

February 23, 2022

Mr. Gary Schmidt

County Administrator Clackamas County 2051 Kaen Road Oregon City, Oregon 97045 gschmidt@clackamas.us

Project: The North End, Oregon City

RE: Clackamas County Financial Support

Dear County Administrator Schmidt,

First and foremost, I greatly appreciate the time the elected officials and administrative personnel of Clackamas County have taken to engage us in discussions on this potentially transformative project for Oregon City, Clackamas County, and State of Oregon. The intent of this letter is to formally request technical and financial support in bringing this development to realization. This document generally outlines the information already provided to date which highlights the project description, what the benefits are of the project, what our project team has accomplished in moving the development forward, what challenges we are currently trying to overcome, and how we see the County as a project team partner and economic development facilitator in pursuing resolution.

This proposed development is located on approximately 62 acres of the Rossman Landfill in Oregon City at the north end of the Mixed-Use Downtown zoning district, hence the current project title of "The North End" (www.northendorcity.com). We envision our project as a northern anchor for a larger city and county economic impact area that includes Oregon City's Downtown, the Blue Heron site as a southern anchor and even the McLaughlin Boulevard Corridor to the north.

As currently entitled under Oregon City's General Development Plan GLUA 21-000016, the project will include (in no particular order):

• 1,091,698 GSF of buildings including multifamily housing, boutique and large format retail, and entertainment uses;



- 524 apartment units (final number to be between 500 and 600 units);
- Major upgrades to Washington Street, Abernethy Road and Redland Road complying with the City's TSP;
- Retaining walls to address hazardous slope conditions on the landfill;
- A central plaza for community gatherings;
- Eight public art pieces;
- A path connection to the End of the Oregon Trail Interpretive Center;
- 10' wide shared-use path across the entire site per City's TSP;
- City easements to all developer built and maintained utilities; and
- Approximately 6 acres of protected wetlands (Natural Resource Overlay District) and natural infiltration area.

The benefits of the North End project are both qualitative and quantitative. Generally, we are taking a currently non-productive, environmentally impacted brownfield and not only creating a regional economic center, but resolving the remediation, maintenance, and monitoring of the potential environmental impacts to the larger community. Economically, this project is forecasted to:

- Generate 1.77M visitors annually;
- Create 3,061 construction related jobs;
- Create 988 full/part time jobs when operational;
- \$153.9M in direct labor income;
- \$77.1M in annual gross economic activity;
- \$33.8M in labor income from new jobs;
- \$115M in annual gross receipts;
- \$3.3M in annual property taxes for our site alone;
- \$366K in local construction excise taxes; and
- A ripple effect of new development on the larger area noted above.

In terms of progress to date, we have been working on this development for over two years. During that time, we have completed our General Development Plan (GDP) master plan application and received unanimous approval from the Planning Commission on July 26, 2021. Even more impressively through our proactive engagement of over 50 community leaders, we were able to accomplish this without any appeals of the application.

In addition, we have executed with the Oregon Department of Environmental Quality a Prospective Purchaser Agreement which requires prefunding a property trust for 30 years to



oversee the monitoring, maintenance and reporting of the water quality wells and methane gas mitigation systems on site, while allowing us to limit the financial exposure to future investors and lenders. It is not only a significant sustainable solution for the City and County, but it also helps us foster interest/involvement from future investors and lenders as well as commercial tenants.

All of our work has brought us to today's crossroad. Prior to proceeding further with the financing and permitting of this development, we need to address the significant financial shortfall which currently forecasts this development as a negative private investment opportunity due to the restrictions surrounding construction on a landfill.

As the nature of this site is both a brownfield or environmentally blighted site, and a geotechnical hazard with settlement and slope concerns, the development of this landfill will never be financially feasible without public funding. As of April of 2021, the delta between the cost to realize this development and the value at completion was a negative value of \$35,867,084. With current escalation in construction material and labor as well as increasing interest rates, we expect the required public funds to be \$40M in order to secure the private equity and debt to finally and formally execute this development. Above and beyond the design and construction of a typical greenfield site, some of the additional costs this large brownfield site will incur are:

- Methane gas collection system under all buildings and hardscape;
- Water quality monitoring wells;
- Surcharging, or compaction of the trash layer, of the entire site;
- Structural piles for all buildings as well as roads and utilities;
- On-site storm water tanks for the collection and controlled distribution of all runoff; and
- The 30-year monitoring, maintenance and reporting of all environmental safety systems.

What are we asking of the County?

As stated above, this development requires \$40M in public funds in order to occur. It is our understanding that funds for this type of public-private partnership may be available from the following sources:

• U.S. EPA Brownfields Funding – application through Clackamas County



- Clackamas County ARPA Funds
- Clackamas County Road Funds
- Clackamas County Lottery Funds

As it relates to the Bipartisan Infrastructure Law, the EPA has been granted \$1.5B specifically to invest in their Brownfield Program. This program is accessible only to "communities, states, tribes and non-profits". We are in the process of assessing the appropriate consultant to assist with the generation of this grant application, and which grants to pursue, but respectfully request that the County consider submitting this application on our behalf.

For the American Rescue Plan Act (ARPA), Coronavirus State and Local Fiscal Recovery Funds (CSLRF) and the interim final rule (IRF), it is our understanding that the four broad categories of use of these funds are public health and economic impacts, premium pay, revenue loss, and investments in infrastructure. This is a potential project which positively impacts the majority of these categories by:

- Cleaning up a site with potential contaminants of the community's water and air;
- Creating solid paying jobs both during construction and long term;
- Providing tremendous economic opportunity and tax generation (including as noted the ripple effect beyond the landfill site);
- Improving the storm water system on and off the site;
- Infrastructure improvement to a number of roads and multi-use pathways;
- Potentially solar energy generation, storage, and EV charging.

For whatever portion of the \$40M we are unable to secure through Federal, State and County programs, we will be submitting an application to Oregon City for Urban Renewal District funding (The North End is currently located within the City's URD).

As with most major projects, time is of the essence. We have until April 2023 to complete the purchase of the property. Also, the City is currently reviewing its Urban Renewal policy and application process, which is to be brought to a public vote most likely in November 2022.

Summit needs to secure financing to supplement the potential Urban Renewal funds that we intend to apply to the brownfield elements and infrastructure improvements. Most importantly, if supplemental funding becomes available and committed with your support, we can be moving dirt by the Spring of 2023. We have selected a general contractor and are working through the



means and methods, phasing should this occur. We ask that you assist in identifying economic development funds that may be available to the County which can be directed to this endeavor.

Thank you for taking the time to review and assess this request, and we look forward to the opportunity to discuss with you in detail.

Regards,

Seth W. Henderson

President

Summit Development Group

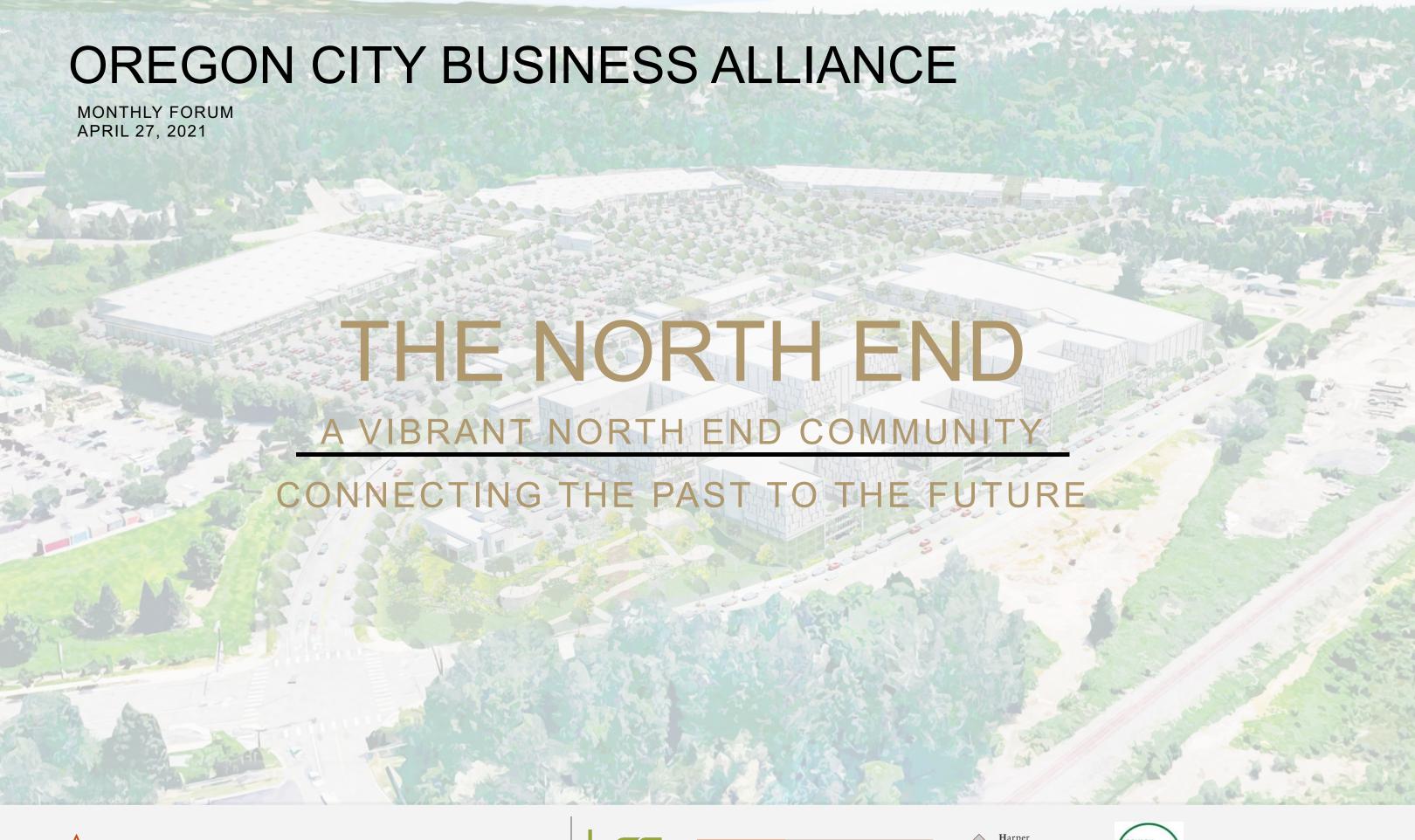
Cc: Tony Konkol, Oregon City

James Graham, Oregon City

Chris Marsh, Summit

Attachments:

OCBA Forum Meeting Presentation dated 04.27.2021
General Development Plan Application by LRS Architects dated 03.17.2021
GLUA 21-000016 Notice of Decision by Oregon City dated 07.27.2021
The North End Economic Summary
ECONorthwest Economic Feasibility Analysis dated 04.02.2021
Bipartisan Infrastructure Law EPA Brownfields Program Grants













MEETING AGENDA

- 1. SDG "WHO WE ARE" | SETH HENDERSON
- 2. INTRODUCTION OF TEAM | JOHN FALCONER
- 3. MASTERPLAN + PROGRAM | GREG MITCHELL
- 4. LANDSCAPING + OPEN SPACE | KURT LANGO
- 5. CIVIL ON SITE IMPROVEMENTS | BRAD KILBY
- 6. ENVIRONMENTAL IMPROVEMENTS | ERIC
 ARONSON
- 7. TRANSPORTATION OFF SITE IMPROVEMENTS |
 PHILL WORTH
- 8. QUESTIONS AND ANSWERS PROJECT TEAM















WHO WE ARE





Seth Henderson, PMP, CCM, LEED AP President

- +25 years experience
- Public and Private sectors, including high tech, healthcare, multifamily, retail, and commercial office
- Brownfield specific site experience
- Experienced as a general contractor, construction manager, owner's representative, operations manager, and developer



John Falconer, AIA VP Design & Development

- 30 years experience
- Commercial Office, High-Tech, Retail, Life-Science, Educational, Multi-Family and Corporate Campus buildings
- Brownfield specific site experience
- Experience with Local, State & Federal permitting agencies
- Experienced as a commercial Architect and developer



Brookside Apartments



808 on Alder



Block 3, Vancouver



503 on Tenth



The North End













KEY DESIGN TEAM PARTNERS





Greg Mitchell – Associate Principal

- +35 years experience
- Happy Valley Retail Center
- Timberland Retail Center, Cedar Mills

lango.hansen

LANDSCAPE ARCHITECTS PC



Kurt Lango – Principal

- +30 years experience
- Portland's Conway District
- Numerous Parks in Oregon City





Brad Kilby – Planning Manager

- 24 years experience
- Portland Waterfront
- Vancouver Waterfront





Eric Aronson

- 22 years experience
- PH I, Cove Project, Oregon City
- · Rossman Landfill, Oregon City





Phill Worth

- 33 years experience
- Bridgeport Village, Tigard
- O.C. Transportation System Plan







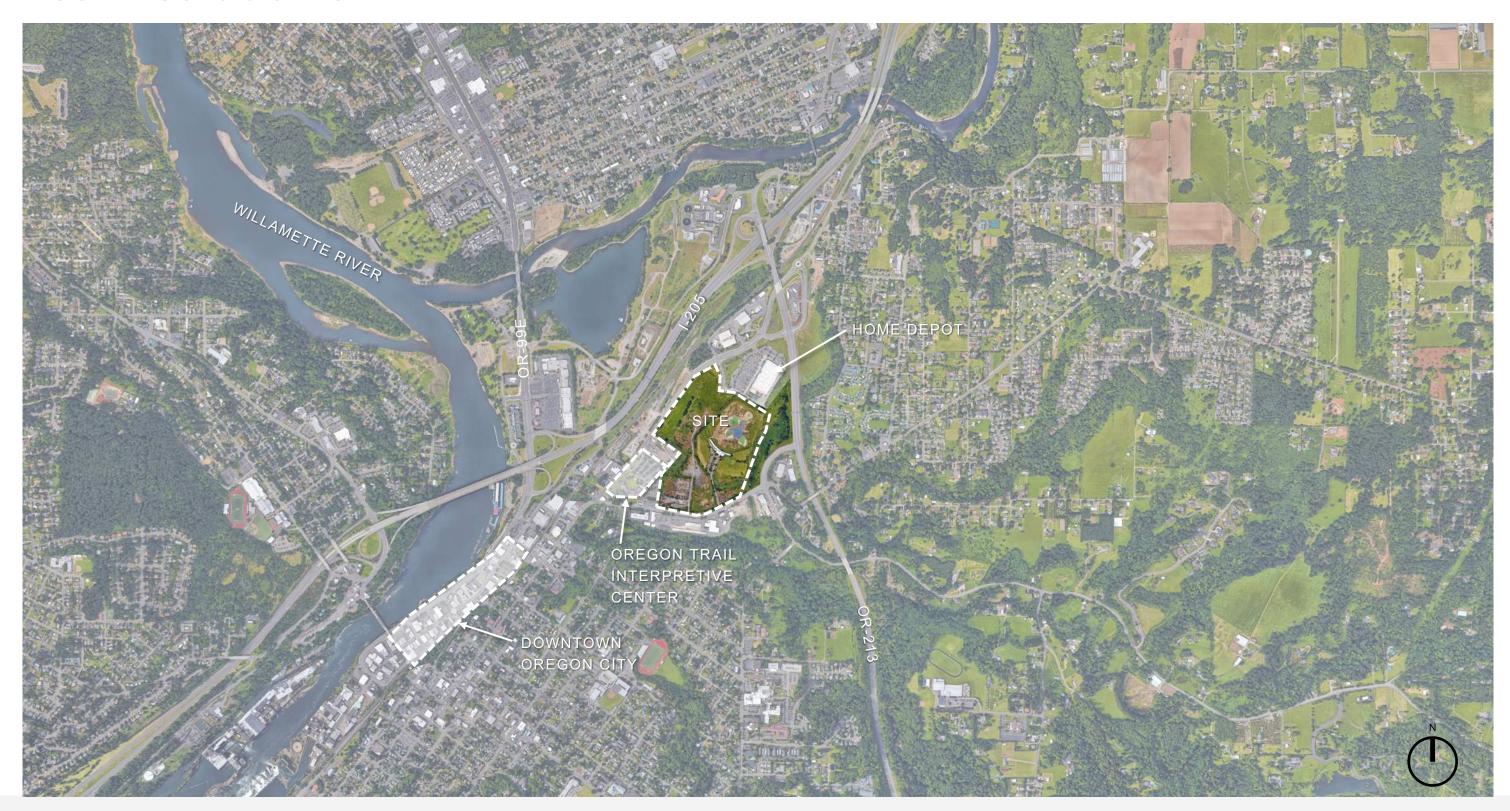






LOCATION MAP

DESIGN + DESIGN OBJECTIVES







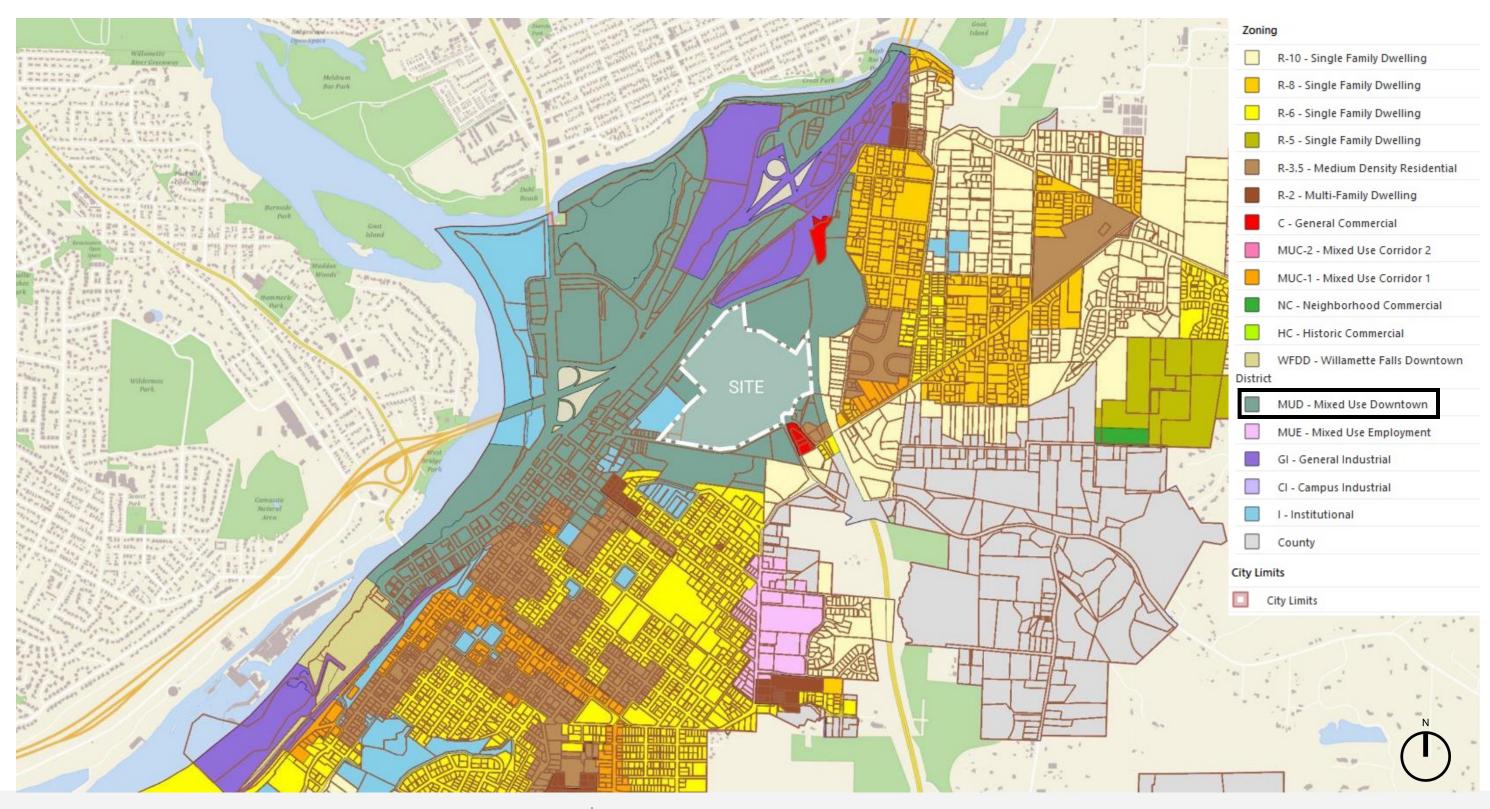








ZONINGSITE CONSTRAINTS













EXISTING CONDITIONS MAP DESIGN + DESIGN OBJECTIVES











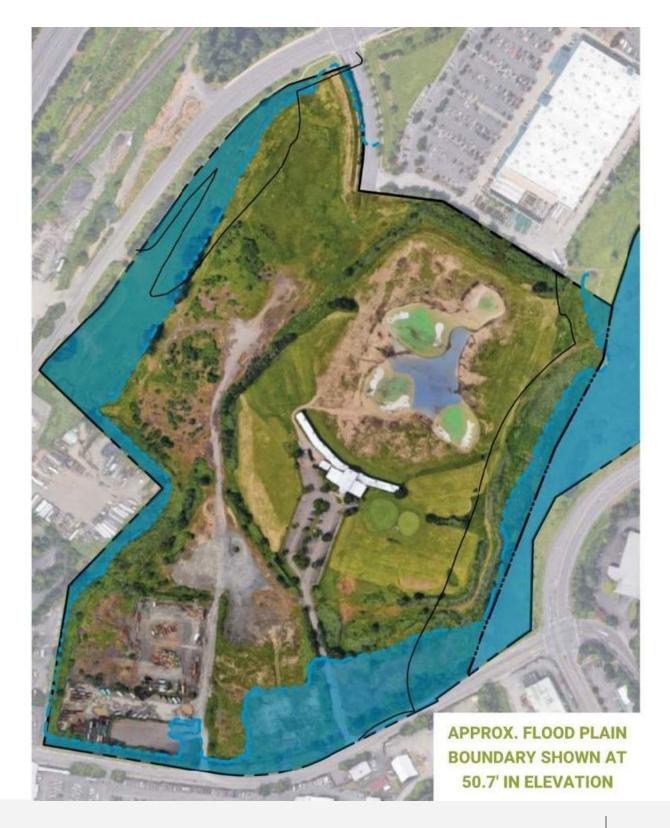






FLOOD PLAIN + IMPACTED AREAS

SITE CONSTRAINTS



















SITE PLAN

DESIGN + DESIGN OBJECTIVES



Proposed Program:

- North District
 - 61,000sf Retail
 - 81,800sf Family Entertainment
 - 490,000sf Housing (~500 units)
- East District
 - 155,800sf Retail
- Central District
 - 140,800sf Retail
- South District
 - 162,300sf Retail















SITE AERIAL VIEW

DESIGN + DESIGN OBJECTIVES















MULTI-MODAL PATHWAYS

DESIGN + DESIGN OBJECTIVES









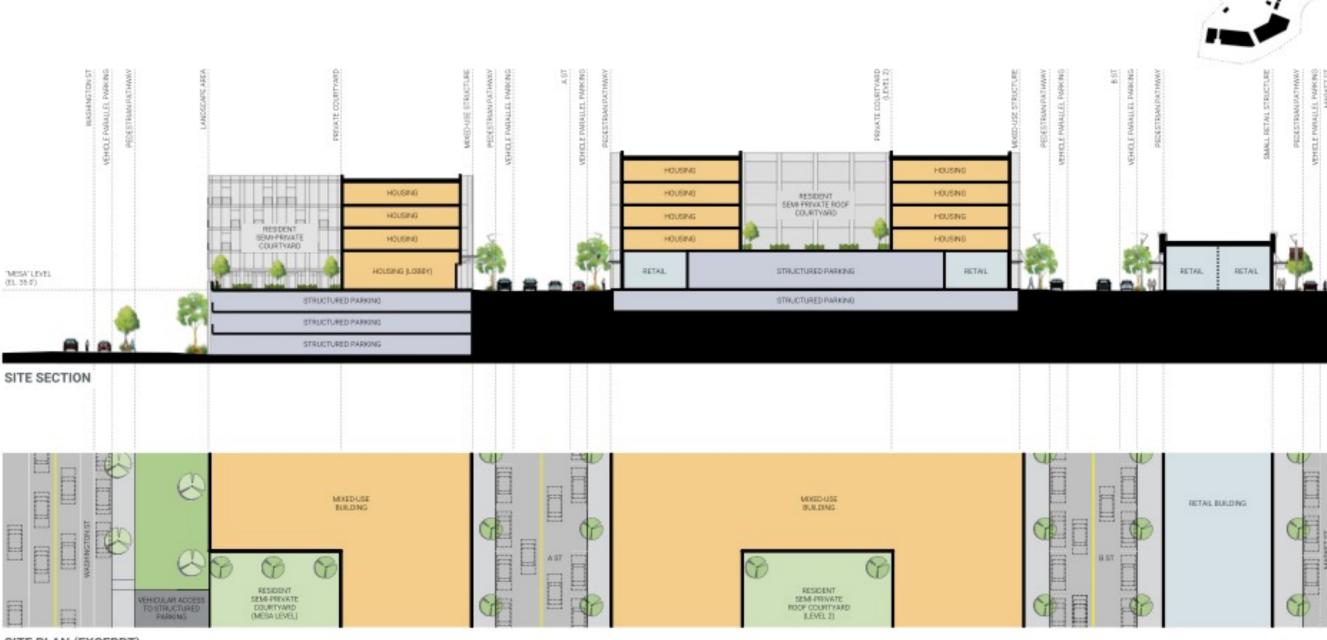




SITE SECTION LOOKING EAST & WEST

DESIGN + DESIGN OBJECTIVES

SITE SECTION A-A

















PROPOSED INTERNAL STREET VIEW

DESIGN + DESIGN OBJECTIVES















PROPOSED INTERNAL STREET VIEW

DESIGN + DESIGN OBJECTIVES















MARKET STREET DESIGN + DESIGN OBJECTIVES















MARKET STREET DESIGN + DESIGN OBJECTIVES

















PUBLIC OUTDOOR AREAS DESIGN + DESIGN OBJECTIVES

















PROPOSED INTERNAL PEDESTRIAN STREET VIEW

DESIGN + DESIGN OBJECTIVES



lango.hansen











CENTRAL SQUARE LANDSCAPING + OPEN SPACE

















VERTICAL PARK AND POCKET PLAZAS

LANDSCAPING + OPEN SPACE

















PEDESTRIAN WAY LANDSCAPING + OPEN SPACE

















PROPOSED PEDESTRIAN PROMENADE

DESIGN + DESIGN OBJECTIVES















PARKING AND STORMWATER

LANDSCAPING + OPEN SPACE



















SITE BACKGROUND



- The landfill operated from 1969 to 1983 and received approximately 60 percent of the residential solid waste generated in the Portland Metropolitan area.
- Property owned by Park Place Development.
- Numerous environmental investigations conducted under DEQ oversight.
 - Closure feasibility study completed in 1992.
 - DEQ Closure Permit issued in 1993.
 - 2009 landfill gas investigation
 - 2017 Focused Feasibility Study
- Environmental costs initially funded by a trust fund. Those funds were exhausted in 2001.
- The 2017 Focused Feasibility study assessed current landfill gas and groundwater impacts from the landfill. Impacts to groundwater, as monitored at perimeter of landfill are minimal.











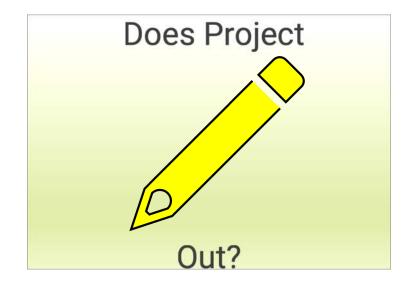






BROWNFIELD REDEVELOPEMENT

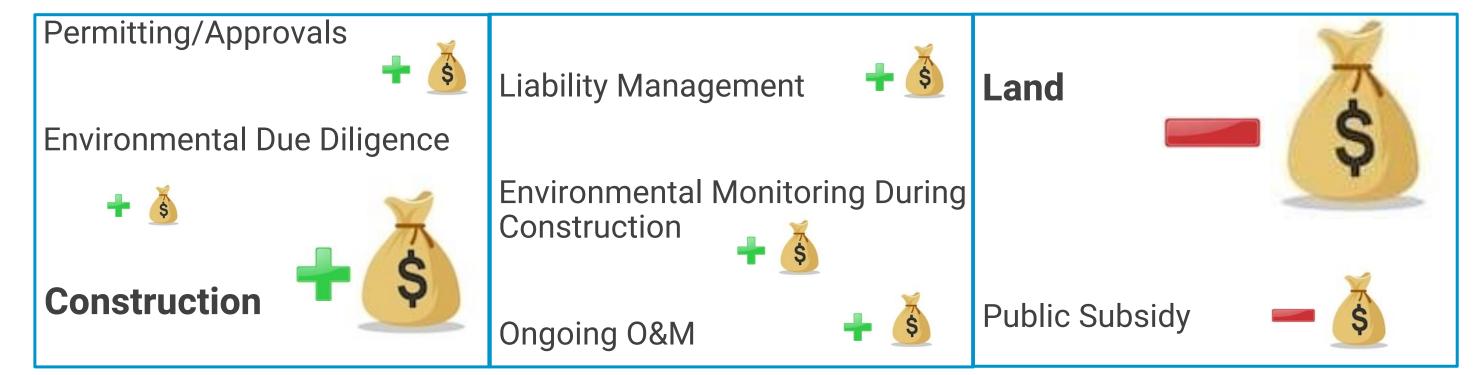




Community Benefits/

Manage Environmental Issues

Increased New The Offset















Brownfield Redevelopment



Astoria Landfill









LANDSCAPE ARCHITECTS PC





CONSTRUCTION CHALLENGES

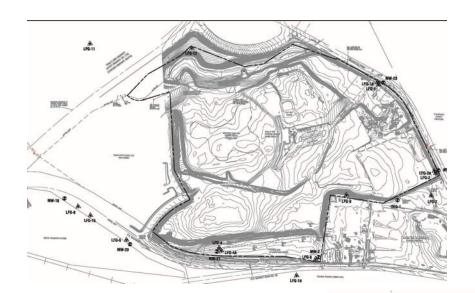
ARONSON ENVIRONMENTAL

ENCINEERING
CONSULTING
GIS SERVICES

Existing topography

Ongoing settling

Specialized foundations systems



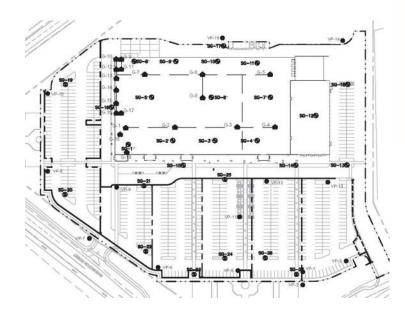
Stormwater management

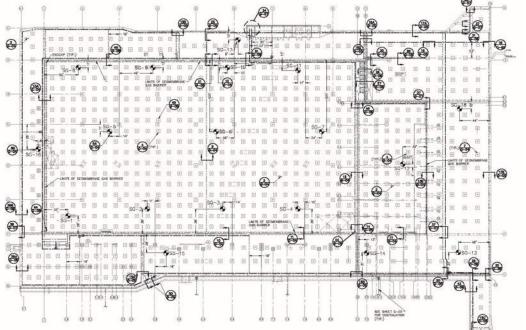
Utilities / Utility Trenches

Maintain cap/Impervious Surfaces

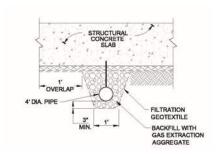
Building protection systems

Subsurface extraction and monitoring

























SDG to establish a Trust Fund, that will be used to fund 30-years (through 2056) of the ongoing environmental compliance and remediation work.

Not paid by the Trust Fund.

Engineering controls and remediation systems that improve the existing site conditions.

- Landfill gas management and monitoring systems will provide building protection and prevent off-property migration.
- Improvements to the landfill cover
- Stormwater will be treated on-site and discharged to off-property stormwater system.
 - Reduce the amount of leachate generated by the landfill.

SDG will conduct additional monitoring to assess landfill gas emissions, assess landfill gas migration, and groundwater quality.













TRANSPORTATION IMPROVEMENTS IN ANTICIPATION OF GROWTH

HWY 213 "JUGHANDLE" PROJECT

BEFORE (2011)



AFTER (2013)









LANDSCAPE ARCHITECTS PC





SITE-RELATED TRANSPORTATION IMPROVEMENTS















CITY REQUIREMENTS FOR TRANSPORTATION

CITY REQUIRES STUDY TO DETERMINE IMPACTS OF DEVELOPMENT

WHAT WILL THIS STUDY EXAMINE?

- Crash History
- Continuity of Multimodal Facilities (gaps and barriers)
- Operations of Intersections

WHAT CONDITIONS WILL BE STUDIED?

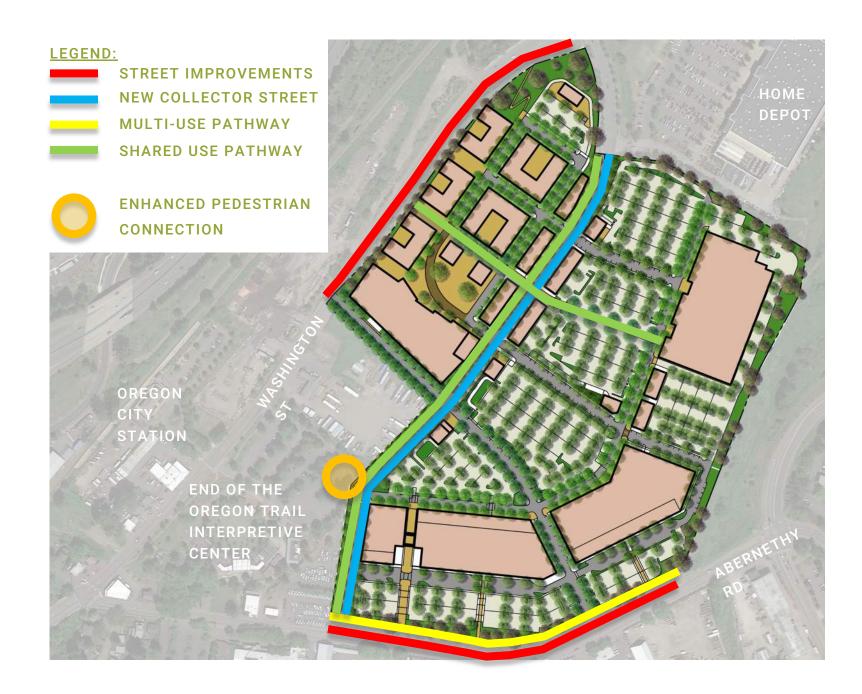
- Year 2020 (Pre-COVID) Conditions
- Year 2025 Conditions Without Development
- Year 2025 Conditions With Development

WHICH INTERSECTIONS WILL BE STUDIED?

25 Intersections (see map)

WHAT ELSE WILL BE DONE?

- Street Frontage Improvements to Washington and Abernethy
- Construction of a City Collector Street Through the Site (TSP Project)
- Construction of Two Shared Use Facilities Through the Site (TSP Project)
- Construction of a Shared Use Facility Along Abernethy (TSP Project)







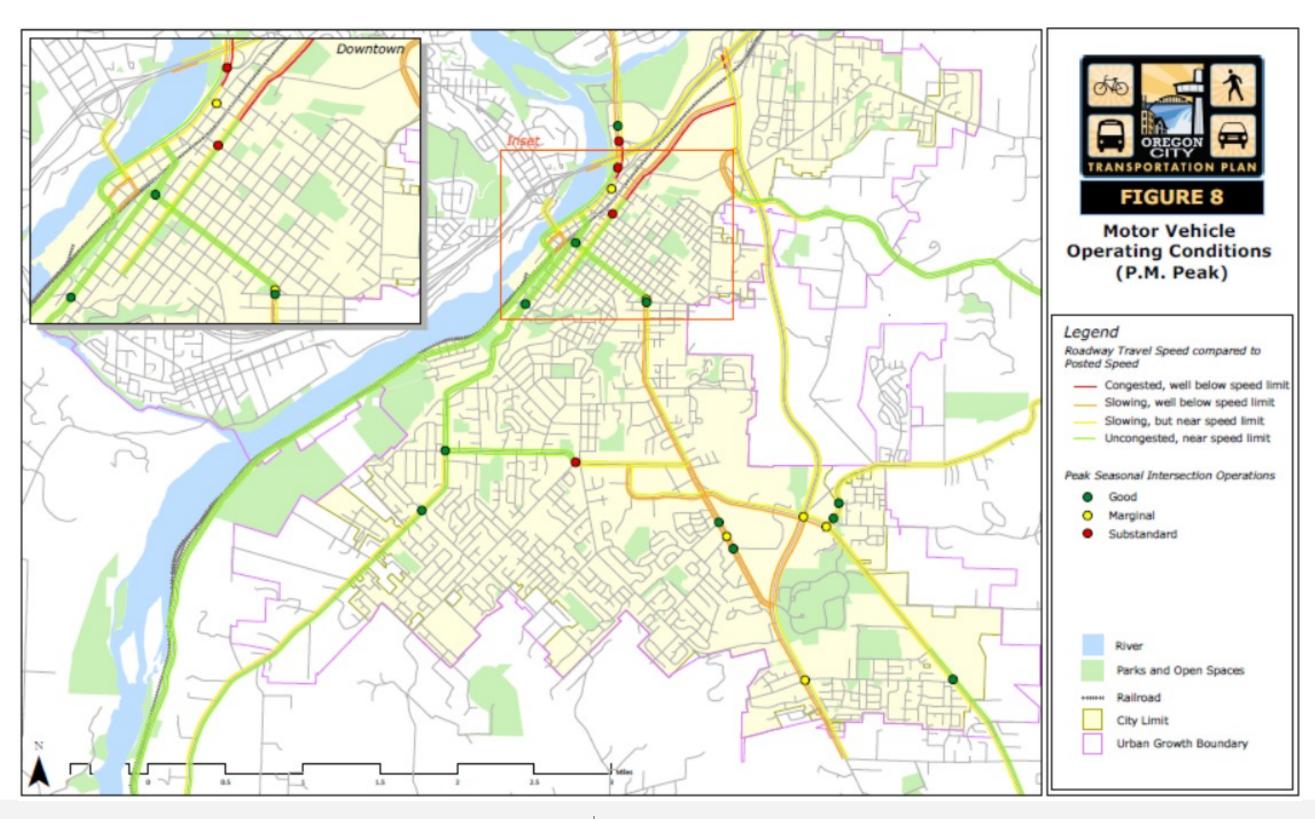








TRANSPORTATION SYSTEM PLAN STUDY INTERSECTIONS









lango.hansen

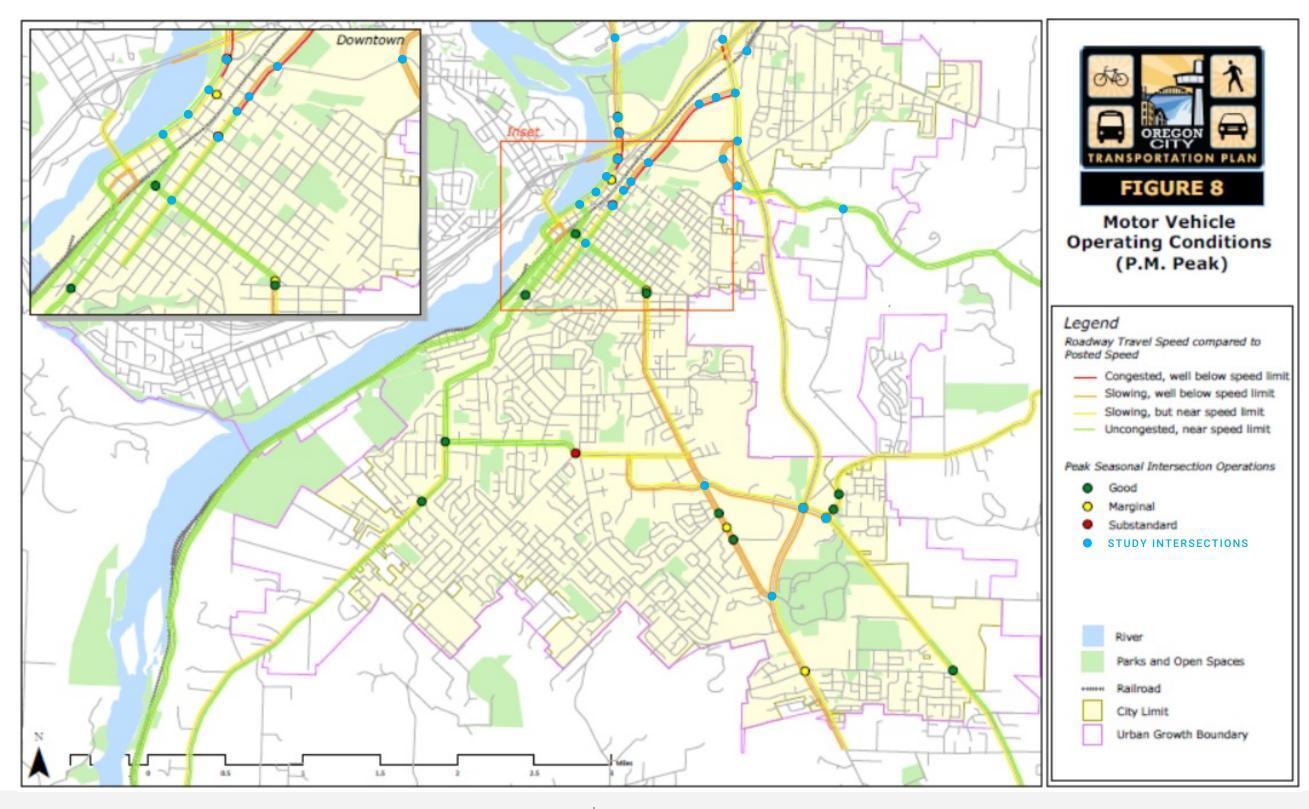






TRANSPORTATION IMPACT ANALYSIS

STUDY INTERSECTIONS





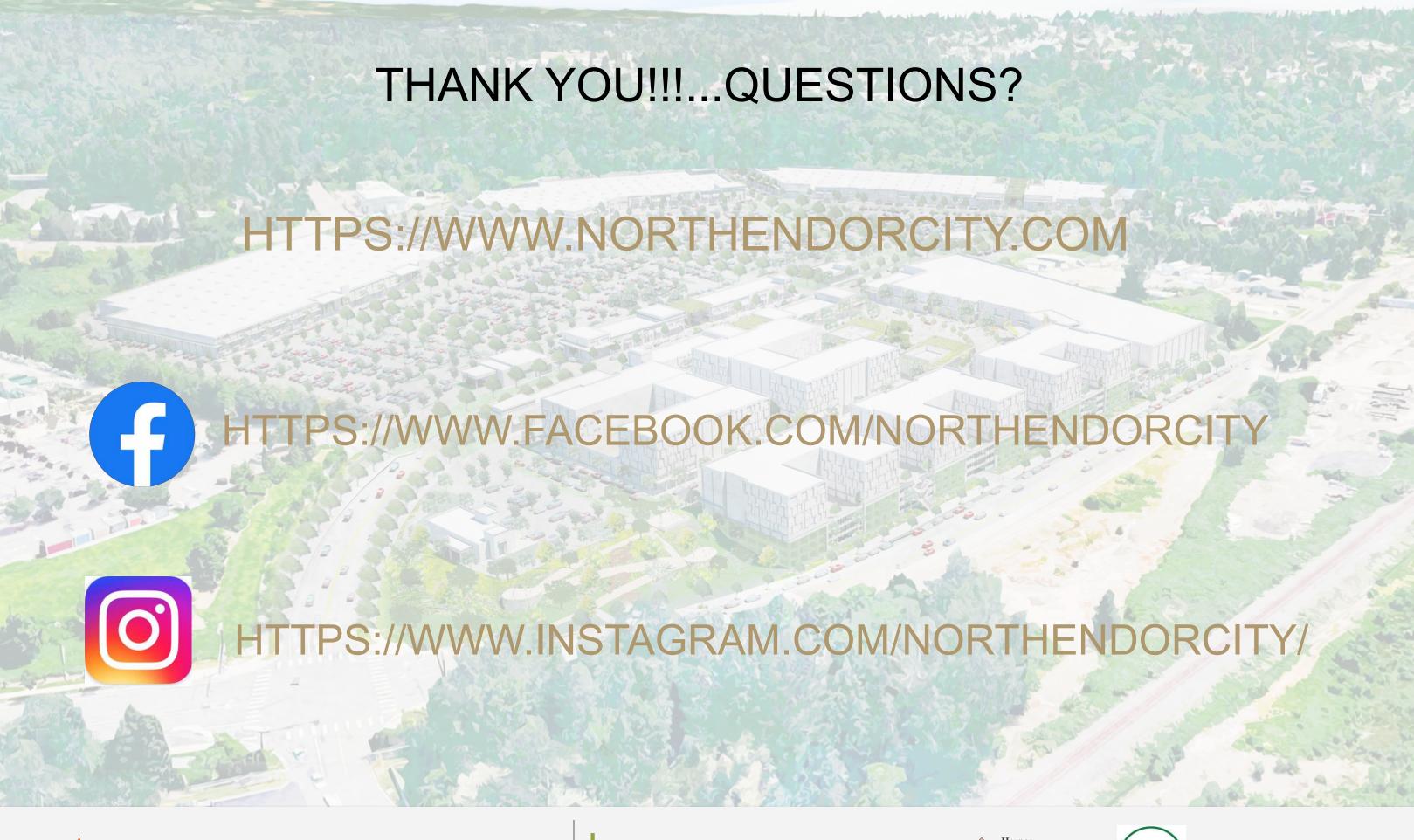






















THE NORTH END | GENERAL DEVELOPMENT PLAN APPLICATION







PROJECT INFORMATION / TABLE OF CONTENTS

2 |

PROJECT DESCRIPTION

OCLD, LLC

Master Plan Concept

Planning Project Number: PA 20-11 Address: 1105 Abernethy Road Map Number(s): 2-2E-29 Tax Lot(s): 00902

Tax Lot(s): 00902 Property Size: 62.2 Ac Zoning: Mixed Use Downtown (MUD)

Overlay Districts: Natural Resource, Geologic Hazard, and Flood Management Proposal Summary:

Summit Development Group is seeking approval of a vibrant mixed-use development at the north end of the Oregon City Downtown. The plan envisions a 20-year road map to redevelop the former Rossman Landfill with a complete live-work neighborhood connected to the downtown.

PROJECT TEAM

OWNER - Summit Development Group

Seth Henderson, President 503-720-3601 | shenderson@sdgpdx.com

John Falconer, AIA, VP Design & Development 925-262-3247 | jfalconer@sdgpdx.com

Marty Surby, Director of Development 971-269-9916 | msurby@sdgpdx.com

Kevin Clark, Director of Development 925-216-9954 | kclark@sdgpdx.com

LAND USE ATTORNEY - Radler White Parks & Alexander

Christie White 971-634-0200 | cwhite@radlerwhite.com

ARCHITECT - LRS Architects

Greg Mitchell, Associate Principal 503-810-1061 | gmitchell@lrsarchitects.com

Robert (Bob) Boileau, Architect/Planner 971-242-8180 | rboileau@lrsarchitects.com

PLANNER/CIVIL ENGINEER - HHPR

Brad Kilby, AICP, Senior Planner 503-221-1131 | bradk@hhpr.com

Dan Loss, PE, Project Manager 503-221-1131 | daniell@hhpr.com

LANDSCAPE ARCHITECT - Lango Hansen

Kurt Lango 503-724-1878 | kurt@langohansen.com

TRAFFIC ENGINEER - Kittelson & Assoc Inc

Phil Worth 503-228-5230 | pworth@kittelson.com

GEOTECHNICAL ENGINEER - GeoDesign

Ryan Lawrence 503-593-5346 | rlawrence@geodesigninc.com

M/E/P CONSULTANT - MKE & Assoc

Steve Lockhart, PE 503-892-1188 | stevel@mke-inc.com

STRUCTURAL CONSULTANT - Holmes Structures

Eric McDonnell 503-850-9132 | eric.mcdonnell@holmesstructures.com

DEQ ENVIRONMENTAL CONSULTANT - Aronson Environmental

Eric Aronson 503-819-7611 | Eric@AronsonEnvironmental.com

WETLANDS ENVIRONMENTAL CONSULTANT - Pacific Habitat Services Inc

John van Staveren, PWS 503-570-0800 | jvs@pacifichabitat.com

ENVIRONMENTAL ATTORNEY - Schwabe Williamson & Wyatt

Michael Robinson 503-796-3756 | mrobinson@schwabe.com

TABLE OF CONTENTS

1.	Project Introduction	3 -
2.		5 - 4
	CHAPTER 17.65: MASTER PLANS AND PLANNED UNIT	
	DEVELOPMENT	
	CHAPTER 12.04: STREETS, SIDEWALKS, AND PUBLIC	
	SPACES	
	CHAPTER 12.08: PUBLIC AND STREET TREES	
	CHAPTER 13.12: STORMWATER MANAGEMENT	
	CHAPTER 15.48: GRADING, FILLING AND EXCAVATING	1
	CHAPTER 16.08 LAND DIVISIONS: PROCESS AND	
	STANDARDS	1
	CHAPTER 16.12: MINIMUM PUBLIC IMPROVEMENTS AND	
	DESIGN STANDARDS	1
	CHAPTER 17.34: MIXED USE DOWNTOWN	3
	CHAPTER 17.41: TREE PROTECTION, PRESERVATION,	
	REMOVAL AND REPLANTING STANDARDS	3
	CHAPTER 17.42: FLOOD MANAGEMENT OVERLAY ZONE	
	CHAPTER 17.44: GEOLOGIC HAZARDS OVERLAY ZONE	
	CHAPTER 17.47: EROSION AND SEDIMENT CONTROL	3
	CHAPTER 17.49: NATURAL RESOURCE OVERLAY ZONE	
	CHAPTER 17.52: OFF-STREET PARKING AND LOADING	4
	CHAPTER 17.54: SUPPLEMENTAL ZONING REGULATIONS	
	CHAPTER 17.56: CONDITIONAL USES	4
3.	Existing Conditions	47 - 5
	Narrative Statement	
	Infrastructure Facilities and Capacities	
	Maps and Plans	
4.	Proposed Development	60 - 8
	Narrative Statement	
	Maps and Diagrams	
5 .		
	Street Design Guidelines	
	Landscape Guidelines	
	Open Space Guidelines	
	Site Lighting Guidelines	
	Building Guidelines	10

Appendices

A | Preliminary Storm Water Calculations

B | Full-Scale Civil Drawings

C | Transportation Impact Analysis

D | Geotechnical Report

E | Natural Resources Overlay District Removal Exhibit

F | Pre-Application Conference Notes - 12.29.20

G | Title Report

H | Tax Receipts





Introduction

The North End Master Plan is a proposed master plan to redevelop the former Rossman Landfill with a mixed-use development. The plan has been carefully designed to promote a sense of place at the north end of the Oregon City Downtown. This land use application is a request to approve the General Development Plan (GDP). The GDP will be subsequently implemented through future discretionary reviews that will be guided by this development plan.

Therefore, this application does not include a request for approval of a Detailed Development Plan (DDP) currently. Once approved, the GDP will vest future development within the master plan area under the current code provisions to assure long term regulatory certainty and a high level of predictability for future tenants and developers within the master plan area.

The GDP provides a detailed framework for development within the master plan area over the next 20 years; although build out of the site is anticipated to occur over the next 5 years or so. The plan has been developed under the applicable chapters of the 2021 version of the Oregon City Municipal Code as discussed in **Chapter 2: Narrative Response**.

Because the GDP vests development for the 20-year life of the GDP, future DDP requests will also be reviewed under the 2021 code and the supplemental design guidelines and conditions of approval of the GDP.

This balanced approach ensures that the quality of the architecture, including massing, forms, and materials, will contribute to a distinctive design that creates the overall identity for the project. Landscaping, site amenities, lighting, and wayfinding will be unified throughout the site to support the project's sense of place.

Existing Conditions and Background

The subject site is located at 1105 Abernathy Drive in Oregon City, Tax Lot Number 2-2E-29-00902. The property is currently zoned Mixed-Use Downtown and is located outside of the historic downtown overlay but is located within the Urban Renewal District. The site is located over the top of the Rossman Landfill, and includes land that is identified in the City's Natural Resource Overlay District (NROD) due to the presence of Abernethy Creek and wetlands that have been identified on the site. The site also includes areas within the Geologic Hazard Overlay Zone for the presence of slopes over 10%; and lands that are impacted by the 100-year floodplain. These and other relevant conditions are discussed in **Chapter 3: Existing Conditions** of this document.

Proposed Development

Summit Development Group seeks approval of The North End Master Plan, a mixed-use GDP to redevelop the site with a mix of commercial, service, entertainment, residential, and retail uses as depicted in the master plan. The plan envisions a transformation of the former landfill to a lively, integrated mixed-use development that will not only complement the downtown, but serve as a primary gateway to the north end of the Oregon City Downtown. The master plan features tree-lined streets, landscaped open spaces, offices and residences overlooking public plazas and open spaces, and will feature a wide variety of shopping, dining, and entertainment experiences. The North End Master Plan and Design Guidelines are intended to integrate design elements of downtown Oregon City into the development are discussed in detail in **Chapter 4: Proposed Development** and **Chapter 5: Master Plan Design Guidelines**.

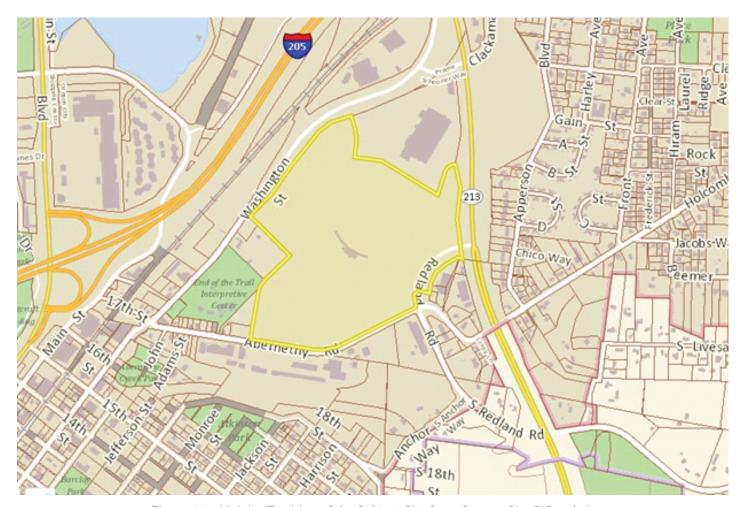


Figure 1.1 - Vicinity/Tax Map of the Subject Site from Oregon City GIS website



4

This page intentionally left blank.





THE NORTH END

2 - NARRATIVE RESPONSE

5







Chapter 17.65: Master Plans and Planned Unit Development

17.65.010: Purpose and Intent

It is the intent of this chapter to foster the growth of major institutions, phased residential, commercial or mixed-use development, and other large-scale development, while identifying and mitigating the impacts of such growth on surrounding properties and public infrastructure. The city recognizes the valuable housing options, services and/or employment opportunities that these developments bring to Oregon City residents. The master plan or planned unit development process is intended to facilitate an efficient and flexible review process for major developments, support innovative and creative land development, and to provide long-term assurance to plan for and execute developments in a phased manner. To facilitate this, the master plan process is structured to allow an applicant to address larger development issues, such as adequacy of infrastructure and transportation capacity, and reserve capacity of the infrastructure and transportation system before expenditure of final design costs. The master plan or planned unit development process is further intended to promote efficiency in land development, maintenance, street systems and utility networks while providing site layouts that integrate usable and attractive open spaces, site circulation, and the general wellbeing of site users. For the purposes of this chapter planned unit developments are considered the same as master plans.

Response:

The North End Master Plan meets the purpose and intent of this Chapter by developing the 62-acre former Rossman Landfill site with a large-scale mixed-use development into a complete community with commercial, retail, entertainment, and residential uses. This application is for approval of a GDP (GDP). The North End Master Plan is the foundation for a thriving, mixed-use development at the north end of downtown Oregon City. It provides a framework for future development of the site by defining on site uses that are anticipated to be developed over the life of the plan, needed extensions of community infrastructure including sewer, water, and transportation, and open space to serve the development, and off-site infrastructure improvements needed to mitigate impacts associated with complete build out of the master plan.

17.65.020: What is Included in a Master Plan or Planned Unit Development A. A master plan or planned unit development is a two-step process that includes a General Development Plan and a detailed development plan. A General Development Plan incorporates the entire area where development is planned for up to the next twenty years from the date of final approval, including the identification of one or more development phases. The General Development Plan may encompass land that is not currently under the applicant's control, but which eventually may be controlled by the applicant during the duration of the master plan. The plan shall have no effect for lands not currently controlled by the applicant. "Controlled" shall be defined as leased or owned by the applicant. A detailed development plan is the phase or phases of the General Development Plan that are proposed for development within two years.

B. A master plan or planned unit development identifies the current and proposed uses of the development, proposed project boundaries, and

proposed public and private infrastructure needed to serve the development. If approved, the General Development Plan may be used to allow existing legal non-conforming uses. If conditions of approval from a previous land use decision have not been completed, they shall be modified through the General Development Plan or completed with new development.

C. A master plan or planned unit development identifies future development impacts, thresholds for mitigation and mitigation improvements and implementation schedules. A threshold for mitigation is the point that determines when or where a mitigation improvement will be required. Examples of "thresholds" include vehicle trips, square feet of impervious surface area, water usage measured in gallons per minute, construction of a building within a General Development Plan and construction of a building within a certain distance of a residential lot.

Response:

This is a request for approval of The North End master plan GDP. The GDP identifies the proposed uses within the development as discussed below, the project boundary and proposes both public and private infrastructure such as transportation and utility service. The GDP includes a detailed analysis of the site and anticipated impacts from the development. Where applicable, the applicant's design team has proposed mitigation to off-set the impacts of the development. Although a phasing plan has not yet been developed, public and private improvements are expected to be constructed with Detailed Development Plans over the life of the master plan.

17.65.030: Applicability

- A. Required for Large Institutional Uses. If the boundaries of an institutional development exceed ten acres in size, the proposed development shall be master planned using the regulations of this chapter. No land use review other than a Type I or II Minor Site Plan and Design Review shall be issued for any institutional development in excess of ten acres in total acreage unless it is accompanied by or preceded by a master plan approval under this chapter. This requirement does not apply to modifications to existing institutional developments unless the modification results in a cumulative square footage increase of over ten thousand total building square feet in an existing institutional development over ten acres.
- B. When Required as Part of Previous Land Use Review. The master plan or planned unit development regulations may be used to fulfill a condition of approval from a previous land use decision-requiring master planning for a development.
- C. When identified in the Oregon City Comprehensive Plan. The master plan regulations are required for all properties identified for master planning in the land use section of the Oregon City Comprehensive Plan.
- D. Voluntarily. An applicant may voluntarily submit a master plan or planned unit development as part of a land use review, including for residential projects.

Response

In this instance, Summit Development Group is the applicant and prospective purchaser of the property. Summit Development Group is voluntarily requesting that the site be developed under the master plan provisions of the Oregon City Development Code as provided in subsection D above.

17.65.040 - Procedure

- A. Preapplication Review. Prior to filing for either General Development Plan or detailed development plan approval, the applicant shall file a pre-application conference pursuant to OCMC 17.50.030.
- B. General Development Plan. An application for a General Development Plan describing the long-term buildout of the site shall be reviewed through a Type III procedure. An applicant shall have an approved General Development Plan before any detailed development plan may be approved, unless both are approved or amended concurrently. Amendments to an approved General Development Plan shall be reviewed under a Type III procedure pursuant to OCMC 17.65.080.
- C. Detailed Development Plan. An application for a detailed development plan, is processed through a Type II procedure, as long as it is in conformance with the approved General Development Plan. Amendments to an approved detailed development plan shall be processed pursuant to OCMC 17.65.080. Once a development has an approved detailed development plan, OCMC 17.62, Site Plan and Design Review is not required.
- D. Concurrent Review. An applicant may concurrently apply for a General Development Plan and a detailed development plan. Such a concurrent application is reviewed through the highest procedure that applies to any element of the combined application.
- E. Relationship to Other Reviews. It is the express policy of the city that development review not be segmented into discrete parts in a manner that precludes a comprehensive review of the entire development and its cumulative impacts.
- F. Duration of General Development Plan. A General Development Plan shall involve a planning period of up to twenty years. An approved General Development Plan shall remain in effect until development allowed by the plan has been completed through the detailed development plan process, the plan is amended or superseded, or the plan expires under its stated expiration date either as stated in the approved master plan or planned unit development application or decision of approval.

