY

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. Valley-fill sediment in the adjacent basin achieves a maximum thickness of 1,500 feet and overlies Miocene Columbia River Basalt at depth (Madin, 1990; Yeats et al., 1996).

Geologic mapping indicates that the site is underlain by the Columbia River Basalt Formation (Madin, 1990). The Miocene aged (about 14.5 to 16.5 million years ago) Columbia River Basalts are a thick sequence of lava flows which form the crystalline basement of the Tualatin Valley. The basalts are composed of dense, finely crystalline rock that is commonly fractured along blocky and columnar vertical joints. Individual basalt flow units typically range from 25 to 125 feet thick and interflow zones are typically vesicular, scoriaceous, brecciated, and sometimes include sedimentary rocks.

REGIONAL SEISMIC SETTING

At least three major fault zones capable of generating damaging earthquakes are thought to exist in the vicinity of the subject site. These include the Portland Hills Fault Zone, the Gales Creek-Newberg-Mt. Angel Structural Zone, and the Cascadia Subduction Zone.

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 0.6 miles northeast of the site. The Oatfield Fault occurs along the western side of the Portland Hills, and is approximately 0.6 miles southwest of the site. The Oatfield Fault is considered to be potentially seismogenic (Wong, et al., 2000). Mabey et al., (1996) indicate the Portland Hills Fault Zone has experienced Late Quaternary (last 780,000 years) fault movement; however, movement has not been detected in the last 20,000 years. 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).

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 20.9 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 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 Fault or Newberg Fault (the fault 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).

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 roughly along the Oregon coast at depths of between 20 and 40 miles.

SUBSURFACE CONDITIONS

Our site-specific exploration for this geotechnical engineering report was conducted on January 20, 2015. A total of 6 exploratory test pits (designated TP-1 through TP-6) were excavated to depths ranging from 3.5 to 12 feet at the locations shown on Figure 2. Test pit locations were determined in the field by pacing or taping distances from property corners and other site features discernible in aerial photographs. As such, the locations of the explorations should be considered approximate.

A representative of the GeoPacific engineering staff 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. Rock hardness was classified in accordance with the below table (Table 1), which was modified from the ODOT Rock Hardness Classification Chart.

Table 1 - Rock Hardness Classification Chart

ODOT Rock Hardness Rating	Field Criteria	Unconfined Compressive Strength	Typical Equipment Needed For Excavation
Extremely Soft (R0)	Indented by thumbnail	<100 psi	Small excavator
Very Soft (R1)	Scratched by thumbnail, crumbled by rock hammer	100-1,000 psi	Small excavator
Soft (R2)	Not scratched by thumbnail, indented by rock hammer	1,000-4,000 psi	Medium excavator (slow digging with small excavator)
Medium Hard (R3)	Scratched or fractured by rock hammer	4,000-8,000 psi	Medium to large excavator (slow to very slow digging), typically requires chipping with hydraulic hammer or mass excavation)
Hard (R4)	Scratched or fractured w/ difficulty	8,000-16,000 psi	Slow chipping with hydraulic hammer and/or blasting
Very Hard (R5)	Not scratched or fractured after many blows, hammer rebounds	>16,000 psi	Blasting

During our explorations, geotechnical conditions such as soil consistency, moisture and groundwater conditions were also noted. For additional information pertaining to subsurface conditions at specific location, refer to the attached test pit logs. It should be noted that subsurface conditions can vary between exploration locations, as discussed in the *Uncertainty and Limitations* section of this report. The following sections discuss the subsurface conditions encountered in our test pit explorations.

Soils

The underlying soils encountered in our explorations consisted of topsoil, native soil, undocumented fill, and the Columbia River Basalt Formation:

Topsoil Horizon: Organic SILT (ML) with fine to medium roots was encountered directly underlying the ground surface in all of the test pit locations. In general, the topsoil layer was approximately 6-inches thick. However, the topsoil depth extended to 18 inches in test pit TP-3, and 12 inches in TP-6. The topsoil horizon was generally soft. Table 2 summarizes the depth to topsoil at each test pit location.

Table 2 – Thicknesses of Topsoil Horizon in Test Pit Explorations

Test Pit Designation	Topsoil Thickness (in)
TP-1	4
TP-2	6
TP-3	18
TP-4	6
TP-5	6
TP-6	12

Undocumented Fill: Undocumented fill was encountered underlying the topsoil horizon in test pit TP-6. The fill material was encountered at an approximate depth of 1.0 to 3.5 feet and consisted of gravel, cobbles, and boulders in a silt matrix. Significant caving was observed in the undocumented fill horizon. The source of the undocumented fill is unknown. Undocumented fill material was not observed in any other test pits at the site, but may exist in other areas of the site outside of our explorations.

Residual Soil: Residual soil was encountered in test pit TP-2 at a depth of 0.5 to 2.5 feet. The residual soil was medium dense to dense and consisted of silty gravel with cobbles and boulders. Residual soil was not encountered in any other test pits at the site.

Columbia River Basalt: Underlying the fill in TP-6, the residual soil in TP-2, and the topsoil in all other test pits, we observed gray basalt belonging to the Columbia River Basalt Formation. The upper portion of the basalt encountered was extremely soft (R0) to medium hard (R3) with trace reddish-brown silty clay to clayey silt. The medium-size trackhoe used for our explorations was able to excavate the basalt classified as R0 and R2; however, practical refusal was met in test pits TP-2 through TP-6 where medium hard (R3) basalt was encountered. The medium hard basalt was encountered in the test pits at variable depths, ranging from 3.5 to 9.0 feet. Boulders up to 3 feet in diameter were encountered in the Columbia River Basalt horizon, and two outcroppings of Columbia River Basalt were observed on the site at the approximate locations shown on Figure 2. Table 3 below summarizes the depth to refusal in test pits TP-2 through TP-6.

Table 3 – Depths to Refusal in Test Pit Explorations

Test Pit Designation	Depth of Refusal (ft)
TP-2	7.5
TP-3	3.5
TP-4	9.0
TP-5	3.5
TP-6	4.5

Soil Moisture and Groundwater

On January 20, 2015 the soil moisture conditions observed in test pits were moist to wet. Static groundwater was observed in all test pits except TP-3 (which was terminated at 3.5 feet due to

refusal on medium hard basalt). The static groundwater levels ranged from 3.0 feet at TP-5 to 4.5 feet at TP-1 and TP-4. No seepage was observed above the static groundwater level in any of the test pits. It is anticipated that groundwater conditions will vary depending on the season, local subsurface conditions, changes in site utilization, and other factors.

CONCLUSIONS AND RECOMMENDATIONS

Based on our review, we consider the proposed development to be geotechnically feasible, provided that the recommendations of this report are incorporated into the design and construction phases of the project. In our opinion, the greatest geotechnical issues for project completion are the presence shallow basalt bedrock and shallow groundwater conditions.

Based on the preliminary construction site plan, it appears the majority of the site will be developed with structures, driving lanes, and/or parking areas. The presence of shallow basalt bedrock throughout the site, including exposed rock outcroppings at the southwest portion, may present issues for the development of this site; and it should be noted that typical construction equipment may not be adequate for site preparation. For example, weathered basalt bedrock is present at portions of the site at depths as shallow as 4-inches. This indicates that typical construction equipment, such as scrapers, may not be adequate for topsoil stripping. In addition, medium hard (R3) basalt was encountered as shallow as 3.5 feet in portions of the site, which will likely present challenges during the excavation of deeper utility trenches. A large excavator may be needed for excavation of the medium hard (R3) basalt, and chipping with a hydraulic hammer may also be necessary. We anticipate that slow excavating conditions will be encountered during installation of utilities deeper than approximately 3 feet.

Static groundwater levels at the site were encountered at depths ranging from 3.0 to 4.5 feet. The presence of shallow groundwater will likely present issues for the installation of deeper trenches, and dewatering measures may be necessary. We have not reviewed a site development grading plan, however, shallow groundwater may also need to be addressed for cuts associated with structural footings and pavement area rock sections.

On-site stormwater management facilities may not be feasible for this project, due to shallow groundwater conditions and shallow bedrock present throughout the site. We anticipate groundwater conditions to vary seasonally; however, it appears that groundwater will be present as shallow as 3.5 feet for portions of the year.

As discussed in the *Subsurface Conditions* section above, undocumented fill material was encountered in test pit TP-6. The fill material was encountered at an approximate depth of 1.0 to 3.5 feet and consisted of gravel, cobbles, and boulders in a silt matrix. The source of the undocumented fill is unknown. Based on the preliminary site plan, a structure is planned for the area surrounding TP-6; therefore, the undocumented fill in this area should be completely removed and the resulting cavity backfilled with engineered fill. Additional test pits may be excavated, if desired, after the existing structures have been demolished to delineate the extent of the undocumented fill.

The following report sections provide additional details for addressing shallow bedrock and shallow groundwater at the site, in addition to general recommendations for site development and construction in accordance with the current applicable codes and local standards of practice.

Site Preparation

Areas of proposed buildings, streets, and areas to receive fill should be cleared of vegetation and any organic and inorganic debris. The site plan for the proposed development indicates existing structures at the site will be razed. Existing structures should be completely demolished and any resulting cavities backfilled with engineered fill. Inorganic debris should be removed from the site. Organic materials from clearing should either be removed from the site or placed as landscape fill (in areas not planned for structures, driving lanes, or parking areas).

Organic-rich topsoil should then be stripped from construction areas of the site or where engineered fill is to be placed. In general, the estimated necessary depth of removal in undisturbed areas for moderately organic soils is 6 inches. However, it should be noted that the necessary depth of topsoil removal in some areas may be up to 12 to 18 inches, as shown on Table 2 above. Large trees are present at the site and deeper stripping to remove large roots or other organics may be necessary in localized areas. The final depth of soil removal will be determined on the basis of a site inspection after the stripping/excavation has been performed. Stripped topsoil should be stockpiled only in designated areas and stripping operations should be observed and documented by the geotechnical engineer (or representative).

Any remaining disturbed native soils, undocumented fills, and subsurface structures (tile drains, basements, driveway and landscaping fill, old utility lines, septic leach fields, etc.) should be removed and the excavations backfilled with engineered fill. Undocumented fill consisting of gravel, cobbles, and boulders was observed from 1.0 to 3.5 feet in test pit TP-6. Based on the preliminary site plan, a structure is planned for the area surrounding TP-6; therefore, the undocumented fill in this area should be removed. Additional undocumented fill material likely exists in the vicinity of the existing home and structures.

Once stripping of a particular area is approved, the area must be ripped or tilled to a depth of 12 inches, moisture conditioned, root-picked, and compacted in-place prior to the placement of engineered fill or crushed aggregate base for pavement. Exposed subgrade soils should be evaluated by the geotechnical engineer. For large areas, this evaluation is normally performed by proof-rolling the exposed subgrade with a fully loaded scraper or dump truck. For smaller areas where access is restricted, the subgrade should be evaluated by probing the soil with a steel probe. Soft/loose soils identified during subgrade preparation should be compacted to a firm and unyielding condition, over-excavated and replaced with engineered fill (as described below), or stabilized with rock prior to placement of engineered fill. The depth of overexcavation, if required, should be evaluated by the geotechnical engineer at the time of construction.

Engineered Fill

All grading for the proposed development should be performed as engineered grading in accordance with the applicable building code at time of construction with the exceptions and additions noted herein. Proper test frequency and earthwork documentation usually requires daily observation and testing during stripping, rough grading, and placement of engineered fill. Imported fill material must be approved by the geotechnical engineer 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.

Engineered fill should be compacted in horizontal lifts not exceeding 8 inches using standard compaction equipment. We recommend that engineered fill be compacted to at least 95% of the maximum dry density determined by Standard Proctor, AASHTO T-99 or equivalent. Field density testing should conform to current ASTM standards and practices. All engineered fill should be observed and tested by the project geotechnical engineer (or 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 will be impacted by soil moisture and shallow groundwater conditions. Earthwork in wet weather would likely require extensive use of cement or lime treatment, or other special measures, at considerable additional cost compared to earthwork performed under dry-weather conditions.

Excavating Conditions and Utility Trenches

Based on the preliminary construction site plan, it appears the majority of the site will be developed with structures, parking lanes, and/or paved parking areas. The presence of shallow basalt bedrock throughout the site, including exposed rock outcroppings at the southwest portion, may present issues for the development of this site; and it should be noted that typical construction equipment may not be adequate for site preparation. For example, weathered basalt bedrock is present at portions of the site at depths as shallow as 4-inches. This indicates that typical construction equipment, such as scrapers, may not be adequate for topsoil stripping. In addition, medium hard (R3) basalt was encountered as shallow as 3.5 feet in portions of the site, which will likely present challenges during the excavation of deeper utility trenches. A medium to large excavator may be needed for excavation of the medium hard (R3) basalt, and chipping with a hydraulic hammer may also be necessary. We anticipate that slow excavating conditions will be encountered during installation of deeper utilities.

Static groundwater levels at the site were encountered at depths ranging from 3.0 to 4.5 feet. The presence of shallow groundwater will likely present issues for the installation of deeper trenches, and dewatering measures may be necessary. We have not reviewed a site development grading plan, however, shallow groundwater may also need to be addressed for cuts associated with structural footings and pavement area rock sections. Saturated soils and groundwater may be encountered in utility trenches, particularly during the wet season. We anticipate that dewatering systems consisting of ditches, sumps and pumps would be adequate for management of groundwater in trenches. 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.

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 native silt soils classify as Type B and temporary excavation side slope inclinations as steep as 1H:1V may be assumed for planning purposes. The existing native bedrock classifies as Type A and temporary excavation side slope inclinations as steep as 3/4H:1V may be assumed for planning purposes. These cut slope inclination is applicable to excavations above the water table only. 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.

PVC pipe should be installed in accordance with the procedures specified in ASTM D2321. We recommend that trench backfill be compacted to at least 95% of the maximum dry density obtained by AASHTO T-99 or equivalent. Initial backfill lift thickness 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, one density test is taken for every 4 vertical feet of backfill on each 200-lineal-foot section of trench.

Erosion Control Considerations

During our field exploration program, we did not observe soil types that would be considered highly 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 bales and silt fences. If used, these erosion control devices should be in place and 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.

Wet Weather Earthwork

Soils underlying the site may be moisture sensitive and may 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 probably require expensive measures such as cement treatment or imported granular material to compact fill 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;
- Material used as engineered fill should consist of clean, granular soil containing less than 5 percent fines. 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 should not be left uncompacted or 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; and
- Bales of straw and/or geotextile silt fences 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.

New Pavement Sections for Driving Lanes and Parking Areas

We understand that the proposed development will consist of paved driving lanes and parking spaces that will be surfaced with asphalt pavement. We assume the proposed pavement sections will be subjected to an initial two-way ADT (average daily traffic count) of 200 vehicles per day. Further, we assumed 2 percent of the vehicles will be heavy trucks (FHWA Class 5 or greater). For design purposes, we assumed a resilient modulus of 15,000 pci for existing subgrade soils. This correlates to a CBR value of approximately 10, which is representative of the native soils at the site and engineered fill.

Table 4 presents the recommended section thicknesses for the proposed pavement areas that are to be completed as part of the project, under dry weather construction conditions. In our opinion, this pavement section is suitable to support the anticipated levels of traffic. See attached pavement section calculations for details.

Table 4 - Recommended Minimum Dry-Weather Pavement Section

Material Layer	Section Thickness (in)	Compaction Standard
Asphaltic Concrete (AC)	3	91%/ 92% of Rice Density AASHTO T-209
Crushed Aggregate Base ¾"-0 (leveling course)	2	95% of Modified Proctor AASHTO T-180
Crushed Aggregate Base 1½"-0	4	95% of Modified Proctor AASHTO T-180
Competent Subgrade	12	Approved native or 95% of AASHTO T-99

Any pockets of organic debris or loose fill encountered during subgrade preparation 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. General recommendations for wet weather pavement sections are provided below.

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.

The recommended pavement section for driving lanes and parking areas assumes a CBR value of 10, which is representative of native residual and bedrock soils, as well as engineered fill. If subgrade conditions are not consistent with those assumed in our design, GeoPacific may be consulted to verify subgrade conditions during construction and to provide revised pavement section recommendations.

Wet Weather Construction Pavement Section

This section presents our recommendations for wet weather pavement sections, which are for construction of on-site driving lanes and parking areas. These wet weather pavement section recommendations are intended for use in situations where it is not feasible to compact the subgrade soils to Clackamas 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 overexcavation 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 overexcavation. For planning purposes, we anticipate that treatment of the on site soils would involve mixing cement powder to approximately 6 percent cement content and a mixing depth on the order of 12 inches.

With implementation of the above recommendations, it is our opinion that the resulting pavement sections 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 challenging, and the performance of pavement subgrade depend on a number of factors including the weather conditions, the contractor's methods, and the amount of traffic the areas are 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% of AASHTO T-180), 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.

Spread Foundations

The proposed residential structures may be supported on shallow foundations bearing on competent undisturbed, native soils and/or engineered fill, appropriately designed and constructed as recommended in this report. Foundation design, construction, and setback requirements should conform to the applicable building code at the time of construction. For maximization of bearing strength and protection against frost heave, spread footings should be embedded at a minimum depth of 12 inches below exterior grade. The recommended minimum widths for continuous footings supporting wood-framed walls without masonry are 12 inches for single-story, 15 inches for two-story, and 18 inches for three-story homes. Minimum foundation reinforcement should consist of a No. 4 bar at the top of stem walls, and two No. 4 bars at the bottom of footings. Concrete slab-on-grade reinforcement should consist of No. 4 bars placed on 24-inch centers in a grid pattern.

The anticipated allowable soil bearing pressure is 2,500 lbs/ft² for footings bearing on bedrock and/or engineered fill. A maximum chimney and column load of 30 kips is preliminarily recommended for the site. The recommended maximum allowable bearing pressure may be increased by 1/3 for short-term transient conditions such as wind and seismic loading. For heavier loads, the geotechnical engineer should be consulted. The coefficient of friction between on-site soil and poured-in-place concrete may be taken as 0.45, which includes no factor of safety. The maximum anticipated total and differential footing movements (generally from soil expansion and/or settlement) are 1 inch and ¾ inch over a span of 20 feet, respectively. We anticipate that the majority of the estimated settlement will occur during construction, as loads are applied. Excavations near structural footings should not extend within a 1H:1V plane projected downward from the bottom edge of footings.

Footing excavations should penetrate through topsoil and any loose soil to competent subgrade that is suitable for bearing support. All footing excavations should be trimmed neat, and all loose or softened soil should be removed from the excavation bottom prior to placing reinforcing steel bars. Due to the moisture sensitivity of on-site native soils, foundations constructed during the wet weather season may require over-excavation of footings and backfill with compacted, crushed aggregate.

Below-Grade Structural 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 walls, an at-rest equivalent fluid pressure of 54 pcf should be used in design, again assuming level backfill against the wall. These values assume that the recommended drainage provisions are incorporated, hydrostatic pressures are not allowed to develop against the wall, and free draining granular backfill is utilized.

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 5.5H, 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 350 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 0.45 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.

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 minimum 12- to 18-inch wide zone of crushed drain rock containing less than 5 percent fines 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 sump to remove water from the crushed drain rock zone. The drain pipe should be wrapped in filter fabric (Mirafi 140N or other as approved by the geotechnical engineer) to minimize clogging. The above drainage measures are intended to

remove water from behind the wall to prevent hydrostatic pressures from building up. Additional drainage measures may be specified by the project architect or structural engineer, for damp-proofing or other reasons.

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.

Footing and Roof Drains

Experience has shown that temporary perched groundwater conditions often occur over fine-grained native deposits such as those beneath the site, particularly during the wet season. To minimize the fluctuation of soil moisture content near structural foundations, we recommend that the structures be constructed with perimeter footing drains. The outside edge of perimeter footings should be provided with a drainage system consisting of 3-inch minimum diameter perforated plastic pipe embedded in a minimum of 1 ft³ per lineal foot of clean, free-draining sand and gravel or 1¼" - ½" drain rock. The drain pipe 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. Water collected from the footing 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. The footing drains should include clean-outs to allow periodic maintenance and inspection.

Down spouts and roof drains should collect roof water in a system separate from the footing drains in order to reduce the potential for clogging. Roof drain water should be directed to an appropriate discharge point well away from structural foundations. Grades around the proposed structure should be sloped such that surface water drains away from the building. Perimeter footing drains are recommended to prevent detrimental effects of groundwater on foundations, and should not be expected to eliminate all potential sources of water entering a crawlspace or beneath slabs. Crawlspaces should be provided with adequate drainage in accordance with applicable building codes at the time of construction.

Stormwater Management Facilities

We understand that plans for project development may include stormwater management facilities. As previously discussed, shallow groundwater is present throughout the site at depths as shallow as 3.5 feet below the existing ground surface. Also, the site is underlain by hard rock at relatively shallow depths. Subsurface infiltration into hard rock is not recommended for design purposes due to the high risk of biological and sediment clogging. Due to shallow groundwater conditions and shallow depths to hard rock, on-site subsurface infiltration should not be considered in the design of stormwater management facilities on the site.

Systems should be constructed as specified by the designer and/or in accordance with jurisdictional design manuals. Stormwater exceeding storage capacities will need to be directed to a suitable surface discharge location. Stormwater management systems may need to include overflow outlets, surface water control measures and/or be connected to the street stormdrain system, if available.

Seismic Design

Structures should be designed to resist earthquake loading in accordance with the methodology described in the 2012 International Residential Code (IRC) for One- and Two-Family Dwellings, with applicable Oregon Structural Specialty Code (OSSC) revisions (*current 2014*). We recommend Site Class C be used for design per the OSSC, Table 1613.5.2 and as defined in ASCE 7, Chapter 20, Table 20.3-1. Design values determined for the site using the USGS (United States Geological Survey) *2014 Seismic Design Maps Summary Report* are summarized in Table 5.

Table 5 - Recommended Earthquake Ground Motion Parameters (2012 IRC)

Parameter	Value
Location (Lat, Long), decimal	45.390, -122.586
Probabilistic Ground Motion Values, 2% Probability of Exceedance in 50 yrs	
Short Period, S_s	0.942 g
1.0 Sec Period, S_1	0.405 g
Soil Factors for Site Class D:	
F_a	1.023
F_v	1.395
Residential Site Value = $2/3 \times F_a \times S_s$	0.642 g
Residential Seismic Design Category	C

Soil liquefaction is a phenomenon wherein saturated soil deposits temporarily lose strength and behave as a liquid in response to earthquake shaking. Soil liquefaction is generally limited to loose, granular soils located below the water table. The on-site soils consist predominantly of dense residual soil and hard rock, and are not considered susceptible to liquefaction. Therefore, it is our opinion that special design or construction measures are not required to mitigate the effects of liquefaction.

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, GeoPacific 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, GeoPacific 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.



Eric Merritt, E.I.T.
Engineering Staff



EXPIRES: 06/30/2017

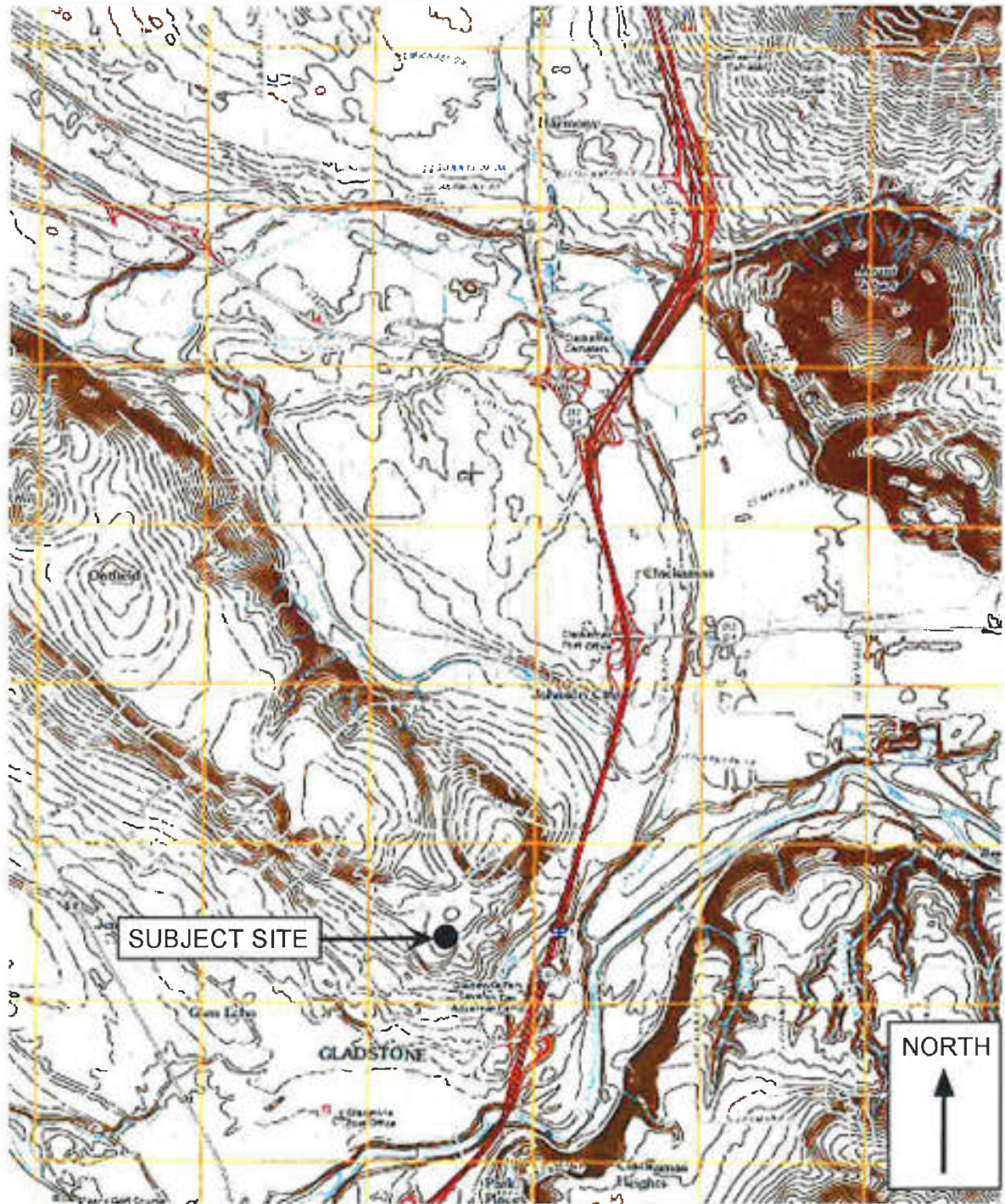
James D. Imbrie, G.E., C.E.G.
Principal Geotechnical Engineer

Attachments: References

- Figure 1 - Vicinity Map
- Figure 2 - Site Plan and Exploration Locations
- Test Pit Logs (TP-1 through TP-6)
- Pavement Design Calculations (3 Pages)

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Legend

Approximate Scale 1 in = 2,000 ft

Date: 5/12/15
Drawn by: EPM

Base map: U.S. Geological Survey 7.5 minute Topographic Map Series, Gladstone Quadrangle

Project: Gladstone Apartments
Gladstone, Oregon

Project No. 15-3655

FIGURE 1

14835 SW 72nd Avenue
 Portland, Oregon 97224
 Tel: (503) 598-8445 Fax: (503) 941-9281



SITE PLAN AND EXPLORATION LOCATIONS



Legend

TP-1 6'

Test Pit Designation, Approximate Location, and Depth to Hard Rock

Date: 04/07/15
 Drawn by: BGA



APPROXIMATE SCALE 1"=100'

Project: Gladstone Apartments
 Gladstone, Oregon

Project No. 15-3655

FIGURE 2



14835 SW 72nd Avenue
 Portland, Oregon 97224
 Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Gladstone Apartments
 Gladstone, Oregon

Project No. 15-3655

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						4" soft, moderately organic gravelly SILT (ML), reddish brown, with fine roots throughout, moist (Topsoil)
2						Extremely soft (R0), highly weathered BASALT, trace reddish-brown matrix of silty clay to clayey silt, gray, black staining, very moist, excavating as angular cobble-size fragments with some 1 to 2 foot diameter boulders (Columbia River Basalt)
3						
4						
5					Grades to wet below 4.5 feet	
6						Excavating as 1 to 3 foot diameter boulders, significant caving observed below 5 feet
7						
8						Test pit terminated at 8 feet due to groundwater seepage and caving
9						
10						Note: Groundwater encountered at 4.5 feet Significant caving observed below 5 feet
11						
12						
13						
14						
15						
16						
17						

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 01/20/15

Logged By: BGA

Surface Elevation:



14835 SW 72nd Avenue
 Portland, Oregon 97224
 Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Gladstone Apartments
 Gladstone, Oregon

Project No. 15-3655

Test Pit No. **TP-2**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (pcf)	Moisture Content (%)	Water Bearing Zone	Material Description
1						6" soft, moderately organic gravelly SILT (ML), reddish brown, with fine roots throughout, moist (Topsoil)
2						Medium dense to dense, silty GRAVEL (GM) with cobbles and boulders, reddish brown, very moist (Residual Soil)
3						Extremely soft (R0), highly weathered BASALT, trace reddish-brown matrix of silty clay to clayey silt, gray, black staining, very moist, excavating as angular cobble-size fragments with some 1 to 3 foot diameter boulders (Columbia River Basalt) Grades to wet below 4 feet
4						
5						Grades to very soft to soft (R1-R2) below 7 feet
6						
7						
8						Test pit terminated at 7.5 feet due to practical refusal on medium hard (R3) basalt
9						Note: Groundwater encountered at 4 feet No significant caving observed
10						
11						
12						
13						
14						
15						
16						
17						

LEGEND

Bag Sample	Bucket Sample	Shelby Tube Sample	Seepage	Water Bearing Zone	Water Level at Abandonment

Date Excavated: 01/20/15
 Logged By: BGA
 Surface Elevation:



14835 SW 72nd Avenue
 Portland, Oregon 97224
 Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Gladstone Apartments
 Gladstone, Oregon

Project No. 15-3655

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						Soft, moderately organic gravelly SILT (ML), reddish brown, with fine roots throughout, moist (Topsoil)
2						Extremely soft to very soft (R0-R1), highly weathered BASALT, trace reddish-brown matrix of silty clay to clayey silt, gray, black staining, vesicular, very moist, excavating as angular cobble-size fragments with some 1 to 3 foot diameter boulders (Columbia River Basalt)
3						
4						Test pit terminated at 3.5 feet due to practical refusal on medium hard (R3) basalt
5						
6						Note: Groundwater not encountered No significant caving observed
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 01/20/15

Logged By: BGA

Surface Elevation:



14835 SW 72nd Avenue
 Portland, Oregon 97224
 Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Gladstone Apartments
 Gladstone, Oregon

Project No. 15-3655

Test Pit No. **TP-4**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1						6" soft, moderately organic gravelly SILT (ML), reddish brown, with fine roots throughout, moist (Topsoil)
2						Extremely soft to very soft (R0-R1), highly weathered BASALT, trace reddish-brown matrix of silty clay to clayey silt, gray, black staining, very moist, excavating as angular cobble-size fragments with some 1 to 3 foot diameter boulders (Columbia River Basalt)
3						
4						Grades to very soft to soft (R1-R2) below 3.5 feet
5					▼	Grades to wet below 4.5 feet
6						
7						
8						
9						
10						Test pit terminated at 9 feet due to practical refusal on medium hard (R3) basalt
11						
12						Note: Groundwater measured at 4.5 feet after 1 hour No significant caving observed
13						
14						
15						
16						
17						

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 01/20/15

Logged By: BGA

Surface Elevation:



14835 SW 72nd Avenue
 Portland, Oregon 97224
 Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Gladstone Apartments
 Gladstone, Oregon

Project No. 15-3655

Test Pit No. **TP-5**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1						6" soft, moderately organic gravelly SILT (ML), reddish brown, with fine roots throughout, moist (Topsoil)
2						Extremely soft to very soft (R0-R1), highly weathered BASALT, trace reddish-brown matrix of silty clay to clayey silt, gray, black staining, very moist, excavating as angular cobble-size fragments with some 1 to 3 foot diameter boulders (Columbia River Basalt)
3					▲	Grades to gray and soft (R2) below 2.5 feet
4						Test pit terminated at 3.5 feet due to practical refusal on medium hard (R3) basalt
5						
6						Note: Groundwater encountered at 3 feet No significant caving observed
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 01/20/15

Logged By: BGA

Surface Elevation:



14835 SW 72nd Avenue
 Portland, Oregon 97224
 Tel: (503) 598-8445 Fax: (503) 941-9281

TEST PIT LOG

Project: Gladstone Apartments
 Gladstone, Oregon

Project No. 15-3655

Test Pit No. **TP-6**

Depth (ft)	Pocket Penetrometer (tons/ft ²)	Sample Type	In-Situ Dry Density (lb/ft ³)	Moisture Content (%)	Water Bearing Zone	Material Description
1						12" soft, moderately organic SILT (ML-OL), dark brown, with fine roots throughout, moist (Topsoil)
2						Loose to medium dense, GRAVEL COBBLES AND BOULDERS (GP) in a silt matrix, very moist, significant caving observed (Undocumented Fill)
3						
4						Extremely soft to very soft (R0-R1), highly weathered BASALT, reddish-brown matrix of silty clay to clayey silt, gray, black staining, very moist, excavating as angular cobble-size fragments with some 1 to 3 foot diameter boulders (Columbia River Basalt)
5						
6						
7						Test pit terminated at 4.5 feet due to practical refusal on medium hard (R3) basalt
8						
9						Note: Groundwater encountered at 3.5 feet No significant caving observed
10						
11						
12						
13						
14						
15						
16						
17						

LEGEND



Bag Sample



Bucket Sample



Shelby Tube Sample



Seepage



Water Bearing Zone



Water Level at Abandonment

Date Excavated: 01/20/15

Logged By: BGA

Surface Elevation:

=====

DARWin(tm) - Pavement Design

A Proprietary AASHTOWARE(tm)
Computer Software Product

Flexible Structural Design Module

Project Description

Gladstone Apartments - Driving Lanes and Parking Areas

Flexible Structural Design Module Data

18-kip ESALs Over Initial Performance Period: 43,183

Initial Serviceability: 4.2

Terminal Serviceability: 2.5

Reliability Level (%): 85

Overall Standard Deviation: .44

Roadbed Soil Resilient Modulus (PSI): 15,000

Stage Construction: 1

Calculated Structural Number: 1.48

Specified Layer Design

Layer: 1
Material Description: Class B ACP
Structural Coefficient (Ai): .42
Drainage Coefficient (Mi): 1
Layer Thickness (Di) (in): 3.00
Calculated Layer SN: 1.26

Layer: 2
Material Description: 3/4"-0 crushed rock
Structural Coefficient (Ai): .11
Drainage Coefficient (Mi): 1
Layer Thickness (Di) (in): 2.00
Calculated Layer SN: .22

Layer: 3
Material Description: 1-1/2"-0 crushed rock
Structural Coefficient (Ai): .11
Drainage Coefficient (Mi): 1
Layer Thickness (Di) (in): 4.00
Calculated Layer SN: .44

Total Thickness (in): 9.00
Total Calculated SN: 1.92

Simple ESAL Calculation

Initial Performance Period (years): 20

Initial Two-Way Daily Traffic (ADT): 200

% Heavy Trucks (of ADT) FHWA Class 5 or Greater: 2

Number of Lanes In Design Direction: 1

Percent of All Trucks In Design Lane (%): 100

Percent Trucks In Design Direction (%): 50

Average Initial Truck Factor (ESALs/truck): 2.2

Annual Truck Factor Growth Rate (%): 0

Annual Truck Volume Growth Rate (%): 3

Growth: Compound

Total Calculated Cumulative Esals: 43,183

Webster Ridge Parking Expansion

X. O&M

Filterra Owner's Manual



This Owner's Manual applies to all precast Filterra Configurations, including Filterra Bioscape Vault.





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Introduction

Thank you for your purchase of the Filterra® Bioretention System. Filterra is a specially engineered stormwater treatment system incorporating high performance biofiltration media to remove pollutants from stormwater runoff. The system's biota (vegetation and soil microorganisms) then further breakdown and absorb captured pollutants. All components of the system work together to provide a sustainable long-term solution for treating stormwater runoff.

The Filterra system has been delivered to you with protection in place to resist intrusion of construction related sediment which can contaminate the biofiltration media and result in inadequate system performance. These protection devices are intended as a best practice and cannot fully prevent contamination. It is the purchaser's responsibility to provide adequate measures to prevent construction related runoff from entering the Filterra system.

Included with your purchase is Activation of the Filterra system by the manufacturer as well as a 1-year warranty from delivery of the system and 1-year of routine maintenance (mulch replacement, debris removal, and pruning of vegetation) up to twice during the first year after activation.

Design and Installation

Each project presents different scopes for the use of Filterra systems. Information and help may be provided to the design engineer during the planning process. Correct Filterra box sizing (by rainfall region) is essential to predict pollutant removal rates for a given area. The engineer shall submit calculations for approval by the local jurisdiction. The contractor is responsible for the correct installation of Filterra units as shown in approved plans. A comprehensive installation manual is available at www.ContechES.com.

Activation Overview

Activation of the Filterra system is a procedure completed by the manufacturer to place the system into working condition. This involves the following items:

- Removal of construction runoff protection devices
- Planting of the system's vegetation
- Placement of pretreatment mulch layer using mulch certified for use in Filterra systems.

Activation **MUST** be provided by the manufacturer to ensure proper site conditions are met for Activation, proper installation of the vegetation, and use of pretreatment mulch certified for use in Filterra systems.



Minimum Requirements

The minimum requirements for Filterra Activation are as follows:

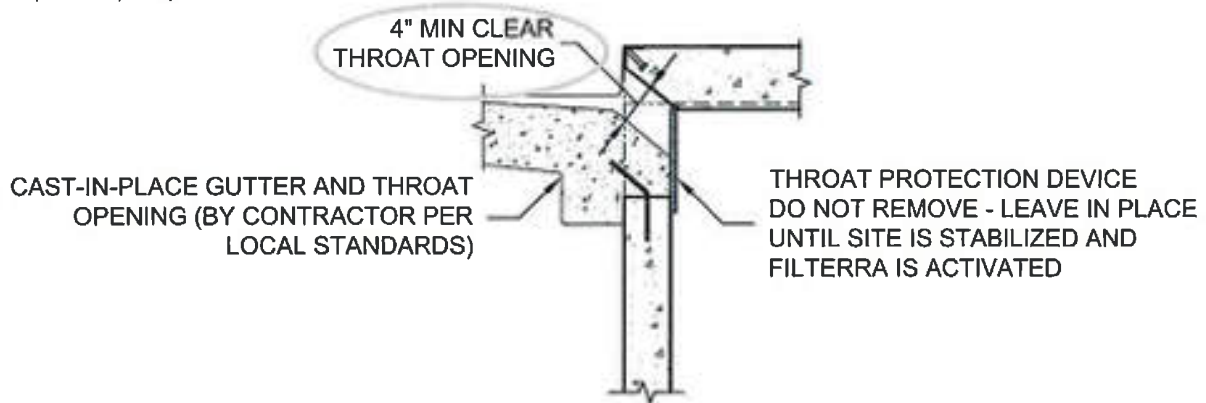
1. The site landscaping must be fully stabilized, i.e. full landscaping installed and some grass cover (not just straw and seed) is required to reduce sediment transport. Construction debris and materials should be removed from surrounding area.



2. Final paving must be completed. Final paving ensures that paving materials will not enter and contaminate the Filterra system during the paving process, and that the plant will receive runoff from the drainage area, assisting with plant survival for the Filterra system.



3. Where curb inlets are included as part of the Filterra system, Filterra throat opening should be at least 4" in order to ensure adequate capacity for inflow and debris.



An Activation Checklist is included on page 12 to ensure proper conditions are met for Contech to perform the Activation services. A charge of \$500.00 will be invoiced for each Activation visit requested by Customer where Contech determines that the site does not meet the conditions required for Activation.

Filterra Plant Selection Overview

A Plant List is available on the Contech website highlighting recommended plants for Filterra systems in your area. Keep in mind that plants are subject to availability due to seasonality and required minimum size for the Filterra system. Plants installed in the Filterra system are container plants (max 15 gallon) from nursery stock and will be immature in height and spread at Activation.

It is the responsibility of the owner to provide adequate irrigation when necessary to the plant of the Filterra system.

The “Planting Requirements for Filterra Systems” document is included as an appendix and discusses proper selection and care of the plants within Filterra systems.

Warranty Overview

Refer to the Contech Engineered Solutions LLC Stormwater Treatment System LIMITED WARRANTY for further information. The following conditions may void the Filterra system’s warranty and waive the manufacturer provided Activation and Maintenance services:

- Unauthorized activation or performance of any of the items listed in the activation overview
- Any tampering, modifications or damage to the Filterra system or runoff protection devices
- Removal of any Filterra system components
- Failure to prevent construction related runoff from entering the Filterra system
- Failure to properly store and protect any Filterra components (including media and underdrain stone) that may be shipped separately from the vault

Routine Maintenance Guidelines

With proper routine maintenance, the biofiltration media within the Filterra system should last as long as traditional bioretention media. Routine maintenance is included by the manufacturer on all Filterra systems for the first year after activation. This includes a maximum of 2 visits to remove debris, replace pretreatment mulch, and prune the vegetation. More information is provided in the Operations and Maintenance Guidelines. Some Filterra systems also contain pretreatment or outlet bays. Depending on site pollutant loading, these bays may require periodic removal of debris, however this is not included in the first year of maintenance, and would likely not be required within the first year of operation.

These services, as well as routine maintenance outside of the included first year, can be provided by certified maintenance providers listed on the Contech website. Training can also be provided to other stormwater maintenance or landscape providers.



Why Maintain?

All stormwater treatment systems require maintenance for effective operation. This necessity is often incorporated in your property's permitting process as a legally binding BMP maintenance agreement. Other reasons to maintain are:

- Avoiding legal challenges from your jurisdiction's maintenance enforcement program.
- Prolonging the expected lifespan of your Filterra media.
- Avoiding more costly media replacement.
- Helping reduce pollutant loads leaving your property.

Simple maintenance of the Filterra is required to continue effective pollutant removal from stormwater runoff before discharge into downstream waters. This procedure will also extend the longevity of the living biofilter system. The unit will recycle and accumulate pollutants within the biomass, but is also subjected to other materials entering the inlet. This may include trash, silt and leaves etc. which will be contained above the mulch layer. Too much silt may inhibit the Filterra's flow rate, which is the reason for site stabilization before activation. Regular replacement of the mulch stops accumulation of such sediment.

When to Maintain?

Contech includes a 1-year maintenance plan with each system purchase. Annual included maintenance consists of a maximum of two (2) scheduled visits. Additional maintenance may be necessary depending on sediment and trash loading (by Owner or at additional cost). The start of the maintenance plan begins when the system is activated.

Maintenance visits are typically scheduled seasonally; the spring visit aims to clean up after winter loads including salts and sands while the fall visit helps the system by removing excessive leaf litter.

It has been found that in regions which receive between 30-50 inches of annual rainfall, (2) two visits are generally required; regions with less rainfall often only require (1) one visit per annum. Varying land uses can affect maintenance frequency; e.g. some fast food restaurants require more frequent trash removal. Contributing drainage areas which are subject to new development wherein the recommended erosion and sediment control measures have not been implemented may require additional maintenance visits.

Some sites may be subjected to extreme sediment or trash loads, requiring more frequent maintenance visits. This is the reason for detailed notes of maintenance actions per unit, helping the Supplier and Owner predict future maintenance frequencies, reflecting individual site conditions.

Owners must promptly notify the maintenance provider of any damage to the plant(s), which constitute(s) an integral part of the bioretention technology. Owners should also advise other landscape or maintenance contractors to leave all maintenance to the Supplier (i.e. no pruning or fertilizing) during the first year.



Exclusion of Services

Clean up due to major contamination such as oils, chemicals, toxic spills, etc. will result in additional costs and are not covered under the Supplier maintenance contract. Should a major contamination event occur the Owner must block off the outlet pipe of the Filterra (where the cleaned runoff drains to, such as drop inlet) and block off the throat of the Filterra. The Supplier should be informed immediately.

Maintenance Visit Summary

Each maintenance visit consists of the following simple tasks (detailed instructions below).

1. Inspection of Filterra and surrounding area
2. Removal of tree grate (where applicable) and erosion control stones
3. Removal of debris, trash and mulch
4. Mulch replacement
5. Plant health evaluation and pruning or replacement as necessary
6. Clean area around Filterra
7. Complete paperwork

Maintenance Tools, Safety Equipment and Supplies

Ideal tools include: camera, bucket, shovel, broom, pruners, hoe/rake, and tape measure. Appropriate Personal Protective Equipment (PPE) should be used in accordance with local or company procedures. This may include impervious gloves where the type of trash is unknown, high visibility clothing and barricades when working in close proximity to traffic and also safety hats and shoes. A T-Bar or crowbar should be used for moving the tree grates, where applicable (up to 170 lbs each). If tree grate opening expansion is necessary, safety glasses/goggles and a 3lb or greater mini sledgehammer are required. Most visits require minor trash removal and a full replacement of mulch. See below for actual number of bagged mulch that is required in each media bay size. Mulch should be a double shredded, hardwood variety. Some visits may require additional Filterra engineered soil media available from the Supplier.

Media Bay Length	Media Bay Width	Filter Surface Area (ft ²)	Volume at 3" (ft ³)	# of 2 ft ³ Mulch Bags
4	4	16	4	2
6	4	24	6	3
8	4	32	8	4
6	6	36	9	5
8	6	48	12	6
10	6	60	15	8
12	6	72	18	9
13	7	91	23	12

Other sizes not listed - 1 bag per 8 ft² of media.

Maintenance Visit Procedure

Keep sufficient documentation of maintenance actions to predict location specific maintenance frequencies and needs. An example Maintenance Report is included in this manual.



1. Inspection of Filterra and surrounding area

- Record individual unit before maintenance with photograph (numbered). Record on Maintenance Report (see example in this document) the following:

Record on Maintenance Report the following:

Standing Water	yes	no
Damage to Box Structure	yes	no
Damage to Grate (if applicable)	yes	no
Is Bypass Clear	yes	no

If yes answered to any of these observations, record with close-up photograph (numbered).



2. Removal of tree grate (if applicable) and erosion control stones

- Remove cast iron grates for access into Filterra box (if applicable).
- Dig out silt (if any) and mulch and remove trash & foreign items.

3. Removal of debris, trash and mulch

Record on Maintenance Report the following:

Silt/Clay	yes	no
Cups/ Bags	yes	no
Leaves	yes	no
Buckets Removed		

- After removal of mulch and debris, measure distance from the top of the Filterra engineered media soil to the top of the top slab. Compare the measured distance to the distance shown on the approved Contract Drawings for the system. Add Filterra media (not top soil or other) to bring media up as needed to distance indicated on drawings.

Record on Maintenance Report the following:

Distance to Top of Top Slab (inches)	_____
Inches of Media Added	_____





4. Mulch replacement

- Add double shredded mulch evenly across the entire unit to a depth of 3”.
- Refer to Filterra Mulch Specifications for information on acceptable sources.
- Ensure correct repositioning of erosion control stones by the Filterra inlet to allow for entry of trash during a storm event.
- Replace Filterra grates (if applicable) correctly using appropriate lifting or moving tools, taking care not to damage the plant.
- Where applicable, if 6” tree grate opening is too close to plant trunk, the grate opening may be expanded to 12” using a mini sledgehammer. Refer to instructions in Appendix 3.



5. Plant health evaluation and pruning or replacement as necessary

- Examine the plant’s health and replace if necessary.
- Prune as necessary to encourage growth in the correct directions

Record on Maintenance Report the following:

Height above top of Filterra Unit	_____	(ft)
Width at Widest Point	_____	(ft)
Health		healthy unhealthy
Damage to Plant		yes no
Plant Replaced		yes no



6. Clean area around Filterra

- Clean area around unit and remove all refuse to be disposed of appropriately.



7. Complete paperwork

- Deliver Maintenance Report and photographs to appropriate location (normally Contech during maintenance contract period).
- Some jurisdictions may require submission of maintenance reports in accordance with approvals. It is the responsibility of the Owner to comply with local regulations.

Maintenance Checklist

Drainage System Failure	Problem	Conditions to Check	Condition that Should Exist	Actions
Inlet	Excessive sediment or trash accumulation.	Accumulated sediments or trash impair free flow of water into Filterra.	Inlet should be free of obstructions allowing free distributed flow of water into Filterra.	Sediments and/or trash should be removed.
Mulch Cover	Trash and floatable debris accumulation.	Excessive trash and/or debris accumulation.	Minimal trash or other debris on mulch cover.	Trash and debris should be removed and mulch cover raked level. Ensure bark nugget mulch is not used.
Mulch Cover	"Ponding" of water on mulch cover.	"Ponding" in unit could be indicative of clogging due to excessive fine sediment accumulation or spill of petroleum oils.	Stormwater should drain freely and evenly through mulch cover.	Recommend contact manufacturer and replace mulch as a minimum.
Vegetation	Plants not growing or in poor condition.	Soil/mulch too wet, evidence of spill. Incorrect plant selection. Pest infestation. Vandalism to plants.	Plants should be healthy and pest free.	Contact manufacturer for advice.
Vegetation	Plant growth excessive.	Plants should be appropriate to the species and location of Filterra.		Trim/prune plants in accordance with typical landscaping and safety needs.
Structure	Structure has visible cracks.	Cracks wider than 1/2 inch or evidence of soil particles entering the structure through the cracks.		Vault should be repaired.

Maintenance is ideally to be performed twice annually.

Filterra Inspection & Maintenance Log

Filterra System Size/Model: _____ Location: _____

Date	Mulch & Debris Removed	Depth of Mulch Added	Mulch Brand	Height of Vegetation Above Top of Vault	Vegetation Species	Issues with System	Comments
1/1/17	5 – 5 gal Buckets	3"	Lowe's Premium Brown Mulch	4"	Galaxy Magnolia	- Standing water in downstream structure	- Removed blockage in downstream structure

Appendix 1 – Filterra® Activation Checklist



Project Name: _____ Company: _____

Site Contact Name: _____ Site Contact Phone/Email: _____

Site Owner/End User Name: _____ Site Owner/End User Phone/Email: _____

Preferred Activation Date: _____ (provide 2 weeks minimum from date this form is submitted)

Site Designation	System Size	Final Pavement / Top Coat Complete	Landscaping Complete / Grass Emerging	Construction materials / Piles / Debris Removed	Throat Opening Measures 4" Min. Height	Plant Species Requested
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Attach additional sheets as necessary.

NOTE: A charge of \$500.00 will be invoiced for each Activation visit requested by Customer where Contech determines that the site does not meet the conditions required for Activation. ONLY Contech authorized representatives can perform Activation of Filterra systems; unauthorized Activations will void the system warranty and waive manufacturer supplied Activation and 1st Year Maintenance.

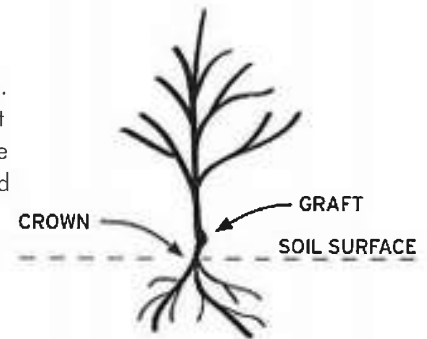
Signature _____

Date _____

Appendix 2 – Planting Requirements for Filterra® Systems

Plant Material Selection

- Select plant(s) as specified in the engineering plans and specifications.
- Select plant(s) with full root development but not to the point where root bound.
- Use local nursery container plants only. Ball and burlapped plants are not permitted.
- For precast Filterra systems with a tree grate, plant(s) must not have scaffold limbs at least 14 inches from the crown due to spacing between the top of the mulch and the tree grate. Lower branches can be pruned away provided there are sufficient scaffold branches for tree or shrub development.
- For precast Filterra systems with a tree grate, at the time of installation, it is required that plant(s) must be at least 6" above the tree grate opening at installation for all Filterra configurations. This DOES NOT apply to Full Grate Cover designs.
- Plant(s) shall not have a mature height greater than 25 feet.
- For standard 21" media depth, a 7 – 15 gallon container size shall be used. Media less than 21" (Filterra boxes only) may require smaller container plants.
- For precast Filterra systems, plant(s) should have a single trunk at installation, and pruning may be necessary at activation and maintenance for some with a tree grate of the faster growing species, or species known to produce basal sprouts.



Plant Installation

- During transport protect the plant foliage from wind and excessive jostling.
- Prior to removing the plant(s) from the container, ensure the soil moisture is sufficient to maintain the integrity of the root ball. If needed, pre-wet the container plant.
- Cut away any roots which are growing out of the container drain holes. Plants with excessive root growth from the drain holes should be rejected.
- Plant(s) should be carefully removed from the pot by gently pounding on the sides of the container with the fist to loosen root ball. Then carefully slide out. Do not lift plant(s) by trunk as this can break roots and cause soil to fall off. Extract the root ball in a horizontal position and support it to prevent it from breaking apart. Alternatively the pot can be cut away to minimize root ball disturbance.
- Remove any excess soil from above the root flare after removing plant(s) from container.
- Excavate a hole with a diameter 4" greater than the root ball, gently place the plant(s).
- If plant(s) have any circling roots from being pot bound, gently tease them loose without breaking them.
- If root ball has a root mat on the bottom, it should be shaved off with a knife just above the mat line.
- Plant the tree/shrub/grass with the top of the root ball 1" above surrounding media to allow for settling.
- All plants should have the main stem centered in the tree grate (where applicable) upon completion of installation.
- With all trees/shrubs, remove dead, diseased, crossed/rubbing, sharply crotched branches or branches growing excessively long or in wrong direction compared to majority of branches.
- To prevent transplant shock (especially if planting takes place in the hot season), it may be necessary to prune some of the foliage to compensate for reduced root uptake capacity. This is accomplished by pruning away some of the smaller secondary branches or a main scaffold branch if there are too many. Too much foliage relative to the root ball can dehydrate and damage the plant.
- Plant staking may be required.

Mulch Installation

- Only mulch that meets Contech Engineered Solutions' mulch specifications can be used in the Filterra system.
- Mulch must be applied to a depth of 3" evenly over the surface of the media.

Irrigation Requirements

- Each Filterra system must receive adequate irrigation to ensure survival of the living system during periods of drier weather.
- Irrigation sources include rainfall runoff from downspouts and/or gutter flow, applied water through the top/tree grate or in some cases from an irrigation system with emitters installed during construction.
- At Activation: Apply about one (cool climates) to two (warm climates) gallons of water per inch of trunk diameter over the root ball.
- During Establishment: In common with all plants, each Filterra plant will require more frequent watering during the establishment period. One inch of applied water per week for the first three months is recommended for cooler climates (2 to 3 inches for warmer climates). If the system is receiving rainfall runoff from the drainage area, then irrigation may not be needed. Inspection of the soil moisture content can be evaluated by gently brushing aside the mulch layer and feeling the soil. Be sure to replace the mulch when the assessment is complete. Irrigate as needed**.
- Established Plants: Established plants have fully developed root systems and can access the entire water column in the media. Therefore irrigation is less frequent but requires more applied water when performed. For a mature system assume 3.5 inches of available water within the media matrix. Irrigation demand can be estimated as 1" of irrigation demand per week. Therefore if dry periods exceed 3 weeks, irrigation may be required. It is also important to recognize that plants which are exposed to windy areas and reflected heat from paved surfaces may need more frequent irrigation. Long term care should develop a history which is more site specific.

** Five gallons per square yard approximates 1 inch of water Therefore for a 6' by 6' Filterra approximately 20-60 gallons of water is needed. To ensure even distribution of water it needs to be evenly sprinkled over the entire surface of the filter bed, with special attention to make sure the root ball is completely wetted. NOTE: if needed, measure the time it takes to fill a five gallon bucket to estimate the applied water flow rate then calculate the time needed to irrigate the Filterra. For example, if the flow rate of the sprinkler is 5 gallons/minute then it would take 12 minutes to irrigate a 6' by 6' filter.



Appendix 3 – Filterra® Tree Grate Opening Expansion Procedure

The standard grates used on all Filterra configurations that employ Tree Grates are fabricated with a 6" opening that is designed with a breakaway section that can be removed, allowing the grate opening to be expanded to 12" as the tree matures and the trunk widens.

The following tools are required to expand the opening:

- Mini sledgehammer (3 lb. or greater)
- Safety Glasses / Goggles

The following guidelines should be followed to properly expand the tree opening from 6" to 12":



1. Remove the grate from the Filterra frame, place it flat on a hard surface, and support the grate by stepping on the edge or using other weighted items such as a few mulch bags if this is being done during a Filterra maintenance event. Put on safety glasses/goggles. Align the mini sledgehammer as shown in the figure to the left. The head of the sledgehammer should be aimed just inside the wide cast iron bar between the larger grate section and the breakaway section.



2. Repeatedly hit the grate at this spot with the mini sledgehammer.



3. After several hits, the breakaway section should snap cleanly off of the larger grate section. Reinstall the grate into the Filterra grate frame. Recycle or dispose of the breakaway section per local guidelines.



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Filterra[®] Maintenance Steps



1. Inspection of Filterra and surrounding area



2. Removal of tree grate and erosion control stones



3. Removal of debris, trash and mulch



4. Mulch replacement



5. Clean area around Filterra



6. Complete paperwork and record plant height and width

Contech has created a network of Certified Maintenance Providers (CCMP's) to provide maintenance on Filterra systems. To find a CCMP in your area please visit www.conteches.com/maintenance



REGULAR AGENDA



memo portland

to **Jacque Betz, City of Gladstone, and John Southgate**

from **Jon Pheanis and Sou Garner, MIG**

re **Summary of Additional Amendments to Zoning Code and Recommended Next Steps**

date **05/11/2022**

In the spring of 2021, the City of Gladstone initiated the Zoning Code Rewrite project (the project) to update Title 17 of the Municipal Code related to needed housing. This project is a critical opportunity to implement policies around improved housing choices in Gladstone, engage all community members including those who have traditionally been under-represented in the decision-making process, and align local policies and standards to the recently adopted Housing Bill 2001 (HB 2001). The following summarizes outcomes of the April 19, 2022 Planning Commission public hearing and recommended next steps.

Background

The City conducted public meetings and work sessions that were open public forums held between November 2021 and April 2022, including three meetings with the City of Gladstone Planning Commission. During the most recent hearing on April 19, 2022, the Planning Commission reviewed the proposed draft amendments to the Zoning Code and considered additional refinements based on a joint meeting with the Gladstone City Council and an online community survey. On April 18, 2022, the City also received comments on the proposed amendments from the Department of Land Conservation and Development (DLCD) just prior to the public hearing. A representative from DLCD was part of the Technical Advisory Committee for the code amendment process.

Summary of April Public Hearing

At the April 19, 2022 Planning Commission hearing, Clackamas County planning staff and members of the MIG consultant team provided an overview of the proposed amendments and additional refinements. Following the presentation, the Planning Commission generally agreed on the proposed amendments with additional changes presented during the meeting, and discussed the following additional changes and questions:

- Chapter 17.06 (Definitions) – Add min, units/acre and relocate min. units per development in 17.10 and 17.12.

- Chapter 17.10 (R-7.2 Zone) and 17.12 (R-5 Zone) – Exempt ADUs from a maximum size for basement conversions; Exempt cottage clusters and townhomes from max. units/acre; remove proposed pedestrian access requirement.
- Chapter 17.38 (Planned Unit Development) – Clarify provision for large PUDs, especially to ensure future use conversions of large lots along 82nd Ave.
- Chapter 17.76 (Exemptions) – Add duplex as an allowed use under “Lot Size Requirements”.

Additional Findings for Housing Affordability

One additional requirement provided in the rules for HB 2001 not addressed in the previous public hearing is for cities to “include findings demonstrating consideration...of methods to increase the affordability of Middle Housing through ordinances or policies that include but are not limited to”:

- Waiving or deferring system development charges;
- Adopting or amending criteria for property tax exemptions or property tax freezes; and
- Assessing a construction tax.

While this is a requirement for Gladstone’s compliance with HB 2001, this specific requirement is not regulated by zoning and is a separate policy discussion that should continue to be discussed in the future. Compliance with this rule will be part of the findings for consideration at the Gladstone City Council public hearing to consider adopting the proposed amendments.

Recommendations on Future Code Amendments

Comments received from DLCD also summarized two additional areas of Gladstone Municipal Code where future amendments would be needed. The consultant team recommends adopting the draft code amendments as modified above for compliance with HB 2001, then consider further amendments to the code as follows.

- HB 4064 - HB 4064 is a recent bill that prohibits cities from regulating manufactured dwellings in a manner that is inconsistent with detached single-family dwellings. Currently, Gladstone’s two detached single-family dwelling zoning districts have different standards for manufactured dwellings which would make them out of compliance.

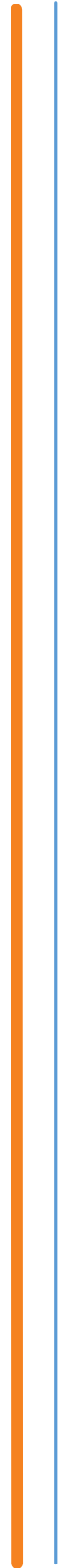
- **Recommendation:** Amend the R-5 and R-7.2 zoning districts to comply with HB 4064 which could include removing separate design standards for manufactured dwellings or making the design standards the same for detached single-family dwellings in the same zone.
- ORS 197.307 – This rule requires cities to adopt clear and objective standards for housing that do not result in additional cost or delay. It therefore prohibits cities from allowing residential uses through discretionary reviews. Currently, multi-family dwellings are a conditional use in the R-5 and R-7.2 zones. Detached single-family dwellings are a conditional use in the MR zone. The proposed code amendments also add middle housing types as a conditional use.
 - **Recommendation:** There are two potential options that the City could consider to comply with ORS 197.307:
 1. Update conditional use standards to comply separately; or
 2. Permit or disallow multi-household dwellings in 17.10 and 17.12, and single-family dwellings in 17.14. If single-family dwellings are permitted in 17.14, then middle housing types would need to be permitted as well which would require additional changes to the zoning code.



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May 2022 Planning Commission Meeting

Draft Title 17 Zoning and Development HB2001 Amendments



Purpose

- Meet future growth needs by creating more opportunities for housing choice
- Update zoning code based on recent legislation for Middle Housing
- Involve the community and decision makers in understanding potential changes and housing needs
- Adopt new zoning requirements by June 30, 2022

Revised Proposed Changes Resulting from the Joint PC/CC Work Session

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04/19/2022

TX-T-2022-01



GLADSTONE
Oregon

Section	Standard	Initial Proposed Amendment	Revised Proposed Amendment
17.06	Definitions	<ul style="list-style-type: none"> Removed references to familial and nonfamilial relationships Added Middle Housing Type definitions Clarified definitions for “home for the aged,” “hospitals,” and “nursing home” Clarified Large Scale Planned Unit Dvlp 	<ul style="list-style-type: none"> Removed definition for “Large Scale Planned Unit Development”
17.10	R-7.2 Residential	<ul style="list-style-type: none"> Changed “family” to “household” 	<ul style="list-style-type: none"> Added “Foster Home” back as a permitted use (R-7.2)
17.12 4 - 7	R-5 Residential	<ul style="list-style-type: none"> Removed “Foster Home” as a permitted use (R-7.2) Increased the floor area for ADUs Clarified dimensional standards per HB2001 requirements Added consistent and clear and objective Cottage Cluster standards 	<ul style="list-style-type: none"> Defined a min floor area of 400 SF and a max of 800 SF
17.14	MR Multi-Residential	<ul style="list-style-type: none"> Changed “family” to “household” Renamed Two-family dwellings to “Duplex” Added Triplex, Quadplex, Townhouse, Cottage Cluster as permitted uses Added min lot sizes for middle housing types 	<ul style="list-style-type: none"> Removed Triplex, Quadplex, Townhouse, Cottage Cluster as permitted uses to protect the MR zone for apartments Added Triplex, Quadplex, Townhouse, Cottage Cluster with detached Single-household dwellings as a conditional use Removed min lot sizes for middle housing types



Section	Standard	Initial Proposed Amendment	Revised Proposed Amendment
17.38	Planned Unit Development	<ul style="list-style-type: none"> Clarified exceptions for middle housing developments Added on-street parking allowance for off-street credit and clarified parking standards for cottage clusters 	<ul style="list-style-type: none"> Removed on-street parking allowance and parking clarification for cottage clusters
17.48	Off-Street Parking	<ul style="list-style-type: none"> Changed “family” to “household” Changed 1.5 required parking spaces to 1 parking space per dwelling unit Added on-street parking allowance for off-street credit Added parking standards minimums and allowed max for middle housing for projects subject to Design Review 	<ul style="list-style-type: none"> Removed on-street parking allowance as credit Removed middle housing type min parking standards and allowed max for design review applications
17.62	Mobile Home Park	<ul style="list-style-type: none"> Clarified mobile home park side and rear yard setbacks 	<ul style="list-style-type: none"> No revised changes
17.76	Exceptions (nonconforming)	<ul style="list-style-type: none"> Changed “family” to “household” Added provision that allows construction of multi-household dwellings within the same structure footprint Removed provision that duplexes continue to be nonconforming (the addition of middle housing types as permitted uses results in this provision being unnecessary) 	<ul style="list-style-type: none"> No revised changes
17.80	Design Review	<ul style="list-style-type: none"> Changed “family” to “household” 	<ul style="list-style-type: none"> No revised changes



Summary of April 19, 2022 Planning Commission Meeting

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04/19/2022

TXT-2022-01



Draft Amendment Refinements

- 17.38 – Planned Unit Development
 - Keep/clarify reference to large PUDs (ex. protecting conversion of larger lots along 82nd Ave.)
- 17.10 (R-7.2) and 17.12 (R-5)
 - ADUs: include max. size exemption for basement conversions

Draft Amendment Clarifications

- Need to encourage community involvement/education around changes after adoption
- Historic structure definitions (OAR 660-023-0200-1)
 - (e) “Historic resources” are those buildings, structures, objects, sites, or districts that potentially have a significant relationship to events or conditions of the human past.
 - (f) “Locally significant historic resource” means a building, structure, object, site, or district deemed by a local government to be a significant resource according to the requirements of this division and criteria in the comprehensive plan.
 - (g) “National Register Resource” means buildings, structures, objects, sites, or districts listed in the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966 (PL 89-665; 16 U.S.C. 470).



Additional Comments: DLCD



Section	Standard	Initial Proposed Amendment	Revised Proposed Amendment
17.06	Definitions	<ul style="list-style-type: none"> 3, 4 or more detached units/acre 	<ul style="list-style-type: none"> Add min. units/acre Relocate min. units per development in 17.10 and 17.12
17.10	R-7.2 Residential	<ul style="list-style-type: none"> Prohibit more than 4 d/u 	<ul style="list-style-type: none"> Exempt cottage clusters and townhomes Remove pedestrian access requirement
17.12	R-5 Residential	<ul style="list-style-type: none"> Pedestrian access (min. 4-foot wide) 	
17.76 4 - 13	Exceptions	<ul style="list-style-type: none"> NA 	<ul style="list-style-type: none"> Add duplex as an allowed use under "Lot Size Requirements" (17.76.030)



Recommendations for Future Amendments



HB 4064 (2022)

What do the new rules require?

HB 4064 prohibits cities from regulating manufactured dwellings in a manner that is inconsistent with detached single-family dwellings.

What does the code require?

Residential zoning districts that allow detached single-family dwellings have different standards for manufactured dwellings.

What amendments will be needed?

Amend R-5 and R-7.2 zoning districts to comply with HB 4064.



ORS 197.307

What do the rules require?

Prohibits cities from allowing residential uses through discretionary reviews.

What does the code require?

Multi-family dwellings are a conditional use in R-5 and R-7.2 zones.

Detached single-family dwellings are a conditional use in MR zone (and middle housing through proposed amendment).



ORS 197.307

What amendments will be needed?