Response:

The applicant has been made aware of these procedures in two separate preapplications held with City staff over the course of the last 11 months. The first pre-app was held in March of 2020 and the second pre-app was held in December of 2020 in response to program changes for future development on the site. The December pre-application conference notes are attached to this application as **Appendix F**. A meeting with the Oregon City Citizen Involvement Committee was held virtually on February 1, 2021. No concurrent DDP approval is requested with this application.

17.65.050 - General Development Plan.

- A. Existing Conditions Submittal Requirements.
- 1. Narrative Statement. An applicant shall submit a narrative statement that describes the following:
 - a. Current uses of and development on the site;
 - b. For institutions, history or background information about the mission and operational characteristics of the institution that may be helpful in the evaluation of the General Development Plan, and information about current programs or services;





7 | Chapter 17.65: Master Plans and Planned Unit Development (Cont.)

- c. A vicinity map showing the location of the General Development Plan boundary relative to the larger community, along with affected major transportation routes, transit, and parking facilities. At least one copy of the vicinity map shall be eight and one-half inches by eleven inches in size, and black and white reproducible;
- d. Land uses that surround the development site. This may also reference submitted maps, diagrams or photographs;
- e. Previous land use approvals within the General Development Plan boundary and related conditions of approval, if applicable;
- f. Existing utilization of the site;
- g. Site description, including the following items. May also reference submitted maps, diagrams or photographs:
 - i. Physical characteristics;
 - ii. Ownership patterns;
 - iii. Building inventory;
 - iv. Vehicle/bicycle parking;
 - v. Landscaping/usable open space;
 - vi. FAR/lot coverage;
 - vii. Natural resources that appear on the city's adopted Goal 5 inventory:
 - viii. Cultural/historic resources that appear on the city's adopted Goal 5 inventory;
 - ix. Location of existing trees six inches in diameter or greater when measured four feet above the ground. The location of single trees shall be shown. Trees within groves may be clustered together rather than shown individually; and
 - x. Geologic hazards pursuant to OCMC 17.44.
- h. Existing transportation analysis, including the following items. May also reference submitted maps, diagrams or photographs.
 - i. Existing transportation facilities, including highways, local streets and street classifications, and pedestrian and bicycle access points and ways;
 - ii. Transit routes, facilities and availability;
 - iii. Alternative modes utilization, including shuttle buses and carpool programs; and
 - iv. Baseline parking demand and supply study (may be appended to application or waived if not applicable).
- i. i. Infrastructure facilities and capacity, including the following items:
- i. Water;
- ii. Sanitary sewer;
- iii. Stormwater management; and
- iv. Easements.
- 2. Maps and Plans.
 - a. Existing conditions site plan. Drawn at a minimum scale of one-inch equals one hundred feet (one inch equals one hundred feet) that shows the following items. At least one copy shall be eight and one-half inches x eleven inches in size, and black and white reproducible.
 - i. Date, north point, and scale of drawing.
 - ii. Identification of the drawing as an existing conditions site plan.
 - iii. Proposed development boundary.
 - iv. All parking, circulation, loading and service areas, including locations of all carpool, vanpool and bicycle parking spaces as

- required in Chapter 52 of this title.
- v. Contour lines at two-foot contour intervals for grades zero to ten percent, and five-foot intervals for grades over ten percent.
- b. A site plan or plans, to scale, for the General Development Plan site and surrounding properties containing the required information identified in OCMC 17.62.040.b, Vicinity map. Depicting the location of the site sufficient to define its location, including identification of nearest cross streets. At least one copy of the vicinity map shall be eight and one-half inches by eleven inches in size, and black and white reproducible.
- c. Aerial photo. Depicting the subject site and property within two hundred fifty feet of the proposed development boundaries. At least one copy of the aerial photo shall be eight and one-half inches by eleven in size, and black and white reproducible.

Response:

The information requested within this section has been provided within this document in **Chapter 3: Existing Conditions** and the accompanying drawings included in **Appendix B**.

- B. Proposed Development Submittal Requirements.
- 1. Narrative statement. An applicant shall submit a narrative statement that describes the following:
- a. The proposed duration of the General Development Plan.
- b. The proposed development boundary. May also reference submitted maps or diagrams.
- c. A description, approximate location, and timing of each proposed phase of development, and a statement specifying the phase or phases for which approval is sought under the current application. May also reference submitted maps or diagrams.
- d. An explanation of how the proposed development is consistent with the purposes of Section 17.65, the applicable zone district or districts, and any applicable overlay district.
- e. A statement describing the impacts of the proposed development on inventoried Goal 5 natural, historic or cultural resources within the development boundary or within two hundred fifty feet of the proposed development boundary.
- f. An analysis of the impacts of the proposed development on the surrounding community and neighborhood, including:
- i. Transportation impacts as prescribed in subsection g below;
- ii. Internal parking and circulation impacts and connectivity to sites adjacent to the development boundary and public right-of-ways within two hundred fifty feet of the development boundary;
- iii. Public facilities impacts (sanitary sewer, water and stormwater management) both within the development boundary and on city-wide systems; including a phasing plan for all on-site and off-site public improvements, including but not limited to transportation, schools, parks, open space, trails, sewer, water and stormwater, with an analysis of the capacity and improvements required as a result of fully implementing the plan. This analysis shall reference any adopted parks and recreation, public facilities plans and concept plans and identify specific funding mechanisms to address the adequacy of public facilities.

- iv. Neighborhood livability impacts;
- v. Natural, cultural and historical resource impacts within the development boundary and within two hundred fifty feet of the development boundary.

Response:

The plans and reports provided with The North End general master plan depict existing and foundational improvements to the master plan area including grading, utilities, circulation, parking areas, access locations, open spaces, a proposed range of uses, building pad locations, and vertical massing. The boundary of the master plan is illustrated in the site plans included in **Appendix B**. The duration of the master plan and the subsequent phasing of improvements is wholly dependent upon market demand. However, it is anticipated that a first phase will include mass grading and horizontal infrastructure followed shortly thereafter by vertical development. Depending on market conditions, the applicant intends to reach full build out by 2025, well within the 20-year vested master plan timeline. As more specifically discussed below, the GDP has been designed to be consistent with the existing provisions of the Oregon City Municipal Code sections except where a few adjustments are discussed below.

The general master plan has been laid out in a manner that intentionally avoids impacts to the natural resources on site, and where there are impacts that are unavoidable, the expectation is that they will be mitigated for in accordance with local requirements. The NROD criteria are addressed in more detail below.

Development on the site would occur over a former landfill that is capped, and although it is unlikely that there are any archaeological resources within the project area as a result of the prior landfill activities, the State Historic Preservation Office has indicated that the project area lies within an area generally perceived to have a high probability for possessing archaeological sites and/or buried human remains. If any archaeological objects or sites are discovered during construction, development activities will cease, and the appropriate authorities will be notified.

The North End master plan will be a high-quality, compact and walkable community. Future development within the boundaries of the master plan area, under detailed development plan approval, is expected to meet City standards which include development standards that have already been adopted by the community to mitigate impacts of the proposed development on the surrounding community and neighborhood. The variety of proposed uses within the plan area allows for people to live, work, play and shop in one place, which also becomes a destination for people from the region. Where possible, the proposed master plan takes advantage of existing infrastructure extensions of existing utilities and streets. The public utility plan is contained in Appendix B.

Improvements to the local transportation system are intended to be consistent with the impacts of the development but timed in accordance with a future development agreement. Ideally, improvements will be based on the individual impacts of each DDP and constructed with a combination of public





8 | Chapter 17.65: Master Plans and Planned Unit Development (Cont.)

Response to 17.65.050.B Cont.:

and private funds. Summit Development Group, the master developer continues to diligently discuss opportunities with local agencies to assist in funding the improvements in a timely and comprehensive manner to help catalyze development within the site. A complete Transportation Impact Analysis for full buildout of the GDP is discussed in more detail below demonstrating that the development can be accommodated within the GDP based on the improvements proposed by the applicant.

- g. A summary statement describing the anticipated transportation impacts of the proposed development. This summary shall include a general description of the impact of the entire development on the local street and road network, and shall specify the maximum projected average daily trips, projected AM and PM peak hour traffic and the maximum parking demand associated with build-out each phase of the master plan or planned unit development.
- h. In addition to the summary statement of anticipated transportation impacts, an applicant shall provide a traffic impact study as specified by city requirements. The transportation impact study shall either:
- i. Address the impacts of the development of the site consistent with all phases of the general development plan; or
- ii. Address the impacts of specific phases if the city engineer determines that the traffic impacts of the full development can be adequately evaluated without specifically addressing subsequent phases.
- i. If an applicant chooses to pursue option h.1., the applicant may choose among three options for implementing required transportation capacity and safety improvements:
- i. The general development plan may include a phasing plan for the proposed interior circulation system and for all on-site and off-site transportation capacity and safety improvements required on the existing street system as a result of fully implementing the plan. If this option is selected, the transportation phasing plan shall be binding on the applicant.
- ii. The applicant may choose to immediately implement all required transportation safety and capacity improvements associated with the fully executed general development plan. If this option is selected, no further transportation improvements will be required from the applicant. However, if a general development plan is later amended in a manner so as to cause the projected average daily trips, the projected a.m. or p.m. peak hour trips, or the peak parking demand of the development to increase over original projections, an additional transportation impact report shall be required to be submitted during the detailed development plan review process for all future phases of the development project and additional improvements may be required.
- iii. The applicant may defer implementation of any and all capacity and safety improvements required for any phase until that phase of the development reaches the detailed development plan stage. If this option is selected, the applicant shall submit a table linking required transportation improvements to vehicle trip thresholds for each development phase.

Response:

A detailed traffic study based on the uses proposed within the general master plan has been prepared by Kittelson and Associates and is included as **Appendix C** to this application ("TIA"). The study determines the

transportation related impacts associated with The North End master plan and was prepared in accordance with the City of Oregon City (City) Guidelines for Transportation Impact Analyses (TIA Guidelines – Reference 1). The study intersections and scope of this report were based on the TIA Guidelines and direction provided by City and Oregon Department of Transportation (ODOT) staff.

The TIA is based on the forecast trip generation of the development combined with engineering judgment and an understanding of existing and future land use and traffic conditions in the vicinity of the site. The study analyzed all site access points and intersections adjacent to the site, driveways serving properties on the opposite side of the streets fronting the development, proposed streets through the site, any intersection of streets classified as an arterial or collector where site traffic is expected to exceed 20 peak hour trips, and intersections where signal progression analysis was needed.

Overall, the traffic study analyzed 25 existing and 5 proposed new intersections within the report. The study analyzed all intersection operations over three peak hour periods. The traffic analyses reflect the peak hours of weekday morning (7:00 AM - 9:00 AM), weekday afternoon (4:00 PM - 6:00 PM), and Saturday midday (11:15 AM - 1:15 PM) conditions.

The analysis evaluated the following scenarios:

- Existing land use and transportation system conditions, including intersection volume-to-capacity (v/c) ratio, control delay, and level-ofservice (LOS) during the weekday AM and PM peak hours, as well as the Saturday midday peak hour.
- Year 2025 background conditions (without the master plan), including intersection v/c ratio, control delay, level-of-service and 95th percentile queues during all three peak hour analysis periods.
- Year 2025 total traffic conditions (with the master plan), including intersection v/c ratio, control delay, level-of-service and 95th percentile queues during all three peak hour analysis periods.

Additionally, the traffic study analyzed existing conditions, future conditions, adjacent land uses and transportation facilities including bicycle and pedestrian facilities, and nearby transit facilities. Finally, the analysis evaluates traffic safety and crash history for the study intersections.

Based on the analyses of these characteristics, the TIA compares the impacts of the proposed development on the transportation system considering background traffic conditions, other developments that are in process and expected to contribute to the system, and traffic expected to be generated from build out of the proposed master plan.

Finally, considering the findings of the analysis and all locally planned improvements to the system, the study assesses the overall impacts from the development on the system and proposes mitigation measures to ensure that the system operates at within acceptable state and local levels of service. The findings and recommendations will be integrated into the conditions associated with approval of the master plan.

The TIA mitigation recommendations are detailed under the narrative response to Oregon City Municipal Code Chapter 16.12.033 below.

- j. For residential and mixed-use projects:
 - Proposed minimum lot area, width, frontage and yard requirements.
 - ii. Proposed project density in number of units per acre.

Response:

Currently, the site is a single property, and the requirements of the Mixed-Use Downtown Zoning District standards for minimum lot area, width, frontage, and yard requirements can be satisfied by future development. It is important that future land divisions and individual detailed DDP's respect the approved concepts within the GDP. Details of how the GDP satisfies the dimensional requirements of the Mixed-Use Downtown zoning district and other applicable provisions of the OCMC are provided within this narrative. It should be noted that the GDP assumes development of 524 residential units within the North District area but that there is no minimum density requirement of the underlying zone. Instead development within the GDP is regulated by FAR. The proposed FAR, as discussed below is 0.49:1 in excess of the 0.3:1 minimum required in the zone.

- 2. Maps and Diagrams. The applicant shall submit, in the form of scaled maps or diagrams, as appropriate, the following information:
 - a. A preliminary site circulation plan showing the approximate location of proposed vehicular, bicycle, and pedestrian access points and circulation patterns, parking and loading areas or, in the alternative, proposed criteria for the location of such facilities to be determined during detailed development plan review.
 - b. The approximate location of all proposed streets, alleys, other public ways, sidewalks, bicycle and pedestrian access ways and other bicycle and pedestrian ways, transit streets and facilities, neighborhood activity centers and easements on and within two hundred fifty feet of the site. The map shall identify existing subdivisions and development and un-subdivided or unpartitioned land ownerships adjacent to the proposed development site and show how existing streets, alleys, sidewalks, bike routes, pedestrian/bicycle access ways and utilities within two hundred fifty feet may be extended to and/or through the proposed development.
 - c. The approximate location of all public facilities to serve the proposed development, including water, sanitary sewer, stormwater management facilities.
 - d. The approximate location, footprint and building square footage of buildings within of each phase of proposed development, and/or proposed lot patterns for each phase of future development.
 - e. The approximate locations of proposed parks, playgrounds or other outdoor play areas; outdoor common areas and usable open spaces; and natural, historic and cultural resource areas or features proposed for preservation. This information shall include identification of areas proposed to be dedicated or otherwise preserved for public use and those open areas to be maintained and controlled by the owners of the property and their successors in interest for private use.



9 | Chapter 17.65: Master Plans and Planned Unit Development (Cont.)

Response:

In **Chapter 4: Proposed Development** and the accompanying drawings included in **Appendix B**, the GDP includes plans and diagrams that provide the information requested in this section. Conceptual descriptions of circulation, site improvements, public infrastructure, building locations and sizes, and proposed open spaces are provided throughout the master plan document and discussed in detail in the narrative below. More detailed programming for on-site open spaces and specific building design will be provided with DDP's and are expected to meet current Oregon City standards except as modified below in combination with the design guidelines that accompany this document.

- C. Approval Criteria for a General Development Plan. The planning commission may approve an application for General Development Plan only upon finding that the following approval criteria are met:
- 1. The proposed General Development Plan is consistent with the purposes of OCMC 17.65.
- 2. Development shall demonstrate compliance with OCMC 12.04 16.12, 17.62, if applicable, and 16.08, if applicable.

Response:

As stated at the beginning of the Chapter, the purpose and intent of a master plan is to, "foster the growth of major institutions, phased residential, commercial or mixed-use development, and other large-scale development, while identifying and mitigating the impacts of such growth on surrounding properties and public infrastructure... The master plan or planned unit development process is intended to facilitate an efficient and flexible review process for major developments, support innovative and creative land development, and to provide long-term assurance to plan for and execute developments in a phased manner. To facilitate this, the master plan process is structured to allow an applicant to address larger development issues, such as adequacy of infrastructure and transportation capacity, and reserve capacity of the infrastructure and transportation system before expenditure of final design costs. The master plan or planned unit development process is further intended to promote efficiency in land development, maintenance, street systems and utility networks while providing site layouts that integrate usable and attractive open spaces, site circulation, and the general wellbeing of site users. For the purposes of this chapter planned unit developments are considered the same as master plans."

This GDP is a major mixed-use development located at the north end of the Oregon City downtown in a very visible location at the confluence of two major transportation facilities. The master plan will facilitate a purposeful and efficient redevelopment of a former landfill. The master plan has been developed consistent with this purpose statement over the course of the past 11 months by a team of design professionals on behalf of the applicant to be as consistent with the requirements of the Comprehensive Plan and Development Code as practical. Compliance with OCMC chapters 12.04 16.12, 17.62 is discussed throughout this narrative. As proposed and modified through this process, future development within the master plan area can comply with OCMC and meet the approval requirements for a GDP. The proposed GDP proposes a plan to foster the growth of a mixed use

community while providing long term certainty that vests the development in the 2021 Oregon City Code. Consistent with the purpose statement, the GDP also identifies all impacts related to the development and proposes a plan for mitigation of those impacts on public infrastructure.

3. Public services for transportation, water supply, police, fire, sanitary waste disposal, storm-water disposal, and any other needed public services and facilities including schools and parks for proposed residential uses, are capable of serving the proposed development, or will be made capable by the time each phase of the development is completed.

Response:

Public services and utilities are available to the site as demonstrated in the attached plans and reports. See **Appendix B**. The plans and reports all demonstrate that it is feasible to provide services to the development proposed in the GDP consistent with the provisions of this code, including water, sewer, stormwater and transportation services. Future detailed development plans are expected to meet the applicable standards of the 2021 Oregon City Municipal Code and the design guidelines that are included with this document are intended to supplement those regulations. The site is already served by the Oregon City Police and Fire Services. Open spaces and plazas are provided within the development for both the public and residents. Systems Development Charges are paid at the time of development to assist the community in maintaining some of these services and facilities as well. The School District will have an opportunity to provide comments on the development to speak to any capacity issues associated with the development.

4. The proposed GDP protects any inventoried Goal 5 natural, historic or cultural resources within the proposed development boundary consistent with the provisions of applicable overlay districts.

Response:

The GDP indicates the locations of the known natural and historic resources within the proposed development boundary and identifies the probable impacts to those resources when the plan is fully realized. Future detailed development plans are expected to meet the applicable standards of the 2021 Oregon City Municipal Code as it pertains to the protection and development of these resources. The most significant natural resource on site, Abernethy Creek, is intended to be preserved with approval of the GDP. Impacts to other resources on the west side of the development, east of Washington Street may be impacted for street improvements and other onsite development. Any impacts to those resources from future development on site will be mitigated for pursuant to the applicable chapters of this code. A final natural resources report will be submitted with each DDP to ensure that future development meets the requirements of the Natural Resources Overlay District on the property. The GDP demonstrates through its master site plan that the GDP does not preclude or prohibit future compliance with the NROD.

5. The proposed General Development Plan, including development standards and impact mitigation thresholds and improvements, adequately

mitigates identified impacts from each phase of development. For needed housing, as defined in ORS 197.303(1), the development standards and mitigation thresholds shall contain clear and objective standards.

Response:

The GDP anticipates impacts to the public systems and the surrounding community and proposes to mitigate impacts to the transportation system through future traffic improvements that have been identified within the City's Transportation System Plan (TSP), to the utility system by making the necessary extensions to serve the site and the payment of Systems Development Charges SDC's, to the public parks system through the payment of SDC's and to surrounding properties through compliance with the applicable standards of the OCMC. The applicant is prepared to mitigate impacts associated with each detailed development plan approval consistent with the applicable provisions of the 2021 Oregon City Municipal Code. The Civil drawings in Appendix B illustrate the site and utility plans, which includes information from the TIA, in conformance with this requirement.

6. The proposed General Development Plan is consistent with the Oregon City Comprehensive Plan.

Response:

The Comprehensive Plan is adopted and acknowledged. The principles within the comprehensive plan embodied by this request include, contain urban development, promote redevelopment, protect natural resources, foster economic vitality, provide efficient and cost-effective services, and ensure a sense of history and place. These are core tenets are reflected within the proposed GDP.

The site is zoned Mixed Use Downtown (MUD) and the proposed development will develop consistent with the provisions of that district and the requirements of the OCMC except where allowed to be modified by this chapter. The community's development code is intended to implement the goals and policies of the Comprehensive Plan as it relates to the development of land. Development of this site through the master plan process will result in a compact and efficient mixed-use development within the existing urban growth boundary, served by existing or new public infrastructure. The TSP, utility master plans, and community concept plans also help to fulfill the goals and policies of the Comprehensive Plan. This master plan and the GDP has been developed considering each one of these documents and future DDP's are required to meet the same standards of those documents as they are being designed and constructed. The GDP is consistent with the applicable regulations for development as explained in this narrative.





10 | Chapter 17.65: Master Plans and Planned Unit Development (Cont.)

7. The proposed General Development Plan is consistent with the underlying zoning district(s) and any applicable overlay zone or concept plans.

Response:

This proposed GDP is consistent with the underlying zoning district as well as the purpose and standards of all applicable overlay zone requirements, as shown below under the narrative response to Oregon City Municipal Code Chapter 17.34. Approval of the GDP does not permit any development on site. Future development on the site can only occur with the approval of DDP's that are consistent with the applicable provisions of the OCMC, with the GDP, and the supplemental design guidelines adopted with this plan. There are no concept plans that apply to this area. The GDP and accompanying documents have been predicated upon compliance with the 2021 Oregon City Municipal Code and include plans demonstrating the feasibility that future development under this plan can comply with the applicable requirements of these districts except where standards are allowed to be modified. There are few modifications to those standards requested with the approval of this plan. They are discussed in detail below.

- 8. For projects with a residential use component, the proposed General Development Plan includes common open space for the recreational needs of the development's residents.
 - a. Required open space shall be located either on-site or off-site within one-quarter mile of the development.
 - b. Minimum required open space shall be one hundred square feet per residential unit in the development.
 - c. The open space area may be in private ownership or proposed for public dedication, at the city's discretion whether to accept.
 - d. The open space shall be developed with a unified design to provide for a mix of passive and active uses. Passive uses include, but are not limited to sitting benches, picnicking, reading, bird watching and natural areas. Active uses include, but are not limited to playgrounds, sports fields and courts, running and walking areas.
 - e. Land area to be used for the open space area that is required in this section shall not include required setback areas, required landscaping, streets, rights-of-way, driveways, or parking spaces.
 - f. Unless dedicated to the public, the applicant shall also provide an irrevocable legal mechanism for the maintenance of the open space and any related landscaping and facilities. The applicant shall submit, for city review and approval, all proposed deed restrictions or other legal instruments used to reserve open space and maintenance of open space and any related landscaping and facilities.

Response

The North End master plan does in fact include a residential component and illustrates common open spaces provided for residents of the development. As detailed development plans are prepared for the residential portions of the site, compliance with the applicable standards and supplemental design guidelines is expected by the prospective developers of those areas. This GDP illustrates that these standards can be satisfied with future development of the site consistent with this plan. The master plan will accommodate 524 residential units. Based on this number of units, the development is required

to provide 52,400 square feet of open space. Within the immediate vicinity of the multi-family buildings, the plan calls for 45,600 square feet of private open space and within a quarter mile there are other on-site parks, open spaces, and public plazas. Open spaces are intended to be both passive and active. See **Chapter 4: Proposed Development** and **Chapter 5: Master Plan Design Guidelines**.

9. For projects with a residential use component, the proposed General Development Plan includes a mix of residential uses such that no single residential use exceeds seventy-five percent of the total proposed units. The mix of residential uses shall provide variety of dwelling types and sizes that are integrated throughout the site, rather than isolated from one another, with smooth transitions between residential types including appropriate setbacks, landscaping or screening as necessary, while maintaining street and pedestrian connectivity between all residential uses. Tenancy (i.e. ownership versus rental) shall not be a consideration in determination of the mix of residential use. For the purposes of this section, residential uses include single-family detached, single-family attached, duplex, 3—4 plex, and multi-family.

Response:

The proposed GDP does include a residential component and satisfies this standard through the provision of a variety of unit sizes, and entry types (i.e. ground floor walk-up, elevator for units located above elevators) within a multi-family/multistory format.

17.65.070 - Adjustments to development standards.

A. Purpose. In order to implement the purpose of the city's master plan or planned unit development process, which is to foster the growth of major institutions, major residential, commercial or mixed-use development, and other large-scale development, while identifying and mitigating their impacts on surrounding properties and public infrastructure, an applicant may request one or more adjustments to the applicable development regulations as part of the master planning or planned unit development process, and are not required to go through the variance process pursuant to OCMC Chapter 17.60.

Response

This application for GDP approval requests four adjustments to standards listed in subsection C below that are permitted to be adjusted through the city's master plan process.

B. Procedure. Requests for adjustments shall be processed concurrently with a General Development Plan. An adjustment request at the detailed development plan review shall cause the detailed development plan to be reviewed as a Type III application.

Response:

The applicant is aware that future adjustments not identified within the GDP will be reviewed as a Type III application.

C. Regulations That May be Adjusted. Adjustments may be allowed for the following items:

- 1. Dimensional standards of the underlying zone of up to twenty percent, except the perimeter of the development shall meet the underlying zone's setbacks when adjacent to residentially zoned property.
- 2. Site plan and design standards.
- 3. Residential design standards.
- 4. Increase in allowed maximum residential density of up to ten percent.
- 5. Standards for land division approval.
- 6. Additional uses allowed with residential projects, or residential component of projects:
- a. Notwithstanding the use provisions of the underlying zones, neighborhood commercial uses as defined in Chapter 17.24.020, including restaurants and eating and drinking establishments without a drive-through, retail trade, and services, are permitted on up to ten percent of the net developable area. The neighborhood commercial uses shall be planned and constructed so as to support and be compatible with the entire development and shall not alter the character of the surrounding area so as to substantially preclude, impair or limit the use of surrounding properties for the primary uses listed in the underlying district.
- b. Public or private parks and playgrounds, community buildings and/or outdoor recreational facilities, such as swimming pools and tennis courts.
- c. Indoor recreational facilities, such as racquetball or tennis courts, fitness centers or swimming pools.
- d. Common public and private open space including trails.
- e. Primary or accessory uses that are not identified as a permitted or conditional use in the underlying zone but which are defined in the code.

Response:

In preparation of the GDP and thinking forward towards implementation, the design team has identified the following four adjustments. Compliance with the approval criteria are discussed below.

- 1. 16.12.030 Blocks—Width. Adjustments to the Land Division standards for approval are permitted through the master plan process under 17.65.070.C.5.
- 17.54.100(2 and 3) Fences, hedges, walls, and retaining walls.
 Adjustments to the site plan and design standards are permitted through
 the master plan process under 17.65.070.C.2. This would be an
 adjustment to a design standard that applies within to all zones within the
 City.
- 3. 17.62.055(D) Institutional, office, multi-family, retail, and commercial building standards. Adjustments to the site plan and design standards are permitted through the master plan process under 17.65.070.C.2.
- 4. 17.62.050(C)(4) General Standards. Adjustments to the site plan and design standards are permitted through the master plan process under 17.65.070.C.2.

D. Regulations That May Not be Adjusted. Adjustments are prohibited for the following items:

- 1. To allow a primary or accessory use that is not identified as a permitted, or conditional use in the underlying zone, with the exception of the additional uses permitted under OCMC 17.65.070.C.6 above;
- 2. To any regulation that contains the word "prohibited";
- 3. As an exception to a threshold review, such as a Type III review





11 | Chapter 17.65: Master Plans and Planned Unit Development (Cont.)

process; and

4. Minimum density for residential sites may not be reduced.

Response:

None of the regulations listed above are adjusted with approval of the GDP.

E. Approval Criteria. A request for an adjustment to one or more applicable development regulations under this section shall be approved if the review body finds that the applicant has shown the following criteria to be met:

1. Granting the adjustment will equally or better meet the purpose of the regulation to be modified;

Response:

Adjustment #1

Chapter 16.12.030 - Blocks—Width states, "The width of blocks shall ordinarily be sufficient to allow for two tiers of lots with depths consistent with the type of land use proposed. The length, width and shape of blocks shall take into account the need for adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, control of traffic circulation, and limitations imposed by topography and other natural features.

All new streets shall be designed as local streets unless otherwise designated as arterials and collectors in the current adopted transportation system plan. The maximum block spacing between streets is five hundred thirty feet and the minimum block spacing between streets is one hundred fifty feet as measured between the right-of-way centerlines except in zones GI, CI, MUE, I, and WFDD where determining the appropriate street spacing will be determined by the city engineer. If the maximum block size is exceeded, pedestrian accessways shall be provided every three hundred thirty feet. The spacing standards within this section do not apply to alleys."

Although a land division is not proposed with this application, we are fairly certain that any land division of this site would not satisfy the requirement given the proposed uses within the master plan and that the master plan area will be served by a series of internal private streets as opposed to local streets.

The purpose of block length and width standards are to make a neighborhood more walkable and connected. They are intended to create neighborhoods with grid traffic patterns to make it easier to get from place to place for multiple modes of transportation and provide opportunities for additional routes throughout the City or neighborhood. Larger blocks, on the other hand discouraged because they can't adequately disperse or calm traffic. Block length standards promote connectivity to the rest of the community. The code recognizes that block length standards are not ideal in all instances as the code allows the city engineer to determine the block length in some zones within the City.

In this instance, the east side of the development includes larger format retail uses and three commercial pads greater than 100,000 square feet in size intended to serve anchor retail facilities and associated parking and circulation aisles that when or if the land is divided will likely exceed the

maximum block length, width, and spacing requirements of this section. Existing development and the presence of Abernethy Creek make it difficult for the development to connect to the north and east.

However, the proposed master plan, with this adjustment equally meets the purpose of the standard in 16.12.030 by providing a continuous and well-connected multi-modal transportation system that includes private streets, sidewalks, and shared use paths to connect uses within the development as well as to the surrounding transportation system. The developer is requesting that the City defer to the layout of the general master plan and adjust these maximum standards in favor of the proposed circulation system and block width proposal.

Adjustment #2

Section 17.54.100.2 states that, "A fence, hedge, wall, located next to, or behind the forward most building, or within more than forty feet of the right-of-way, whichever is less may be up to:

- a. Six feet in total height for residential properties with less than five units as measured from the finished grade at any point on the fence; or
- b. Eight feet in total height for all other uses as measured from the finished grade at any point on the fence."

Section 17.54.100.3 states that, "A retaining wall or combination of a fence, hedge, wall located next to and behind the forward most building, or within more than forty feet of the right-of-way, whichever is less, may be up to (as measured from the finished grade) 8.5 feet in height from the finished grade."

This particular chapter is not provided with a purpose statement, but the chapter in general sets out the requirements for accessory structures, projections, exceptions, marijuana businesses and mobile food units, which would lead one to believe that the purpose of these standards are to regulate operations and aesthetics of particular circumstances that relate to specific uses. A wall of any height can be constructed provided it's engineered properly, but, most communities put regulations limiting the height of walls in place to discourage and break up large blank surfaces on the landscape.

Given the significant difference in height between the master plan area, the adjacent properties at the south and west property lines, and Washington Street, it may be necessary to design and construct retaining walls that are higher than 8.5 feet from finished grade.

In some instances, buildings foundations will be utilized in place of walls but that's not the case along the proposed streets and sidewalk system. For example, the difference in height between the subject property and the End of the Oregon Trail Interpretive Center is approximately 29 feet. The applicant is requesting that the City adjust this height requirement given the known grade differences. The purpose of this standard can be equally or better met through thoughtful design of those retaining walls by utilizing different colors and materials or landscaping that climb the walls. The applicant is willing to accept conditions related to the design of the walls.

Adjustment #3

Section 17.62.055.D Siting of Structures. States, "On sites with one hundred feet or more of frontage at least sixty percent of the site frontage width shall be occupied by buildings placed within five feet of the property line... Multifamily developments shall be placed no farther than twenty feet from the front property line..."

The code allows larger front yard setbacks to be approved through site plan and design review if the setback area incorporates elements such as tables, benches, art, fountains, additional landscaping, enhanced landscaping, and other elements approved by the Community Development Director that can meet the intent of the section.

The purpose statement for this section is to, "...provide a range of design choices that promote creative, functional, and cohesive development that is compatible with surrounding areas. Buildings approved in compliance with these standards are intended to serve multiple tenants over the life of the building, and are not intended for a one-time occupant. The standards encourage people to spend time in the area, which also provides safety through informal surveillance. Finally, this section is intended to promote the design of an urban environment that is built to human scale by creating buildings and streets that are attractive to pedestrians, create a sense of enclosure, provide activity and interest at the intersection of public and private spaces while also accommodating vehicular movement."

The proposed development has over one hundred feet of frontage along both Abernethy Road and Washington Street. As stated earlier, the difference in grade between the development site and the surrounding streets are significant given that this was a former land fill. The grade along Washington Street is taken up by the building foundations of the proposed parking garages beneath the multi-family housing. The setbacks proposed along Washington Street vary from 1.9 to 23 feet behind the right of way, and over 230 feet along the site's frontage along Abernethy Road. The applicant is requesting this adjustment due to the unique shape of the site and the presence of the floodplain along Abernethy Road. To the extent possible, the applicant would prefer to keep all occupied buildings outside of the floodplain. In order to accomplish this, the buildings along Abernethy Road would be replaced with surface parking. The developer is requesting that the City allow this standard to be adjusted and provide deference to the proposed layout of the GDP as currently proposed.

This adjustment will allow the development to equally meet the purpose of the regulation by providing pedestrian amenities and enhanced landscaping along Abernethy Road and Washington Street. Further, the applicant is proposing a private commercial street, ("D" Street) between the buildings and Abernethy Road and places the buildings within five feet of that proposed street. These buildings will serve multiple tenants over their lifetime by providing separate retail spaces that are daylighted below the larger retail spaces above that will front ("C Street). With retail uses fronting both private internal streets, there will be opportunities for added activity and surveillance on both sides of the retail buildings.





12 | Chapter 17.65: Master Plans and Planned Unit Development (Cont.)

Response to 17.65.070.E.1 Cont.:

Adjustment #4

Section 17.62.050.C.4 states, "Elevated external stairways or walkways shall not extend beyond the building facade except for external stairways or walkways located in, or facing interior courtyard areas that are not visible from the street or a public access easement..."

According to the code, "The purposes of site plan and design review are to: Encourage site planning in advance of construction; protect lives and property from potential adverse impacts of development; consider natural or manmade hazards which may impose limitations on development; conserve the city's natural beauty and visual character and minimize adverse impacts of development on the natural environment as much as is reasonably practicable; assure that development is supported with necessary public facilities and services; ensure that structures and other improvements are properly related to their sites and to surrounding sites and structure; and implement the city's comprehensive plan and land use regulations with respect to development standards and policies." There is not a separate purpose statement for the section proposed to be adjusted.

The applicant is requesting an adjustment to this standard to allow pedestrians to walk between the plaza area and Washington Street. Because of the grade difference in this location, it would be difficult to provide a direct pedestrian route without providing a stairwell that projects beyond the building façade. The proposed stairwell is not located in or facing an internal courtyard. The idea behind this stairwell is to provide an attractive pedestrian alternative to connect the site to development in a more direct manner. This adjustment equally meets the purpose statement of the Site Plan and Design Review Chapter by considering a man-made hazard (grade difference) between the public street and the development. It will also add visual interest and character to the site's frontage with Washington Street by providing an artistic feature that also serves a practical purpose and creative solution to pedestrian connectivity. Details of the stairwell would be provided with the appropriate DDP.

2. If more than one adjustment is being requested, the cumulative effect of the adjustments results in a project that is still consistent with the overall purpose of the zone;

Response:

More than one adjustment is being requested with this application. The cumulative effect of the adjustments continues to satisfy the overall purpose of the MUD zone by providing a high quality vibrant mixed-use development with a variety of retail and service uses on the ground floors and residential on the upper floors. It creates an urban and intense development on the west side of the development and will attract more people into downtown Oregon City with a mix of larger retail uses that tend to serve the larger reason. The site will be well connected to the community and transit through a comprehensive and circuitous circulation plan. Each of the adjustments are necessary to respond to unique and specific site conditions not typically found on other sites. The impact of the adjustments is to create that high quality walkable environment while navigating significant changes in grade.

3. City-designated Goal 5 resources are protected to the extent otherwise required by Title 17;

Response:

The proposed adjustments do not impact City-designated Goal 5 resources on the site.

4. Any impacts resulting from the adjustment are mitigated such that the development does not create significant adverse impacts on adjacent properties;

Response:

The proposed adjustments do not impact any of the adjacent properties. The site is immediately adjacent to three properties and bound by public streets and Abernethy Creek. Any impacts from the retaining wall height at the southwest edges of the master plan site, can be mitigated through selection of materials and landscaping to break up the mass of the wall, if necessary.

5. If an environmental zone, the proposal has as few significant detrimental environmental impacts on the resource and resource values as is practicable; and

Response:

Although there are environmental resources on the master plan site, none of the proposed adjustments would significantly impact those resources.

6. The proposed adjustment is consistent with the Oregon City Comprehensive Plan and a concept plan if applicable.

Response

The subject property is not located within a concept plan and the adjustments do not affect any of the Oregon City Comprehensive Plan goals and policies which are implemented through the City's development code. As stated above, the proposed adjustments equally meet the purpose statements of the regulations that are being adjusted and satisfy the standards of the MUD zoning district. Approval of these adjustments is consistent with the land use designations for the site and do not preclude the development from meeting the applicable goals and policies of the Oregon City Comprehensive Plan.

17.65.090 - Regulations that apply.

An applicant is entitled to rely on land use regulations in effect on the date its GDP application was initially submitted, pursuant to ORS 227.178(3), as that statute may be amended from time to time. After a General Development Plan is approved, and so long as that General Development Plan is in effect, an applicant is entitled to rely on the land use regulations in effect on the date its General Development Plan application was initially submitted, as provided above, when seeking approval of detailed development plans that implement an approved General Development Plan. At its option, an applicant may request that a detailed development plan be subject to the land use regulations in effect on the date its detailed development plan is initially submitted.

Response:

Summit Development Group is formally requesting that future development within the site, including all DDPs, be vested under the applicable provisions of the 2021 Oregon City Municipal Code land use regulations with approval of the GDP. This will afford future developers and tenants within the master plan area with long term regulatory certainty and predictability.

Chapter 12.04: Streets, Sidewalks, and Public Spaces

Response:

Chapter 12.04.170 requires that all development be in conformance with the city's public facility master plans, public works policies, standard drawings, and engineering specifications. All streets must be reviewed and approved by the city engineer prior to construction and when we are connecting, if at all, to another jurisdiction's' right of way, that jurisdiction must also review the right of way as a condition of site plan or plat review, if required by code or intergovernmental agreement.

The GDP has been designed to meet the current Oregon City requirements for all adjacent public streets, sidewalks, and public spaces as found in the city's public facility plans, public works policies and engineering specifications in compliance with these criteria. The proposed street plan is illustrated within the GDP provided with this narrative in **Chapter 4: Proposed Development.**

With this approval, frontage improvements will occur along Abernethy Road and Washington Street, both of which have been designed consistent with the City/County standards as shown on the Civil Plans attached to this narrative as **Appendix B.**

Internal streets will be private and provided with public access easements to ensure that the general public has access throughout the master plan in the same manner as future residents and tenants. Internal sidewalks will be designed to meet or exceed city standards. For example, Civil Sheets C110 and C111 attached with **Appendix B** to this narrative shows the sidewalk cross sections ranging between 5 and 12 feet depending upon the street. Although the private streets proposed within the GDP vary from the typical Oregon City Street cross section, they are designed to mimic and function as public streets. Proposed features include wider sidewalks, street furniture, bulb outs at intersections, planter strips, and raised crosswalks.

There are differences in the grades between existing street frontages and the proposed development. The reclaimed landfill sits much higher than the existing streets and surrounding properties. The street network was created to navigate these grade changes and make the desired connections to adjacent streets and provide vehicular connectivity through the plan area.

The following projects are identified within the current Oregon City TSP and are proposed to be either constructed with the first phase of the GDP (Bolded) or in response to impacts associated with future DDP approvals. The timing of the improvements will be memorialized within a subsequent development agreement with the City or as conditions of approval to this GDP review.





13 | Chapter 12.04: Streets, Sidewalks, and Public Spaces (Cont.)

Response to Chapter 12.04 Cont.: **S44 Project**

Description: Construction of a shared use path from Abernethy Road to east

of the Abernethy Road-Washington Street extension. Find in TSP document (Page 90).

S5 Project

Description: Construction of a shared-use path from Abernethy Road to Clackamas River Drive. Find in TSP document (Page 87)

S2 Project

Description: Construction of a shared use path from Main Street to Redland Road. Find in TSP document (Page 87)

D63 Project

Description: Street connection from Washington Street to Abernethy Road. Find in TSP document (Page 54)

B8 Project

Description: Abernethy Road. Bike Lanes from Washington Street to Redland Rd. Find in TSP document (Page 83)

W5 Project

Description: Washington Street sidewalk infill from Washington Street to Abernethy Road. Find in TSP document (Page 55)

D79 Project (with future phases)

Description: capacity improvements at the intersection of OR 213/Redland Road. Find in TSP document (Page 78)

A Traffic Impact Analysis ("TIA") was also completed for this GDP review and is addressed in detail below. The TIA identifies all of the on-site and off-site transportation improvements that will be completed upon full buildout of this proposal.

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

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

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

franchises, licenses and permits.

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

The applicant acknowledges the City permitting requirements for work in the rights-of -way. The project team will comply with OCMC standards and permitting requirements for any work or use of the right-of-way.

12.04.025 - Driveways.

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

Response:

The GDP provides six access locations into the site as described below. There are two proposed accesses along Abernethy Road and four new proposed driveways along Washington Street.

Proposed "Market Street" would provide access into the master plan at intersections with both Abernethy Road to the south and Washington Street to the North. Additionally, proposed 4th Street would connect to Abernethy to the east and Washington Street to the west. Proposed Market Street would satisfy the street connection called for in the Oregon City Transportation System Plan. The driveways differentiate the private street entrances from the surrounding public streets.

The applicant seeks a modification below for the limitation of one driveway per frontage under OCMC 16.12.035. A modification is requested through the process outlined in OCMC Section 16.12.013. All other aspects of the project driveways will be designed in accordance with OCMC 16.12.035.

12.04.030 - Maintenance and repair.

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

The applicant acknowledges the requirement for maintenance and repair of sidewalks along the street frontages.

12.04.032 - Required sidewalk repair.

Response:

The applicant acknowledges the requirement for maintenance and repair of sidewalk along the street frontage.

12.04.050 - Retaining walls-Required.

Response:

The applicant acknowledges the requirement for retaining walls on private property, when necessary, to prevent soil or earth from sliding or failing into the street. Except for the retaining walls that provide the proposed pedestrian access to the End of the Oregon Trail Interpretive Center from the master plan site, all retaining walls will be constructed on the inside of a property line.

12.04.100 - Excavations—Restoration of pavement.

Response:

The applicant acknowledges the requirement to restore pavement in excavated areas of the street during construction.

12.04.120 - Obstructions-Permit required.

The applicant will obtain the appropriate permits required for permanent and temporary obstructions prior to construction activities.

12.04.150 - Street and alley vacations—Cost.

Response:

Street and alley vacations are not associated with this development. This requirement is not applicable to the GDP.

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

The drawings associated with public street access, vehicle circulation and street frontage improvements were prepared by a professional, licensed civil engineer in compliance with City standards, except where approved as an engineering modification. See civil sheets C110 and C111 in Appendix B to this narrative. As stated previously the application includes a modification request to OCMC 16.12.035, which limits driveways to one per frontage. The project requests approval of two driveways along Abernethy Road and four driveways along Washington Street. That modification is discussed in detail later in this narrative. All design requirements for driveway width, spacing and sight line vision are in compliance with City standards.

12.04.270 - Standard construction specifications.

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





14 | Chapter 12.04: Streets, Sidewalks, and Public Spaces (Cont.)

requirements of this chapter and the Public Works Street Standard Drawings shall control. In the case of work within ODOT or Clackamas County rights-of-way, work shall be in conformance with their respective construction standards.

Response:

The applicant acknowledges this requirement. Workmanship and materials performed under permits will comply with these specifications and standards.

Chapter 12.08: Public and Street Trees

All development shall provide street trees adjacent to all street frontages. Species and locations of trees shall be selected based upon vision clearance requirements, but shall in all cases be selected from the Oregon City Street Tree List, an approved street tree list for a jurisdiction in the metropolitan region, or be approved by a certified arborist unless otherwise approved pursuant to this section. If a setback sidewalk has already been constructed or the Public Works Department determines that the forthcoming street design shall include a setback sidewalk, then all street trees shall be installed with a planting strip or within tree wells. If existing street design includes a curb-tight sidewalk, then all street trees shall be placed according to OCMC 12.08.035.C.

Response:

The GDP includes a street plan with street trees proposed along all public and private streets within and adjacent to the development in compliance with 12.08.015. As called for in the Landscape Design Guidelines in **Chapter 5:**Master Plan Design Guidelines, street trees within Detailed Development Plans (DDP) for individual phases of development will be planted and spaced according to these provisions. Tree spacing will be evenly distributed to meet the clearance requirements of 15 feet from streetlights, 5 feet from fire hydrants, 20 feet from intersections and 5 feet from all public utilities in compliance with 12.08.015.B.

The proposed GDP Design Guidelines, included here as **Chapter 5: Master Plan Design Guidelines**, further ensures compliance with the Oregon City Municipal Code (OCMC) standards through mandatory language that requires development within the project to meet or exceed the requirements of Chapter 12.08. For example, design guideline 5 requires street trees to be planted and spaced in accordance with Chapter 12.08 and requires selected street trees to have a minimum 40 foot height and a 40-foot canopy spread at the time of planting. The Design Guidelines also require the same clearance distances be maintained when street trees are planted within the development. All the provisions of this Chapter are met or exceeded with approval of the GDP because the street plan has been designed to accommodate all of the spacing requirements upon a specific DDP application.

Chapter 13.12: Stormwater Management

13.12.050 - Applicability and exemptions.
This chapter establishes performance standards for stormwater conveyance, quantity and quality. Additional performance standards for erosion prevention

and sediment control are established in OCMC 17.47.

- A. Stormwater Conveyance. The stormwater conveyance requirements of this chapter shall apply to all stormwater systems constructed with any development activity, except as follows:
- 1. The conveyance facilities are located entirely on one privately owned parcel;
- 2. The conveyance facilities are privately maintained; and
- 3. The conveyance facilities receive no stormwater runoff from outside the parcel's property limits.

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

Response:

Stormwater generated from the developed site area in the master plan will be collected, detained, and treated consistent with the Oregon City Stormwater and Grading Design Standards. A preliminary stormwater management report was prepared by Daniel Loss, P.E., a professional and licensed engineer for the master plan development and is included as **Appendix A**. Under the master plan approval, the site's new and reconstructed impervious surfaces will be managed per the Oregon City Stormwater and Grading Design Standards dated March 2020. Because of the landfills clay cap, all new and redeveloped impervious surfaces within the master plan site will be treated by a combination of proprietary treatment systems and Low Impact Development (LID) facilities such as vegetated swales, filtration raingardens and planters.

The mechanical filters are sized for the onsite stormwater runoff. Specific details of the proposed stormwater management system and the methods utilized to design the system are laid out in detail in the Stormwater Management report, and as proposed, the stormwater system satisfies these provisions of the OCMC.

- B. Water Quality and Flow Control. The water quality and flow control requirements of this chapter shall apply to the following proposed uses or developments, unless exempted under subsection C:
- 1. Activities located wholly or partially within water quality resource areas pursuant to OCMC 17.49 that will result in the creation of more than five hundred square feet of impervious surface within the NROD or will disturb more than one thousand square feet of existing impervious surface within the NROD as part of a commercial or industrial redevelopment project. These square footage measurements will be considered cumulative for any given five-year period; or
- 2. Activities that create or replace more than five thousand square feet of impervious surface, cumulated over any given five-year period.

Response:

The project is partially located within a water quality resource area and creates more than 5,000 square feet of new impervious surface. Water quality and flow control except as discussed below can be provided for portions of the site that are located within these areas with future DDP review and approval.

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

 1. An exemption to the flow control requirements of this chapter will be granted when the development site discharges to the Willamette River, Clackamas River or Abernethy Creek; and either lies within the one hundred-year floodplain or is up to ten feet above the design flood elevation as defined in OCMC 17.42, provided that the following conditions are met:
- a. The project site is drained by a conveyance system that is comprised entirely of manmade elements (e.g. pipes, ditches, culverts outfalls, outfall protection, etc.) and extends to the ordinary high water line of the exempt receiving water; and
- b. The conveyance system between the project site and the exempt receiving water has sufficient hydraulic capacity and erosion stabilization measures to convey discharges from the proposed conditions of the project site and the existing conditions from non-project areas from which runoff is collected.
- 2. Projects in the following categories are generally exempt from the water quality and flow control requirements:
- a. Stream enhancement or restoration projects approved by the City.
- b. Farming practices as defined by ORS 30.960 and farm use as defined in ORS
- 214.000; except that buildings associated with farm practices and farm use are subject to the requirements of this chapter.
- c. Actions by a public utility or any other governmental agency to remove or alleviate an emergency condition.
- d. Road and parking area preservation/maintenance projects such as pothole and square cut patching, surface sealing, replacing or overlaying of existing asphalt or concrete pavement, provided the preservation/maintenance activity does not expand the existing area of impervious coverage above the thresholds in subsection B of this section.
- e. Pedestrian and bicycle improvements (sidewalks, trails, pathways, and bicycle paths/lands) where no other impervious surfaces are created or replaced, built to direct stormwater runoff to adjacent vegetated areas. f. Underground utility projects that replace the ground surface with in-kind material or materials with similar runoff characteristics.
- g. Maintenance or repair of existing utilities.

Response:

The master plan area will discharge to all three bodies listed in this section and is located partially within the 100 – year floodplain which means that it qualifies for an exemption to the flow control requirements. The stormwater report, included as **Appendix A** to this narrative, concludes that 29.8 acres of impervious surface from the site will outfall into the Abernethy Creek tributary after being treated. The creek tributary extends approximately 520 feet south before entering joining Abernethy Creek and ultimately flowing to the Willamette River.

The existing stream channel geometry was estimated based upon available topographic survey and average stream cross sections. Using Civil Tool Pro, HHPR concluded that the Abernethy Creek tributary segment has more than sufficient capacity to convey the 10-yr storm event. Flows will remain in the existing creek channel at and downstream of the point of discharge.



15 | Chapter 13.12: Stormwater Management (Cont.)

Response to 13.12.050.C Cont.:

Areas of the project contributing to the Kelly Field drainage basin will include 30.8 acre of disturbed land. The project will ultimately discharge into a 36" concrete culvert pipe. The existing 36" pipe extends west under Washington Street before out falling west to the Clackamas River delta approximately 1500 feet downstream. Current topographic survey is underway to confirm existing pipe slopes, sizes, and configuration. Downstream analysis will be conducted during individual DDP development and documented in the final stormwater report to ensure that this criterion is satisfied prior to redevelopment. However, based on the expert studies referenced above and attached as **Appendix A**, the redevelopment of the site can conform to all the water quality and flow control standards.

The stormwater report concludes that no adverse impacts to the downstream system are anticipated due to runoff from this project.

- D. Uses Requiring Additional Management Practices. In addition to any other applicable requirements of this chapter, the following uses are subject to additional management practices, as defined in the Public Works Stormwater and Grading Design Standards:
- 1. Bulk petroleum storage facilities;
- 2. Above ground storage of liquid materials;
- 3. Solid waste storage areas, containers, and trash compactors for commercial, industrial, or multi-family uses;
- 4. Exterior storage of bulk construction materials;
- 5. Material transfer areas and loading docks;
- 6. Equipment and/or vehicle washing facilities;
- 7. Development on land with suspected or known contamination;
- 8. Covered vehicle parking for commercial or industrial uses;
- 9. Industrial or commercial uses locating in high traffic areas, defined as average daily count trip of two thousand five hundred or more trips per day; and
- 10. Land uses subject to DEQ 1200-Z Industrial Stormwater Permit Requirements.

Response

The GDP lays out the general plan to develop the prior Rossman Landfill, which corresponds to items 3, 7, 8, and 9. While the stormwater report details how the project can meet the stormwater management requirements, additional management practices will be evaluated and recommended with each subsequent DDP. Future development within the master plan area for uses subject to additional management practices will provide supplemental stormwater reports to address compliance with these sections.

13.12.080 - Submittal requirements.

A. Applications subject to stormwater conveyance, water quality, and/or flow control requirements of this chapter shall prepare engineered drainage plans, drainage reports, and design flow calculation reports in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards.

B. Each project site, which may be composed of one or more contiguous parcels of land, shall have a separate valid city approved plan and report before

proceeding with construction.

Response:

The application package includes a preliminary stormwater report and stormwater plan sheet, prepared by a professional, licensed civil engineer that addresses each of the factors in Subsection A above. Before proceeding with construction, a separate final report will be provided for each project. See Appendix A.

13.12.090 - Approval criteria for engineered drainage plans and drainage report

An engineered drainage plan and/or drainage report shall be approved only upon making the following findings:

- A. The plan and report demonstrate how the proposed development and stormwater facilities will accomplish the purpose statements of this chapter. B. The plan and report meet the requirements of the Public Works Stormwater and Grading Design Standards adopted by resolution under OCMC 13.12.020. C. The storm drainage design within the proposed development includes provisions to adequately control runoff from all public and private streets and roof, footing, and area drains and ensures future extension of the current drainage system.
- D. Streambank erosion protection is provided where stormwater, directly or indirectly, discharges to open channels or streams.
- E. Specific operation and maintenance measures are proposed that ensure that the proposed stormwater quantity control facilities will be properly operated and maintained.

Response:

The application package includes a preliminary stormwater report and stormwater plans, prepared by a professional, licensed civil engineer, in compliance with City standards. The information provided within the report demonstrates that the stormwater management design proposed with the GDP will satisfy the Public Works Stormwater and Grading Design Standards, adequately controls run-off from impervious surfaces, and prescribes improvements that will protect streambanks associated with Abernethy Creek from erosion. Specific operation and maintenance measures have been suggested and will be provided upon approval and construction of the system during review of individual DDP's.

New and constructed impervious surfaces will be managed per the Oregon City Stormwater and Grading Design Standards dated March 2020. However, the site is not able to utilize infiltration type facilities during design since the project site was once a landfill and has contaminated soils. Because infiltration would run the risk of mobilizing contaminates in the soils or groundwater, the project will be utilizing underground detention and mechanical treatment methods for stormwater disposal. Stormwater will be treated by proprietary treatment systems, vegetated swales, filtration raingardens and planters across the site. The public frontage improvements will be treated with filtration planters.

Based on the measures proposed within the report, the stormwater management plan will achieve pollutant removal to the maximum extent

practicable via biofiltration designed to target pollutants expected with a commercial development. The proposed private facilities satisfy the City of Oregon City water quality and quantity requirements, and as designed, this project will not create any adverse impacts to the downstream storm system.

13.12.100 - Alternative materials, alternative design and methods of construction.

The provisions of this chapter are not intended to prevent the use of any material, alternate design or method of construction not specifically prescribed by this chapter or the Public Works Stormwater and Grading Design Standards, provided any alternate has been approved and its use authorized by the City Engineer. The City Engineer may approve any such alternate, provided that the City Engineer finds that the proposed design is satisfactory and complies with the intent of this chapter and that the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed by this chapter in effectiveness, suitability, strength, durability and safety. The City Engineer shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting approval of an alternate shall be recorded and entered in the City files.

Response:

The applicant understands the proposal of alternative materials or methods are subject to review and authorization by the City engineer. The project proposes to employ low impact development facilities for water quality treatment and flow control across the site as previously discussed.

The civil engineer has designed the proposed stormwater system to be consistent with the Oregon City Stormwater Grading and Design Standards. Finally, the report also included an investigation of the downstream conveyance system and did not find any obstructions. Each subsequent DDP will be required to ensure that the stormwater from the development is managed consistent with the Public Works Stormwater and Grading Design Standards, reaffirm the findings of the preliminary storm report, and obtain any necessary approvals from the City Engineer prior to utilizing an alternative method or design.

13.12.110 - Transfer of engineering responsibility.

Project drainage plans shall always have a project engineer. If the project engineer is changed during the course of the work, the City shall be notified in writing and the work shall be stopped until the replacement engineer has agreed to accept the responsibilities of the project engineer. The new project engineer shall provide written notice of accepting project responsibility to the City within seventy-two hours of accepting the position as project engineer.

Response:

The drainage plan for the application was prepared by a licensed civil engineer. The applicant understands the requirements that apply should a transfer of engineering responsibility occur during construction of the project.

13.12.120 - Standard construction specifications.
The workmanship and materials shall be in accordance with the current edition of the "Standard Specifications for Public Works Construction," as prepared by





16 | Chapter 13.12: Stormwater Management (Cont.)

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

Response:

The project is designed to comply with City standards and specifications. During construction, workmanship and materials will be required to comply with the approved drawings demonstrating the standards and specifications.

13.12.140 - Maintenance of public stormwater facilities.

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

Response:

Public stormwater facilities are proposed with this development along Washington Street and Abernethy Road. The onsite stormwater facilities are not designed to receive water from the public right-of-way. Easements, when necessary, will be provided to the City for access maintenance to any public facility.

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

Response

The applicant understands this requirement and will comply with this standard during the DDP and construction phases of the project.

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

Response:

Noted. The applicant is aware of this requirement and will comply.

13.12.145 - Maintenance of private stormwater facilities.

A. An applicant shall submit an operation and maintenance plan for each proposed stormwater facilities, unless exempted in the Public Works

Stormwater and Grading Design Standards. The information in the operation and maintenance plan shall satisfy the requirements of the Public Works Stormwater and Grading Design Standards.

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

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

Response:

The property owner is aware of their responsibility to maintain stormwater facilities on the private property. A preliminary stormwater report is provided as **Appendix A** with this application package. The civil engineer has acknowledged this requirement within the report and it will be incumbent upon future DDP developers to provide supplemental stormwater reports consistent with the GDP stormwater plan and provide an operations and maintenance plan for their projects that are compliant with the Public Works Stormwater and Grading Design Standards.

13.12.170 - Permits from other jurisdictions.

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

Response:

The applicant acknowledges this requirement and each DDP is expected to comply with these standards.

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

Response:

The applicant acknowledges this requirement and is in the process of reviewing the NROD designation along the northwest edge of the property through a separate Type I process with the City. No physical development is proposed with the GDP. If it is subsequently found that these permits are needed during design of individual DDP's, the applicant and subsequent

developers within the master plan will comply.

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

Response:

To the applicant's knowledge, this requirement is not applicable to the GDP or any subsequent DDP. If it is subsequently found that review by the Oregon State Department of Fish and Wildlife is warranted during design of individual DDP's, the applicant and subsequent developers within the master plan will comply.

Chapter 15.48: Grading, Filling and Excavating

15.48.030 Applicability—Grading permit required.

- A. A city-issued grading permit shall be required before the commencement of any of the following filling or grading activities:
- 1. Grading activities in excess of ten cubic yards of earth;
- 2. Grading activities which may result in the diversion of existing drainage courses, both natural and man-made, from their natural point of entry or exit from the grading site;
- 3. Grading and paving activities resulting in the creation of impervious surfaces greater than two thousand square feet or more in area;
- 4. Any excavation beyond the limits of a basement or footing excavation, having an unsupported soil height greater than five feet after the completion of such a structure; or
- 5. Grading activities involving the clearing or disturbance of one-half acres (twenty-one thousand seven hundred eighty square feet) or more of land.

Response:

Grading for the site will be required. On-site grading within The North End master plan is complicated by the presence of the clay soil cap that's used in the landfill reclamation. The project team includes Ryan Lawrence, a geotechnical engineer with NV-5; Eric Aronson, an environmental consultant and hydrogeologist with Aronson Environmental which is responsible for overseeing the Rossman Landfill remediation plan; and Daniel Loss, a professional licensed Civil Engineer. Each one of these professionals have been employed to consult on all grading and development activity that is planned to occur within the overall master plan and make informed decisions about the methods and designs that are to be employed during those activities to ensure that the integrity of the clay cap is not compromised.