- Update conditional use standards to comply separately; or
- Permit or disallow multi-household dwellings in 17.10 and 17.12, and permit or disallow single-family dwellings in 17.14.
 - If permitted, then also permit middle housing types





May 2022 Planning Commission Meeting

Draft Title 17 Zoning and Development HB2001 Amendments



May 2022, Planning Commission Meeting Agenda Item No. 4

Draft Housing Code Amendments Options

Public Hearing

- Options
 - Sidewalks
 - Manufactured Homes
 - Conditional Uses

4 - 20



City must allow middle housing in areas zoned for Low Density Residential Use

Slide 3

Compliance required by June 30, 2022



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05/17/22

TXT-2022-01

Sidewalks – not required to be included in amendments for HB 2001

- Currently required for multifamily dwelling development of three or more units through Design Review per 17.50.010 and 17.50.020(3)
- Currently required for all development that is part of a land division that requires land use approval per 17.50.010 and 17.50.020(3)
- With amendments related to HB 2001 Sidewalks will only be required for multifamily developments with five or more units.



Sidewalk Option A

- Leave sidewalks as is and they will be required for multifamily developments with five or more units and land divisions that require land use approval including middle housing land divisions.



Sidewalk Option B

Add to the Design Standard Sections in 17.10.060 and 17.12.060 or 17.10.060:

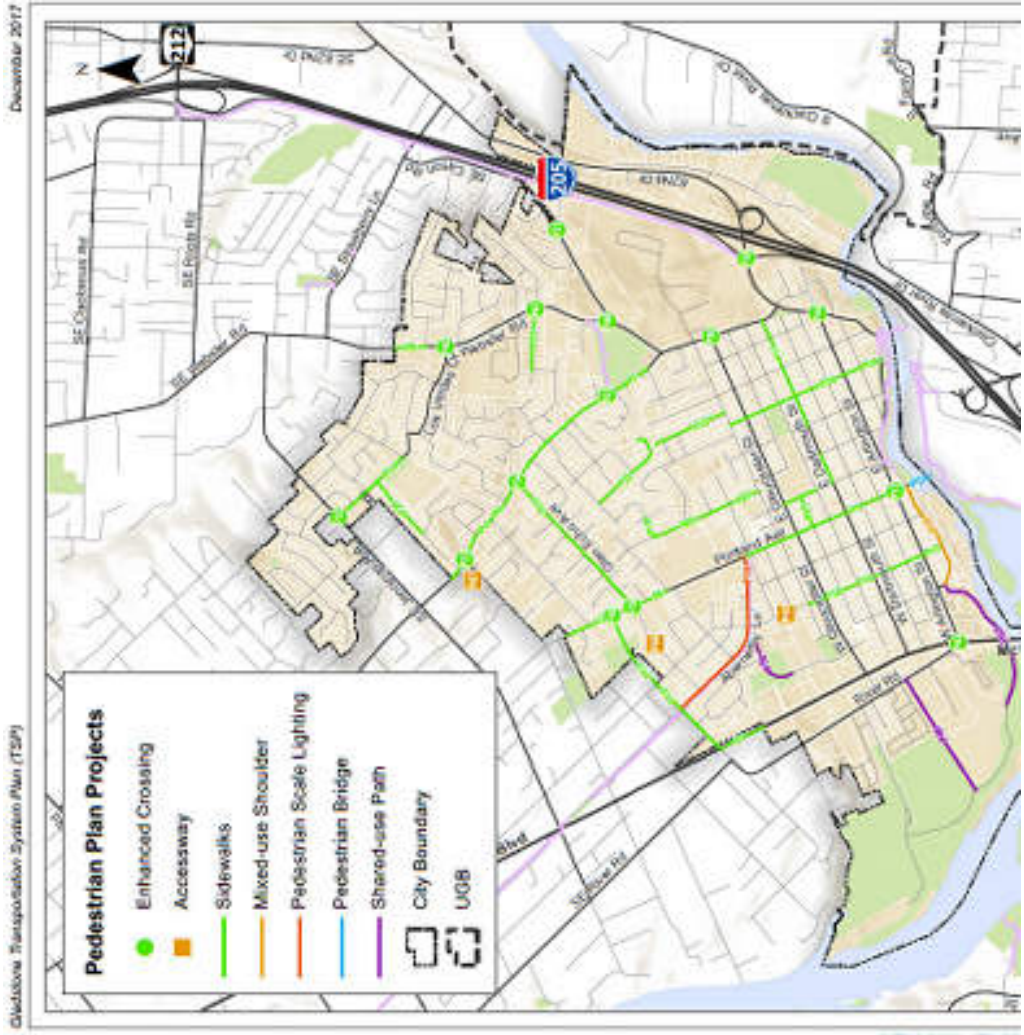
- (3) Curbs and Sidewalks. Provide curbs, associated drainage, and sidewalks within the right-of-way or easement for public roads and streets (from 17.50.020(3)). Improvements installed by a developer, shall conform to the standards of this title, GMC Chapter 12.02 (street excavation requirements) and to any supplemental design and construction specifications adopted by the city for such improvements (from 17.42.030).



Sidewalk Option B Exceptions

- This shall apply to new structures and Middle Housing Land Divisions Subject to 17.... (TBD); with the following exceptions:
 - (i) There is no existing sidewalks within 200 feet of the subject parcel, and no planned sidewalk network in the area as identified in the Transportation System Plan.
 - (ii) When sidewalks and other frontage improvements would be located on land with cross slopes greater than nine percent as shown on the site plan submitted with the building permit.





HB 4064 [2022] Manufactured Dwellings -

HB 4064 [2022] prohibits cities from regulating manufactured dwellings in a manner that is inconsistent with detached single family dwellings. “A local government may not subject manufactured homes or prefabricated structures within an urban growth boundary, or the land upon which the homes or structures are sited, to any

- 4 applicable standard that would not apply to a detached,
- 27 site-built single-family dwelling on the same land, except: (a)

As necessary to comply with a protective measure adopted pursuant to a statewide land use planning goal; or (b) To require that the manufacturer certify that the manufactured home or prefabricated structure has an exterior thermal envelope meeting performance standards which reduce levels equivalent to the performance standards required of single-family dwellings constructed under the Low-Rise Residential Dwelling Code as defined in ORS 455.010.”



Image Source: HUD - <https://www.hud.gov/OMHP>

17.10.060 and 17.12.060-

(4) Manufactured Dwellings. All manufactured dwellings on individual lots in this district shall meet or exceed the following design standards:

- (a) The manufactured dwelling shall be multi-sectional and enclose a space of not less than 1,000 square feet;
- (b) The manufactured dwelling shall be placed on an excavated, backfilled foundation and enclosed at the perimeter such that no more than 12 inches of the enclosing material is exposed above grade. Where the building site has a sloped grade, no more than 12 inches of the enclosing material shall be exposed on the uphill side of the home. If the manufactured dwelling is placed on a basement, the 12-inch limitation shall not apply;
- (c) The manufactured dwelling shall have a pitched roof of not less than three feet in height for each twelve feet in width;
- (d) The manufactured dwelling shall have exterior siding and roofing which in color, material and appearance is similar to the exterior siding and roofing material on surrounding dwellings;
- (e) The manufactured dwelling shall be certified by the manufacturer to have an exterior thermal envelope meeting performance standards equivalent to the performance standards required of single-family dwellings constructed under the Oregon Residential Specialty Code. Evidence demonstrating that the manufactured home meets "Super Good Cent's" energy efficiency standards is deemed to satisfy the exterior thermal envelope certification standards. Additional manufacturer's certification shall not be required in such cases.
- (f) The manufactured dwelling shall have a garage or carport constructed of like materials. An attached or detached garage may be approved in lieu of a carport where such is consistent with the predominant construction of immediately surrounding dwellings.

17.10.060 and 17.12.060- Potential Amendments for consideration and discussion:

- (3) Design Features. Single-family dwellings shall include at least two of the following design features:
- (a) Dormer;
 - (b) One or more windows that face the street lot line;
 - (c) Cupola;
 - (d) Bay or bow window;
 - (e) Gable;
 - (f) Covered porch entry;
 - (g) Eaves (minimum six inches projection); ~~and~~
 - (h) Offset on building face or roof (minimum 16 inches);
 - (i) **Roof pitch of not less than three feet in height for each twelve feet in width; and**
 - (j) **Garage or carport. The garage or carport can be attached (see 17.12.060(1)) or detached.**



Image Source: OHCS - <https://www.oregon.gov/ohcs/mmcr/pages/index.aspx>

17.10.060 and 17.12.060- Potential Amendments for consideration and discussion:

(3) Foundations

- a. The dwelling shall be placed on an excavated, backfilled foundation and enclosed at the perimeter such that no more than 12 inches of the enclosing material is exposed above grade.
- b. Where the building site has a sloped grade, no more than 12 inches of the enclosing material shall be exposed on the uphill side of the home.
- c. If the dwelling is placed on a basement, the 12-inch limitation shall not apply;



Image Source: Census - <https://www.census.gov/programs-surveys/mhs.html>

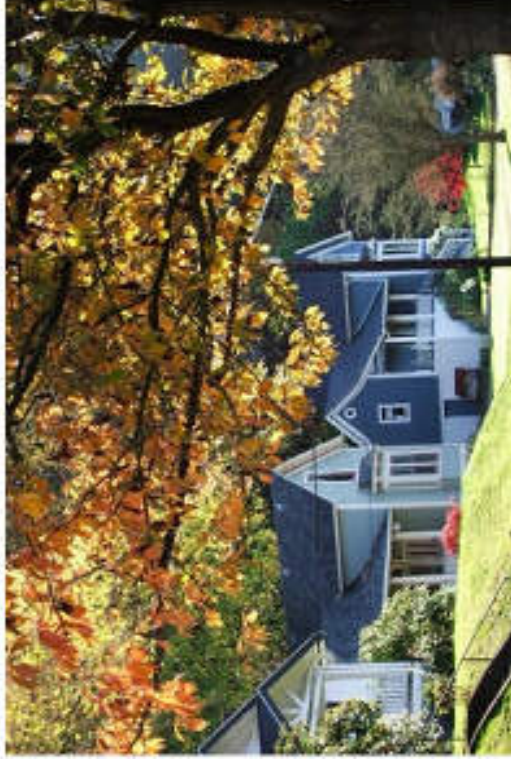


17.10 and 17.12.060-Potential Amendments Continued

- (4) Manufactured Dwellings. All manufactured dwellings on individual lots in this district shall meet or exceed the following design standards:
- (a) The manufactured dwelling shall be multi-sectional and enclose a space of not less than 1,000 square feet;
 - (b) The manufactured dwelling shall be placed on an excavated, backfilled foundation and enclosed at the perimeter such that no more than 12 inches of the enclosing material is exposed above grade. Where the building site has a sloped grade, no more than 12 inches of the enclosing material shall be exposed on the uphill side of the home. If the manufactured dwelling is placed on a basement, the 12-inch limitation shall not apply;
 - (c) The manufactured dwelling shall have a pitched roof of not less than three feet in height for each twelve feet in width;
 - (d) The manufactured dwelling shall have exterior siding and roofing which in color, material and appearance is similar to the exterior siding and roofing material on surrounding dwellings;
 - (e) The manufactured dwelling shall be certified by the manufacturer to have an exterior thermal envelope meeting performance standards equivalent to the performance standards required of single-family dwellings constructed under the Oregon Residential Specialty Code. Evidence demonstrating that the manufactured home meets "Super Good Cents" energy efficiency standards is deemed to satisfy the exterior thermal envelope certification standards. Additional manufacturer's certification shall not be required in such cases.
 - (f) The manufactured dwelling shall have a garage or carport constructed of like materials. An attached or detached garage may be approved in lieu of a carport where such is consistent with the predominant construction of immediately surrounding dwellings.

Conditional Uses

- Not required before July 1st because not required for compliance with HB 2001
- Needed in the future to provide a pathway for housing development that has clear and objective standards for land use review



STAFF RECOMMENDATION:

Gladstone Planning Commission recommends that the City Council approve the draft amendments proposed for the Comprehensive Plan and Gladstone Municipal Code, as found in the Planning Commission packet and amended by the Planning Commission.

**INFORMATION
INCLUDED
IN
APRIL 17, 2022
PLANNING
COMMISSION
PACKET**



Agenda Item No. 3

PC Meeting Date: 04/19/22

STAFF REPORT

File No: TXT-2022-01;

Applicant or Presenter: City of Gladstone and MIG

Project Location: Residential Zoning Districts Citywide including: R7.2, R5 and MR Zoning Districts

Project Description: In the spring of 2021, the City of Gladstone initiated the Zoning Code Rewrite project to align local policies and standards to the recently adopted Housing Bill 2001 (HB 2001). House Bill 2001 requires local governments, including Gladstone, to allow duplexes, triplexes, fourplexes, townhomes, and cottage clusters in areas currently zoned for single family and multifamily homes.

SUMMARY

In the spring of 2021, the City of Gladstone initiated the Zoning Code Rewrite project (the project) to update Title 17 of the Municipal Code related to needed housing. This project is a critical opportunity to implement policies around improved housing choices in Gladstone, engage all community members including those who have traditionally been under-represented in the decision-making process, and align local policies and standards to the recently adopted Housing Bill 2001 (HB 2001).

House Bill 2001 requires local governments, including cities within the Portland Metro Area with more than 1,000 residents, to allow duplexes on every lot currently zoned for residential use and allow additional middle housing types such as triplexes, fourplexes, townhomes, and cottage clusters in areas where infrastructure is sufficient. The bill also requires that local land use regulations do not cause unreasonable cost or delay in permitting middle housing.

The bill defines "Middle housing" as duplexes, triplexes, quadplexes, townhomes, and cottage clusters, although historically part of the housing stock of many communities, these housing types have recently been omitted from many local zoning regulations, particularly in areas zoned for single-family dwellings.

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These proposals are subject to Chapter 17.68, Amendments and Zone Changes and Chapter 17.94, Hearings, of Title 17 of the Gladstone Municipal Code. As proposed edited, planning staff find the amendments consistent with all applicable standards from Title 17 of the Gladstone Municipal Code (GMC), the Statewide Planning Goals and Metro's Functional Plan.

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EXHIBITS

Exhibit 1. Location Map

APPENDIX: SUBSTANSIVE FILE DOCUMENTS

- A. Draft Amendments**
- B. Public Notice,**
- C. PAPA Notice**
- D. Comments Received**

I. PUBLIC NOTICE

Published In: Clackamas Review, DLCD’s post-acknowledgment plan amendment website (PAPA), and on the Gladstone Website; Needed Housing Advisory Committee; City Council and Planning Commission work session; Gladstone Website and Gladstone Weekly Update.

Responses Received: Comments were received from the public through an online survey and through a committee meeting and joint work session with the City of Gladstone Planning Commission and City Council.

II. CONSISTENCY WITH STATEWIDE PLANNING GOALS

- 1. Goal 1 – Citizen Involvement:** To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

Finding: Goal 1 requires the City to incorporate six key components in its public involvement program:

- **Citizen Involvement:** An officially recognized committee for public involvement broadly representative of geographic areas and interests related to land use and land-use decisions to provide for widespread public involvement;
- **Communication:** Mechanisms for effective two-way communication between the public and elected/appointed officials;
- **Influence:** Opportunities for the public to be involved in all phases of the planning and decision-making process including developing, evaluating, and amending plans;
- **Technical Information:** Access to technical information used in the decision-making process, provided in an accessible and understandable format;

- **Feedback Mechanisms:** Programs to ensure that members of the public receive responses from policymakers and that a written record for land-use decisions is created and made accessible; and,
- **Financial Support:** Adequate resources allocated for the public involvement program as an integral component of the planning budget.

The following is a summary of activities undertaken by the City as part of the City's community engagement effort to support the production and adoption of the Housing Code Amendments.

The City conducted public meetings and work sessions that were open public forums held between November 2021 and April 2022. Each work session included opportunities for elected officials, appointed officials, and the public, to review draft code amendments, discuss key aspects, and answer questions. The City also hosted an informational project webinar on the City's website and an online survey to solicit feedback on the proposed code changes.

The City publicized these work sessions on the City of Gladstone website, through the City newsletters and during other public meetings.

The first public meeting held with the Planning Commission presented the scope of work to be completed as part of the HB 2001 code amendments. The meeting also included an overview of the findings from the Summary Report and introduced the Downtown Overlay Zone process. The Planning Commission was generally supportive of needed housing and code changes to Portland Ave. The Commission expressed the need for the process to consider parking, traffic and infrastructure impacts. An additional request around increasing the accessory dwelling unit size was also expressed.

The City also held a joint working session with the Planning Commission and City Council on March 15, 2022 to review the proposed amendments. The following summarizes general comments by the Planning Commission and City Council and responses by City staff and consultant team:

- **Encourage ADA accessibility in the design of all new housing in Gladstone.**
 - **Response:** Although the intent of middle housing is to provide a broader range of housing types including for seniors and older adults, ADA accessibility is not part of the proposed amendments. ADA standards are addressed in the Building Code and any applicant will be required to meet these standards during review of individual applications.
- **Ensure required parking is provided off-street.**
 - **Response:** The amendments will specify that all required parking must be provided off-street.
- **Transit access is limited in Gladstone which does not provide adequate options when also lowering required parking.**
 - **Response:** Point noted. The proposed amendments meet the minimum requirements of recent Oregon Administrative Rules related to parking requirements. An applicant still has the burden of proof to show that infrastructure is available or will be made available to service the development.

- Remove middle housing as a permitted use as currently proposed in the MR (Multi-Family Residential Zone).
 - Response: Point noted. The proposed amendments will be modified to address this comment.
- Consider impacts of allowing Planned Unit Development in any zone, especially given larger lots along 82nd Ave.
 - Response: Point noted. The proposed amendments will be modified to address this comment.

Where appropriate and not in conflict with HB2001 and the Division Rules, comments and proposed revisions are shown in blue as part of the hearing materials for the Planning Commission.

In addition, the City hosted an online survey to allow community members to provide feedback on proposed changes. Survey responses were collected and initially presented to the joint Technical Advisory Committee and Needed Housing Advisory Committee and at the joint work session. Following the work session, the survey was reopened for those interested to participate. The two major findings from the survey indicated that respondents wanted to "encourage more intense residential development in undeveloped areas at the edges of town" when asked what strategies would be most effective at creating positive and desirable housing opportunities in Gladstone. Another key finding was that many respondents indicated that including standards that ensured middle housing looks and feels like the existing single family housing inventory is the right direction to pursue.

At the same time of the survey was launched, a recorded community webinar was posted to the project website. This webinar provided an overview of the process, the requirements of HB 2001 and directed viewers to the survey.

The City's prior initiatives related to the provision of more housing choice (the Downtown Revitalization Plan, 2018; and the Housing Code Audit, 2019) entailed extensive community engagement, including community forums, and information on the City website. The City appointed a diverse group of community stakeholders to serve on an Advisory Committee for the Housing Code Audit, and all members of that Committee have been invited to participate in the housing code amendment work sessions as well as the Planning Commission hearings on the topic.

For this effort, the Needed Housing Advisory Committee (NHAC) made up of seven community and industry representatives, along with the Technical Advisory Committee (TAC), provided guidance throughout the process with three meetings held between September 2021 and April 2022.

Based on the findings above, the code amendments and Comprehensive Plan amendment to implement HB 2001 as referenced, is consistent with Statewide Planning Goal 1.

Goal 2 – Land Use Planning: To establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.

Finding: Statewide Planning Goal 2 requires each local government in Oregon to have and follow a comprehensive land use plan and implementing regulations. Cities and counties must build their comprehensive plans on a factual base, and follow their plan when making decisions on appropriate zoning. City and county plans must be consistent with one another. Special district and state agency plans and programs must be coordinated with comprehensive plans.

Generally, the housing code amendments are consistent with the current Comprehensive Plan and implements several goals. Currently the Gladstone Comprehensive Plan includes the following Goals:

Land Use Planning Goals: *“To provide and maintain a high standard for Gladstone’s quality of life.” And “To ensure a factual base for land use decisions and actions and to establish a planning process and policy framework for this purpose.”*

Housing Goal: *“To meet the housing needs of all segments of the population through optimum utilization of housing resources for the construction, rehabilitation and maintenance of the diversity of housing types at appropriate locations, price ranges and rent levels, while preserving and enhancing the integrity and identity of existing residential neighborhoods.”*

Because the Comprehensive Plan provides the land use policy guidance for the City, amendments and clarifications to the plan are also proposed to ensure that it is consistent with the proposed development code text amendments.

Notice of the housing code amendment package consideration was provided to Metro and DLCD through the Post-Acknowledgement Plan Amendment website and distribution system.

Therefore, the code amendments and Comprehensive Plan amendment to implement HB2001 as referenced, are consistent with Statewide Planning Goal 2.

Goals 3 -4 – Agricultural and Forest Lands:

Finding: These goals are not applicable because the housing code amendments do not change the City of Gladstone policies required to meet these goals that are directed at rural areas and counties.

Goal 5 – Open Spaces, Scenic and Historic Areas, and Natural Resources: To protect natural resources and conserve scenic and historic areas and open spaces.

Finding: Goal 5 aims to protect natural resources and conserve scenic and historic areas and open spaces. Particularly in urban areas, the emphasis of Goal 5 is on the inventory and conservation of wetlands, riparian zones, and wildlife habitats. In addition to Goal 5, the City is required to comply with Metro Title 13 for all mapped resources located within

the UGB. By meeting the requirements of Title 13, the City also complies with Goal 5 for riparian areas and wildlife habitat. Metro Title 13 is addressed in the findings for the Urban Growth Management Functional Plan.

The Gladstone Municipal code contains the following zoning overlays that were adopted by the City to provide protection for Significant Natural Resources under Statewide Planning Goal 5 and to comply with the provisions of OAR 660, Division 23:

- 17.25 HCAD—Habitat Conservation Area District;
- 17.26 OS—Open Space District;
- 17.27 WQ—Water Quality Resource Area District;
- 17.28 GW—Greenway Conditional Use District; and
- 17.29 FM—Flood Management Area District.

The City of Gladstone works closely with the Gladstone Historical Society to promote the enjoyment, research, documentation, preservation and public enrichment of the history and heritage of Gladstone, Oregon and the surrounding local area. The Gladstone Municipal Code, Chapter 2.48, includes the ability for a Historic Preservation Board to review alterations to historic landmarks. A 2009 survey of historical resources in downtown Gladstone found that 19% (22 buildings) of the buildings surveyed were potentially eligible for designation on the National Register. Recently, the City worked with the Gladstone Historical Society to display the history of Gladstone in the newly constructed City Hall.

HB 2001 and the accompanying Oregon Administrative Rules (OARs) allows a City to regulate and/or limit development of middle housing on the Goal-Protected Lands.

The housing code amendments neither reduce, nor increase, the pressure for the redevelopment of historic resources. The housing code amendments do not modify these natural resource zoning overlay districts or historic preservation efforts. The Comprehensive Plan Update, through the adoption of the housing code amendments, does not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the natural resource zoning districts in the Gladstone Municipal Code. Goal 5 does not directly apply to the housing code amendment or comprehensive plan amendment because no new Goal 5 program is advanced by this amendment and no existing Goal 5 program is changed by this amendment.

Based on the findings above, the Comprehensive Plan Update to adopt the housing code amendments as referenced, is consistent with Statewide Planning Goal 5.

Goal 6 – Air, Water and Land Resources Quality: To maintain and improve the quality of the air, water and land resources of the state.

Finding: Goal 6 instructs local governments to consider protection of air, water and land resources from pollution and pollutants when developing comprehensive plans. The pollutants addressed in Goal 6 include solid waste, water waste, noise and thermal pollution, air pollution, and industry-related contaminants. Comprehensive Plans must demonstrate consistency with

the administrative rules related to air, water, and land quality established by the Environmental Quality Commission (EQC).

Under the oversight of the EQC, the Oregon Department of Environmental Quality (DEQ) regulates air, water, and land through its permitting actions under the federal Clean Water Act and Clean Air Act. The Department of State Lands and the Army Corps of Engineers regulate jurisdictional wetlands and waters of the state and the country, respectively. The City of Gladstone Public Works department regulates impervious surface and stormwater runoff throughout the City through design standards applied to development. The Clackamas County Water Environmental Services and Oak Lodge also provide sewer and stormwater services for City residents. The Gladstone Municipal Code (GMC) has the following overlay districts that are related to water quality, wetlands, and surface water:

- 17.25 HCAD—Habitat Conservation Area District;
- 17.27 WQ—Water Quality Resource Area District; and
- 17.29 FM—Flood Management Area District.

While air quality is largely regulated by DEQ, the City can impose conditions of approval on land use approvals that require minimizing air pollution and carbon emission impacts through actions such as vegetative plantings and conservation.

The Federal Transit Administration and Federal Highway Administration enforce noise standards for federally-funded rail and highway projects. The Oregon Noise Control Act authorizes cities and counties to adopt and enforce noise ordinances and standards of their own. Gladstone regulates noise through the GMC Chapter 8.12 Noise Control, which designates prohibited noises and maximum permissible environmental noise and sound levels. Gladstone's Zoning Code (Chapter 17) also includes noise-related provisions in several sections of the code, often referring to the City's Noise Ordinance in Chapter 8.12 or standards of the DEQ.

HB 2001 and the accompanying Oregon Administrative Rules (OARs) allows a City to regulate and/or limit development of middle housing on the Goal-Protected Lands.

The housing code amendments package does not modify existing water resource zoning overlay districts or noise ordinance. The adoption of the amendments does not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the water resource zoning districts in the Gladstone Municipal Code. Goal 6 does not directly apply to the housing code amendments, or comprehensive plan amendment because no new Goal 6 program is advanced by this amendment and no existing Goal 6 program is changed by this amendment. Therefore, Goal 6 is not applicable to the housing code amendments and associated comprehensive plan amendment because the amendment does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 6.

Based on the findings above, the Comprehensive Plan amendment to adopt the housing code amendment as referenced, is consistent with Statewide Planning Goal 6.

Goal 7 – Areas Subject to Natural Disasters and Hazards: To protect people and property from natural hazards.

Finding: Goal 7 requires local comprehensive plans to address Oregon’s natural hazards. Protecting people and property from natural hazards requires knowledge, planning, coordination, and education. Natural hazards applicable to Gladstone include floods, landslides, weak foundation soils, earthquakes, and wildfires. Goal 7 calls for local governments to respond to new hazard inventory information provided by federal and state agencies by adopting or amending plan policies and implementing measures as needed. For riverine flood hazards, local governments must adopt and implement local floodplain regulations that meet the minimum National Flood Insurance Program (NFIP) requirements. In implementing natural hazard plans and policies, the State goal urges local governments to do the following: coordinate plans with emergency preparedness and recovery programs; consider stormwater management as a means to address flood and landslide hazards; consider nonregulatory approaches to implementing hazard plans; and to require technical reports when reviewing development requests in hazard areas.

The City of Gladstone complies with Goal 7 by regulating development in hazard-prone areas through the Municipal Code, the Public Works Design Guidelines and MOU’s with Clackamas County on fire response and other emergency preparedness efforts. The following Gladstone Municipal Code Chapters address flooding and landslides:

17.27 WQ—Water Quality Resource Area District.

17.29 FM—Flood Management Area District.

Additionally, the Design Review and Conditional Use land use processes address applicable natural hazards.

HB 2001 and the accompanying Oregon Administrative Rules (OARs) allow a City to regulate and/or limit development of middle housing on the Goal-Protected Lands.

The housing code amendments do not modify existing zoning overlay districts or design standards related to protecting development from hazards. The adoption of the housing code amendments does not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the overlay zoning districts in the Gladstone Municipal Code. Goal 7 does not directly apply to the housing code amendments or comprehensive plan amendment because no new Goal 7 program is advanced by this amendment and no existing Goal 7 program is changed by this amendment.

Therefore, Goal 7 is not applicable to the housing code amendments and associated comprehensive plan amendment because the amendment does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 7.

Based on the findings above, the Comprehensive Plan amendment to adopt the housing code amendments as referenced, is consistent with Statewide Planning Goal 7.

Goal 8 – Recreational Needs: To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

Finding: Goal 8 requires local governments to plan for the recreation needs of their residents and visitors. The goal places priority on non-motorized forms of recreation, and recreation areas that serve high-density populations with limited transportation options and limited financial resources. It also places priority on recreation areas that are free or available at a low cost to the public.

The City of Gladstone has a robust system of parks, recreation facilities and trails, including 14 neighborhood parks, community gardens, and natural areas. All of Gladstone’s parks are owned and managed by the City. The City completed a Parks Master Plan in 2017. Many of the current parks are included in the Open Space District that is regulated by Chapter 17.26 of the Gladstone Municipal Code.

HB 2001 and the accompanying Oregon Administrative Rules (OARs) allow a City to regulate and/or limit development of middle housing on the Goal-Protected Lands.

The housing code amendment does not modify existing open space overlay districts or the Parks Master Plan. The adoption of the housing code amendments does not propose any changes to the Parks Master Plan, adopted inventories, the Comprehensive Plan Map, or the overlay zoning districts in the Gladstone Municipal Code. Goal 8 does not directly apply to the housing code amendment or comprehensive plan amendment because no new Goal 8 program is advanced by this amendment and no existing Goal 8 program is changed by this amendment.

Therefore, Goal 8 is not applicable to the housing code amendments and associated comprehensive plan amendment because the amendment does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 8.

Based on the findings above, the Comprehensive Plan amendment to adopt the housing code amendments as referenced, is consistent with Statewide Planning Goal 8.

Goal 9 – Economy of the State: To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

Finding: Goal 9 ensures cities and counties have enough land available to realize economic growth and development opportunities. Commercial and industrial development takes a variety of shapes and leads to economic activities that are vital to the health, welfare and prosperity of Oregon's citizens. To be ready for these opportunities, local governments perform Economic Opportunity Analyses based on a 20-year forecast of population and job growth.

Goal 9 is not applicable because the amendments do not propose to change comprehensive land use plan policies or implementing regulations related to economic development and analysis in the City.

Goal 10 – Housing: To provide for the housing needs of citizens of the state.

Finding: Goal 10 concerns urban lands designated for residential use. Goal 10 requires the City to maintain and plan for an adequate land supply to accommodate at least 20 years of future growth, providing flexibility in housing location, type, and density (specifically at an overall density of 10 or more units/acre with the opportunity for 50 percent of new units to be attached single family or multifamily) to ensure the availability and prices of housing units are commensurate with the needs and financial capabilities of Oregon households.

Comprehensive plans are required to include an analysis of community housing needs by type and affordability, an assessment of housing development potential, and an inventory of residential land; contain policies for residential development and supportive services based on that analysis that increase the likelihood that needed housing types will be developed; and provide for an adequate supply of a variety of housing types consistent with identified policies and meeting minimum density and housing mix requirements (established by OAR 660, Division 007).

The findings for Goal 10 Housing, based on the City's proposed 2020 Housing Needs Analysis (HNA), include findings that demonstrate that Gladstone currently has a range of housing types, including single-family detached and attached homes, duplexes, multi-family, and mixed-use developments, and has a need for additional capacity to provide for needed housing during the next 20 years. The HNA provides information about the factors that could affect housing development, including demographics, affordability trends, workforce housing availability, and development patterns.

The Housing Needs Analysis adopted in 2021 includes the City's buildable lands inventory (BLI) for housing within the UGB. The BLI is required by Goal 10 and ORS 197.296 to ensure that current use designations provide an adequate short- and long-term land supply for housing development for meeting existing needs and those of projected growth. It analyzes existing development patterns and intensity, land and development values, existing land use designations and zoning, and building constraints to determine where there is vacant land and/or land that is likely to be redeveloped and compares the existing supply of land to emerging trends and indicators for future estimates of demand. The housing code amendments do not propose to change the buildable lands inventory, or housing needs analysis but rather amends the zoning districts to allow middle housing using the same standards or less restrictive standards than those applicable to the detached single household residential units.

The proposed housing code amendments related to middle housing amend the R-5 and R-7.2 zoning districts so that middle housing types are allowed outright in these zones. A definition for "middle housing" is added to the code to clarify that this means Duplex, Triplex, Quadplex, Cottage Cluster, or Townhouse in the R-5 or R-7.2 zones. The proposed amendments also

propose a clearer definition for multi-households, five to eight dwelling units, and allows these uses as a conditional use in the R-5 district and on arterial and collector streets in the R-7.2 district. The MR district has also been amended to allow Duplexes outright in this District. Additionally, Triplex, Quadplex, Cottage Cluster, and Townhome uses were added to the existing allowance of Detached Single Household Dwellings with a conditional use permit. This would ensure that middle housing types are afforded the same process as an approval for detached single-households but would not conflict with the BLI for needed multi-household units.

Other amendments related to middle housing include amending 17.76.020(6) to allow for nonconforming multi-household buildings to be rebuilt to the same footprint in the event the building is damaged or destroyed. Chapter 17.38.060(4) has been amended so that middle housing in Planned Unit Developments utilize the setbacks of the underlying zoning district. The proposed housing code amendments further the State's goal of providing for more middle housing types.

The findings for Goal 10 also illustrate that the current policies in the Comprehensive Plan support housing affordability and housing type diversity to encourage a variety of housing options for households of all incomes. The current Comprehensive Plan housing goals includes an emphasis on the preservation of existing homes, with a policy that calls out those that are historically significant.

EXCERPTS FROM GLADSTONE COMPREHENSIVE PLAN

Land Use Planning Goals: *"To provide and maintain a high standard for Gladstone's quality of life." And "To ensure a factual base for land use decisions and actions and to establish a planning process and policy framework for this purpose."*

Land Use Planning Objectives: *1) "To provide for adequate levels of housing, services, shopping, employment, transportation and recreation facilities for the city's residents. 2) To relate land use actions to housing, open space, recreation, transportation, utilities, shopping facilities, jobs, police and fire protection, and other social needs. 3) To protect property values and livability. And 4) To direct development away from flood plains, hazard areas, stream banks, places with unique natural value, and other desirable permanent public open spaces."*

Residential Use Policy:

5. Allow housing types ranging from low to high density units, providing for variation in the design of housing units.

Housing Goal: *"To meet the housing needs of all segments of the population through optimum utilization of housing resources for the construction, rehabilitation and maintenance of the diversity of housing types at appropriate locations, price ranges and rent levels, while preserving and enhancing the integrity and identity of existing residential neighborhoods."*

Housing Objectives: *1) "To provide for the housing needs of a minimum population of 12,000 by the year 2000. 2) To utilize housing resources to the maximum. 3) To minimize housing costs. 4) To promote and preserve the integrity, aesthetic quality and compatibility of neighborhoods. 5) To adapt the type and density of housing to the*

nature of the neighborhood in order to provide the widest possible range of housing choice and to enhance neighborhood stability and identity. 6) To minimize adverse social, economic and environmental impacts.”

Policy 1: Provide a choice of housing type, density and price range.

Policy 2: Promote the development of high density housing around commercial and/or industrial centers served by mass transit transfer stations.

Policy 3: Promote the supply of adequate housing.

- a. Work with Clackamas County in applying for federal housing assistance funds.*
- b. Explore the feasibility of offering density bonuses to developers who provide for federally subsidized low and moderate income housing units within developments.*
- d. Solicit the participation of the building industry, lending institutions and school district in a program for supplying housing structures to meet the special needs of the physically limited and elderly.*

Policy 4: Promote the upgrading and preservation of existing housing units and neighborhoods, with special emphasis on historically significant homes.

- a. Work with Clackamas County in applying for federal funds for housing and neighborhood rehabilitation and improvements.*
- b. Work with the building industry, lending institutions and school district in rehabilitation and/or maintenance programs.*
- c. Explore ways of encouraging an on-going maintenance program of existing multi-family structures and landscaping.*

The City's proposed housing code amendments responds to the City's updated Housing Needs Analysis and supports additional housing opportunities by allowing middle housing.

Based on the findings above the housing code amendments and Comprehensive Plan amendment are consistent with Statewide Planning Goal 10.

Goal 11 – Public Facilities and Services: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Finding: The City conducted a Water System Master Plan and a Sanitary Sewer Master Plan in 2014. In 2017, a Sanitary Sewer Master Plan, Parks Master Plan and Transportation System Plan were completed. The Housing Code Amendments and Comprehensive Plan amendment do not propose any changes to the adopted master plans, the Comprehensive Plan Map, or the Gladstone Municipal Code related to public facilities and services. The housing code amendments or comprehensive plan amendment proposes no new Goal 11 program and no existing Goal 11 program is changed by this amendment. The housing code amendment do not propose to change the comprehensive land use plan policies or implementing regulations regarding public facilities and services for compliance with Statewide Planning Goal 11.

Based on the findings above, the Comprehensive Plan Update to adopt the housing code amendment as referenced, is consistent with Statewide Planning Goal 11. The OARs allow for a city to require that existing infrastructure or proposed improvements can adequately support middle housing development. Requirements also allow the City to plan for adequate infrastructure where middle housing is allowed with the amendments.

Based on the findings above, the Comprehensive Plan amendment to adopt the housing code amendments as referenced, is consistent with Statewide Planning Goal 11.

Goal 12 – Transportation: To provide and encourage a safe, convenient and economic transportation system.

Finding: Goal 12 is implemented by Oregon Administrative Rules (OAR) Chapter 660, Division 12. Local governments are required to adopt a transportation system plan (TSP) and land use regulations to implement the TSP. OAR 660-012-0060 requires any comprehensive plan amendment to be evaluated according to the terms outlined in that OAR to demonstrate whether they will have a significant impact on the transportation system. The City of Gladstone completed a Transportation System Plan in 2017. The Housing Code Amendments and Comprehensive Plan amendments do not propose any changes to the adopted Transportation System Plan. The housing code amendments and comprehensive plan amendment proposes no new Goal 12 program and no existing Goal 12 program, or standard, is changed by this amendment. The housing code amendment does not propose to change the comprehensive land use plan policies or implementing regulations regarding transportation and compliance with Statewide Planning Goal 12.

Based on the findings above, the Comprehensive Plan amendment to adopt and incorporate the housing code amendments as referenced, is consistent with Statewide Planning Goal 12.

Goal 13 – Energy Conservation: To conserve energy.

Finding: Goal 13 requires that land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles. The housing code amendments package does not modify existing design standards or land use regulations related to energy conservation. The adoption of the proposed housing code amendments does not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the Gladstone Municipal Code as it relates to energy conservation. Goal 13 does not directly apply to the housing code amendments or comprehensive plan amendment because no new Goal 13 program is advanced by this amendment and no existing Goal 13 program is changed by this amendment. Therefore, Goal 13 is not applicable to the housing code amendments and associated comprehensive plan amendment because the amendment does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 13.

Based on the findings above, the Comprehensive Plan amendment to adopt the housing code amendments as referenced, is consistent with Statewide Planning Goal 13.

Goal 14 – Urbanization: To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

Finding: The entirety of the city and its Urban Growth Management Area is located within the Regional Urban Growth Boundary (UGB). As such, this amendment will not result in the transition of any land from rural to urban uses, or result in population or employment growth outside of the UGB. The housing code amendment does not modify the Gladstone Urban Growth Management Area, the UGB, or existing zoning requirements related to urbanization. The adoption of the housing code amendments does not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the Gladstone Municipal Code as it relates to the Urban Growth Boundary. Goal 14 does not directly apply to the housing code amendments or comprehensive plan amendment because no new Goal 14 program is advanced by this amendment and no existing Goal 14 program is changed by this amendment. Therefore, Goal 14 is not applicable to the housing code amendments and associated comprehensive plan amendment because the amendment does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 14.

Based on the findings above, the Comprehensive Plan amendment to adopt the housing code amendments as referenced, is consistent with Statewide Planning Goal 14.

Goal 15 – Willamette River Greenway: To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway.

Finding: Gladstone is bordered on one side by the Willamette River and the Greenway. Therefore, the Gladstone Municipal Code includes Chapter 17.28 that establishes the land use regulations related to the Greenway Conditional Use District. The housing code amendment does not modify the Greenway Conditional Use District, or existing zoning requirements related to the Willamette River Greenway. The adoption of the housing code amendment does not propose any changes to the adopted inventories, the Comprehensive Plan Map, or the Gladstone Municipal Code as it relates to the Willamette River. Goal 15 does not directly apply to the housing code amendment or comprehensive plan amendment because no new Goal 15 program is advanced by this amendment and no existing Goal 15 program is changed by this amendment. Therefore, Goal 15 is not applicable to the housing code amendment and associated comprehensive plan amendment because the amendment does not propose to change comprehensive land use plan policies or implementing regulations for compliance with Statewide Planning Goal 15.

Based on the findings above, the Comprehensive Plan amendment to adopt the housing code amendment as referenced, is consistent with Statewide Planning Goal 15.

Goals 16-19 – Estuarine Resources, Coastal Shore lands, Beaches and Dunes, and Ocean Resources:

Finding: The City of Gladstone is not subject to these four Statewide Planning Goals. Therefore, they are not applicable to the housing code amendment, or the comprehensive Plan amendment to adopt the housing code amendment.

III. FINDINGS RELATED TO GLADSTONE MUNICIPAL CODE

Once the housing code amendments are finalized and recommended by the Planning Commission and adopted City Council, the Comprehensive Plan will need to be amended to reference the housing code amendments as part of the consistency with Statewide Planning Goal 10.

The City of Gladstone planning staff finds:

17.68.010 AUTHORIZATION TO INITIATE AMENDMENTS.

(1) An amendment to the text of this title or the Comprehensive Plan may be initiated by the City Council, the City Planning Commission or the City Administrator or his designee.

(2) An amendment to the Zoning Map or to the Comprehensive Plan Map may be initiated by:

(a) The City Council;

(b) The City Planning Commission;

(c) The City Administrator or his designee; or

(d) By application of a property owner, contract purchaser or authorized agent of the subject property.

(3) The request by a property owner for a map amendment shall be accomplished by filing an application with the city using forms prescribed by the city and submitting the information required from the applicant under Section 17.68.050.

Finding: The request came from the City Administrator through an adopted legislative bill. This criterion is met.

17.68.020 Review process. *Applications under this chapter shall be reviewed pursuant to GMC Division VII (administrative procedures).*

Finding: The housing code amendments was submitted and was reviewed by the Planning Commission and City Council joint work session on March 15, 2022 and a public hearing is being held on the final draft. The amendment to the comprehensive plan to incorporate the housing code amendments as referenced is being reviewed according to GMC Division VII. This criterion is met.

17.68.040 Conditions.

(1) City Council may require conditions. When necessary to properly relate new developments to existing or anticipated conditions in the vicinity or to make possible a higher quality of development than would otherwise be possible, the City Council may determine that a zone change will be accompanied by the acceptance or accomplishment of certain specified

conditions. Conditions and requirements invoked pursuant to a zoning map amendment shall thereafter apply to the property so zoned.

(2) *Acceptance of conditions.* Such conditions shall be designed to further the objectives of the comprehensive plan and the zoning ordinance codified in this title and shall clearly set forth, in written form or upon drawings, all restrictions and requirements which will be applicable to the property rezoned. Where a zone change is made subject to such conditions, it shall become effective upon written acceptance and filing of the applicable terms and conditions by the property owner and by any other person intending to have an ownership interest in or to develop the property. The signed acceptance of conditions shall be filed with the City Recorder and a certified copy shall also be filed in the county deed records at the expense of the petitioner.

(3) *Type of conditions.* Conditions may include special measures designed to limit use or density, screen or separate buildings or portions of the site from adjoining property; limit access from important thoroughfares or through residential areas; provide additional right-of-way for an abutting street, preserve or provide public access to greenspace, floodplains, or river frontage; improve bicycle or pedestrian safety and connectivity; or improve transit capacity and efficiency.

(4) *No variance of ordinance standards.* In connection with the adoption of a zoning amendment, ordinance standards may be varied only when the Planning Commission finds that the development proposed and covered by specific limiting conditions will provide benefits and safeguards equal to or better than those possible under a strict interpretation of the zoning ordinance. In no case shall a use not specifically permitted within the zoning district be allowed under this section and Section 17.68.050. When circumstances as described in GMC Section 17.72.020 (circumstances for granting) exist, the regular variance procedures shall be followed.

(5) *Building permit conditions.* In addition to conditions as described above in this section, the Council may also provide that a zoning amendment will become effective upon satisfactory performance by the applicant of certain conditions or actions, such as a bona fide application for a building permit within a specified period of time.

Finding: Staff are not recommending any special conditions. This criterion does not apply.

17.68.050 Evidence supplied by applicant. The applicant seeking a zoning map change pursuant to the provisions of GMC Section 17.68.010 must show by a preponderance of the evidence all of the following, unless otherwise provided for in this title:

(1) *Granting the request fulfills a public need; the greater departure from present development policies or land use patterns, the greater the burden of the applicant.*

(2) *The public need is best carried out by granting the petition for the proposed action, and that need is best served by granting the petition at this time.*

(3) *The proposed action is consistent with the comprehensive plan and Metro's Functional Plan (Metro Code 3.07), and the Transportation Planning Rule (OAR 660-012-0060).*

(4) *Proof of significant change in a neighborhood or community or a mistake in the planning or zoning for the property under consideration, when relevant.*

(5) *The property and affected area is presently provided with, or concurrent with development can be provided with, adequate public facilities, including, but not limited to, the planned function, capacity, and performance standards of the transportation system as adopted in the transportation system plan.*

(6) *The transportation system is capable of safely supporting the uses allowed by the proposed designation in addition to the existing and planned uses in the area, consistent with the Transportation Planning Rule (OAR 660-012-0060). Requirements of the State Transportation Planning Rule shall apply to those land use actions that significantly affect the transportation system, as defined by OAR 660-012-0060.*

Finding: This project is not seeking a zoning map change. Therefore, this criterion is not applicable.

17.70.010 Authorization to grant or deny.

2) Conditions of Approval. In addition to the specific requirements of this title, including those set forth in GMC Chapter 17.62 (special uses), and the comprehensive plan, approval of a conditional use may be granted subject to additional conditions that are found necessary to protect the best interests of the surrounding area or the city as a whole. These conditions may include, but are not limited to, the following:

- (a) Limiting the hours, days, place and manner of operation;*
- (b) Requiring design features that minimize environmental impacts such as noise, vibration, smoke, dust, fumes and glare;*
- (c) Requiring increased setbacks, lot area, lot depth and lot width;*
- (d) Limiting building height, size, lot coverage and location on the site;*
- (e) Designating the size, number, location and design of vehicle access points;*
- (f) Requiring street right-of-way to be dedicated and streets to be improved;*
- (g) Requiring landscaping, screening, drainage and surfacing of parking and loading areas;*
- (h) Limiting the number, size, location, height and lighting of signs;*
- (i) Regulating the location and intensity of outdoor lighting;*
- (j) Requiring a sight-obscuring fence or hedge to screen the conditional use from adjacent to or nearby property;*
- (k) Construction of off-site transportation improvements to mitigate impacts resulting from development that relate to capacity deficiencies and public safety; and*
- (l) Upgrade or construct public facilities to city standards.*

Finding: Currently there are no conditions recommended. This criterion is met.

IV. CONSISTENCY WITH METRO’S FUNCTIONAL PLAN (METRO CODE 3.07),

Finding: The purpose of the Metro Urban Growth Management Functional Plan is to “implement regional goals and objectives adopted by the Metro Council as the Regional Urban Growth Goals and Objectives (RUGGO) including the Metro 2040 Growth Concept and the Regional Framework Plan.” The plan provides requirements for a local jurisdiction to provide adequate housing capacity within the urban growth boundary including but not limited to density and affordability.

The proposed amendments are mandated by the state, inconsistencies within the Metro Functional Plan will need to be brought into compliance with the HB 2001 and Division 46 of the OARs, by the agency. As presented here, the proposed amendments do not conflict with the purpose of the Functional Plan and, therefore, this criterion is met.

V. CONSISTENCY WITH TRANSPORTATION PLANNING RULE (OAR 660-012-0060).

Finding: Chapter 639, Section 3(5) of Oregon Laws 2019 provides that “[w]hen a local government makes a legislative decision to amend its comprehensive plan or land use regulations to allow middle housing in areas zoned for residential use that allow for detached single-family dwellings, the local government is not required to consider whether the amendments significantly affect an existing or planned transportation facility.”

The Middle Housing Code Amendments are legislative changes to Gladstone’s land use regulations to allow middle housing in areas zoned for residential use that allow for detached single-household dwellings. Therefore, the City is not required to consider whether the amendments significantly affect an existing or planned transportation facility. Based on the above findings, this criterion is met.

RECOMMENDATION: The Planning Commission recommends that the City Council approve the draft amendments proposed for the Comprehensive Plan and Gladstone Municipal Code, as found in the Planning Commission packet and amended by the Planning Commission.

EXHIBITS

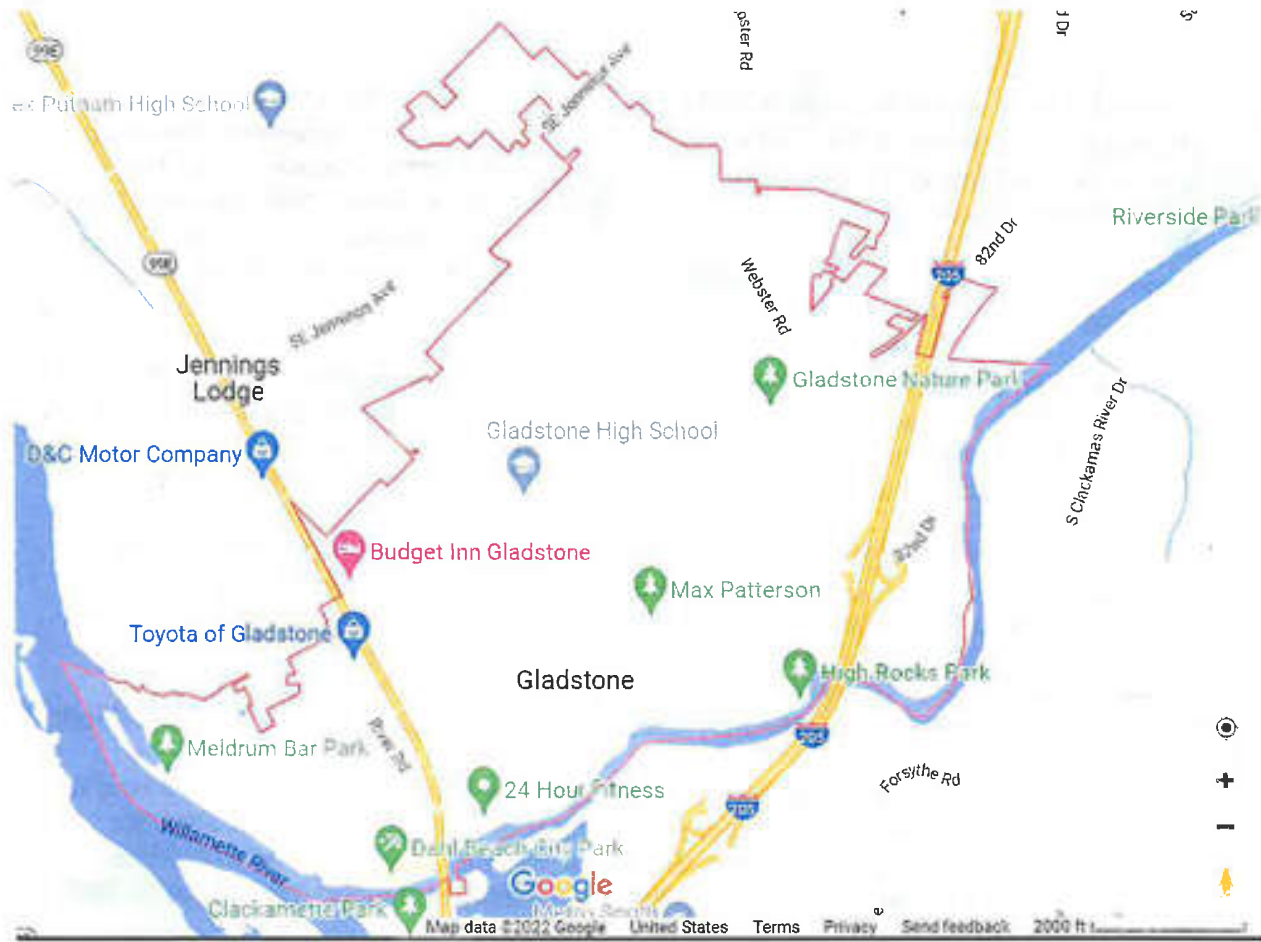


EXHIBIT 1
Location Map
Citywide

CHAPTER 17.06

DEFINITIONS

Chapter 17.06 DEFINITIONS*

Sections:

- 17.06.005 Generally.
- 17.06.010 Access.
- 17.06.013 Accessory dwelling unit.
- 17.06.015 Accessory use or accessory structure.
- 17.06.020 Alley.
- 17.06.035 Automobile service station.
- 17.06.040 Automobile storage or repair garages.
- 17.06.045 Boarding house, lodging house or rooming house.
- 17.06.050 Building.
- 17.06.055 Building height.
- 17.06.060 Building line, front.
- 17.06.065 Building official.
- 17.06.070 Carport.
- 17.06.075 Cattery.
- 17.06.080 Change of use for purposes of the greenway zone only.
- 17.06.085 Chapter.
- 17.06.090 City.
- 17.06.095 City Council.
- 17.06.100 City Administrator or designee.
- 17.06.105 Comprehensive plan.
- 17.06.115 Day care center.
- 17.06.117 Days.
- 17.06.120 Development for purposes of the greenway zone only.
- 17.06.125 Development permit.
- 17.06.130 Drinking establishment.
- 17.06.135 Durable and dustless surface.
- 17.06.14140 Dwelling, multi-~~family-household~~.
- 17.06.14245 Dwelling, single-~~family-household~~.
- 17.06.14350 Dwelling, two-~~family-household~~ or “Duplex”.
- 17.06.14055 Dwelling unit.
- 17.06.144 Dwelling, three-household or “Triplex”.
- 17.06.145 Dwelling, four-household or “Quadplex”.
- 17.06.146 Townhouse.
- 17.06.147 Townhouse Project.
- 17.06.148 Cottage Cluster.
- 17.06.149 Middle Housing.
- 17.06.160 Easement.
- 17.06.165 Eating establishment.
- 17.06.170 Exterior.
- 17.06.175 ~~Family-Household~~.
- 17.06.180 Fence or hedge, sight-obscuring.
- 17.06.195 Floor area.
- 17.06.200 Foster home.
- 17.06.205 Frontage.
- 17.06.210 Grade, ground level.
- 17.06.213 Gross leasable area (GLA).
- 17.06.214 Home for the aged
- 17.06.215 Group home.
- 17.06.220 Home occupation.
- 17.06.225 Hospitals, nursing homes and homes for the aged.
- 17.06.230 Hotel.
- 17.06.233 Institutional use.

17.06.235 Intensification of use for purposes of the greenway zone.
17.06.240 Kennel.
17.06.245 Landscaping.
17.06.247 Land use decision.
17.06.250 Livestock.
17.06.255 Loading space.
17.06.260 Lot.
17.06.265 Lot area.
17.06.270 Lot, corner.
17.06.275 Lot coverage.
17.06.280 Lot depth.
17.06.282 Lot, flag.
17.06.285 Lot line.
17.06.290 Lot line, front.
17.06.295 Lot line, rear.
17.06.300 Lot line, side.
17.06.301 Lot line, street side.
17.06.305 Lot of record.
17.06.310 Lot, through.
17.06.315 Lot width.
17.06.325 Major remodeling.
17.06.328 Manufactured dwelling.
17.06.336 Mini-storage.
17.06.338 Mixed use development.
17.06.340 Mobile home.
17.06.345 Mobile home court or mobile home park.
17.06.350 Model unit real estate office.
17.06.355 Motel.
17.06.358 Net acre.
17.06.360 New construction.
17.06.365 Nonaccess reservation.
17.06.370 Nonconforming use.
17.06.372 Nonconforming development.
17.06.375 Open space.
17.06.380 Owner.
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17.06.390 Parking space.
17.06.395 Partition.
17.06.400 Partition land.
17.06.405 Pedestrian way.
17.06.410 Person.
17.06.415 Planning Commission.
17.06.416 Plat.
17.06.418 Porch, front.
17.06.419 Primary building wall.
17.06.420 Primary zoning district.
17.06.426 Property line adjustment.
17.06.430 Recreation vehicle park.
17.06.435 Recreation vehicle.
17.06.440 Residential home.
17.06.445 Residence.
17.06.450 Residential planned unit development
17.06.455 Residential zoning district.
17.06.460 Right-of-way.
17.06.465 Roadway.
17.06.470 Seasonal.

17.06.475 Section.
17.06.480 School, commercial.
17.06.485 School, primary, elementary, junior high or high.
17.06.491 Senior housing center.
17.06.492 Setback, front.
17.06.493 Setback, rear.
17.06.494 Setback, side.
17.06.496 Setback, street side.
17.06.497 Sidewalk.
17.06.500 Sign.
17.06.501 Sign, electronic message center.
17.06.503 Sign, monument.
17.06.504 Sign, segmented message.
17.06.506 Sign, tri-vision.
17.06.507 Story.
17.06.510 Story, half.
17.06.515 Street.
17.06.520 Structure.
17.06.525 Subdivide land.
17.06.530 Subdivision.
17.06.535 Temporary structure real estate offices.
17.06.537 Temporary structures.
17.06.540 Title.
17.06.542 Transit street.
17.06.545 Use.
17.06.548 Utility facility.
17.06.550 Utility substation.
17.06.551 Vacation rental.
17.06.553 Vacation occupancy.
17.06.555 Vegetation.
17.06.560 Vehicle.

* Prior history:

17.06.025 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 §1, 2002.
17.06.030 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 §1, 2002.
17.06.110 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 § 1, 2002.
17.06.185 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1334, 2004.
17.06.190 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1334, 2004.
17.06.320 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1171 §1(K), 1993.
17.06.330 **History:** Ord. 1131 §2, 1990; Ord.1179 §11(B), 1993; Repealed by Ord. 1323 §1, 2002.
17.06.335 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1171 §1(L), 1993.
17.06.425 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323§1, 2002.
17.06.490 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323§1, 2002.
17.06.495 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 §1, 2002.
17.06.502 **History:** Ord. 1161 §1, 1992; Renumbered to §17.06.504 by Ord. 1323 §1, 2002.

17.06.505 **History:** Ord. 1131 §2, 1990; Renumbered to §17.06.507 by Ord. 1323 §1, 2002.

17.06.565 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 §1, 2002.

17.06.570 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 §1, 2002.

17.06.575 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 §1, 2002.

17.06.580 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 §1, 2002.

17.06.585 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1323 §1, 2002.

17.06.005 Generally.

The words and phrases used in Title 17 shall have the meanings set out in Chapter 17.06 (definitions) unless the context otherwise requires.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.010 Access.

“Access” means the right to cross between public and private property allowing pedestrians and vehicles to enter and leave property.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.013 Accessory dwelling unit.

“Accessory dwelling unit” means an additional, smaller, subordinate dwelling unit located on the same lot as a detached or attached single-~~family~~ household dwelling or multi-household dwelling. An accessory dwelling may be created as a detached structure or within, or as an addition to, a detached single-~~family~~ household dwelling or accessory structure.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1289, 2000

17.06.015 Accessory use or accessory structure.

“Accessory use” or “accessory structure” means a use or structure incidental and subordinate to the main use of the property and located on the same lot as the main use.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.020 Alley.

“Alley” means a street which affords only a secondary means of access to the property.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.035 Automobile service station.

“Automobile service station” means a retail place of business engaged primarily in the sale of motor fuels, but also supplying goods and services required in the operation and maintenance of automotive vehicles. These may include petroleum products, tires, batteries, automotive accessories and replacement items, washing and lubrication services, or automobile and truck maintenance and repair, and the supplying of other incidental customer services and products, but not painting, body and fender work, and storage of autos and trucks.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.040 Automobile storage or repair garages.

“Automobile storage or repair garages” means a premises used for the storage, repair, or sale of used automobile vehicles or automotive parts.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.045 Boarding house, lodging house, or rooming house.

“Boarding house,” “lodging house” or “rooming house” means a building or portion thereof without separate housekeeping facilities to be occupied, or which is occupied primarily by persons paying consideration for sleeping purposes where meals may or may not be served.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.050 Building.

“Building” means a structure built for the support, shelter or enclosure of any persons, animals, chattels, or property of any kind excepting uncovered patios or decks not exceeding thirty inches in height above the average grade of the adjoining ground.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.055 Building height.

“Building height” means the vertical distance measured from the adjoining street center line grade as established by the city to the highest point of the roof surface of a flat roof, to the deck line of a mansard roof, and to a mean height level between the eaves and ridge for a gable, hip or gambrel roof; provided, however, that where buildings are set back from the street line, the height of the building may be measured from the average elevation of the finished grade at the front of the building.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.060 Building line, front.

“Front building line” means a line parallel and adjacent to the front of that structure which is closest to the front lot line. For purposes of this definition, the front of a structure is the side facing the front lot line. A front building line extends from one side lot line to the opposite side lot line.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.065 Building official.

“Building official” means the building official of the city.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.070 Carport.

“Carport” means a stationary structure consisting of a roof with its supports and not more than two walls, or a storage cabinet substituting for one of the walls, and used for sheltering a motor vehicle, boat or recreation vehicle.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.075 Cattery.

“Cattery” means ten or more cats owned or boarded on the premises.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.080 Change of use for purposes of the greenway zone only.

“Change of use for purposes of the greenway zone only” means a different use than that which existed on December 6, 1975. It includes a change that requires construction, alterations of the land, water or other areas outside of existing buildings or structures and which substantially alters or affects the land or water. It does not include a change of use of a building that does not substantially alter or affect the land or water upon which it is situated. Change of use shall not include the completion of a structure for which a valid permit has been issued as of December 6, 1975, and under which permanent substantial construction has been undertaken by July 1, 1976. The sale of property is not in itself considered to be a change of use. An existing open storage area shall be considered to be the same as a building.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.085 Chapter.

“Chapter” means a portion of this ordinance identified by a four digit number (for example, Chapter 17.06, Definitions.)

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.090 City.

“City” means the City of Gladstone, Oregon.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.095 City Council.

“City Council” means the governing body of the city.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.100 City Administrator or designee.

“City Administrator” or “designee” means the administrator of the city or a person designated by the City Administrator.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.105 Comprehensive plan.

“Comprehensive plan” means the official plan adopted by the city for the guidance of growth and improvement, including modifications or refinements which may be made from time to time.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.115 Day care center.

“Day care center” means any facility, institution, establishment or place not a part of a school that provides day care to thirteen or more children, including children of the provider, regardless of full or part-time status, under thirteen years of age.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.117 Days.

“Days” means calendar days without reference to business days or holidays unless specifically stated to the contrary.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.120 Development for purposes of the greenway zone only.

“Development for purposes of the greenway zone only” means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, parking lots, mining, dredging, filling, grading, paving, excavation or drilling operations, to bring about growth or availability, to construct or alter a structure, to make a physical change in the use or appearance of land, to divide land into parcels, or to create or terminate rights of access.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.125 Development permit.

“Development permit” means a building permit, subdivision approval, temporary permit, or any other permit required by the city before development can occur.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.130 Drinking establishment.

“Drinking establishment” means a place of business which requires a permit and/or license from the Oregon Liquor Control Commission for the dispensing of liquor for consumption upon the premises.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.135 Durable and dustless surface.

“Durable and dustless surface” means a surface providing a hard topping which is free from mud conditions in wet weather and dusty conditions in dry weather, specifically including concrete or asphaltic concrete or like material but specifically excluding gravel and dirt.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.1401 Dwelling, multi-family household.

“Multi-family household dwelling” means a building ~~or portion thereof~~, designed for occupancy by ~~three~~ five or more ~~families~~ households living independently of each other.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.1452 Dwelling, detached single-family household.

“Single-family household dwelling unit” means a detached building containing one dwelling unit located on a single lot, ~~and designed for occupancy by one family only.~~

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.15043 Dwelling, two-family household or “Duplex”.

“Two-family household dwelling unit” means a detached ~~or attached~~ building containing two dwelling units ~~on a single lot and designed for occupancy by two families independent of each other.~~

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.15540 Dwelling unit.

“Dwelling unit” means one or more rooms for occupancy by one family household for living purposes that is identified by a single street address and has common entrances and internal access. Trailer coaches shall not be considered as dwelling units, except when located in mobile home courts or parks.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1171 §1(1), 1993.

17.06.144 Dwelling, three household or “Triplex”.

“Three household dwelling unit” or “Triplex” means three attached or detached dwelling units on a single lot in any configuration.

17.06.145 Dwelling, four household or “Quadplex”.

“Four household dwelling unit” or “Quadplex” means four attached or detached dwelling units on a single lot in any configuration.

17.06.146 Townhouse.

“Townhouse” means a dwelling unit that is part of a row of two or more attached dwelling units, where each unit is located on an individual lot and shares at least one common wall with an adjacent dwelling unit.

17.06.147 Townhouse Project.

“Townhouse Project” means one or more townhouse structures constructed, or proposed to be constructed, together with the development site where the land has been divided, or is proposed to be divided, to reflect the Townhouse property lines and any commonly owned property.

17.06.148 Cottage Cluster.

“Cottage cluster” means a grouping of three, four or more detached dwelling units per acre with a building footprint of less than 900 square feet each that includes a common courtyard on a single lot or on individual lots.

17.06.149 Middle Housing.

“Middle Housing” means Duplex, Triplex, Quadplex, Cottage Cluster, or Townhouse in the R-5 or R-7.2 zone and is subject to the Oregon Administrative Rules Chapter 660, Division 46 Middle Housing in Medium and Large Cities.

17.06.160 Easement.

“Easement” means a grant of the right to use a strip of land for specific purposes.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.165 Eating establishment.

“Eating establishment” means a place of business which serves food but does not require a permit and/or license from the Oregon Liquor Control Commission.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.170 Exterior.

“Exterior” means any portion of the outside of a structure which can be seen from a public place.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.175 Family Household.

~~“Family”“Household” means one person or two or more persons related by blood, marriage, legal adoption or legal guardianship, living together as one housekeeping unit using one kitchen and providing meals or lodging to not more than two additional persons, excluding servants or a group of not more than five unrelated persons living together as one housekeeping unit using one kitchen.;~~ occupying a dwelling unit as their usual place of residence. This definition shall not apply to group homes, foster homes, or homes for the aged.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.180 Fence or hedge, sight-obscuring.

“Sight-obscuring fence or hedge” means a fence consisting of wood, metal, masonry or similar materials, or an evergreen hedge or other evergreen planting, arranged in such a way as to obscure vision at least eighty percent (80%).

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.195 Floor area.

“Floor area” means the sum of the gross horizontal area of the several floors of a building, measured from the exterior faces of the exterior walls, or from the center line of walls separating two buildings, but not including:

- (1) Attic space providing headroom of less than seven feet.
- (2) Basement or cellar.
- (3) Uncovered steps or fire escapes.
- (4) Private garages, carports or porches.
- (5) Accessory water towers or cooling towers.
- (6) Accessory off-street parking or loading spaces.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.200 Foster home.

“Foster home” means any dwelling occupied and maintained by a person or persons licensed or certified by the state or other authorized agency to provide extended or temporary care, food, and lodging in such home for not more than seven dependent individuals beyond the number defined as a [family household](#). A foster home is not a hospital, nursing home, or home for the aged as defined in Oregon Revised Statutes, nor does it include a halfway house, work release center, or any other domiciliary facility for persons released from any penal or correctional institution.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

[Ed. Note: The publication(s) referred to or incorporated by reference in this ordinance are available from the office of the City Recorder.]

17.06.205 Frontage.

“Frontage” means property abutting on a street.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.210 Grade, ground level.

“Ground level grade” means the average elevation of the finished ground elevation at the centers of all walls of a building, except that if a wall is parallel to and within five feet of a sidewalk, the sidewalk elevation nearest the center of the wall shall constitute the ground elevation.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.213 Gross leasable area (GLA).

“Gross leasable area (GLA)” means the total floor area designed for tenant occupancy and exclusive use, including any basements, mezzanines, or upper floors, expressed in square feet and measured from the center line of joint partitions and from outside wall faces.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1289 §1, 2000.