Preliminary grading plans are provided within the civil plan set to comply with the applicable provisions of the Oregon City Municipal Code related to grading. See sheets C300-C307 in **Appendix B**. Preliminary and final grading plans will be provided with individual DDP's. The first DDP will be applied for once the GDP is approved and is expected to include mass grading of the site,



17 | Chapter 15.48: Grading, Filling and Excavating (Cont.)

Response to 15.48.030 Cont.:

for the purposes of installing internal streets, utilities, and frontage improvements along Washington Street and Abernethy road. The preliminary grading plans have been prepared in accordance with this chapter and the applicant acknowledges that no grading can occur on site until the City reviews and approves a specific mass grading permit.

15.48.040 - Grading permit exemptions.

The following filling and grading activities shall not require the issuance of a grading permit:

A. Excavation for utilities, or for wells or tunnels allowed under separate permit by other governmental agencies;

B. An excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid building permit. The placement of any fill material removed from such an excavation requires a grading permit if:

- 1. It exceeds fifty cubic yards,
- 2. More than ten cubic yards are removed from the site, or
- 3. The fill is placed on the site to a depth greater than one foot;
- C. Farming practices as defined in ORS 30.930 and farm uses as defined in ORS 215.203, except that buildings associated with farm practices and farm uses are subject to the requirements of this chapter;
- D. Excavation for cemetery graves;
- E. Sandbagging, diking, ditching, filling or similar work when done to protect life or property during an emergency;
- F. Repaving of existing paved surfaces that does not alter existing drainage patterns;
- G. Maintenance work on public roads performed under the direction of the city, Clackamas County or Oregon State Department of Transportation personnel.

Response:

The applicant acknowledges the grading permit exemptions listed above. However, a grading permit is required per the requirements established in OMC 15.48.030. The exceptions listed above are not applicable to the project.

15.48.090 Submittal requirements.

An engineered grading plan or an abbreviated grading plan shall be prepared in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards whenever a city approved grading permit is required. In addition, a geotechnical engineering report and/or residential lot grading plan may be required pursuant to the criteria listed below.

- A. Abbreviated Grading Plan. The city shall allow the applicant to submit an abbreviated grading plan in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards if the following criteria are met:
- 1. No portion of the proposed site is within the flood management area overlay district pursuant to Chapter 17.42, the unstable soils and hillside constraints overlay district pursuant to Chapter 17.44, or a water quality resource area pursuant to Chapter 17.49; and
- 2. The proposed filling or grading activity does not involve more than fifty cubic yards of earth.
- B. Engineered Grading Plan. The city shall require an engineered grading plan in

compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards to be prepared by a professional engineer if the proposed activities do not qualify for abbreviated grading plan.

- C. Geotechnical Engineering Report. The city shall require a geotechnical engineering report in compliance with the minimum report requirements of the Public Works Stormwater and Grading Design Standards to be prepared by a professional engineer who specializes in geotechnical work when any of the following site conditions may exist in the development area:
- 1. When any publicly maintained facility (structure, street, pond, utility, park, etc.) will be supported by any engineered fill;
- 2. When an embankment for a stormwater pond is created by the placement of fill:
- 3. When, by excavation, the soils remaining in place are greater than three feet high and less than twenty feet wide.
- D. Residential Lot Grading Plan. The city shall require a residential lot grading plan in compliance with the minimum report requirements of the Public Works Stormwater and Grading Design Standards to be prepared by a professional engineer for all land divisions creating new residential building lots or where a public improvement project is required to provide access to an existing residential lot.

Response:

Given the size of the site, the proposal will exceed the thresholds for an Abbreviated Grading Plan as established in OMC 15.48.090.A. As such, the applicant has prepared an Engineered Grading Plan that is included in the attached plan set as sheets C300 through C307 in **Appendix B**. Further, a geotechnical report meeting the standards above has been prepared for the site and is included as **Appendix D**. Approval of the current GDP will not result in the creation of any new residential lots or provide access to an existing residential lot; For this reason, the application does not include a Residential Lot Grading Plan.

Chapter 16.08: Land Divisions Process and Standards

Response

Since no land divisions are proposed with approval of the GDP this chapter is not applicable. However, the applicant does acknowledge that a land division may be required to divide the portion of the site subject to maximum height requirements adjacent to the End of the Oregon Trail Interpretive Center from the rest of the site, and expects that future tenants may want to further divide the land to ensure that their assets and lease areas are located on separate lots. Further, it is recognized that the block length standards of 530 feet required within Chapter 16.12 will be difficult to comply with given the proposed programming within North End master plan. A modification to block length standards is requested with the GDP and is discussed in Chapter 17.65.070 below. All other provisions of the land division standards will be addressed and satisfied upon future land divisions within the master plan area. The site size and configuration of uses in the GDP does not preclude or prohibit compliance with any future application of the land division standards.

Chapter 16.12: Minimum Public Improvements and Design Standards

16.12.010 - Purpose and general provisions.

All development shall be in conformance with the policies and design standards established by this chapter and with applicable standards in the City's public facility master plans and City design standards and specifications. In reviewing applications for development, the City Engineer shall take into consideration any approved development and the remaining development potential of adjacent properties. All street, water, sanitary sewer, storm drainage and utility plans associated with any development shall be reviewed and approved by the City Engineer prior to construction. All streets, driveways or storm drainage connections to another jurisdiction's facility or right-of-way shall be reviewed by the appropriate jurisdiction as a condition of the preliminary plat and when required by law or intergovernmental agreement shall be approved by the appropriate jurisdiction.

Response:

All street, water, sanitary sewer, storm drainage and utility plans associated with any development will be specifically reviewed and approved by the City Engineer prior to construction and subsequent to approval of a DDP. The proposed GDP includes a street network that conforms with the City's street standards for both the internal street network as well as the adjacent and surrounding street system. Appendix B includes the proposed street design and the related cross sections demonstrating that the proposed street system meets the City's design standards except where modification is requested under this GDP proposal. The proposed water, sanitary sewer, storm drainage and utility plans are also included in the Appendix B of the GDP proposal. These exhibits demonstrate that any of the proposed development in the GDP can satisfy the respective design standards for that utility at the time a DDP application is submitted for review and approval.

16.12.011 - Applicability.

- A. Compliance with this chapter is required for all development including land divisions, site plan and design review, master plan, detailed development plan and conditional use applications and all public improvements. Minor Site Plan and Design Review applications shall not be subject to this chapter unless improvements are proposed within the right-of-way, or as otherwise provided in this chapter.
- B. Compliance with this chapter is also required for new construction or additions which exceed fifty percent of the existing square footage of all 3-4 plexes, single and two-family dwellings living space. Garages, carports, sheds, and porches may not be included in the calculation if these spaces are not living spaces. Accessory dwelling units are not subject to compliance with this chapter. All applicable 3-4 plexes, single and two-family dwellings shall provide any necessary dedications, easements or agreements as identified in the transportation system plan and this chapter, subject to constitutional limitations. In addition, the street frontage shall be improved to include the following priorities for improvements:
- 1. Improve street pavement, construct curbs, gutters, sidewalks and planter strips; and
- 2. Plant street trees.

The cost of compliance with the standards identified in 16.12.011.B.1 and





18 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

16.12.011.B.2 is calculated based on the square footage valuation from the State of Oregon Building Codes Division and limited to ten percent of the total construction costs. The value of the alterations and improvements is based on the total construction costs for a complete project rather than costs of various project component parts subject to individual building permits. The entire proposed construction project cost includes engineering and consulting fees and construction costs. It does not include permit fees, recording fees, or any work associated with drafting or recording dedications or easements.

Response:

The proposal is for a GDP. Therefore, consistent with 16.12.011.A above, Chapter 16.12 applies to the proposed development. The following narrative and appendices demonstrate that the GDP is compliant with the Minimum Public Improvements and Design Standards.

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

Response:

The applicant acknowledges that Oregon City has jurisdiction and exercises regulatory management over all public rights-of-way as defined and outlined in Chapter 12.04 of the Oregon City Municipal Code. The development site fronts three public streets: Washington Street, Abernethy Road, and Redland Road. All required/proposed improvements for these frontages have been coordinated with Oregon City and the applicant and the proposed upgrades to these adjacent rights of way have been included in the TIA.

16.12.013 - Modifications.

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

Response

The GDP requires one modification to the engineering standards of Subsection 16.12 as explained below:

- OCMC 16.12.035.C. The standards of this section limit properties to one driveway per street frontage. The project requests approval of four driveway access points along Washington Street and two driveway access points along Abernethy Road.
- A. The modification meets the intent of the standard:

Response:

The site is approximately 62 acres in size and includes approximately 1,091,698 square feet of new commercial, retail, entertainment, and residential uses. Driveway access, under the provisions of 16.12.035.C is limited to reduce conflicts with the traveling public along streets and to ensure adequate space for street improvements including curbs, gutters, sidewalks, planter strips and street trees.

The project proposes four driveways along the Washington Street frontage and two additional driveways along the Abernethy Road frontage. There is approximately 1,344 lineal feet of street frontage along Washington Street and approximately 1,320 lineal feet of frontage along Abernethy Road According to the TIA provided with this application as Appendix C, Washington Street and Abernethy Road are both classified as a Minor Arterial. Section 12.04.195 of the Oregon City Municipal Code requires that the minimum driveway spacing along a Minor Arterial is 175 feet. As proposed within the GDP, the three new site accesses proposed along Washington Street will be positioned at equal spacings of approximately 500 feet relative to the signalized intersection at Washington Street/Home Depot-Site Access "A". The two new site accesses proposed along Abernethy will be approximately 1,000 feet apart, with the closest driveway at approximately 750 feet west of the signalized Abernethy Road/Redland Road intersection. Accordingly, the access spacing proposed within the GDP will comply with the access spacing requirements of the Oregon City Municipal Code. The additional driveways do not hinder the installation of priority street improvements, such as street trees, lighting and sidewalks. This request is consistent with the intent of the driveway standards.

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

Response

The proposed driveways are located along Washington Street and Abernethy Road. The site has a significant amount of frontage along these rights-of-way. The additional driveways exceed the access spacing requirements of the OCMC for streets classified as "minor arterials" in the Oregon City Transportation System Plan (TSP) as described above. Accordingly, the additional driveways will not affect the safety of pedestrians along the right-of-way. The driveways are shown on the Civil Site Plan sheets C200 to C207 of the Civil Plans provided in **Appendix B**. Site driveways have been located on the site and designed to meet all City requirements for sight distance, driveway spacing, and appropriate traffic control.

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

Response:

Table 16.12.035.A identifies 175 feet as the minimum driveway spacing standard for a minor arterial. As discussed previously, three new site accesses are proposed along Washington Street at equal spacings of approximately 500 feet relative to the signalized intersection at Washington Street/Home Depot-Site Access "A". The two new site accesses proposed

along Abernethy will be approximately 1,000 feet apart, with the closest driveway at approximately 750 feet west of the signalized Abernethy Road/Redland Road intersection.

The driveway approaches are identified in Table 16.12.035.D and require the approaches be a minimum width of 20 feet for two way traffic and a maximum width of 40 feet for commercial and mixed uses. The proposed driveways are compliant with the minimum and maximum driveway widths established in the plan as illustrated in the civil plans (Sheets C200 through C207).

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

Response:

The additional driveways proposed for the development are complementary to the surrounding street design because the driveways are spaced more than 175 feet apart and located to facilitate safe connections to the surrounding streets and make circulation in and around the master plan area more efficient. Because of the large size of the site and the need to create multiple connections within the site as well as connections to the existing street grid external to the site, the driveways have been placed to maximize pedestrian, vehicle and bicycle connections as well as presenting a design that permits a coherent design for all of the related frontage and sidewalk improvements.

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

Response:

The modifications are not being requested for constitutional reasons; therefore, this criterion is not applicable to the proposed GDP.

16.12.015 - Street design—Generally.

Development shall be required to provide existing or future connections to adjacent sites through the use of vehicular and pedestrian access easements where applicable. Development shall provide any necessary dedications, easements or agreements as identified in the Transportation System Plan, Trails Master Plan, and/or Parks and Recreation Master Plan and this chapter, subject to constitutional limitations. The location, width and grade of street shall be considered in relation to: existing and planned streets, topographical conditions, public convenience and safety for all modes of travel, existing and identified future transit routes and pedestrian/bicycle accessways, overlay districts, and the proposed use of land to be served by the streets. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. To the extent possible, proposed streets shall connect to all existing or approved stub streets that abut the development site. The arrangement of streets shall either:





19 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

A. Provide for the continuation or appropriate projection of existing principal streets in the surrounding area and on adjacent parcels or conform to a plan for the area approved or adopted by the City to meet a particular situation where topographical or other conditions make continuance or conformance to existing streets impractical;

B. Where necessary to give access to or permit a satisfactory future development of adjoining land, streets shall be extended to the boundary of the development and the resulting dead-end street (stub) may be approved with a temporary turnaround as approved by the City Engineer. Notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future, Access control in accordance with OCMC 16.12.017 shall be required to preserve the objectives of street extensions. C. Adequate right-of-way and improvements to streets, pedestrian ways, bike routes and bikeways, and transit facilities shall be provided and be consistent with the City's Transportation System Plan. Consideration shall be given to the need for street widening and other improvements in the area of the proposed development impacted by traffic generated by the proposed development. This shall include, but not be limited to, improvements to the right-of-way, such as installation of lighting, signalization, turn lanes, median and parking strips, traffic islands, paving, curbs and gutters, sidewalks, bikeways, street drainage

Response

pedestrian traffic generation.

The development site fronts three public streets, Washington Street, Abernethy Road, and Redland Road. The arrangement of these streets and their respective intersections is not proposed to change, nor is their location or grade. Frontage improvements have been coordinated with the Oregon City Engineering Division and are consistent with the requirements within the OCMC as discussed below. In addition, the proposed GDP approval proposes to construct seven projects identified within the TSP as discussed on pages 11 and 12 of this narrative. Those improvements will be constructed with the appropriate phase of development. Required right-of-way and easements will be dedicated or provided with each of those proposed improvements.

facilities and other facilities needed because of anticipated vehicular and

Based on the TIA completed for the project, the following improvements will be constructed adjacent to and through the site:

Frontage improvements proposed along Washington Street will consist of the required half-street improvements, per the City's Minor Arterial street design standards. This will include additional pavement width, where needed, to support the transition of the roadway from five lanes to three lanes southbound, including the extension of a continuous left-turn lane. Frontage improvements will also support respective bike lanes, planter strip and sidewalk treatments as required by the City's design standards, and on-street parking where required by the City Engineer.

Frontage improvements proposed along Abernethy Road will consist of the required half-street improvements consistent with the City's Minor Arterial street design standards. This will include additional pavement width, where needed, to support the existing three-lane cross-section with a continuous

left-turn lane. Frontage improvements will also support respective bike lanes, planter strip and sidewalk treatments as required by the City's design standards, and on-street parking where required by the City Engineer.

A new collector-level street will extend through the site, starting from the current street terminus just south of the signalized Washington Street/Home Depot access intersection and include bike lanes and a shared-use facility, per the City's TSP.

A second shared-use facility will be constructed on the site, per the City's TSP. The two shared-use facilities will be fully interconnected with a system of pedestrian facilities that extend to every building, pedestrian plaza, and other pedestrian destination on the site.

The master plan envisions a total of six external site access points. These accesses, including proposed traffic control measures are as follows:

- Washington St./Home Depot-Site Access "A": Existing access with no proposed changes.
- Washington St./Site Access "B": This is a new private driveway leading
 into a parking structure. Improvements include stop-control on the minor
 approach, with a single egress lane for shared left- and right-turn
 movements. This access will rely on the presence of a continuous leftturn lane on Washington Street to allow for left-turn ingress.
- Washington St./Site Access "C": This access is identical to Site Access "B".
- Washington St./Site Access "D": This is a new private street connection leading into the site. Improvements include stop-control on the minor approach, with separate left- and right-turn egress lanes. This access will rely on the presence of a continuous left-turn lane on Washington Street to allow for left-turn ingress.
- Abernethy Rd./Site Access "E": This is a new private street connection leading into the site. Improvements include stop-control on the minor approach, with a single egress lane for shared left- and right-turn movements. This access will rely on the presence of a continuous leftturn lane on Abernethy Road to allow for left-turn ingress.
- Abernethy Rd./Site Access "F": This is part of the new collector-level street leading into the site. Improvements include signalization, with separate left- and right-turn egress lanes. This access will rely on a left-turn lane on Abernethy Road to allow for left-turn ingress. Improvements also include the construction of a westbound right-turn lane from Abernethy into the site.

With these improvements, the GDP conforms to these approval criteria.

16.12.016 - Street design.

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

based on the modification criteria in OCMC 16.12.013. The steps for reducing the street design are found in the Transportation System Plan.

Response:

Alternative street plans that were different from table 16.12.016 were provided by City Staff at the pre-application conference and the proposed street sections have been discussed over the course of the last year. The development site fronts three public roadways: Washington Street, Abernethy Road, and Redland Road. Access into and out of the site are proposed along Washington Street and Abernethy Road. Frontage improvements along Redland Road are not proposed with the General Development Plan. Washington Street and Abernethy Road are both classified as Minor Arterials in the Oregon City TSP. All internal streets are proposed to be private. Below, is an analysis of the proposed street sections.

Abernethy Road (Minor Arterial)

Abernethy Road is a Clackamas County Facility. Along Abernethy Road, there is a 400-foot section of sidewalk that extends west along the site frontage from the signalized intersection and crosswalks at Redland Road, with the remaining property frontage having no sidewalk. Further west beyond the site frontage, sidewalk is lacking for most of the distance to the next traffic signal at Washington Street. According to Oregon City Staff, the maximum street section that the City may require is as follows:

Maximum Street Section city code may require on the development's side of centerline

	Maximum Stre	ct occion .	city cour		quii c oi	i the acre	iopinicité s	Jide of	centerin		
	Road	Zoning	R.O.W.	Road	Public	Sidewalk	Landscape	Bike	Street	Travel	Median
ı	Classification		width	Width	Access		Strip &	Lane	parking	Lanes	
							Curb				
	Minor Arterial	MUD	58'	47'	0.5'	10'	0.5' (5'x5'	6'	8'	(2.5)	6'
							tree wells			12'	
							within				
							sidewalk)				

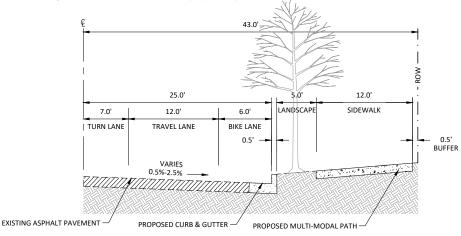
The project proposes to construct ½ street improvements that exceed what the City may require along Abernethy Road within 43 feet of right of way from the centerline. Right of way improvements include a 7-foot turn lane, a 12-foot travel lane, a 6-foot bike lane, curb, a 5-foot landscape strip a 12-foot sidewalk and .5 feet of buffer behind the edge of sidewalk. All the proposed improvements will be located within a 43-foot-wide half street right of way and meet or exceed the City's requirements for ½ Street improvements along Abernethy Road.





20 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

Abernethy Road (Minor Arterial) (Cont.)



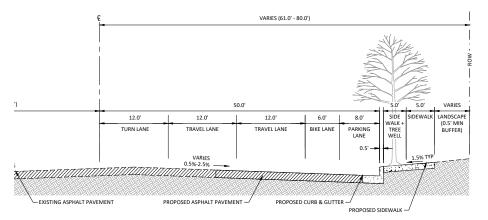
Washington Street (Minor Arterial)

Washington Street is a City owned and managed facility but is also classified as a Minor Arterial. The portion of the development site fronting Washington Street does not include any curb, gutter, planter strips, or street trees. It is paved and improved with a separated, meandering, and narrow sidewalk for pedestrians. According to City staff, the maximum street section that the City may require is as follows:

Maximum Street Section city code may require on the development's side of centerline

THURITING THE	et seemon	city cour		-quii e o	. the act	siopinicine s	Jiuc o.	cciicciiii		
Road Classification	Zoning	R.O.W. width	Road Width	Public Access	Sidewalk	Landscape Strip & Curb	Bike Lane	Street parking	Travel Lanes	Median
Minor Arterial	MUD	58′	47'	0.5'	10'	0.5' (5'x5' tree wells within sidewalk)	6′	8'	(2.5) 12'	6'

As proposed and illustrated below, Washington Street is proposed to be constructed ½ street improvements including a 12-foot turn lane, two 12-foot travel lanes, a 6-foot wide bike lane, an 8-foot wide parking lane, curb, a 5-foot planter strip, a 5 foot sidewalk, and a varying width landscape buffer within a right of way that varies between 61 and 80 feet. Additional right of way dedications and easements will be provided where necessary. The proposed ½ street section was confirmed by City staff prior to being designed.



Redland Road (Minor Arterial)

Redland Road is also classified as a Minor Arterial but is an ODOT owned facility and does not currently include any frontage improvements for cyclists or pedestrians. The applicant is not proposing direct access onto Redland Road. The TIA suggests improvements at the intersection of OR213/Redland Road and at Abernethy Road/Redland Road based on the analysis performed. The future improvements will likely be required through conditions of approval on individual DDP's that trigger the improvements.

Market Street

All internal streets, including "Market Street" are proposed to be constructed as private facilities within public access easements overlaid. "Market Street" is expected to function like a Collector Street. As proposed, the "Market Street" improvements will vary through the development as illustrated below. Right of way width will vary between 64 and 80 feet. Section 1 detail begins at the north end of the site where the street will tie in with the existing street improvements adjacent to The Home Depot. Section 2 runs through the middle of the site and Section 3 runs between proposed "4th Street" along the sites shared property line with the End of the Oregon Trail Interpretive Center to Abernethy road. In all three sections, travel and turn lanes are proposed to be 12 feet wide, bike lanes, where provided will be constructed on both sides of the street and be a minimum of 6 feet wide. Where provided parking lanes will be 8 feet wide, sidewalks and landscaping will vary.

Within Section 1, the landscaping and street trees will be located within an area that is 13.5 feet behind the edge of sidewalk. In Sections 2 and 3, the proposed sidewalks vary between 11 and 13 feet with 5-foot tree wells. Section 2, the portion of the street that runs through the heart of the development, is provided with parking and bike lanes on both sides of the street.

Other interior streets vary based on function and location within the development. They are still private but intend to be like local streets within a minimum right of way width of 64 feet. The specific private street sections are provided in Sheets C110 and C111 of the Civil Plan set located in Appendix B to this application.

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

16.12.110.

Response:

The applicant proposes the installation new sidewalks on both sides of all new private streets that are interior to the development and along the frontages of Washington Street and Abernethy Road where ½ street improvements have been proposed. There are no sidewalk improvements along either side of Redland Road, presumably because it does not include any access or development immediately adjacent to the facility. The proposed sidewalk improvements will be constructed to City standards and are illustrated in the civil plans attached to this application as Appendix B.

B. Pedestrian and Bicycle Accessways Routes. If deemed appropriate to extend pedestrian and bicycle routes, existing or planned, the decision-maker may require the installation of separate pedestrian and bicycle facilities.

Response:

Bike and Pedestrian routes are identified throughout the development and along the site's frontage with Washington Street and Abernethy Road as illustrated in sheets C110 and C111 of the civil plans attached to this application as **Appendix B**. All other bike lanes and pedestrian access routes are identified **Chapter 4: Proposed Development**.

C. Street Name Signs and Traffic Control Devices. The applicant shall install street signs and traffic control devices as directed by the City Engineer. Street name signs and traffic control devices shall be in conformance with all applicable city regulations and standards.

Response:

Street names for the GDP are only for reference. Street names that honor the history of Oregon City will be selected at a later date. There are no proposed changes to the existing street name signs or traffic control devices. The applicant acknowledges that new signage and traffic control devices will be warranted based on the impacts of additional traffic generated from development of the site and consistent with the TIA. All future street name signs and traffic control devices warranted by the TIA will be consistent with applicable city regulations and standards and subject to approval by the City engineer at the time of DDP review and approval.

D. Street Lights. The applicant shall install street lights which shall be served from an underground source of supply. Street lights shall be in conformance with all City regulations.

Response:

This is an application for approval of the GDP. No actual physical improvements will be constructed with approval of this request. The applicant is aware of the requirements to install street lights consistent with City regulations. Future applications for DDP approval will be accompanied by formal street lighting plans consistent with these provisions.





21 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

E. Any new street proposed with a pavement width of less than thirty-two feet shall be processed through OCMC 16.12.013 and meet minimum life safety requirements, which may include fire suppression devices as determined by the Fire Marshall to assure an adequate level of fire and life safety. The modified street shall have no less than a twenty-foot wide unobstructed travel lane

Response:

None of the streets within the proposed GDP include a pavement width of less than thirty-two feet. Therefore, this criterion is not applicable to the proposal.

F. All development shall include vegetated planter strips that are five feet in width or larger and located between the sidewalk and curb unless otherwise approved pursuant to this chapter. All development shall utilize the vegetated planter strip for the placement of street trees or place street trees in other acceptable locations, as prescribed by OCMC 12.08. Development proposed along a collector, minor arterial, or major arterial roads may place street trees within tree wells within a wider sidewalk in lieu of a planter strip. In addition to street trees per OCMC 12.08, vegetated planter strips shall include ground cover and/or shrubs spaced four feet apart and appropriate for the location. No invasive or nuisance plant species shall be permitted.

Response:

Alternative Street plans were provided by staff for the public street improvements and all internal streets are proposed to be private. Vegetated planter strips are provided between the sidewalk and curb or behind the sidewalk when matching an existing public street section. Interior to the site, street trees are provided along all newly proposed streets adjacent to or within the development. Washington Street and Abernethy Road are classified as minor arterials within the Oregon City TSP.

For Abernethy Road, a five-foot-wide vegetated planter strip is located between the curb and sidewalk. Along Washington Street, the vegetated planter strip varies in width and is located behind the sidewalk. In this case, street trees are provided within 5-foot tree wells. Section 1 of "Market Street" includes vegetated planter strips and street trees behind the sidewalk. Along all other interior streets, five-foot-wide tree wells are provided to allow for more active and wider sidewalks. Street trees are not proposed along the site's frontage with Redland Road as this is an ODOT facility, and it does not appear that there would be room to widen the right-of-way without impacting the Abernethy Creek NROD. Further, the proposed master plan does not propose any direct access or improvements to Redland Road or Hwy 213.

G. Vehicle and pedestrian access easements may serve in lieu of streets when approved by the decision maker and only where dedication of a street is deemed impracticable.

Response:

The GDP includes a street plan and does not require vehicle and pedestrian access easements in lieu of street dedication. New private streets along with primary and secondary pedestrian access routes are provided through the

site to meet provisions of the TSP. The applicant will dedicate required right-of-way when the GDP is approved and after completing the proposed ½ street improvements to the adjacent rights of way.

H. Vehicular and pedestrian easements shall allow for public access and shall comply with all applicable pedestrian access requirements.

Response:

All proposed private streets and pedestrian ways included within this development will be provided with pedestrian access easements to the public. These connections will provide access into and out of the site from one of proposed driveways and include sidewalks that connect at those same locations. There are other pedestrian locations proposed along both Abernethy Road and Washington street that are separated from the streets. See the civil site plan (Sheets C200 thru C207) in Appendix B.

16.12.017 - Street design—Access control.

A. A street which is dedicated to end at the boundary of the development or in the case of half-streets dedicated along a boundary shall have an access control granted to the City as a City controlled plat restriction for the purposes of controlling ingress and egress to the property adjacent to the end of the dedicated street. The access control restriction shall exist until such time as a public street is created, by dedication and accepted, extending the street to the adjacent property.

Response:

The street plan and improvements associated with the street network will require dedications along Washington Street and Abernethy Road. Each of these dedications will be provided to the City under this standard and concurrently with each DDP that triggers that frontage improvement and related dedication.

B. The City may grant a permit for the adjoining owner to access through the access control.

Response:

The applicant is aware of this requirement. The development site is surrounded by right-of-way on three sides. The proposed GDP provides for pedestrian connections throughout the site, to the End of the Oregon Trail Interpretive Center, and to adjacent public rights-of-way; If it is subsequently determined that an adjacent owner requires access for a legitimate purpose, the applicant will comply with this standard.

C. The plat shall contain the following access control language or similar on the face of the map at the end of each street for which access control is required: "Access Control (See plat restrictions)."

Response

This proposal is for the approval of the GDP. No land division is proposed with this application. Therefore, this standard does not apply.

D. Said plats shall also contain the following plat restriction note(s): "Access to (name of street or tract) from adjoining tracts (name of deed document number[s]) shall be controlled by the City of Oregon City by the recording of this plat, as shown. These access controls shall be automatically terminated upon the acceptance of a public road dedication or the recording of a plat extending the street to adjacent property that would access through those Access Controls."

Response:

This proposal is for the approval of the GDP. No land division is proposed with this application. Therefore, this standard does not apply.

16.12.018 - Street design-Alignment.

The centerline of streets shall be:

A. Aligned with existing streets by continuation of the centerlines; or B. Offset from the centerline by no more than five feet, provided appropriate mitigation, in the judgment of the City Engineer, is provided to ensure that the offset intersection will not pose a safety hazard.

C. Driveways that are at least twenty-four feet wide shall align with existing or planned streets on adjacent sites.

Response:

The civil plans attached as **Appendix B**, have been designed to this standard. The location where this standard is triggered is at the continuation of "Market Street" from the Home Depot access road. The proposed private street into the site will match that centerline.

16.12.019 - Traffic sight obstructions.

All new streets shall comply with the Traffic Sight Obstructions in Chapter 10.32.

Response:

The sight line standards established in OMC 10.32.030 state that:

"A clear vision area shall contain no vegetation or fences or other artificial obstruction exceeding three feet in height measured from the top of the curb or, where no curb exists, from the established street center line grade, except that trees exceeding this height may be located in this area provided all branches and foliage are removed to a height of eight feet above the grade."

Currently, there is not a formal landscape plan provided with this application. The applicant and design team are aware of these requirements and are not proposing any obstructions (such as fences) within the sight lines of the accesses for those entering or exiting the public right-of-way. Future DDP's are expected to satisfy these standards with their submittal. The applicant is aware of their obligation to maintain sightline visibility.

16.12.020 - Street design—Intersection angles.

Except where topography requires a lesser angle, streets shall be laid out to intersect at angles as near as possible to right angles. In no case shall the acute angles be less than eighty degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least one hundred feet of tangent adjacent to the intersection unless





22 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

topography requires a lesser distance. Other streets, except alleys, shall have at least fifty feet of tangent adjacent to the intersection unless topography requires a lesser distance. All street intersections shall be provided with a minimum curb return radius of twenty-five feet for local streets. Larger radii shall be required for higher street classifications as determined by the City Engineer. Additional right-of-way shall be required to accommodate curb returns and sidewalks at intersections. Ordinarily, intersections should not have more than two streets at any one point.

Response:

All proposed intersections have been designed to intersect at a right angle to other streets as illustrated in the civil plan sheets C200 through C207 within **Appendix B** to this application. Intersection angles to the public right-of-way were designed to be at 90 degrees except for the connection to Washington Street which is at an existing angle of 82 degrees. There is more than 100 feet of tangent at all intersections to the public right-of-way. A minimum of 25-foot curb return is proposed to be provided at all intersections to the public right-of-way.

16.12.021 - Street design—Grades and curves. Grades and center line radii shall conform to standards approved by the City Engineer.

Response:

The proposed street design has been designed to meet the grades and curves to the Oregon City Street Design Standards provided by the City Engineer.

16.12.022 - Street design—Development abutting arterial or collector street. Where development abuts or contains an existing or proposed arterial or collector street, the decision maker may require: access control; screen planting or wall contained in an easement or otherwise protected by a restrictive covenant in a form acceptable to the decision maker along the rear or side property line; or such other treatment it deems necessary to adequately protect residential properties or afford separation of through and local traffic. Reverse frontage lots with suitable depth may also be considered an option for residential property that has arterial frontage. Where access for development abuts and connects for vehicular access to another jurisdiction's facility then authorization by that jurisdiction may be required.

Response:

The development site abuts three Minor Arterials, Washington Street, Abernethy Road, and Redland Road. However, vehicular access is proposed to only Washington Street and Abernethy Road. This project is not a development that is in need of protection from through or local traffic. Vehicular access connections along the site's frontage with Abernethy Road is in Clackamas County's jurisdiction and the applicant is aware that there is a need to obtain approvals from them for new access. Redland Road is under ODOT's jurisdiction, but no new access is proposed along Redland Road. To the extent that this provision applies to future DDP's the applicant will comply.

16.12.023 - Street design—Pedestrian and bicycle safety.
Where deemed necessary to ensure public safety, reduce traffic hazards and

promote the welfare of pedestrians, bicyclists and residents of the subject area, the decision maker may require that local streets be so designed as to discourage their use by nonlocal automobile traffic.

The City Engineer may require that crosswalks include a large vegetated or sidewalk area which extends into the street pavement as far as practicable to provide safer pedestrian crossing opportunities. These curb extensions can increase the visibility of pedestrians and provide a shorter crosswalk distance as well as encourage motorists to drive slower. The City Engineer may approve an alternative design that achieves the same standard for constrained sites.

Response:

The applicant acknowledges that the City Engineer may impose additional requirements for pedestrian and bicycle safety during the application review process. All new streets and frontage improvements have been designed to be compliant with the Oregon City street design requirements as informed by City staff and located to be consistent with the Oregon City TSP. Pedestrian and bicycle safety improvements have been considered in the proposed design of new streets intended to serve the master plan area. The applicant will later submit a DDP for development of each phase of the project. While Appendix B demonstrates that all new streets and street frontages have been designed to meet City standards, the applicant understands that the City Engineer could consider corner extensions in the DDP process.

16.12.024 - Street design—Half street.

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

When the remainder of an existing half-street improvement is completed it shall include the following items: dedication of required right-of-way, construction of the remaining portion of the street including pavement, curb and gutter, landscape strip, sidewalk, street trees, lighting and other improvements as required for that particular street. It shall also include at a minimum the pavement replacement to the centerline of the street. Any damage to the existing street shall be repaired in accordance with the City's "Pavement Cut Standards" or as approved by the City Engineer.

Response:

The applicant is proposing ½ street improvements along both Washington Street and Abernethy Road. The proposed ½ street improvements for both rights of way are provide a pavement width greater than 20-feet and provide dedication of required right-of-way, construction of curb and gutter, landscape strips, sidewalks, street trees, lighting and other improvements as

informed and discussed with City staff. Pavement is provided from the centerline of the respective right-of-way. Finally, no construction activities are proposed with approval of the GDP. See the street sections for Washington Street and Abernethy Road on sheet C110 of the civil plan set attached to this narrative with Appendix B.

16.12.025 - Street design—Cul-de-sacs and dead-end streets.
The City discourages the use of cul-de-sacs and permanent dead-end streets except where construction of a through street is found by the decision maker to be impracticable due to topography or some significant physical constraint such as geologic hazards, wetland, natural or historic resource areas, pre-existing dedicated open space, pre-existing development patterns, arterial access restrictions or similar situation as determined by the decision maker. This section is not intended to preclude the use of curvilinear eyebrow widening of a street where needed.

A. When permitted, access from new cul-de-sacs and permanent dead-end streets shall be limited to a maximum of twenty-five dwelling units.

Response:

The proposed GDP does not provide for any cul-de-sacs or permanent deadend streets. This standard is not applicable.

B. Cul-de-sacs and permanent dead-end streets shall include pedestrian/ bicycle accessways to meet minimum block width standards as prescribed in OCMC 16.12.030.

Response:

The applicant is not proposing any alterations to the existing cul-de-sac south of the subject site with this application. This standard does not apply.

C. Cul-de-sacs shall have sufficient radius to provide adequate turn-around for emergency vehicles in accordance with fire district and city adopted street standards.

Response

The applicant is not proposing any cul-de-sacs with this application. This standard does not apply.

D. Permanent dead-end streets shall provide public street right-of-way/ easements sufficient to provide a sufficient amount of turn-around space complete with appropriate no-parking signs or markings to accommodate waste disposal, sweepers, emergency and other long vehicles in the form of a hammerhead or other design to be approved by the decision maker.

Response:

There are no proposed cul-de-sacs or dead-end street proposed within the GDP. This standard is not applicable.

E. In the case of dead-end stub streets that will connect to streets on adjacent sites in the future, notification that the street is planned for future extension shall be posted on the stub street until the street is extended and shall inform the public that the dead-end street may be extended in the future. A dead-end





23 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

street shall include signage or barricade meeting Manual on Uniform Traffic Control Devices (MUTCD).

Response:

The proposed GDP does not propose any dead-end stub streets to connect to adjacent properties. This standard is not applicable.

16.12.026 - Street design—Alleys.

Alleys with public access easements on private property shall be provided in the Park Place and South End concept plan areas for the following districts R-5, R-3.5, R-2, MUC-1, MUC-2 and NC zones unless other permanent provisions for private access to off-street parking and loading facilities are approved by the decision maker. All alleys intended to provide access for emergency vehicles shall be a minimum width of twenty feet. The corners of alley intersections shall have a radius of not less than ten feet and shall conform to standards approved by the City Engineer. Access easements and maintenance agreements shall be recorded on affected properties.

Response:

The subject site is not located within the Park Place or South End concept plan areas, nor is it or will it be zoned R-5, R-3.5, R-2, MUC-1, MUC-2, or NC. This standard does not apply.

16.12.027 - Street design—Off-site street improvements.

During consideration of the preliminary plan for a development, the decision maker shall determine whether existing streets impacted by, adjacent to, or abutting the development meet the applicable design or dimensional requirements. Where such streets fail to meet these requirements, the decision-maker shall require the applicant to make proportional improvements sufficient to achieve conformance with minimum applicable design standards required to serve the proposed development.

Response:

The project proposes frontage improvements to Washington Street and Abernethy Road consistent with City and County requirements for those facilities and sufficient to achieve conformance with standards required to serve the proposed development. As discussed in more detail above under Section 17.65, the applicant has included a complete TIA with this GDP proposal. The TIA evaluated the total impacts to the transportation system from the proposed full buildout of the GDP area and identifies the facility improvements that are recommended to serve the proposed development. The applicant adopts the recommendations and the improvements proposed in the TIA. Proposed street improvements were discussed previously in OCMC Subsection 16.12.016, Street Design.

16.12.028 - Street design—Transit.

Streets shall be designed and laid out in a manner that promotes pedestrian and bicycle circulation. The applicant shall coordinate with transit agencies where the application impacts transit streets as identified in OCMC 17.04.1310. Pedestrian/bicycle access ways shall be provided as necessary to minimize the travel distance to transit streets and stops and neighborhood activity centers. The decision maker may require provisions, including easements, for

transit facilities along transit streets where a need for bus stops, bus pullouts or other transit facilities within or adjacent to the development has been identified.

Response:

The applicant is proposing to install pedestrian and bicycle facilities throughout the development consistent with the Oregon City street design standards and in locations called for in the Oregon City TSP as discussed earlier. The applicant is aware that future tenants and businesses within the master plan area can benefit from transit facilities located within the development. According to the TIA provided as **Appendix C**, "local transit service is already provided by TriMet in the immediate site vicinity by the following two bus lines:

- TriMet Line 79 (Clackamas/Oregon City): Provides service between Clackamas Town Center and Oregon City Transit Center, with bus stops conveniently located along Washington Street right at the traffic signal with the Home Depot/site access street. Weekday and weekend service is generally provided at 40-minute headways.
- TriMet Line 154 (Willamette/Clackamas Heights): Provides service that connects the Clackamas Heights area up along Holcomb Boulevard with the Oregon City Transit Center, with additional service to the West Linn area via Willamette Falls Drive. Bus stops are conveniently located along Abernethy Road at the traffic signal with Redland Road and at the west end of the property frontage. Only weekday service is provided at 1-hour headways.

Additionally, The North End master plan site is just over three-quarters of a mile (approximately 17 minute walk) from the Oregon City Transit Center located in the downtown core of Oregon City at Main Street and 11th Street. This means that visitors, residents, and employees associated with the master plan area can walk (or use Route 79) to the Oregon City Transit Center and access a variety of other bus lines that serve the area. There has not been any requests from TriMet for any easements or other transit improvements, but if it is determined through individual DDP review that they are needed, the applicant of that DDP is expected to comply with the relevant standards.

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

Response

The applicant acknowledges that it is their responsibility to restore any pavement that is damaged during the excavation process.

16.12.030 - Blocks-Width.

The width of blocks shall ordinarily be sufficient to allow for two tiers of lots with depths consistent with the type of land use proposed. The length, width and shape of blocks shall take into account the need for adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, control of traffic circulation, and limitations imposed by topography and other natural features

All new streets shall be designed as local streets unless otherwise designated as arterials and collectors in the current adopted Transportation System Plan. The maximum block spacing between streets is 530 feet and the minimum block spacing between streets is 150 feet as measured between the right-of-way centerlines except in zones GI, CI, MUE, I, and WFDD where determining the appropriate street spacing will be determined by the City Engineer. If the maximum block size is exceeded, pedestrian accessways shall be provided every 330 feet. The spacing standards within this section do not apply to alleys.

Response:

The proposed GDP does not include any land division that would normally be used to create new blocks; however, the GDP does identify specific uses that require large areas of land and provides for an underlying street system that creates connectivity between uses both on and off site. The street plan responds to several factors including the desire for a new collector level street through the GDP area, efficient and safe connections to the external street system, topographical differences between the site and the existing surrounding street network and the desire to create a mixed use, multimodal live work environment within the project area. These unique factors atop a reclaimed landfill and within a floodplain and NROD overlay make it difficult for future land divisions to comply with these block spacing standards. However, as the street plan in Appendix B demonstrates and as discussed above, takes into account the need for adequate building site size, convenient motor vehicle, pedestrian, bicycle and transit access, control of traffic circulation, and limitations imposed by topography and other natural features as required by this criterion. For all these reasons, the applicant has requested a modification to the block length standards under the provisions in 17.65.070 later in this narrative.

16.12.031 - Street design—Street names.

Except for extensions of existing streets, no street name shall be used which will duplicate or be confused with the name of an existing street. Street names shall conform to the established standards in the City and shall be subject to the approval of the City.

Response:

New street names will be requested later in conjunction with future street construction and site development through the DDPs and will conform to this standard.

16.12.032 – Public off-street pedestrian and bicycle accessways.

Pedestrian/bicycle accessways are intended to provide direct, safe and convenient connections between residential areas, retail and office areas, institutional facilities, industrial parks, transit streets, neighborhood activity





24 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

centers, rights-of-way, and pedestrian/bicycle accessways which minimize outof-direction travel, and transit-orientated developments where public street connections for automobiles, bicycles and pedestrians are unavailable. Pedestrian/bicycle accessways are appropriate in areas where public street options are unavailable, impractical or inappropriate. Pedestrian and bicycle accessways are required through private property or as right-of-way connecting development to the right-of-way at intervals not exceeding 330 feet of frontage; or where the lack of street continuity creates inconvenient or out of direction travel patterns for local pedestrian or bicycle trips.

Response

Public streets are readily available along Washington Street and Abernethy Road. Private streets are proposed to provide internal circulation of the master plan area. All proposed street improvements along the site's frontage as well those private streets proposed internally are provided with appropriate bicycle and pedestrian improvements. In addition, the master plan includes additional shared use amenities called for in the Oregon City TSP to provide safe and convenient access within the site, to surrounding streets, and to the End of the Oregon Trail Interpretive Center. The onsite bicycle and pedestrian circulation system provides for safe and convenient connections between uses within the GDP, to open spaces, the plaza, and to the surrounding streets. Chapter 4: Proposed Development and Appendix B includes the pedestrian and bicycle accessways in compliance with this standard.

A. Entry points shall align with pedestrian crossing points along adjacent streets and with adjacent street intersections.

Response:

Acknowledged by the applicant. There are currently no adjacent pedestrian crossing points along the site's frontage. This standard is not applicable to this proposal.

- B. Accessways shall be free of horizontal obstructions and have a nine foot six inch high vertical clearance to accommodate bicyclists. To safely accommodate both pedestrians and bicycles, accessway right-of-way widths shall be as follows:
- 1. Accessways shall have a fifteen- foot wide right-of-way with a seven-foot wide paved surface with a minimum four-foot planter strip on either side.

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

Response:

None of the proposed pedestrian and bicycle accessways are obstructed within the development and are proposed with more than the minimum vertical clearance. The width of the proposed accessway that bisects the property from east to west is 22 feet, more than the 15-foot width required by this standard. Future and site specific DDP's will be required to design this adequate 22-foot width with at least the 7-foot wide paved surface and 4-foot planter strip in compliance with this criterion. Because the 22-foot proposed width easily accommodates these design features the GDP is consistent with this standard.

C. Accessways shall be direct with at least one end point of the accessway always visible from any point along the accessway. On-street parking shall be prohibited within fifteen feet of the intersection of the accessway with public streets to preserve safe sight distance and promote safety.

Response:

In compliance with this standard, all planned accessways are direct and can meet this visibility standard as shown on the civil site plans (C200 thru C207) in **Appendix B**. The specific design of the onsite pedestrian and bicycle amenities will be further reviewed and approved by the City in subsequent DDPs. None of the proposed accessways intersect with the public streets unless they are approved as part of the sidewalk system and connecting to either Washington Street or Abernethy Road. In these instances, on street parking will not be permitted and is not planned within 15 feet of the intersection of any accessway and public street to preserve safe sight distance.

D. To enhance pedestrian and bicycle safety, accessways shall be lighted with pedestrian-scale lighting. Accessway lighting shall be to a minimum level of one-half-foot-candles, a one and one-half foot-candle average, and a maximum to minimum ratio of seven-to-one and shall be oriented not to shine upon adjacent properties. Street lighting shall be provided at both entrances.

Response:

No specific site lighting is proposed with the GDP. The applicant is aware of this standard and the proposed street plan and accessway plan in the GDP can easily accommodate these lighting standards at the time of DDP approval.

E. Accessways shall comply with Americans with Disabilities Act (ADA).

Response

The proposed accessways are already provided with sufficient width to meet ADA with on-site sidewalks ranging between 5 and 22 feet. All future DDP applications are will provide this level of design for pedestrian walkways which comply with ADA code requirements. The GDP itself proposes an access plan composed of both private and public streets and internal pathways. As designed and located on the site, each accessway or street affords a grade and width that can satisfy ADA requirements at the time of DDP approval.

- F. The planter strips on either side of the accessway shall be landscaped along adjacent property by installation of the following:
- 1. Either an evergreen hedge screen of thirty to forty-two inches high or shrubs spaced no more than four feet apart on average; and
- 2. Ground cover covering one hundred percent of the exposed ground. No bark mulch shall be allowed except under the canopy of shrubs and within two feet of the base of trees; and
- 3. A two-inch minimum caliper tree for every thirty-five -feet along the accessway. Trees may be planted on either side of the accessway, provided they are spaced no more than thirty-five feet apart; and
- 4. In satisfying the requirements of this section, evergreen plant materials that

grow over forty-two inches in height shall be avoided. All plant materials shall be selected from the Oregon City Native Plant List.

Response

The proposed on-site access ways were designed to be compliant with these standards to ensure there was adequate space in the cross sections, as shown in the preliminary high level landscape plans, to accommodate all of these planting requirements. For example, the cross section for "Market Street" provides a width of five feet that can easily accommodate these planting requirements. The applicant for each new DDP will further refine the design to ensure that the detailed requirements of these standards are reflected in the detailed landscape plans. Trees are proposed to be provided along the accessways except where they cross private streets, drive aisles, or interfere with parking.

G. Accessways shall be designed to prohibit unauthorized motorized traffic. Curbs and removable, lockable bollards are suggested mechanisms to achieve this.

Response:

The supplemental landscape design guidelines include provisions within the master plan to ensure that the accessways are differentiated from motorized traffic with different materials and require minimum hardscape, softscape, and furniture requirements. See **Chapter 5: Master Plan Design Guidelines** for specific details related to the landscape and material requirements for each district. If necessary, bollards will be located to ensure that there are no unauthorize motor vehicles on the accessways.

H. Accessway surfaces shall be paved with all-weather materials as approved by the City. Pervious materials are encouraged. Accessway surfaces shall be designed to drain stormwater runoff to the side or sides of the accessway. Minimum cross slope shall be two percent.

Response:

Compliance with this standard is illustrated in sheets (C300 thru C308) for grading, materials, and stormwater provided with Appendix B in addition to the GDP preliminary site plans and Design Guidelines attached to this narrative in Chapter 4: Proposed Development and Chapter 5: Master Plan Design Guidelines respectively. In sum, all accessway surfaces will be paved with all-weather surfaces and have been designed to drain stormwater runoff to the side of the accessway. The cross slopes are all a minimum of two percent.

I. In parks, greenways or other natural resource areas, accessways may be approved with a five-foot wide gravel path with wooden, brick or concrete edgings.

Response

No accessways are currently proposed in the subject areas as part of this GDP. If such an accessway is later proposed in a DDP, the specific DDP application will have to demonstrate compliance with this criterion.





25 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

J. The decision maker may approve an alternative accessway design due to existing site constraints through the modification process set forth in OCMC 16.12.013.

Response:

The GDP does not propose any alternative accessway designs. If such designs are later requested through a DDP application, the applicant will be required to meet this standard as well as the design guidelines that are approved with this GDP.

- K. Ownership, liability and maintenance of accessways. To ensure that all pedestrian/bicycle accessways will be adequately maintained over time, the City Engineer shall require one of the following:
- 1. Dedicate the accessways to the public as public right-of-way prior to the final approval of the development; or
- 2. The developer incorporates the accessway into a recorded easement or tract that specifically requires the property owner and future property owners to provide for the ownership, liability and maintenance of the accessway.

Response

The applicant has indicated that they would provide public access easements throughout the master plan area for any private street, accessway, or sidewalk. This standard will be required to be met with individual DDP plan approval.

16.12.033 - Mobility standards.

Development shall demonstrate compliance with intersection mobility standards. When evaluating the performance of the transportation system, the City of Oregon City requires all intersections, except for the facilities identified in subsection E below, to be maintained at or below the following mobility standards during the two-hour peak operating conditions. The first hour has the highest weekday traffic volumes and the second hour is the next highest hour before or after the first hour. Except as provided otherwise below, this may require the installation of mobility improvements as set forth in the Transportation System Plan (TSP) or as otherwise identified by the City Engineer.

- A. For intersections within the regional center, the following mobility standards apply:
- 1. During the first hour, a maximum v/c ratio of 1.10 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
- 2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
- 3. Intersections located on the Regional Center boundary shall be considered within the Regional Center.
- B. For intersections outside of the Regional Center but designated on the Arterial and Throughway Network, as defined in the Regional Transportation

Plan, the following mobility standards apply:

- 1. During the first hour, a maximum v/c ratio of 0.99 shall be maintained. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
- 2. During the second hour, a maximum v/c ratio of 0.99 shall be maintained at signalized intersections. For signalized intersections, this standard applies to the intersection as a whole. For unsignalized intersections, this standard applies to movements on the major street. There is no performance standard for the minor street approaches.
- C. For intersections outside the boundaries of the Regional Center and not designated on the Arterial and Throughway Network, as defined in the Regional Transportation Plan, the following mobility standards apply:
- 1. For signalized intersections:
- a. During the first hour, LOS "D" or better will be required for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of the critical movements.
- b. During the second hour, LOS "D" or better will be required for the intersection as a whole and no approach operating at worse than LOS "E" and a v/c ratio not higher than 1.0 for the sum of the critical movements.
- 2. For unsignalized intersections outside of the boundaries of the Regional Center:
- a. For unsignalized intersections, during the peak hour, all movements serving more than twenty vehicles shall be maintained at LOS "E" or better. LOS "F" will be tolerated at movements serving no more than twenty vehicles during the peak hour.
- D. For the intersection of OR 213 & Beavercreek Road, the following mobility standards apply:
- 1. During the first, second & third hours, a maximum v/c ratio of 1.00 shall be maintained. Calculation of the maximum v/c ratio will be based on an average annual weekday peak hour.
- E. Until the City adopts new performance measures that identify alternative mobility targets, the City shall exempt proposed development that is permitted, either conditionally, outright, or through detailed development master plan approval, from compliance with the above-referenced mobility standards for the following state-owned facilities:

I-205/OR 99E Interchange

- State intersections located within or on the Regional Center Boundaries
 1. In the case of conceptual development approval for a master plan that impacts the above references intersections:
- a. The form of mitigation will be determined at the time of the detailed development plan review for subsequent phases utilizing the Code in place at the time the detailed development plan is submitted; and
- b. Only those trips approved by a detailed development plan review are vested. 2. Development which does not comply with the mobility standards for the intersections identified in OCMC 16.12.033 shall provide for the improvements identified in the Transportation System Plan (TSP) in an effort to improve intersection mobility as necessary to offset the impact caused by development. Where required by other provisions of the Code, the applicant shall provide a traffic impact study that includes an assessment of the development's impact on the intersections identified in this exemption and

shall construct the intersection improvements listed in the TSP or required by the Code.

Response:

The TIA prepared by Phill Worth and Brian Dunn, P.E. of Kittelson and Associates is attached to this submittal as **Appendix C**. Kittelson analyzed the mobility standards on the studied intersections consistent with these criteria. You can find his analysis beginning on page 9 of the TIA. The TIA addresses the impacts of the project related to traffic generation and transportation conditions at 25 existing and the 5 new intersections proposed within the GDP. The trip generation calculations show 984 AM peak hour trips and 2727 PM peak hour trips, for a total of 3,711 trips each weekday. Table 1: Applicable Mobility Standards for All Study Intersections found on page 11 of the TIA (**Appendix C**) and provided below for reference, illustrates the mobility standards for each of the study intersections expected to be impacted by proposed development of The North End master plan.

The TIA found that when the master plan is fully developed, all but two of the 25 existing study intersections operate at levels that meet the mobility standards of the governing agency. The TIA recommends the following mitigation measures to offset those impacts:

- 1. OR 213/Dunes Road Further document how signal timing/phasing optimization can improve intersection operations.
- 2. OR 213/Redland Road To address operational and vehicle queue deficiencies, evaluate the construction of a third southbound travel lane on OR 213 through the intersection with taper transition back to two lanes prior to the Holcomb Boulevard overcrossing. This improvement would also include reconstruction of the exclusive southbound right-turn lane from the highway onto Redland Road at current storage length, with appropriate taper transition back to three lanes prior to the sign bridge across OR 213.
- 3. Abernethy Road/Redland Road To address queue deficiencies, research installation of a right-turn overlap signal phasing on the southbound approach of Redland Road. As necessary, evaluate the construction of a second eastbound left-turn lane on Abernethy Road and retiming of the traffic signal to minimize vehicle queues.
- 4. Abernethy Road/Site Access "F" Evaluate signal warrants and increased multimodal benefits under a scenario that includes a traffic signal at this primary access to Abernethy Road.

In addition to the other frontage improvements and new internal street network proposed by the GDP to carry the traffic associated with this development, the applicant is committed to ensuring that the impacts from the development are mitigated consistent with the applicable requirements of the OCMC. Thus, the applicant will continue to work with the City Engineer on these recommended off-site mitigation measures to mitigate mobility impacts at the two identified intersections. It is assumed that the appropriate timing for constructing the recommended mitigation measures will be informed by the trip generation data identified within the TIA.





26 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

Response to 16.12.033 Cont.:

With the TIA, proposed frontage improvements and on site new street network and the recommended mobility impact recommendations, this standard is satisfied.

	Study Intersection	Area Location/ dy Intersection Jurisdiction Facility Designation		Operating Requirement
1	OR 99E / River RdArlington St.	ODOT	Corridor	0.99 v/c 1st hour, then 0.99 v/c 2nd hour
2	OR 99E / Dunes Dr.	ODOT	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour
3	OR 99E / I-205 SB Ramp	ОДОТ	Regional Center	Exempt from mobility standards by City municipal code*
4	OR 99E / I-205 NB Ramp	ОДОТ	Regional Center	Exempt from mobility standards by City municipal code*
5	OR 99E / 14th St.	ODOT	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
6	OR 99E / 12th St.	ODOT	Regional Center	1.10 v/c 1" hour, then 0.99 v/c 2 nd hour
7	OR 99E / 10th St.	ODOT	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
8	Washington St. / Clackamas River Dr.	City	Outside Regional Center, but on Arterial and Throughway Network	0.99 v/c 1 st hour, then 0.99 v/c 2 nd hour
9	Washington St. / Prairie Schooner Wy.	City	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour
10	Washington St./ Home Depot-Site Access A	City	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
11	Washington St. / Abernethy Rd.	City	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour
12	Washington St. / 15th St.	City	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
13	Washington St. / 14th St.	City	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour
14	Washington St. / 12th St.	City	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour
15	Washington St. / 7th St.	City	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
16	Redland Rd. / Abernethy Rd Holcomb Blvd.	City	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour
17	Redland Rd. / Anchor Wy.	City	Outside Regional Center, but on Arterial and Throughway Network	0.99 v/c 1 st hour, then 0.99 v/c 2 nd hour
18	Redland Rd. / Holly Ln.	City	Outside Regional Center, but on Arterial and Throughway Network	0.99 v/c 1st hour, then 0.99 v/c 2nd hour
19	I-205 SB Off-Ramp / OR 213	ODOT	Regional Center	Exempt from mobility standards by City municipal code**
20	OR 213 / Clackamas River Dr.	ODOT	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
21	OR 213 / Redland Rd.	ODOT	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
22	OR 213 / Beavercreek Rd.	ОДОТ	Principal Arterial Route	v/c ratio of 1.0 for 1 st , 2 nd , and 3 rd peak hours***
23	OR 213 / Molalla Ave.	City	Principal Arterial Route	0.99 v/c 1 st hour, then 0.99 v/c 2 nd hour
24	Molalla Ave. / Beavercreek Rd.	City	Outside Regional Center, but on Arterial and Throughway Network	0.99 v/c 1 st hour, then 0.99 v/c 2 nd hour
25	Maplelane Rd. / Beavercreek Rd.	City	Outside Regional Center, but on Arterial and Throughway Network	0.99 v/c 1 st hour, then 0.99 v/c 2 nd hour
26	Washington St. / Site Access B (proposed)	City	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
27	Washington St. / Site Access C (proposed)	City	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour
28	Washington St. / Site Access D (proposed)	City	Regional Center	1.10 v/c 1st hour, then 0.99 v/c 2nd hour
29	Abernethy Rd / Site Access E (proposed)	City	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour
30	Abernethy Rd / Site Access F (proposed)	City	Regional Center	1.10 v/c 1 st hour, then 0.99 v/c 2 nd hour

OR 99E/I-205 ramp terminal intersections are exempt from meeting state mobility targets, as per Oregon City Municipal Code Section 16.12.033.

OR 213/I-205 SB ramp terminal intersection is exempt from meeting state mobility targets, as per the 2013 Oregon City TSP (see page 38).

16.12.035 - Driveways.

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

Ta	Table 16.12.035.A Minimum Driveway Spacing Standards					
Street Functional Classification	Minimum Driveway Spacing Standards L					
Major Arterial Streets	Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings					
Minor Arterial Streets	Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings	175 ft				
Collector Streets	Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings	100 ft				
Local Streets	Minimum distance from a street corner to a driveway for all uses other than detached single and two-family dwellings	25 ft				

The distance from a street corner to a driveway is measured along the right-ofway from the edge of the intersection (on the same side of the road) right-ofway to the nearest portion of the driveway and the distance between driveways is measured at the nearest portions of the driveway at the right-of-way.

Response

As discussed previously, the GDP proposes four driveways along the Washington Street frontage and two additional driveways on the Abernethy Road frontage. There is approximately 1,344 lineal feet of street frontage along Washington Street and approximately 1,320 lineal feet of frontage along Abernethy Road. According to the TIA, Washington Street and Abernethy Road are both classified as a Minor Arterial. Section 12.04.195 of the Oregon City Municipal Code requires that the minimum driveway spacing along a Minor Arterial is 175 feet. As proposed within the GDP, the three new site accesses proposed along Washington Street will be positioned at equal spacings of approximately 500 feet relative to the signalized intersection at Washington Street/Home Depot-Site Access "A". The two new site accesses proposed along Abernethy will be approximately 1,000 feet apart, with the closest driveway at approximately 750 feet west of the signalized Abernethy Road/Redland Road intersection. Accordingly, the access spacing proposed within the GDP will comply with the minimum driveway spacing standards above.

B. Nonresidential or multi-family residential driveways that generate high traffic volumes shall be treated as intersections and shall adhere to requirements of OCMC 16.12.020.

Response:

As stated earlier in this narrative, the proposed driveways will comply with the requirements of OCMC 16.12.020 which requires them to intersect with adjacent streets at right angles. This standard is met.

C. One driveway may be allowed per frontage, unless otherwise restricted. In no case shall more than two driveways be allowed for any single-family attached or detached residential property, duplex, 3-4 plex, or property developed with an ADU or internal conversion with multiple frontages, unless otherwise approved by the City Engineer.

Response:

The proposal would provide four new driveways along Washington Street and two new driveways from along Abernethy Road. The proposed driveways are justified by the size of the project site and the amount of traffic expected to be generated at build-out. The applicant is seeking approval of the additional driveways through modification that was discussed in detail under the provisions of OCMC Subsection 16.12.013 earlier in this narrative.

D. When a property fronts multiple roads, access shall be provided from the road with the lowest classification in the Transportation System Plan whenever possible to minimize points of access to arterials and collectors. At the discretion of the City Engineer, properties fronting a collector or arterial road may be allowed a second driveway, for the creation of a circulation pattern that eliminates reverse maneuvers for vehicles exiting a property if applied for and granted through procedures in OCMC 16.12.013. All lots proposed with a driveway and lot orientation on a collector or minor arterial shall combine driveways into one joint access per two or more lots unless the City Engineer determines that:

- 1. No driveway access may be allowed since the driveway(s) would cause a significant traffic safety hazard; or
- 2. Allowing a single driveway access per lot will not cause a significant traffic safety hazard.

Response:

The site fronts three streets: Washington Street, Abernethy Road, and Redland Road. All three streets are classified as Minor Arterials. The GDP proposes vehicle access from both Washington Street and Abernethy Road. A modification has been requested above under 16.12.013 in order to allow the site to be served with more than one driveway. Both streets share the same classification in the Transportation System Plan. The additional driveways will not create a significant traffic safety hazard. In this case the site is atypically large, leaving sufficient distance between driveways to avoid any safety concerns. Each driveway is designed to meet the design specifications of the City Engineer and each driveway has confirmed sight distance to ensure safe operations.



^{**} Per a 2018 amendment to the Oregon Highway Plan (OHP).

27 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

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

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

Driveway widths shall match the width of the driveway approach where the driveway meets sidewalk or property line but may be widened onsite (for example between the property line and the entrance to a garage). Groups of more than four parking spaces shall be so located and served by driveways so that their use will not require backing movements or other maneuvering within a street right-of-way other than an alley.

Response

As demonstrated on the attached site plans (sheets C200 through C207) within the civil sheets provided as **Appendix B**, the proposed driveways serving the site along Washington Street include a 36-foot driveway at the end of the existing street that provides access to The Home Depot, two 24-foot driveways from Washington Street into the parking garages, and one 40-foot driveway from Washington Street to proposed "4th Street". The proposed driveways serving the site along Abernethy Road include one 40-foot driveway at the intersection of Abernethy Road and "Market Street" and one 40-foot driveway at the intersection of Abernethy Road and "4th Street". The proposed widths of all new driveways fall between the minimum and maximum driveway approaches for commercial, industrial, office, institutional, mixed use, and nonresidential sites, as established in Table 16.12.035.D. Two-way traffic circulation is proposed in the parking lot design. This standard is satisfied by the GDP.

- F. The City Engineer reserves the right to require a reduction in the number and size of driveway approaches as far as practicable for any of the following purposes:
- 1. To provide adequate space for on-street parking;
- 2. To facilitate street tree planting requirements;
- 3. To assure pedestrian and vehicular safety by limiting vehicular access points; and
- 4. To assure that adequate sight distance requirements are met.
- a. Where the decision maker determines any of these situations exist or may occur due to the approval of a proposed development for non-residential uses or attached or multi-family housing, a shared driveway shall be required and limited to twenty-four feet in width adjacent to the sidewalk or property line.

Response:

The applicant acknowledges the City Engineer's authority to alter the number of driveways for the reasons listed in subsections (1) - (4) above. As discussed previously, the TIA establishes that adequate visibility and stopping distance are available to safely accommodate traffic flow from the proposed driveways. Sufficient curb length remains to accommodate on-street parking around the driveway access points where permitted. In addition, the project provides street trees along all public and private streets within and adjacent to the development.

G. For all driveways, the following standards apply.

- 1. Each new or redeveloped curb cut shall have an approved concrete approach or asphalted street connection where there is no concrete curb and a minimum hard surface for at least ten feet back into the property as measured from the current edge of sidewalk or street pavement to provide for controlling gravel tracking onto the public street. The hard surface may be concrete, asphalt, or other surface approved by the City Engineer.
- 2. Any driveway approach built within public right-of-way shall be built and permitted per City requirements as approved by the City Engineer.3. No driveway with a slope of greater than fifteen percent shall be permitted
- 3. No arriveway with a slope of greater than lifteen percent shall be permit without approval of the City Engineer.

Response:

The proposed driveways can satisfy these standards as demonstrated on the attached site plans (sheet C200 through C207). The project engineer proposes asphalted approaches for each driveway, adjacent to the existing adjoining roadway. The driveways are not provided on slopes greater than fifteen percent. Furthermore, because the driveway approaches are constructed within the public right-of-way, the applicant acknowledges that they must be constructed to the City's standards and approved by the City Engineer. The driveways were designed in compliance with City standards by a licensed civil engineer.

H. Exceptions. The City Engineer reserves the right to waive these standards or not allow driveway access, if the driveway(s) would cause a significant traffic safety hazard. Narrower driveway widths may be considered where field conditions preclude use of recommended widths. When larger vehicles and trucks will be the predominant users of a particular driveway, turning templates may be utilized to develop a driveway width that can safely and expeditiously accommodate the prevalent type of ingress and egress traffic.

Response

The applicant acknowledges that the City Engineer reserves the right to waive development standards if they suspect that the proposed design will result in dangerous scenarios. As stated above, none of these scenarios are presented by the proposed design and the applicant is not requesting narrower driveway widths. Further, larger vehicles are not the predominant users of this mixeduse site and therefore all planned turning templates are sufficient to accommodate the nature of the traffic generated by this proposed GDP.

16.12.065 - Building site—Grading.

Grading of building sites shall conform to the State of Oregon Structural

Specialty Code, Title 18, any approved grading plan and any approved residential lot grading plan in accordance with the requirements of OCMC 13.12,15.48, 16.12 and the Public Works Stormwater and Grading Design Standards, and the erosion control requirements of OCMC 17.47.

Response

The applicant acknowledges that the building grading shall conform to the State of Oregon Structural Specialty Code, Title 18, and the requirements established in OCMC 13.12, 15.48, 16.12, 17,47, and the Public Works Stormwater and Grading Design Standards. Where applicable, the building grading is designed to comply with these standards. Preliminary grading plans are provided in sheets C300 thru C307 of the civil plan set attached as Appendix B to this narrative.

16.12.085 - Easements.

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

Response:

Utility easements will be provided with approval of individual DDP approvals and will be based on locations provided within the final engineering plans.

B. Unusual Facilities. Easements for unusual facilities such as high voltage electric transmission lines, drainage channels and stormwater detention facilities shall be adequately sized for their intended purpose, including any necessary maintenance roads. These easements shall be shown to scale on the preliminary and final plats or maps. If the easement is for drainage channels, stormwater detention facilities or related purposes, the easement shall comply with the requirements of the Public Works Stormwater and Grading Design Standards.

Response:

Easements for unusual facilities will be provided with DDP approval and will be adequately sized for their intended purposes including any required maintenance roads.

C. Watercourses. Where a development is traversed or bounded by a watercourse, drainageway, channel or stream, a stormwater easement or drainage right-of-way shall be provided which conforms substantially to the line of such watercourse, drainageway, channel or stream and is of a sufficient width to allow construction, maintenance and control for the purpose as required by the responsible agency. For those subdivisions or partitions which are bounded by a stream of established recreational value, setbacks or easements may be required to prevent impacts to the water resource or to accommodate pedestrian or bicycle paths.





28 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

Response:

Abernethy Creek runs along the east edge of the site and another natural resource area with a shape similar to a lobster claw is located in the northwest edge of the site. Easements for the proposed maintenance and control will be provided to the responsible agency with DDP approval. This standard is not applicable to the GDP. No element proposed under this GDP would preclude or inhibit conformance with this standard at the time of DDP review and approval.

D. Access. When easements are used to provide vehicular access to lots within a development, the construction standards, but not necessarily width standards, for the easement shall meet City specifications. The minimum width of the easement shall be 20 feet. The easements shall be improved and recorded by the applicant and inspected by the City Engineer. Access easements may also provide for utility placement.

Response:

Easements are not used to provide vehicular access to lots adjacent to the subject site. This standard does not apply.

E. Resource Protection. Easements or other protective measures may also be required as the Community Development Director deems necessary to ensure compliance with applicable review criteria protecting any unusual significant natural feature or features of historic significance.

Response:

The applicant is aware that the Community Development Director may require easements to protect any significant natural features located within the subject site. The most likely candidate for this protection is the Abernethy Creek riparian area. The applicant will comply with this standard at the appropriate time as determined by the applicant and the City.

16.12.090 - Minimum improvements—Procedures.
In addition to other requirements, improvements installed by the applicant either as a requirement of these or other regulations, or at the applicant's option, shall conform to the requirements of this title and be designed to City specifications and standards as set out in the City's facility master plan and Public Works Stormwater and Grading Design Standards. The improvements shall be installed in accordance with the following procedure:

A. Improvement work shall not commence until construction plans have been reviewed and approved by the City Engineer and to the extent that improvements are located in County or State right-of-way, they shall be approved by the responsible authority. To the extent necessary for evaluation of the proposal, the plans may be required before approval of the preliminary plat of a subdivision or partition. Expenses incurred thereby shall be borne by the applicant and paid for prior to final plan review.

Response:

The applicant acknowledges that improvement work cannot commence until construction plans have been reviewed and approved by the City Engineer or other responsible authority.

B. Improvements shall be constructed under the inspection and approval of the

City Engineer. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. Where required by the City Engineer or other City decision-maker, the applicant's project engineer also shall inspect construction.

Response:

The applicant acknowledges that the improvements must be inspected and approved by the City Engineer and that the expenses incurred thereby shall be their responsibility.

C. Erosion control or resource protection facilities or measures are required to be installed in accordance with the requirements of OCMC 17.47, 17.49 and the Public Works Erosion and Sediment Control Standards.

Response:

This request for approval of the GDP does not approve any actual construction activities for the site; therefore, detailed erosion control plans consistent with the applicable requirements of the OCMC will be provided with applications for DDP approval.

D. Underground utilities, waterlines, sanitary sewers and storm drains installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities, such as, storm, water and sanitary sewer shall be placed beyond the ten-foot wide franchise utility easement within private property.

Response:

The applicant acknowledges this requirement and will place all utilities underground consistent with these provisions during construction of approved DDP's on the site.

E. As-built construction plans and digital copies of as-built drawings shall be filed with the City Engineer upon completion of the improvements.

Response

The applicant acknowledges that physical and digital copies of as-built construction documents must be filed with the City Engineer upon completion of improvements on site. However, the GDP does not involve any construction activities on site. The as-builts will be provided for utilities that are constructed with approved DDP's.

F. The City Engineer may regulate the hours of construction and access routes for construction equipment to minimize impacts on adjoining residences or neighborhoods.

Response:

The applicant acknowledges that the City Engineer may regulate the hours of construction and access routes for construction equipment to minimize impacts on adjoining residences or neighborhoods.

16.12.095 - Minimum improvements—Public facilities and services.
The following minimum improvements shall be required of all applicants for a development, unless the decision-maker determines that any such

improvement is not proportional to the impact imposed on the City's public systems and facilities:

A. Transportation System. Applicants and all subsequent lot owners shall be responsible for improving the City's planned level of service on all public streets, including alleys within the development and those portions of public streets adjacent to but only partially within development. Applicants are responsible for designing and providing adequate vehicular, bicycle and pedestrian access to their developments and for accommodating future access to neighboring undeveloped properties that are suitably zoned for future development. Storm drainage facilities shall be installed and connected to off-site natural or man-made drainageways. Upon completion of the street improvement survey, the applicant shall reestablish and protect monuments of the type required by ORS 92.060 in monument boxes with covers at every public street intersection and all points or curvature and points of tangency of their center line, and at such other points as directed by the City Engineer.

Response:

The applicant acknowledges the required contributions to the public transportation system adjacent to the project and has proposed to construct frontage improvements along the sites frontage as well as several projects listed within the TSP as described previously. Preliminary utility plans have been provided with the GDP to demonstrate that the proposed master plan can comply with City Standards for each of these facilities. See civil sheets C110, C111, and C400 thru C407 for specific details.

B. Stormwater Drainage System. Applicants shall design and install drainage facilities within a development and shall connect the development's drainage system to the appropriate downstream storm drainage system as a minimum requirement for providing services to the applicant's development. The applicant shall obtain county or state approval when appropriate. Applicants are responsible for extending the appropriate storm drainage system to the development site and for providing for the connection of upgradient properties to that system. The applicant shall design the drainage facilities in accordance with City drainage master plan requirements, OCMC 13.12 and the Public Works Stormwater and Grading Design Standards.

Response

This standard is met. The stormwater plan for the GDP is unique to this location due to presence of the former landfill. The proposed stormwater management plan will achieve pollutant removal to the maximum extent practicable via biofiltration designed to target pollutants expected with a commercial development. The proposed private facilities satisfy the City of Oregon City water quality and quantity requirements. As designed, this project will not create any adverse impacts to the downstream storm system. Specific details on the proposed stormwater management system can be found in the Storm Report provided as **Appendix A.**

C. Sanitary Sewer System. The applicant shall design and install a sanitary sewer system to serve all lots or parcels within a development in accordance with the City's sanitary sewer design standards, and shall connect those lots or parcels to the City's sanitary sewer system, except where connection is required to the county sanitary sewer system as approved by the county.



29 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

Applicants are responsible for extending the City's sanitary sewer system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development. The applicant shall obtain all required permits and approvals from all affected jurisdictions prior to final approval and prior to commencement of construction. Design shall be approved by the City Engineer before construction begins.

Response:

This standard is met. The GDP includes a preliminary utility plan to serve the site by connections to existing services within Washington Street and Abernethy Road. Sanitary sewer service is connected along both frontages as well as within the street that currently serves The Home Depot. As proposed, the sewer extensions have been designed to meet all jurisdictional requirements. Sanitary facilities are proposed to be extended through the site to feed all proposed structures within the master plan. Specific details of the sewer system can be found in the utility plan sheets (C400 thru C407) attached as Appendix B.

D. Water System. The applicant shall design and install a water system to serve all lots or parcels within a development in accordance with the City public works water system design standards, and shall connect those lots or parcels to the City's water system. Applicants are responsible for extending the City's water system to the development site and through the applicant's property to allow for the future connection of neighboring undeveloped properties that are suitably zoned for future development.

Response:

This standard is met. As demonstrated on the preliminary utility plan provided in civil sheets (C400 thru C407) and attached as **Appendix B**, the project will extend an existing public water line located within the street serving The Home Depot and loop it through the site to serve all of the proposed buildings within the master plan. As proposed, the water extension has been designed to meet all jurisdictional requirements.

E. Street Trees. Refer to OCMC 12.08, Street Trees.

Response:

Refer to the responses to OCMC 12.08.

F. Bench Marks. At least one bench mark shall be located within the subdivision boundaries using datum plane specified by the City Engineer.

Response

This application does not include a request for subdivision approval. This standard does not apply.

G. Other Utilities. The applicant shall make all necessary arrangements with utility companies or other affected parties for the installation of underground lines and facilities. Existing and new electrical lines and other wires, including but not limited to communication, street lighting and cable television, shall be placed underground.

Response:

The applicant acknowledges this requirement. The project will locate new franchise utilities underground and extend them through the site. Actual utility locations will be coordinated with the utility companies and constructed with approval of individual DDP's.

H. Oversizing of Facilities. All facilities and improvements shall be designed to City standards as set out in the City's facility master plan, public works design standards, or other City ordinances or regulations. Compliance with facility design standards shall be addressed during final engineering. A development may be required to modify or replace existing offsite systems if necessary to provide adequate public facilities. The City may require oversizing of facilities to meet standards in the City's facility master plan or to allow for orderly and efficient development. Where oversizing is required, the applicant may request reimbursement from the City for oversizing based on the City's reimbursement policy and funds available, or provide for recovery of costs from intervening properties as they develop.

Response:

As demonstrated throughout this document and the appendices, public improvements associated with the GDP have been designed to City standards. The need to oversize any public facilities for this project has not been identified by staff.

I. Erosion Control Plan—Mitigation. The applicant shall be responsible for complying with all applicable provisions of OCMC 17.47 with regard to erosion control.

Response:

Preliminary grading plans are provided in civil sheets (C300 thru C307) to demonstrate that the project can be graded in compliance with the applicable city standards. These grading plans will be refined and submitted along with each DDP filed within the master plan. Detailed erosion control plans will be provided with construction drawings at the time of permit review. This standard is not directly applicable to the GDP as no grading permit is request with this GDP approval.

16.12.100 - Same—Road standards and requirements.

A. The creation of a public street and the resultant separate land parcels shall be in conformance with requirements for subdivisions or partitions and the applicable street design standards of this Chapter. However, the decision-maker may approve the creation of a public street to be established by deed without full compliance with the regulations applicable to subdivisions or partitions where any of the following conditions exist:

- 1. The establishment of the public street is initiated by the City Commission and is declared essential for the purpose of general traffic circulation and the partitioning of land is an incidental effect rather than the primary objective of the street:
- 2. The tract in which the street is to be dedicated is within an isolated ownership either not over one acre or of such size and characteristics as to make it impossible to develop building sites for more than three dwelling units.

Response:

This standard does not apply. A private internal street system with public access easements is proposed to serve the development. There are also existing abutting public streets that will be improved as part of the GDP and subsequent DDPs. These streets are already dedicated to the public.

B. For any public street created pursuant to subsection A of this section, a copy of a preliminary plan and the proposed deed shall be submitted to the Community Development Director and City Engineer at least ten days prior to any public hearing scheduled for the matter. The plan, deed and any additional information the applicant may submit shall be reviewed by the decision-maker and, if not in conflict with the standards of Title 16 and Title 17, may be approved with appropriate conditions.

Response

The applicant is not proposing to create any new public streets with this application. This standard does not apply.

16.12.105 - Same—Timing requirements.

A. Prior to applying for final plat approval, the applicant shall either complete construction of all public improvements required as part of the preliminary plat approval or guarantee the construction of those improvements. Whichever option the applicant elects shall be in accordance with OCMC 17.50.140.

Response

There are no land divisions proposed with the GDP. This standard is not applicable. Public improvements will be constructed with individual approval of DDP's for the site.

B. Construction. The applicant shall construct the public improvements according to approved final engineering plans and all applicable requirements of this Code, and under the supervision of the City Engineer. Under this option, the improvement shall be complete and accepted by the City Engineer prior to final plat approval.

Response:

The applicant acknowledges that the public improvements must be constructed according to the approved final engineering plans and all applicable requirements of the Oregon City Municipal Code. Those plans will be filed with individual requests for DDP approval for the site.

16.12.110 -Public improvements—Financial guarantees.

A. To ensure construction of required public improvements, the applicant shall provide the City with a performance guarantee in accordance with OCMC 17.50.140.

Response:

The applicant acknowledges their responsibility to provide a performance guarantee for public improvements in compliance with OCMC 17.50.140 and will provide those in association with the construction of individual DDP's.





30 | Chapter 16.12: Minimum Public Improvements and Design Standards (Cont.)

B. After satisfactory completion of required public improvements and facilities, all public improvements not constructed by the City, shall be maintained and under warranty provided by the property owner or developer constructing the facilities until the City accepts the improvements at the end of the warranty period as prescribed in OCMC 17.50.141.

Response:

The applicant acknowledges that the required public improvements and facilities shall be maintained and under warranty until the City accepts the improvements as prescribed in OCMC 17.50.141 once they have been constructed.

16.12.120 - Waiver of Remonstrance.

The review authority may require a property owner to sign a waiver of remonstrance against the formation of and participation in a local improvement district where it deems such a waiver necessary to provide needed improvements reasonably related to the impacts created by the proposed development. To ensure compliance with this chapter, the review authority may require an applicant to sign or accept a legal and enforceable covenant, contract, dedication, easement, performance guarantee, or other document, which shall be approved in form by the City Attorney.

Response:

The applicant acknowledges the City's authority to require the property owner to sign a waiver of remonstrance against the formation of and participation in a local improvement district.

Chapter 17.34: Mixed Use Downtown

17.34.010 - Designated

The mixed-use downtown (MUD) district is designed to apply within the traditional downtown core along Main Street and includes the "north-end" area, generally between 5th Street and Abernethy Street, and some of the area bordering McLoughlin Boulevard. Land uses are characterized by high-volume establishments constructed at the human scale such as retail, service, office, multi-family residential, lodging or similar as defined by the community development director. A mix of high-density residential, office and retail uses are encouraged in this district, with retail and service uses on the ground floor and office and residential uses on the upper floors. The emphasis is on those uses that encourage pedestrian and transit use. This district includes a downtown design district overlay for the historic downtown area. Retail and service uses on the ground floor and office and residential uses on the upper floors are encouraged in this district. The design standards for this sub-district require a continuous storefront façade featuring streetscape amenities to enhance the active and attractive pedestrian environment.

Response:

The North End master plan is located within the Mixed-Use Downtown (MUD) district but outside of the downtown design district. This is a request for GDP approval for the master plan. The GDP has been prepared over the course of the last 12 months to ensure that it can meet the applicable standards of this Chapter. Subsequent applications for DDP should be based on the preliminary

layout of buildings and uses within the approved GDP. All future development will continue to be subject to the provisions of this chapter except where modifications have been proposed through the GDP.

The GDP proposes land uses are characterized by high-volume establishments constructed at the human scale such as retail uses both large and small scale, office uses, multi-family residential, and permitted entertainment uses. The code encourages a mix of high-density residential, office and retail uses with retail and service uses on the ground floor and residential uses on the upper floors. The emphasis is on those uses that encourage pedestrian and transit use. The proposed GDP directly reflects all of these urban use objectives by proposing a combination of mixed use residential oriented around and near a pedestrian scale Market Street as well as a series of anchor retail and entertainment uses that serve residents and visitors alike in compliance with this designation within a street plan and open space network that accommodated multi-modal travel.

17.34.020 Permitted Uses

Response:

The proposed GDP proposes retail, office, residential and entertainment uses all of which are listed as permitted uses in the zone.

USE	DESCRIPTION
Banquet, conference facility, and meeting rooms	
Lodging facilities	Including bed and breakfasts, boarding houses, hotels, motels, and other related facilities
Child care centers and nursery schools	
Indoor entertainment centers and arcades	
Health and fitness clubs	
Medical and dental clinics	Including outpatient and infirmary services
Museums, libraries, and cultural facilities	
Offices	Including finance, insurance, real estate, government, and other related services
Outdoor markets	Including produce stands, craft markets, farmers markets that operate on the weekend and after 6pm on the weekdays
Postal services	

USE	DESCRIPTION			
Repair shops	Including those for radio and television, office equipment, bicycles, electronic equipment, shoes, and small appliances and equipment			
Multi family residential				
Restuarants	Eating and drinking establishments without a drive- through			
Services	Including personal, professional, educational, and financial services, and laundry and dry-cleaning			
Retail trade	Including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies, specialty stores			
Seasonal sales				
Residential care facilities	Including assisted living facilities, nursing homes, and group homes for over 15 patients licensed by the state			
Studios and galleries	Including dance, art, photography, music, and other arts			
Utilities	Basic and linear facilities, such as water, sewer, power, telephone, cable, electrical and natural gas lines, not including major facilities such as sewage and water treatment plants, pump stations, water tanks, telephone exchanges and cell towers			
Vetrinary clinics or pet hospitals	Including pet day care facilities			
Home occupations				
Research and development activities				
Temporary real estate offices in model dwellings				
Transporation facilities				
Live/work dwellings				
After-hours public parking				
Religious institutions				
Mobile food units out	Subject to the provisions of the Oregon City Municipal Code			





31 | Chapter 17.34: Mixed Use Downtown (Cont.)

17.34.030 - Conditional uses

The following uses are permitted in this district when authorized and in accordance with the process and standards contained in OCMC 17.56:

- A. Drive-through facilities;
- B. Emergency services;
- C. Hospitals;
- D. Outdoor markets that do not meet the criteria of OCMC 17.34.020.1;
- E. Parks, playgrounds, play fields and community or neighborhood centers;
- F. Parking structures and lots not in conjunction with a primary use on private property, excluding after-hours public parking;
- G. Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies and specialty stores in a freestanding building with a single store exceeding a foot print of sixty thousand square feet;
- H. Public facilities such as sewage and water treatment plants, water towers and recycling and resource recovery centers;
- I. Public utilities and services such as pump stations and sub-stations;
- J. Distributing, wholesaling and warehousing;
- K. Gas stations;
- L. Public and or private educational or training facilities;
- M. Stadiums and arenas;
- N. Passenger terminals (water, auto, bus, train), excluding bus stops;
- O. Recycling center and/or solid waste facility;
- P. Shelters, except within the downtown design district.

Response:

The GDP includes a request to approve eight conditional uses for the site including five drive through uses and three anchor retail facilities that will exceed sixty thousand square feet within a freestanding building. All of these uses are listed as permitted conditional uses and are addressed below under the applicable conditional use criteria.

USE		DESCRIPTION
	Drive-through facilities	
	Emergency services	
	Hospitals	
	Outdoor markets	Only those not meeting the required criteria of a permitted outdoor market
	Parks, playgrounds, play fields and community or neighborhood centers	
	Parking structures and lots not in conjunction with a primary use on private property	Excluding after-hours public parking
	Retail trade	Including grocery, hardware, gift shops, bakeries, delicatessens, florists, pharmacies, and specialty stores in a freestanding building with a single store exceeding a footprint of 60,000 square feet
	Public facilities	
	Public utilities and services	Including pump stations and sub-stations
	Distributing, wholesaling and warehousing	
	Gas stations	
	Public and private	
	educational or training facilities	
	Passenger terminals, excluding bus stops	
	Shelters	

17.34.040 - Prohibited uses

Response:

The GDP approval requested with this application does not include any of the uses prohibited in the MUD district. Individual applications for DDP will be subject to a separate review of their proposed uses and will be subject to the same prohibitions.

USE	DESCRIPTION
Kennels	
Outdoor storage and sale	Not including outdoor markets allowed as a permitted use
Self-service storage	
Single-family attached and detached residential units and duplexes	
Motor vehicle and recreational vehicle repair and services	
Motor vehicle and recreational vehicle sales and incidental services	
Heavy equipment service, repair, sales, storage or rental	Including but not limited to construction equipment and machinery and farming equipment
Marijuana facilities	Including production, processing, wholesaling, research, testing, and laboratories
Mobile food units within the downtown design district	Unless a special event has been issued

17.34.060 - Mixed-use downtown dimensional standards—For properties located outside of the downtown design district

- A. Minimum lot area: None.
- B. Minimum floor area ratio: 0.30.
- C. Minimum building height: Twenty-five feet or two stories except for accessory structures or buildings under one thousand square feet.
- D. Maximum building height: Seventy-five feet, except for the following location where the maximum building height shall be forty-five feet:
- 1. Properties between Main Street and McLoughlin Boulevard and 11th and 16th streets:
- 2. Property within five hundred feet of the End of the Oregon Trail Center property; or





32 | Chapter 17.34: Mixed Use Downtown (Cont.)

- 3. Property abutting single-family detached or attached units.
- E. Minimum required setbacks, if not abutting a residential zone: None.
- F. Minimum required interior side yard and rear yard setback if abutting a residential zone: Fifteen feet, plus one additional foot in yard setback for every two feet in height over thirty-five feet.
- G. Maximum Allowed Setbacks.
- 1. Front yard: Twenty feet.
- 2. Interior side yard: No maximum.
- 3. Corner side yard abutting street: Twenty feet.
- 4. Rear yard: No maximum.
- 5. Rear yard abutting street: Twenty feet.
- H. Maximum site coverage including the building and parking lot: Ninety percent.
- I. Minimum landscape requirement (including parking lot): Ten percent.
- J. Residential minimum net density of 17.4 units per acre, except that no minimum net density shall apply to residential uses proposed above nonresidential uses in a vertical mixed-use configuration or to live/work dwellings.

Response:

The applicable dimensional standards for The North End master plan are met in the proposed GDP as illustrated in the table below except where modifications have been requested under the provisions of 17.65.070. Future DDP's will be subject to consistency with the GDP to ensure that the overall master plan satisfies these requirements as proposed.

Standard	Requirement	Proposed	Notes
Min. Lot Area	None	62+ Acres	Standard met by the GDP
Min. Floor Area Ratio	0.3	0.49	Standard met by the GDP
Min. Building Height	25 feet	Varies	Standard met by the GDP
Max. Building Height	75 / 45 feet	Varies	The 45-foot height requirement applies to those portions of the site located within 500 feet of the End of the Oregon Trail Interpretive Center. A subsequent land division may be needed to separate this area from the rest of the site as the City interprets this standard to apply to the entire property as a single lot.
Min. Setbacks	None	Varies	Standard met by the GDP
Max. Setbacks	20 feet	Varies	Many of the buildings are located within this setback to an internal private street. Future land divisions within the GDP will need to locate property lines in accordance with these standards on site. The GDP locates buildings as close to the existing Washington street frontage as possible, however, buildings located along the Abernethy Road frontage are setback outside of the floodplain and a modification to this standard has been requested as allowed by the provisions in 17.65.070.
Max. Coverage	90%	~26%	Standard met by the GDP
Min. Residential Density	None		Does not apply to residential developments above retail in a mixed-use development.
Min. Landscaping	10%	~11.5%	Standard met by the GDP

17.34.080 - Explanation of certain standards.

- A. Floor Area Ratio (FAR).
- 1. Purpose. Floor area ratios are a tool for regulating the intensity of development. Minimum FARs help to achieve more intensive forms of building development in areas appropriate for larger-scale buildings and higher residential densities.
- 2. Standards.
- a. The minimum floor area ratios contained in OCMC 17.34.060 and 17.34.070 apply to all nonresidential and mixed-use building developments.
- b. Required minimum FARs shall be calculated on a project-by-project basis and may include multiple contiguous blocks. In mixed-use developments, residential floor space will be included in the calculations of floor area ratio to determine conformance with minimum FARs.
- c. An individual phase of a project shall be permitted to develop below the required minimum floor area ratio provided the applicant demonstrates, through covenants applied to the remainder of the site or project or through other binding legal mechanism, that the required density for the project will be achieved at project build out.

Response:

In compliance with this standard, the FAR for the GDP is calculated based on the entire site area subject to the GDP except for the Abernethy Creek NROD. With this site area reduction, the site area comprises 2,464,613 square feet. The development proposed under this GDP comprises 1,091,698 square feet for a total proposed FAR of 0.49:1, meeting the required minimum FAR of 0.3:1. Each individual phase may or may not meet the minimum requirement but as permitted by this section, a phase will be permitted to develop below the required minimum as long as each phase demonstrates through a binding mechanism that the site will meet the minimum FAR requirement at full buildout. This is a request for the approval of the GDP which satisfies the requirements for FAR across the overall site. The FAR requirements apply to this development under the standards above. Future applications for DDP should be consistent with the GDP approval to ensure the project remains compliant with this standard.

- B. Building Height.
- 1. Purpose.
- a. The Masonic Hall is currently the tallest building in downtown Oregon City, with a height of fifty-eight feet measured from Main Street. The maximum building height limit of fifty-eight feet will ensure that no new building will be taller than the Masonic Hall.
- b. A minimum two-story (twenty-five feet) building height is established for the downtown design district overlay sub-district to ensure that the traditional building scale for the downtown area is maintained.

Response:

The site is not located within the downtown design district. As proposed in the GDP, all development is within the allowed height limits and will demonstrate continuing compliance with the height maximums at each DDP approval.

Chapter 17.41: Tree Protection, Preservation, Removal and Replanting Standards

17.41.010 - Protection of trees—Intent

The intent of this chapter is to ensure that new development is designed in a manner that preserves trees to the maximum extent practicable. As a requirement of any Type II land use application, the siting of structures, roadways and utility easements, shall provide for the protection of tree resources to the maximum extent practicable. This chapter applies to all land division and site plan and design review applications.

17.41.020 - Tree protection—Applicability

- A. Applications for development subject to OCMC 16.08 (Land Divisions) or OCMC 17.62 (Site Plan and Design Review) shall demonstrate compliance with these standards as part of the review proceedings for those developments. Compliance with this chapter is required from the date a land use application is filed until a land division is recorded or other development approval is final.
- B. For public capital improvement projects, the city engineer shall demonstrate compliance with these standards pursuant to a Type I process.
 C. Tree canopy removal greater than twenty-five percent on areas with greater than twenty-five percent slope, unless exempted under OCMC 17.41.040, shall be subject to these standards.
- D. A heritage tree or grove which has been designated pursuant to the procedures of OCMC 12.32 shall be subject to the standards of this section.

 E. A tree that has been planted pursuant to this section shall remain or shall be replaced with a new tree if removed.

Response:

This is an application for approval of The North End master plan GDP. No tree removal is proposed with this request and this standard is not expressly applicable to the GDP review. It is noted however that this site is a reclaimed landfill and there are very few trees on the site outside of the resource areas. For any required tree removal within a proposed development footprint, onsite mitigation is preferred and proposed to be integrated into the overall site landscaping consistent with the proposed design guidelines provided as **Chapter 5: Master Plan Design Guidelines** of this application. Requests for individual DDP's will be subject to the requirements of this chapter and be required to demonstrate conformance with these standards under a site-specific development plan.

Chapter 17.42: Flood Management Overlay Zone

17.42.010 - Purpose-Findings.

A. There is established in the city a flood management overlay district. The flood management overlay district is an overlay zone classification defining areas subject to periodic flooding or inundation which can result in property harm or loss, disruption of public services, hazards for public health, or added expense for public services. All conditions and restrictions of land use established by this chapter of the city's zoning ordinance shall be in addition to such restrictions and conditions as may be imposed and established in underlying zoning districts.





33 | Chapter 17.42: Flood Management Overlay Zone (Cont.)

- B. It is the purpose of this chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:
- 1. To protect human life and health;

To minimize expenditure of public money and costly flood control projects; To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

- 2. To minimize prolonged business interruptions;
- 3. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- 4. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas:
- 5. To ensure that potential buyers are notified that property is in an area of special flood hazard;
- 6. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions; and
- 7. To protect flood management areas, which provide the following functions:
- a. Protect life and property from dangers associated with flooding;
- b. Flood storage, reduction of flood velocities, reduction of flood peak;
- c. Flows and reduction of wind and wave impacts;
- d. Maintain water quality by reducing and sorting sediment loads;
- e. Processing chemical and organic wastes and reducing nutrients, recharge, store and discharge groundwater; and
- f. Provide plant and animal habitat, and support riparian ecosystems.

17.42.020 - Applicability.

- A. This chapter shall apply to development in the flood management overlay district, which may also be referred to as the "floodplain overlay district" in this code. The flood management overlay district includes all areas of special flood hazards and all flood management areas within the city. The overlay district restricts the uses that are allowed in the base zone by right, with limitations, or as provisional uses.
- B. The flood management areas which have been mapped include the following locations:
- 1. Land contained within the one hundred-year floodplain, flood area and floodway as shown on the Federal Emergency Management Agency flood insurance maps dated June 17, 2008, including areas of special flood hazard pursuant to Section 17.42.040 and the area of inundation for the February 1996 flood: and
- 2. Lands that have physical or documented evidence of flooding within recorded history based on aerial photographs of the 1996 flooding and/or the water quality and flood management areas maps.
- C. The standards that apply to the flood management areas apply in addition to state or federal restrictions governing floodplains or flood management areas.

Response:

The North End master plan is located within the Flood Management Overlay Zone as illustrated in the figure 2.3, therefore, these standards are applicable to future development requested with DDP approval. For the purposes of this request, building locations within the GDP have been proposed based on the 1996 flood inundation lines also illustrated below so that any flooding that can be expected on site in a similar event will primarily only affect the proposed parking areas within the master plan area. For example, the areas that were flooded in 1996 along Abernethy Road are proposed to be developed with surface parking lots, and the areas within that were inundated along Washington Street will be developed with mixed use housing that is located on top of three proposed parking structures.

17.42.160 - Flood management area standards.

- A. Uses Permitted Outright:
- 1. Excavation and fill required to plant any new trees or vegetation.
- 2. Restoration or enhancement of floodplains, riparian areas, wetland, upland and streams that meet federal and state standards provided that any restoration project which encroaches on the floodway complies with the requirements of Section 17.42.190 (Floodways).
- B. Provisional Uses.
- 1. All uses allowed in the base zone or existing flood hazard overlay zone are allowed in the flood management overlay district subject to compliance with the development standards of this section.
- C. Prohibited Uses.
- 1. Any use prohibited in the base zone;
- 2. Uncontained areas of hazardous materials as defined by the Department of Environmental Quality.

Response

The uses proposed within the GDP are all uses that are either outright allowed in the zone or conditionally allowed within the MUD zone district in compliance with this criterion. The GDP does not propose any of the prohibited uses within the master plan area. The preliminary grading illustrated in civil sheets C300 thru C-307, attached within Appendix B illustrate that based on the grading plan and the proposed development in the GDP, there will be no net increase of fill within the floodplain on site. The Cut/Fill balance exhibits are provided within the preliminary stormwater report attached as Appendix A to this application. The GDP therefore does not permit any development that would otherwise be prohibited by the floodplain overlay zone.

The remaining sections of this Chapter include standards that are specific to construction, materials, and methods. The GDP does not provide a level of detail to demonstrate compliance with these standards. The applicant recognizes that all future development within the flood management overlay zone is subject to these requirements and will ensure that they are designed to meet these specific approval criteria with the submission of individual DDP's.



Figure 2.3 - FEMA 100-yr floodplain and the 1996 Flood Inundation

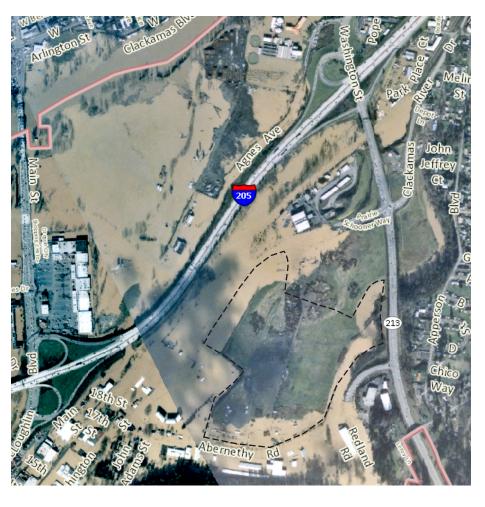


Figure 2.4 - Aerial showing extent of 1996 Flood on the North End site





34

Chapter 17.44: Geologic Hazards Overlay Zone

17.44.010 - Intent and purpose.

The intent and purpose of the provisions of this chapter are:

- A. To ensure that activities in geologic hazard areas are designed based on detailed knowledge of site conditions in order to reduce the risk of private and public losses;
- B. To establish standards and requirements for the use of lands within geologic hazard areas;
- C. To provide safeguards to prevent undue hazards to property, the environment, and public health, welfare, and safety in connection with use of lands within geologic hazard areas;
- D. To mitigate risk associated with geologic hazard areas, not to act as a guarantee that the hazard risk will be eliminated, nor as a guarantee that there is a higher hazard risk at any location. Unless otherwise provided, the geologic hazards regulations are in addition to generally applicable standards provided elsewhere in the Oregon City Municipal Code.

Response:

There are areas within The North End master plan area that are identified within the Geologic Hazards Overlay Zone as illustrated in the figure below. The master plan area topography was artificially created to cover the prior landfill that was located on site.

Brett Shipton P.E., a Principal Engineer with NV5 (formerly GeoDesign), has provided a geotechnical report that is attached as an **Appendix D** to this application. That report provides a detailed level of review of the soils and geologic conditions on site along with identifying recommended construction practices to ensure that risks associated with development on properties within geologic hazards on site are mitigated by proposed development.

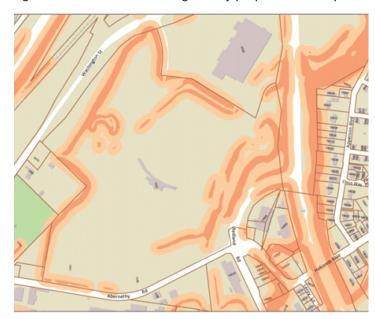


Figure 2.5 Oregon City Geologic Hazards Map - Steep Slopes

17.44.025 - When required; regulated activities; permit and approval requirements.

No person shall engage in any of the following regulated activities within the adopted Oregon City Geologic Hazards Overlay Zone as defined in section 17.04.515 of the Oregon City Municipal Code without first obtaining permits or approvals as required by this chapter:

- A. Installation or construction of an accessory structure greater than 500 square feet in area;
- B. Development of land, construction, reconstruction, structural alteration, relocation or enlargement of any building or structure for which permission is required pursuant to the Oregon City Municipal Code;
- C. Tree removal on slopes greater than 25 percent where canopy area removal exceeds 25 percent of the lot.
- D. Excavation which exceeds two feet in depth, or which involves twenty-five or more cubic yards of volume;

The requirements of this chapter are in addition to other provisions of the Oregon City Municipal Code. Where the provisions of this chapter conflict with other provisions of the Oregon City Municipal Code, the provisions that are the more restrictive of regulated development activity shall govern.

Response:

Future construction projects within the GDP will result in development, tree removal, and excavation. Therefore, these requirements are applicable to development within the master plan area. Future applications for DDP's will be required to conform with the recommendations of the NV5 report and supplement that information with their own specific analysis and design. Any DDP that includes land identified within a designated Geologic Hazard Overlay Zone is expected to comply with the applicable provisions of the Oregon City Municipal Code. The NV5 report demonstrates that based on the proposed preliminary grading plan and the development locations, the site development under each DDP can feasibly satisfy the requirements of the Geologic Hazard Overlay Zone.

17.44.050 - Development—Application requirements and review procedures and approvals.

Except as provided by subsection B. of this section, the following requirements apply to all development proposals subject to this chapter:

- A. A geological assessment and geotechnical report that specifically includes, but is not limited to:
- 1. Comprehensive information and data regarding the nature and distribution of underlying geology, the physical and chemical properties of existing soils and groundwater; an opinion of site geologic stability, and conclusions regarding the effect of geologic conditions on the proposed development. In addition to any field reconnaissance or subsurface investigation performed for the site, the following resources, as a minimum, shall be reviewed to obtain this information and data:
- a. The State of Oregon Department of Geology and Mineral Industries (DOGAMI) in Bulletin 99, Geology and Geological Hazards of North Clackamas County, Oregon (1979), or in any subsequent DOGAMI mapping for the Oregon City area;
- b. Portland State University study entitled "Environmental Assessment of Newell Creek Canyon, Oregon City, Oregon" (1992);

- c. Portland State University study, "Landslides in the Portland, Oregon, Metropolitan Area Resulting from the Storm of February 1996: Inventory Map, Database and Evaluation" (Burns and others, 1998);
- d. DOGAMI Open File Report O-06-27, "Map of Landslide Geomorphology of Oregon City, Oregon, and Vicinity Interpreted from LIDAR Imagery and Aerial Photographs" (Madin and Burns, 2006);
- e. "Preliminary Geologic Map of the Oregon City Quadrangle, Clackamas County, Oregon" (Madin, in press);
- 2. Information and recommendations regarding existing local drainage, proposed permit activity impacts on local drainage, and mitigation to address adverse impacts;
- 3. Comprehensive information about site topography;
- 4. Opinion as to the adequacy of the proposed development from an engineering standpoint;
- 5. Opinion as to the extent that instability on adjacent properties may adversely affect the project;
- 6. Description of the field investigation and findings, including logs of subsurface conditions and laboratory testing results;
- 7. Conclusions regarding the effect of geologic conditions on the proposed development, tree removal, or grading activity;
- 8. Specific requirements and recommendations for plan modification, corrective grading, and special techniques and systems to facilitate a safe and stable site;
- 9. Recommendations and types of considerations as appropriate for the type of proposed development:
- a. General earthwork considerations, including recommendations for temporary and permanent cut and fill slopes and placement of structural fill;
- b. Location of residence on lot;
- c. Building setbacks from slopes;
- d. Erosion control techniques applicable to the site;
- e. Surface drainage control to mitigate existing and potential geologic hazards;
- f. Subdrainage and/or management of groundwater seepage;
- g. Foundations;
- h. Embedded/retaining walls;
- Management of surface water and irrigation water; and
- j. Impact of the development on the slope stability of the lot and the adjacent properties.
- 10. Scaled drawings that describe topography and proposed site work, including:
- a. Natural physical features, topography at two or ten-foot contour intervals locations of all test excavations or borings, watercourses both perennial and intermittent, ravines and all existing and man-made structures or features all fully dimensioned, trees six-inch caliper or greater measured four feet from ground level, rock outcroppings and drainage facilities;
- b. All of the features and detail required for the site plan above, but reflecting preliminary finished grades and indicating in cubic yards whether and to what extent there will be a net increase or loss of soil.
- c. A cross-section diagram, indicating depth, extent and approximate volume of all excavation and fills.
- 11. For properties greater than one acre, a preliminary hydrology report, prepared by a suitably qualified and experienced hydrology expert, addressing





35 | Chapter 17.44: Geologic Hazards Overlay Zone (Cont.)

the effect upon the watershed in which the proposed development is located; the effect upon the immediate area's stormwater drainage pattern of flow, the impact of the proposed development upon downstream areas and upon wetlands and water resources; and the effect upon the groundwater supply.

- B. Review procedures and approvals require the following:
- 1. Examination to ensure that:
- a. Required application requirements are completed;
- b. Geologic assessment and geotechnical report procedures and assumptions are generally accepted; and
- c. All conclusions and recommendations are supported and reasonable.
- 2. Conclusions and recommendations stated in an approved assessment or report shall then be directly incorporated as permit conditions or provide the basis for conditions of approval for the regulated activity.
- 3. All geologic assessments and geotechnical reports shall be reviewed by an engineer certified for expertise in geology or geologic engineering and geotechnical engineering, respectively, as determined by the city. The city will prepare a list of prequalified consultants for this purpose. The cost of review by independent review shall be paid by the applicant.
- C. The city engineer may waive one or more requirements of subsections A and B of this section if the city engineer determines that site conditions, size or type or development of grading requirements do not warrant such detailed information. If one or more requirements are waived, the city engineer shall, in the staff report or decision, identify the waived provision(s), explain the reasons for the waiver, and state that the waiver may be challenged on appeal and may be denied by a subsequent review authority.

Response

A preliminary Geotech report has been prepared by Brett Shipton P.E., a Principal Engineer with NV5 (formerly GeoDesign). The preliminary report is attached to this application as Appendix D. The preliminary Geotech report is a comprehensive report that provides a review of the soils, geologic conditions, surface and subsurface conditions, an analysis of geologic hazards. The report also provides design recommendations for foundations, pavement, retaining walls, and drainage. Finally, the report provides recommendations for construction activities including site preparation, excavation, structural fill, erosion control, and wet weather construction. on site along with identifying recommended construction practices to ensure that the hazards on site are mitigated by future development.

The report provides a general overview of the geotechnical conditions on site for the GDP. However, while future applications for detailed development plans can rely upon the findings and recommendations of the NV5 report, they must provide their own analysis and design based on building types, final grading, and locations.

17.44.060 - Development standards.

Notwithstanding any contrary dimensional or density requirements of the underlying zone, the following standards shall apply to the review of any development proposal subject to this chapter. Requirements of this chapter are in addition to other provision of the Oregon City Municipal Code. Where provision of this chapter conflict with other provision of the Oregon City Municipal Code, the provisions that are more restrictive of regulated

development activity shall govern.

A. All developments shall be designed to avoid unnecessary disturbance of natural topography, vegetation and soils. To the maximum extent practicable as determined by the review authority, tree and ground cover removal and fill and grading for residential development on individual lots shall be confined to building footprints and driveways, to areas required for utility easements and for slope easements for road construction, and to areas of geotechnical remediation.

Response:

With the exception of the Abernethy Creek corridor on the eastern edge of the master plan site, there is not native topography, vegetation, or soils. That corridor is proposed to be preserved through approval of the GDP.

B. All grading, drainage improvements, or other land disturbances shall only occur from May 1 to October 31. Erosion control measures shall be installed and functional prior to any disturbances. The city engineer may allow grading, drainage improvements or other land disturbances to begin before May 1 (but no earlier than March 16) and end after October 31 (but no later than November 30), based upon weather conditions and in consultation with the project geotechnical engineer. The modification of dates shall be the minimum necessary, based upon the evidence provided by the applicant, to accomplish the necessary project goals. Temporary protective fencing shall be established around all trees and vegetation designed for protection prior to the commencement of grading or other soil disturbance.

Response

The applicant acknowledges these requirements and expects all subsequent applications for development within the master plan area to comply with this standard prior to any on-site development activity.

C. Designs shall minimize the number and size of cuts and fills.

Response:

Preliminary grading plans have been provided in the civil plan set, sheets C300 thru C307 in **Appendix B**. Areas that are proposed to be developed on site will minimize the amount of cut and fill, but a minimal amount of cut will be necessary in order to construct streets, utilities, and buildings. Competing interests such as utility systems that rely on gravity to function (i.e. wet utilities) and compliance with the Americans with Disabilities Act largely dictate the amount of grading required on site. Because this is a reclaimed landfill site and there is a remediation cap in place, there will be careful consideration developing within these areas. The preliminary grading plan and stormwater management plan address these cut and fill and cap issues as detailed above. Based on all of these considerations, the GDP minimizes the number of on-site cuts and fills.

D. Cut and fill slopes, such as those for a street, driveway accesses, or yard area, greater than seven feet in height (as measured vertically) shall be terraced. Faces on a terraced section shall not exceed five feet. Terrace widths shall be a minimum of three feet and shall be vegetated. Total cut and fill slopes shall not exceed a vertical height of fifteen feet. Except in connection

with geotechnical remediation plans approved in accordance with the chapter, cuts shall not remove the toe of any slope that contains a known landslide or is greater than twenty-five percent slope. The top of cut or fill slopes not utilizing structural retaining walls shall be located a minimum of one-half the height of the cut slope from the nearest property line.

Response:

No cuts are required by the GDP development plans that would remove the toe of a slope and the GDP calls for the location of structural retaining walls where they may be required as shown on sheets C300 thru C307 of the civil plan sheets. Future development can feasibly comply with this standard. The GDP itself does not provide the level of construction detail to demonstrate specific compliance with this standard.

E. Any structural fill shall be designed by a suitably qualified and experienced civil or geotechnical engineer licensed in Oregon in accordance with standard engineering practice. The applicant's engineer shall certify that the fill has been constructed as designed in accordance with the provisions of this chapter.

Response

The GDP does not dictate the need for any structural fill. If such fill is required to develop improvements consistent with the approved GDP, the DDP review will be required to demonstrate conformance with this standard.

F. Retaining walls shall be constructed in accordance with the Oregon Structural Specialty Code adopted by the State of Oregon.

Response:

Any retaining walls required by a DDP will demonstrate compliance with this standard, but it should be recognized that the GDP does not propose site design element that would preclude an applicant for a DDP from complying with this standard.

G. Roads shall be the minimum width necessary to provide safe vehicle and emergency access, minimize cut and fill and provide positive drainage control. The review authority may grant a variance from the city's required road standards upon findings that the variance would provide safe vehicle and emergency access and is necessary to comply with the purpose and policy of this chapter.

Response:

Streets proposed within the master plan area are proposed to be private and have been designed to provide safe access for all modes of transportation including vehicles, bicycles, and pedestrians. A variance is not necessary to the road standards with approval of the GDP. The preliminary grading plan and stormwater management plan addressed above demonstrate that minimum cut and fill is proposed for the street system and positive drainage control is achieved.





36 | Chapter 17.44: Geologic Hazards Overlay Zone (Cont.)

- H. Density shall be determined as follows:
- 1. For those areas with slopes less than twenty-five percent between grade breaks, the allowed density shall be that permitted by the underlying zoning district:
- 2. For those areas with slopes of twenty-five to thirty-five percent between grade breaks, the density shall not exceed two dwelling units per acre except as otherwise provided in subsection I of this section;
- 3. For those areas with slopes over thirty-five percent between grade breaks, development shall be prohibited except as otherwise provided in subsection 1.4. of this section.

Response:

Subsection (H)(1) applies. The allowed density in the GDP area is a minimum of .3:1 FAR. The GDP maintains a density of .49:1 in compliance with the density permitted by the underlying zoning district.

- I. For properties with slopes of twenty-five to thirty-five percent between grade breaks:
- 1. For those portions of the property with slopes of twenty-five to thirty-five percent, the maximum residential density shall be limited to two dwelling units per acre; provided, however, that where the entire site is less than one-half acre in size, a single dwelling shall be allowed on a lot or parcel existing as of January 1, 1994 and meeting the minimum lot size requirements of the underlying zone;
- 2. An individual lot or parcel with slopes between twenty-five and thirty-five percent shall have no more than fifty percent or four thousand square feet of the surface area, whichever is smaller, graded or stripped of vegetation or covered with structures or impermeable surfaces.
- 3. No cut into a slope of twenty-five to thirty-five percent for the placement of a housing unit shall exceed a maximum vertical height of fifteen feet for the individual lot or parcel.
- 4. For those portions of the property with slopes over thirty-five percent between grade breaks:
- a. Notwithstanding any other city land use regulation, development other than roads, utilities, public facilities and geotechnical remediation shall be prohibited; provided, however, that the review authority may allow development upon such portions of land upon demonstration by an applicant that failure to permit development would deprive the property owner of all economically beneficial use of the property. This determination shall be made considering the entire parcel in question and contiguous parcels in common ownership on or after January 1, 1994, not just the portion where development is otherwise prohibited by this chapter. Where this showing can be made on residentially zoned land, development shall be allowed and limited to one single-family residence. Any development approved under this chapter shall be subject to compliance with all other applicable city requirements as well as any applicable state, federal or other requirements;
- b. To the maximum extent practicable as determined by the review authority, the applicant shall avoid locating roads, utilities, and public facilities on or across slopes exceeding thirty-five percent.

Response:

According to the geotechnical reports, the steepest slopes were artificially created to either serve as a landfill berm on the perimeter of the site or to construct the golf driving range within the interior of the site. The report identifies possible evidence of slope instability, caused either naturally or at the time these slopes were constructed. These artificial slopes in the master plan area are man-made and range between 35 and 80 percent. The GDP shows preliminary grading plans that will grade those slopes for future development.

J. The geotechnical engineer of record shall review final grading, drainage, and foundation plans and specifications and confirm in writing that they are in conformance with the recommendations provided in their report.

Response

The applicant acknowledges this requirement. Future applications for DDP review will provide their own geotechnical analysis and the geotechnical engineer of record will be responsible for reviewing the final grading, drainage, and foundation plans as specified in this standard. No actual development activity is authorized with approval of the GDP. However, the GDP includes a preliminary grading plan demonstrating that the GDP can be built out in conformance with applicable geotechnical specifications.

K. At the city's discretion, peer review shall be required for the geotechnical evaluation/investigation report submitted for the development and/or lot plans. The peer reviewer shall be selected by the city. The applicant's geotechnical engineer shall respond to written comments provided by the city's peer reviewer prior to issuance of building permit.

Response

The applicant is aware that the City may require peer review of the geotechnical reports associated with development.

L. The review authority shall determine whether the proposed methods of rendering a known or potential hazard site safe for construction, including proposed geotechnical remediation methods, are feasible and adequate to prevent landslides or damage to property and safety. The review authority shall consult with the city's geotechnical engineer in making this determination. Costs for such consultation shall be paid by the applicant. The review authority may allow development in a known or potential hazard area as provided in this chapter if specific findings are made that the specific provisions in the design of the proposed development will prevent landslides or damage. The review authority may impose any conditions, including limits on type or intensity of land use, which it determines are necessary to assure that landslides or property damage will not occur.

Response:

The applicant is aware that the cost for the peer review of the geotechnical reports provided by the City's consulting engineer is paid by the applicant and that additional conditions could be imposed on the development to assure that landslides and property damage do occur in compliance with this criteria.

17.44.070 - Access to property.

- A. Shared private driveways may be required if the city engineer or principal planner determines that their use will result in safer location of the driveway and lesser amounts of land coverage than would result if separate private driveways are used.
- B. Innovations in driveway design and road construction shall be permitted in order to keep grading and cuts or fills to a minimum and to achieve the purpose and policy of this chapter.
- C. Points of access to arterials and collectors shall be minimized.
- D. The city engineer or principal planner shall verify that adequate emergency services can be provided to the site.

Response:

Access to the master plan area is proposed in several locations through the GDP. The applicant has requested a modification to allow the site to have more than one access. The proposed access locations are onto two designated minor arterials but have been located so that they meet or exceed the access spacing standards. For the size of this development, the proposed access locations are intentional and proposed in a way to efficiently move traffic in and out of the development without burdening any single facility.

17.44.080 - Utilities.

All new service utilities, both on-site and off-site, shall be placed underground and under roadbeds where practicable. Every effort shall be made to minimize the impact of utility construction. Underground utilities require the geologic hazards permitting and review prescribed herein.

Response:

The applicant is aware of the requirement to provide all new service utilities underground as required.

17.44.090 - Stormwater drainage.

The applicant shall submit a permanent and complete stormwater control plan. The program shall include, but not be limited to the following items as appropriate: curbs, gutters, inlets, catch basins, detention facilities and stabilized outfalls. Detention facilities shall be designed to city standards as set out in the city's drainage master plan and design standards. The review authority may impose conditions to ensure that waters are drained from the development so as to limit degradation of water quality consistent with Oregon City's Title III section of the Oregon City Municipal Code Chapter 17.49 and the Oregon City Public Works Stormwater Management Design Manual and Standards Plan or other adopted standards subsequently adopted by the city commission. Drainage design shall be approved by the city engineer before construction, including grading or other soil disturbance, has begun.

Response:

A preliminary stormwater report is provided as **Appendix A** to this application along with a set of utility plans demonstrating that stormwater form the site can be collected, treated, and detained prior to being released into an approved system consistent with City standards. Specific details of the system have been discussed previously in this narrative and illustrated within the accompanying plan sets. Future applications for DDP approval will require these plans to be refined to respond to the actual proposed development.





37

Chapter 17.47: Erosion and Sediment Control

17.47.010 - Purpose.

A. The purpose of this chapter is to require erosion prevention measures and sediment control practices for all development during construction to prevent and restrict the discharge of sediments, and to require final permanent erosion prevention measures, which may include landscaping, after development is completed. Erosion prevention techniques shall be designed to protect soil particles from the force of water and wind and other mechanical means so that they will not be transported from the site. Sediment control measures shall be designed to capture soil particles after they have become dislodged by erosion and attempt to retain the soil particles on-site.

B. The objective of these measures is to control, at the source, waterborne and airborne erosion and the air and water pollution that results from such erosion mechanisms. This chapter recognizes that all non-point discharges eventually end up in surface water bodies. This chapter is intended to control water quality degradation from construction and development activities and it applies in addition to any other applicable provision of this Code, state or federal law. This chapter is not intended to serve as a guideline for stormwater management control measures for already constructed developments. 17.47.030 - Applicability.

A. This chapter, which may also be referred to as "erosion control" in this Code, applies to development that may cause visible or measurable erosion on any property within the city limits of Oregon City.

B. This chapter does not apply to work necessary to protect, repair, maintain or replace existing structures, utility facilities, roadways, driveways, accessory uses and exterior improvements in response to emergencies, provided that after the emergency has passed, adverse impacts are mitigated in accordance with applicable standards.

Response:

This is a proposal for approval of the GDP associated with The North End master plan. Preliminary construction plans are provided as appendices to this plan for the purposes of illustrating that the master plan can be constructed in conformance with City standards. Construction activities are not permitted through the GDP approval. Separate DDP's will be filed for new development within the master plan area once the GDP is approved. Construction associated with approval of individual DDP's for the site will be required to meet the provisions of this chapter before the City will issue development permits.