17.06.214 Home for the aged.

“Home for the aged” means a supervised personal care facility where staff provide services to residents. A home for the aged is not a group home, foster home, hospital, or nursing home.

Statutory Reference: ORS Ch. 197, Ch. 227

17.06.215 Group home.

“Group home” means any home occupied and maintained by a person or persons licensed by the state or other appropriate agency to provide extended or temporary care, food and lodging in such home for from eight to ten dependent individuals beyond the number defined as a [family household](#). A group home is not a foster home, hospital, nursing home or home for the aged as defined in Oregon Revised Statutes, nor does it include a halfway house, work release center, or any domiciliary facility for persons released from any penal or correctional institution.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

[Ed. Note: The publication(s) referred to or incorporated by reference in this ordinance are available from the office of the City Recorder.]

17.06.220 Home occupation.

“Home occupation” means an occupation, profession, or craft which is customarily incidental to or carried on in a dwelling place or premises and not one in which the use of the premises as a dwelling place is largely incidental to the occupation carried on, and which occupation is carried on by an immediate member of the family household residing within the dwelling place; provided, however, there shall be no structural alteration or changes in the dwelling, or on the premises and there is no display of merchandise, storage materials, signs or articles or objects awaiting or in the process of repair, remodeling, or modification on the premises which can be seen from the exterior of the dwelling. Noise, odor, smoke, gases, fallout, vibration, heat or glare resulting from the use shall not be of the intensity as to be detected outside of the containing structure.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.225 Hospitals, ~~nursing homes and homes for the aged.~~

~~“Hospitals,” “nursing homes” and “homes for the aged” means the same as defined in the Oregon Revised Statutes.~~

~~“Hospital” means a medical facility licensed by the state of Oregon that provides health services on a primarily inpatient basis.~~

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

[Ed. Note: The publication(s) referred to or incorporated by reference in this ordinance are available from the office of the City Recorder.]

17.06.230 Hotel.

“Hotel” means a building or portion thereof designed or used for occupancy of transient individuals who are lodged with or without meals and in which no provision is made for cooking in any individual room or suite.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.233 Institutional use.

“Institutional use” means a church, school, public facility, hospital, nursing home or home for the aged.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1289 §1, 2000; Ord. 1292 §1, 2000.

17.06.235 Intensification of use for purposes of the greenway zone.

“Intensification of use for purposes of the greenway zone” means any additions which increase or expand the area or amount of an existing use, or the level of activity. Remodeling of the exterior of a structure not excluded below in this section is an intensification when it will substantially alter the appearance of the structure. (Intensification shall not include the completion of a structure for which a valid permit has been issued as of December 6, 1975, and under which substantial construction has been undertaken by July 1, 1976.) Maintenance and repair usual and necessary for the continuance of an existing use is not an intensification of use. Reasonable emergency procedures necessary for the safety or protection of the greenway includes the practices and activities customarily related to the use and enjoyment of one’s home. Landscaping, construction of driveways, modification of existing structures, or construction or placement of such subsidiary structures or facilities adjacent to the residence as are usual and necessary to such use and enjoyment shall not be considered an intensification for the purposes of this district. Seasonal increases in gravel operation shall not be considered an intensification of use.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.240 Kennel.

“Kennel” means four or more dogs with permanent canine teeth owned or boarded on the premises.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.245 Landscaping.

“Landscaping” means the improvement of land by means such as contouring, plantings, fencing and the placement of outdoor structures.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.247 Land use decision.

“Land use decision” includes a final decision or determination that concerns the adoption, amendment, interpretation or application of the goals, comprehensive plan provision, land use regulation, but does not include:

- (1) A decision which is made under the city’s development standards which do not require interpretation or the exercise of facts, policy, or legal judgment.
- (2) A decision which approves, approves with conditions or denies a subdivision or partition and is consistent with the city’s development standards.
- (3) Approval or denial of a building permit.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.250 Livestock.

“Livestock” means domestic animals of types customarily raised or kept on farms for profit or other purposes.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.255 Loading space.

“Loading space” means an off-street space or berth on the same lot or parcel with a building or use or contiguous to a group of buildings or uses for the temporary parking of a vehicle while loading or unloading persons, merchandise, or materials and which space or berth abuts upon a street, alley or other appropriate means of access and egress.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.260 Lot.

“Lot” means a unit of land that is created by a subdivision of land. For the purposes of this title, “lot” includes “parcel” and “lot of record” unless the context otherwise requires.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.265 Lot area.

“Lot area” means the total area of a lot measured in a horizontal plane within the lot boundary lines exclusive of public streets.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.270 Lot, corner.

“Corner lot” means the total area of a lot abutting on two or more streets, other than an alley, at their intersection.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.275 Lot coverage.

“Lot coverage” means the area covered by a building or buildings on a lot, expressed as a percentage of the total lot area.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.280 Lot depth.

“Lot depth” means the average horizontal distance between the front lot line and rear lot line.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.282 Lot, flag.

“Flag lot” means a lot that has access to a street by means of a narrow deeded strip of land or easement.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1289 §1, 2000.

17.06.285 Lot line.

“Lot line” means the property line bounding a lot.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.290 Lot line, front.

“Front lot line” means a lot line separating a lot from a street other than an alley. In the case of a corner lot, either of the lot lines separating the lot from a street other than an alley may be designated by the property owner as the front lot line with the other such lot line designated as a street side lot line. Except as modified by GMC Subsection 17.76.040(5), the front lot line of a flag lot, for the purposes of determining minimum yard requirements, shall be a line within the boundaries of the lot by a distance equal to the width of the narrow deeded strip of land or easement providing access to the lot from the street. The line shall be parallel to the lot line that extends from the street to the lot line opposite and most distant from the street.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000; Ord. 1323 §1, 2002.

17.06.295 Lot line, rear.

“Rear lot line” means the lot line that is opposite and most distant from the front lot line. In the case of an irregular

or triangular shaped lot, the rear lot line is a line ten feet (10') in length within the lot parallel to and at a maximum distance from the front lot line.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.300 Lot line, side.

“Side lot line” means any lot line not a front or rear lot line.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.301 Lot line, street side.

“Street side lot line” means a side lot line separating a lot from a street other than an alley.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.305 Lot of record.

“Lot of record” means a lot or parcel in a recorded plat. For units of land that are not lots or parcels in a recorded plat, “lot of record” means a unit of land or aggregate of contiguous units of land held in a single ownership, as recorded in the office of the Clackamas County Recorder on October 26, 1971.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.310 Lot, through.

“Through lot” means an interior lot having frontage on two streets other than alleys.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.315 Lot width.

“Lot width” means the average horizontal distance between the side lot lines.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.325 Major remodeling.

“Major remodeling” means any work that substantially alters the exterior appearance of a structure or off-street parking area.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.328 Manufactured dwelling.

“Manufactured dwelling” means a single family household dwelling with a Department of Housing and Urban Development (HUD) label certifying that the structure was constructed on or after June 15, 1976, and met the requirements of the Federal Manufactured Housing Construction and Safety Standards and Regulations in effect at the time of construction, consistent with 1989 Oregon Laws, Chapter 380, 1989. This definition shall not apply to structures known as “modular homes” where such modular homes are constructed in accordance with all requirements of the state building code for modular homes and bear the Seal of Approval of the State of Oregon,

Building Codes Agency.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1171 §1(A), 1993; Ord. 1179 §11(A), 1993.

[Ed. Note: The publication(s) referred to or incorporated by reference in this ordinance are available from the office of the City Recorder.]

17.06.336 Mini-storage.

“Mini-storage” means a storage and warehousing service within a building(s) primarily for individuals to store personal effects and by business to store materials for operation of an industrial or commercial enterprise located elsewhere. In no case may storage spaces in a mini-warehouse facility function as an independent retail, wholesale business, or service use. Spaces shall not be used for workshops, hobby shops, manufacturing, or similar uses and human occupancy of said spaces shall be limited to that required to transport, arrange, and maintain stored materials. The location of an owner or manager residence on the premises is permitted.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1256 §1, 1998.

17.06.338 Mixed use development.

“Mixed use development” means development or buildings where land uses are mixed together. This can include residential and commercial, or office and retail. Uses may be mixed in one building “vertically” where there is one use on the ground floor and a different use above in one building, or “horizontally” where a variety of uses are next to each other in one building.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1289 §1, 2000.

17.06.340 Mobile home.

“Mobile home” means a single **family household** dwelling originally designed and constructed to be movable or portable, constructed to be transported on its own chassis and designed originally without a permanent foundation, whether or not a permanent foundation is subsequently provided, or two or more units separately transportable but designed to be joined into an integral unit, and which do not conform to all requirements of the building code for other residences and not meeting the definition of “manufactured dwelling.”

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1171 §1(B), 1993.

17.06.345 Mobile home court or mobile home park.

“Mobile home court” or “mobile home park” means four mobile home units or more for rent within five hundred feet of one another on a lot, tract, or parcel.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.350 Model unit real estate office.

“Model unit real estate office” means a permanent residential structure located in a developing subdivision used for the promotion of sale of units in the subdivision, so long as the model unit real estate office is at all times available for sale, lease, lease option or exchange as a residential dwelling.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.355 Motel.

“Motel” means one or more buildings designed or used as temporary living quarters for transients.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.358 Net acre.

“Net acre” means an area measuring forty-three thousand five hundred sixty (43,560) square feet, which excludes:

- (1) Road rights-of-way and other public dedications through or on the edge of the land; and
- (2) Environmentally constrained areas, including open water areas, areas in the FM District, areas in the WQ District, natural resource areas protected under statewide planning Goal 5 in the Comprehensive Plan, slopes in excess of twenty-five percent (25%) and wetlands requiring a federal fill and removal permit under Section 404 of the Clean Water Act.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1289 §1, 2000; Ord. 1334, 2002.

[Ed. Note: The publication(s) referred to or incorporated by reference in this ordinance are available from the office of the City Recorder.]

17.06.360 New construction.

“New construction” means a structure for which the start of construction commenced on or after the effective date of the ordinance codified in this title.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.365 Nonaccess reservation.

“Nonaccess reservation” means a street plug or a one foot right-of-way width owned by the city.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.370 Nonconforming use.

“Nonconforming use” means a lawful existing use at the time the ordinance codified in this title or any amendment thereto becomes effective, which does not conform to the requirements of the zone in which it is located.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1266 §1, 1998.

17.06.372 Nonconforming development.

“Nonconforming development” means development of a site which was lawfully existing at the time the ordinance codified in this title or any amendment thereto becomes effective, which does not conform to the requirements of this title, including but not limited to minimum parking, minimum landscaping, etc.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1266 §2, 1998.

17.06.373 Nursing Home

“Nursing Home” means a facility that provides medical care, nursing, and other health services to its residents. A

nursing home is not a group home, foster home, hotel, hospital, or home for the aged.

Statutory Reference: ORS Ch. 197, Ch. 227

17.06.375 Open space.

“Open space” means land that is undeveloped and that is planned to remain so indefinitely. “Open space” also refers to land zoned OS, Open Space District, and developed with uses identified in GMC Chapter 17.26 (OS open space district).

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1334, 2002.

17.06.380 Owner.

“Owner” means the person holding fee title to the land, or where there is a recorded land sale contract, the purchaser there under.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1334, 2002.

17.06.385 Parcel.

“Parcel” means a unit of land that is created by a partitioning of land. For the purposes of this title, “parcel” includes “lot” and “lot of record” unless the context otherwise requires.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.390 Parking space.

“Parking space” means an area available for the parking of a standard or compact vehicle.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.395 Partition.

“Partition” means either an act of partitioning land or an area or tract of land partitioned as defined in GMC Section 17.06.400.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.400 Partition land.

“Partition land” means to divide a lot of record into two (2) or three (3) parcels within a calendar year, but does not include a division of land resulting from a lien foreclosure, foreclosure of a recorded contract for the sale of real property or the creation of cemetery lots; divisions of land made pursuant to a court order, including, but not limited to, court orders and proceedings involving testate or intestate succession; or an adjustment of a property line by the relocation of a common boundary where an additional lot of record is not created and where the existing lot of record reduced in size by the adjustment complies with the provisions of this title. Any property divided by the sale or grant of property for state highway, county road, city street or other right-of-way purposes shall continue to be considered a single lot of record until such time as the property is further subdivided or partitioned.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1171 §1(M), 1993; Ord. 1323 §1, 2002.

17.06.405 Pedestrian way.

“Pedestrian way” means a right-of-way for pedestrian traffic.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.410 Person.

“Person” means an individual, firm, partnership, corporation, company, syndicate, association, social or fraternal organization or any legal entity, and including any trustee, receiver, assignee, or any group or combination acting as a unit.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.415 Planning Commission.

“Planning Commission” means the Planning Commission of the city.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.416 Plat.

“Plat” means a final map and other writing containing all the descriptions, locations, specifications, dedications, provisions and information concerning a subdivision or partition.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.418 Porch, front.

“Front porch” means a front entrance to a dwelling covered by a separate roof or an extension of the dwelling roof. Enclosure walls shall extend no more than half the distance from the front porch to the porch eaves. A front porch shall be used only for recreational, outdoor living purposes and not as a carport, garage, storage room or habitable room.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1289 §1, 2000.

17.06.419 Primary building wall.

“Primary building wall” means an exterior building wall that contains a public entrance to the premises and faces either a street or a parking area.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.420 Primary zoning district.

“Primary zoning district” includes the following: R-7.2, R-5, MR, C-1, C-2, C-3, OP, LI, and OS.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.426 Property line adjustment.

“Property line adjustment” means the relocation of a common property line between two (2) abutting lots of record.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.430 Recreation vehicle park.

“Recreational vehicle park” means an area designated by the person establishing, operating, managing or maintaining the same for overnight camping in recreation vehicles or for a short duration by the general public or any segment of the public. Recreation vehicle park includes, but is not limited to, areas open to use free of charge or through payment of a tax or fee or by virtue of rental, lease, license, membership, association, or ownership. Overnight camping of mobile homes is not allowed within recreation vehicle parks. A recreation vehicle park shall not include a municipal, county, state or federal park or recreation area.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1198 §1(A), 1994.

17.06.435 Recreation vehicle.

“Recreation vehicle” means a vacation trailer or self-propelled vehicle or structure equipped with wheels for highway use which is intended for human occupancy and is being used for recreation or vacation purposes, but not for residential purposes, and is equipped with plumbing, sink or toilet, and has a floor space of less than two hundred twenty square feet, excluding built-in equipment such as wardrobes, closets, cabinets, kitchen units or fixtures and bath and toilet rooms.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990

17.06.440 Residential home.

“Residential home” means the same as a foster home as defined in GMC Section 17.06.200.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.445 Residence.

“Residence” means a dwelling unit as defined in GMC Section 17.06.155.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.450 Residential planned unit development.

“Residential planned unit development” means a residential (R) planned unit development as allowed under GMC Chapter 17.38 (planned unit development) and is at least eighty thousand square feet in any zoning district or combination thereof. A planned unit development less than eighty thousand square feet must be approved by Planning Commission per GMC 17.38.020.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

~~**17.06.451 ——— Large Scale Planned Unit Development**~~

~~A planned unit development that encompasses 2 acres or more in any zoning district or combination thereof.~~

17.06.455 Residential zoning district.

“Residential zoning district” means the R-7.2, R-5 and MR zones.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.460 Right-of-way.

“Right-of-way” means the area between boundary lines of a street or other easement, whether improved or unimproved.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.465 Roadway.

“Roadway” means the portion of a street right-of-way developed for vehicular traffic.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.470 Seasonal.

“Seasonal” means limited to a period of no more than six months in any twelve-month period, but related to a unique or an annually occurring event or condition.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.475 Section.

“Section” means a portion of this title identified by a seven-digit number, such as GMC Section 17.10.020 (uses allowed outright) in the R-7.2 zoning district.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.480 School, commercial.

“Commercial school” means a place where instruction is given to pupils in arts, crafts, trades or other occupational skills and operated as a commercial enterprise as distinguished from schools endowed or supported by taxation.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.485 School, primary, elementary, junior high or high.

“Primary, elementary, junior high or high schools” includes public, private or parochial but not nursery school, kindergarten or day nursery, except when operated in conjunction with a school.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.491 Senior housing center.

A “senior housing center” means a residential facility providing dwelling units without full kitchens (known as residential suites) for those aged sixty-five and older and dwelling units with full kitchens. Up to fifteen percent of the total number of dwelling units may be provided as single-family household units or duplex units with full kitchens. A senior housing center is a congregate care facility which provides common services including but not limited to transportation of residents, three meals per day in a common facility and other non-medical care congregate services.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1280 §1, 1998.

17.06.492 Setback, front.

“Front setback” means the horizontal distance between a front lot line and a structure.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.493 Setback, rear.

“Rear setback” means the horizontal distance between a rear lot line and a structure.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.494 Setback, side.

“Side setback” means the horizontal distance between a side lot line and a structure.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.496 Setback, street side.

“Street side setback” means the horizontal distance between a street side lot line and a structure.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.497 Sidewalk.

“Sidewalk” means a pedestrian walkway with permanent surfacing to city standards.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.500 Sign.

“Sign” means an identification, description, illustration or device which is affixed to or represented, directly or indirectly, upon a building, structure, or land and which directs attention to a product, place, activity, person, institution or business.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.501 Sign, electronic message center.

“Electronic message center sign” means a sign, display or device, or portion thereof, whose message may be changed by electronic process or remote control, and may include electronic time and/or temperature displays and the device known in the advertising industry as a commercial electronic variable message sign.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1161 §1, 1992; Ord. 1323 §1, 2002.

17.06.503 Sign, monument.

“Monument sign” means a sign that extends to the ground or that has a support that places the bottom of the sign

less than two feet (2') from the ground.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.504 Sign, segmented message.

“Segmented message sign” means any message or distinct subunit of a message presented by means of at least one display change on an electronic message center sign.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1161 §1, 1992; Renumbered from 17.06.502 by Ord. 1323 §1, 2002.

17.06.506 Sign, tri-vision.

“Tri-vision sign” means a sign where the display surface is composed of triangular louvers that rotate periodically to allow three (3) images to be displayed.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1323 §1, 2002.

17.06.507 Story.

“Story” means that portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a basement, cellar or unused under floor space is more than six feet (6') above grade as defined in this section for more than fifty percent (50%) of the total perimeter or is more than twelve feet (12') above grade as defined in this section at any point, such basement, cellar or unused under floor space shall be considered a story.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Renumbered from 17.06.505 by Ord. 1323§1, 2002.

17.06.510 Story, half.

“Half-story” means a story under a gable, hip, or gambrel roof, the wall plates of which on at least two opposite exterior walls are not more than two feet above the floor of such story.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.515 Street.

(1) “Street” means a public or private way that is created to provide ingress or egress for persons to one or more lots, parcels, areas or tracts of land, and the placement of utilities and including the terms road, highway, lane, avenue, place, court, way, circle, drive, alley or similar designation.

(2) “Alley” means a narrow street through a block primarily for vehicular service access to the back or side of properties otherwise abutting on another street.

(3) “Arterial” means a street of considerable continuity which is primarily a traffic artery for intercommunication among large areas.

(4) “Collector” means a street supplementary to the arterial street system and a means of intercommunication between this system and smaller areas; used to some extent for access to abutting properties and may be used to a limited extent for through traffic.

(5) “Cul-de-sac” (dead-end street) means a short street having one end open to traffic and terminated by a vehicle

turnaround.

(6) “Marginal access street” means a minor street parallel and adjacent to a major arterial street providing access to abutting properties, but protected from through traffic.

(7) “Minor street” means a street intended primarily for access to abutting properties.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.520 Structure.

“Structure” means something constructed or built and having a fixed base on or fixed connection to the ground or another structure to include a mobile home.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.525 Subdivide land.

“Subdivide land” means to divide a lot of record into four (4) or more lots within a calendar year.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.06.530 Subdivision.

“Subdivision” means either an act of subdividing land or an area or a tract of land subdivided as defined in GMC Section 17.06.525.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.535 Temporary structure real estate offices

“Temporary structure real estate offices” means a temporary structure located in a subdivision used for the promotion of a sale of residential units in a developing subdivision.

Statutory Reference: ORS Ch. 197, Ch. 27

History: Ord. 1131 §2, 1990.

17.06.537 Temporary structures.

“Temporary structures” means an area covered by a plastic, tarp, fabric, or metal membrane that is either attached to a rigid framework, natural feature or some other structure that is used for storage. It does not include greenhouses or weather proofing of a vehicle, boat, or other individual item by tarp or other type of covering as long as the covering is attached directly to and covers only the particular item.

History: Ord. 1482 §1, 2018.

17.06.540 Title.

“Title” means that portion of the Gladstone Municipal Code identified by a two-digit number, such as Title 17, zoning and development.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.542 Transit street.

“Transit street” means a street on which public transit stops are located.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1289 §1, 2000.

17.06.545 Use.

“Use” means the purpose for which land or a structure is designed, arranged or intended or for which it is occupied or maintained.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.548 Utility facility.

“Utility facility” means buildings, structures or any constructed portion of a system that provides for the production, transmission, conveyance, delivery or furnishing of services including, but not limited to, heat, light, water, power, natural gas, sanitary sewer, stormwater, telephone and cable television. Utility facilities do not include stormwater pretreatment facilities.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990, Ord. 1431, 2011.

17.06.550 Utility substation.

“Utility substation” means a facility that provides for the location of utility service apparatus that includes, but is not limited to: telephone exchanges; public utility structures, without shops, garages or general administrative offices; transmission and receiving towers, and/or earth stations.

History: Ord. 1502 §1, 2020.

17.06.551 Vacation rental.

“Vacation rental” means a dwelling unit or accessory dwelling unit providing vacation occupancy.

History: Ord. 1502 §1, 2020.

17.06.553 Vacation occupancy.

“Vacation occupancy” as defined by ORS 90.100 means occupancy in a dwelling unit, not including transient occupancy in a hotel or motel, that has all of the following characteristics:

- (1) The occupant rents the unit for vacation purposes only, not as a principal residence;
- (2) The occupant has a principal residence other than at the unit; and
- (3) The period of authorized occupancy does not exceed 45 days.

History: Ord. 1502 §1, 2020.

17.06.555 Vegetation.

“Vegetation” means plantings or natural growth of trees, grass, shrubs, etc. which would permit normal percolation.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

17.06.560 Vehicle.

“Vehicle” means a device in, upon, or by which any person or property is or may be transported or drawn upon a public highway, except devices moved by human power or used exclusively upon stationary rails or tracks.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990.

CHAPTER 17.10

R-7.2

SINGLE-FAMILY RESIDENTIAL

Chapter 17.10

R-7.2—SINGLE-~~FAMILY~~HOUSEHOLD RESIDENTIAL DISTRICT

Sections:

- 17.10.010 Purpose.
- 17.10.020 Uses allowed outright.
- 17.10.030 Accessory uses allowed.
- 17.10.040 Conditional uses allowed.
- 17.10.050 Dimensional standards.
- 17.10.060 Design standards.
- 17.10.070 Exemptions to uses permitted outright.

17.10.010 Purpose.

The purpose of an R-7.2 district is to implement the comprehensive plan and to provide land for ~~families households and individuals~~ desiring to live in an environment of single-household ~~dwelling, including low density and middle housing dwellings on the periphery of neighborhoods.~~

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1499 §1 (Exh. A), 2020.

17.10.020 Uses allowed outright.

In an R-7.2 zoning district, the following uses and their accessory uses are allowed outright:

- (1) Single-~~family household~~ dwelling, including a manufactured dwelling.
- (2) ~~Two family dwelling on a collector or minor arterial.~~ Middle housing.
- (3) Foster home.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1188 §1, 1994; Ord. 1323 1, 2002; Ord. 1499 §1 (Exh. A), 2020.

17.10.030 Accessory uses allowed.

Accessory uses shall comply with all the requirements of this zoning district, except as this section allows to the contrary. All accessory structures shall be subject to GMC Chapter 17.54 (Clear Vision). The following accessory uses shall be allowed in an R-7.2 zoning district:

- (1) Buildings. Garages and carports, storage and other buildings, as follows:
 - (a) Either the side, except a street side, or rear setback may be reduced to five feet for structures that:
 - (A) Are detached from other buildings on the same lot by a minimum of 10 feet;
 - (B) Do not exceed a height of one story; and
 - (C) Do not exceed a floor area of 450 square feet.
 - (b) Either the side, except a street side, or rear setback may be reduced to three feet for structures that do not exceed a floor area of 120 square feet.
 - (c) A wall of rated, fire-resistive construction may be required by the Oregon Structural Specialty Code or its successor.
 - (d) A setback does not apply to portable storage containers as defined in GMC Chapter 5.22.

(2) Courtyards, Patios and Decks. The minimum side, except street side, and rear setbacks for uncovered courtyards, patios and decks in excess of 30 inches in height shall be five feet. The minimum front and street side setbacks for such courtyards, patios and decks shall be 15 feet. No setbacks shall be required for uncovered courtyards, patios or decks 30 inches or less in height. When calculating the height of a courtyard, patio or deck, railings and benches shall be excluded from the calculation.

(3) Fences and Walls. The following standards shall apply to fences and walls of all types whether open, solid, wood, metal, masonry or other material:

(a) When located between the front lot line and the front building line, fences and walls shall not exceed three feet in height.

(b) Fences and walls not subject to subsection (3)(a) of this section shall not exceed six feet in height.

(c) An exception may be granted to the maximum fence or wall height standards for conditional or nonconforming uses. Such an exception may be granted pursuant to review of an application for conditional use; alteration, expansion or change of use of a nonconforming use; or design review and when an exception is found necessary to provide adequate screening for the use.

(4) Storage. Storage of boats, trailers, pickup campers, coaches, motorhomes and similar recreation equipment. Occupancy of such equipment is subject to a temporary permit under GMC Chapter 15.28 (Temporary Dwellings).

(5) Accessory dwelling units, subject to the following standards:

(a) Only one accessory dwelling unit per lot shall be permitted. ~~An accessory dwelling unit shall not be permitted on a lot occupied by two or more dwelling units;~~

(b) The floor area of an accessory dwelling unit shall ~~be a minimum of 400 square feet and~~ not exceed ~~400~~ 800 square feet;

(c) An accessory dwelling unit shall not contain more than one bedroom;

(d) Only one entrance, other than a vehicular entrance to a garage, may be located on the street-facing facade of the structure containing the primary dwelling unit unless this structure had additional entrances before the accessory dwelling unit was created and the number of entrances will not be increased;

(e) The exterior finish materials—including siding, trim and roofing—of an accessory dwelling unit shall be the same or visually similar to those of the primary dwelling unit with respect to type, size, placement and color;

(f) The roof pitch of an accessory dwelling unit shall be the same as the predominant roof pitch of the primary dwelling unit;

(g) The windows of an accessory dwelling unit shall be the same or visually similar to those of the primary dwelling unit;

(h) The eaves on an accessory dwelling unit shall project from the structure walls the same distance as the eaves on the primary dwelling unit;

(i) An accessory dwelling unit shall comply with the minimum yard requirements and maximum building height established in GMC Section 17.10.050.

(j) An accessory dwelling unit used as a vacation rental shall provide:

(A) One off-street parking space in addition to the off-street parking space required by GMC Chapter 17.48 (Off-Street Parking and Loading) for the primary dwelling unit; and

(B) A deed restriction requiring owner-occupancy of one of the units recorded in the Clackamas County Clerk’s Office in a form prescribed by the city. Either the primary dwelling unit or the accessory dwelling unit shall be owner-occupied for as long as the accessory dwelling unit is being used as a vacation rental.

(6) Swimming Pools, Ponds and Hot Tubs. The minimum side, street side and rear setbacks for swimming pools, ponds and hot tubs shall be three feet. The minimum front setback for ponds no greater than five feet wide and no more than two feet deep shall be three feet.

(7) Home Occupations. Home occupations shall be subject to GMC Chapter 17.78 (Home Occupations).

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000; Ord. 1323 §1, 2002; Ord. 1392 §3, 2007; Ord. 1499 §1 (Exh. A), 2020.

17.10.040 Conditional uses allowed.

In an R-7.2 zoning district, the following uses and their accessory uses are allowed subject to GMC Chapter 17.70 (Conditional Uses):

- (1) Multi-family household dwelling, ~~three-five-~~ eight-unit ~~complexes building~~ on a collector or minor arterial.
- (2) Church and associated buildings and structures.
- (3) Fire station or similar public use necessary to provide service or preserve public safety in the area.
- (4) Community center, day care center.
- (5) Nursing homes and homes for the aged.
- (6) School and associated buildings, structures and facilities.
- (7) Utility facility; provided, that no outside storage is involved.
- (8) Group homes.
- (9) Planned unit development (PUD).

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002; Ord. 1499 §1 (Exh. A), 2020.

17.10.050 Dimensional standards.

Except as provided in GMC Chapters 17.38 (Planned Unit Development), 17.72 (Variances) and 17.76 (Exceptions), the following dimensional standards shall apply in an R-7.2 zoning district:

<u>Minimum Lot Area</u>		
<u>Detached single household</u>	<u>7,200 sf</u>	
<u>Middle Housing</u>	<u>3,600 sf</u>	
<u>Multi-household dwellings</u>	<u>3,600 sf per dwelling unit</u>	
<u>Other uses</u>	<u>7,200 sf</u>	Or as established by the Planning Commission, as provided by GMC Chapter 17.70 (Conditional Uses).
<u>Minimum Setbacks</u>		

<u>Front Setback</u>	<u>20 ft</u>	Except that a front porch may project a maximum of five feet into a required front setback area
<u>Side Setback</u>	<u>20% of the average lot width or 15 ft, whichever is less, but in no case will be less than 5 ft (except for townhouses)</u> <u>7.5 ft or 5 ft due to irregular shaped lots</u>	Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet into a required setback area <u>Townhouse projects are allowed a zero-foot side setback for lot lines where Townhouse units are attached.</u>
<u>Street Side Setback</u> <u>Interior side setback</u>	<u>20 ft</u> <u>5 ft</u>	<u>Townhouse projects are allowed a zero-foot side setback for lot lines where Townhouse units are attached.</u>
<u>Rear Setback</u>	<u>15 ft</u>	<u>Cottage Cluster minimum setbacks can be reduced to 5 feet, if there is more than 150 square feet per dwelling unit of common open space provided, as define in Section 17.12.065(2).</u> <u>Setbacks for Manufactured homes in a mobile home park are subject to the standards in Section 17.62.070 (4).</u>
Maximum Building Height	35 ft	Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this subsection.
Minimum Density		
	Subdivisions and PUDs shall provide a minimum density of 80% of the maximum density per net acre.	
<u>Maximum Density</u>		
<u>Detached single household dwelling</u>	<u>one dwelling unit per 7,200 square feet of lot area or eight units per net acre</u>	<u>This code does not allow for the creation of more than four (4) dwelling units on a lot, including accessory dwelling units.</u>
<u>Middle Housing</u>	<u>None</u>	
<u>Sufficient Infrastructure</u>	<u>Applicants must demonstrate that Sufficient Infrastructure is provided, or will be provided, upon submittal of a residential development application.</u>	

~~(1) Lot Area.~~

- ~~(a) For a single family dwelling, the minimum lot area shall be 7,200 square feet;~~
- ~~(b) For two family or multi household dwelling, the minimum lot area shall be 3,600 square feet per dwelling unit;~~
- ~~(c) For other uses, the minimum lot area shall be 7,200 square feet, or as established by the Planning Commission, as provided by GMC Chapter 17.70 (Conditional Uses).~~

~~(2) Setback Requirements.~~

- ~~(a) A front setback shall be a minimum of 20 feet, except that a front porch may project a maximum of five feet into a required front setback area;~~
- ~~(b) Except on a corner lot, the total side setback shall be a minimum of 20 percent of the average lot width or 15 feet, whichever is less, but in no case shall a side setback be less than five feet;~~
- ~~(c) A rear setback shall be a minimum of 15 feet;~~
- ~~(d) On a corner lot, the street side setback shall be a minimum of 20 feet and the other side setback shall be a minimum of five feet;~~
- ~~(e) Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet into a required setback area;~~

~~(3) Building Height. Maximum building height shall be 35 feet. Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this subsection.~~

~~(4) All PUDs with residential uses must include a mix of two or more middle housing types for a minimum of 25% of the total dwelling units proposed.~~

~~(a) Exceptions in Case of Large Scale PUD. The dimensional standards of this section may be modified by the Planning Commission in the case of a plan and program for a planned unit development, providing the modifications are not detrimental to the public health, safety and welfare and provided the Planning Commission determines there is provision for adequate public spaces and improvements for the circulation, recreation, light, air and service needs of the developed tract and its relation to adjacent areas and for such covenants or other legal provisions as will assure conformity to and achievement of the plan.~~

~~(5) Minimum Density.~~

- ~~(a) Subdivisions and PUDs shall provide a minimum density of 80 percent of the maximum density per net acre. For the purpose of this provision, maximum density shall be one dwelling unit per 7,200 square feet of lot area or six units per net acre.~~

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000; Ord. 1323 §1, 2002; Ord. 1499 §1 (Exh. A), 2020.

17.10.055 Cottage Cluster Standards.

The following dimensional standard apply to cottage clusters development in the R-7.2 zone. Where conflicts arise between the standards within this section and elsewhere in the code, the standards of this section will supersede.

(1) Dimensional Standards

- (a) Minimum Lot Size and Dimensions. Cottage clusters shall meet the minimum lot area that apply to detached single family dwellings in the R-7.2 zone.

(b) Setbacks and Building Separation.

(A) Setbacks. Cottage clusters shall meet the minimum setback standards:

- Front setbacks: 10 feet
- Side setbacks: 5 feet
- Rear setbacks: 10 feet

(B) Building Separation. Cottages shall be separated by a minimum distance of six (6) feet. The minimum distance between all other structures, including accessory structures, shall be in accordance with building code requirements.

(c) Average Unit Size. The maximum average floor area for a cottage cluster is 1,400 square feet per dwelling unit. Community buildings shall be included in the average floor area calculation for a cottage cluster.

(d) Off-Street Parking.

(A) Required Off-Street Parking. The minimum number of required off-street parking spaces for a cottage cluster project is zero (0) spaces per unit with a floor area less than 1,000 square feet and one (1) space per unit with a floor area of 1,000 square feet or more. Spaces may be provided for individual cottages or in shared parking clusters. A credit for on-street parking shall be granted for some or all of the required off-street parking as provided in subsection (b).

(B) On-Street Credit. If on-street parking spaces meet all the standards in subsections (i)-(iv) below, they shall be counted toward the minimum off-street parking requirement.

- i. The space must be abutting the subject site;
- ii. The space must be in a location where on-street parking is allowed by the jurisdiction;
- iii. The space must be a minimum of 22 feet long; and
- iv. The space must not obstruct a required sight distance area.

17.10.060 Design standards.

(1) Attached Garage. The following standard shall apply to the construction of a garage attached to a single-family household dwelling ~~or two-family dwelling~~. An existing garage, legally constructed prior to the adoption of this standard, that does not conform to this standard may be remodeled or expanded, provided such remodeling or expansion shall not further reduce the structure's compliance with this standard.

(a) The length of the garage wall facing the street may be up to 50 percent of the length of the street-facing building facade. On corner lots only one street-facing garage wall must meet this standard unless there are two garages, such as in the case of a two-family dwelling.

(2) Main Entrance. The main entrance ~~of a single-family dwelling and the main entrance of each unit of a two-family dwelling~~ shall:

(a) Single-Household Dwelling.

~~(A)~~ (A) Face the street lot line. On a corner lot, the main entrance may face either street lot line or the corner; or

~~(B)~~ (B) The main entrance shall open onto a covered porch that has an entrance that faces the street lot line. The porch and its roof shall each be at least 40 square feet in area and neither the width nor the depth shall be less than five feet.

(b) Duplex, Triplex, Quadplex and Townhouse.

1. Connect to any on-site parking and the public right-of-way with a pedestrian pathway that is a minimum of 4 ft wide. The pathway may use a driveway surface.

(3) **Design Features.** Single-~~family household~~ dwellings and ~~two-family dwellings~~ duplexes, triplexes, quadplexes, townhomes, and cottage clusters shall include at least two of the following design features on each dwelling unit:

- (a) Dormer;
- (b) One or more windows that face the street lot line;
- (c) Cupola;
- (d) Bay or bow window;
- (e) Gable;
- (f) Covered porch entry;
- (g) Eaves (minimum six inches projection); and
- (h) Offset on building face or roof (minimum 16 inches);

(i) Recessed garage entrance for street-facing garage (minimum 16 inches).

(4) **Manufactured Dwellings.** All manufactured dwellings on individual lots in this district shall meet or exceed the following design standards:

- (a) The manufactured dwelling shall be multi-sectional and enclose a space of not less than 1,000 square feet;
- (b) The manufactured dwelling shall be placed on an excavated, backfilled foundation and enclosed at the perimeter such that no more than 12 inches of the enclosing material is exposed above grade. Where the building site has a sloped grade, no more than 12 inches of the enclosing material shall be exposed on the uphill side of the home. If the manufactured dwelling is placed on a basement, the 12-inch limitation shall not apply;
- (c) The manufactured dwelling shall have a pitched roof of not less than three feet in height for each twelve feet in width;
- (d) The manufactured dwelling shall have exterior siding and roofing which in color, material and appearance is similar to the exterior siding and roofing material on surrounding dwellings;
- (e) The manufactured dwelling shall be certified by the manufacturer to have an exterior thermal envelope meeting performance standards equivalent to the performance standards required of single-family dwellings constructed under the Oregon Residential Specialty Code. Evidence demonstrating that the manufactured home meets “Super Good Cents” energy efficiency standards is deemed to satisfy the exterior thermal envelope certification standards. Additional manufacturer’s certification shall not be required in such cases.
- (f) The manufactured dwelling shall have a garage or carport constructed of like materials. An attached or detached garage may be approved in lieu of a carport where such is consistent with the predominant construction of immediately surrounding dwellings.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1188 §1, 1994; Ord. 1289 §1, 2000; Ord. 1499 §1 (Exh. A), 2020.

17.10.065 Cottage Cluster Design Standards

The following design standards apply to cottage clusters development in the R-7.2 zone. Where conflicts arise between the standards within this section and elsewhere in the code, the standards of this section will supersede.

(1) Cottage Orientation. Cottages must be clustered or abut around a common courtyard or are directly connected to it by a pedestrian path, and must meet the following standards (see Figure 1):

(a) Each cottage within a cluster must either abut the common courtyard or must be directly connected to it by a pedestrian path that is at least 4 ft wide.

(b) A minimum of 50 percent of cottages within a cluster must be oriented to the common courtyard and must:

(A) Have a main entrance facing the common courtyard;

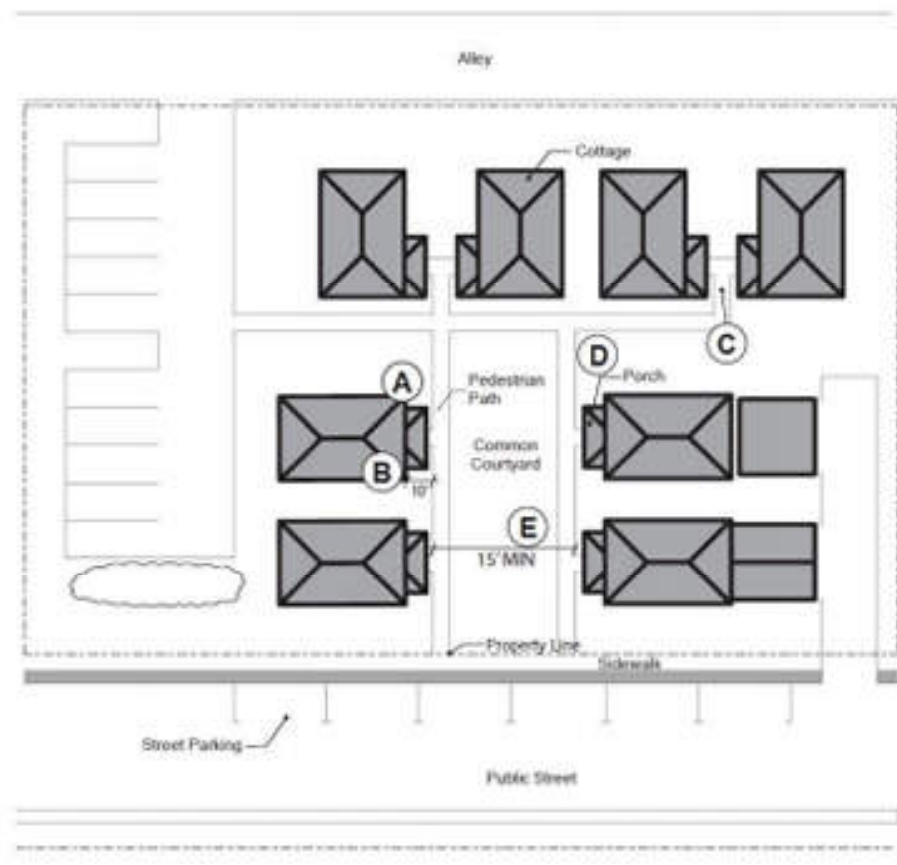
(B) Be within 10 feet from the common courtyard, measured from the façade of the cottage to the nearest edge of the common courtyard; and

(C) Be connected to the common courtyard by a pedestrian path.

(c) Cottages within 20 feet of a street property line may have their entrances facing the street.

(d) Cottages not facing the common courtyard or the street must have their main entrances facing a pedestrian path that is directly connected to the common courtyard.

Figure 1. Cottage Cluster Orientation and Common Courtyard Standards



(2) Common Courtyard Design Standards. Each cottage cluster must share a common courtyard in order to provide a sense of openness and community of residents. Common courtyards must meet the following standards:

(a) The common courtyard must be a single, contiguous piece.

(b) The common courtyard must contain a minimum of 150 square feet per cottage within the associated cluster.

(c) The common courtyard must be a minimum of 15 feet wide at its narrowest dimension.

(d) The common courtyard shall be developed with a mix of landscaping, lawn area, pedestrian paths, and/or paved courtyard area, and may also include recreational amenities. Impervious elements of the common courtyard shall not exceed 75 percent of the total common courtyard area.

(e) Pedestrian paths must be included in a common courtyard. Paths that are contiguous to a courtyard shall count toward the courtyard's minimum dimension and area. Parking areas, required setbacks, and driveways do not qualify as part of a common courtyard.

(3) Pedestrian Access.

(a) An accessible pedestrian path that is at least 4 feet wide must be provided that connects the main entrance of each cottage to one or all the following:

(A) The common courtyard;

(B) Shared parking areas;

(C) Community buildings; and

(D) Sidewalks in public rights-of-way abutting the site or rights-of-way if there are no sidewalks.

(b) The pedestrian path must be hard-surfaced and a minimum of four (4) feet wide.

(4) Parking location and access.

(a) Off-street parking spaces and vehicle maneuvering areas shall not be located:

- Within of 20 feet from any street property line, except alley property lines;
- Between a street property line and the front façade of cottages located closest to the street property line. This standard does not apply to alleys.

(b) Off-street parking spaces shall not be located within 10 feet of any other property line, except alley property lines. Driveways and drive aisles are permitted within 10 feet of other property lines.

(c) Clustered parking. Off-street parking may be arranged in clusters and separated from common spaces by at least four (4) feet of landscaping.

(5) Screening. Landscaping, fencing, or walls at least three feet tall shall separate clustered parking areas and parking structures from common courtyards and public streets.

(6) Garages and carports.

(a) Garages and carports (whether shared or individual) must not abut common courtyards.

(b) Individual attached garages up to 200 square feet shall be exempted from the calculation of maximum building footprint for cottages.

(c) Individual detached garages must not exceed 400 square feet in floor area.

(d) Garage doors for attached and detached individual garages must not exceed 20 feet in width.

17.10.070 Exemptions to uses allowed outright.

Manufactured housing shall not be allowed in any area designated in an acknowledged Comprehensive Plan or land use regulation as an historic district or on residential land immediately adjacent to an historic landmark.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1188 §1, 1994; Ord. 1323 §1, 2002; Ord. 1499 §1 (Exh. A), 2020.

CHAPTER 17.12

R-5

SINGLE-FAMILY RESIDENTIAL

Chapter 17.12

R-5—SINGLE-~~FAMILY~~HOUSEHOLD RESIDENTIAL DISTRICT

Sections:

- 17.12.010 Purpose.
- 17.12.020 Uses allowed outright.
- 17.12.030 Accessory uses allowed.
- 17.12.040 Conditional uses allowed.
- 17.12.050 Dimensional standards.
- 17.12.060 Design standards.

17.12.010 Purpose.

The purpose of an R-5 district is to implement the Comprehensive Plan and to provide land for families and individuals desiring to live in an environment of medium density, mixed single-~~family~~ household and middle housing multi-family dwellings.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1499 §1 (Exh. B), 2020.

17.12.020 Uses allowed outright.

In an R-5 zoning district, the following uses and their accessory uses are allowed outright:

- (1) Single-family household dwelling, including a manufactured dwelling.
- (2) ~~Duplex Middle housing.~~
- ~~(2)~~(3) Mobile home park, subject to GMC Section 17.62.070 (Mobile home park).

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1144 §1, 1991; Ord. 1171 §1(C), 1993; Ord.1291 §1, 2000; Ord.1323 §1, 2002; Ord. 1499 §1 (Exh. B), 2020.

17.12.030 Accessory uses allowed.

Accessory uses shall comply with all the requirements of this zoning district, except as this section allows to the contrary. All accessory structures shall be subject to GMC Chapter 17.54 (Clear Vision). The following accessory uses shall be allowed in an R-5 zoning district:

- (1) Buildings. Garages and carports, storage and other buildings, as follows:
 - (a) Either the side, except a street side, or rear setback may be reduced to zero for one accessory structure, provided such structure:
 - (A) Is detached from other buildings;
 - (B) Does not exceed a height of one story; and
 - (C) Does not exceed a floor area of 450 square feet;
 - (b) A wall of rated, fire-resistive construction may be required by the Oregon Structural Specialty Code or its successor.
 - (c) When more than one accessory structure is present including a portable storage container, as defined in GMC Chapter 5.22, a setback does not apply to the portable storage container.

(2) Courtyards, Patios and Decks. The minimum side, except street side, and rear setbacks for uncovered courtyards, patios and decks in excess of 30 inches in height shall be five feet. The minimum front and street side setbacks for such courtyards, patios and decks shall be 15 feet. No setbacks shall be required for uncovered courtyards, patios and decks 30 inches or less in height. When calculating the height of a courtyard, patio or deck, railings and benches shall be excluded from the calculation.

(3) Fences and Walls. The following standards shall apply to fences and walls of all types whether open, solid, wood, metal, masonry or other material.

(a) When located between the front lot line and the front building line, fences and walls shall not exceed three feet in height;

(b) Fences and walls not subject to subsection (3)(a) of this section shall not exceed six feet in height.

(c) An exception may be granted to the maximum fence or wall height standards for conditional or nonconforming uses. Such an exception may be granted pursuant to review of an application for conditional use; alteration, expansion or change of use of a nonconforming use; or design review and when an exception is found necessary to provide adequate screening for the use.

(4) Storage. Storage of boats, trailers, pickup campers, coaches, motorhomes and similar recreation equipment. Occupancy of such equipment is subject to a temporary permit under GMC Chapter 15.28 (Temporary Dwellings).

(5) Accessory dwelling units, subject to the following standards:

(a) Only one accessory dwelling unit per lot shall be permitted. ~~An accessory dwelling unit shall not be permitted on a lot occupied by two or more dwelling units;~~

(b) The floor area of an accessory dwelling unit shall be a minimum of 400 square feet and not exceed ~~400~~ 800 square feet;

(c) An accessory dwelling unit shall not contain more than one bedroom;

(d) Only one entrance, other than a vehicular entrance to a garage, may be located on the street-facing facade of the structure containing the primary dwelling unit unless this structure had additional entrances before the accessory dwelling unit was created and the number of entrances will not be increased;

(e) The exterior finish materials—including siding, trim and roofing—of an accessory dwelling unit shall be the same or visually similar to those of the primary dwelling unit with respect to type, size, placement and color;

(f) The roof pitch of an accessory dwelling unit shall be the same as the predominant roof pitch of the primary dwelling unit;

(g) The windows of an accessory dwelling unit shall be the same or visually similar to those of the primary dwelling unit;

(h) The eaves on an accessory dwelling unit shall project from the structure walls the same distance as the eaves on the primary dwelling unit;

(i) An accessory dwelling unit shall comply with the minimum yard requirements and maximum building height established in GMC Section 17.12.050;

(j) An accessory dwelling unit used as a vacation rental shall provide:

(A) One off-street parking space in addition to the off-street parking space required by GMC Chapter 17.48 (Off-Street Parking and Loading) for the primary dwelling unit; and

(B) A deed restriction requiring owner-occupancy of one of the units recorded in the Clackamas County Clerk’s Office in a form prescribed by the city. Either the primary dwelling unit or the accessory dwelling unit shall be owner-occupied for as long as the accessory dwelling unit is being used as a vacation rental.

(6) Swimming Pools, Ponds and Hot Tubs. The minimum side, street side and rear setbacks for swimming pools, ponds and hot tubs shall be three feet. The minimum front setback for ponds no greater than five feet wide and no more than two feet deep shall be three feet.

(7) Home Occupations. Home occupations shall be subject to GMC Chapter 17.78 (Home Occupations).

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1171 §§1(E) & 1(F), 1993; Ord. 1289 §1, 2000; Ord. 1323 §1, 2002; Ord. 1392, §3, 2007; Ord. 1499 §1 (Exh. B), 2020.

17.12.040 Conditional uses allowed.

In an R-5 zoning district, the following uses and their accessory uses are allowed subject to GMC Chapter 17.70 (Conditional Uses):

- (1) Multi-household dwelling, ~~three-five~~-to-eight-unit ~~complexes-building~~.
- (2) Medical/dental office at the intersection of minor arterials or collectors.
- (3) Church and associated buildings and structures.
- (4) Community center, day care center.
- (5) Fire station or similar public use necessary to provide service or preserve public safety in the area.
- (6) Planned unit development.
- (7) Nursing homes and homes for the aged.
- (8) School and associated buildings, structures and facilities.
- (9) Utility facility; provided, that no outside storage is involved.
- (10) Community commercial within 200 feet from the Portland Avenue C-2 district.
- (11) Group homes.
- (12) Boarding house, rooming house, lodging house.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002; Ord. 1499 §1 (Exh. B), 2020.

17.12.050 Dimensional standards.

Except as provided in GMC Chapters 17.38 (Planned Unit Development), 17.72 (Variances) and 17.76 (Exceptions), the following dimensional standards shall apply in an R-5 zoning district:

<u>Minimum Lot Area</u>		
<u>Detached single household</u>	5,000 sf	
<u>Duplex and Triplex</u>	<u>5,000 sf</u>	
<u>Quadplex</u>	<u>7,000 sf</u>	

<u>Cottage Cluster</u>	<u>7,000 sf</u>	
<u>Townhouse Project</u>	<u>5,000 sf</u>	<u>The average minimum lot area for a townhouse dwelling shall be 1,500 sf</u>
<u>Multi-household dwellings</u>	2,500 sf per dwelling unit	
<u>Other uses</u>	5,000 sf	Or as established by the Planning Commission, as provided by GMC Chapter 17.70 (Conditional Uses).
<u>Minimum Setbacks</u>		
<u>Front Setback</u>	20 ft	Except that a front porch may project a maximum of five feet into a required front setback area
<u>Side Setback</u>	5 ft	
<u>Street Side Setback</u>	20 ft	Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet into a required setback area
<u>Rear Setback</u>	15 ft	<p><u>Townhouse projects are allowed a zero-foot side setback for lot lines where Townhouse units are attached.</u></p> <p><u>Cottage Cluster minimum setbacks can be reduced to 5 feet, if there is more than 150 square feet per dwelling unit of common open space provided, as define in Section 17.12.065(2).</u></p>
<u>Maximum Building Height</u>	35 ft	Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this subsection.
<u>Minimum Vegetation</u>		
<u>Multi-household dwelling</u>	At least 20% of the total area of the lot	The minimum area that must be left or planted with trees, shrubs, grass, etc.
<u>Minimum Density</u>	Subdivisions and PUDs shall provide a minimum density of 80 percent of the maximum density per net acre.	

Maximum Density	one dwelling unit per 5,000 square feet of lot area or eight units per net acre	
Sufficient Infrastructure	Applicants must demonstrate that Sufficient Infrastructure is provided, or will be provided, upon submittal of a triplex or quadplex development application.	

~~(1) Lot Area.~~

- ~~(a) For a single family dwelling, the minimum lot area shall be 5,000 square feet;~~
- ~~(b) For a multi-family dwelling, the minimum lot area shall be 2,500 square feet per dwelling unit~~
- ~~(c) For other uses, the minimum lot area shall be 5,000 square feet, or as established by the Planning Commission, as provided by GMC Chapter 17.70 (Conditional Uses).~~

~~(2) Setback Requirements.~~

- ~~(a) A front setback shall be a minimum of 20 feet except that a front porch may project a maximum of five feet into a required front setback area;~~
- ~~(b) A side setback shall be a minimum of five feet;~~
- ~~(c) A rear setback shall be a minimum of 15 feet;~~
- ~~(d) A street side setback shall be a minimum of 20 feet;~~
- ~~(e) Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet into a required setback area.~~

~~(3) Building Height. Maximum building height shall be 35 feet. Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this subsection.~~

~~(4) Minimum Vegetation. For multi-family dwellings, the minimum area that must be left or planted with trees, shrubs, grass, etc., shall be at least 20 percent of the total area of the lot.~~

~~(5) All PUDs with residential uses must include a mix of two or more middle housing types for a minimum of 25% of the total dwelling units proposed.~~

~~(a) Exceptions in Case of Large Scale PUD. The dimensional standards of this section may be modified by the Planning Commission in the case of a plan and program for a planned unit development, providing the modifications are not detrimental to the public health, safety and welfare and providing the Planning Commission determines there is provision for adequate public spaces and improvements for the circulation, recreation, light, air and service needs of the developed tract and its relation to adjacent areas and for such covenants or other legal provisions as will assure conformity to and achievement of the plan.~~

~~(6) Minimum Density. Subdivisions and PUDs shall provide a minimum density of 80 percent of the maximum density per net acre. For the purposes of this provision, maximum density shall be one dwelling unit per 5,000 square feet of lot area or eight units per net acre.~~

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000; Ord. 1291 §1, 2000; Ord. 1323 §1, 2002; Ord. 1499 §1 (Exh. B), 2020.

17.12.055 Cottage Cluster Standards.

The following dimensional standard apply to cottage clusters development in the R-5 zone. Where conflicts arise between the standards within this section and elsewhere in the code, the standards of this section will supersede.

(1) Dimensional Standards

(a) Minimum Lot Size and Dimensions. Cottage clusters shall meet the minimum lot area that apply to detached single family dwellings in the R-5 zone.

(b) Setbacks and Building Separation.

(A) Setbacks. Cottage clusters shall meet the minimum setback standards:

- Front setbacks: 10 feet
- Side setbacks: 5 feet
- Rear setbacks: 10 feet

(B) Building Separation. Cottages shall be separated by a minimum distance of six (6) feet. The minimum distance between all other structures, including accessory structures, shall be in accordance with building code requirements.

(c) Average Unit Size. The maximum average floor area for a cottage cluster is 1,400 square feet per dwelling unit. Community buildings shall be included in the average floor area calculation for a cottage cluster.

(d) Off-Street Parking.

(A) Required Off-Street Parking. The minimum number of required off-street parking spaces for a cottage cluster project is zero (0) spaces per unit with a floor area less than 1,000 square feet and one (1) space per unit with a floor area of 1,000 square feet or more. Spaces may be provided for individual cottages or in shared parking clusters. A credit for on-street parking shall be granted for some or all of the required off-street parking as provided in subsection (b).

(B) On-Street Credit. If on-street parking spaces meet all the standards in subsections (i)-(iv) below, they shall be counted toward the minimum off-street parking requirement.

- i. The space must be abutting the subject site;
- ii. The space must be in a location where on-street parking is allowed by the jurisdiction;
- iii. The space must be a minimum of 22 feet long; and
- iv. The space must not obstruct a required sight distance area.

17.12.060 Design standards.

(1) Attached Garage. The following standard shall apply to the construction of a garage attached to a single-family household dwelling or ~~two-family dwelling duplex~~. An existing garage, legally constructed prior to the adoption of this standard, that does not conform to this standard may be remodeled or expanded, provided such remodeling or expansion shall not further reduce the structure's compliance with this standard.

(a) The length of the garage wall facing the street may be up to 50 percent of the length of the street-facing building facade. On corner lots only one street-facing garage wall must meet this standard unless there are two garages, such as in the case of a two-family dwelling.

(2) Main Entrance. The main entrance ~~to a dwelling of a single family dwelling and the main entrance of each unit of a two family dwelling~~ shall:

(a) Single Household Dwelling.

(A) Face the street lot line. On a corner lot, the main entrance may face either street lot line or the corner; or

~~(B)~~ (B) The main entrance shall open onto a covered porch that has an entrance that faces the street lot line. The porch and its roof shall each be at least 40 square feet in area and neither the width nor the depth shall be less than five feet.

(b) Duplex, Triplex, Quadplex and Townhouse.

1. Connect to any on-site parking and the public right-of-way with a pedestrian pathway that is a minimum of 4 ft wide. The pathway may use a driveway surface.

(3) Design Features. ~~Detached~~ Single-family household dwellings, duplexes, triplexes, quadplexes, townhomes, and cottage clusters shall include at least two of the following design features on each dwelling unit:

- (a) Dormer;
- (b) One or more windows that face the street lot line;
- (c) Cupola;
- (d) Bay or bow window;
- (e) Gable;
- (f) Covered porch entry;
- (g) Eaves (minimum six inches projection); and
- (h) Offset on building face or roof (minimum 16 inches);

(i) Recessed garage entrance for street-facing garage (minimum 16 inches).

(4) Manufactured Dwellings. All manufactured dwellings on individual lots in this district shall meet or exceed the following design standards:

- (a) The manufactured dwelling shall be multi-sectional and enclose a space of not less than 1,000 square feet;
- (b) The manufactured dwelling shall be placed on an excavated, back-filled foundation and enclosed at the perimeter such that no more than 12 inches of the enclosing material is above grade. Where the building site has a sloped grade, no more than 12 inches of the enclosing material shall be exposed on the uphill side of the home. If the manufactured home is placed on a basement, the 12-inch limitation shall not apply;
- (c) The manufactured dwelling shall have a pitched roof of not less than three feet in height for each 12 feet in width;
- (d) The manufactured dwelling shall have exterior siding and roofing which in color, material and appearance is similar to the exterior siding and roofing material on surrounding dwellings;
- (e) The manufactured dwelling shall be certified by the manufacturer to have an exterior thermal envelope meeting performance standards equivalent to the performance standards required of single-family dwellings constructed under the Oregon Residential Specialty Code. Evidence demonstrating that the manufactured home meets “Super Good Cents” energy efficiency standards is deemed to satisfy the exterior thermal envelope certification standards. Additional manufacturer’s certification shall not be required in such cases;
- (f) The manufactured home shall have a garage or carport constructed of like materials. An attached or detached garage may be approved in lieu of a carport where such is consistent with the predominant construction of immediately surrounding dwellings.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1144 §1, 1991; Ord. 1171 §1(D), 1993; Ord. 1188 §1, 1994; Ord. 1289 §1, 2000; Ord. 1291 §1, 2000; Ord. 1499 §1 (Exh. B), 2020.

[**Ed. Note:** The publication(s) referred to or incorporated by reference in this chapter are available from the office of the City Recorder.]

17.12.065 Cottage Cluster Design Standards

The following design standards apply to cottage clusters development in the R-5 zone. Where conflicts arise between the standards within this section and elsewhere in the code, the standards of this section will supersede.

(1) Cottage Orientation. Cottages must be clustered or abut around a common courtyard or are directly connected to it by a pedestrian path, and must meet the following standards (see Figure 1):

(a) Each cottage within a cluster must either abut the common courtyard or must be directly connected to it by a pedestrian path that is at least 4 ft wide.

(b) A minimum of 50 percent of cottages within a cluster must be oriented to the common courtyard and must:

(A) Have a main entrance facing the common courtyard;

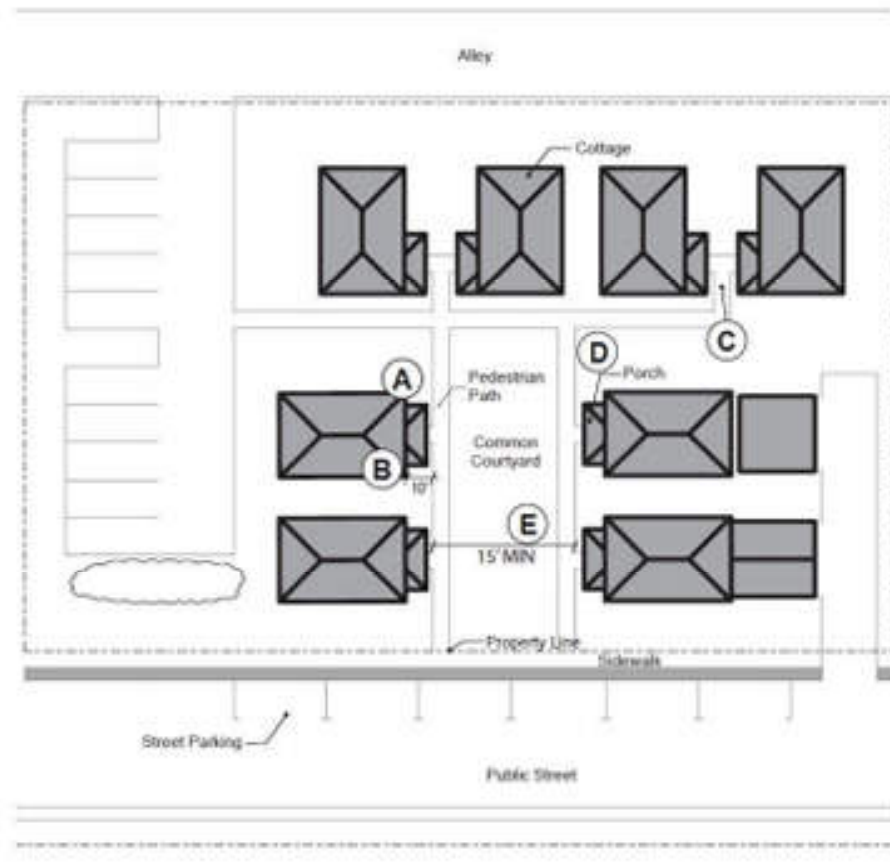
(B) Be within 10 feet from the common courtyard, measured from the façade of the cottage to the nearest edge of the common courtyard; and

(C) Be connected to the common courtyard by a pedestrian path.

(c) Cottages within 20 feet of a street property line may have their entrances facing the street.

(d) Cottages not facing the common courtyard or the street must have their main entrances facing a pedestrian path that is directly connected to the common courtyard.

Figure 1. Cottage Cluster Orientation and Common Courtyard Standards



(2) Common Courtyard Design Standards. Each cottage cluster must share a common courtyard in order to provide a sense of openness and community of residents. Common courtyards must meet the following standards:

- (a) The common courtyard must be a single, contiguous piece.
- (b) The common courtyard must contain a minimum of 150 square feet per cottage within the associated cluster.
- (c) The common courtyard must be a minimum of 15 feet wide at its narrowest dimension.
- (d) The common courtyard shall be developed with a mix of landscaping, lawn area, pedestrian paths, and/or paved courtyard area, and may also include recreational amenities. Impervious elements of the common courtyard shall not exceed 75 percent of the total common courtyard area.
- (e) Pedestrian paths must be included in a common courtyard. Paths that are contiguous to a courtyard shall count toward the courtyard's minimum dimension and area. Parking areas, required setbacks, and driveways do not qualify as part of a common courtyard.

(3) Pedestrian Access.

(a) An accessible pedestrian path that is at least 4 feet wide must be provided that connects the main entrance of each cottage to one or all the following:

(A) The common courtyard;

(B) Shared parking areas;

(C) Community buildings; and

(D) Sidewalks in public rights-of-way abutting the site or rights-of-way if there are no sidewalks.

(b) The pedestrian path must be hard-surfaced and a minimum of four (4) feet wide.

(4) Parking location and access.

(a) Off-street parking spaces and vehicle maneuvering areas shall not be located:

- Within of 20 feet from any street property line, except alley property lines;
- Between a street property line and the front façade of cottages located closest to the street property line. This standard does not apply to alleys.

(b) Off-street parking spaces shall not be located within 10 feet of any other property line, except alley property lines. Driveways and drive aisles are permitted within 10 feet of other property lines.

(c) Clustered parking. Off-street parking may be arranged in clusters and separated from common spaces by at least four (4) feet of landscaping.

(5) Screening. Landscaping, fencing, or walls at least three feet tall shall separate clustered parking areas and parking structures from common courtyards and public streets.

(6) Garages and carports.

(a) Garages and carports (whether shared or individual) must not abut common courtyards.

(b) Individual attached garages up to 200 square feet shall be exempted from the calculation of maximum building footprint for cottages.

(c) Individual detached garages must not exceed 400 square feet in floor area.

(d) Garage doors for attached and detached individual garages must not exceed 20 feet in width.

CHAPTER 17.14

MR MULTI-FAMILY RESIDENTIAL

Chapter 17.14

MR—MULTI-~~HOUSEHOLD~~~~FAMILY~~ RESIDENTIAL DISTRICT

Sections:

- 17.14.010 Purpose.
- 17.14.020 Uses allowed outright.
- 17.14.030 Accessory uses allowed.
- 17.14.040 Conditional uses allowed.
- 17.14.050 Dimensional standards.

17.14.010 Purpose.

The purpose of an MR district is to: implement the comprehensive plan and to provide land for ~~families and individuals households~~ desiring to live in an environment of higher density ~~multi-family dwellings residential development~~ with proximity to mass transit, shopping and service facilities.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2 (Part), 1990.

17.14.020 Uses allowed outright.

In an MR zoning district, the following uses and their accessory uses are allowed outright:

- (1) ~~Duplex Two-family dwellings.~~
- (2) ~~Triplex Multi-family dwellings.~~
- ~~(3) Quadplex~~
- ~~(4) Townhouse~~
- ~~(5) Cottage Cluster~~
- ~~(6) Multi household dwellings~~

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2 (Part), 1990; Ord. 1323 §1 (Part), 2002.

17.14.030 Accessory uses allowed.

Accessory uses shall comply with all the requirements of this zoning district, except as this section allows to the contrary. All accessory structures shall be subject to GMC Chapter 17.54 (clear vision). The following accessory uses shall be allowed in an MR Zoning district:

- (1) Buildings. Garages and carports, storage and other buildings, as follows:
 - (a) Either the side, except a street side, or rear setback may be reduced to zero for one accessory structure provided such structure:
 - (A) Is detached from other buildings;
 - (B) Does not exceed a height of one (1) story; and
 - (C) Does not exceed a floor area of four hundred-fifty (450) square feet;
 - (b) A wall of rated, fire-resistive construction may be required by the Oregon Structural Specialty Code or its successor.

(c) When more than one accessory structure is present including a portable storage container as defined in Chapter 5.22, a setback does not apply to the portable storage container.

(2) Courtyards, Patios and Decks. The minimum side, except street side, and rear setbacks for uncovered courtyards, patios and decks in excess of thirty inches (30”) in height shall be five feet (5’). The minimum front and street side setbacks for such courtyards, patios and decks shall be fifteen feet (15’). No setback shall be required for uncovered courtyards, patios and decks thirty inches (30”) or less in height. When calculating the height of a courtyard, patio or deck, railings and benches shall be excluded from the calculation.

(3) Fences and Walls. The following standards shall apply to fences and walls of all types whether open, solid, wood, metal, masonry or other material.

(a) When located between the front lot line and the front building line, fences and walls shall not exceed three feet (3’) in height;

(b) Fences and walls not subject to Subsection (3)(a) of this Section shall not exceed six feet (6’) in height;

(c) An exception may be granted to the maximum fence or wall height standards pursuant to review of an application for conditional use; alteration, expansion or change of use of a nonconforming use; or design review and when an exception is found necessary to provide adequate screening for the use.