Chapter 17.49: Natural Resource Overlay Zone

17.49.010 - Purpose.

The natural resource overlay district designation provides a framework for protection of Metro Titles 3 and 13 lands, and Statewide Planning Goal 5 resources within Oregon City. The natural resource overlay district (NROD) implements the Oregon City Comprehensive Plan Natural Resource Goals and Policies, as well as Federal Clean Water Act requirements for shading of streams and reduction of water temperatures, and the recommendations of the Metro ESEE Analysis. It is intended to resolve conflicts between development and conservation of habitat, stream corridors, wetlands, and

floodplains identified in the city's maps. The NROD contributes to the following functional values:

A. Protect and restore streams and riparian areas for their ecologic functions and as an open space amenity for the community.

B. Protect floodplains and wetlands, and restore them for improved hydrology, flood protection, aguifer recharge, and habitat functions.

C. Protect upland habitats, and enhance connections between upland and riparian habitat.

D. Maintain and enhance water quality and control erosion and sedimentation through the revegetation of disturbed sites and by placing limits on construction, impervious surfaces, and pollutant discharges.

E. Conserve scenic, recreational, and educational values of significant natural resources.

The NROD ecological functions listed above are planned for integration with existing neighborhoods, new residential and commercial developments. The long-term goal of the NROD is to restore and enhance stream corridors, wetlands, and forests to more natural vegetated conditions, recognizing that existing homes and other existing uses will continue in the district. This chapter does not regulate the development within the identified water resource. Separate permits from the Division of State Lands and the Army Corp of Engineers may be required for work within a stream or wetland.

Response:

The applicant has submitted a Type I NROD Permit Exemption and Boundary Verification for Area 4 indicated on the attached **Appendix E** which would, if approved, modify the boundary of the NROD along the northern site frontage adjacent to Washington Street and exempt the existing imperious Washington Street improvements from NROD permits.

The applicant has also submitted a Type I NROD Permit Exemption for Area 5 indicated on the attached **Appendix E**. This area contains the impervious soil cap.

The Type I application will likely be reviewed during the completeness review for this GDP application process. If the areas are removed under the Type I procedure, the NROD approval criteria for that area of the site will be inapplicable to this GDP application. The applicant understands, however, that it may be required to supplement the GDP application narrative with responses to the NROD approval criteria for Areas 4 and 5.

17.49.060 - Consistency and relationship to other regulations.

Response:

The proposed project will result in the elimination of Roadside Ditch 1. As such, the project will obtain necessary permits and approvals from the Oregon Department of State Lands (DSL) and/or the U.S. Corps of Engineers. The project will also require permits from the Oregon Department of Environmental Quality (ODEQ). The Applicant is aware that an NROD permit does not become valid prior to obtaining other agency approvals or those agencies indicate that such approvals are not required.

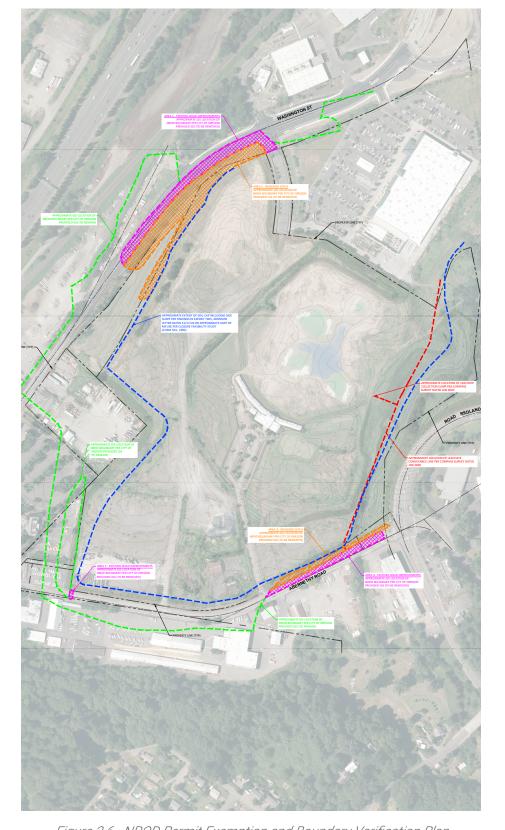


Figure 2.6 - NROD Permit Exemption and Boundary Verification Plan





38 | Chapter 17.49: Natural Resource Overlay Zone (Cont.)

17.49.080 - Uses allowed outright (exempted)

J. Replacement, additions, alterations and rehabilitation of existing structures, roadways, utilities, etc., where the ground level impervious surface area is not increased.

Response:

The applicant will replace existing impervious surface area associated with Washington Street and Abernethy Road for the required half street improvements. This portion of the proposed development within the VC associated with Roadside Ditch 1 and Tributary 1 and Associated Wetlands is exempt from review pursuant to Section 17.49.080.J.

17.49.090 - Uses allowed under prescribed conditions.

F. New roadways, bridges/creek crossings, utilities or alterations to such facilities when not exempted by Section 17.49.080.

Response:

The required half street improvements for Washington Street and Abernethy Road will increase the ground level impervious surface area beyond the limits of existing development. These portions of the required half street improvements within the NROD (78,462 square feet) are subject to Section 17.49.150 described below.

17.49.100 - General development standards.

The following standards apply to all Uses Allowed under Prescribed Conditions within the NROD with the exception of rights of ways (subject to Section 17.49.150), trails (subject to Section 17.49.170), utility lines (subject to Section 17.49.160), and mitigation projects (subject to Section 17.49.180 or 17.49.190):

A. Native trees may be removed only if they occur within ten feet of any proposed structures or within five feet of new driveways or if deemed not windsafe by a certified arborist. Trees listed on the Oregon City Nuisance Plant List or Prohibited Plant List are exempt from this standard and may be removed. A protective covenant shall be required for any native trees that remain;

Response:

Standard is met. The trees proposed for removal within the NROD are all within 10 feet of proposed permanent development. A tree survey of the project area is needed and will be included with future DDP submittals.

B. The community development director may allow the landscaping requirements of the base zone, other than landscaping required for parking lots, to be met by preserving, restoring and permanently protecting habitat on development sites in the Natural Resource Overlay District.

Response

Standard does not apply. No landscaping requirements of the base zone will be met within the NROD.

C. All vegetation planted in the NROD shall be native and listed on the Oregon City Native Plant List;

Response

The vegetation proposed to be planted within the NROD will be native and listed on the Oregon City Native Plant List.

D. Grading is subject to installation of erosion control measures required by the City of Oregon City;

Response:

Proposed erosion control measures required by the City of Oregon City will be installed prior to site mobilization and grading activities.

E. The minimum front, street, or garage setbacks of the base zone may be reduced to any distance between the base zone minimum and zero in order to minimize the disturbance area within the NROD portion of the lot;

Response:

Standard does not apply. Minimum setback reductions prescribed in the MUD zone are not being requested.

F. Any maximum required setback in any zone, such as for multi-family, commercial or institutional development, may be increased to any distance between the maximum and the distance necessary to minimize the disturbance area within the NROD portion of the lot;

Response

Maximum setback increases are being requested through the provisions of 17.65.070 and are not related to the location of the NROD on site.

G. Fences are allowed only within the disturbance area;

Response:

Standard is met. Fences are not proposed within the undisturbed NROD with the GDP. Subsequent applications for individual DDP's will be required to satisfy the applicable standards of this chapter at the time they are submitted.

H. Incandescent lights exceeding two hundred watts (or other light types exceeding the brightness of a two hundred watt incandescent light) shall be placed or shielded so that they do not shine directly into resource areas;

Response:

The applicant is aware of these standards. Lights are not currently proposed for any portion of the site. When individual DDP's are applied for the applicant will be required to satisfy these standards. Any lights adjacent to the NROD will be shielded so that they do not shine directly into resource areas.

I. If development will occur within the one hundred-year floodplain, the FEMA floodplain standards of Chapter 17.42 shall be met; and

Response:

Standard is met. Development will occur within the one hundred year floodplain. As such, the FEMA floodplain standards of Chapter 17.42 will be required to be satisfied with future development and as stated within that

section, the proposed GDP will comply with those standards.

J. Mitigation of impacts to the regulated buffer is required, subject to Section 17.49.180 or 17.49.190.

Response:

Mitigation of impacts will be provided subject to Section 17.49.180, Mitigation Planting Option 2.

17.49.150 – Standards for vehicular or pedestrian paths and roads.

A. Stream crossings shall be limited to the minimum number and width necessary to ensure safe and convenient pedestrian, bicycle and vehicle connectivity, and shall cross the stream at an angle as close to perpendicular to the stream channel as practicable. Bridges shall be used instead of culverts wherever practicable.

Response:

This standard does not apply. Stream crossings are not proposed for the development.

B. Where the right-of-way or private road crosses a stream the crossing shall be by bridge or a bottomless culvert;

Response:

This standard does not apply. Stream crossings are not proposed within the development.

C. No fill or excavation shall occur within the ordinary high water mark of a stream without the approval of the Division of State Lands and/or the U.S. Army Corps of Engineers;

Response:

Approval from DSL and the Corps will be obtained for the elimination of Roadside Ditch 1. Copies of the permits or approvals will be provided to the City prior to concurrent with the Oregon City grading permit application.

D. If the Oregon Department of State Lands (DSL) has jurisdiction over any work that requires excavation or fill in a wetland, required permits or authorization shall be obtained from DSL prior to release of a grading permit; **Response:**

Approval from DSL and the Corps will be obtained for the elimination of Roadside Ditch 1. Copies of the permits or approvals will be provided to the City prior to concurrent with the Oregon City grading permit application.

E. Any work that will take place within the banks of a stream shall be conducted between June 1 and August 31, or shall be approved by the Oregon Department of Fish and Wildlife; and





39 | Chapter 17.49: Natural Resource Overlay Zone (Cont.)

Response:

Standard will be met. If required, work within Roadside Ditch 1 will either be conducted between June 1 and August 31 or an In-Water Work Variance will be approved by the Oregon Department of Fish and Wildlife.

F. Mitigation is required, subject to OCMC 17.49.180 or 17.49.190.

Response:

Mitigation for the 78,462 square feet (1.8 acres) of total impacts associated with the required half street improvements will be provided as required and detailed in the response to Section 17.49.180.

17.49.180 - Mitigation standards.

Response

The applicant will provide mitigation for project-related impacts pursuant to the standards of this section using Mitigation Planting Option 2.

A. Mitigation shall occur at a two-to-one ratio of mitigation area to proposed NROD disturbance area [...].

Response:

Standard is met. The proposed disturbance area, excluding disturbance to existing impervious surface areas is 78,462 square feet (1.8 acres), which requires 156,924 square feet of mitigation. The proposed mitigation area is 156,924 square feet (3.6 acres), located in the eastern portion of the project parcel adjacent to Tributary 1 and Associated Wetlands.

- B. Mitigation shall occur on the site where the disturbance occurs, pursuant to the following:
- 1. The mitigation required for disturbance associated with a right-of-way or utility in the right-of-way shall be located as close to the impact area as possible within the NROD;

Response

Mitigation is proposed for the eastern portion of the Tax Lot 902 adjacent to Tributary 1 and Associated Wetlands. This standard will be met.

2. If not possible to locate mitigation on the same site, the mitigation shall occur first on the same stream tributary, secondly in the Abernethy, Newell or Livesay Creek or a tributary thereof, or thirdly as close to the impact area as possible within the NROD: and

Response:

The proposed mitigation location is on the project parcel.

3. An easement that allows access to the mitigation site for monitoring and maintenance shall be provided as part of the mitigation plan.

Response:

The applicant will provide an easement to the mitigation site allowing for monitoring and maintenance as required.

C. Mitigation shall occur within the NROD area of a site unless it is demonstrated that this is not feasible because of a lack of available and appropriate area. In such cases, the proposed mitigation area shall be contiguous to the existing NROD area so the NROD boundary can be easily extended in the future to include the new resource site.

Response:

The proposed mitigation location is on the project parcel within the existing NROD adjacent to Tributary 1 and Associated Wetlands.

D. Invasive and nuisance vegetation shall be removed within the mitigation area.

Response:

Invasive vegetation listed on the Oregon City Nuisance Plant List including, but not limited to Himalayan blackberry, thistle, reed canarygrass, spotted cat's ear, and common teasel will be removed within the mitigation area.

E. Required Mitigation Planting. An applicant shall meet Mitigation Planting Option 1 or 2 below, whichever option results in more tree plantings, except that where the disturbance area is one acre or more, Mitigation Option 2 shall be required. All trees, shrubs, and groundcover shall be selected from the Oregon City Native Plant List.

Response:

Mitigation Planting Option 2 will be used because the impact area is larger than 1 acre. All trees, shrubs, and herbaceous (groundcover) selected for the mitigation plan are from the Oregon City Native Plant List. The plant species listed in Table 4 are subject to adjustment based on site conditions and plant availability at the time of planting. However, no more than one-third of the trees will be of the same genus, and shrubs will consist of at least three different species.

Table 4: Proposed Plant List for Mitigation Planting		
Botanical Name	Common Name	
TREES (minimum of 785 plantings)		
Acer macrophyllum	Big-leaf maple	
Alnus rubra	Red alder	
Fraxinus latifolia	Oregon Ash	
Pseudotsuga menziesii	Douglas-fir	
Salix scouleriana	Scouler's willow	
SHRUBS (min.	imum of 3,923 plantings)	
Acer circinatum	Vine maple	
Amelanchier alnifolia	Western serviceberry	
Berberis aquifolium	Tall Oregon grape	
Crataegus douglasii	Black hawthorn	
Ribes sanguineum	Red flowering currant	
Spiraea douglasii	Douglas' spirea	
Symphoricarpos albus	Snowberry	
Н	ERBACEOUS	
Agrostis exerata	Spike bentgrass	
Bromus carinatus	California brome	
Deschampsia cespitosa	Tufted hairgrass	

2. Mitigation Planting Option 2.

Response:

The mitigation planting quantity is based on the disturbance area within the NROD. Seven-hundred and eighty-five (785) replacement trees and three-thousand, nine-hundred and twenty-three (3,923) replacement shrubs will be planted according to the size, spacing, and diversity standards of this section. Bare ground will be planted or seeded with native grasses and ground cover species. New plantings will be mulched and planting areas will be watered for a minimum of three years following planting.



40

F. Monitoring and Maintenance.

Response:

The proposed mitigation will be monitored and maintained for a minimum of five years, with approved annual progress reports submitted to the City's planning division. Mulching and irrigation will be applied in the amounts necessary to ensure eighty percent survival at the end of the required five-year monitoring period. The mitigation area will be inspected annually during the active growing season. During site monitoring, survival rates of planted trees and shrubs and invasive plant species cover will be documented. This information, along with photo-documentation of the mitigation area, will be used to inform the annual progress report. Should survival rate drop below 80 percent or invasive plant coverage exceed 10 percent at any time during the maintenance period, immediate remedial action will be taken. Monitoring and maintenance is the on-going responsibility of the property owner, assign, or designee.

G. Covenant or Conservation Easement. Applicant shall record a restrictive covenant or conservation easement, in a form provided by the city, requiring the owners and assigns of properties subject to this section to comply with the applicable mitigation requirements of this section. Said covenant shall run with the land, and permit the city to complete mitigation work in the event of default by the responsible party. Costs borne by the city for such mitigation shall be borne by the owner.

Response:

The applicant will record a restrictive covenant or conservation easement in the form provided by the City that will require owners and assigns of the property to comply with the applicable mitigation requirements. The covenant or easement will run with the land and permit the City to complete mitigation work in the event of default by the responsible party. Should the city need to complete the mitigation work, such cost will be borne by the owner. The covenant or conservation easement is the responsibility of the property owner, assign, or designee.

H. Financial Guarantee. A financial guarantee for establishment of the mitigation area, in a form approved by the city, shall be submitted before development within the NROD disturbance area commences. The city will release the guarantee at the end of the five-year monitoring period, or before, upon its determination that the mitigation plan has been satisfactorily implemented pursuant to this section.

Response:

A financial guarantee will be provided to the city prior to development within the NROD disturbance area. The financial guarantee is the responsibility of the property owner, assign, or designee.

17.49.250 - Verification of NROD boundary.

The NROD boundary may have to be verified occasionally to determine the true location of a resource and its functional values on a site. This may be through a site-specific environmental survey or a simple site visit in those cases where existing information demonstrates that the NROD significance rating does not

apply to a site-specific area. Applications for development on a site located in the NROD area may request a determination that the subject site is not in an NROD area and therefore is not subject to the standards of OCMC 17.49.100. Verifications shall be processed as either a Type I or Type II process.

Response

As approved in NROD-20-00022, the portion of the City-mapped NROD on the landfill refuse soil cap is not viable NROD. This area has been removed from the NROD within the parcel. The removed NROD area on the west side of the landfill refuse soil cap contained the entirety of an area mapped as upland habitat and a portion of the associated VC. Because the mapped upland habitat is not viable NROD, it is assumed that the NROD Significance Rating does not apply to the portion of the VC associated with the mapped upland habitat that is west of and outside of the limits of the landfill refuse soil cap.

Chapter 17.52: Off-Street Parking and Loading

17.52.010 - Applicability.

The construction of a new structure or parking lot, or alterations to the size or use of an existing structure, parking lot or property use shall require site plan review approval and compliance with this chapter. This chapter does not apply to single-family attached, detached residential dwellings and duplexes.

Response:

The standards of this chapter are applicable to the project review. The project proposes a combination of parking structures and surface parking lots to satisfy minimum off-street parking requirements of the OCMC and serve the needs of future businesses and residents in the master plan.

17.52.015 - Planning commission adjustment of parking standards.

A. Purpose: The purpose of permitting a Planning Commission adjustment to parking standards is to provide for flexibility in modifying parking standards in all zoning districts, without permitting an adjustment that would adversely impact the surrounding or planned neighborhood. Adjustments provide flexibility to those uses which may be extraordinary, unique, or provide greater flexibility for areas that can accommodate a denser development pattern based on existing infrastructure and ability to access the site by means of walking, biking or transit. An adjustment to a minimum parking standard may be approved based on a determination by the Planning Commission that the adjustment is consistent with the purpose of this Code, and the approval criteria can be met.

B. Procedure: A request for a Planning Commission parking adjustment shall be initiated by a property owner or authorized agent by filing a land use application. The application shall be accompanied by a site plan, drawn to scale, showing the dimensions and arrangement of the proposed development and parking plan, the extent of the adjustment requested along with findings for each applicable approval criteria. A request for a parking adjustment shall be processed as a Type III application as set forth in Chapter 17.50.

Response:

The applicant is not requesting approval of an adjustment to parking standards. The parking proposed complies with the minimum requirements of the OCMC, as discussed in subsection 17.52.20, below.

17.52.020 - Number of automobile spaces required.

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

Response:

The North End master plan is a proposed 1,091,698 square feet of mixed-use development that includes 524 residential units, (3) anchor retail facilities, and a mix of smaller retail and entertainment uses on a 62-acre site. Table 17.52.020 requires a minimum of 4.1 parking spaces per 1,000 sf of retail which includes stores, restaurants and drive thru uses; .25 spaces per seat for movie theaters; and 1 space per unit for the multi-family residential units. Based on the proposed programming in the master plan, and the requirements of Table 17.52.020, the site is required to provide a minimum of 3,366 onsite parking spaces.

Table 17.52.020 also establishes the maximum allowed number of spaces at 5.0 parking spaces per 1,000 sf of retail which includes stores, restaurants and drive thru uses; .5 spaces per seat for movie theaters, and 2.5 spaces per unit for the multi-family residential units proposed on site. Based on the proposed programming in the master plan, the maximum number of allowed spaces would be 5,923 spaces. See the table below:

Parking Requirements				
Land Use	Floor Area (SF)	Min. Requirement	Max. Requirement	Proposed
Drive Thru Restaurant	3,800	15.7	19.1	
Retail	170,800	700.2	853.9	
Multi-Family Housing	524	524	???	
Theatre (seats)*	1000	250	2500	
Total - North District		1489.9	3635	1354
Drive Thru Restaurant (s)	7,200	29.5	35.9	
Retail	149,100	611.4	745.6	
Total - East District		634	773	973
Drive Thru Restaurant	3,300	13.5	16.5	
Retail	137,500	563.7	687.42	
Total - Central District		577	704	452
Drive Thru Restaurant	4,000	16.4	20.0	
Retail	158,300	649.1	791.6	
Total - South District		665	811	446





41 | Chapter 17.52: Off-Street Parking and Loading (Cont.)

Response to 17.52.020.A Cont.:

Per 17.52.020.A.3, fractional results less than one-half are disregarded. Other results round up, requiring an additional space. The master plan proposes to provide 3,225 parking stalls within the parking structures and parking lots, and another 531 parallel parking stalls along the internal private street system for a total of 3,756 parking stalls on-site. Therefore, the master plan proposes parking that exceeds the minimum number of required parking spaces, but less than the maximum number allowed. Parking will be evaluated again with each application for DDP approval. This standard is satisfied.

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

Response

The master plan would include a mix of uses and parking has been calculated based on the square footages for each use separately. This standard is satisfied.

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

Response:

A determination by the Community Development Director is not needed for this application. The parking requirements for the uses proposed within the master plan are listed in minimum and maximum parking standards of Table 17.52.020.

3. Where calculation in accordance with the above list results in a fractional space, any fraction less than one-half shall be disregarded and any fraction of one-half or more shall require one space.

Response

Parking requirements for the proposed GDP utilized this methodology for dealing with fractional spaces and provides enough parking to satisfy the minimum parking requirement for the site without exceeding the maximum allowed parking.

4. Fleet vehicle parking shall be accommodated within the maximum parking ratio, except that in GI, CI, and MUE zones, fleet vehicle parking may be included in a parking lot in addition to the maximum number of permitted parking spaces.

Response:

Fleet vehicle parking was not considered within the GDP. This provision is not applicable with this request but may be considered when considering applications for DDP's.

5. A change in use within an existing habitable building located in the MUD Design District or the Willamette Falls Downtown District is exempt from additional parking requirements. Additions to an existing building and new

construction are required to meet the minimum parking requirements for the areas as specified in Table 17.52.020 for the increased square footage.

Response:

The site is located within the MUD zone but this application does not propose conversion of an existing building. The GDP is proposing to meet the minimum parking requirements for the uses proposed.

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

Response:

All proposed required parking spaces are located on the private property developed with The North End master plan. This standard is met.

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

Response:

This is an application for approval of a GDP for a mixed-use development. All parking has been calculated based on the sum of the requirements for all proposed uses on site. Further, the minimum requirements are exceeded as discussed above so a reduction is not necessary.

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

Response

Parking on site will be shared across the development. Individual DDP requests will include shared parking agreements and easements as required.

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

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

Response:

with over eighty units).

On street parking within the internal private streets has been included in the parking calculations above. On street parking is based on the parallel parking standard listed above. All on-street parking will be available on a first come, first serve basis to anyone patronizing the master plan development. Individual applications for DDP are expected to be subject to these standards as well.

- C. Reduction of the Number of the Minimum Automobile Spaces Required. Any combination of the reductions below is permitted unless otherwise noted. 1. Downtown Parking Overlay. The minimum required number of parking stalls
- is reduced within the Downtown Parking Overlay by fifty percent.
- 2. Transit Oriented Development. For projects not located within the Downtown Parking Overlay District, the minimum required number of parking stalls is reduced up to twenty-five percent when:
- a. In a commercial center (sixty thousand square feet or greater of retail or office use measured cumulatively within a five hundred foot radius) or
- b. When adjacent to multi-family development with over eighty units or c. Within 1,320 feet of an existing or planned public transit street and within 1,320 feet of the opposite use (commercial center or multi-family development
- 3. Tree Preservation. The Community Development Director may grant an adjustment to any standard of this requirement provided that the adjustment preserves a designated heritage tree or grove so that the reduction in the amount of required pavement can help preserve existing healthy trees in an undisturbed, natural condition.
- 4. Transportation Demand Management. The Community Development Director shall reduce the required number of parking stalls up to twenty-five percent when a parking-traffic study prepared by a traffic engineer demonstrates—alternative modes of transportation, including transit, bicycles, and walking, and/or special characteristics of the customer, client, employee or resident population will reduce expected vehicle use and parking space demand for this development, as compared to standard Institute of Transportation Engineers vehicle trip generation rates and further that the transportation demand management program promotes or achieves parking utilization lower than minimum city parking requirements.
- A transportation demand management (TDM) program shall be developed to include strategies for reducing vehicle use and parking demand generated by the development and will be measured annually. If, at the annual assessment, the City determines the plan is not successful, the plan may be revised. If the City determines that no good-faith effort has been made to implement the plan, the City may take enforcement actions.
- 5. The minimum required number of stalls may be reduced by up to ten percent when the subject property is adjacent to an existing or planned fixed public transit route or within one thousand feet of an existing or planned transit stop.





42 | Chapter 17.52: Off-Street Parking and Loading (Cont.)

Response:

The GDP does not seek a reduction to the number of minimum automobile spaces required under these provisions.

17.52.030 - Standards for automobile parking.

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

Response:

This standard is met by the GDP. The layout of vehicle parking on the proposed site provides circulation and maneuvering which enables all vehicles to enter and exit the site in a forward motion through any one of the driveway access points along Washington Street or Abernethy Road.

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

Response:

This standard is met by the GDP. Paving is proposed for all vehicle areas on the site. Pervious asphalt/concrete are not currently proposed, but are not prohibited by the master plan and could be proposed with individual DDP's. The applicant acknowledges the requirement to maintain the paved surfaces over time.

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

Response

Parking and circulation area were all considered in the preliminary storm design for the master plan site. As discussed under the findings for Chapter 13.12, Stormwater Management, the project will comply with the Oregon City Stormwater Grading and Design Standards as proposed.

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

Response:

This standard is met. All stalls shown on the civil site plans have been designed to meet the minimum dimensions required for standard or compact stalls. Parking is primarily angled at 90 degrees, but there are locations along the north and east edge of the development where angled parking is proposed. The civil site plans (sheets C200 through C207) attached in **Appendix B** to this application provides the dimensions for parking stalls and circulation to demonstrate that development within the master plan area can comply with these standards. DDP's may propose compact spaces within their design provided the minimum parking requirements for the overall site are met.

2. Alternative parking/plan. Any applicant may propose an alternative parking plan. Such plans are often proposed to address physically constrained or smaller sites, however innovative designs for larger sites may also be considered. In such situations, the Community Development Director may approve an alternative parking lot plan with variations to parking dimensions of this section. The alternative shall be consistent with the intent of this chapter and shall create a safe space for automobiles and pedestrians while providing landscaping to the quantity and quality found within parking lot landscaping requirements.

Response:

The project does not seek approval of an alternative parking plan. This standard is not applicable.

E. Carpool and Vanpool Parking. New developments with seventy-five or more parking spaces, excluding projects where seventy-five percent or more of the total floor area is residential, and new hospitals, government offices, group homes, nursing and retirement homes, schools and transit park-and-ride facilities with fifty or more parking spaces, shall identify the spaces available for employee, student and commuter parking and designate at least five percent, but not fewer than two, of those spaces for exclusive carpool and vanpool parking. Carpool and vanpool parking spaces shall be located closer to the main employee, student or commuter entrance than all other employee, student or commuter parking spaces with the exception of ADA accessible parking spaces. The carpool/vanpool spaces shall be clearly marked "Reserved - Carpool/Vanpool Only."

Response:

The master plan provides more than 75 parking spaces on site and this provision is applicable. The location of carpool, vanpool, and ADA spaces will be designated with individual DDP's. ADA parking has been identified within the GDP for each building to demonstrate that the site is able to comply with dimensional standards for ADA spaces, but those locations are not intended to be formally set with this request. Carpool, vanpool, and ADA spaces can be accommodated on site.

17.52.040 - Bicycle parking standards.

B. Number of Bicycle Spaces Required. For any use not specifically mentioned in Table A, the bicycle parking requirements shall be the same as the use which, as determined by the Community Development Director, is most

similar to the use not specifically mentioned. Calculation of the number of bicycle parking spaces required shall be determined in the manner established in OCMC 17.52.020 for determining automobile parking space requirements. Modifications to bicycle parking requirements may be made through the site plan and design, conditional use, or master plan review process. Where two options for a requirement are provided, the option resulting in more bicycle parking applies. Where a calculation results in a fraction, the result is rounded up to the nearest whole number.

Response:

All of the uses proposed within the GDP are listed in table A which prescribes the minimum number of bicycle parking spaces required for the site. The GDP does not provide the level of detail required to satisfy this standard but there is adequate space on the site to accommodate required bicycle parking. Future applications for DDP approval are expected to provide detailed plans that satisfy this requirement.

- C. Design Standards.
- 1. Bicycle parking facilities shall be in the form of a lockable enclosure onsite, secure room in a building onsite, a covered or uncovered rack onsite, or within the adjacent right-of-way.
- 2. Bicycle parking areas shall be clearly marked or visible from on-site buildings or the street. If a bicycle parking area is not plainly visible from the street or main building entrance, a sign shall be posted indicating the location of the bicycle parking area. Indoor bicycle parking areas shall not require stairs to access the space. If sites have more than one building, bicycle parking shall be distributed as appropriate to serve all buildings.
- 3. All bicycle racks shall be designed so that:
- a. The bicycle frame is supported horizontally at two or more places.
- b. The frame and at least one wheel of the bicycle can be locked to the rack with a standard
- c. The user is not required to lift the bicycle onto the bicycle rack.
- d. Each bicycle parking space is accessible without moving another bicycle.
- e. It is a minimum of thirty inches tall and eighteen inches wide between the two points of contact.
- f. Provides an area of six feet by two feet per bicycle.
- g. All bicycle racks and lockers shall be securely anchored to the ground or to a structure.

Response

The GDP does not provide the level of detail required to satisfy these design standards but there is adequate space on the site to accommodate required bicycle parking and meet the design standards. Future applications for DDP approval are expected to provide detailed plans that satisfy these requirements.





43 | Chapter 17.52: Off-Street Parking and Loading (Cont.)

17.52.060 - Parking lot landscaping.

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

Response:

The project is subject to parking lot landscaping standards. However, the GDP provides high level landscape drawings that show that required parking lot landscaping can generally satisfy these provisions. No modifications to the parking lot landscaping is requested with the GDP approval. Subsequent requests for DDP approval will require the applicant to provide more detailed landscape plans that meet these provisions as well as the landscape design quidelines proposed with the overall master plan.

- B. Development Standards.
- 1. The landscaping shall be located in defined landscaped areas that are uniformly distributed throughout the parking or loading area.
- 2. All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.
- 3. Parking lot trees shall be a mix of deciduous shade trees and coniferous trees. The trees shall be evenly distributed throughout the parking lot as both interior and perimeter landscaping.
- 4. Required landscaping trees shall be of a minimum two-inch minimum caliper size (though it may not be standard for some tree types to be distinguished by caliper), planted according to American Nurseryman Standards, and selected from the Oregon City Street Tree List or approved by an arborist;
- 5. At maturity, all of the landscaped area shall be planted in ground cover plants, which includes grasses. Mulch (as a ground cover) shall only be allowed underneath plants at full growth and within two feet of the base of a tree and is not a substitute for ground cover.
- 6. Landscaped areas shall include irrigation systems unless an alternate plan is submitted, and approved by the Community Development Director, that can demonstrate adequate maintenance;
- 7. All landscaping shall be installed according to accepted planting procedures, according to American Nurseryman Standards.
- C. Perimeter Parking Lot Landscaping and Parking Lot Entryway/Right-of-Way Screening. Parking lots and associated drive aisles shall include a five-foot wide landscaped buffer where the parking lot abuts the right-of-way and/or adjoining properties. In order to provide connectivity between non-single-family sites, the Community Development Director may approve an interruption in the perimeter parking lot landscaping for a single driveway where the parking lot abuts property designated as multi-family, commercial or industrial. Shared driveways and parking aisles that straddle a lot line do not need to meet perimeter landscaping requirements.
- 1. The perimeter parking lot are[a] shall include:
- a. Trees spaced a maximum of thirty feet apart (minimum of one tree on either side of the entryway is required). When the parking lot is adjacent to a public right-of-way, the parking lot trees shall be offset from the street trees;
- b. An evergreen hedge screen of thirty to forty-two inches high or shrubs

spaced no more than four feet apart on average. The hedge/shrubs shall be parallel to and not nearer than two feet from the right-of-way line. The required screening shall be designed to allow for free access to the site and sidewalk by pedestrians. Visual breaks, no more than five feet in width, shall be provided every thirty feet within evergreen hedges abutting public right-of-ways.

- D. Parking Area/Building Buffer. Except for parking lots with fewer than five parking stalls, parking areas (excluding drive aisles with no adjacent parking) shall be separated from the exterior wall of a structure, exclusive of pedestrian entranceways or loading areas, by one of the following:
- 1. Minimum five-foot wide landscaped planter strip (excluding areas for pedestrian connection) meeting the standards for perimeter parking lot area landscaping; or:
- 2. Minimum seven foot sidewalks with shade trees spaced a maximum of thirty feet apart in three-foot by five-foot tree wells.
- E. Interior Parking Lot Landscaping. Surface parking lots with more than five parking stalls shall include at least forty-five square feet of interior parking lot landscaping per parking stall to improve the water quality, reduce storm water runoff, and provide pavement shade. Pedestrian walkways or any impervious surface in the landscaped areas are not to be counted in the percentage. Fractions shall be rounded up when calculating the required number of plantings.

Interior parking lot landscaping shall include:

- a. A minimum of one tree per four parking spaces.
- b. A minimum of 1.5 shrubs per parking space.
- c. No more than eight contiguous parking spaces shall be created without providing an interior landscape strip between them. Landscape strips shall be provided between rows of parking shall be a minimum of six feet in width and a minimum of ten feet in length.
- F. Alternative landscaping plan.

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

- 1. General Review Standard. The alternative shall meet the standards in OCMC 17.62.015- Modifications that will better meet design review requirements.
- 2. Credit for Pervious/Low Impact Development. The Community Development Director may count up to fifty percent of the square footage of any pervious hardscaped landscape material within a parking lot that is designed and approved pursuant to the City's adopted stormwater and low impact development design standards toward minimum landscaping requirements for the site. (This includes porous pavement detention, open celled block pavers, porous asphalt, porous concrete pavement, porous turf, porous gravel, etc.).

Response:

The GDP provides an overall general landscape plan that was designed based on these standards. The plans are high level and do not get to the level of detailed design needed to demonstrate compliance with specific details; however, future applications for DDP's within the master plan area are required to meet the provisions of the OCMC as well as the landscape design standards in **Chapter 5: Master Plan Design Guidelines** of this application.

The GDP landscape plans generally show how the landscape standards can be met with future development. Landscaping is proposed in all areas not specified for parking, maneuvering, or circulation. The landscape design guidelines reinforce the standard that all trees within the landscape are 2-inch caliper or greater. The required parking lot landscaping considered the need for 45 square feet of landscaping for each parking space and anticipates trees spaced according to the OCMC requirements listed above. Ground cover is required across the site where improvements are not constructed filling in the gaps between trees and shrubs. The plans illustrate a variety trees within a minimum 5-foot buffer around the perimeter of each parking lot and shows adequate space for hedges/shrubs. Perimeter landscaping is provided along all parking areas.

The GDP high level landscape plans and preliminary design were developed by a Kurt Lango, a certified landscape architect who also authored the landscape design guidelines. Each application for DDP approval will be required to provide greater detail and satisfy both sets of requirements. Alternative landscape plans may be requested with future DDP applications, but the GDP illustrates that it is possible to satisfy these requirements.

17.52.080 - Maintenance.

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

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

- a. It will not interfere with the maintenance or repair of any public utility;
- b. It will not restrict pedestrian or vehicular access; and
- c. It will not constitute a traffic hazard due to reduced visibility.

Response:

The applicant acknowledges this requirement and understands that maintenance of the site is their responsibility.

17.52.090 - Loading areas.

B. Applicability.

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





44 | Chapter 17.52: Off-Street Parking and Loading (Cont.)

- C. Standards.
- 1. The off-street loading space shall be large enough to accommodate the largest vehicle that is expected to serve the use without obstructing vehicles or pedestrian traffic on adjacent streets and driveways. Applicants are advised to provide complete and accurate information about the potential need for loading spaces because the City Engineer or decision maker may restrict the use of other public right-of-way to ensure efficient loading areas and reduce interference with other uses.
- 2. Where parking areas are prohibited between a building and the street, loading areas or drive isles are also prohibited.
- 3. The City Engineer and decision maker, through site plan and design review, may approve a loading area adjacent to or within a street right-of-way when all of the following loading and unloading operations conditions are met:
- a. Short in duration (i.e., less than one hour);
- b. Infrequent (less than three operations daily between 5:00 a.m. and 12:00 a.m. or all operations between 12:00 a.m. and 5:00 a.m. at a location that is not adjacent to a residential zone);
- c. Does not obstruct traffic during peak traffic hours;
- d. Does not interfere with emergency response services; and
- e. Is acceptable to the applicable roadway authority.

Response:

The standards of this section are applicable as the mixed-use master plan includes anchor retail as well as a mix of other smaller retail uses on site. These uses will require loading areas; however, the exact location of loading will be dependent upon the individual developer or tenant. The GDP site plan (Civil Sheets C200 thru C207) illustrates some opportunities for loading associated with the anchor retail and some of the smaller retail uses around the site, but again, these locations are not formalized with this request and will need to be confirmed with applications for DDP approval.

Chapter 17.54 - Supplemental Zoning Regulations

Response:

This chapter regulates accessory structures and uses, projections from buildings, setback exceptions, fences, hedges, walls, and retaining walls, marijuana businesses, mobile food units, and home occupations. Individual developments within the master plan may propose some of the items regulated within this chapter through individual DDP requests. With the exception of section 17.54.100 that pertains to the regulation of Fences, hedges, walls, and retaining walls, those requests should be consistent with these provisions.

A modification under the provisions of 17.65.070 is requested to the maximum allowed height of retaining walls to address the anticipated walls necessary to make a pedestrian connection to the End of the Oregon Trail Interpretive Center. Because of the difference in grade around the site as a result of berms and fill associated with the former Rossman Landfill, retaining walls will need to exceed the 8.5 foot height requirement. This is a condition specific to this site. The modification is discussed under Chapter 17.65.

Chapter 17.56 - Conditional Uses

17.56.010 - Permit—Authorization—Standards—Conditions.
A conditional use listed in this title may be permitted, enlarged or altered upon authorization of the planning commission in accordance with the standards and procedures of this title. A conditional use permit listed in this section may be permitted, enlarged or altered upon authorization of the planning commission or city commission in accordance with the standards and procedures of this section. Any expansion to, alteration of, or accessory use to a conditional use shall require planning commission or city commission approval of a modification to the original conditional use permit unless authorized in this chapter.

- A. Conditional uses, because of their public convenience and necessity and their effect upon the neighborhood shall be permitted only upon the approval of the planning commission or city commission after due notice and public hearing, according to procedure as provided in OCMC 17.50. The applicant shall provide evidence substantiating that all the requirements of this title relative to the proposed use are satisfied, and demonstrate that the proposed use also satisfies the following criteria:
- 1. The use is listed as a conditional use in the underlying district;
- 2. The characteristics of the site are suitable for the proposed use considering size, shape, location, topography, existence of improvements and natural features:
- 3. Development shall demonstrate compliance with OCMC 16.12;
- 4. The proposed use will not alter the character of the surrounding area in a manner which substantially limits, impairs or precludes the use of surrounding properties for the primary uses listed in the underlying district;
- 5. The proposal satisfies the goals and policies of the city comprehensive plan which apply to the proposed use.

Response:

- 1. The North End master plan includes pads for five drive through facilities. It has not been determined what these drive through uses are; however, they would likely include drive through eating and drinking facilities such as coffee stands or restaurants, or personal services like banks. The master plan also proposes three anchor retail facilities. Drive-throughs and Retail trade, including grocery, hardware and gift shops, bakeries, delicatessens, florists, pharmacies and specialty stores in a freestanding building with a single store exceeding a foot print of sixty thousand square feet are permitted as Conditional Uses within the Mixed Use Downtown Zoning District according to Section 17.34.030 (A and G).
- 2. The North End master plan is a redevelopment of a former land fill that is approximately 62 acres in size at the north end of Oregon City. The site is large enough to accommodate the proposed uses and will be provided with all necessary public services. The location and shape of the site as well as the planned improvements also make this site suitable for the proposed development. Each of the conditional uses are located on the site in a manner that accommodates the service and mitigates any impact from the use. The larger anchor retail tenants will serve as an economic catalyst for the remainder of the retail, entertainment, and residential uses on the site. Each larger anchor will be served by a sufficient parking supply as well as a planned internal and external

transportation system that can readily accommodate the trips associated with the development. The TIA identifies the trip generation from all of the proposed conditional uses and demonstrates with the new internal street system, the frontage improvements to the existing street system and recommended mitigation measures for two off-site intersections, all of the permitted uses, together with the conditional uses can be suitably and adequately accommodated on the site. Each of the drive-through pads have been located to accommodate efficient and suitable gueuing and circulation so as not to interfere with other site circulation provided on site. None of the conditional uses will impact any natural features and all uses are located in a manner that will serve both on-site residents and visitors alike. The internal pedestrian, vehicular and bicycle accessways and paths have been planned and designed to connect all of these uses on site with a well-designed streetscape and intermittent open spaces and plazas. Lastly, each of these uses will be subject to the Design Guidelines adopted with this GDP further ensuring a design consistency between these uses and the permitted uses on site.

- 3. The TIA and the GDP plan establish a street plan that meets the requirements for public improvements and will adequately serve the proposed development. Rather than repeating those findings here, this criteria response incorporates by reference the TIA findings above and below and the findings above related to Chapter 16.12.
- 4. The North End master plan will beneficially alter the character of the area by redeveloping a former landfill into a vibrant mixed-use development. All the uses proposed within the master plan are permitted outright or conditionally allowed within the underlying zone. The technical reports submitted with this application demonstrate that any impacts associated with the development are adequately mitigated and will not impact surrounding properties. In fact, the improvements to the adjacent street frontages and the new collector planned through the site will provide additional access options for adjacent properties connecting through the site to other destinations or to locations within the GDP. These improvements include multimodal access improvements such as a new pedestrian connection to the Oregon Trail museum. The character of the area has been defined largely by this former landfill. Reclaiming this landfill for beneficial and economic use will significantly benefit the character of the area in a manner that does not preclude but instead enhances the opportunities on surrounding properties. The conditional uses associated with this request will all be internal to the site, and do not preclude surrounding property owners from using their properties consistent with the Mixed-Use Downtown zoning district.





45 | Chapter 17.56 - Conditional Uses (Cont.)

Response to 17.56.010.A Cont.:

- 5. The Oregon City Comprehensive Plan map designates The North End master plan area as Mixed-Use Downtown. It's also recognized as a Regional Center under the Metro 2040 Growth Concept Plan. While the Comprehensive plan includes by reference, the Oregon City Downtown Community Plan and Oregon City Waterfront Master Plans, neither of these plans include a discussion of detailed development concepts within the landfill area. However, within Section 2 Land Use, Goal 2.2 of the Comprehensive Plan envisions the area, "...the End of the Oregon Trail area, as a quality place for shopping, living, working, cultural and recreational activities, and social interaction." Subsequently, the North End master plan has been zoned Mixed-Use Downtown and the zoning code implements these goals through specific provisions. Because the proposed uses are identified within the zoning code and the site is zoned for Mixed-Use Downtown, this request is consistent with the Comprehensive Plan.
- B. Permits for conditional uses shall stipulate restrictions or conditions which may include, but are not limited to, a definite time limit to meet such conditions, provisions for a front, side or rear yard greater than the minimum dimensional standards of the zoning ordinance, suitable landscaping, off-street parking, and any other reasonable restriction, condition or safeguard that would uphold the spirit and intent of the zoning ordinance, and mitigate adverse effect upon the neighborhood properties by reason of the use, extension, construction or alteration allowed as set forth in the findings of the planning commission.
- C. Any conditional use shall meet the dimensional standards of the zone in which it is to be located pursuant to subsection B of this section unless otherwise indicated, as well as the minimum conditions listed below.
- D. In the case of a use existing prior to the effective date of the ordinance codified in this title and classified in this title as a conditional use, any change of use expansion of lot area or expansion of structure shall conform with the requirements for conditional use.
- E. The planning commission may specifically permit, upon approval of a conditional use, further expansion to a specified maximum designated by the planning commission without the need to return for additional review.

Response:

All the proposed conditional use locations are identified within the overall master plan map. Under Subsections (B) and (C) above, all the conditional uses meet the dimensional standards of the zone with the exception of the anchor tenants and those dimensional adjustments are addressed here in this conditional use review. The entire site, including the conditional uses, will meet and exceed the landscaping and other applicable setback requirements. With the exception of traffic impacts that are proposed to be mitigated through the Plan approval, any impacts from the proposed conditional uses will be limited to the interior of the development itself and those impacts have been addressed through location within the site, the circulation plan, adequate parking and stacking and a comprehensive set of design guidelines. Subsections (D) and (E) are not triggered by this proposal.

- 17.56.040 Criteria and standards for conditional uses. In addition to the standards listed herein in OCMC 17.56.010, which are to be considered in the approval of all conditional uses and the standards of the zone in which the conditional use is located, the following additional standards shall be applicable:
- A. Building Openings. The city may limit or prohibit building openings within fifty feet of residential property in a residential zone if the openings will cause glare, excessive noise or excessive traffic which would adversely affect adjacent residential property as set forth in the findings of the planning commission
- B. Additional Street Right-of-Way. The dedication of additional right-of-way may be required where the city plan indicates need for increased width and where the street is inadequate for its use; or where the nature of the proposed development warrants increased street width.

Response:

None of the proposed conditional uses are proposed within fifty feet of a residential zone, and additional right of way will be dedicated and improved through the master plan approval. The remaining uses of this section are not proposed within The North End master plan.





46

This page intentionally left blank.

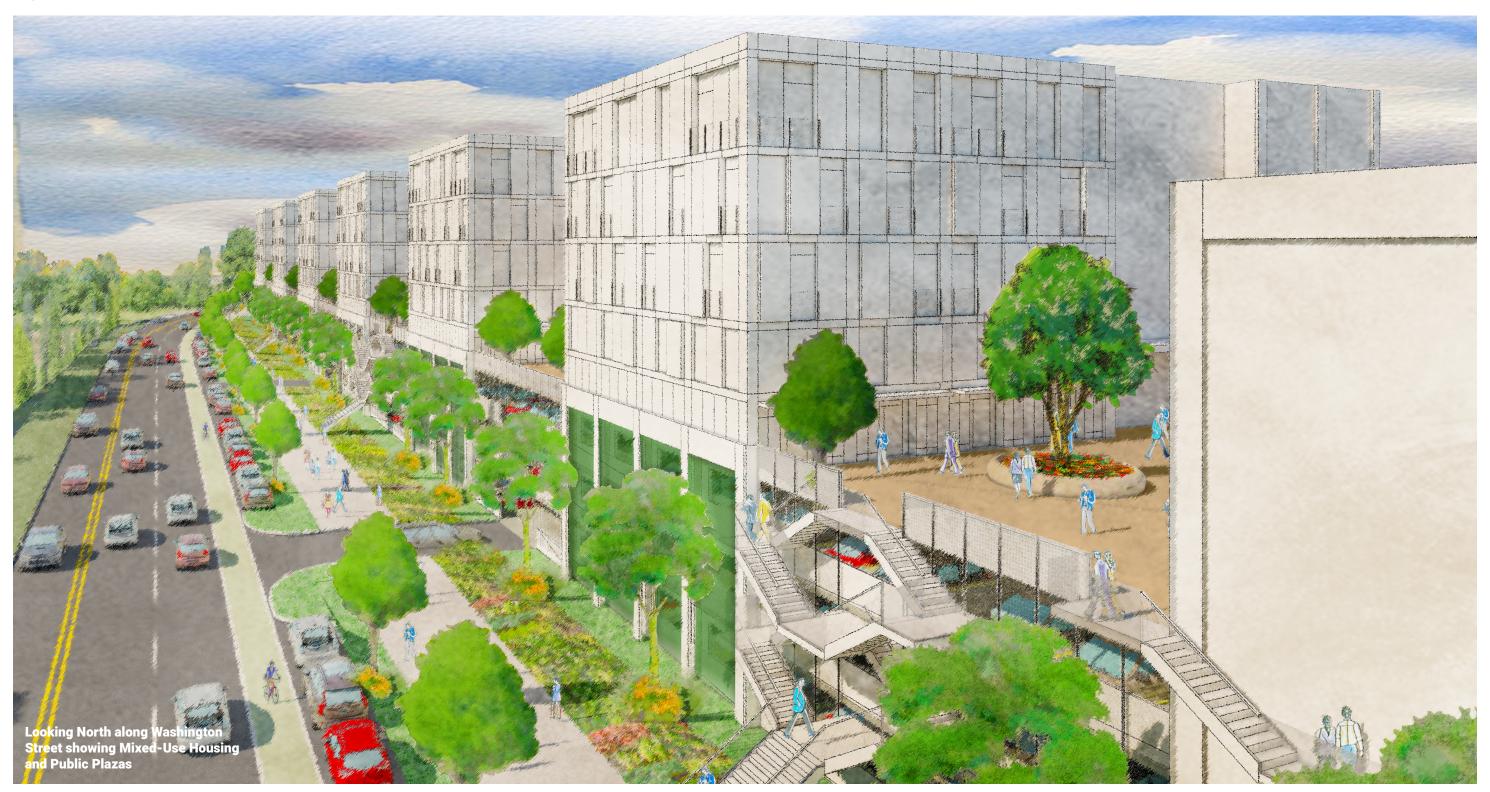




THE NORTH END

3 - EXISTING CONDITIONS

47







48 | Site History and Current Uses

Existing Conditions and Background

The subject site is located at 1105 Abernathy Drive in Oregon City, Tax Lot Number 2-2E-29-00902. The property is currently zoned Mixed-Use Downtown and is located outside of the historic downtown overlay but is located within the Urban Renewal District. Abernethy Creek runs along the northeast portion of the site and the Creek and its environs will be preserved within the master plan.

The site is located over the top of the Rossman Landfill, and includes land that is identified in the City's Natural Resource Overlay District (NROD) due to the presence of Abernethy Creek and wetlands that have been identified on the site. The site also includes areas within the Geologic Hazard Overlay Zone for the presence of slopes over 10%; and lands that are impacted by the 100-year floodplain.

The Rossman Landfill was established in 1969 and accepted approximately 60% of the municipal waste generated in the Portland Metropolitan area until it closed in late 1980. A closure permit was approved in 1990 which included remediation that intended to seal the waste and any associated leachate with a clay soil layer cap. The closure plan includes on-going monitoring for groundwater contamination and landfill related gasses. Home Depot and other commercial uses have been constructed over the top of the reclaimed landfill since 2000. The site is currently developed with outdoor equipment storage and the Trails End Driving Range which includes event space as well as eating and drinking facilities. Both of these uses are accessed from Abernethy Road. Below is a vicinity map of the area with the subject site outlined in yellow.

Regional Importance

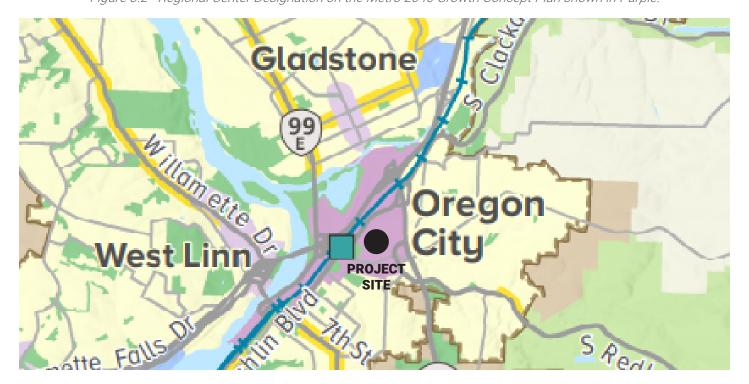
The proposed master plan is within one of eight areas designated as a regional center in the Metro 2040 Growth Concept Plan. According to the Concept Plan, "Regional centers are hubs of commerce and local government services serving hundreds of thousands of people. They are characterized by two- to four- story, compact employment and housing development served by high-quality transit."

The challenges with developing this particular site are complex and should be afforded specific attention. Summit Development envisions a complete community intended to add diversity and appropriately scaled intensity that will build upon and contribute to the overall character of Downtown Oregon City. The master plan is dependent upon partnerships with the City and an appropriate mix of anchor and smaller scale retail with the other proposed uses in order to offset the high costs of developing this former landfill with public infrastructure and street improvements that will deliver a new sense of identity and place for residents and visitors.



Figure 3.1 - Site Map of Natural Resources Overlay Zone, Floodplain Management Zone, and Geologic Hazard Overlay Zone from Oregon City GIS website

Figure 3.2 - Regional Center Designation on the Metro 2040 Growth Concept Plan shown in Purple.







49 | Vicinity Map





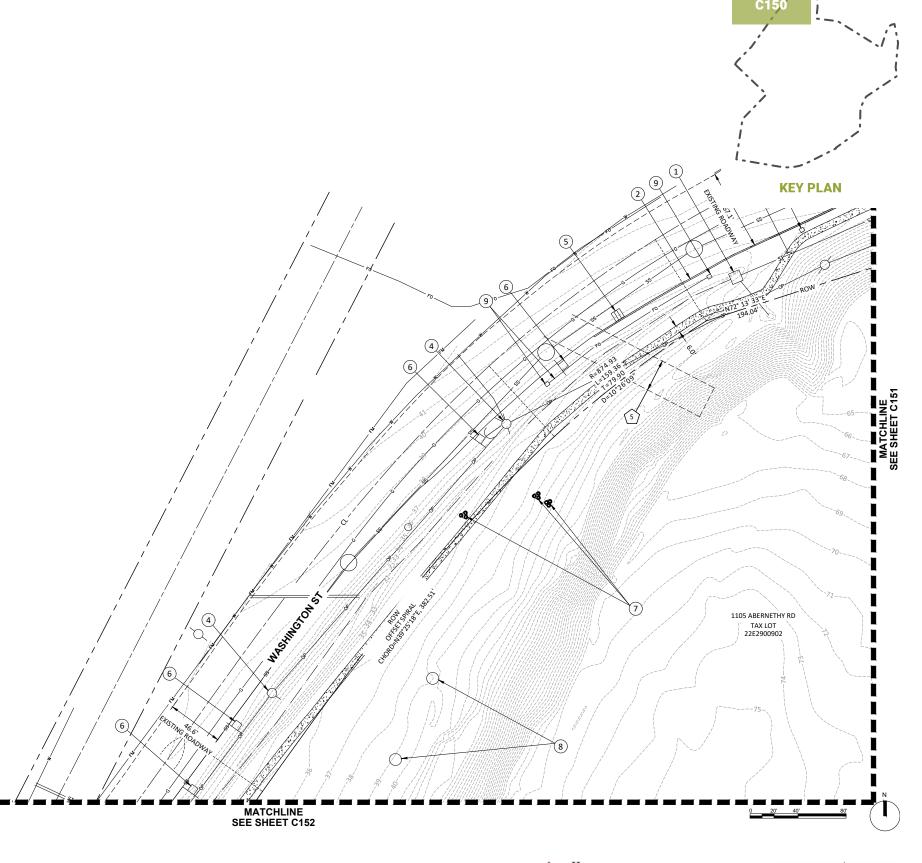


50 | Existing and Demo Site Plan

CONSTRUCTION NOTES:

- 1 EXISTING DITCH INLET TO BE REMOVED.
- 2 EXISTING CURB TO BE REMOVED. SEE SHEET SERIES C200 FOR LIMITS OF REMOVAL.
- $\underbrace{ \text{3} }_{\text{SERIES C200 FOR LIMITS OF REMOVED. SEE SHEET} }$
- (4) EXISTING POWER POLE TO BE RELOCATED.
- 5 EXISTING CATCH BASIN TO BE REMOVED.
- (6) EXISTING SIGN AND POST TO BE RELOCATED.
- 7 EXISTING METHANE GAS STANDPIPE AND BOLLARDS TO BE REMOVED.
- 8 EXISTING METHANE GAS MANHOLE TO BE REMOVED.
- 9 EXISTING FRANCHISE UTILITY TO BE RELOCATED. COORDIANTE WITH UTILITY.
- (10) EXISTING FRANCHISE UTILITY TO REMAIN. PROTECT IN PLACE.

LEGEND	
	RIGHT-OF-WAY
	PROPERTY LINE
	CENTERLINE
	DITCH
	CURB
	EDGE OF PAVEMENT
l —————	FENCE LINE
OP	OVERHEAD POWER LINE
UGP	UNDERGROUND POWER LINE
	NATURAL GAS LINE
ST	STORM SEWER LINE
ss	SANITARY SEWER LINE
w	WATER LINE
	PROPERTY BOUNDARY
•	FOUND MONUMENT
•	STORM MANHOLE
•	CATCH BASIN
0	CLEANOUT
0	SANITARY MANHOLE
⊞	WATER METER
⊗	WATER VALVE
Q	FIRE HYDRANT
т	SIGN
₩	STREET LIGHT
LB	LIGHT BOX
JB	STORM JUNCTION BOX
þ	POWER POLE
TB⋄	TRAFFIC SIGNAL BOX
MON. WELL	MONITORING WELL







51 | Existing and Demo Site Plan

CONSTRUCTION NOTES:

- EXISTING STREET LIGHT BOX AND POLE TO REMAIN. PROTECT IN PLACE.
- (12) EXISTING CURB TO REMAIN. PROTECT IN PLACE.
- (13) EXISTING SIDEWALK TO REMAIN. PROTECT IN PLACE.

LEGEND

______ DITCH
______ CURB
____ EDGE OF PAVEMENT
____ FENCE LINE

RIGHT-OF-WAY

OVERHEAD POWER LINE
UNDERGROUND POWER LINE
NATURAL GAS LINE
STORM SEWER LINE

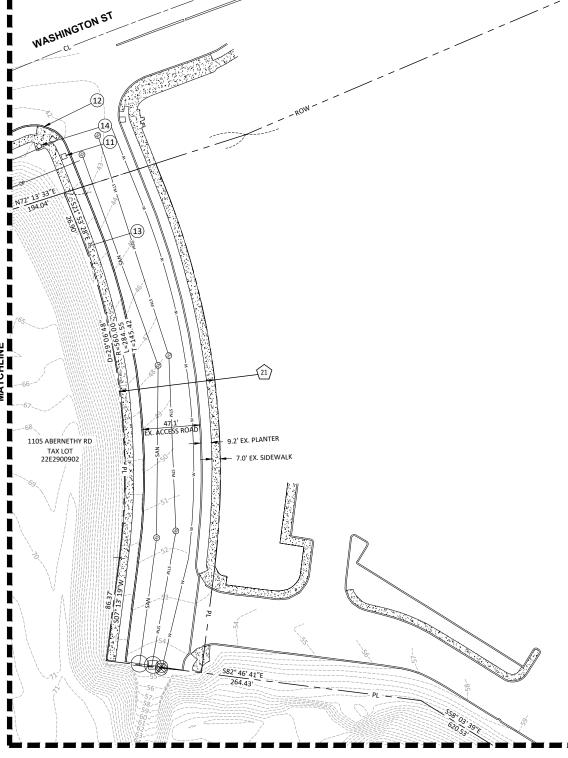
SANITARY SEWER LINE

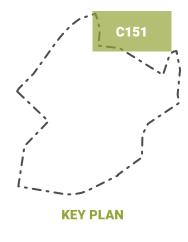
FOUND MONUMENT
STORM MANHOLE
CATCH BASIN
CLEANOUT
SANITARY MANHOLE
WATER METER
WATER VALVE
FIRE HYDRANT
SIGN
STREET LIGHT
LIGHT BOX
STORM JUNCTION BOX
POWER POLE
TRAFFIC SIGNAL BOX

MONITORING WELL

WATER LINE PROPERTY BOUNDARY

EXISTING SIGNAL POLE TO REMAIN. PROTECT IN PLACE.