(4) Storage. Storage of boats, trailers, pickup campers, coaches, motorhomes and similar recreation equipment. Occupancy of such equipment is subject to a temporary permit under GMC Chapter 15.28 (temporary dwellings).

(5) Swimming Pools, Ponds and Hot Tubs. The minimum side, street side and rear setbacks for swimming pools, ponds and hot tubs shall be three feet (3’). The minimum front setback for ponds no greater than five feet (5’) wide and no more than two feet (2’) deep shall be three feet (3’).

(6) Home Occupations. Home occupations shall be subject to GMC Chapter 17.78 (home occupations).

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2 (Part), 1990; Ord. 1171 §1(F), 1993; Ord. 1323 §1, 2002; Ord. 1392 § 4, 2007.

17.14.040 Conditional uses allowed.

In an MR zoning district, the following uses and their accessory uses are allowed subject to GMC Chapter 17.70 (conditional uses):

- (1) Detached Single-~~household family~~ dwelling, Triplex, Quadplex, Townhouse, and Cottage Clusters.
- (2) Church and associated buildings and structures.
- (3) Community center, day care center, meeting hall.
- (4) Mobile home park.
- (5) Nursing homes and homes for the aged.
- (6) School and associated structures and facilities.
- (7) Utility facility provided no outside storage is involved.
- (8) Local commercial uses listed under GMC Section 17.16.020 (uses permitted outright).
- (9) Foster homes.
- (10) Group homes.
- (11) Planned unit development.

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1 (Part), 2002.

17.14.050 Dimensional standards.

Except as provided in GMC Chapter 17.38 (planned unit development), Chapter 17.72 (variances) and Chapter 17.76 (exceptions), the following dimensional standards shall apply in an MR zoning district:

<u>Minimum Lot Area</u>		
<u>Detached</u> single household	5,000 sf	
<u>Duplex</u>	3,000 sf + 1,000 sf per dwelling unit	
<u>Triplex</u>	3,000 sf + 1,000 sf per dwelling unit	
<u>Quadplex</u>	3,000 sf + 1,000 sf per dwelling unit	
<u>Townhouse</u>	3,000 sf + 1,000 sf per dwelling unit	
<u>Cottage Cluster</u>	3,000 sf + 1,000 sf per dwelling unit	
<u>Multi-household dwellings</u>	3,000 sf + 1,000 sf per dwelling unit	
<u>Other uses</u>	5,000 sf	Or as established by the Planning Commission, as provided by GMC Chapter 17.70 (Conditional Uses).
<u>Minimum Setbacks</u>		
<u>Front Setback</u>	20 ft	Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet into a required setback area
<u>Side Setback</u>	5 ft	
<u>Street Side Setback</u>	20 ft	<u>Townhouse projects are allowed a zero-foot side setback for lot lines where Townhouse units are attached.</u> <u>Cottage Cluster minimum setbacks can be reduced to 5 feet, if there is more than 150 square feet per dwelling unit of common open space provided, as define in Section 17.12.065(2).</u>
<u>Rear Setback</u>	15 ft	
Maximum Building Height	35 ft	Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials,

		flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this subsection.
Minimum Vegetation	At least 20% of the total area of the lot	<u>must be left or planted in trees, shrubs, grass, etc.</u>
Minimum Density		
	80% of the maximum number of units allowed under <u>GMC Subsection 17.14.050(1) Minimum Lot Area.</u>	In no case shall the minimum density exceed thirty (30) units per net acre. Exception. Where an existing two-family or multi-family development is being altered or expanded, it shall not be required to comply with the minimum density standard provided the alteration or expansion does not result in a net loss of units. Mobile home parks shall provide a minimum density of eight (8) units per net acre.
<u>Maximum Density</u>	<u>None</u>	

~~(1) Lot area:~~

- ~~(a) For a single family dwelling, the minimum lot area shall be five thousand (5,000) square feet;~~
- ~~(b) For a two family or multi family dwelling, the minimum lot area three thousand square (3,000) feet, plus one thousand (1,000) square feet per dwelling unit;~~
- ~~(c) For other uses, the lot area shall be a minimum of five thousand (5,000) square feet or as established by the Planning Commission as provided in GMC Chapter 17.70 (conditional uses);~~

~~(2) Setback Requirements:~~

- ~~(a) A front setback shall be a minimum of twenty feet (20');~~
- ~~(b) A side setback shall be a minimum of five feet (5');~~
- ~~(c) A rear setback shall be a minimum of fifteen feet (15');~~
- ~~(d) A street side setback, shall be a minimum of twenty feet (20');~~
- ~~(e) Architectural features such as cornices, eaves, gutters, chimneys and flues may project a maximum of two feet (2') into a required setback area;~~

~~(3) Building Height. Maximum building height shall be thirty five feet (35'). Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this Section.~~

~~(4) Minimum Vegetation. The minimum area that must be left or planted in trees, shrubs, grass, etc., shall be at least twenty percent (20%) of the total area of the lot.~~

~~(5) All PUDs with residential uses must include a mix of two or more middle housing types for a minimum of 25% of the total dwelling units proposed~~

Exceptions in Case of Large Scale PUD. The dimensional standards of this section may be modified by the Planning Commission in the case of a plan and program for a large-scale planned unit development, providing modifications are not detrimental to the public health, safety and welfare and providing the Planning Commission determines there is provision for adequate public spaces and improvements for circulation, recreation, light, air and service needs of the developed tract and its relation to adjacent areas and for such covenants or other legal provisions as will assure conformity to the achievement of the plan.

~~(6) Minimum Density.~~

~~(a) Developments of two family or multi householdfamily dwellings shall provide a minimum density of eighty percent (80%) of the maximum number of units allowed under GMC Subsection 17.14.050(1). In no case shall the minimum density of any residential dwelling units exceed thirty (30) units per net acre.~~

~~(b) Exception. Where an existing middle housing development two family or multi householdfamily development is being altered or expanded, it shall not be required to comply with the minimum density standard provided the alteration or expansion does not result in a net loss of units.~~

~~(c) Mobile home parks shall provide a minimum density of eight (8) units per net acre.~~

Statutory Reference: ORS Ch. 197, Ch. 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000; Ord. 1323 §1, 2002.

17.14.055 Cottage Cluster Standards.

The following dimensional standard apply to cottage clusters development in the R-5 zone. Where conflicts arise between the standards within this section and elsewhere in the code, the standards of this section will supersede.

(1) Dimensional Standards

(a) Minimum Lot Size and Dimensions. Cottage clusters shall meet the minimum lot area that apply to detached single family dwellings in the R-5 zone.

(b) Setbacks and Building Separation.

(A) Setbacks. Cottage clusters shall meet the minimum setback standards:

- Front setbacks: 10 feet
- Side setbacks: 5 feet
- Rear setbacks: 10 feet

(B) Building Separation. Cottages shall be separated by a minimum distance of six (6) feet. The minimum distance between all other structures, including accessory structures, shall be in accordance with building code requirements.

(c) Average Unit Size. The maximum average floor area for a cottage cluster is 1,400 square feet per dwelling unit. Community buildings shall be included in the average floor area calculation for a cottage cluster.

(d) Off-Street Parking.

(A) Required Off-Street Parking. The minimum number of required off-street parking spaces for a cottage cluster project is zero (0) spaces per unit with a floor area less than 1,000 square feet and one (1) space per unit with a floor area of 1,000 square feet or more. Spaces may be provided for individual cottages or in shared parking clusters. A credit for on-street parking shall be granted for some or all of the required off-street parking as provided in subsection (b).

(B) On-Street Credit. If on-street parking spaces meet all the standards in subsections (i)-(iv) below, they shall be counted toward the minimum off-street parking requirement.

- (i) The space must be abutting the subject site;
- (ii) The space must be in a location where on-street parking is allowed by the jurisdiction;
- (iii). The space must be a minimum of 22 feet long; and
- (iv) The space must not obstruct a required sight distance area.

(2) Design Standards

The following design standards apply to cottage clusters development in the MR zone. Where conflicts arise between the standards within this section and elsewhere in the code, the standards of this section will supersede.

(a) Cottage Orientation. Cottages must be clustered or abut around a common courtyard or are directly connected to it by a pedestrian path, and must meet the following standards (see Figure 1):

(A) Each cottage within a cluster must either abut the common courtyard or must be directly connected to it by a pedestrian path that is at least 4 ft wide.

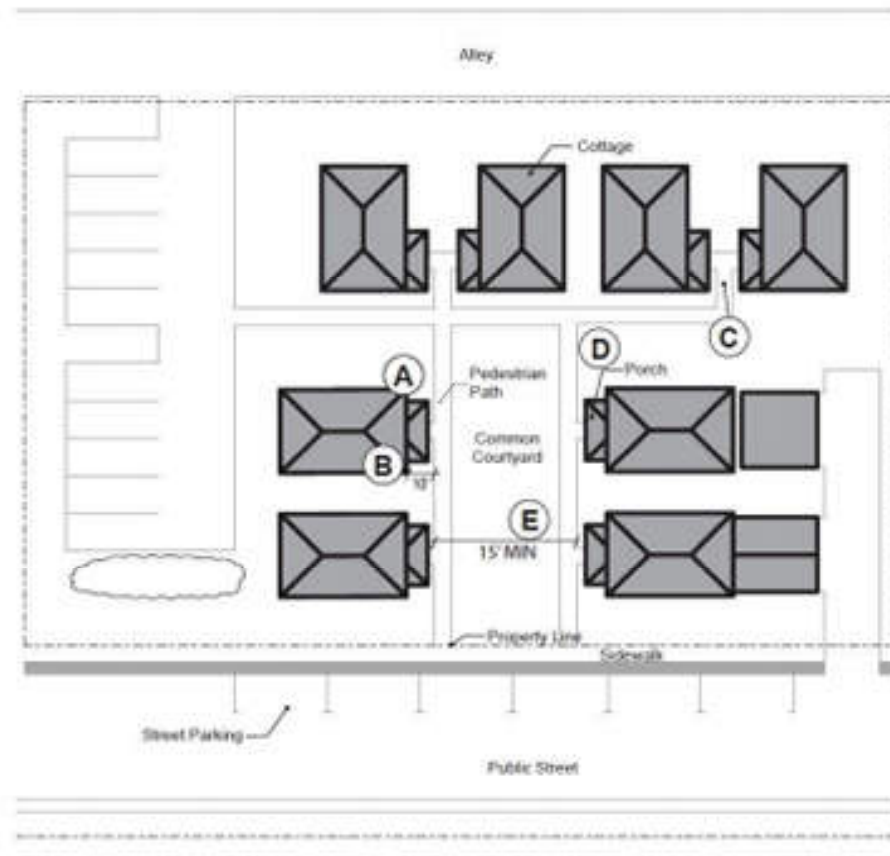
(B) A minimum of 50 percent of cottages within a cluster must be oriented to the common courtyard and must:

- (i) Have a main entrance facing the common courtyard;
- (ii) Be within 10 feet from the common courtyard, measured from the façade of the cottage to the nearest edge of the common courtyard; and
- (iii) Be connected to the common courtyard by a pedestrian path.

(C) Cottages within 20 feet of a street property line may have their entrances facing the street.

(D) Cottages not facing the common courtyard or the street must have their main entrances facing a pedestrian path that is directly connected to the common courtyard.

Figure 1. Cottage Cluster Orientation and Common Courtyard Standards



(b) Common Courtyard Design Standards. Each cottage cluster must share a common courtyard in order to provide a sense of openness and community of residents. Common courtyards must meet the following standards:

(A) The common courtyard must be a single, contiguous piece.

(B) The common courtyard must contain a minimum of 150 square feet per cottage within the associated cluster.

(C) The common courtyard must be a minimum of 15 feet wide at its narrowest dimension.

(D) The common courtyard shall be developed with a mix of landscaping, lawn area, pedestrian paths, and/or paved courtyard area, and may also include recreational amenities. Impervious elements of the common courtyard shall not exceed 75 percent of the total common courtyard area.

(E) Pedestrian paths must be included in a common courtyard. Paths that are contiguous to a courtyard shall count toward the courtyard's minimum dimension and area. Parking areas, required setbacks, and driveways do not qualify as part of a common courtyard.

(c) Pedestrian Access.

(A) An accessible pedestrian path that is at least 4 feet wide must be provided that connects the main entrance of each cottage to one or all the following:

(i) The common courtyard;

(ii) Shared parking areas;

(iii) Community buildings; and

(iv) Sidewalks in public rights-of-way abutting the site or rights-of-way if there are no sidewalks.

(B) The pedestrian path must be hard-surfaced and a minimum of four (4) feet wide.

(d) Parking location and access.

(A) Off-street parking spaces and vehicle maneuvering areas shall not be located:

- Within of 20 feet from any street property line, except alley property lines;
- Between a street property line and the front façade of cottages located closest to the street property line. This standard does not apply to alleys.

(B) Off-street parking spaces shall not be located within 10 feet of any other property line, except alley property lines. Driveways and drive aisles are permitted within 10 feet of other property lines.

(C) Clustered parking. Off-street parking may be arranged in clusters and separated from common spaces by at least four (4) feet of landscaping.

(e) Screening. Landscaping, fencing, or walls at least three feet tall shall separate clustered parking areas and parking structures from common courtyards and public streets.

(f) Garages and carports.

(A) Garages and carports (whether shared or individual) must not abut common courtyards.

(B) Individual attached garages up to 200 square feet shall be exempted from the calculation of maximum building footprint for cottages.

(C) Individual detached garages must not exceed 400 square feet in floor area.

(D) Garage doors for attached and detached individual garages must not exceed 20 feet in width.

CHAPTER 17.38

PLANNED UNIT DEVELOPMENT

Chapter 17.38

PLANNED UNIT DEVELOPMENT

Sections:

- 17.38.010 Purpose.
- 17.38.020 Applicability.
- 17.38.030 Uses permitted outright.
- 17.38.040 Accessory uses.
- 17.38.050 Conditional uses.
- 17.38.060 Development standards.
- 17.38.070 Submittal requirements.
- 17.38.080 Review and approval.

17.38.010 Purpose.

The purpose of a planned unit development is to:

- (1) Encourage a more creative and flexible approach in the development of land consistent with the uses of the underlying zoning district(s).
- (2) Promote the retention of open space for integration in an efficient and aesthetically desirable manner with the overall development.
- (3) Provide the opportunity for a mixture of land uses in a creative approach to development by allowing flexibility in design, building placement, circulation, off-street parking areas, and use of open space.
- (4) Foster variety in a development pattern that is consistent with the goals and policies of the comprehensive plan.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990.

17.38.020 Applicability.

A PUD may be established on a site of at least eighty thousand square feet in any zoning district or combination thereof. A PUD shall not be established on less than eighty thousand square feet unless the Planning Commission finds that a smaller site is suitable due to special features, such as topography, geography, size and shape, or other unique features.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990.

17.38.030 Uses permitted outright.

Uses permitted outright are those uses listed as primary uses in the zone(s) in which the development is located.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990.

17.38.040 Accessory uses.

The following uses may be allowed when developed in conjunction with a primary use:

- (1) Accessory structures consistent with the primary uses of the underlying zoning district(s).
- (2) Recreational facilities including, but not limited to, swimming pools, tennis courts, and playgrounds.

(3) Offices, buildings, and facilities required for the operation, administration, and maintenance of the PUD and for recreation purposes, such as golf courses, recreation rooms, and vehicle storage areas.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990.

17.38.050 Conditional uses.

Conditional uses may be established within a residentially zoned PUD, pursuant to GMC Chapter 17.70 (conditional use). Approval shall not be granted unless the proposal satisfies the criteria set forth in the special use requirements of GMC Chapter 17.62 (special uses):

- (1) Schools, libraries, community hall.
- (2) Retirement homes, group homes, day care centers.
- (3) Churches.
- (4) Utility facility (provided no outside storage is involved), fire station or similar public service facility.
- (5) Medical/dental office when fronting a collector or minor arterial.
- (6) Convenience establishments of a commercial and service nature, including stores, laundry, dry cleaning, beauty shops, barber shops, and convenience grocery stores (but specifically excluding gas stations, repair garages, drive-in restaurants, and taverns), provided:
 - (a) Such convenience establishments are an integral part of the general plan of development and provide facilities related to the needs of the prospective residents;
 - (b) Such convenience establishments and their parking, loading, and maneuvering areas shall occupy an area not exceeding a ratio of one-half (1/2) acre per one hundred (100) dwelling units;
 - (c) Such convenience establishments will be located, designed, and operated to efficiently service the needs of persons residing in the planned unit development and not persons residing elsewhere;
 - (d) Such convenience establishments will not, by reason of location, construction, manner of hour of operation, signs, lighting, parking, traffic, or other characteristics, have adverse impacts on residential uses within or adjoining the PUD;
 - (e) Such convenience establishments shall not have building permits issued for their construction until at least one hundred (100) dwelling units are constructed within the PUD.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990.

17.38.060 Development standards.

In consideration of a planned unit development, the requirements of the city's development standards shall be observed unless modified by this section or as follows:

- (1) Site Adaption. To the maximum extent possible, the plan and design of the development shall assure the natural and/or unique features of the environment are preserved.
- (2) Lot Arrangement. All lots within the development shall have reasonable access to open space, recreational features, or service amenities. Care shall be taken to ensure adequate lot width for easements and building footprints in residential areas.

(3) Access. No individual lot street frontage is required when such lots are shown to have adequate access in a manner that is consistent with the purposes and objectives of this title.

(4) Setbacks:

(a) The minimum front and street side setbacks shall be twenty feet (20') for residential uses, except for middle housing development as regulated by the underlying base zone. No front or street side setbacks shall be required for other uses;

(b) The minimum side and rear setbacks shall be three feet (3');

(c) Setbacks for the perimeter of the planned unit development shall be the same as required for the underlying zoning district, except for middle housing development as regulated by the underlying base zone. When a lot line abuts a more restrictive zoning district, the setback of the more restrictive zoning district shall apply. Exceptions to this requirement may be granted pursuant to the conditional use review process for the planned unit development and subject to the following criteria:

(A) The size, shape, topography or allowed use of the adjoining property is such that impacts occurring to this property from setback infringement would be negligible, and

(B) The design of the planned unit development would be superior because of such a setback infringement, and

(C) The exception would be consistent with this title and the comprehensive plan.

(5) Community Services. The city may request dedication of proposed open space which is reasonably suited for use as a public park or other recreation or community purpose, taking into consideration such action as size, shape, topography, access, location, or other unique features.

(6) Building Height. Buildings shall not exceed a height of thirty-five feet (35') except as follows:

(a) Limits may be increased by one story if the building is provided with an approved automatic fire-extinguishing system throughout as provided in Section 507 of the Structural Specialty and Fire Life Safety Code edition of the current Uniform Building Code;

(b) Vertical projections such as chimneys, spires, domes, elevator shaft housings, towers, aerials, flagpoles and similar objects not used for human occupancy are not subject to building height limitations of this subsection.

(7) Open Space:

(a) All PUDs shall have a minimum of twenty percent (20%) of the gross site area retained in open space. Such open space shall include school access routes, bicycle trails, natural or landscaped buffer areas, covered bus stops, or recreational facilities;

(b) All improvements associated with the open space shall be constructed or guaranteed consistent with provisions of GMC Chapter 17.96 (improvement guarantees);

(c) Ownership of open space shall be in one of the following manners:

(A) A homeowners association in common for all owners within the development may be approved; membership shall be mandatory and in perpetuity and dissolution of such an association cannot occur without Planning Commission approval;

(B) Dedication of the open space to the city for management as public property may be approved by the Planning Commission and the City Council;

(C) Conservation easements may be approved when the Planning Commission determines such easements will protect the intent and purpose of this code and will be in the public interest.

(8) Off-street parking shall be required pursuant to GMC Chapter 17.48 (off-street parking and loading).
Additionally:

(a) Parking may be provided on each lot or in designated parking areas close to the dwelling units they serve.

1. On street parking may be counted towards the minimum parking requirements if the applicant can show adequate right of way width and 17.48.030(1)(f) are met.

2. Cluster parking for Cottage Cluster developments are regulated by the design standards regulated by the underlying base zone.

(b) Guest parking may be required in consideration of street width, traffic volume, transit amenities, and pedestrian circulation;

(c) Recreational vehicle parking may be required. If required, it shall be located so as to be compatible with the surrounding development, including adjacent properties.

(9) Density. Planned unit development shall be subject to the residential base densities and minimum densities per net acre identified in the underlying zoning district(s).

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000; Ord. 1323 §1, 2002.

[**Ed. Note:** The publication(s) referred to or incorporated by reference in this ordinance are available from the office of the City Recorder.]

17.38.070 Submittal requirements.

In addition to complying with the submittal requirements of GMC Chapters 17.32 (subdivisions) and 17.70 (conditional uses), the applicant shall submit the following:

(1) A statement of the general purpose of the project and an explanation of all features pertaining to uses and other pertinent matters not readily identifiable in map form.

(2) A table showing:

(a) The total number of acres;

(b) The percent distribution by use;

(c) The percent of nonresidential uses, such as off-street parking, streets, parks, open space, recreational areas, commercial uses, industrial uses, public facilities, and any other appropriate delineations;

(d) The overall density of residential development, with a breakdown of density by dwelling types;

(e) The construction schedule for the phasing and timing of each portion of the development.

(3) A draft of the proposed restrictive covenants, easements, and reservations of non-dedicated open space.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.38.080 Review and approval.

Review and approval of a planned unit development shall be subject to GMC Chapters 17.32 (subdivisions) and 17.70 (conditional uses). Approval of a planned unit development shall expire if a final plat consistent with the tentative plan is not submitted to the City Administrator or designee within one year of the date of the final decision unless a time extension is granted pursuant to GMC Section 17.70.040 (time limit on permit).

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

CHAPTER 17.48

OFF-STREET PARKING AND LOADING

Chapter 17.48

OFF-STREET PARKING AND LOADING

Sections:

- 17.48.010 Applicability.
- 17.48.020 Single-family and two-family residential standards.
- 17.48.030 Standards for developments subject to design review.
- 17.48.040 Design requirements for permanent off-street parking and loading.
- 17.48.050 Bicycle parking standards.
- 17.48.060 Car pool and van pool parking.

17.48.010 Applicability.

Off-street parking and loading standards shall apply to all development permits.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000.

17.48.020 Single-family household and middle housing two-family residential standards.

At the time of construction or substantial exterior improvement of a single-family household dwelling or middle housing dwelling unit, a minimum of one off-street parking space per dwelling unit shall be provided. ~~At the time of construction or substantial exterior improvement of a two-family dwelling duplex, a minimum of one and one-half off-street parking spaces per dwelling unit shall be provided. The off-street parking space or spaces shall be located on the same lot as the dwelling.~~

~~(a) On-street parking may count towards fulfilling the off-street parking requirements where on-street parking is allowed and the applicant can demonstrate that on-street parking is available. On-street parking must be available on the subject site's frontage in order to be credited towards the off-street parking requirement. On-street parking credited for a specific use may not be used exclusively by that use, but shall be available for general public use at all times. No signs or actions limiting general public use of on-street spaces is permitted.~~

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000.

17.48.030 Standards for developments subject to design review.

At the time of construction, enlargement, or change of use of any structure or development subject to GMC Chapter 17.80 (Design Review), except as provided in the C-2 district, off-street parking spaces shall be provided as follows unless greater requirements are otherwise established under this title:

(1) Calculation of Parking Requirements.

(a) Square Footage as Basis for Requirement. Where square feet of the structure or use is specified as the basis for the parking requirement, the calculation shall be based on the gross leasable area (GLA).

(b) Number of Employees as Basis of Requirement. When the number of employees is specified as the basis for the parking space requirement, the calculation shall be based on the number of employees working on the premises during the largest shift at peak season.

(c) If more than one use occupies a single structure or lot, the total minimum and maximum parking requirements for the structure or lot shall be the sum of the requirements for all uses. Where it can be shown that the peak parking demands are actually less (i.e., the uses operate on different days or at different times of the day), the total requirements may be reduced accordingly to the use with highest minimum parking requirement.

(d) When calculation of a minimum or maximum parking requirement results in a fractional space requirement, such fraction shall be rounded down to the nearest whole number.

(e) Owners of two or more uses, structures or lots may agree to utilize jointly the same parking and loading spaces when the peak hours of operation do not substantially overlap. Satisfactory legal evidence shall be presented to establish the joint use. Shared parking spaces shall be included in the calculation of the minimum parking requirement for each of the joint users. For the purpose of calculating the maximum permitted parking for each of the joint users, shared spaces shall be apportioned between the joint users.

(f) On-street parking may count towards fulfilling ~~up to one-quarter of~~ the off-street parking requirements where on-street parking is allowed and the applicant can demonstrate that on-street parking is available. On-street parking must be available on the subject site's frontage in order to be credited towards the off-street parking requirement. On-street parking credited for a specific use may not be used exclusively by that use, but shall be available for general public use at all times. No signs or actions limiting general public use of on-street spaces is permitted.

(g) Parking spaces fulfilling the minimum off-street parking space requirement shall not be used for display or storage and shall not be rented, leased or assigned to any other person or organization, except as authorized under subsection (l)(e) of this section.

(h) Off-Site Parking. ~~Except for single-family dwellings~~ For multi-household dwellings, the vehicle parking spaces required by this chapter may be located on another parcel of land, provided the parcel is within 500 feet walking distance of the use it serves. The distance from the parking area to the use shall be measured from the nearest parking space to a building entrance, following a sidewalk or other pedestrian route. The right to use the off-site parking must be evidenced by a recorded deed, lease, easement, or similar written instrument.

(2) Minimum and maximum permitted parking.

(a) The number of surface parking spaces provided at no charge for a particular use shall not be less than the minimum nor exceed the maximum parking ratios identified for that use in Table 1. Minimum parking ratios for those uses not identified in Table 1 (below) shall be determined by the Planning commission during design review.

(b) For purposes of the maximum parking ratios identified in Table 1 (below), Zone A shall include those areas where 20-minute peak hour transit service is provided within a one-quarter (1/4) mile walking distance for bus transit stops or stations or one-half (1/2) mile walking distance for high capacity transit stops or stations. Zone B shall include all other areas.

(c) The following types of parking spaces are exempt from the maximum parking ratios:

- (A) Parking spaces in parking structures;
- (B) Fleet parking spaces;
- (C) Parking spaces used to store vehicles that are for sale, lease or rent;
- (D) Employee carpool parking spaces that are clearly delineated with signs;
- (E) Dedicated valet parking spaces.

(d) Upon expansion of a nonconforming development or nonconforming use that does not comply with minimum or maximum parking ratios, additional parking spaces shall be provided as follows:

- (A) If the existing number of parking spaces is less than the minimum parking ratio in Table 1 (below), the number of additional parking spaces required shall be based only on the floor area or capacity added and not on the area or capacity existing prior to the expansion.

(B) If the existing number of parking spaces exceeds the maximum parking ratio in Table 1 (below), additional parking spaces may only be provided if compliance with the maximum parking ratio will be met for the entire development or use following the expansion.

(e) Exceptions to the minimum and maximum parking ratios may be granted pursuant to GMC Section 17.80.090 (minor exception). Exceptions exceeding twenty-five percent (25%) of the requirement shall be subject to GMC Chapter 17.72 (variances).

17.48.030 Table 1				
MINIMUM AND MAXIMUM OFF-STREET PARKING REQUIREMENTS				
USE		MINIMUM REQUIRED	ZONE A MAX. ALLOWED	ZONE B MAX. ALLOWED
(1) RESIDENTIAL USES				
(a)	Single-household Family Dwelling	1 space	Not Applicable	Not Applicable
(b)	Duplex Two-Family or Multi-Family Dwelling-	1.5 spaces per dwelling unit	Min: None Max: None	Not Applicable
	Triplex/Quadplex	Lot sizes of less than 5,000 square feet, one (1) off-street parking space per development. Lot sizes of 5,000 square feet or more, two (2) off-street parking spaces per development.	Min: None Max: None	
	Townhouse	1 space per Townhouse dwelling unit	Min: None Max: None	
	Cottage Cluster	1 space per dwelling unit	Min: None Max: None	
	Multi Household Dwelling	1.5 spaces per dwelling unit		Not Applicable
(c)	Rooming-house or Boarding-house	Spaces equal to eighty percent (80%) of the number of guest accommodations plus one additional space for the owner or manager	Not Applicable	Not Applicable
(d)	Senior Housing Center	.5 spaces per residential suite	Not Applicable	Not Applicable
(2) COMMERCIAL RESIDENTIAL USES				
(a)	Hotel or Motel	1 space per guest room or suite plus 1 additional space for the owner or manager and 1 space per 2 employees	Not Applicable	Not Applicable
(3) INSTITUTIONAL USES				
(a)	Welfare or Correctional Institution, Nursing Home or Homes for the Aged	1 space per 10 beds for patients or inmates plus 1 space per 2 employees	Not Applicable	Not Applicable
(b)	Convalescent Hospital	1 space per 4 beds	Not Applicable	Not Applicable
(c)	Hospital	1.5 spaces per bed	Not Applicable	Not Applicable

17.48.030 Table 1				
MINIMUM AND MAXIMUM OFF-STREET PARKING REQUIREMENTS				
USE		MINIMUM REQUIRED	ZONE A MAX. ALLOWED	ZONE B MAX. ALLOWED
(4) PLACES OF PUBLIC ASSEMBLY				
(a)	Church	1 space per 6 seats or 8 feet of bench length in the main auditorium or 75 square feet of floor area of a main auditorium not containing fixed seats	.6 space per seat or 1.33 feet of bench length in the main auditorium or 12.5 square feet of floor area of a main auditorium not containing fixed seats	.8 space per seat or 1.33 feet of bench length in the main auditorium or 12.5 square feet of floor area of a main auditorium not containing fixed seats
(b)	Library, Reading Room	1 space per 400 square feet plus 1 space per 2 employees	Not Applicable	Not Applicable
(c)	Preschool, Nursery, Kindergarten, Day Care Center	2 spaces per full-time staff person	Not Applicable	Not Applicable
(d)	Primary or Middle School	1 space per classroom plus 1 space per administrative employee plus 1 space per 4 seats or 8 feet of bench length in the main auditorium or 75 square feet of floor area of a main auditorium not containing fixed seats	Not Applicable	Not Applicable
(e)	High School, College or Commercial School for Adults	1 space per classroom plus 1 space per administrative employee plus 1 space for each 6 students or 1 space per 4 seats or 8 feet of bench length in the main auditorium, whichever is greater	1.5 spaces per classroom plus 1.5 spaces per administrative employee plus 1.5 spaces for each 6 students or 1.5 spaces per 4 seats or 8 feet of bench length in the main auditorium, whichever is greater	1.5 spaces per classroom plus 1.5 spaces per administrative employee plus 1.5 spaces for each 6 students or 1.5 spaces per 4 seats or 8 feet of bench length in the main auditorium, whichever is greater
(f)	Non-School Auditorium, Meeting Room, Community or Senior Center	1 space per 6 seats or 8 feet of bench length in an assembly room or 75 square feet of floor area of an assembly room not containing fixed seats, plus 1 space for each administrative employee, plus 1 space for each classroom for lounge, plus requirements for other uses included in the building	Not Applicable	Not Applicable
(5) COMMERCIAL AMUSEMENT				
(a)	Stadium, Arena, Theater	1 space per 4 seats or 8 feet of bench length	.4 space per seat or 2 feet of bench length	.5 space per seat or 2 feet of bench length
(b)	Bowling Alley	3 spaces per alley	Not Applicable	Not Applicable
(c)	Dancehall	1 space 100 square feet plus 1 space per 2 employees	Not Applicable	Not Applicable

17.48.030 Table 1				
MINIMUM AND MAXIMUM OFF-STREET PARKING REQUIREMENTS				
USE		MINIMUM REQUIRED	ZONE A MAX. ALLOWED	ZONE B MAX. ALLOWED
(d)	Skating Rink	1 space per 200 square feet plus 1 space per 2 employees	Not Applicable	Not Applicable
(e)	Sports Club/Recreation Facility	4.3 spaces per 1,000 square feet	5.4 spaces per 1,000 square feet	6.5 spaces per 1,000 square feet
(f)	Tennis/Racquetball Court	1 space per 1,000 square feet	1.3 spaces per 1,000 square feet	1.5 spaces per 1,000 square feet
(6) COMMERCIAL USE				
(a)	Retail Store	1 space per 300 square feet	1 space per 196 square feet	1 space per 161 square feet
(b)	Service or Repair Shop, Retail Store Handling Exclusively Bulky Merchandise Such as Automobiles or Furniture	1 space per 600 square feet	1 space per 294 square feet	1 space per 161 square feet
(c)	Bank	1 space per 300 square feet	1 space per 185 square feet	1 space per 154 square feet
(d)	Office	1 space per 370 square feet	1 space per 294 square feet	1 space per 244 square feet
(e)	Medical, Dental Clinic	1 space per 256 square feet	1 space per 204 square feet	1 space per 170 square feet
(f)	Eating or Drinking Establishment Except Fast Food Restaurant with Drive-Thru	1 space per 300 square feet	1 space per 52 square feet	1 space per 44 square feet
(g)	Fast Food Restaurant with Drive-Thru	1 space per 300 square feet	1 space per 81 square feet	1 space per 67 square feet
(h)	Mortuary	1 space per 6 seats or 8 feet of bench length in chapels	Not Applicable	Not Applicable
(7) INDUSTRIAL USES				
<i>(a) Manufacturing and Processing</i>				
Less than 25,000 square feet		1 space per 600 square feet	Not Applicable	Not Applicable
Greater than or equal to 25,000 square feet and less than 50,000 square feet		1 space per 700 square feet	Not Applicable	Not Applicable
Greater than or equal to 50,000 square feet and less than 80,000 square feet		1 space per 800 square feet	Not Applicable	Not Applicable
Greater than or equal to 80,000 square feet and less than 200,000 square feet		1 space per 1,000 square feet	Not Applicable	Not Applicable
Greater than or equal to 200,000 square feet		1 space per 2,000 square feet	Not Applicable	Not Applicable
<i>(b) Warehousing and Distribution</i>				
Less than 50,000 square feet		1 space per 2,000 square feet	Not Applicable	Not Applicable
Greater than or equal to 50,000 square feet and less than 150,000 square feet		1 space per 5,000 square feet	Not Applicable	Not Applicable
Greater than or equal to 150,000 square feet		1 space per 5,000 square feet	Not Applicable	Not Applicable

17.48.030 Table 1				
MINIMUM AND MAXIMUM OFF-STREET PARKING REQUIREMENTS				
USE		MINIMUM REQUIRED	ZONE A MAX. ALLOWED	ZONE B MAX. ALLOWED
(c)	Rail and Trucking Terminal	1 space per employee	Not Applicable	Not Applicable
(d)	Wholesale Establishment	1 space per employee plus 1 space per 700 square feet of patron service area	Not Applicable	Not Applicable

17.48.030 FIGURE 1	
OFF-STREET PARKING DESIGN STANDARDS	
Parallel Parking	45° Parking
Minimum Turning Radius	60° Parking
	90° Parking

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1269 §1, 1998; Ord. 1282 §1, 1998; Ord. 1298 §1, 2000; Ord. 1483 §2 (Exh. 5), 2017.