HOME DEPOT

2002 WASHINGTON ST TAX LOT 22E2900906

SEE SHEET C102 FOR EASEMENT INFORMATION

MATCHLINE SEE SHEET C153







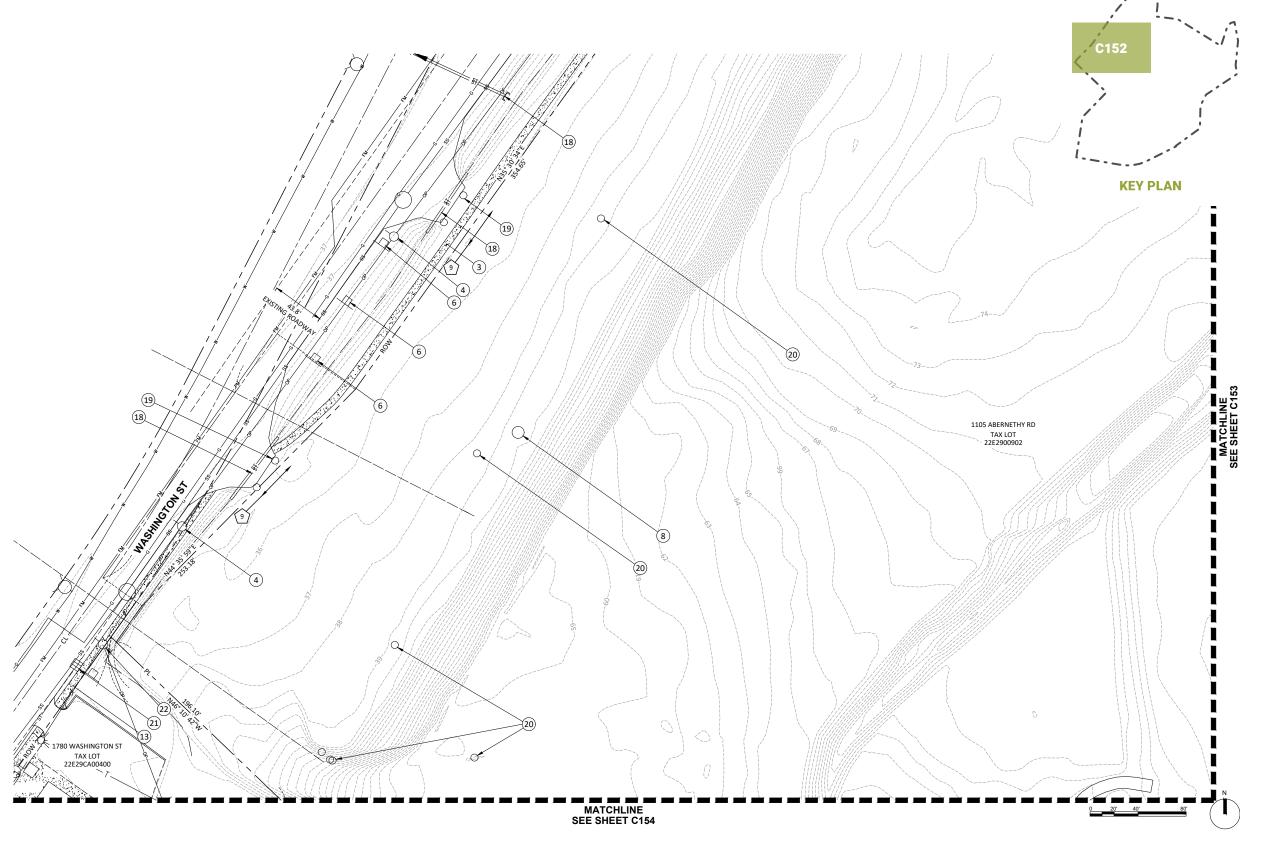
MON. WELL

52 | Existing and Demo Site Plan

CONSTRUCTION NOTES:

- EXISTING SIDEWALK TO BE REMOVED. SEE SHEET SERIES C200 FOR LIMITS OF REMOVAL.
- (4) EXISTING POWER POLE TO BE RELOCATED.
- $oxed{6}$ Existing sign and post to be relocated.
- $\overline{ 8})$ existing methane gas manhole to be removed.
- $ar{13}$ Existing sidewalk to remain. Protect in place.
- (18) EXISTING CULVERT AND HEADWALL TO BE REMOVED.
- (19) EXISTING FENCE AND GATE TO BE REMOVED.
- 20) EXISTING METHANE GAS RISER(S) TO BE REMOVED.
- (21) EXISTING CATCH BASIN TO REMAIN. PROTECT IN PLACE.
- 22) EXISTING POWER POLE TO REMAIN. PROTECT IN PLACE.

LEGEND		
	RIGHT-OF-WAY	
	PROPERTY LINE	
	CENTERLINE	
	DITCH	
	CURB	
	EDGE OF PAVEMENT	
	FENCE LINE	
OP	OVERHEAD POWER LINE	
UGP	UNDERGROUND POWER LINE	
	NATURAL GAS LINE	
ST	STORM SEWER LINE	
ss	SANITARY SEWER LINE	
w	WATER LINE	
	PROPERTY BOUNDARY	
•	FOUND MONUMENT	
©	STORM MANHOLE	
•	CATCH BASIN	
0	CLEANOUT	
0	SANITARY MANHOLE	
⊞	WATER METER	
⊗	WATER VALVE	
Q	FIRE HYDRANT	
т	SIGN	
*	STREET LIGHT	
LB	LIGHT BOX	
JB	STORM JUNCTION BOX	
þ	POWER POLE	
TB o	TRAFFIC SIGNAL BOX	
MON. WELL	MONITORING WELL	







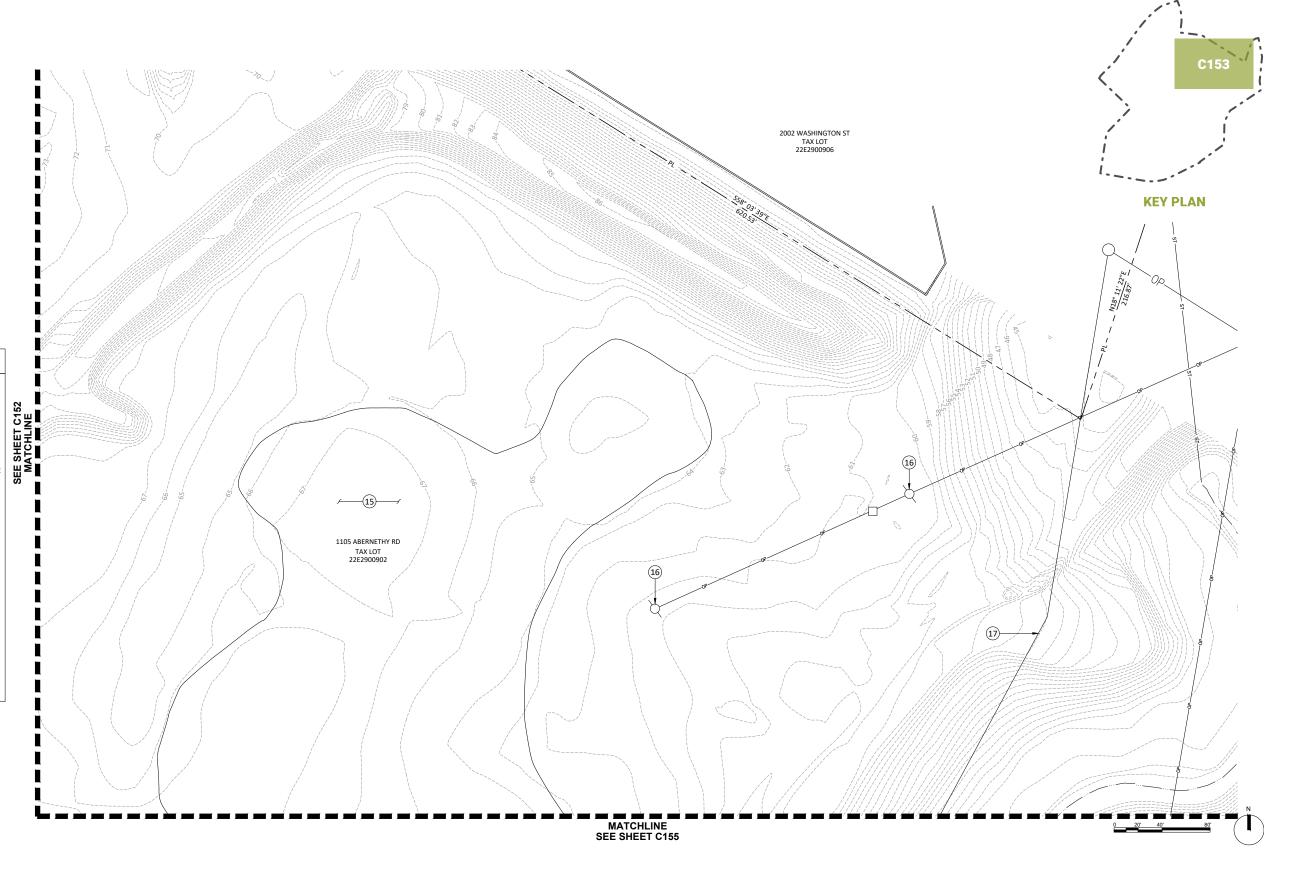


53 | Existing and Demo Site Plan

CONSTRUCTION NOTES:

- EXISTING ARTIFICIAL TURF DRIVING RANGE TO BE REMOVED.
- EXISTING POWER POLE TO BE REMOVED.
 EXISTING LEACHATE FORCE MAIN TO REMAIN. ADJUST TO PROPOSED GRADES AS NECESSARY.

LEGEND		
	RIGHT-OF-WAY	
	PROPERTY LINE	
	CENTERLINE	
	DITCH	
	CURB	
	EDGE OF PAVEMENT	
	FENCE LINE	
OP	OVERHEAD POWER LINE	
UGP	UNDERGROUND POWER LINE	
	NATURAL GAS LINE	
st	STORM SEWER LINE	
ss	SANITARY SEWER LINE	
	WATER LINE	
	PROPERTY BOUNDARY	
•	FOUND MONUMENT	
©	STORM MANHOLE	
	CATCH BASIN	
0	CLEANOUT	
0	SANITARY MANHOLE	
⊞	WATER METER	
⊗	WATER VALVE	
Q	FIRE HYDRANT	
т	SIGN	
**	STREET LIGHT	
LB	LIGHT BOX	
JB	STORM JUNCTION BOX	
Þ	POWER POLE	
TB⋄	TRAFFIC SIGNAL BOX	
MON.	MONITORING WELL	







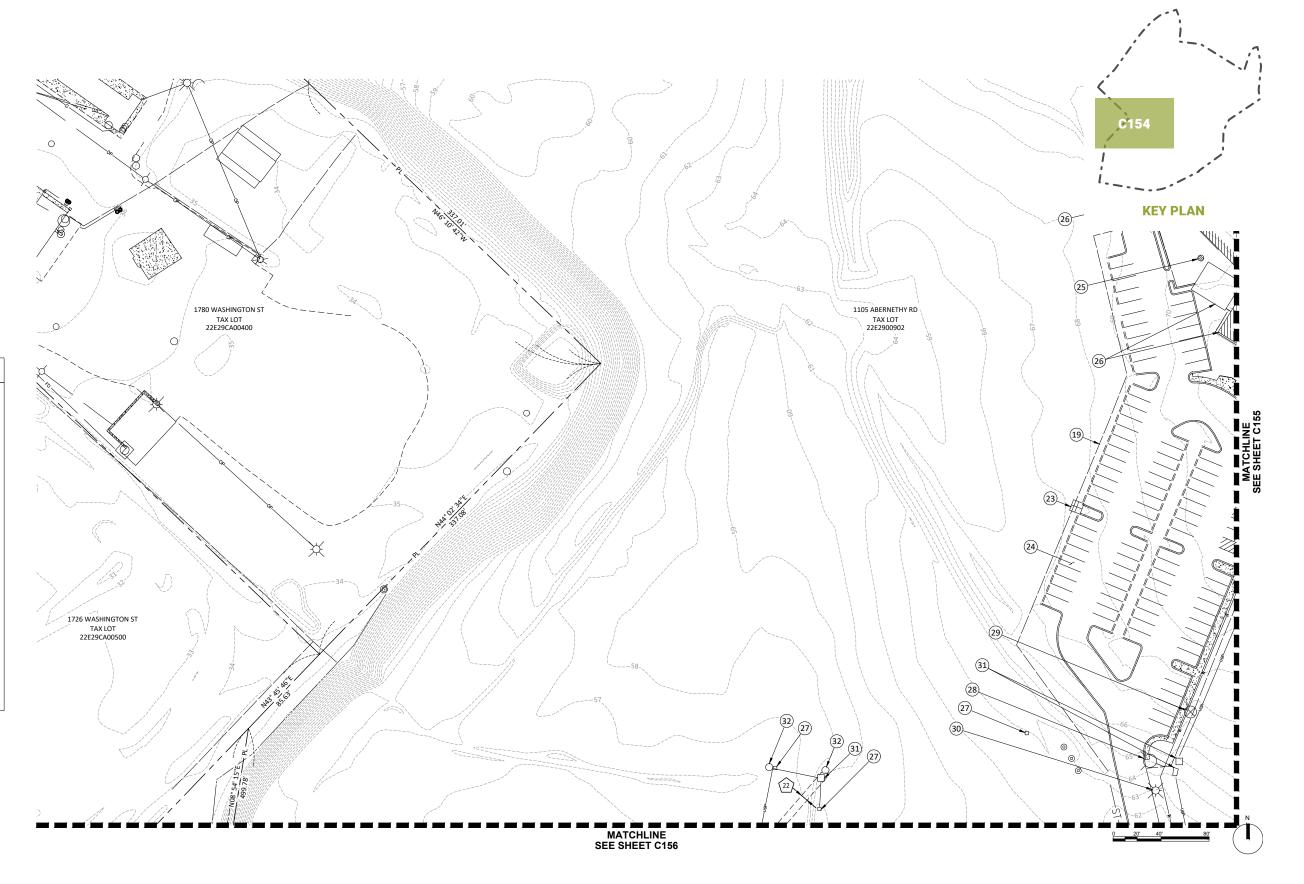


54 | Existing and Demo Site Plan

CONSTRUCTION NOTES:

- (19) EXISTING FENCE AND GATE TO BE REMOVED.
- (23) EXISTING WATER METER TO BE REMOVED.
- (24) EXISTING ASPHALT PARKING LOT BE REMOVED.
 REMOVAL TO INCLUDE ALL PARKING LOT ASSOCIATED
 CURB, SIDEWALK, PLANTERS, TREES, AND WHEEL
 STOPS.
- (25) EXISTING AREA DRAIN TO BE REMOVED.
- (26) EXISTING BUILDING TO BE REMOVED.
- (27) EXISTING ELECTRICAL RISER TO BE REMOVED.
- 28 EXISTING HYDRANT AND LATERALS TO BE REMOVED.
- 29 EXISTING WATER VALVE(S) TO BE REMOVED.
- (30) EXISTING STREET LIGHT AND POLE TO BE REMOVED.
- EXISTING POWER VAULT AND UNDERGROUND CONDUITS TO BE REMOVED.
- 32) EXISTING WATER FAUCET TO BE REMOVED.

LEG	END
OP UGP	RIGHT-OF-WAY PROPERTY LINE CENTERLINE DITCH CURB EDGE OF PAVEMENT FENCE LINE OVERHEAD POWER LINE UNDERGROUND POWER LINE
	NATURAL GAS LINE STORM SEWER LINE SANITARY SEWER LINE WATER LINE PROPERTY BOUNDARY
© 	FOUND MONUMENT STORM MANHOLE CATCH BASIN CLEANOUT
О	SANITARY MANHOLE WATER METER WATER VALVE FIRE HYDRANT
LB JB S	SIGN STREET LIGHT LIGHT BOX STORM JUNCTION BOX POWER POLE
TB o MON. WELL	TRAFFIC SIGNAL BOX MONITORING WELL







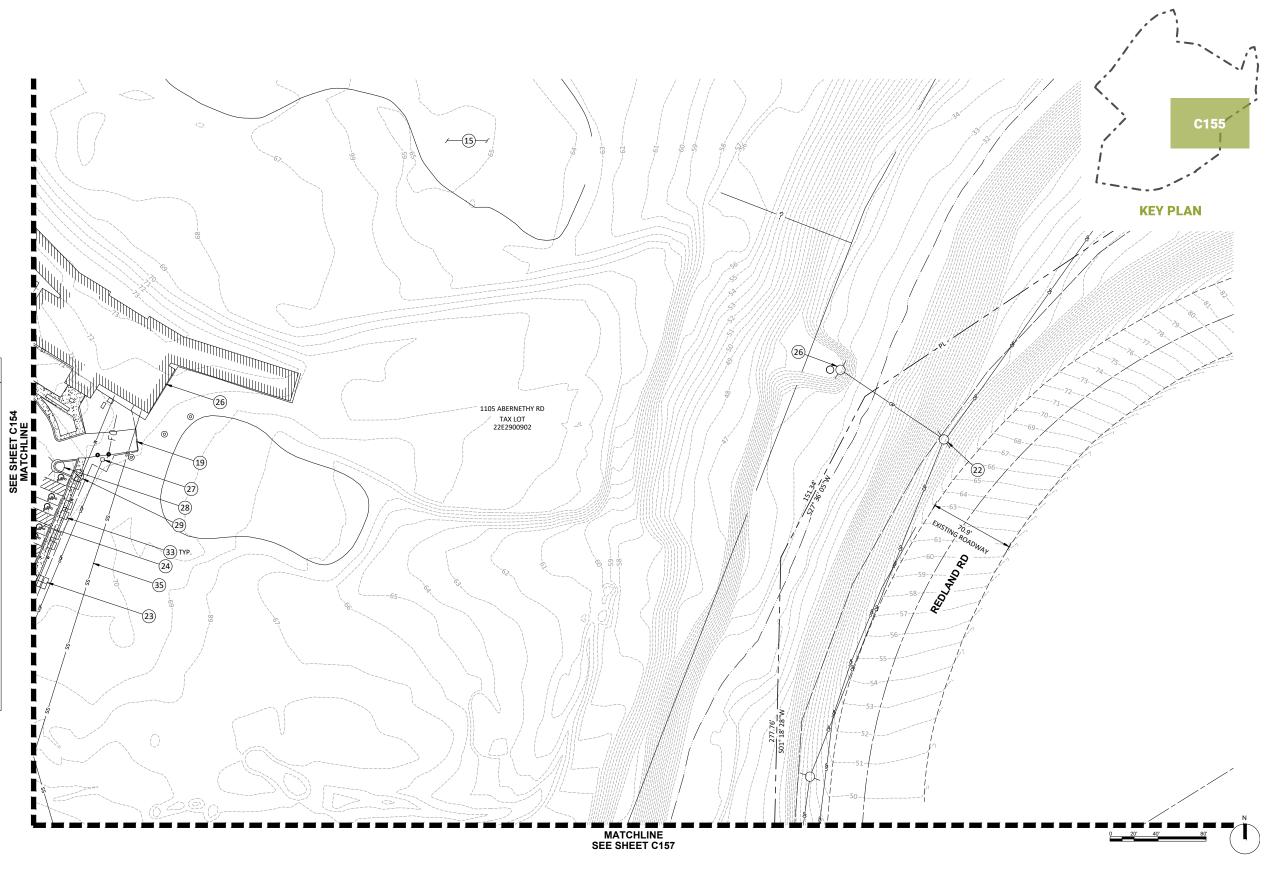


55 | Existing and Demo Site Plan

CONSTRUCTION NOTES:

- EXISTING ARTIFICIAL TURF DRIVING RANGE TO BE REMOVED.
- (19) EXISTING FENCE AND GATE TO BE REMOVED.
 (22) EXISTING POWER POLE TO REMAIN. PROTECT IN PLACE.
- (23) EXISTING WATER METER TO BE REMOVED.
- (24) EXISTING ASPHALT PARKING LOT BE REMOVED.
 REMOVAL TO INCLUDE ALL PARKING LOT ASSOCIATED CURB, SIDEWALK, PLANTERS, TREES, AND WHEEL STOPS.
- (26) EXISTING BUILDING TO BE REMOVED.
- (27) EXISTING ELECTRICAL RISER TO BE REMOVED.
- (28) EXISTING HYDRANT AND LATERALS TO BE REMOVED.(29) EXISTING WATER VALVE(S) TO BE REMOVED.
- 33) EXISTING ADA PARKING SIGN AND POLE TO BE REMOVED.
- 35) EXISTING SANITARY SERVICE TO BE REMOVED.

LEGEND	
	RIGHT-OF-WAY
	PROPERTY LINE
	CENTERLINE
	DITCH
	CURB
	EDGE OF PAVEMENT
	FENCE LINE
OP	OVERHEAD POWER LINE
UGP	UNDERGROUND POWER LINE
	NATURAL GAS LINE
st	STORM SEWER LINE
ss	SANITARY SEWER LINE
w	WATER LINE
	PROPERTY BOUNDARY
•	FOUND MONUMENT
•	STORM MANHOLE
	CATCH BASIN
0	CLEANOUT
0	SANITARY MANHOLE
H	WATER METER
8	WATER VALVE
Ω	FIRE HYDRANT
т	SIGN
<u></u>	STREET LIGHT
LB	LIGHT BOX
JB	STORM JUNCTION BOX
þ	POWER POLE
TB o	TRAFFIC SIGNAL BOX
MON. WELL	MONITORING WELL







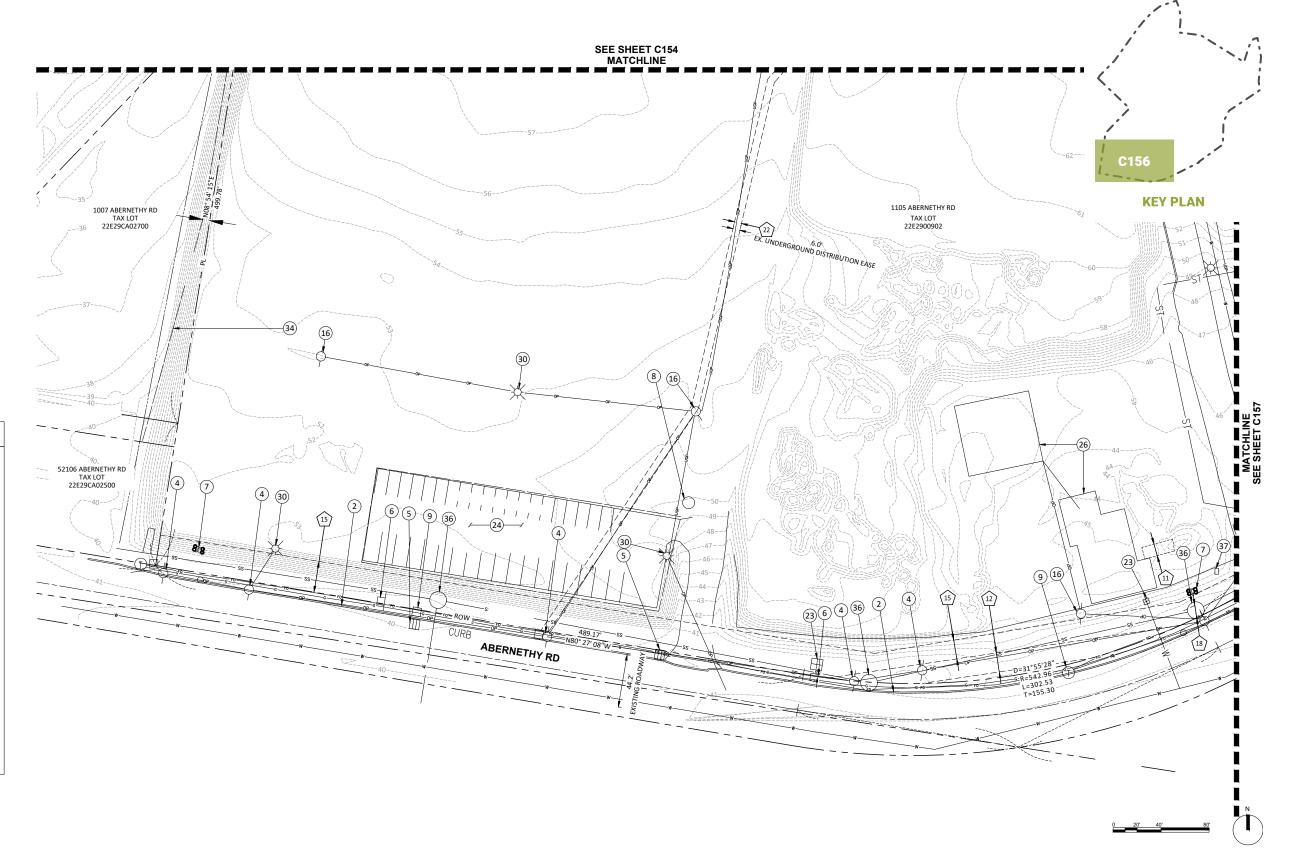


56 | Existing and Demo Site Plan

CONSTRUCTION NOTES:

- 2 EXISTING CURB TO BE REMOVED. SEE SHEET SERIES C200 FOR LIMITS OF REMOVAL.
- (4) EXISTING POWER POLE TO BE RELOCATED.
- 5 EXISTING CATCH BASIN TO BE REMOVED.
- $\fbox{6}$ existing sign and post to be relocated.
- EXISTING METHANE GAS STANDPIPE AND BOLLARDS TO BE REMOVED.
- 8 EXISTING METHANE GAS MANHOLE TO BE REMOVED.
- 9 EXISTING FRANCHISE UTILITY TO BE RELOCATED. COORDIANTE WITH UTILITY.
- 16) EXISTING POWER POLE TO BE REMOVED.
- 23) EXISTING WATER METER TO BE REMOVED.
- (24) EXISTING ASPHALT PARKING LOT BE REMOVED.
 REMOVAL TO INCLUDE ALL PARKING LOT ASSOCIATED
 CURB, SIDEWALK, PLANTERS, TREES, AND WHEEL
 STOPS.
- (26) EXISTING BUILDING TO BE REMOVED.
- (30) EXISTING STREET LIGHT AND POLE TO BE REMOVED.
- (34) EXISTING FENCE TO REMAIN. PROTECT IN PLACE.
- EXISTING MANHOLE TO BE ADJUSTED TO PROPOSED GRADES. PROTECT IN PLACE.
- (37) EXISTING TRANSFORMER TO BE ADJUSTED TO PROPOSED GRADES. PROTECT IN PLACE.

LEGEND		
	RIGHT-OF-WAY	
	PROPERTY LINE	
	CENTERLINE	
	DITCH	
	CURB	
	EDGE OF PAVEMENT	
	FENCE LINE	
OP	OVERHEAD POWER LINE	
UGP	UNDERGROUND POWER LINE	
	NATURAL GAS LINE	
sr	STORM SEWER LINE	
ss	SANITARY SEWER LINE	
w	WATER LINE	
	PROPERTY BOUNDARY	
•	FOUND MONUMENT	
•	STORM MANHOLE	
	CATCH BASIN	
0	CLEANOUT	
0	SANITARY MANHOLE	
#	WATER METER	
⊗	WATER VALVE	
Ω	FIRE HYDRANT	
т	SIGN	
₩	STREET LIGHT	
LB	LIGHT BOX	
JB	STORM JUNCTION BOX	
þ	POWER POLE	
TB⋄	TRAFFIC SIGNAL BOX	
MON. WELL	MONITORING WELL	





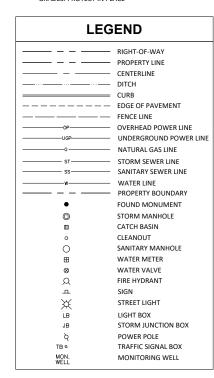


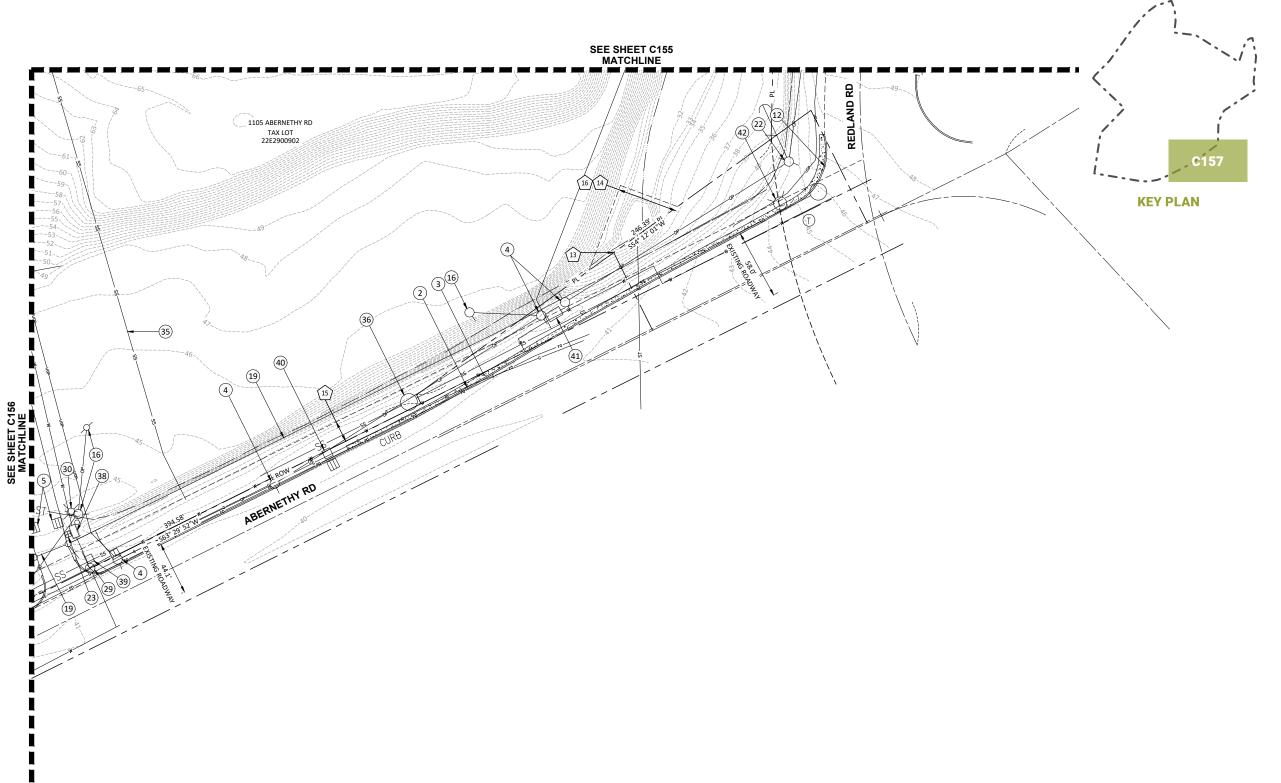


57 | Existing and Demo Site Plan

CONSTRUCTION NOTES:

- 2 EXISTING CURB TO BE REMOVED. SEE SHEET SERIES C200 FOR LIMITS OF REMOVAL.
- $\underbrace{ \text{3} }_{\text{SERIES C200 FOR LIMITS OF REMOVED. SEE SHEET} }$
- (4) EXISTING POWER POLE TO BE RELOCATED.
- (5) EXISTING CATCH BASIN TO BE REMOVED.
- (12) EXISTING CURB TO REMAIN. PROTECT IN PLACE.
- (16) EXISTING POWER POLE TO BE REMOVED.
- (19) EXISTING FENCE AND GATE TO BE REMOVED.
- EXISTING POWER POLE TO REMAIN. PROTECT IN PLACE.
- (23) EXISTING WATER METER TO BE REMOVED.
- 29 EXISTING WATER VALVE(S) TO BE REMOVED.
- (30) EXISTING STREET LIGHT AND POLE TO BE REMOVED.
- (35) EXISTING SANITARY SERVICE TO BE REMOVED.
- EXISTING MANHOLE TO BE ADJUSTED TO PROPOSED GRADES. PROTECT IN PLACE.
- (38) EXISTING WATER SERVICE AND VAULT TO BE REMOVED.
- (39) EXISTING SIGN TO BE REMOVED.
- (40) EXISTING JUNCTION BOX TO BE RELOCATED.
- EXISTING WATER VAULT TO BE ADJUSTED TO PROPOSED GRADES. PROTECT IN PLACE.
- 42) EXISTING HYDRANT TO BE ADJUSTED TO PROPOSED GRADES. PROTECT IN PLACE





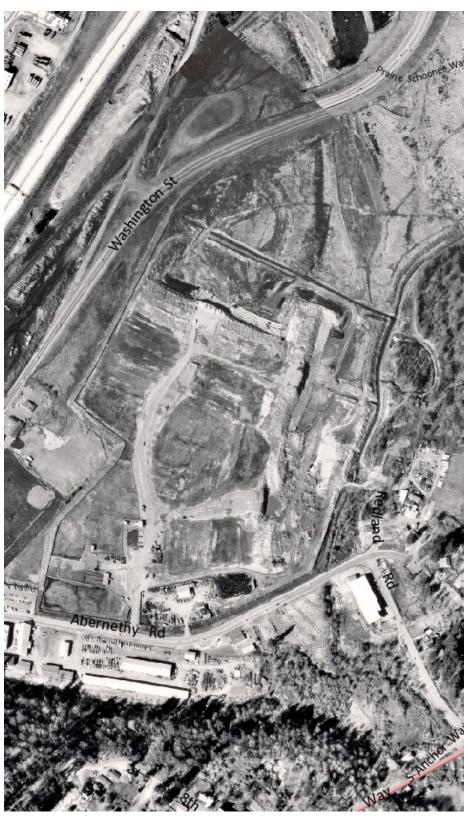






58 | Aerial Photos







1944 2019





59

This page intentionally left blank.





THE NORTH END

4 - PROPOSED DEVELOPMENT

60 |







61 | Narrative and Site Plan

Project Description

Summit Development Group seeks approval of The North End Master Plan, a mixed-use GDP to redevelop the site with a mix of commercial, service, entertainment, residential, and retail uses as depicted in the master plan. The plan envisions a transformation of the former landfill to a lively, integrated mixed-use development that will not only complement the downtown, but serve as a primary gateway to the north end of the Oregon City Downtown. The master plan features treelined streets, landscaped open spaces, offices and residences overlooking public plazas and open spaces, and will feature a wide variety of shopping, dining, and entertainment experiences.

The compact design on the west edge of the development provides appropriate architecture and massing, and the walkable environment of a downtown streetscape while maintaining a human scale. The east edge of the site is provided with a mix of small retail spaces integrated into larger anchor retail pads that will allow the development to balance the need for growth and economic opportunity, without compromising the comfortable, small-town roots of downtown Oregon City. For future residents and tenants, The North End master plan provides a place where they can live, work and be a part of Oregon City.

The North End architecture and design guidelines are intended to integrate design elements of downtown Oregon City into the development.

The proposed development includes the creation of a comprehensive circulation system comprised of streets, sidewalks, shared paths, and on-street bike lanes that connect the proposed uses on-site to each other, to internal plazas and open spaces, and to the greater community through connections along Washington Street, Abernethy Road, and the End of the Oregon Trail Interpretive Center.

The proposed master plan is located at a key entrance to the north end of Downtown Oregon City near the intersections of Interstate 205 and Highway 213. Streets have been named within this submittal for the purposes of organization only. The names are intended to be placeholders for review and description and are planned to be formally named later. The master plan is divided into four distinct "Districts" as described below:

North District Area

The North District Area is approximately 17.1 Acres of the overall master plan. It is located west of the proposed "Market street" and east of Washington Street. This area is proposed to be developed with a mix of four and five story residential mixed use buildings, retail commercial uses, an entertainment center, the main pavilion, the parking garages along Washington Street, and one of the five drive thru uses identified within the master plan. Overall, this area would include approximately 524 residential units and 632,789 square feet of building area. This district is compact, served by the main internal plaza, a series of locally placed open spaces, and makes up the most active multi-modal portion of the masterplan area. The North District Area includes four east-west street connections, depicted as 1st, 2nd, 3rd, and 4th Streets and three north-south street connections including A Street, B Street, and Market Street in the master plan. The area is located adjacent to Washington Street which connects directly to the End of the Oregon Trail Interpretive Center, the Amtrak Station, and the rest of Downtown Oregon City. This portion of the site shares similar characteristics with the Oregon City downtown.

East District Area

The East District Area is approximately 16.3 Acres of the overall master plan and would be developed with a mix of small format commercial retail uses, two drive thru uses and one of the Anchor Retail uses on site. The area is located adjacent to the nearby Home Depot development and would consist of approximately 155,804 square feet of building area. Surface parking is provided for uses within the East District Area. The main pedestrian path that connects to the North District Area is to the anchor retail areas in the East District as well as two east-west street connections depicted on the master plan as 2nd and 3rd Streets. The East District Area also includes the primary natural resource on the site which remains set aside and protected through the master plan.

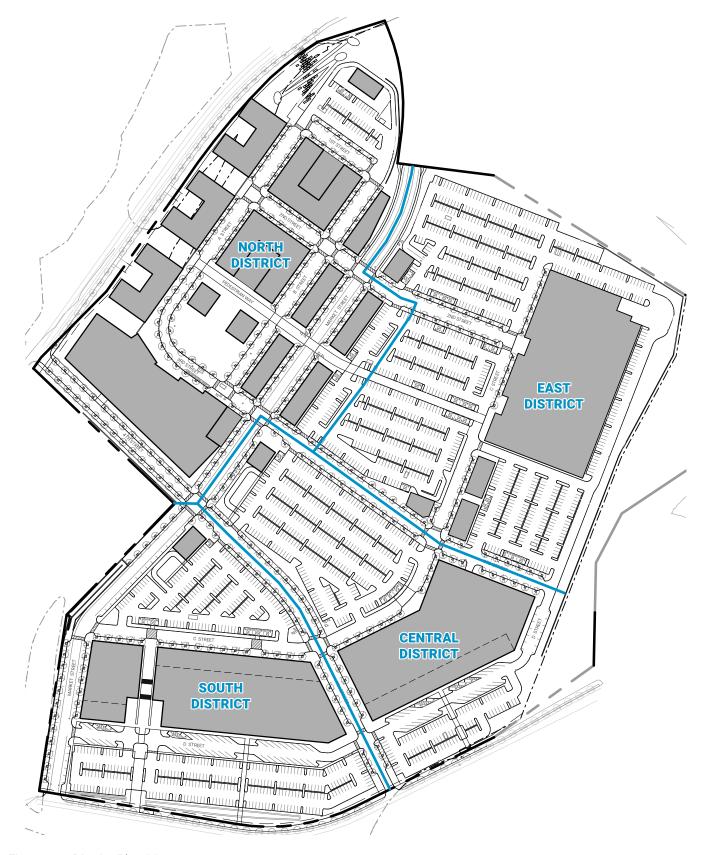


Figure 1.1. District Plan Map





62 | Narrative and Phasing Plan

Central District

The Central District area makes up approximately 10.6 acres of the overall master plan and will be developed with a mix of small format commercial retail uses, an anchor retail pad and one drive thru use. This area is located between 3rd and 4th Streets east of Market Street. This area would consist of approximately 140,779 square feet of building area. In addition to the streets mentioned previously, this district is served by two north-south streets depicted as C Street and D Street on the master plan. Due to the difference in grades across the site, there are opportunities for lower level retail uses along D Street at the rear of the anchor retail pad located within this district. Abernethy Road runs along the southern portion of the Central District Area and includes one of the accesses along 4th Street into the master plan site.

South District Area

The South District area makes up 12.6 acres of the overall master plan and includes the last drive thru use within the master plan, a small format grocer, an anchor retail pad and commercial retail uses along both Market Street and D Street. The building area within the South District is approximately 162,326 square feet. The South District Area includes the second access from Abernethy Road along Market Street and includes C Street and D Street as additional east-west connections. The proposed drive thru in this District is at the intersection of 4th Street and Market Street within the master plan. The pedestrian connection to the End of the Oregon Trail interpretive Center is located within the South District Area.

Access

There are four proposed access points to the subject site. Proposed Market Street would provide access into the master plan at intersections with both Abernethy to the south and Washington Street to the North. Additionally, proposed 4th Street would connect to Abernethy to the east and Washington Street to the west. Proposed Market Street would satisfy the street connection called for in the Oregon City Transportation System Plan.

All internal streets are proposed to be private with overlaid with public access easements and although different from the typical Oregon City Street cross section, the internal streets will be designed to mimic and function as public streets. Proposed features include wider sidewalks, street furniture, bulb outs at intersections, planter strips, and raised crosswalks. The proposed street sections are shown on sheets XXXXXXXX of the master plan and have been designed to provide for safe and efficient connections for all modes of travel within the master plan.

The shared paths called for in the TSP through the project site are proposed to be provided as part of Market Street and through the east-west pedestrian corridor that bisects the site south of the anchor retail site located in the East District Area. These paths would connect into the frontage improvements planned along Abernethy Road, Washington Street, the End of the Oregon Trail interpretive Center, and the internal street systems providing a circuitous bike and pedestrian system that connects all of the internal uses.

Phasing

The project will be developed over several years with the first phase consisting of mass grading, padding, utilities, internal streets, shared use paths, and frontage improvements. Subsequent phases would likely begin with the construction of anchor retail sites enabling for other on-site improvements and secondary retail. The remaining phases will likely include a mix of commercial retail, entertainment, and mixed-use residential uses as the market demand for those uses is realized.

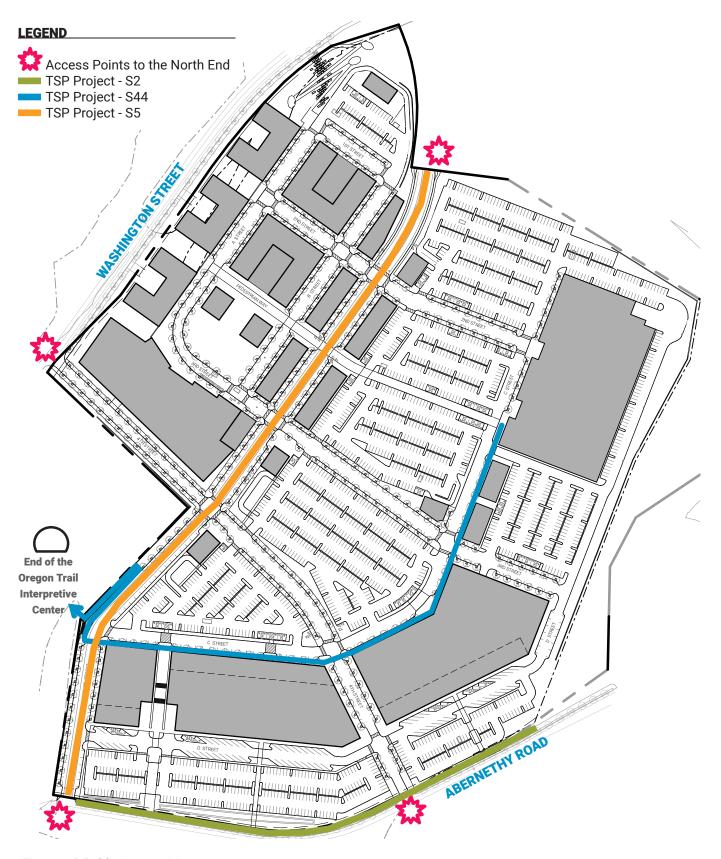


Figure 1.2 Public Access Map















65 | Site Plan

PROPOSED BUILDING TYPES

North District

N1 - DRIVE THRU (CU)

N2 - RETAIL COMMERCIAL

N3 - RETAIL COMMERCIAL

N4 - RETAIL COMMERCIAL

N5 - RETAIL COMMERCIAL

N6 - RETAIL COMMERCIAL

N7 - THEATRE AND COMMERCIAL

N8 - MIXED USE W/ RESIDENTIAL (4-STORY)

N9 - MIXED USE W/ RESIDENTIAL (4-STORY)

N10 - MIXED USE W/ RESIDENTIAL (4-STORY)

N11 - MIXED USE W/ RESIDENTIAL (5-STORY)

N12 - MIXED USE W/ RESIDENTIAL (5-STORY)

N13 - PAVILLION COMMERCIAL

N14 - PAVILLION COMMERCIAL

N15 - BELOW-GRADE PARKING GARAGE

EAST DISTRICT

E1 - DRIVE THRU (CU)

E2 - ANCHOR RETAIL COMMERCIAL (CU)

E3 - RETAIL COMMERCIAL

E4 - RETAIL COMMERCIAL

E5 - DRIVE THRU (CU)

CENTRAL DISTRICT

C1 - DRIVE THRU (CU)

C2 - ANCHOR RETAIL COMMERCIAL (CU)

SOUTH DISTRICT

S1 - DRIVE THRU (CU)

S2 - ANCHOR RETAIL COMMERCIAL (CU)

S3 - GROCER + RETAIL COMMERCIAL

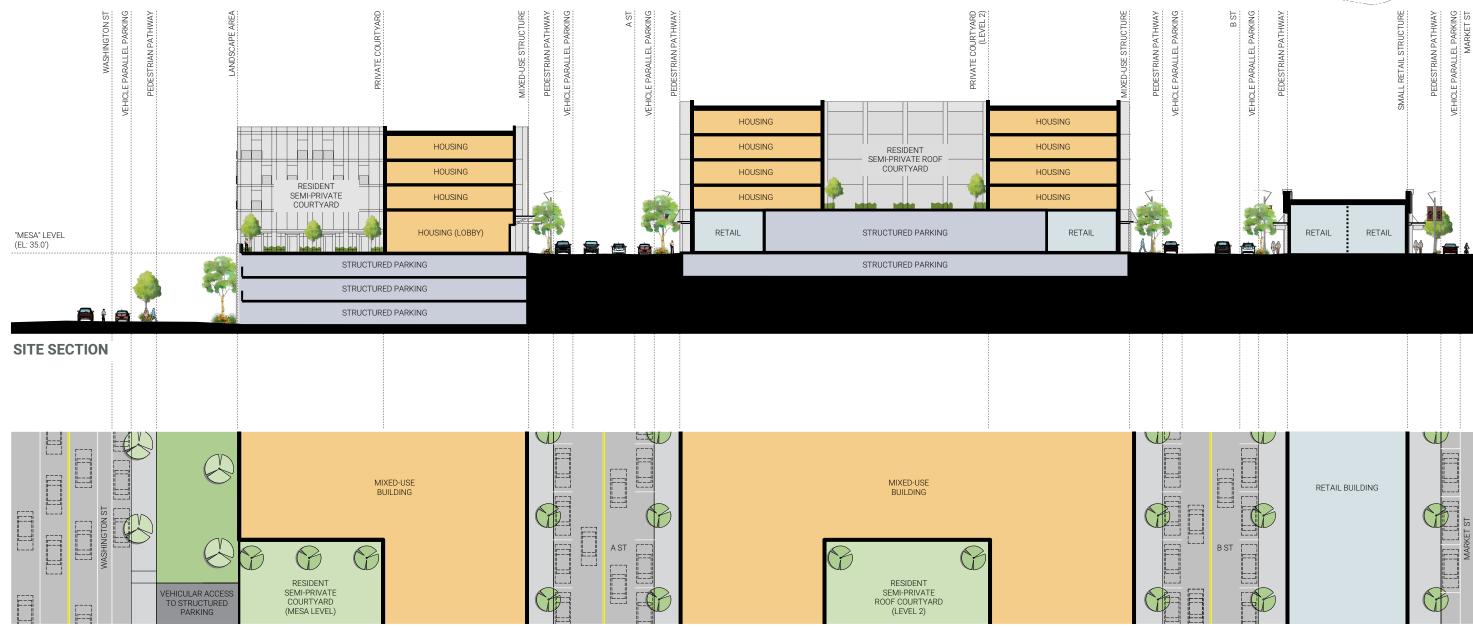




66 | Site Sections

SITE SECTION A-A





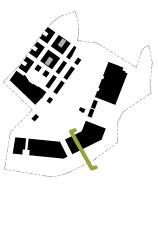
SITE PLAN (EXCERPT)





67 | Site Sections

SITE SECTION B-B



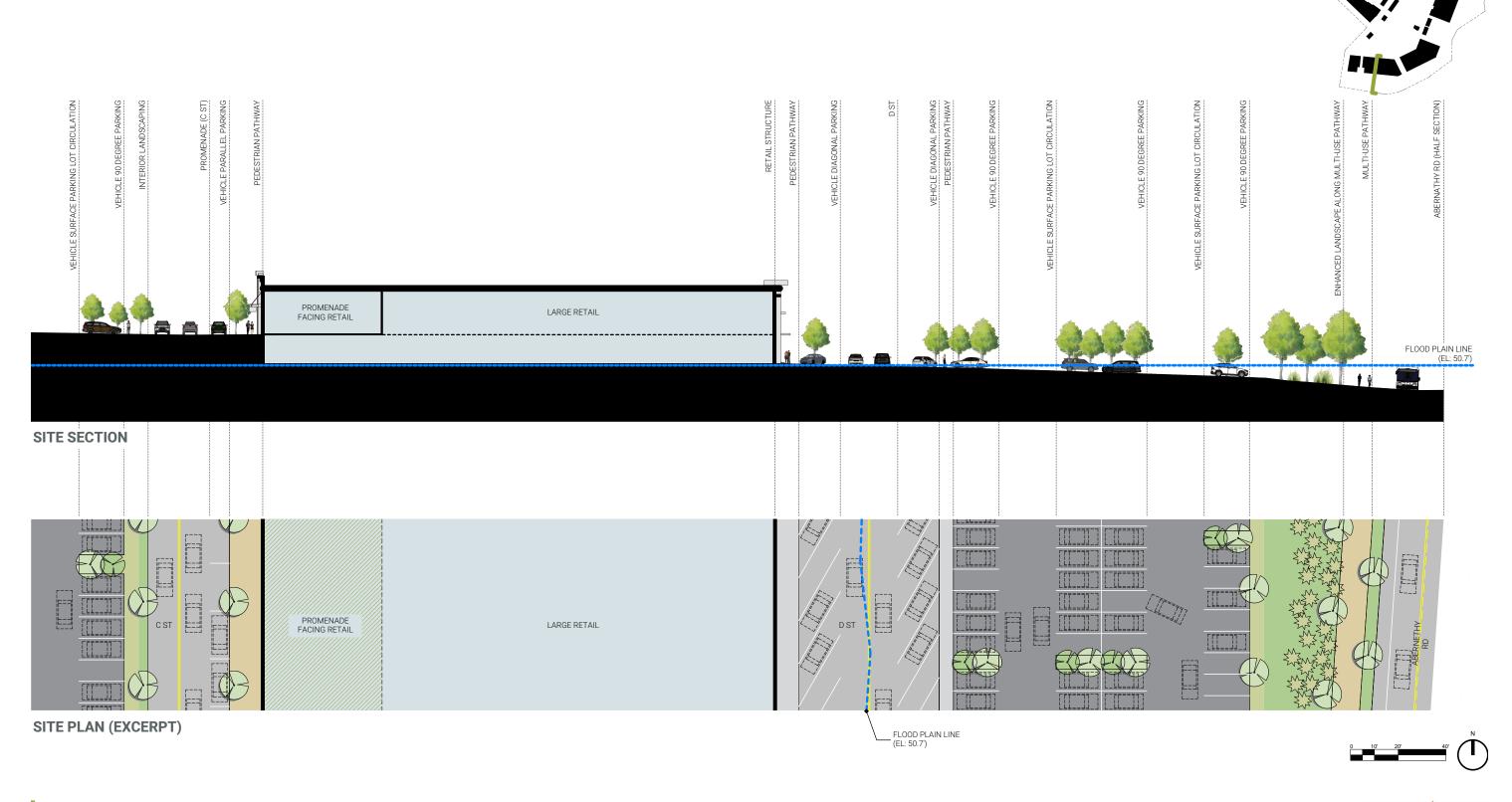






68 | Site Sections

SITE SECTION C-C







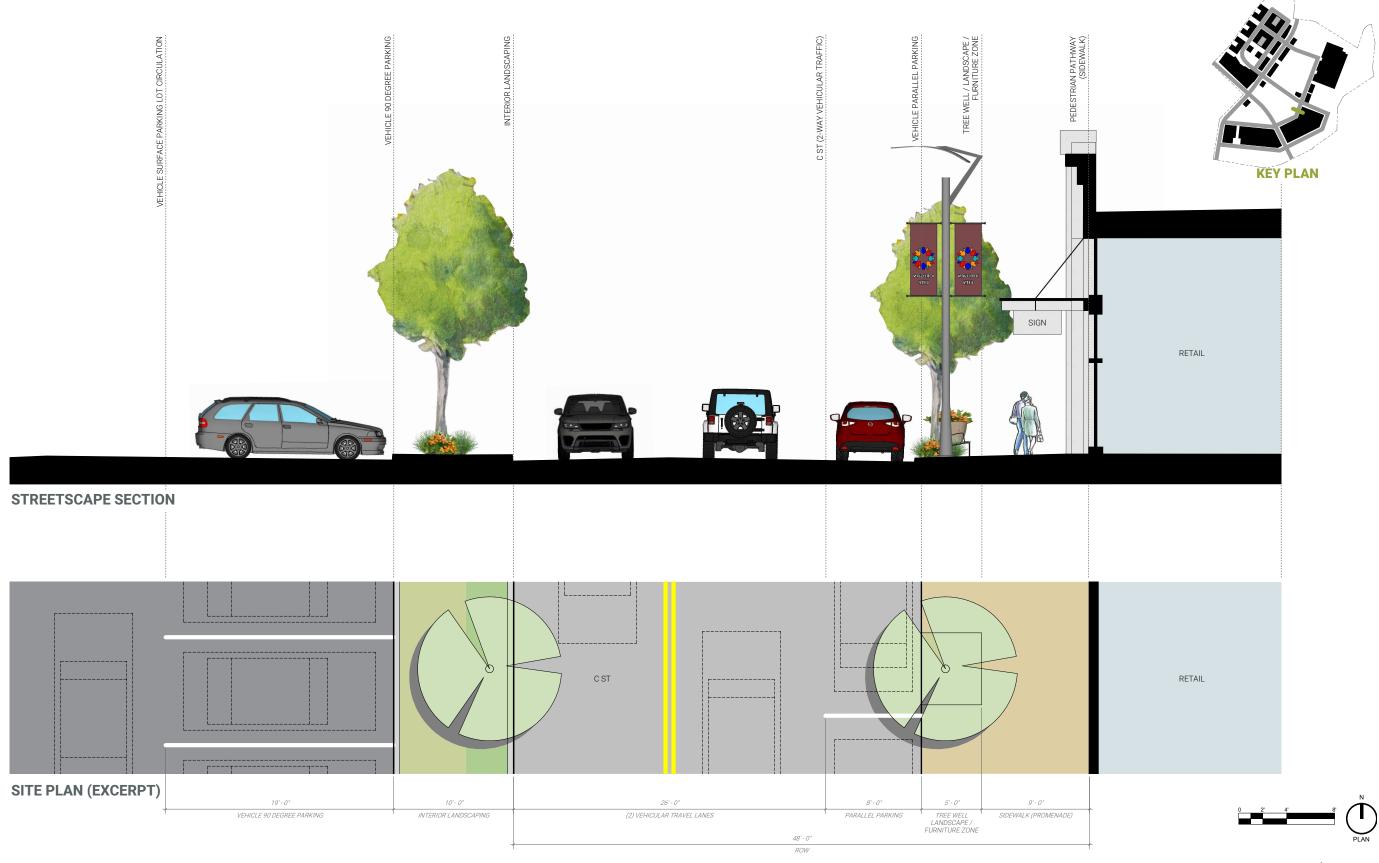
69 | Enlarged Site Section @ Market Street







70 | Enlarged Site Section @ the Promenade













72 | Proposed Site Plan

CONSTRUCTION NOTES:

- (1) CONSTRUCT STANDARD CURB PER OREGON CITY STANDARD DETAIL 510.
- 2 CONSTRUCT SIDEWALK PER OREGON CITY STANDARD DETAIL 508.
- (3) PROPOSED PARKING STALL STRIPING.
- 4 PROPOSED PARALLEL PARKING STALL.
- CONSTRUCT ASPHALT PAVEMENT. SEE GRADING PLANS FOR PROPOSED GRADING.
- 6 CONSTRUCT CONCRETE PEDESTRIAN CROSSING AND STRIPING.
- 7 CONSTRUCT STREET SECTION AND STRIPING. SEE TYPICAL SECTIONS FOR INFORMATION.
- 8 PROPOSED WALL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- (9) LANDSCAPE AREA. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED ADA ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED VAN ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED TREE WELL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.

KEY PLAN NROD (TYP.) 2 1105 ABERNETHY RD TAX LOT 22E2900902 MATCHLINE SEE SHEET C202



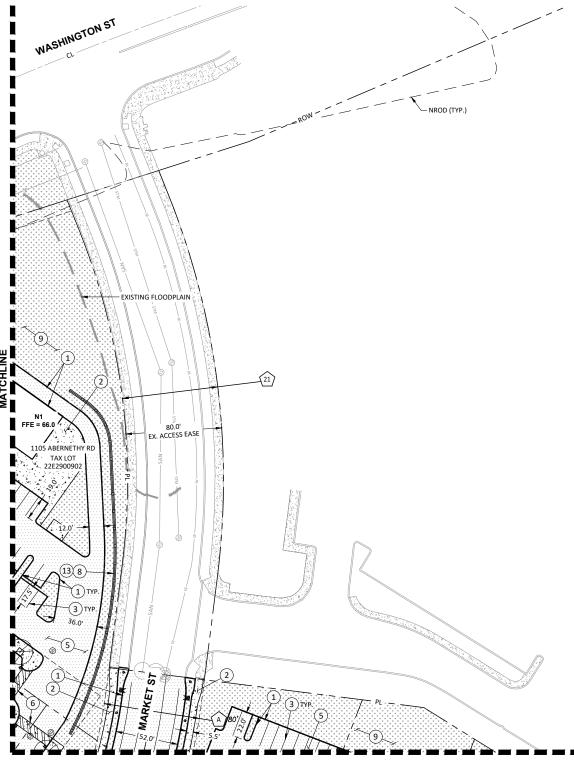




73 | Proposed Site Plan

CONSTRUCTION NOTES:

- CONSTRUCT STANDARD CURB PER OREGON CITY STANDARD DETAIL 510.
- 2 CONSTRUCT SIDEWALK PER OREGON CITY STANDARD DETAIL 508.
- (3) PROPOSED PARKING STALL STRIPING.
- CONSTRUCT ASPHALT PAVEMENT. SEE GRADING PLANS FOR PROPOSED GRADING.
- 6 CONSTRUCT CONCRETE PEDESTRIAN CROSSING AND STRIPING.
- 8 PROPOSED WALL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- 9 LANDSCAPE AREA. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED GUARDRAIL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.



C201

KEY PLAN

HOME DEPOT

2002 WASHINGTON ST TAX LOT 22E2900906

SEE SHEET C102 FOR EASEMENT INFORMATION

MATCHLINE SEE SHEET C203





74 | Proposed Site Plan

CONSTRUCTION NOTES:

- CONSTRUCT STANDARD CURB PER OREGON CITY STANDARD DETAIL 510.
- 2 CONSTRUCT SIDEWALK PER OREGON CITY STANDARD DETAIL 508.
- 3 PROPOSED PARKING STALL STRIPING.
- 4 PROPOSED PARALLEL PARKING STALL.
- S CONSTRUCT ASPHALT PAVEMENT. SEE GRADING PLANS FOR PROPOSED GRADING.
- 6 CONSTRUCT CONCRETE PEDESTRIAN CROSSING AND STRIPING.
- 7 CONSTRUCT STREET SECTION AND STRIPING. SEE TYPICAL SECTIONS FOR INFORMATION.
- 8 PROPOSED WALL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- 9 LANDSCAPE AREA. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED ADA ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED VAN ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED TREE WELL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED GUARDRAIL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- (14) CONSTRUCT PRIVATE HARDSCAPE. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR MATERIALS, COLOR, SCORING AND FINISH.
- CONSTRUCT COMMERCIAL DRIVEWAY PER OREGON CITY STANDARD DETAIL 505.
- 16) PROPOSED LOADING ZONE STRIPING.

KEY PLAN NROD (TYP.) N12 FFE = 66.0 1105 ABERNETHY RD TAX LOT 22E2900902 N14 FFE = 66.0 8 N7 FFE = 66.0 1780 WASHINGTON ST TAX LOT 22E29CA00400 500' OREGON TRAIL LINE MATCHLINE SEE SHEET C204



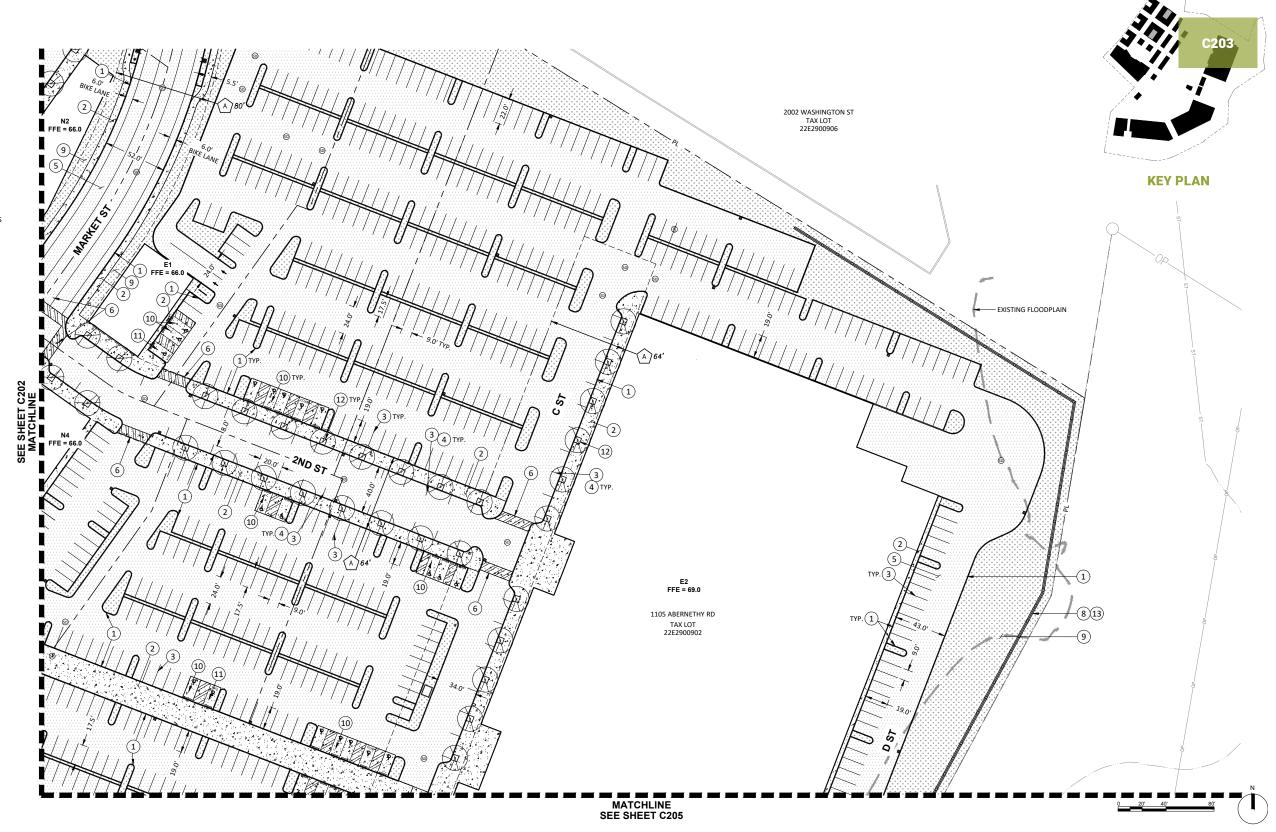




75 | Proposed Site Plan

CONSTRUCTION NOTES:

- CONSTRUCT STANDARD CURB PER OREGON CITY STANDARD DETAIL 510.
- 2 CONSTRUCT SIDEWALK PER OREGON CITY STANDARD DETAIL 508.
- (3) PROPOSED PARKING STALL STRIPING.
- 4 PROPOSED PARALLEL PARKING STALL.
- CONSTRUCT ASPHALT PAVEMENT. SEE GRADING PLANS FOR PROPOSED GRADING.
- 6 CONSTRUCT CONCRETE PEDESTRIAN CROSSING AND STRIPING.
- 8 PROPOSED WALL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- 9 LANDSCAPE AREA. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED ADA ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- $\widehat{\mbox{11}}$ proposed van accessible parking stall, wheel stop, and signage.
- PROPOSED TREE WELL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED GUARDRAIL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.





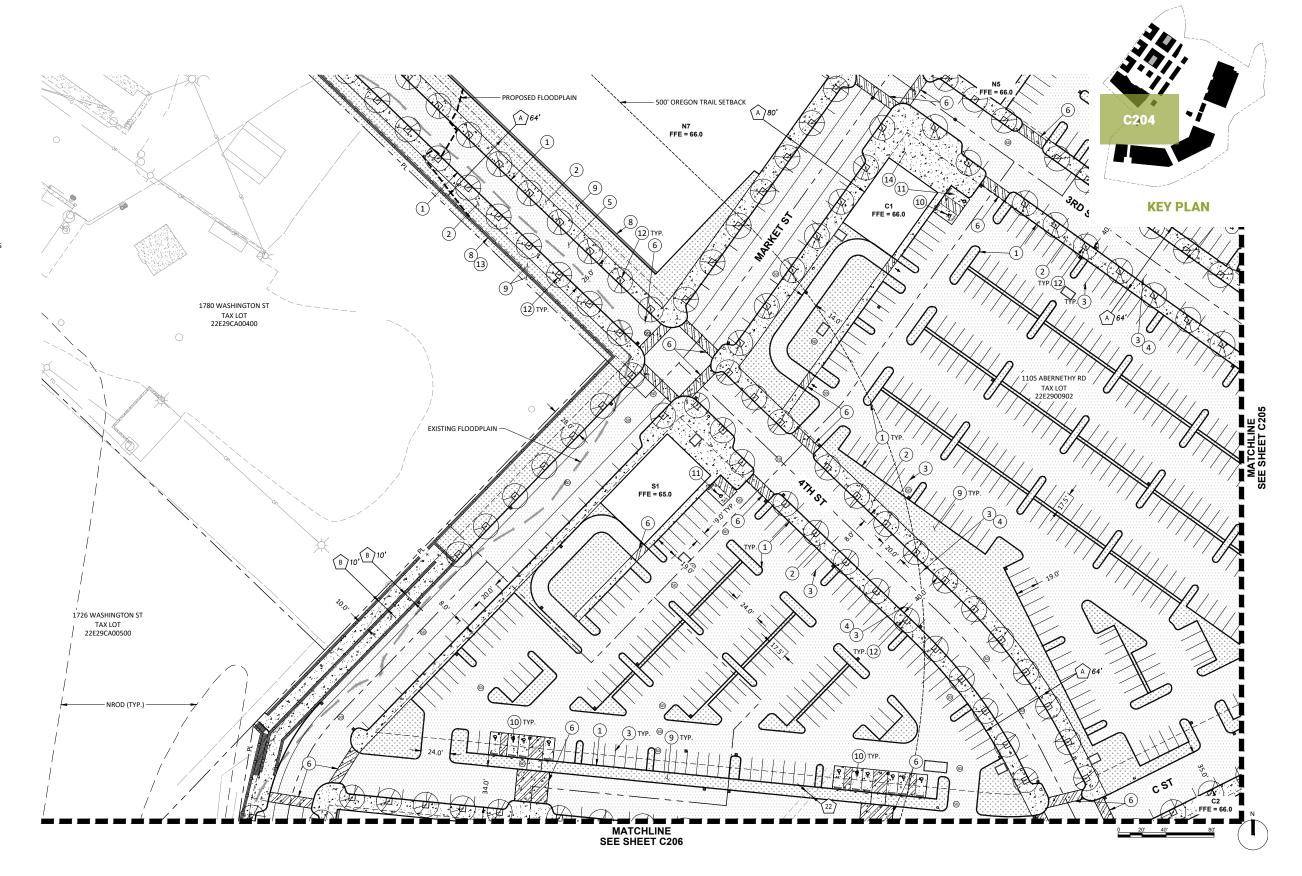




76 | Proposed Site Plan

CONSTRUCTION NOTES:

- CONSTRUCT STANDARD CURB PER OREGON CITY STANDARD DETAIL 510.
- 2 CONSTRUCT SIDEWALK PER OREGON CITY STANDARD DETAIL 508.
- (3) PROPOSED PARKING STALL STRIPING.
- 4 PROPOSED PARALLEL PARKING STALL.
- CONSTRUCT ASPHALT PAVEMENT. SEE GRADING PLANS FOR PROPOSED GRADING.
- 6 CONSTRUCT CONCRETE PEDESTRIAN CROSSING AND STRIPING.
- 8 PROPOSED WALL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- 9 LANDSCAPE AREA. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED ADA ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- 11) PROPOSED VAN ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED TREE WELL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED GUARDRAIL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- (14) CONSTRUCT PRIVATE HARDSCAPE. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR MATERIALS, COLOR, SCORING AND FINISH.





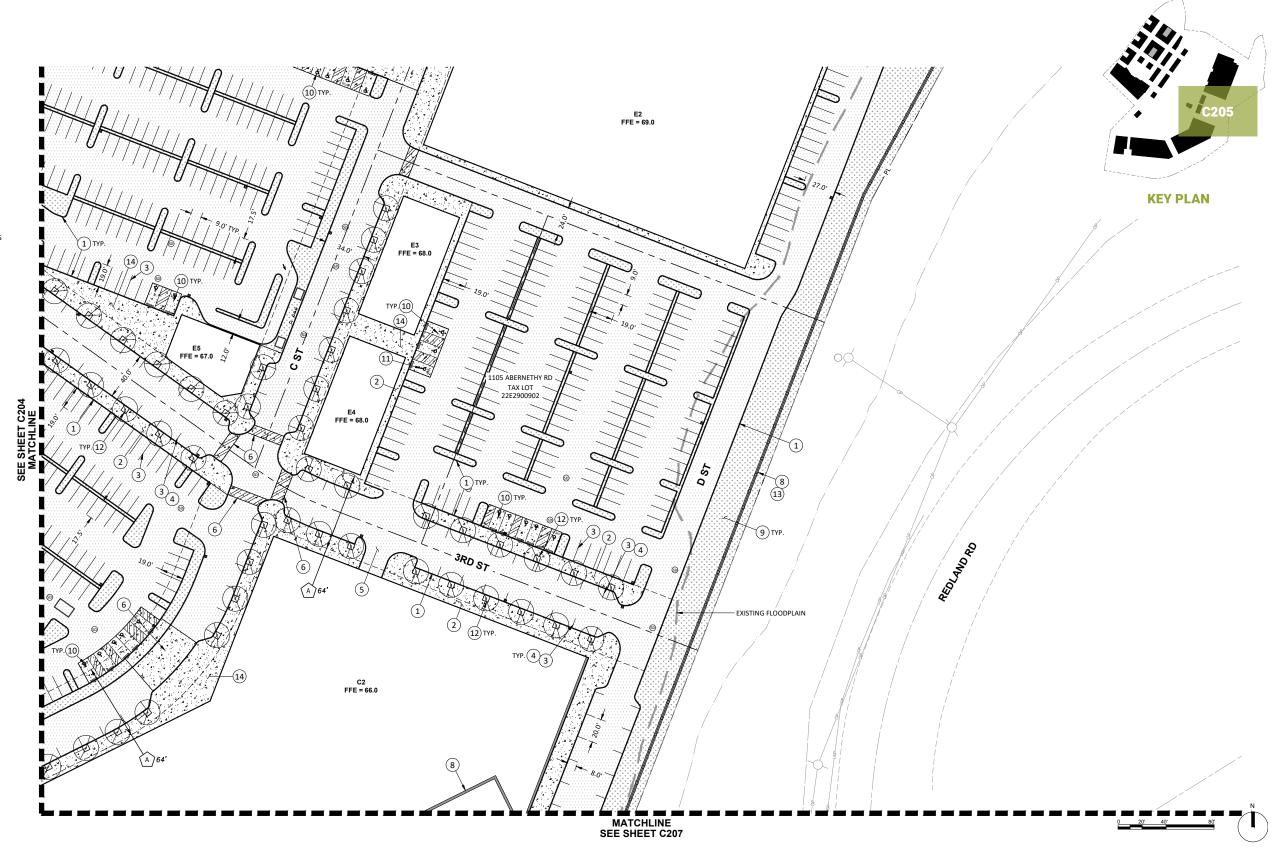




77 | Proposed Site Plan

CONSTRUCTION NOTES:

- CONSTRUCT STANDARD CURB PER OREGON CITY STANDARD DETAIL 510.
- 2 CONSTRUCT SIDEWALK PER OREGON CITY STANDARD DETAIL 508.
- (3) PROPOSED PARKING STALL STRIPING.
- 4 PROPOSED PARALLEL PARKING STALL.
- S CONSTRUCT ASPHALT PAVEMENT. SEE GRADING PLANS FOR PROPOSED GRADING.
- 6 CONSTRUCT CONCRETE PEDESTRIAN CROSSING AND STRIPING.
- 8 PROPOSED WALL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- 9 LANDSCAPE AREA. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED ADA ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED VAN ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED TREE WELL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED GUARDRAIL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- (14) CONSTRUCT PRIVATE HARDSCAPE. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR MATERIALS, COLOR, SCORING AND FINISH.





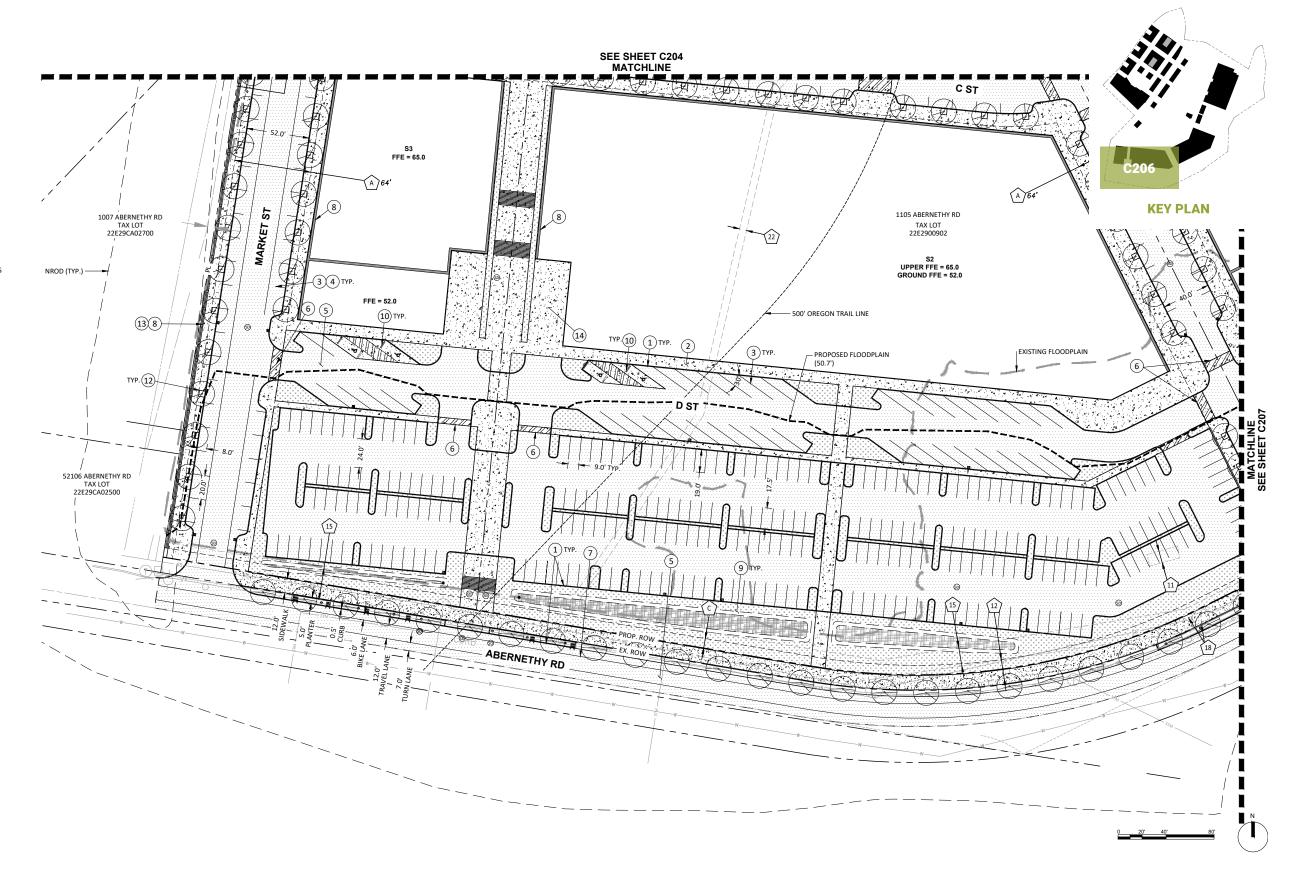




78 | Proposed Site Plan

CONSTRUCTION NOTES:

- CONSTRUCT STANDARD CURB PER OREGON CITY STANDARD DETAIL 510.
- 2 CONSTRUCT SIDEWALK PER OREGON CITY STANDARD DETAIL 508.
- (3) PROPOSED PARKING STALL STRIPING.
- (4) PROPOSED PARALLEL PARKING STALL.
- CONSTRUCT ASPHALT PAVEMENT. SEE GRADING PLANS FOR PROPOSED GRADING.
- 6 CONSTRUCT CONCRETE PEDESTRIAN CROSSING AND STRIPING.
- 7 CONSTRUCT STREET SECTION AND STRIPING. SEE TYPICAL SECTIONS FOR INFORMATION.
- 8 PROPOSED WALL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- (9) LANDSCAPE AREA. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED ADA ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED TREE WELL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED GUARDRAIL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- (14) CONSTRUCT PRIVATE HARDSCAPE. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR MATERIALS, COLOR, SCORING AND FINISH.







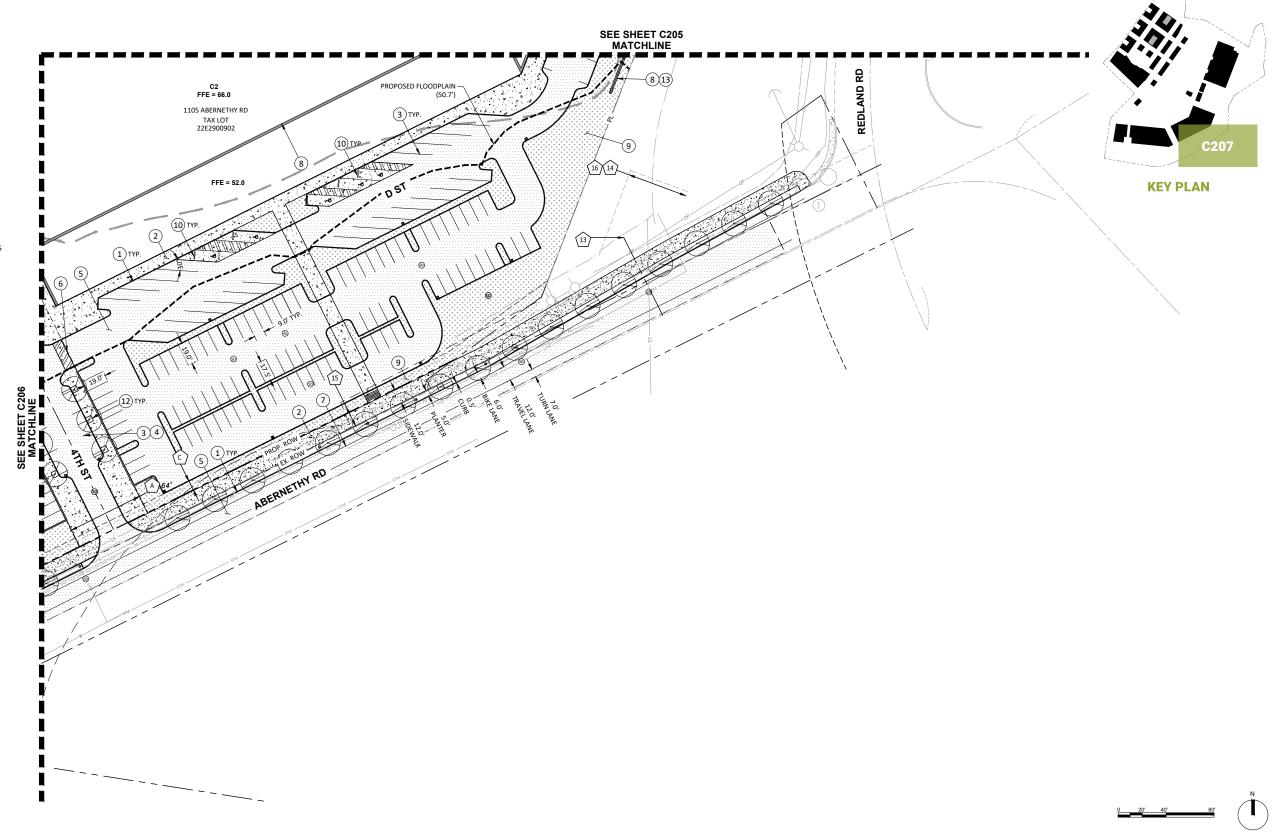




79 | Proposed Site Plan

CONSTRUCTION NOTES:

- CONSTRUCT STANDARD CURB PER OREGON CITY STANDARD DETAIL 510.
- 2 CONSTRUCT SIDEWALK PER OREGON CITY STANDARD DETAIL 508.
- 3 PROPOSED PARKING STALL STRIPING.
- 4 PROPOSED PARALLEL PARKING STALL.
- CONSTRUCT ASPHALT PAVEMENT. SEE GRADING PLANS FOR PROPOSED GRADING.
- 6 CONSTRUCT CONCRETE PEDESTRIAN CROSSING AND STRIPING.
- 7 CONSTRUCT STREET SECTION AND STRIPING. SEE TYPICAL SECTIONS FOR INFORMATION.
- 8 PROPOSED WALL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- 9 LANDSCAPE AREA. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED ADA ACCESSIBLE PARKING STALL, WHEEL STOP, AND SIGNAGE.
- PROPOSED TREE WELL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.
- PROPOSED GUARDRAIL. REFER TO LANDSCAPE ARCHITECT'S PLANS FOR INFORMATION.









80 | Utility Plan

STORM NOTES:

- 2 PROPOSED 48" STANDARD STORM MANHOLE.
- (3) PROPOSED STORM INLET.
- PROPOSED STORM PIPE. SLOPE AT 0.5% MIN.
- $\widecheck{6}$ install 48" storm manhole over existing storm line.
- 7 PROPOSED BAYFILTER WATER QUALITY TREATMENT VAULT.
- PROPOSED PUBLIC STORMWATER CURB PLANTER WITH CURB CUTS, TYP.
- PROPOSED 5.0' DIAM. BARREL ADS STORMWATER DETENTION SYSTEM.
- 15) PROPOSED CONNECTION TO EXISTING CULVERT.
- 16) PROPOSED OVERFLOW INLET.
- (17) PROPOSED CONCRETE CURB INLET.
- PROPOSED 6" PERFORATED STORM PIPE. SLOPE AT 1.0% MIN.

SANITARY NOTES:

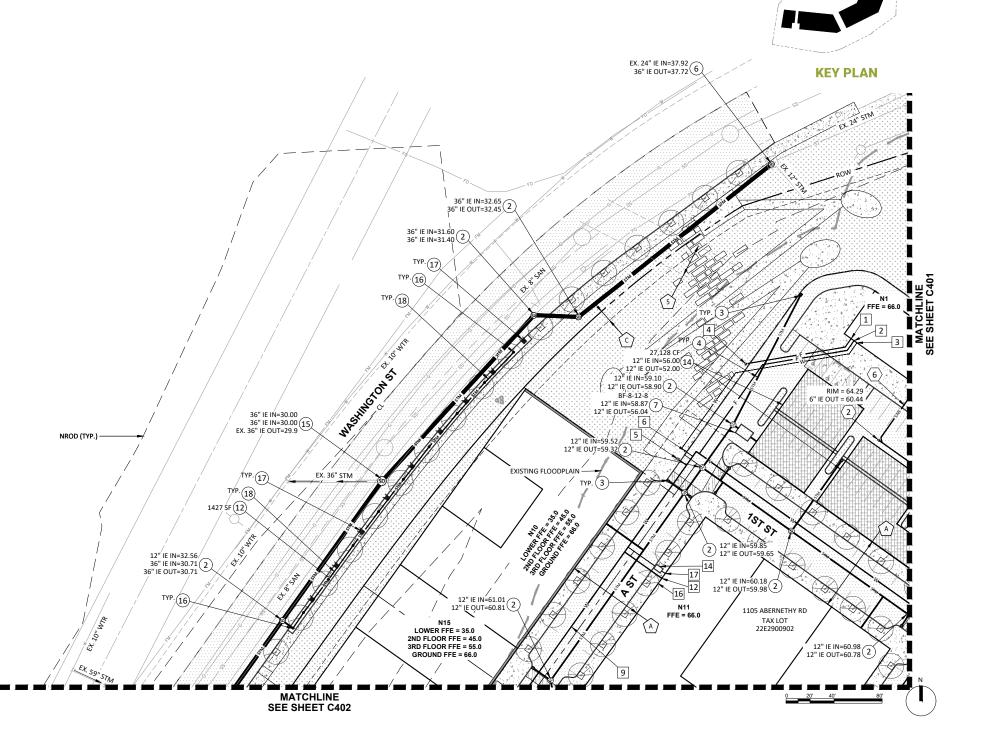
- 2 PROPOSED SANITARY CLEANOUT.
- 6 PROPOSED SANITARY SEWER PIPE.

WATER NOTES:

- 1 PROPOSED FDC LINE BUILDING CONNECTION.
- PROPOSED FIRE SERVICE BUILDING CONNECTION.

 PROPOSED DOMESTIC WATER SERVICE BUILDING CONNECTION.
- 4 PROPOSED FIRE DEPARTMENT CONNECTION (FDC).
- 5 PROPOSED FIRE HYDRANT.
 6 PROPOSED 1" DOMESTIC WATER METER VAULT.
- 9 PROPOSED 8" PUBLIC WATER MAIN.
- PROPOSED FIRE SERVICE BUILDING CONNECTION. PROPOSED DCDA TO BE INSTALLED ON THE IMMEDIATE INSIDE WALL OF BUILDING.
- 14 PROPOSED 3" DOMESTIC WATER METER VAULT.

LEGEND	
	RIGHT-OF-WAY
	PROPERTY LINE
STM	STORM LINE
w	WATER LINE
F	FIRE LINE
SAN	SANITARY LINE
	EXISTING FLOODPLAIN
	PROPOSED FLOODPLAIN
	500' OREGON TRAIL LINE
	CATCH BASIN
(SD)	STORM MANHOLE
SS	SANITARY MANOLE
۰	CLEANOUT
В	FIRE HYDRANT
•	FDC









81 | Utility Plan

STORM NOTES:

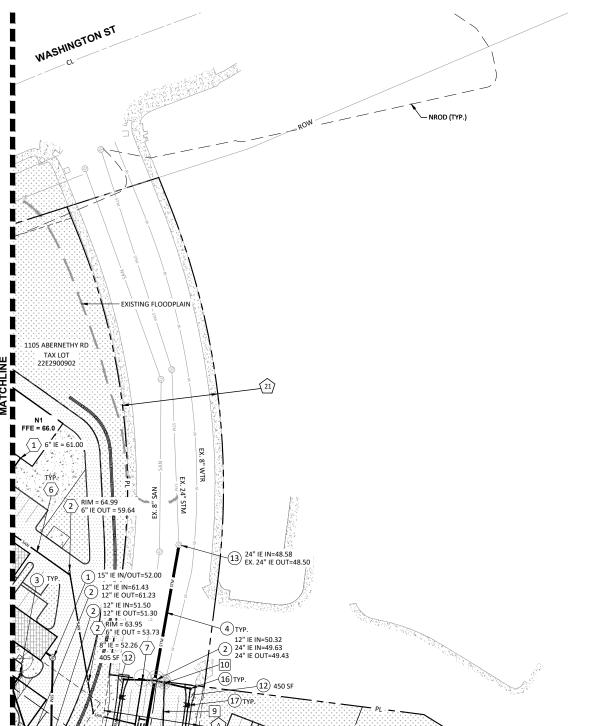
- 1) PROPOSED 60" FLOW CONTROL MANHOLE.
- 2 PROPOSED 48" STANDARD STORM MANHOLE.
- 3 PROPOSED STORM INLET.
- 4 PROPOSED STORM PIPE. SLOPE AT 0.5% MIN.
- $\overbrace{12} \ \ \, \text{PROPOSED PUBLIC STORMWATER CURB PLANTER } \\ \ \, \text{WITH CURB CUTS, TYP.}$
- 13) PROPOSED CONNECTION TO EXISTING MANHOLE.
- 16) PROPOSED OVERFLOW INLET.
- 17) PROPOSED CONCRETE CURB INLET.
- $\overbrace{18}^{\rm proposed}$ 6" perforated storm pipe. Slope at 1.0% min.

SANITARY NOTES:

- 1 PROPOSED SANITARY BUILDING CONNECTION.
- $\langle \overline{2} \rangle$ PROPOSED SANITARY CLEANOUT.
- $\overline{6}$ PROPOSED SANITARY SEWER PIPE.
- PROPOSED CONNECTION TO EXISTING SANITARY MANHOLE.

WATER NOTES:

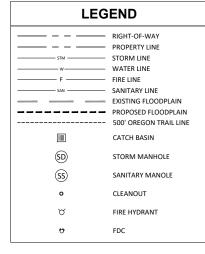
- 9 PROPOSED 8" PUBLIC WATER MAIN.
 10 PROPOSED CONNECTION TO EXISTING PUBLIC WATER MAIN.





HOME DEPOT

2002 WASHINGTON ST TAX LOT 22E2900906











82 | Utility Plan

STORM NOTES:

- 1 PROPOSED 60" FLOW CONTROL MANHOLE.
- 2 PROPOSED 48" STANDARD STORM MANHOLE.
- 3 PROPOSED STORM INLET.
- 4 PROPOSED STORM PIPE. SLOPE AT 0.5% MIN.
- 7 PROPOSED BAYFILTER WATER QUALITY TREATMENT VAULT.
- 8 PROPOSED LINED RAIN GARDEN.
- PROPOSED 4.0' DIAM. BARREL ADS STORMWATER DETENTION SYSTEM.
- PROPOSED PUBLIC STORMWATER CURB PLANTER WITH CURB CUTS, TYP.
- PROPOSED 5.0' DIAM. BARREL ADS STORMWATER DETENTION SYSTEM.
- (15) PROPOSED CONNECTION TO EXISTING CULVERT.
- 16) PROPOSED OVERFLOW INLET.
- (17) PROPOSED CONCRETE CURB INLET.
- (18) PROPOSED 6" PERFORATED STORM PIPE. SLOPE AT
- (19) INSTALL 48" STORM MANHOLE OVER EXISTING CATCHBASIN. CONNECT TO EXISTING STORM LINE

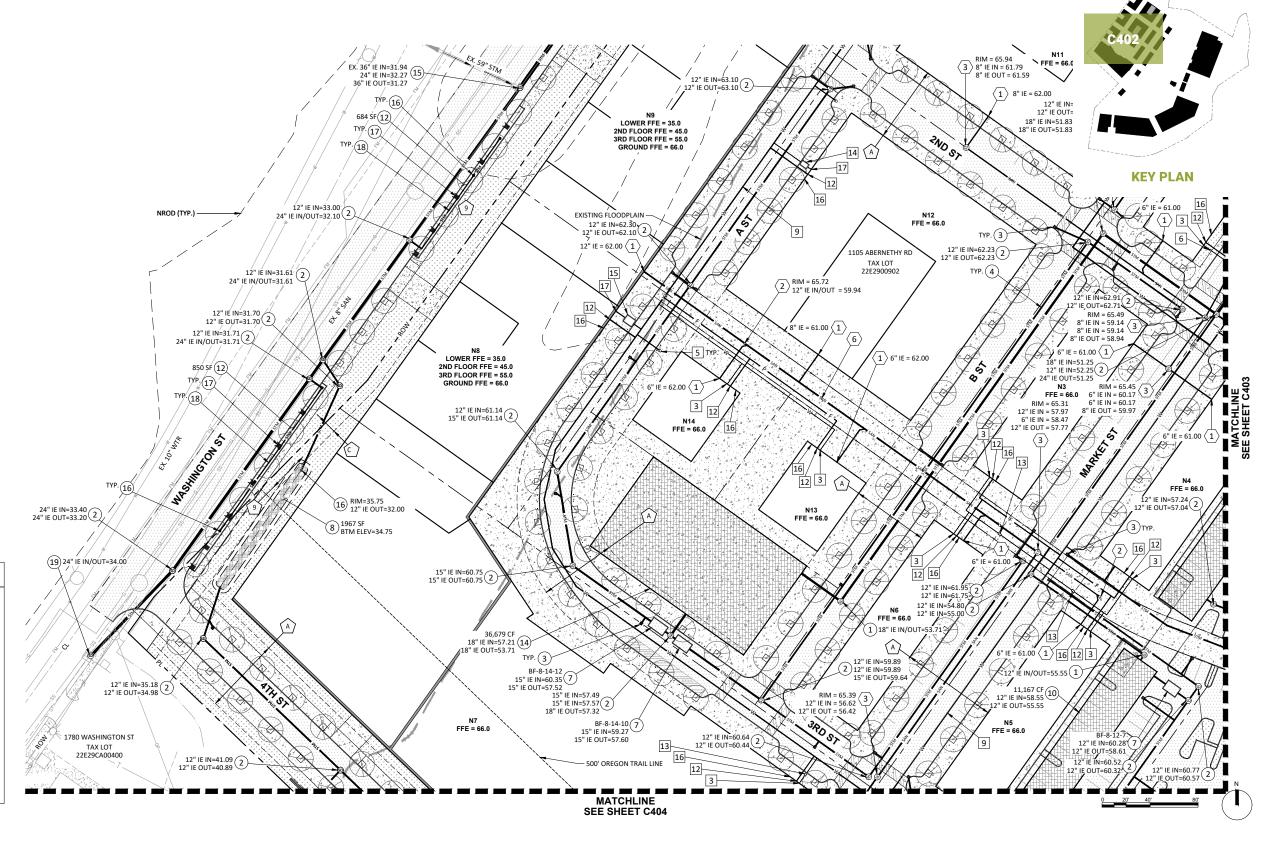
SANITARY NOTES:

- 1 PROPOSED SANITARY BUILDING CONNECTION.
- 2 PROPOSED SANITARY CLEANOUT.
- (3) PROPOSED SANITARY MANHOLE.
- $\overline{6}$ PROPOSED SANITARY SEWER PIPE.

WATER NOTES:

- 3 PROPOSED DOMESTIC WATER SERVICE BUILDING
- 5 PROPOSED FIRE HYDRANT.
- 6 PROPOSED 1" DOMESTIC WATER METER VAULT.
- 9 PROPOSED 8" PUBLIC WATER MAIN. 12 PROPOSED FIRE SERVICE BUILDING CONNECTION.
- PROPOSED DCDA TO BE INSTALLED ON THE IMMEDIATE INSIDE WALL OF BUILDING.
- 13 PROPOSED 2" DOMESTIC WATER METER VAULT.
- 14 PROPOSED 3" DOMESTIC WATER METER VAULT.
 15 PROPOSED 6" DOMESTIC WATER METER VAULT.
 16 PROPOSED WALL-MOUNTED FDC.
- 17 PROPOSED DOMESTIC WATER SERVICE BUILDING CONNECTION, PROPOSED DCVA TO BE INSTALLED ON THE IMMEDIATE INSIDE WALL OF BUILDING

LEGEND	
STM	PROPERTY LINE STORM LINE WATER LINE
	CATCH BASIN
(SD)	STORM MANHOLE
(SS)	SANITARY MANOLE
•	CLEANOUT
Д	FIRE HYDRANT
o	FDC









83 | Utility Plan

STORM NOTES:

- 1 PROPOSED 60" FLOW CONTROL MANHOLE.
- 2 PROPOSED 48" STANDARD STORM MANHOLE.
- 3 PROPOSED STORM INLET.
- 4 PROPOSED STORM PIPE. SLOPE AT 0.5% MIN.
- PROPOSED BAYFILTER WATER QUALITY TREATMENT VAULT.
- PROPOSED 4.0' DIAM. BARREL ADS STORMWATER DETENTION SYSTEM.
- PROPOSED 5.0' DIAM. BARREL ADS STORMWATER DETENTION SYSTEM.

SANITARY NOTES:

- 1 PROPOSED SANITARY BUILDING CONNECTION.
- $\overline{\left(3\right)}$ PROPOSED SANITARY MANHOLE.
- 6 PROPOSED SANITARY SEWER PIPE.

WATER NOTES:

- PROPOSED FDC LINE BUILDING CONNECTION.
 PROPOSED FIRE SERVICE BUILDING CONNECTION.
 PROPOSED DOMESTIC WATER SERVICE BUILDING CONNECTION.
- 4 PROPOSED FIRE DEPARTMENT CONNECTION (FDC).
- 5 PROPOSED FIRE HYDRANT.
- 6 PROPOSED 1" DOMESTIC WATER METER VAULT.
 8 PROPOSED FIRE SERVICE DCDA VAULT.

- 9 PROPOSED FIRE SERVICE BUILDING CONNECTION.
 PROPOSED FIRE SERVICE BUILDING CONNECTION.
 PROPOSED DCDA TO BE INSTALLED ON THE
 IMMEDIATE INSIDE WALL OF BUILDING.

LEGEND

RIGHT-OF-WAY — PROPERTY LINE

STORM LINE

WATER LINE

CATCH BASIN

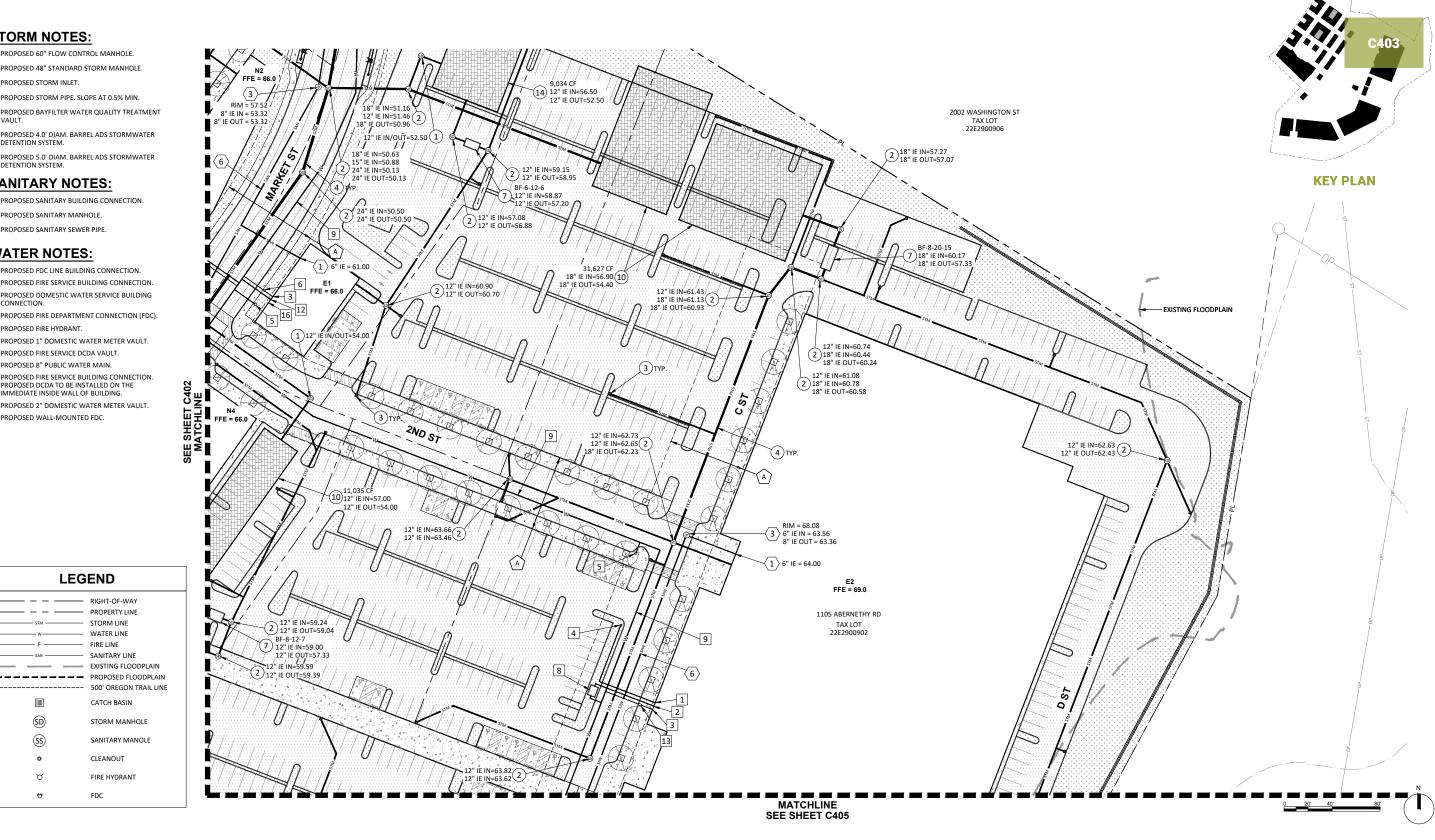
STORM MANHOLE

SANITARY MANOLE CLEANOUT

FIRE HYDRANT FDC

FIRE LINE SANITARY LINE

- PROPOSED 2" DOMESTIC WATER METER VAULT.
 PROPOSED WALL-MOUNTED FDC.





(SD)

(SS)

Д





84 | Utility Plan

STORM NOTES:

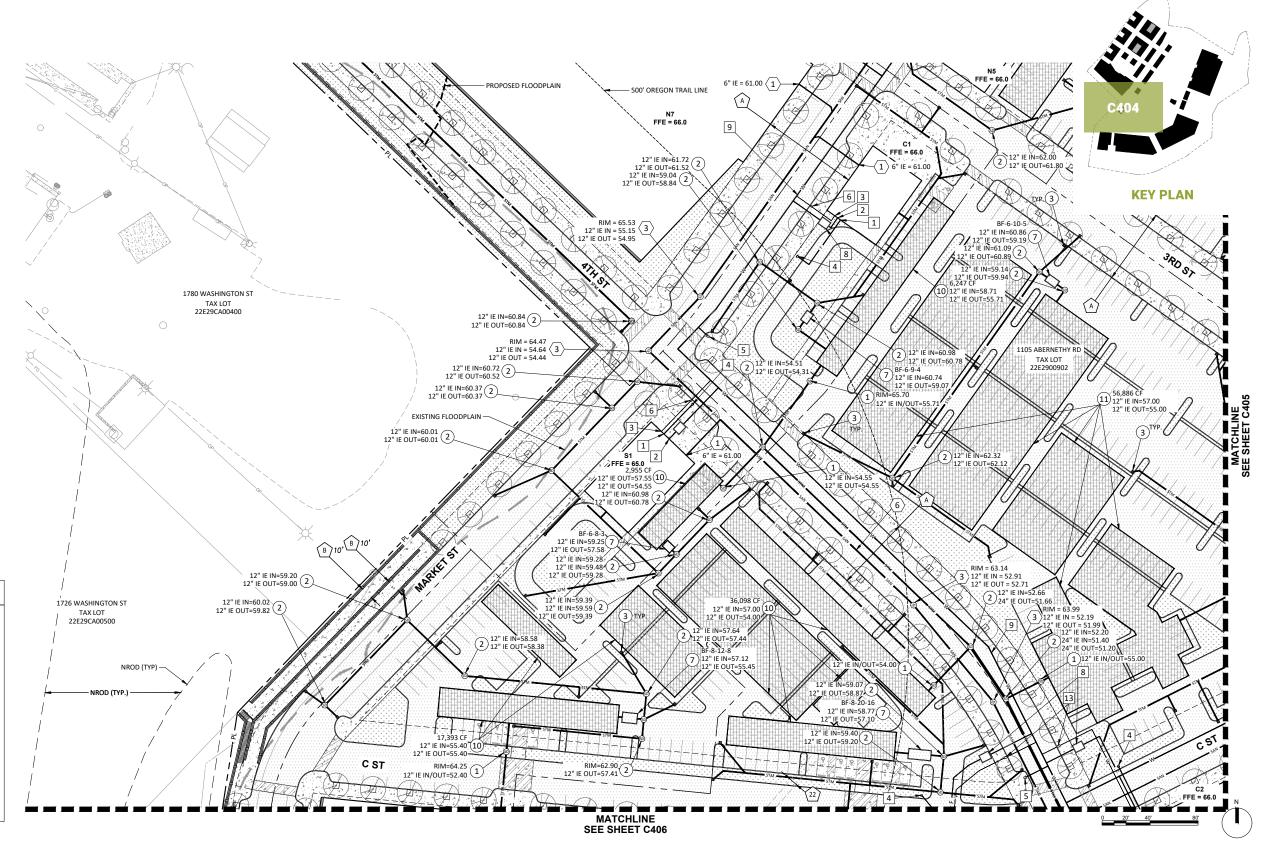
- 1 PROPOSED 60" FLOW CONTROL MANHOLE.
- 2 PROPOSED 48" STANDARD STORM MANHOLE.
- 3 PROPOSED STORM INLET.
- 7 PROPOSED BAYFILTER WATER QUALITY TREATMENT
- PROPOSED 4.0' DIAM. BARREL ADS STORMWATER DETENTION SYSTEM.
- PROPOSED 3.0' DIAM. BARREL ADS STORMWATER DETENTION SYSTEM.

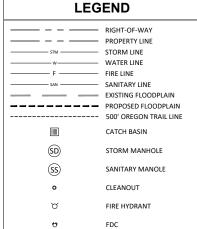
SANITARY NOTES:

- 1 PROPOSED SANITARY BUILDING CONNECTION.
- 3 PROPOSED SANITARY MANHOLE.
- $\overline{\left\langle 6\right\rangle}$ PROPOSED SANITARY SEWER PIPE.

WATER NOTES:

- 1 PROPOSED FDC LINE BUILDING CONNECTION.
- 2 PROPOSED FIRE SERVICE BUILDING CONNECTION.
- PROPOSED DOMESTIC WATER SERVICE BUILDING CONNECTION.
- 4 PROPOSED FIRE DEPARTMENT CONNECTION (FDC).
- 5 PROPOSED FIRE HYDRANT.
- 6 PROPOSED 1" DOMESTIC WATER METER VAULT.
- 8 PROPOSED FIRE SERVICE DCDA VAULT.
- 9 PROPOSED 8" PUBLIC WATER MAIN.
 13 PROPOSED 2" DOMESTIC WATER METER VAULT.











85 | Utility Plan

STORM NOTES:

- 1 PROPOSED 60" FLOW CONTROL MANHOLE.
- 2 PROPOSED 48" STANDARD STORM MANHOLE.
- 3 PROPOSED STORM INLET.
- 4 PROPOSED STORM PIPE. SLOPE AT 0.5% MIN.
- 7 PROPOSED BAYFILTER WATER QUALITY TREATMENT VAULT.
- PROPOSED 4.0' DIAM. BARREL ADS STORMWATER DETENTION SYSTEM.
- $\overbrace{ \mbox{11} } \mbox{ PROPOSED 3.0' DIAM. BARREL ADS STORMWATER } \\ \mbox{ DETENTION SYSTEM.}$

SANITARY NOTES:

- 1 PROPOSED SANITARY BUILDING CONNECTION.
- $\overline{3}$ PROPOSED SANITARY MANHOLE.
- $\overline{\left(5\right)}$ PROPOSED PUBLIC SANITARY SEWER MAIN.

WATER NOTES:

- 1 PROPOSED FDC LINE BUILDING CONNECTION.
- 2 PROPOSED FIRE SERVICE BUILDING CONNECTION.
- PROPOSED DOMESTIC WATER SERVICE BUILDING CONNECTION.
- PROPOSED FIRE DEPARTMENT CONNECTION (FDC).
 PROPOSED FIRE HYDRANT.
 PROPOSED 1" DOMESTIC WATER METER VAULT.
 PROPOSED FIRE SERVICE DCDA VAULT.

LEGEND

RIGHT-OF-WAY — PROPERTY LINE

STORM LINE

WATER LINE FIRE LINE

SANITARY LINE

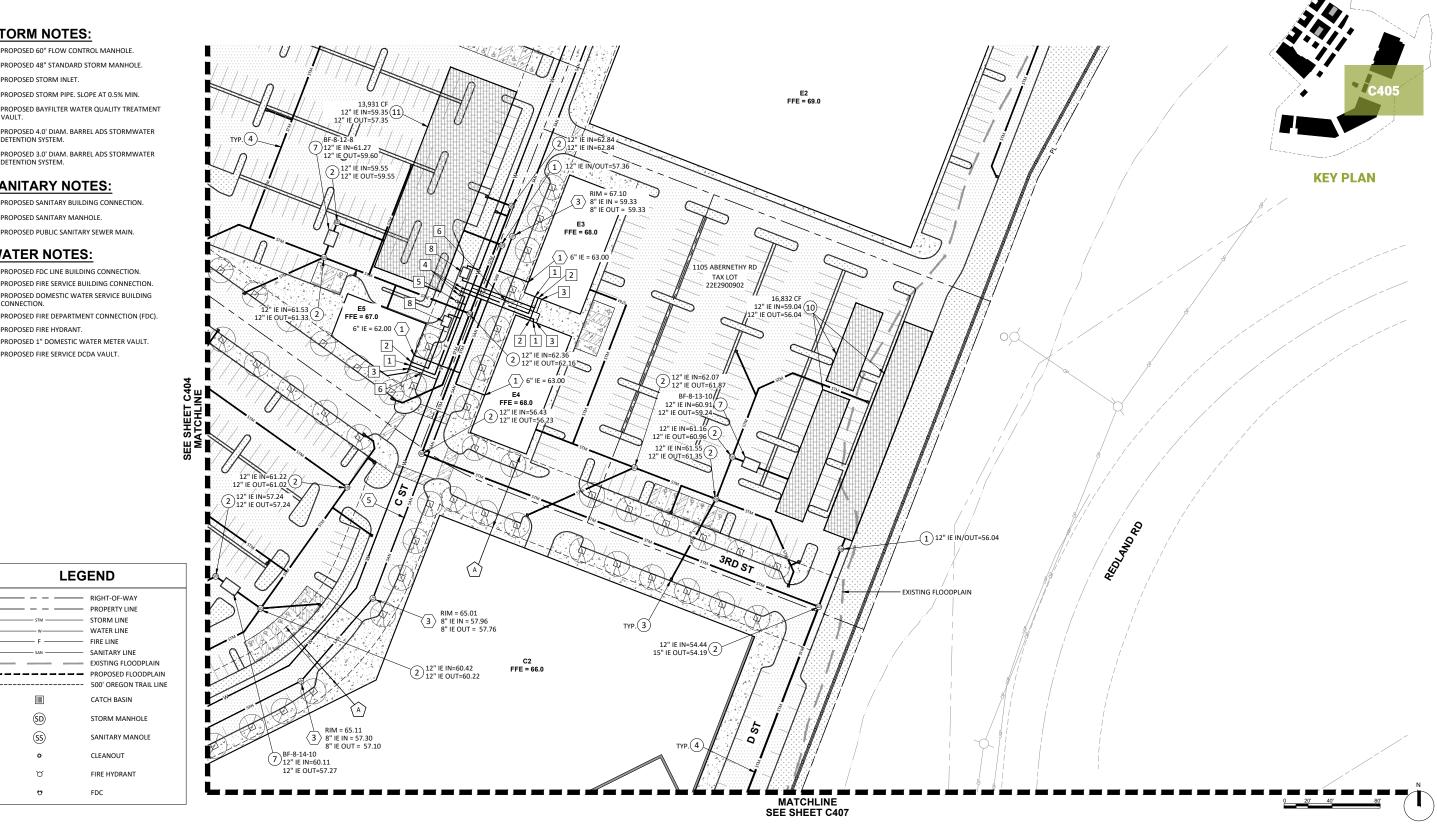
CATCH BASIN

CLEANOUT

FIRE HYDRANT FDC

STORM MANHOLE

SANITARY MANOLE





(SD)

(SS)

 α





86 | Utility Plan

STORM NOTES:

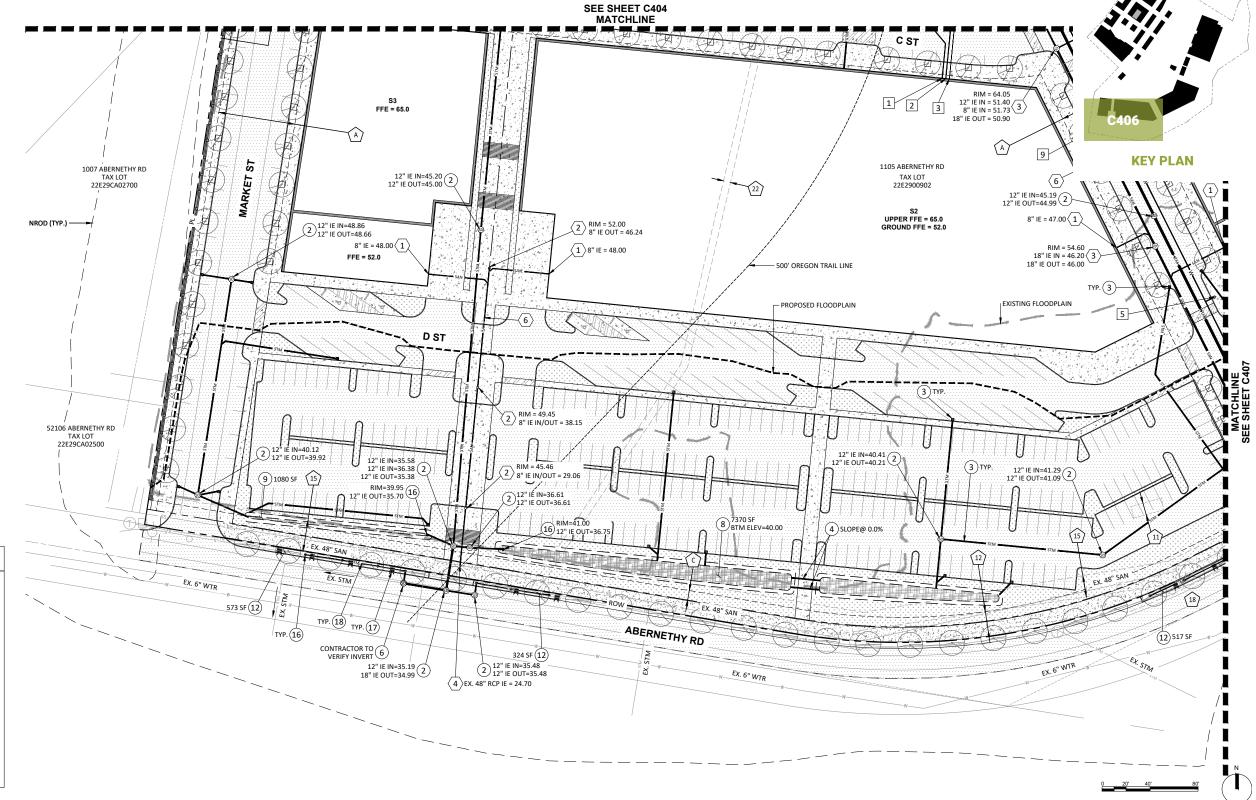
- 2 PROPOSED 48" STANDARD STORM MANHOLE.
- (3) PROPOSED STORM INLET.
- (4) PROPOSED STORM PIPE. SLOPE AT 0.5% MIN.
- $\overleftarrow{6}$ install 48" storm manhole over existing storm line.
- (8) PROPOSED LINED RAIN GARDEN.
- 9 PROPOSED LINED STORMWATER TREATMENT SWALE.
- PROPOSED PUBLIC STORMWATER CURB PLANTER WITH CURB CUTS, TYP.
- (16) PROPOSED OVERFLOW INLET.
- (17) PROPOSED CONCRETE CURB INLET.
- 18) PROPOSED 6" PERFORATED STORM PIPE. SLOPE AT 1.0% MIN.

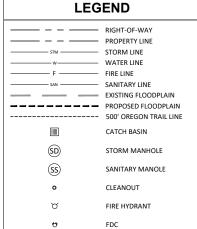
SANITARY NOTES:

- 1 PROPOSED SANITARY BUILDING CONNECTION.
- $\overline{2}$ PROPOSED SANITARY CLEANOUT.
- 3 PROPOSED SANITARY MANHOLE.
- $\overline{igg(4)}$ Proposed connection to existing sanitary line.
- 6 PROPOSED SANITARY SEWER PIPE.

WATER NOTES:

- 1 PROPOSED FDC LINE BUILDING CONNECTION.
- 2 PROPOSED FIRE SERVICE BUILDING CONNECTION.
- 3 PROPOSED DOMESTIC WATER SERVICE BUILDING CONNECTION.
- 5 PROPOSED FIRE HYDRANT.
- 9 PROPOSED 8" PUBLIC WATER MAIN.











87 | Utility Plan

STORM NOTES:

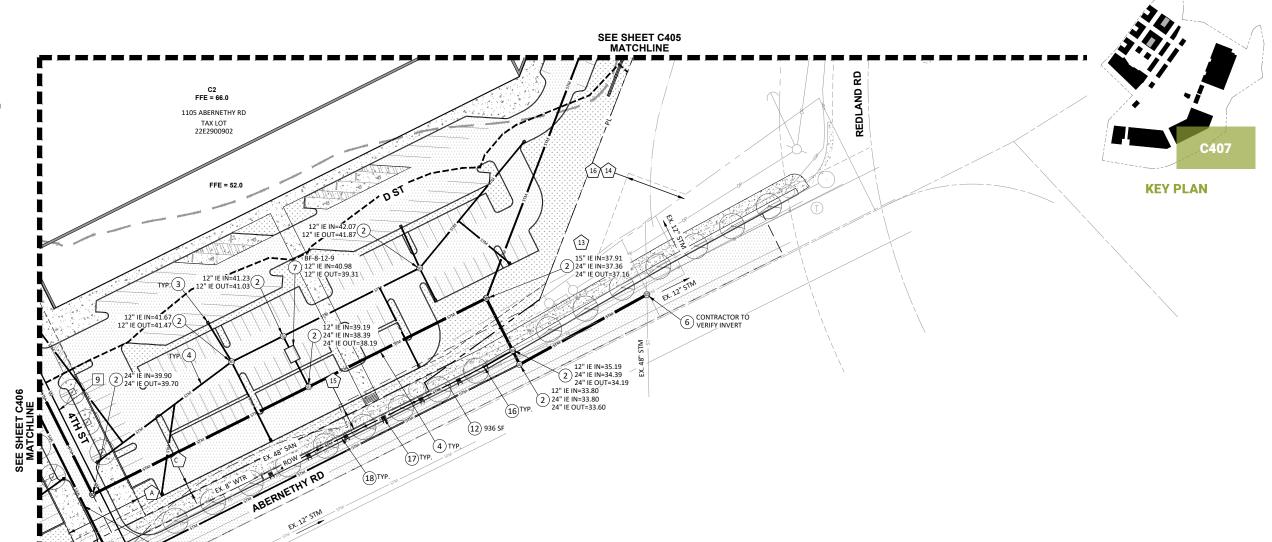
- 2 PROPOSED 48" STANDARD STORM MANHOLE.
- 3 PROPOSED STORM INLET.
- PROPOSED STORM PIPE. SLOPE AT 0.5% MIN.
- \bigodot install 48" storm manhole over existing storm line.
- 7 PROPOSED BAYFILTER WATER QUALITY TREATMENT VAULT.
- PROPOSED PUBLIC STORMWATER CURB PLANTER WITH CURB CUTS, TYP.
- (16) PROPOSED OVERFLOW INLET.
- (17) PROPOSED CONCRETE CURB INLET.
- PROPOSED 6" PERFORATED STORM PIPE. SLOPE AT 1.0% MIN.