17.48.040 Design requirements for permanent off-street parking and loading.

All structures and developments subject to design review shall provide permanent off-street parking and loading as follows:

(1) Parking and Loading:

- (a) Parking and loading areas shall be paved with asphalt and/or concrete meeting city standards, maintained adequately for all weather use and so drained as to avoid flow of water across public sidewalks;
- (b) Off-street parking and loading areas shall be screened from abutting properties located in a residential zoning district unless such abutting properties are developed with nonresidential uses. Required screening shall be accomplished by building placement, a landscaped earth berm or a sight-obscuring fence or hedge. Required screening shall be a minimum of six feet high and shall not conflict with GMC Chapter 17.54 (clear vision).
- (c) Areas for standing and maneuvering vehicles, other than for the off-street parking and storage of truck tractors and/or semitrailers, shall be paved with an asphalt and/or concrete surface meeting city standards. The parking of truck tractors and/or semitrailers in off-street parking areas used exclusively for the parking and/or storage of said vehicles may be allowed utilizing a durable and dustless surface other than an asphalt and/or concrete surface. Such surface must be graded, compacted and surfaced in such a manner that it will adequately support these vehicles, including trailer standing gear, will not produce dust, will not produce tracking of mud or other materials onto adjoining streets or properties, and otherwise complies with other applicable provisions of this code.

(2) Parking:

- (a) Required parking spaces shall be located not further than 200 feet from the building or use they are required to serve, measured in a straight line from the building;

- (b) Required parking shall be provided in the same zoning district or a different zoning district of a more intensive use;
- (c) In no case shall required parking for a commercial or industrial use be provided in a residential district, except for approved conditional uses;
- (d) Groups of more than four parking spaces shall be permanently marked and so located and served by driveways that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley;
- (e) Parking spaces along the outer boundaries of a parking lot shall be contained by a curb at least four inches high and setback a minimum of five feet from the property line. A bumper rail may be substituted for a curb;
- (f) Off-street parking and loading areas, including parking spaces and access aisles, shall meet or exceed the minimum dimensional standards identified in Tables 2 and 3 and Figure 1 (of this chapter). Access aisles shall be of sufficient width for all vehicular turning and maneuvering;
- (g) Up to 50 percent of required parking spaces may be provided for compact cars;
- (h) Parking areas shall be designed, to the maximum extent practicable, to avoid large, uninterrupted rows of parking spaces.

(3) Loading:

- (a) A driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers shall be located on the site of any school having a capacity greater than 25 students;
- (b) Buildings or structures to be built or substantially altered which receive and distribute material or merchandise by truck shall provide and maintain off-street loading berths in sufficient numbers and size to adequately handle the needs of the particular use. If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately handle the needs of the particular use;
- (c) Off-street parking areas used to fulfill the requirements of this section shall not be used for loading and unloading operations except during periods of the day when not required to take care of parking needs;
- (d) Loading facilities shall be located at least 20 feet from residential property. Loading spaces shall be located on the site and directly accessible to the main structure.

17.48.040 Table			
STANDARD PARKING DIMENSIONS IN FEET			
Parking Angle	Stall Width	Stall Depth	Aisle Width
45°	9.5'	18.0'	14.0'
60°	9.5'	18.0'	16.0'
90°	9.5'	18.0'	24.0'

17.48.040 Table			
COMPACT PARKING DIMENSIONS IN FEET			
Parking Angle	Stall Width	Stall Depth	Aisle Width
45°	8.5'	16.0'	14.0'
60°	8.5'	16.0'	16.0'
90°	8.5'	16.0'	24.0'

(e) Exceptions and Adjustments. Loading areas within a street right-of-way in areas zoned mixed-use commercial in the C-2 zoning district may be approved when all of the following conditions are met:

(A) Loading areas must be signed to limit the duration of the activity, which may not exceed one hour for each loading operation.

(B) Proposed loading areas must support a use that requires infrequent loading activity. Infrequent loading activity is defined as less than three operations that occur daily between 5:00 a.m. and 12:00 a.m., or all operations that occur between 12:00 a.m. and 5:00 a.m. at a location that is not adjacent to a residential zone.

(C) The proposed loading area:

- (i) Does not unreasonably obstruct traffic;
- (ii) Will be limited to one loading activity at a time;
- (iii) Notwithstanding Portland Avenue, does not obstruct a primary emergency response route; and
- (iv) Is acceptable to the applicable roadway authority.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1298 §1, 2000; Ord. 1483 §2 (Exh. 5), 2017.

17.48.050 Bicycle parking standards.

(1) General Provisions.

(a) Applicability. Standards for bicycle parking apply to full-site design review of new construction for multi-family residential (four units and larger) and new commercial/industrial developments. The Planning Commission may grant exemptions to bicycle parking requirements in connection with temporary uses or uses that are not likely to generate the need for bicycle parking.

(b) Types of Spaces. Bicycle parking facilities shall be provided in terms of short-term bicycle parking and long-term bicycle parking. Short-term bicycle parking is intended to encourage customers and other visitors to use bicycles by providing a convenient and readily accessible place to park bicycles. Long-term bicycle parking provides a weather-protected place to park bicycles for employees, students, residents, commuters, and others who generally stay at a site for at least several hours.

(c) Minimum Number of Spaces. All developments required to comply with this section shall provide a minimum five percent bicycle parking spaces based on the city's required minimum number of automobile parking spaces. In addition, the following applies:

- (A) All development shall have a minimum two short-term bicycle parking spaces; and

(B) If more than seven bicycle parking spaces are required, at least 50 percent of the spaces shall be provided as long-term bicycle parking.

(C) Notwithstanding subsection (1)(a)(A) of this section, 100 percent of all bicycle parking spaces for multi-family development of four units and more shall be provided as long-term bicycle parking.

(2) Location and Design.

(a) Short-Term Bicycle Parking. Short-term bicycle parking facilities are lockers or racks that meet the standards of this section and that are located inside a building, or located outside within 30 feet of the main entrance to the building or at least as close as the nearest vehicle parking space, whichever is closer;

(b) Long-Term Bicycle Parking. Long-term bicycle parking includes:

(A) Racks, storage rooms, or lockers in areas that are secure or monitored (e.g., visible to employees or customers or monitored by security).

(B) Covered outside bicycle parking spaces that meet the requirements of subsection (2)(g) of this section and are located within 100 feet of an entrance to the building;

(c) Signs. If the bicycle parking is not visible from the street or main building entrance, then a sign conforming to the city's standards for on-site traffic control, GMC Section 17.52.060(1), shall be posted indicating the location of the parking facilities;

(d) Rack Type and Dimensions.

(A) Bicycle racks must hold bicycles securely by the frame and be securely anchored;

(B) Bicycle racks must accommodate:

(i) Locking the frame and one wheel to the rack with a high-security U-shaped shackle lock, or approved substitute; or

(ii) Locking the frame and both wheels to the rack with a chain or cable not longer than six feet;

(C) The Planning Commission may approve alternate bicycle racks provided they are convenient and secure;

(e) Bicycle parking spaces must be at least six feet long and two feet wide. An aisle five feet wide for bicycle maneuvering must be provided;

(f) Areas set aside for required bicycle parking must be clearly marked and reserved for bicycle parking only;

(g) Covered Parking (Weather Protection).

(A) When required, covered bicycle parking shall be provided in one of the following ways: inside buildings, under roof overhangs or awnings, in bicycle lockers, or within or under other structures.

(B) Where required covered bicycle parking is not proposed to be located within a building or locker, the cover must be permanent and designed to protect the bicycle from rainfall and provide seven-foot minimum overhead clearance.

(C) Where required bicycle parking is provided in lockers, the lockers shall be securely anchored.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1175 §3 (A), 1993; Ord. 1483 §2 (Exh. 5), 2017.

17.48.060 Car pool and van pool parking.

New industrial, institutional and office developments requiring full site design review, including government offices, with 50 or more employee parking spaces, shall designate at least 10 percent of the parking spaces for car pool or van pool parking. The car pool/van pool spaces shall be clearly marked “reserved – car pool/van pool only.”

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1175 §3 (B), 1993.

CHAPTER 17.62.070

MOBILE HOME PARK

17.62.070 Mobile home park.

Mobile home parks shall meet the requirements of Chapter 446, Oregon Revised Statutes, and the Rules and Regulations Governing the Construction and Sanitary Operation of Travelers' Accommodations and Trailer Parks adopted by the Oregon State Board of Health. In addition, the following minimum standards shall apply:

(1) Parking Space Requirement. A parking space shall be provided for each mobile home space on the site. In addition, guest parking spaces shall be provided in every mobile home park within two hundred feet (200') of the mobile home spaces served and at a ratio of one parking space for each two (2) mobile home spaces. Parking spaces shall have durable and dustless surfaces adequately maintained for all-weather use and shall be properly drained.

(2) Fencing and Landscaping. A sight-obscuring fence or hedge not more than six feet (6') high shall enclose the mobile home park except at points of ingress and egress. A built-up fence, as distinguished from a hedge, shall be so located as to conform to front and side yard requirements of the zoning district and suitable landscaping shall be provided in the required yard.

(3) Density Standards:

(a) Maximum density shall be ten (10) units per net acre;

(b) Minimum density shall be eight (8) units per net acre.

(4) Yard Requirements. Front yard from abutting street shall be at least twenty-five feet (25') but no closer than fifty feet (50') from the center of the road. Side and rear yards shall be at least thirty feet (30') from any interior property line abutting property zoned R-7.2. Side and rear yard shall be at least ten feet (10') from any interior property line. ~~Mobile homes situated in one space shall be separated by at least ten feet (10') from mobile homes in an adjoining space. Each mobile home park shall be divided into spaces for each dwelling unit and each space shall have a~~ minimum side and rear yard of five feet (5') from an adjoining space.

(5) Recreation Area. A minimum of four thousand (4,000) square feet of recreation area shall be provided for each gross acre of land in the proposed mobile home park. The recreation area may be in one or more locations in the park. At least one recreation area shall have a minimum size of ten thousand (10,000) square feet. The recreational site or sites are to be of a size and shape adequate for the intended use and location shall be convenient to all mobile home sites in the park.

(6) Area. The minimum area of a mobile home park shall be one (1) acre.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000.

[**Ed. Note:** The publication(s) referred to or incorporated by reference in this ordinance are available from the office of the City Recorder.]

CHAPTER 17.76

EXCEPTIONS

Chapter 17.76 EXCEPTIONS

Sections:

- 17.76.010 Exceptions—Generally.
- 17.76.020 Nonconforming uses and nonconforming developments.
- 17.76.030 Lot size requirements.
- 17.76.040 Setback requirements.

17.76.010 Exceptions—Generally.

Exceptions to the requirements of this title may be granted under the provisions of this chapter.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002.

17.76.020 Nonconforming uses and nonconforming developments.

(1) Continuance of a Nonconforming Use or a Nonconforming Development: Alteration of a Nonconforming Development. Except as provided herein, a nonconforming use may be continued but may not be altered or extended. The extension of a nonconforming use to a portion of a development which was arranged or designed for the nonconforming use at the time of passage of the ordinance codified in this title is not an enlargement or expansion of a nonconforming use. A nonconforming development which conforms with respect to use may be altered or extended provided the alteration or extension conforms to the standards of this title.

(2) Discontinuance of a Nonconforming Use. If a nonconforming use is discontinued for a period of one (1) year, further use of the property shall conform to this title.

(3) Maintenance. Normal maintenance of structures and premises that are part of a nonconforming use shall be permitted provided there are no significant use or structural alterations. Normal maintenance may include painting, roofing, siding, interior remodeling, electrical work, plumbing work, re-paving of access roads and parking/loading areas, replacement of landscaping elements or other similar tasks. Normal maintenance does not include increasing the number of dwelling units, constructing new structures or constructing additions to existing structures except to the extent that an addition is necessary to render a structure accessible to the disabled.

(4) Alterations Required by Law. Alteration of a nonconforming use shall be permitted when necessary to comply with any lawful requirement for alteration of the use or structures and premises associated with the use. Such alteration shall be subject to building, plumbing, electrical and other permit requirements in effect at the time the alteration is begun.

(5) Alterations Not Required by Law. A nonconforming use may be altered, expanded or changed to another nonconforming use pursuant to GMC Division VII (administrative procedures) and subject to the following criteria:

(a) The alteration, expansion or change of use will, after the imposition of conditions as authorized below, have no greater adverse impact on the neighborhood than the existing use. At a minimum, factors that shall be considered under this criterion include traffic generation, noise, vibration, smoke, dust, fumes, glare and visual compatibility with surrounding uses;

(b) Conditions of approval may be imposed on any alteration, expansion or change of use when deemed necessary to ensure the mitigation of any adverse impacts of such alteration, expansion or change of use. These conditions may include, but are not limited to, the following:

(A) Limiting the hours, days, place and manner of operation;

(B) Requiring design features that minimize environmental impacts such as noise, vibration, smoke, dust, fumes and glare;

- (C) Requiring increased setbacks, lot area, lot depth and lot width;
- (D) Limiting the building height, size, lot coverage and location on the site;
- (E) Designating the size, number, location and design of vehicle access points;
- (F) Requiring street right-of-way to be dedicated and streets to be improved;
- (G) Requiring landscaping, screening, drainage and surfacing of parking and loading areas;
- (H) Limiting the number, size, location, height and lighting of signs;
- (I) Regulating the location and intensity of outdoor lighting; and
- (J) Requiring a sight-obscuring fence or hedge to screen the nonconforming use from adjacent or nearby property.

(6) Destruction of a Nonconforming Use or a Nonconforming Development. If a nonconforming use or a nonconforming development is destroyed by any cause to an extent exceeding seventy-five percent (75%) of its fair market value as indicated by the records of the Clackamas County Assessor, a future use or development on the site shall conform to the requirements of this title. Nonconforming single-~~family household and multi-household~~ dwellings shall not be deemed nonconforming for the purpose of this subsection and may be replaced regardless of the extent of destruction provided the development is within the same structure footprint and that replacement commences within one (1) year of destruction. ~~Nonconforming two-family dwellings in the R-5 zoning district shall not be deemed nonconforming for the purpose of this subsection and may be replaced regardless of the extent of destruction provided that the number of stories and the area of the structure footprint of a replacement two-family dwelling shall not exceed those of the two-family dwelling being replaced and provided that replacement commences within one (1) year of destruction.~~

(7) Plans Otherwise Approved. Nothing contained in this chapter shall require any change in the plans, construction, alteration or designated use of a structure for which a building permit has been approved by the city and issued by Clackamas County and for which construction has commenced prior to the adoption of the ordinance codified in this title provided that the structure, if nonconforming or intended for a nonconforming use, is completed and in use within one year of the date the building permit is issued.

(8) Residential Uses. Nonconforming single-~~family household~~ dwellings, nonconforming two-~~household family~~ and multi-~~household family~~ dwellings in commercial and industrial zoning districts and nonconforming two-~~family household~~ dwellings in the R-5 zoning district shall not be deemed nonconforming for the purpose of expansion, remodeling or alteration for residential use or for residential accessory uses provided that there is no increase in the number of dwelling units other than the addition of an accessory dwelling unit when otherwise permitted by this title. The number of stories and the area of the structure footprint of a two-~~family household~~ dwelling in the R-5 zoning district shall not be increased. .

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1171 §1 (G), 1993; Ord. 1267 §1, 1998; Ord. 1291 §1, 2000; Ord. 1323 §1, 2002; Ord. 1374 §2, 2006.

17.76.030 Lot size requirements.

A lot of record that has an area less than the minimum lot area standard of the zoning district in which it is located may be developed with a use allowed in the zoning district. ~~In~~, except that in a zoning district where dwellings are an allowed use, residential development shall be limited to one (1) single-~~family household~~ dwelling. Development on an undersized lot of record shall comply with other applicable standards of this title.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1323 §1, 2002. Ord. 1374, 2006.

17.76.040 Setback requirements.

The following exceptions to setback requirements may be authorized for a lot in any zoning district:

(1) Average of Adjacent Front Setbacks. If there are buildings on both abutting lots which are within one hundred feet (100') of the intervening lot, and the buildings have front setbacks of less than the minimum for the zoning district, the front setback for the intervening lot need not exceed the average front setback of the abutting lots or ten feet (10'), whichever is greater. However, in all cases the minimum front setback requirement of the zoning district shall be maintained for a garage or carport if the garage vehicle entrance or an open side of the carport faces the front lot line.

(2) Related to Abutting Front Setbacks. If there is a building on one (1) abutting lot which is within one hundred feet (100') of the lot, and this building has a front setback of less than the minimum for the zoning district, the front setback for the lot need not exceed the average of the front setback of the abutting lot and the minimum front setback for the zoning district, or ten feet (10'), whichever is greater. However, in all cases the minimum front setback requirement of the underlying zoning district shall be maintained for a garage or carport if the garage vehicle entrance or an open side of the carport faces the front lot line.

(3) Corner Lots with Frontage on a Private Street. Where a corner lot has frontage on a public street and also has frontage on a private street from which it does not receive vehicular access, the lot line abutting the private street shall be considered a side lot line for the purpose of determining the minimum setback requirement.

(4) Front Setbacks from Private Streets or Flag Lot Accesses. Where the front lot line of a lot in an R-5 or R-7.2 zoning district abuts a private street or the narrow deeded strip of land or easement providing access to a flag lot, the front setback may be reduced to ten feet (10'). However, if a garage vehicle entrance or an open side of a carport faces the front lot line, a minimum setback of twenty feet (20') shall be maintained between the garage or carport and the interior edge of the private street or flag lot access drive.

(5) Flag Lots. For the purpose of determining the minimum setback requirements for a flag lot, the designation of front, rear and side property lines may be modified to allow flexibility in the placement of structures when one or both of the following conditions apply:

(a) It is not possible to extend the narrow deeded strip of land or easement providing access to the flag lot to serve additional lots due to physical conditions such as topography or existing development; or

(b) It is not necessary to extend the narrow deeded strip of land or easement providing access to the flag lot to serve additional lots because the subject property and adjacent property are fully developed or have adequate alternative access from existing streets.

(6) Fences and walls. There shall be no minimum setback requirements for fences and walls. Compliance with GMC Chapter 17.54 (clear vision) shall be required.

(7) Through lots. In the case of a through lot, either of the lot lines separating the lot from a street other than an alley may be designated by the property owner as the front lot line with the other such lot line designated as a rear lot line. However, in a residential zoning district, a minimum setback of twenty feet (20') shall be maintained between a garage vehicle entrance or an open side of a carport and a street.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1131 §2, 1990; Ord. 1289 §1, 2000; Ord. 1323 §1 (pan), 2002.

CHAPTER 17.80

DESIGN REVIEW

Chapter 17.80
DESIGN REVIEW*

Sections:

- 17.80.011 Objectives.
- 17.80.021 Applicability.
- 17.80.061 Submittal requirements.
- 17.80.080 Maintenance.
- 17.80.090 Minor exceptions.
- 17.80.100 Compliance.

* Prior history:

- 17.80.010 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1254 §1, 1998.
- 17.80.020 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1254 §1, 1998.
- 17.80.020 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1254 §1, 1998.
- 17.80.030 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1254 §1, 1998.
- 17.80.031 **History:** Ord. 1254 §2, 1998; Repealed by Ord. 1323 §1, 2002.
- 17.80.040 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1254 §1, 1998.
- 17.80.041 **History:** Ord. 1254 §2, 1998; Repealed by Ord. 1323 §1, 2002.
- 17.80.050 **History:** Ord. 1131 §2, 1990; Repealed by Ord. 1254 §1, 1998.
- 17.80.051 **History:** Ord. 1254 §2, 1998; Repealed by Ord. 1323 §1, 2002.
- 17.80.070 **History:** Ord. 1254 §2, 1998; Repealed by Ord. 1323 §1, 2002.

17.80.011 Objectives.

The following objectives of the regulations in this chapter are as follows:

- (1) To preserve the natural environment and protect and enhance the visual character of the city, and to ensure compliance with the goals, objectives and policies of the Gladstone Comprehensive Plan, zoning and subdivision ordinances.
- (2) To encourage orderly development and to assure that structures, signs and other improvements are appropriately related to their site, and to surrounding sites and structures. Due regard shall be given to the aesthetic qualities of the terrain and landscaping, and proper attention given to exterior appearance of structures, signs, energy conservation and other improvements.
- (3) To ensure significant site development will be compatible with land use on adjacent properties.
- (4) To protect neighboring owners and users by assuring that reasonable provisions have been made for such matters as surface water drainage, the preservation of views, light, air and solar access and those effects on neighboring land uses.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1254 §2, 1998.

17.80.021 Applicability.

(1) This chapter shall apply to new structures; additions to existing structures; site development, such as grading, parking lot construction or commercial/industrial use of an undeveloped property; change of use; and major remodeling, with the following exceptions:

- (a) Single ~~family Household d~~wellings, Middle Housing, and their allowed accessory uses;
- ~~(b) Duplexes, and their allowed accessory uses in the R-7.2, and R-5, and MR zoning districts;~~
- ~~(eb)~~ Utility lines and equipment cabinets, not including towers or substations, provided such equipment cabinets are no greater than one hundred twenty (120) square feet in area and ten feet (10') in height;
- ~~(ec)~~ Fences unless associated with a primary, accessory or conditional use in the Office Park District or unless design review is required to grant an exception to the maximum fence height standard of the zoning district;
- ~~(ed)~~ Fabric-covered awnings;
- ~~(fe)~~ Playground equipment;
- ~~(gf)~~ Grading that does not require a permit under the Clackamas County Excavation and Grading Code;
- ~~(hg)~~ Signs reviewed by the City Administrator or designee pursuant to GMC Chapter 17.52 (signs);
- ~~(ih)~~ Vehicular or pedestrian right-of-way improvements provided such improvements are not associated with additional development that is subject to design review;
- ~~(ji)~~ Changes of use where:
 - (A) The proposed change is not from a residential, commercial/industrial or institutional use to a use in a different one of these categories;
 - (B) The new use is not required by this title to have a greater number of off-street parking spaces than the previous use or at least the minimum number of off-street parking spaces required by this title for the new use currently exists. However, where applicable parking requirements are not identified in Table 1 of GMC Section 17.48.030 (standards for developments subject to design review) or where on-street parking is proposed to fulfill a portion of the minimum off-street parking requirement, design review shall be required;
- ~~(kj)~~ Normal maintenance of structures and premises provided there are no significant use or structural alterations. Normal maintenance may include painting, roofing, siding, interior remodeling, electrical work, plumbing work, re-paving of access roads and parking/loading areas, replacement of landscaping elements or other similar tasks. Normal maintenance does not include increasing the number of dwelling units, constructing new structures or constructing additions to existing structures except to the extent that an addition is necessary to render a structure accessible to the disabled. Normal maintenance performed shall be consistent with previous design review approvals for the site.

(2) If a design review application is required, no building, sign, grading or blasting permit shall be issued until design review approval has been granted.

(3) An application for design review shall be reviewed pursuant to GMC Division VII (administrative procedures) and shall be reviewed for compliance with standards of the underlying zoning district and GMC Division IV (development standards).

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1254 §2, 1998; Ord. 1289 §1, 2000; Ord. 1323§1, 2002.

17.80.061 Submittal requirements.

(1) An application for design review shall include a minimum of twelve (12) copies of the following plans drawn to scale. A project summary shall accompany the application when necessary to describe special circumstances such as a request for a minor exception pursuant to GMC Section 17.80.090 (minor exceptions).

(a) Vicinity Map: The vicinity map shall show the location of the subject property relative to well-known landmarks in all directions and shall be at least four inches (4") by four inches (4") in size.

(b) Site Plan: The site plan shall include the following:

(A) The applicant's entire property and the surrounding area to a distance sufficient to determine the relationship between the applicant's property and proposed development and adjacent property and development;

(B) Lot lines, dimensions and area of the subject property;

(C) Complete names, addresses and telephone numbers of the property owner, applicant and project designer;

(D) Natural features including, but not limited to, individual trees greater than six inches (6") in diameter at five feet (5') above the ground (identify the species), wooded areas, wildlife habitat areas, streams and stream corridors, marsh and wetland areas, underground springs, surface features such as earth mounds and large rock outcroppings, significant views, natural drainage on the subject property and adjacent properties, areas of special flood hazard and potential geologic hazards such as areas of mass movement and soil hazards. Identify proposed alterations to natural features;

(E) Location, dimensions and names of all proposed rights-of-way and all existing rights-of-way within or adjacent to the subject property. Include proposed new curbs and sidewalks. Include existing curbs and sidewalks where necessary to show a connection to new curbs and sidewalks;

(F) Location and dimensions of existing and proposed easements, to which property they are conveyed and for what purpose(s). Include easements on the subject property and off-site easements conveyed to the subject property;

(G) Identification of existing uses of the subject property, including the location and exterior dimensions of existing structures. Identify whether existing structures will remain on the property or be removed;

(H) Location of proposed and existing utilities on the subject property and the location of adjacent off-site utilities to which on-site utilities will connect. Include water, sanitary sewer, storm drainage, gas, electric (including power poles) and other utilities;

(I) Location and exterior dimensions of all proposed structures;

(J) Relation of the subject property to nearby transit stops;

(K) Location and dimensions of individual parking spaces, parking lot access aisles, driveways and pedestrian and bicycle circulation;

(L) Lighting (include type);

(M) Service areas for trash disposal, recycling, loading and delivery and bicycle parking;

(N) Location of potential noise sources in the proposed development;

(O) Information about significant climatic variables including, but not limited to, solar potential, wind direction and wind velocity.

(c) Grading Plan: The preliminary grading plan shall indicate where and to what extent grading will occur and shall include approximate proposed contour lines, slope ratios, slope stabilization proposals and natural resources protection proposals. Existing contour lines shall also be shown. Proposed and existing contour lines shall be shown at maximum intervals of two feet (2') for slopes less than ten percent (10%), five feet (5') for slopes between ten (10) and twenty percent (20%) and ten feet (10') for slopes exceeding twenty percent (20%). A slope analysis shall be provided showing portions of the site according to the following slope ranges: less than ten percent (10%), ten (10) to less than twenty percent (20%), twenty (20) to less than thirty-five percent (35%), thirty five percent (35%) to less than fifty percent (50%) and fifty percent (50%) or greater. Approximate area calculations shall be provided for each of these slope ranges.

(d) Architectural Drawings:

(A) Building elevations and sections;

(B) Building materials, including color and type;

(C) Sufficient architectural details pertaining to exterior building materials, including samples and views from roads and other properties, as determined by the City Administrator or designee, to assure compliance with 17.44.020(4);

(D) Floor plans.

(e) Landscape Plan: The landscape plan shall be at the same scale as the site plan and shall include:

(A) Lot lines and adjacent rights-of-way;

(B) Proposed structures and existing structures to remain;

(C) Parking and loading areas and driveways;

(D) Locations of proposed plants and existing plants to remain, keyed to a legend identifying botanical names, common names, sizes at planting and numbers;

(E) Description of soil conditions and plans for soil treatment such as stockpiling of topsoil. Include plant selection requirements relating to soil conditions;

(F) Erosion controls, including plant materials and soil stabilization, if any;

(G) Irrigation systems;

(H) Landscape-related structures such as fences, terraces, decks, patios, shelters, play areas, etc.;

(I) Boundaries of open space, recreation or reserved areas to remain, access to open space and any alterations proposed;

(J) Locations of pedestrian and bikeway circulation within landscaped areas;

(K) Method of planting and maintenance.

(f) Signs:

(A) Freestanding signs:

(i) Location on-site plan;

(ii) Elevation drawing (indicate size, total height, height between bottom of sign and ground, color, materials and means of illumination).

(B) On-building signs:

- (i) Building elevation with location of sign (indicate size, color, materials and means of illumination);
- (ii) Site plan showing location of on-building sign in relation to adjoining property.

(2) A transportation impact analysis shall be submitted if deemed necessary by the City Administrator or designee to assess the impacts of the proposed development.

(3) The City Administrator or designee may waive any submittal requirements of this chapter if they are deemed not necessary or not applicable due to the scale or nature of the development proposal.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1254 §2 (pan), 1998, Ord. 1395 2007.

17.80.080 Maintenance.

All approved on-site improvements shall be the ongoing responsibility of the property owner or occupant.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1254 §2, 1998.

17.80.090 Minor Exceptions.

(1) Authority. In conjunction with the design review plan approval, the Planning Commission may grant minor exceptions from the following requirements:

- (a) Dimensional standards for yards required in the primary district;
- (b) Dimensional standards for off-street parking as required in GMC Chapter 17.48 (Off-Street Parking and Loading);
- (c) Minimum and maximum number of off-street parking spaces required in GMC Chapter 17.48 (Off-Street Parking and Loading).

(2) Limitations. No minor exceptions shall be greater than twenty-five percent (25%) of the requirement from which the exception is requested. Requests greater than twenty-five percent (25%) shall be subject to variance procedures.

(a) In the case of a minor yard exception for landscaping, the Planning Commission shall find that approval will result in:

- (i) More efficient use of the site;
- (ii) Preservation of natural features, where appropriate;
- (iii) Adequate provision of light, air and privacy to adjoining properties;
- (iv) Energy conservation; and

(v) Adequate emergency access.

(b) In the case of a minor exception to the dimensional standards for off-street parking spaces or the minimum required number of off-street parking spaces, the Planning Commission shall find that approval will provide adequate off-street parking in relation to user demands. The following factors may be considered in granting such an exception:

- (i) Special characteristics of users which indicate low demand for off-street parking (e.g. low income, elderly);
- (ii) Opportunities for joint use of nearby off-street parking facilities;

(iii) Availability of public transit; and

(iv) Natural features of the site (topography, vegetation and drainage) which would be adversely affected by application of required parking standards.

(c) In the case of a minor exception to the maximum allowed number of off-street parking spaces, the Planning Commission shall find that approval will not result in excessive off-street parking relative to the user demand. The following factors shall be considered in granting such an exception:

(i) Special characteristics of users that indicate high demand for off-street parking. Characteristics generally attributable to the use classification upon which the maximum parking ratio is based shall not be considered “special characteristics” for purposes of this provision.

(ii) Lack of sufficient available on-street parking, public off-street parking or shared parking within one-quarter (1/4) mile walking distance of the subject site.

(iii) A study of parking demand, submitted by the applicant, for a use substantially similar to the one proposed.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1254 §2, 1998; Ord. 1289 §1, 2000.

17.80.100 Compliance.

(1) Approval of design review shall expire if construction has not begun within two years of the date of the final decision. Upon request and in accordance with GMC Section 17.66.015(4)(a), the two-year period may be renewed once by the City Administrator or designee for not more than one year.

(2) Prior to issuance of a final certificate of occupancy, the development site shall be checked by the City Administrator or designee to insure compliance with the approved design review plans. Approval of a final certificate of occupancy shall not be granted until all conditions of design review approval are met.

(3) Any departure from the approved design review plans may be cause for revocation of the building permit or denial of a final certificate of occupancy. Any changes in the approved design review plans shall be submitted to the City Administrator or designee for review and approval prior to execution. Changes to the substance of an approval or the substance of conditions of approval shall require the submittal of a new design review application.

Statutory Reference: ORS Ch. 197 and 227

History: Ord. 1254 §2, 1998; Ord. 1323 §1, 2002; Ord. 1498 §1 (Exh. A), 2019.

**COMPREHENSIVE
PLAN
AMENDMENTS
MEMO**

memo portland

to **Gladstone Planning Commission**
from **MIG**
re **Comprehensive Plan Amendments**
date **4/12/2022**

Introduction

The Gladstone Comprehensive Plan is composed of land use goals, objectives, policies, implementation strategies and land use planning maps, and supported by extensive findings, inventory analysis and evaluation. The comprehensive plan has previously been adopted by Ordinance No. 946. After its adoption the comprehensive plan was reviewed for consistency with statewide land use planning goals and guidelines as it relates to HB 2001 and implementation of Gladstone's Downtown Revitalization Plan. That review process resulted in minor revisions to the Gladstone Comprehensive Plan in order to be consistent with the required amendments to the development code.

Amendments

The text of the Gladstone Comprehensive Plan is amended in the following respects:

- A. At page 5, the Low Density Residential section is amended to be read as follows:
"Appropriate uses include, but are not limited to, single-household and middle housing dwellings, churches, schools, day-care centers, community centers, nursing homes, home occupations, and similar uses."
- B. At page 5, the Medium Density Residential section is amended to be read as follows:
"Appropriate uses include, but are not limited to, single-household, middle housing, and five-to-eight multi-household dwellings, mobile home parks,

professional offices, schools, parks, community and day-care centers, churches, nursing homes, home occupations, and similar uses.”

- C. At page 5, the High Density Residential section is amended to be read as follows:

“High density areas may offer a wide range of housing opportunities.”

- D. At page 6, the Commercial section is amended by removing the following paragraph:

“Certain classes of commercial land uses may not be compatible with a residential environment, particularly single family dwellings. Efficiency and convenience to users should be emphasized. Ordinarily residential and commercial land uses are considered incompatible unless proper and careful design treatment is provided.”

- E. Throughout the Comprehensive Plan, all references to “family” to describe housing occupancy types are replaced with “household.”