SANITARY NOTES:

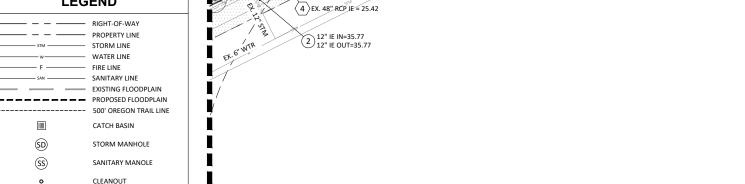
- 4 PROPOSED CONNECTION TO EXISTING SANITARY LINE.
- $\langle \overline{6} \rangle$ PROPOSED SANITARY SEWER PIPE.

WATER NOTES:

- 9 PROPOSED 8" PUBLIC WATER MAIN.
- PROPOSED CONNECTION TO EXISTING PUBLIC WATER MAIN.



LEGEND	
	- RIGHT-OF-WAY
	 PROPERTY LINE
STM	 STORM LINE
w	 WATER LINE
—— F ——	FIRE LINE
	 SANITARY LINE
	 EXISTING FLOODPLAIN
	 PROPOSED FLOODPLAIN
	- 500' OREGON TRAIL LINE
	CATCH BASIN
(SD)	STORM MANHOLE
SS	SANITARY MANOLE
•	CLEANOUT
Я	FIRE HYDRANT
•	FDC



10









88 |

This page intentionally left blank.





THE NORTH END

MASTER PLAN DESIGN GUIDELINES

89







90

INTRODUCTION

Using the Guidelines

These guidelines are based upon the Oregon City Municipal Code and all applicable State and Federal Building Codes as of March 2021. This is the framework for which projects submitting Detailed Development Plans under this GDP shall be reviewed.

Where no direct guidance is provided in these guidelines, the base zoning code shall apply. In the event of a future conflict between the provisions of the Oregon City Municipal Code and the GDP, the Design Guidelines and framework approved and established under this GDP shall be applied.

A Major Modification to the master plan is any proposal that would alter the plan's proposed development by more than 25% such as a decrease in open space or required parking.

Minor modifications are proposals that do not substantially alter the plan's proposed development such as: facade treatments (i.e. material or color), character/design detail of public spaces, or minor variations to street furniture or landscaping. (i.e. tree or shrub type). A modification of any type should be consistent with the intent of the applicable design guidelines within the master plan. Any request for a modification to the master plan must be approved by the developer (Summit Development Group) prior to being submitted to Oregon City.





91 | Street Design Guidelines

STREET DESIGN GUIDELINES

All street designs shall comply with the City of Oregon City standards (Chapter 12.04 - dated 07.03.2019), as well as the following standards:

Half-Street Improvements along **ABERNETHY ROAD** shall include the following:

- (1) 7'-0" turn lane
- (1) 12'-0" travel lane
- (1) 6'-0" bike lane
- (1) 5'-0" landscape
- (1) 5'-0" landscape strip
- (1) 12'-0" Multi-Modal Path

Half-Street Improvements along **WASHINGTON STREET** shall include the following:

- (1) 12'-0" turn lane
- (2) 12'-0" travel lane
- (1) 6'-0" bike lane
- (1) 8'-0" parking lane
- (1) 10'-0" sidewalk zone with 5'-0" wide tree wells

MARKET STREET shall connect to the existing road extension from Washington St and be covered by a 80'-0" public access easement. The design varies slightly across the site in response to the existing road alignment and topography. Design features shall include:

- (2) 12'-0" travel lane
- (2) 6'-0" bike lane
- (1) 12-0" turn lane from Washington St to 2nd Street
- (2) 8'-0" parking lane where occurs, see Site Plan
- (2) Various sidewalks zones with 5'-0" tree wells where occurs, see Site Plan
- North of 2nd Street the remainder of the ROW shall be landscaped

All internal **FIRE ACCESS STREETS** shall be covered be a 64'-0" public access easement and have 13'-0" wide travel lanes. Additional design features shall include:

- (2) 8'-0" parking lane
- (2) 11'-0" sidewalk zone with 5'-0" wide tree wells

All **NON-FIRE ACCESS INTERNAL STREETS** shall be covered be a 64'-0" public access easement and have 12'-0" wide travel lanes. Additional design features shall include:

- (2) 8'-0" parking lane
- (2) 12'-0" sidewalk zone with 5'-0" wide tree wells

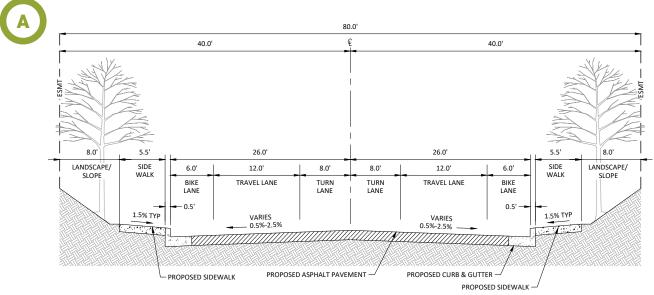
Refer to site plan and enlarged sections on pages 60-61 for details.



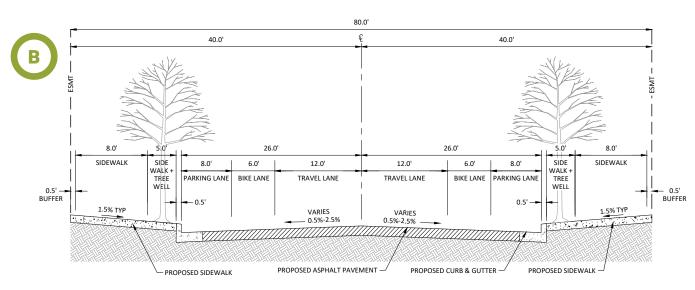




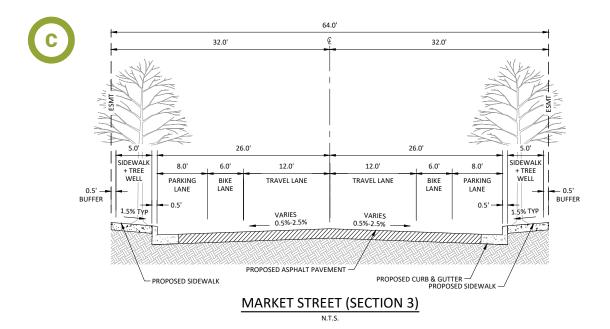
92 | Street Design Guidelines

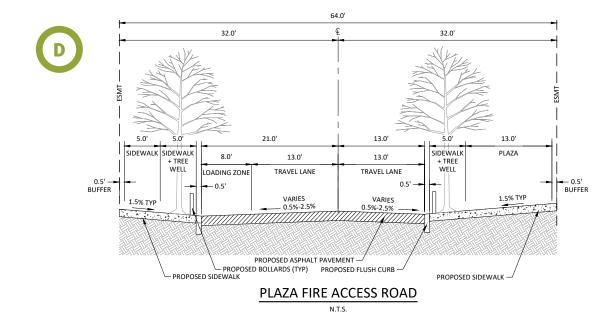


MARKET STREET (SECTION 1)



MARKET STREET (SECTION 2)

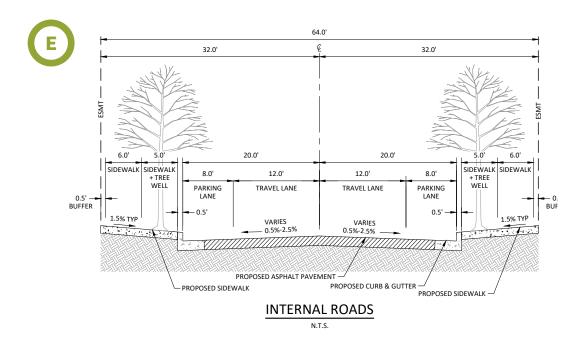


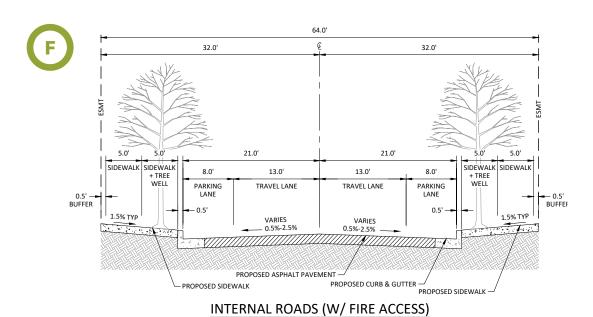


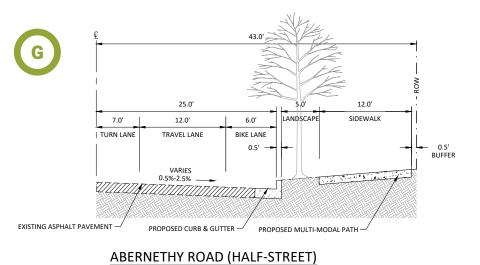


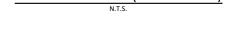


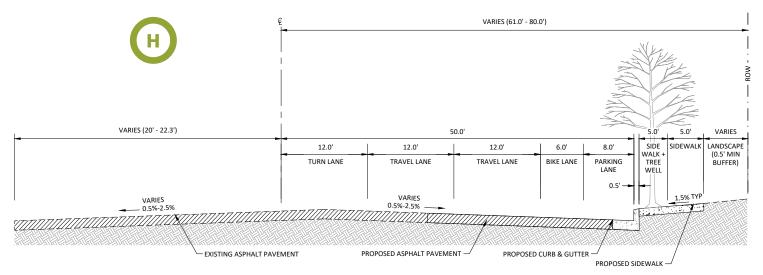
93 | Street Design Guidelines











WASHINGTON STREET (HALF-STREET)

N.T.S.

94

LANDSCAPE GUIDELINES

The proposed site plan offers a variety of uses overlaid on to an expansive site, which has been carefully broken down into a series of individual districts by way of a network of streets and pedestrian ways. The landscape provides an opportunity to further differentiate these districts and contribute to the distinct character of each area and further enhance the pedestrian experience. A landscape palette should be developed for each type of outdoor space – parking lots, streetscapes, parks and plazas, and pedestrian ways - to create a planting hierarchy across the site. Plants should be selected for seasonal interest, drought-tolerance, and low maintenance while reinforcing the design of the outdoor spaces and architecture of the site.

- 1. The intent of all landscape areas will be to meet the General Design standards set forth in Oregon City's Site Plan and Design Review standards (Section 17.62).
- Section 17.34.060.I and 17.62.050.A.4: The mixed-use downtown dimensional standards for this site require that each property have a minimum landscape of 10% (including parking lot landscaping). All landscape plans shall include a mix of vertical (trees and shrubs) and horizontal elements (grass, groundcover, etc.) that within three years will cover one hundred percent of the landscape area.

1 | General Planting

In selecting plant material, consideration should be given to support the visual character and ecological functions of the site within the context of Oregon City and the greater Willamette Valley. Native plants are recommended as they are suited for the climate of the region, require less watering and maintenance, and provide habitat for wildlife. Heritage plants, such as the Oregon White Oak, are not only native but are important contributors to the area's sense of place and should be considered where appropriate. Variety in plant selection is encouraged to promote a diverse and resilient plant community. Individual site conditions should be evaluated carefully prior to plant selection to choose the appropriate specie, while prioritizing the health, safety, and welfare of site users. Any code-required landscape areas shall meet City standards.

2 | Stormwater

As stated by the City of Oregon City, stormwater management is a key element in maintaining and enhancing livability within the city. Stormwater shall be viewed as a valuable natural resource that is managed through a variety of green infrastructure in order to improve the water quality for the City and the greater Oregon City watershed. Green infrastructure for stormwater management shall emphasize low-impact development practices, manage higher pollutant generating activities at the source, erosion and sediment control, and long-term operation and management of this infrastructure once implemented. On-site infiltration, retention, treatment, and utilization of rainwater on-site shall be prioritized where feasible.

3 | Maintenance

To help promote healthy and enduring exterior spaces all materials shall be chosen with long-term maintenance in mind. Hardscape materials and site furnishings shall be durable and easy to maintain and the selection of drought tolerant, low-maintenance plant materials should be prioritized. Permanent automatic irrigation systems that are water-efficient shall be used in landscape areas to encourage healthy and enduring plant materials







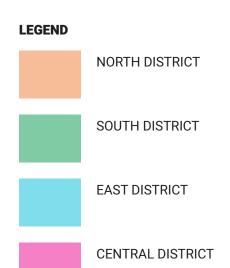
95 | Landscape Guidelines

4 | Parking Lots

The landscape areas within and surrounding parking lots are intended to improve and soften the appearance of the parking; reduce the visual impact of parking areas from sidewalks, streets; shade and cool parking areas; reduce the amount and rate of stormwater runoff from vehicle areas; and improve air quality. The parking lot landscape should be informed by the adjacent streetscapes and pedestrian ways to further strengthen the identity of the development's different districts and assist with wayfinding.

The parking lot landscaping shall meet the requirements of the City of Oregon City Municipal Code (Section 17.52.060 - Parking lot landscaping) as a base standard. In addition, the following landscape requirements must be met:

- 1. The tree planting types shall be unique to each District within the development. For the parking areas, each district parking area shall have a minimum of 3 tree types with a total 20% of the trees being evergreen.
- 2. All trees must be chosen from the adopted Oregon City Tree List.
- 3. All trees shall reach a mature height of 30-feet with a minimum 30-foot canopy spread.
- 4. For shrubs and groundcover within the parking area and perimeter planting, a total of 40% must be evergreen.
- 5. All shrubs and groundcover must be at least one-gallon container size.







96 | Landscape Guidelines

5 | Street Trees

Street trees clean our air, give us shade, limit storm water runoff, reduce energy costs, increase property values, enhance business districts, and make our community more inviting to visitors. They also help unify the development's buildings with the adjacent streetscape and help lend a pedestrian scale to the site. In addition to the selecting trees appropriate for the site's climate and planting conditions, trees should be selected to help differentiate streets and adjacent development while accentuating entrances, intersections, and other key development features. Consideration should be given to maintaining a diverse population of trees that will help ensure a healthy urban forest.

All street trees for public and private frontages shall meet the requirements in the Oregon City Municipal Code Chapter 12.08 Public and Street Trees. In addition, the following requirements must be met:

- 1. Each street shall have a consistent tree type that is unique to that street.
- 2. Street trees along Main Street shall have a minimum 40-foot height and 40-foot canopy spread.
- 3. At the designer's discretion, large canopy trees (trees that reach a minimum 40-foot height) may be used to demarcate street corners.
- 4. Trees shall be spaced according to Oregon City street tree standards.
- 5. If trees cannot be added within the ROW due to conflicts with utilities, or otherwise, trees shall be placed on-site within ten feet of the right-of-way as street trees. A covenant shall be recorded identifying the tree(s) as subject to the protections and replacement requirements in this chapter.
- 6. In addition to the standards above, trees shall be backfilled with the original soil that was excavated from the site, unless more soil is needed or the soil is compacted or very poorly drained. Soil used to fill the planting hole shall be reasonably clear of rocks, roots, debris, weeds, ash, cement, concrete, tar, and all other foreign matter. Soil shall not be frozen when backfilling.

6 | Streetscape Furnishing Zones

Site Furnishings:

A minimum of 2 standard benches per approximately 200 linear feet shall be provided within the furnishing zone. Benches shall be centered between street trees to the maximum extent practicable. The standard bench for the accessways shall be the '59" Backed Neocombo' by Landscape Forms.

1-7 bike racks per block in furnishing zone or as per direction of the City Engineer. Bike racks shall be grouped to the maximum extent practicable. The standard bike rack within the streetscapes shall be the 'Bola' by Landscape Forms.

3 planters shall be placed within every 100 linear feet of furnishing zone. Planters may be grouped. Raised planters shall not inhibit the flow of pedestrian traffic or conflict with adjacent vehicular parking area or development. The standard planter for the furnishings zone shall be the DS-23 planter by Kornegay Design.

LEGEND ABERNETHY ROAD WASHINGTON STREET A STREET **B STREET C STREET D STREET 1ST STREET** 2ND STREET **3RD STREET** 4TH STREET **CENTRAL SQUARE**

MARKET STREET





97







98

OPEN SPACE GUIDELINES

1 | Parks and Plazas

Parks and open spaces are integral to the development and the pedestrian experience within. These are the public places that encourage gathering and provide flexibility for a variety of uses and activities. These spaces should be designed in the context of providing a valuable resource for both the development and larger Oregon City region. The unique geography of Oregon City, its distinction as "the end of the Oregon Trail," and its setting as a nexus for numerous Native American groups contributes to a strong sense of place that should be reflected in the design of each park and plaza. They should be well integrated with the adjacent buildings and easily accessible from all parts the development. They should link to other open spaces, parks, and pedestrian ways to create a cohesive network that enhances the pedestrian experience. Plantings, site furnishings, and paving in these areas should be consistent across the development to further enhance the continuity of the outdoor spaces.





99 | Open Space Guidelines

2 | Central Square

The Central Square is located at the core of the mixed-use area and unifies the adjacent commercial and residential development by providing a flexible urban space. It should be an iconic space for the development that brings people together from the new development and the surrounding neighborhood alike. The central square shall be designed to both encourage every-day use, informal gathering, and accommodate large-scale events: it should function as the development's living room. Minimal plantings should be used to enhance the open nature of the site while a mix of paving materials and seating elements shall be used to create visual interest. A lawn provides a flexible and soft area conducive to informal gathering and recreation as well as events. Sufficient space should be provided to allow a stage and viewing area. In addition to meeting minimum light level requirements, exterior lighting should be incorporated to foster evening activities and sufficient power should be provided for a variety of events.

Hardscape:

A minimum of 40% of the plaza area shall consist of a special paving material, which can include brick, precast concrete, pavers, or stone. A maximum of 50% of the plaza area can be concrete paving. A minimum of 5,000 square feet of open space shall be provided that is unimpeded by planting or site elements to create a central gathering space. The material of the roadway shall be consistent with the hardscape material throughout the plaza and be flush with the finish grade of the plaza. Bollards, light poles, or other materials that meet current guidelines for pedestrian crossings and accessibility standards shall be integrated to differentiate the roadway from the plaza.

Softscape:

10% of plaza area shall be used to create a contiguous lawn space. Trees within the plaza shall be planted in 4-feet by 6-feet tree wells with tree grates. An electrical duplex shall be provided at each tree grate to allow for holiday lighting. A specimen tree at 6" caliper shall be provided between the two retail pavilions. The tree shall be deciduous and reach a height of 40-60 feet at maturity. The tree shall be planted in a landscape area with minimum dimensions of 10-feet by 10-feet. The designer can add additional trees and landscape areas at their discretion.

Site Furnishings:

A minimum of 10 standard benches shall be located throughout the plaza. Custom benches can be used in addition to this minimum requirement. The standard bench for the Central Square shall be the '69" Backed Neoliviano' by Landscape Forms. A minimum of 20 standard bike racks shall be provided. The standard bike rack for the Central Square shall be the 'Bola' by Landscape Forms. The standard tree grate shall be 'Corona' by Iron Age Designs. A minimum of 2 trash and 2 recycling receptacle shall be provided in the Central Square. The standard receptacle for the Central Square shall be the 'Collect Litter-Side Open' by Landscape Forms.

Art:

The designer is encouraged to integrate art within the plaza, whether through hardscape design, custom benches, lighting, or stand-alone pieces



LEGEND

CENTRAL SQUARE





100 | Open Space Guidelines

3 | Vertical Park

The primary park space of the development functions as a pedestrian gateway into the site, a visual landmark from off-site, and a key recreational zone for the area. The park will need to navigate a significant change in elevation from Washington Street into the site while taking advantage of the views afforded by this location. To do so, an accessible pathway system with a series of nodes with seating elements should be implemented. The planting design of this area shall be visually engaging to establish the park as a key landmark and accentuate the entrance into the site.

Hardscape:

The design shall provide an ADA accessible walkway with a slope that shall not exceed 4.5-percent. The walkway shall navigate the slope by switchback from the entrance on Washington Street to an overlook located at the top of the park. An entry plaza shall be located at the bottom and the top of the walkway and shall each be a minimum of 900 square feet. The designer shall locate periodic gathering areas along the walk with opportunities for seating. Natural materials, such as wood timbers or stone boulders, shall be used to create a cascading scramble and seating area that is integrated with the pathway system. The scramble shall be a minimum of 3600 square feet.

Softscape:

The designer shall use a variety of plant material and trees to create a vibrant and dynamic landscape reflective of the natural surroundings.

Site Furnishings:

A minimum of 6 standard benches shall be located throughout the vertical park. Custom benches can be used in addition to this minimum standard. The standard bench for the Central Square shall be the '59" Backed Neocombo' by Landscape Forms. A minimum of 1 trash and 1 recycling receptacle shall be provided in the Vertical Park. The standard receptacle for the Central Square shall be the 'Collect Litter-Side Open' by Landscape Forms.

4 | Parklets

There are several parklets located throughout the site that are pedestrian focused and provide moments of respite for passersby. Located in conjunction with adjacent commercial spaces these parklets provide opportunities for an outdoor extension of the building and informally programmed activities. They should be designed as gathering places that are adaptable for a number of activities and shall be visually linked to the other parklets through use of cohesive hard and softscape materials and site furnishings. Specialty paving, such as stone or concrete pavers, should be considered to distinguish these areas.

LEGEND



VERTICAL PARK



PARKLETS





LANDSCAPE ARCHITECTS PC

101 | Open Space Guidelines

5 | Pedestrian Way

The key to the pedestrian experience within the site are the pedestrian ways that link together the different districts of the development. This network should function as a linear park in which pedestrians can safely navigate through the site while having the opportunity to stop and enjoy the different facets of each district. The pedestrian way should be large enough to accommodate shared bicycle and pedestrian traffic and include a consistent palette of hardscape materials, site furnishings, and plantings to create a cohesive network. Large shade trees shall be utilized to create an informal canopy and ornamental plantings shall be used strategically to emphasize entries and nodes along the pedestrian ways.

Hardscape:

Paving material shall be entirely a specialty material, including brick, precast concrete, pavers, or stone.

Softscape:

Trees shall be planted in 4-feet by -feet tree wells with tree grates at 30-feet on center. An electrical duplex shall be provided at each tree grate to allow for holiday lighting. All trees shall reach a mature height of 30-feet with a minimum 30-foot canopy spread. Trees shall be consistent throughout the pedestrian way.

Site Furnishings:

The standard tree grate shall be 'Corona' by Iron Age Designs.

6 | North Access Ways

The three access ways along Washington Street shall function as welcoming plaza spaces that are seamlessly integrated with the surrounding development and provide safe and accessible entry into the site. These entries should be emphasized through a balanced use of specialty paving, plantings, and seating. Plantings along Washington Street shall be used strategically to blend the scale of the retaining structures with the adjacent landscape and pedestrian walkway.

Hardscape:

A minimum of 40% of each access way area shall consist of a special material, which can include brick, precast concrete, pavers, or stone. A maximum of 40% of plaza area can be concrete paving.

Softscape

A minimum of 20% of each access way shall be landscape area, which shall consist of a mix of trees, shrubs, and groundcover. Lawn is not permitted.

Site Furnishings:

A minimum of 10 standard benches or an equivalent length of custom benches shall be incorporated in each access way. The standard bench for the access ways shall be the '59" Backed Neocombo' by Landscape Forms.

LEGEND



PEDESTRIAN WAY



NORTH ACCESS WAYS





102 | Open Space Guidelines

7 | South Access Ways

The three access ways along Washington Street shall function as welcoming plaza spaces that are seamlessly integrated with the surrounding development and provide safe and accessible entry into the site. These entries should be emphasized through a balanced use of specialty paving, plantings, and seating. Plantings along Washington Street shall be used strategically to blend the scale of the retaining structures with the adjacent landscape and pedestrian walkway.

Hardscape:

A minimum of 40% of each access way area shall consist of a special material, which can include brick, precast concrete, pavers, or stone. A maximum of 40% of plaza area can be concrete paving.

Softscape:

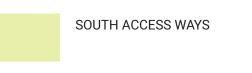
A minimum of 20% of each access way shall be landscape area, which shall consist of a mix of trees, shrubs, and groundcover. Lawn is not permitted.

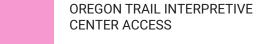
Site Furnishings:

A minimum of 10 standard benches or an equivalent length of custom benches shall be incorporated in each access way. The standard bench for the access ways shall be the '59" Backed Neocombo' by Landscape Forms.

8 | Oregon Trail Interpretive Center Access

Located to the east of the site is the historic End of the Oregon Trail Interpretive Center, a significant site for the development of Oregon City and the larger Pacific Northwest. Providing an enhanced connection to the Interpretive Center from the development site is critical to integrating the site with the history of Oregon City and enhancing the sense of place. Due to a substantial difference in grade along the property line between the two sites the plans propose a series of retaining walls and ramps to navigate the steep slopes and provide an accessible pedestrian connection. The ramp shall be a minimum of 10'-wide and meet ADA requirements for providing an accessible walkway. Where feasible, planting shall be used to help soften the visual impact of the retaining walls.





LEGEND



103

SITE LIGHTING GUIDELINES

1 | General Lighting Guidelines

The overall goal of the outdoor lighting for the OCMU project is to provide safety and personal security in an aesthetically pleasing manner that helps create interest in the overall development during the hours of darkness. The luminares selected are intended to be visually appealing during daylighting hours, or be generally hidden from sight. The luminaires will be chosen to control glare and excessive brightness. With few exceptions, cut off style luminaires is a requirement of the following lighting design standards. The exceptions to this are limited to pedestrian scale pole mounted luminaires, landscape lighting, and some decorative building mounted lighting. Light trespass to properties abutting the OCMU project will be less than 0.5 footcandles outside of the OCMU development. LED lamps are currently the most energy efficient technology in the market place, and will continue to be for the foreseeable future. Luminaires with LED lamping will be required for all outdoor lighting associated with this project. The lighting will comply with the latest version of the Oregon State Energy Code (OSEC). The OSEC is a very stringent standard, and will provide the project with low operating costs for outdoor lighting in and of itself. The lighting design will direct the illumination where it is useful, such as for security and accent some of the architectural features of the buildings. Misdirected light equals wasted energy. One of the added benefits of a mindful illumination strategy that places the light only where desired, is that in addition to minimizing light pollution, it saves energy.

2 | General Exterior Lighting Guidelines

- All exterior lighting will be an LED source, and have a color temperature of 4000K, with the exception of luminaires intended to architecturally highlight specific finishes may be changed to enhance the specific finish. For example, illumination of brick or natural wood surfaces may be changed to 3000K to enhance the warmth of the materials.
- 2. Photometric calculations will be required to show compliance with the lighting design standards as well as city requirements.
- 3. A minimum of 3 footcandles is required at building entrances per city code.
- 4. Building canopy lighting will be either fully recessed, or shielded by the canopy structure.
- 5. Free standing open structures may have employ the use of other lighting strategies provided they do not produce excessive glare.

3 | Street Lighting Guidelines

- Private street lighting will meet the minimum lighting levels and uniformity prescribed in IESNA RP-8-14. This is the same standard for public street lighting in Oregon City.
- 2. Light fixtures and poles shall meet city standards

4 | Parking Area Guidelines

- 1. General parking lot illumination will be full cut off style luminaires mounted on 30 foot poles that are installed on 3 foot tall concrete pole bases where physical protection is required. (code max is 35' mounting height for lots 5 acres and larger). Pole finish shall be black.
- 2. Parking lot lighting levels will be illuminated to a minimum of 1 foot candle.

5 | Pedestrian Connection Lighting Guidelines

- Decorative luminaires will be mounted on decorative poles will be used to help define the pedestrian connection paths. Non-cut off luminaires may be used to help clearly identify people and other objects and create a localized glow when compared to the areas illuminated with cut off style luminaires such as the retail parking areas. Care will be used to limit the light output of pedestrian lighting to avoid excessive glare.
- 2. Pedestrian connection lighting will meet the minimum lighting levels and uniformity prescribed in IESNA RP-8-14 for public pedestrian areas.
- 3. Illuminated bollards will be used where the path intersects private streets.

6 | Multifamily Outdoor Space Lighting Guidelines

Multifamily areas are generally all bordered by private streets, and pedestrian connectors. Lighting will be designed to be consistent, and carry the theme of the adjacent street and pedestrian lighting into the Multifamily building areas.

7 | Plaza Lighting Guidelines

Various lighting strategies may be employed in the Plaza areas.

- 1. Generally one or two taller poles with multiple decorative luminaires on the poles will be installed in a plaza area to provide general illumination.
- 2. Pedestrian scale poles may be used to illuminate smaller spaces within the plazas, and to help connect them to other areas of the project.
- 3. Illuminated bollards may be used to help delineate drivable surfaces from pedestrian surfaces.
- 4. Festival catenary may be used in all plaza areas.
- 5. Accent lighting will be employed to highlight architectural design elements, hardscape areas and adjacent structures.
- 6. Light levels will create a safe and inviting outdoor plaza spaces while minimizing needless glare.





104

BUILDING GUIDELINES

1 | Mechanical and Service Equipment Guidelines

Development throughout the site shall include the following measures to minimize the visual and acoustic impact of mechanical, service, and utility equipment on the site and adjacent buildings. The standard does not apply to solar energy panels, photo-voltaic equipment, wind power generating equipment, pipes, vents, and chimneys.

Roof Top Equipment in:

Zone A (See Fig 1.2a) -

- Shall be set back from the face of the buildings by a minimum of 10'-0"
- Shall not extend past a line drawn at a 19 degree angle from the top of parapet or exterior roof edge

OF

be fully screened by a sight-obscuring enclosure that is designed to blend into the adjacent roof surface.

Zone B (See Fig 1.2b) -

- Shall be set back from the face of the buildings by a minimum of 10'-0"
- Shall be screened by a sight-obscuring enclosure that:
 - a. Uses the building materials from the primary facade of the building
 - b. Extends a minimum of 8'-0" above the roof plane

Wall mounted equipment and Utility Meters in:

Zone A -

- Shall not be located on the Primary building facade
- Shall be screened from view by one of the following:
 - a. sight-obscuring enclosures constructed of one of the materials used on the primary facade of the structure
 - b. sight-obscuring fences
 - c. trees or shrubs that block at least eighty percent of the equipment from view
 - d. painting the units to match the building.

Zone B -

- Shall not be located on the Primary building facade
- Shall be fully enclosed, located within the building footprint and accessible directly to the exterior from the adjacent ROW

be located in an exterior screened alcove.

Exceptions -

Vents and Wall-mounted mechanical equipment that extends six inches or less from the outer building wall shall be exempt from this standards if designed to blend in with the color and architectural design of the subject building.

Ground-mounted above-grade mechanical equipment in:

Zone A -

Shall be screened by ornamental fences, screening enclosures, trees, or shrubs that block at least eighty percent of the view from the public right-ofway.

Zone B -Is prohibited

2 | Refuse and Recycling Enclosure Guidelines

On-site waste management and collection facilities shall be located in fully enclosed and visually screened enclosures that are designed to be efficient, safe and convenient. In addition to meeting all the standards laid out in 17.62.085, refuse and recycling enclosures in:

Zone A-

Shall be located within the building envelope, immediately adjacent to the public right-of-way, No collection access shall be provided on C Street.

Shall be free-standing enclosures that are not be located on a primary roadway. Free standing enclosures shall be designed to match the associated building's materials and architectural language.

Zone B -

Shall be located within the building envelope, immediately adjacent to the public right-of-way. No collection access shall be provided on Market Street.

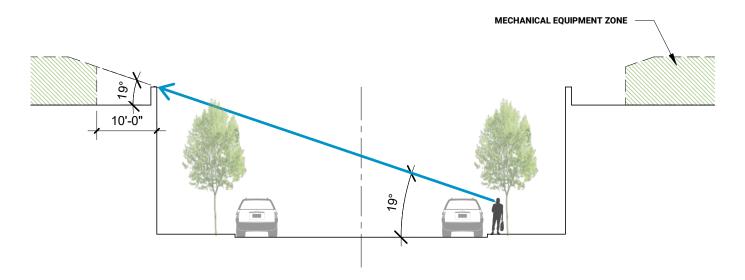


Figure 1.1 - MECHANICAL EQUIPMENT ZONES





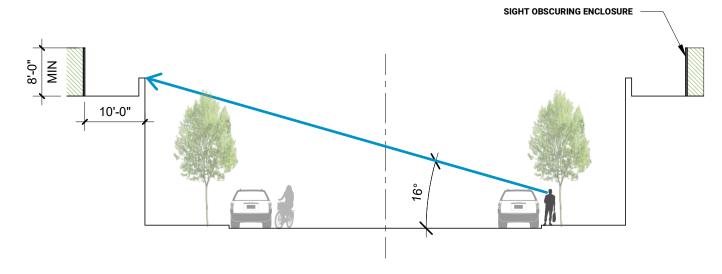
105 | Building Guidelines (Cont.)



C STREET @ SMALL SCALE RETAIL



Figure 1.2a - ROOFTOP EQUIPMENT ZONE A



MARKET STREET

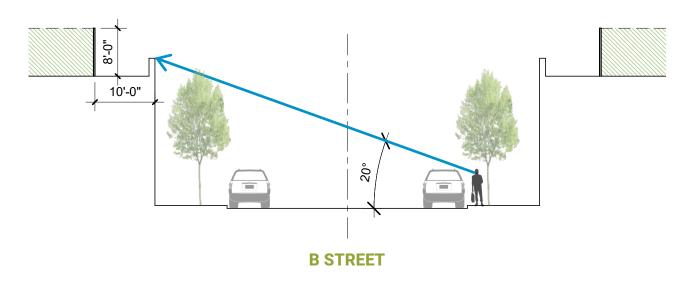


Figure 1.2b - ROOFTOP EQUIPMENT ZONE B





5 - MASTER PLAN DESIGN GUIDELINES

106 | Building Guidelines (Cont.)

3 | Building Material Guidelines

The intent of this development is to be a memorable and purposeful destination within the heart of Oregon City which seeks to represent the site in its place, historically and physically. The site materials were chosen to produce a modern Pacific Northwest style, highlighting the refined industrial nature of a region built on river trade and the timber industry. To that end, the building materials are limited to develop a character that is cohesive across all the future development on site.

The development hopes to tap into the joy of living in Oregon by emphasizing natural light and connection to the outdoors. High-quality exterior materials will create a sense of timelessness, permanence, and emphasize the pedestrian experience throughout the site. These materials should be thoughtfully detailed to contribute to a well-articulated building facade.

General Material Guidelines

All structures on site shall provide one or more of the following as their primary facade materials, >50% of total facade square footage minus the glazing area:

- **Heavy Timber**
- **Brick**
- Wood
- Stone

Additional acceptable materials include pre-finished architectural metal panels, premium prefinished cement composite siding, board form concrete, stucco finishes and split or ground-faced concrete block. Plain concrete may be used no more than three feet above the finished grade level.

The following materials are not allowed on site, vinyl or plywood siding, glass block, highly tinted* or reflective glass, corrugated fiberglass, and highly reflective sheet metal.



CONSISTENT VERTICAL AND HORIZONTAL PLANES



INTEGRATE BUILDING MATERIALS IN TO GLAZING



USE OF MATERIALS TO ARTICULATE FACADE



INTEGRATE GROUND FLOOR WITH UPPER STORIES





*Based on Oregon State Energy Code requirements light tinting or fritting may

be used to meet code compliance and glazing requirements.

5 - MASTER PLAN DESIGN GUIDELINES

107

4 | Building Massing Guidelines

All structures in the development shall front directly on at least one roadway frontage. Buildings facades shall be within five feet of the sidewalk. Up to 15% of the building facade can be up to ten feet from the sidewalk to allow for architectural interest and emphasis on primary entries. Buildings that use the 15% shall provide enhanced paving and approved public seating in these areas.

Exception:

Buildings that are inside or front Plazas are not limited in the roadway setback limit. Plazas shall conform to Open space guidelines on page: XXX

Primary Entries

Buildings shall have their Primary Entries located on the Primary Facade as indicated in Fig 1.2. Primary entries shall be designed to:

- Provide Protection from the weather. All entries shall be protected by a hard or soft cover that extend at least 3 feet past the face of the facade.
- Provide Visual interest through architectural projections or recess, height changes at the parapet or roof level, and material variation from the primary building material.

Architectural Projections

Where canopies or awnings are placed on a building facade, they must comply with the following:

- The bottom of canopy or awning shall be a minimum of 12'-0" above finished pedestrian sidewalk surface.
- The depth of the canopy or awning shall be a minimum of 4'-0" measured from face of the building.

More generous depths of cover than described above are encouraged at building corners and ground floor entries.

Pedestrian Focused Facades

At the Ground Level along the Pedestrian Way, larger ground level openings and overhead doors are encouraged to provide a better pedestrian experience and connection for those walking and occupying the buildings.







Community Development - Planning

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

TYPE III NOTICE OF DECISION

Mailed on July 27, 2021

FILE NUMBER: GLUA 21-000016 (MAS 21-02, CU 21-01, FP 21-03, GEO 21-03)

APPLICANT: Summit Development Group Attn: Seth Henderson HHPR, Inc. Attn: Brad Kilby, AICP

13221 SW 68th Parkway, Suite 401 205 SE Spokane Street, Suite 200

Tigard, OR 97223 Portland, OR 97202

OWNER: c/o Brad Miller

Brix Law LLP 75 SE Yamhill St, Suite 202,

Portland, Oregon 97214

LOCATION: 1105 Abernethy Road

Oregon City, OR 97045

Clackamas County Tax Map 22E2900902

REQUEST: Summit Development Group is seeking approval of a mixed-use development Master

Plan at the north end of the Oregon City Downtown. The plan envisions a 20-year road

map to redevelop the former Rossman Landfill. No concurrent development

applications are being proposed with this application. If the Master Plan is approved, future development applications will be reviewed through the separate Detailed

Development Plan review process found in OCMC 17.65 Master Plans and Planned Unit

Developments.

DECISION: On July 26, 2021 after reviewing all of the evidence in the record and considering all of

the arguments made by the applicant, opposing and interested parties, the Planning Commission voted 6-0 to approve with conditions the aforementioned application.

PROCESS: Type III decisions involve the greatest amount of discretion and evaluation of subjective approval standards, yet are not required to be heard by the city commission, except upon appeal. Applications evaluated through this process include conditional use permits, preliminary planned unit development plans, variances, code interpretations, similar use determinations and those rezonings upon annexation under Section 17.06.050 for which discretion is provided. In the event that any decision is not classified, it shall be treated as a Type III decision. The process for these land use decisions is controlled by ORS 197.763. Notice that the application will be considered by the planning commission and the hearing date is published and mailed to the applicant, recognized neighborhood association and property owners within three hundred feet. Notice must be issued at least twenty days pre-hearing, and the staff report must be available at least seven days pre-hearing. At the evidentiary hearing held before the planning commission, all issues are addressed. The decision of the planning commission is appealable to the city commission, on the record. A city-recognized neighborhood association requesting an appeal fee waiver pursuant to 17.50.290(c) must officially approve the request through a vote of its general membership or board at a duly announced meeting prior to the filing of an appeal. The city commission decision on appeal from the historic review

board or the planning commission is the city's final decision and is appealable to LUBA within twenty-one days of when it becomes final.

Planning File GLUA 21-000016 (MAS 21-02, CU 21-01, FP 21-03, GEO 21-030)

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

This approval sets a framework approach to implementation of the submitted plan through future staff level (Type II) review of development applications over multiple phases as directed by the applicant. Each development will be reviewed for approval to the adopted Master Plan and the 2021 Municipal Code over the life of the Master Plan, unless amended.

This approach allows staff, the applicant, and the public a clear road map for what is required, and more importantly, clearly specifies the range of development allowed and the level of review needed for design revisions and transportation improvements. All permitted uses in the Mixed-Use Downtown District are allowed within the area subject to the Master Plan and architectural standards are based on the adopted code. Illustrations, 3D renderings, building sections, and demonstration photos found in the submitted Master Plan application are considered background documentation and are not to be used as future adoption criteria. Additions to or removal of Permitted Uses listed in the Applicant's submittal shall not in themselves constitute a need for an amendment to the Master Plan unless the addition or revision makes changes to the master plan that triggers a need for an amendment through OCMC 17.65.080 Amendments to Plans.

- Future development shall comply with the conditional approval of Planning file GLUA 21-000016 (MAS 21-02, CU 21-01, FP 21-03, GEO 21-030) and any amendments within this application. (P & DS)
- 2. The Master Plan approval is a land-use action that approves the general Master Plan layout and development approach based on the requirements set forth in OCMC 17.65 Master Plans and implemented through conditions of approval that are proportional to the proposal. Development onsite requires a public Detailed Development review process to analyze the proposed construction against the criteria in the 2021 Oregon City Municipal Code prior to construction. The applicant may choose to enter into agreements with funding entities that may place additional requirements on the development. It is up to the applicant to determine if those requirements are consistent with the Conditions of Approval of the adopted Master Plan and submit a Master Plan amendment if needed. (P)
- 3. All permitted uses in the Mixed-Use Downtown District are allowed within the area subject to the Master Plan. Additions to or removal of uses listed in the Applicant's submittal shall not in themselves constitute a need for an amendment to the Master Plan unless the addition or revision triggers a need for an amendment through a Condition of Approval or OCMC 17.65.080 Amendments to Plans.

- 4. Unless subsequently amended by the Planning Commission, this Master Plan shall control development on the site for 20 years from the date of the initial adoption of this General Development Plan. Land within the Master Plan is subject to compliance despite any future lot line adjustments or land divisions (P)
- 5. For each Detailed Development Plan application, the applicant may choose to utilize the 2021 Oregon City Municipal Development Code as adopted at the time of the Master Plan submittal or the Development Code that is applicable at the time a Detailed Development Plan (DDP) is applied for. (P)
- 6. The proposed development will be reviewed under the adopted Oregon City Municipal Code at the time of each DDP review, along with all applicable conditions. Except for the consolidated Master Plan document that is approved with the adoption of this General Development Plan, Illustrations, 3D renderings, building sections, and demonstration photos found in the submitted Master Plan application shall be considered background documentation and are not to be used as future adoption criteria. (P)
- 7. Except as listed below approved by the Planning Commission, the applicant is required to show compliance with OCMC 17.65.80 Amendments to approved plans and all applicable conditions of approval at the time of each DDP application to ensure the proposal is reviewed under the correct review process.
 - a. The GDP for the North End Master Plan is a concept plan and is not intended to fix the location of structures on-site, provided they meet all other applicable codes and conditions of approval.
 - b. All Permitted uses within the Mixed-Use Downtown District shall continue to be allowed, provided those uses meet all other applicable code requirements.
 - c. At full buildout, on-site parking shall be within the code minimum and maximum requirements.
 - d. Variations in parking count prior to full buildout are governed by Condition No. 16.
 - e. At full buildout, the site shall have between 500 and 600 residential units.
 - f. Building areas can be combined and/or configured in any manner, provided they meet all other applicable codes and conditions of approval. At full buildout, the total building area shall be within 25% of the maximum square footage provided within the GDP and shall continue to meet the minimum FAR requirements and not exceed the maximum approved trip generation. (P)
- 8. The Confederated Tribes of the Umatilla Indian Reservation submitted comments relating to the need for a cultural survey for the site. A cultural survey is not a requirement found in the Municipal Code. However, the applicant is required to meet applicable state and federal laws with respect to above and below ground cultural resources. (P)
- 9. The applicant has indicated that all of the residential development will be part of a mixed-use development and not subject to the minimum residential density requirement of the MUD District. If the applicant chooses to build stand-alone residential, the residential density of a minimum net density of 17.4 units per acre applies to the site. (P)
- 10. The proposed buildings needing a Conditional Use for tenant size (E2, S2, C2) are approved for implementation through the DDP process with the following conditions:
 - a. Building E2 is allowed to be used for a single tenant.
 - b. Buildings S2 and C2 are subject to the following limitation:
 - i. No single retail tenant may occupy more than 85% of leasable square footage.
 - ii. This single-tenant percentage limitation does not apply to uses that are otherwise permitted outright in the underlying zone.
- 11. The proposed conditional use drive-thru locations (N1, E1,C1,S1,E5)_are approved for implementation through the DDP process with the following conditions:

- a. At the time of the DDP, drive-thru location N1 shall be redesigned to meet OCMC 17.62 site requirements, including but not limited to ensuring direct pedestrian access from a public or private street that does not cross parking or drive aisles. This redesign may occur as a Type II DDP review if implemented as directed above and will not require a Type III amendment review. Designs that do not meet OCMC 17.62 site requirements will be reviewed as a Master Plan Amendment. All drive-thru locations not identified in the Master Plan approval shall be reviewed through a Type III Master Plan amendment process.
- b. Buildings E1,C1, S1, E5 are approved for a CU drive-thru and will be reviewed in accordance with the Municipal Code. (P)
- 12. The following adjustments to the Municipal Code are approved and subject to the conditions found in the Notice of Decision.
 - a. OCMC Chapter 16.12.030 Blocks—Width
 - i. Subject to the proposed street and pedestrian connections layout found on the site circulation diagram of page 64 of the application.
 - b. OCMC Chapter 17.54.100.2- Retaining Walls
 - i. Retaining walls are allowed to exceed height limits in areas identified where the following mitigation is provided:
 - For retaining walls exceeding the height limit by less than 5 feet, mitigation shall be provided through a combination of vegetated walls and/or plantings.
 - For retaining walls exceeding the height limit by greater than 5 feet, mitigation that covers 40% of the exposed wall area shall be provided through a combination of vegetated walls, plantings, Public Art Murals, and/or other mitigation measures as approved by the Community Development Director.
 - c. OCMC Chapter 17.62.055.D- Siting of Structures (Frontage)
 - Building frontage percentages and location on public or private streets shall meet at a minimum the footprint layout found on the District Plan Map found on page 61 of the application
 - d. OCMC Chapter 17.62.050.C.4 Elevated External Stairways or Walkways
 - i. Elevated stairways are allowed within the North District.
- 13. The following items, shown in the submitted Master Plan and design guidelines, shall be implemented through the applicable DDP applications. Mitigation items not included in the list below, not addressed in other conditions of approval, or not required by OCMC criteria, either at the time this Master Plan was submitted or in place at the time of DDP review are not required.
 - a. Construction of open space as demonstrated in the figure identified on page 98 of the submitted Master Plan. Open spaces that vary more than 25% in square footage than proposed within the GDP shall be reviewed at a Type III level. All open spaces shall use a combination of hard and soft scaping.
 - b. A minimum of 40% of the Central Square plaza area shall consist of a special paving material, which can include brick, precast concrete, pavers, or stone. A maximum of 50% of the plaza area can be concrete paving. A minimum of 5,000 square feet of open space shall be provided that is unimpeded by planting or site elements to create a central gathering space. The central square shall not eligible for any multi-family open space calculation.

- c. A minimum of 2 public art or interpretive elements shall be installed in each District (North, South, Central, West) and be at least three cubic feet or thirty square feet in size.
- d. There shall be a differentiation of private street lighting and parking lot lighting design. Street lighting shall utilize decorated banners or flower baskets on at least 50% of the light standards.
- e. Pedestrian wayfinding signage shall be installed in all four districts directing pedestrians to offsite amenities such as End of the Oregon Trail Museum, Amtrak Station, Main Street, and Willamette River.
- f. No more than 50% of the proposed multi-family square footage can be constructed and Certificates of Occupancy given without full construction of the proposed Central Square Plaza.
- g. The pedestrian connection to the End of The Oregon Trail Museum shall be constructed by the date of final occupancy of C2 within the South District. The record demonstrates that there are multiple feasible alignments for that connection and the final design shall be reviewed through the Type II DDP process as long as it is consistent with the intent of providing an ADA access between the development and the EOT in the same general location as depicted in the adopted Master Plan. The pedestrian connection may utilize portions of city property at the End of the Oregon Trail Museum if allowed by a future public/private agreement and/or with an abutting private property.
- h. The Primary east-west Pedestrian way shall have the following elements:
 - i. Trees located at 30ft on-center.
 - ii. Adjacent to any parking lot area, a 4ft (at maturity) evergreen hedge shall be provided. The design shall allow for periodic breaks in the hedge to provide pedestrian access to the walkway.
 - iii. Pedestrian Benches shall be located every 90ft adjacent to trees and planting areas.
 - iv. All-weather cover shall be provided through pavilion and trellis elements. A minimum of (2) elements, with a minimum size of 500 sqft each, shall be located along the pedestrian way.
- i. A minimum of 4 raised pedestrian crossings or tabletop intersections shall be included on-site at final buildout. (P)
- 14. Prior to receiving approval for any building with a height greater than 45 feet, the applicant must show that the building is not located on a parcel or lot that is closer than 500 feet from the End of the Oregon Trial Museum (EOT). (P)
- 15. Private streets shall be designed and constructed to the standards required by the city, but those standards may be different than would apply to public streets. The street system, as proposed and conditioned in the Master Plan, can be considered street frontage for the purpose of siting standards in OCMC 17.62 Site Plan and Design Review. Building setbacks are to be taken from the back of the sidewalk (or curb if no sidewalk) along private streets. Small revisions to the street system can be approved through the DDP process if they substantially comply with the Master Plan.(P/DS)
- 16. The applicant has proposed a sitewide parking approach looking at the sum total of development proposed and parking provided. The parking ratios proposed in the Master Plan (GDP) fall within the minimum and maximum parking standards found in OCMC 17.52.020. At the time of each DDP submittal, the applicant is responsible to demonstrate how they are implementing parking requirements based on the proposed DDP uses. At no time shall the site be more than 40% above

parking maximums or 15% below parking minimums per 17.52.020 - Number of automobile spaces required. With the following modifications:

- a. Structured parking may be completed and used before the associated use is constructed and is not subject to the limitations above. (P)
- 17. The Floor Area Ratio for this Master Plan is calculated based on the entire site area subject to the GDP. Each individual phase may or may not meet the minimum requirement but as part of an approved Master Plan. A phase will be permitted to develop below the required minimum as long as each phase demonstrates that the site will meet the minimum FAR requirement at full buildout. (P)
- 18. The developer for future DDPs shall construct all sidewalks along the frontage of the proposed development, existing and new, ADA compliant per City Standards. (DS)
- 19. The workmanship and materials for any work performed under permits issued by Oregon City Public Works shall be in accordance with the edition of the "Oregon Standard Specifications for Construction" as prepared by the Oregon Department of Transportation (ODOT) and the Oregon Chapter of American Public Works Association (APWA) and as modified and adopted by the city. In the case of work within ODOT or Clackamas County rights-of-way, work shall be in conformance with their respective construction standards. (DS)
- 20. Prior to the City construction plan approval or issuance of a grading or building permit associated with the proposed development, the property and building owners shall provide written acknowledgment and statement to assume responsibility for risks associated with development on land with suspected or known contamination. The applicant shall submit a final engineering report to DEQ, the City's Building Official, and the City's Public Works Engineering Development Services for review and approval. The Engineering Investigation Report shall document the following:
 - a. Details, as necessary, to address DEQ requirements relative to increased leachate and landfill gas migration due to consolidation of the landfill, penetrating the landfill cap (including alternatives that allow landscaping to address water quality concerns), and limiting sub-landfill aquifer contamination via pile penetration as may be applicable.
 - b. Recommendations to minimize risks of negative impacts for proposed building structure, site grading, cuts and fill, foundations, seismic, utility infrastructure including connections between the underground utilities and the building structure, methane gas migration and accumulation including consideration of the gas migration through utility trenches and accumulation in utility infrastructure such as utility pipes, manholes, light pole bases, and junction boxes. (DS)
- 21. Each individual Detailed Development Plan (DDP) within the master plan area shall provide updated engineered drainage plan(s), drainage report(s), and design flow calculation report(s) stamped and signed by a licensed engineer addressing all items from the Section 9 of the Public Works Stormwater and Grading Design Standards. (DS)
- 22. Each individual DDP within the master plan area shall include with their drainage report a written modification request for the use of underground detention storage systems per Section 1.6 of the Oregon City Stormwater Grading and Design Standards where use of underground detention storage systems is proposed. (DS)
- 23. All stormwater facilities proposed to serve the development shall be private except the public stormwater facilities that receive stormwater runoff from the public right-of-way of Washington Street and Abernethy Road. Future DDP developers and property owner(s) shall execute an agreement providing maintenance of and giving Oregon City access to, privately-owned stormwater management facilities and pay associated recording fees. The agreement shall include a site plan identifying all privately-owned stormwater management facilities and an operation and maintenance plan for each type of stormwater facility in accordance with the Public Works Stormwater and Grading Design Standards. The agreement shall run with the land and be

- applicable to subsequent property owners. The agreement shall be reviewed and accepted by the City prior to occupancy of the associate building(s). (DS)
- 24. The developer for future DDPs shall obtain a 1200-C (NPDES) permit from the Oregon Department of Environmental Quality (DEQ) for construction activities one acre or greater prior to receiving a permit and beginning construction. (DS)
- 25. For construction activities requiring Oregon State Division of State Lands (DSL) and/or United States Army Corps of Engineers (USACE) permits, no work will be authorized until the city has received a copy of Oregon State DSL and/or USACE permit(s) or written documentation that no approval from the aforementioned agencies is needed. (DS)
- 26. For construction activities requiring Oregon State Department of Fish and Wildlife (ODFW) permits, no work will be authorized until the city has received a copy of the ODFW permit or written documentation that no approval from the aforementioned agencies is needed. (DS)
- 27. The developer for future DDPs shall provide an engineered grading plan prepared by a professional engineer in compliance with the submittal requirements of the Public Works Stormwater and Grading Design Standards. (DS)
- 28. The development plans shall comply with all current Oregon City Public Works design standards, specifications, codes, and policies prior to receiving a permit and beginning construction. The City will not provide construction plan approval until applicable Oregon Department of Transportation and Clackamas County approvals or permits are obtained. (DS)
- 29. The developer for future DDPs shall submit or address all items in section 16.12.014 of the Oregon City Municipal Code based on the timing requirements contained therein and as deemed applicable by the City. (DS)
- 30. To fulfill TSP project S5, the developer for future DDPs shall provide a 12-foot-wide shared-use path running along the west side of the existing north-south road and, at a minimum, a 10-foot-wide shared-use path running on the west side of the centerline of the north-south road (proposed as Market St). The shared-use path shall be continuous and connect Washington Street and Abernethy Road. To fulfill TSP project S44, the developer for future DDPs shall provide, at a minimum, a 10-foot-wide shared-use path which extends from the "End of the Oregon Trail Interpretive Center" and connects to the north-south shared-use path. (DS)
- 31. Roadway improvements, including street widening, frontage improvements and right-of-way dedication along Abernethy Road shall be per requirements of the jurisdiction that has authority over Abernethy Road at the time of construction plan approval. The future developer of DDPs shall provide a 12-foot-wide shared-use path along the site's frontage on the north side of Abernethy Road to fulfill TSP project S2 and may serve to fulfill the sidewalk required on the north side of Abernethy Road if approved by the jurisdiction that has authority over Abernethy Road at the time of construction plan approval. (DS)
- 32. All roads required to be constructed by the developer, public and private, shall have 11-12-foot-wide vehicular lanes unless otherwise approved by the City Engineer. (DS)
- 33. Street Improvements, including street widening, frontage improvements, and right-of-way dedication along Redland Road shall be per the requirements of the Oregon Department of Transportation requirements. (DS)
- 34. The developer of future DDPs shall provide approved plans with applicable street signs for review by the City prior to installation. All traffic control devices, such as signage, flashing lights/beacons, and traffic signals shall be designed using the MUTCD. (DS)
- 35. For all new site driveways and intersections that require new traffic signals, the developer of future DDPs shall provide a Traffic Signal Plan conforming to the requirements of the road authority.
- 36. The developer of future DDPs shall provide street lighting plans with photometric information for all internal roads, Washington Street, Abernethy Road, and Redland Road. Street lighting shall

- conform with all City standards, specifications, codes, and policies and be approved by Portland General Electric (PGE) prior to receiving a permit and beginning construction. (DS)
- 37. If it is determined through individual DDP review that public transit improvements are needed, the applicant of that DDP shall provide rider accommodations for transit and/or shuttle rider facilities (such as benches and structured cover consistent with pedestrian amenities elsewhere on site) along Washington Street and Abernethy Road and on at the intersection of the new north-south road connecting Washington Street and Abernethy Road (Market Street) and 4th Road. (P,DS)
- 38. Pavement cuts or other improvements made in a City street or alley shall be done in accordance with the City of Oregon City Public Works Pavement Cut Standards and restored in accordance with the City of Oregon City Public Works Pavement Cut Standards. (DS)
- 39. The applicant shall submit a request to the Building Division to receive approval for new any new public or private street names and addresses onsite; only approved street names shall be included on the final construction plans. (B)
- 40. The developer for future DDPs shall provide pedestrian accessways with pedestrian-scale lighting with a minimum level of one-half-foot-candles, a one and one-half foot-candle average, and a maximum to minimum ratio of seven-to-one and shall be oriented not to shine upon adjacent properties. (DS)
- 41. The developer for future DDPs shall provide public pedestrian accessways that are Americans with Disabilities Act (ADA) compliant. (DS)
- 42. All public accessways and shared-use paths shall be paved with all-weather materials as approved by the City. (DS)
- 43. The future developer of DDPs shall provide a covenant for 24-hour public access over the pedestrian and bicycle accessways and shared use paths and be responsible for the future maintenance and liability. (DS)
- 44. The developer for future DDPs shall provide a 10-foot-wide public utility easement (PUE) along all property lines fronting existing or proposed public right-of-ways or provide, at a minimum, 10-foot-wide clear space between buildings and the public sidewalk. The developer for future DDPs shall also provide a 10-foot-wide public utility easement (PUE) adjacent the north-south public access road running through the development site, which extends from the Home Depot site and connects to Abernethy Road. In the event that the provision of a public utility easement would create a conflict with achieving compliance with other city codes, the location and width may be adjusted by the City Engineer. In such cases, the applicant shall obtain written acceptance from all utilities for the location and width proposed for said public utility easement. (DS)
- 45. The developer for future DDPs shall provide public utility easements for the public sanitary sewer mains and water main identified by subsequent conditions of approval. (DS)
- 46. The future developer of DDP's shall provide an easement over all roads proposed to run through the development site and provide a covenant over them for 24-hour public access and be responsible for their future maintenance and liability. (DS)
- 47. Improvements constructed by the future developer of DDPs shall be constructed under the inspection and approval of the City. Expenses incurred thereby shall be borne by the applicant and paid prior to final approval. The applicant's project engineer also shall inspect the construction. Inspection fees are set by City resolution; see section 16.12.014 of this report. (DS)
- 48. Underground utilities, waterlines, sanitary sewers, and storm drains proposed to be installed in streets shall be constructed prior to the surfacing of the streets. Stubs for service connections for underground utilities, such as storm, water, and sanitary sewer, shall be placed beyond the tenfoot-wide public utility easement within private property. (DS)
- 49. The future developer of DDPs shall provide As-built drawings to be filed with the City Engineer within 90 days of completing improvements. (DS)

- 50. Permitted hours of construction shall be set forth by the City Engineer in the pre-construction meeting. (DS)
- 51. All sewer mains within the development site shall be privately owned and maintained except for the first fifty feet of all sanitary sewer mains connecting to the Tri-City sewer trunk which shall be Oregon City sanitary sewer mains and terminate at an Oregon City sanitary sewer manhole. The developer shall provide capacity calculations to show that the proposed sanitary sewer system can support the full buildout of the development site. (DS)
- 52. The first phase of the GDP shall extend the existing public water line located within the street serving The Home Depot and loop it through the site to the existing water main within Abernethy Road, and this water main shall be public. The public main shall be protected from potential landfill contaminants in a manner approved by Oregon City. All other mains connecting to this water main shall be private. The developer shall provide capacity calculations to show that the proposed water system can support the full buildout of the development site. The future developer of DDPs shall upsize all water mains along the frontage of Abernethy Road to be 12-inch in diameter. (DS)
- 53. The future developer of DDPs shall place all new franchise utilities underground. The future developer of DDPs shall relocate all existing overhead utilities adjacent to the property frontage underground unless deemed infeasible by the City and franchise utilities. (DS)
- 54. Public improvements associated with each DDP are required to be completed and accepted by the City Engineer. Public improvements shall be constructed according to approved final engineering plans prior to occupancy. (DS)
- 55. The property owner(s) shall sign a Restrictive Covenant Non-Remonstrance Agreement for the purpose of making storm sewer, sanitary sewer, water, or street improvements in the future that benefit the property, and all fees associated with processing and recording the Non-Remonstrance Agreement shall be paid prior to occupancy. (DS)
- 56. Prior to City construction plan approval or issuance of a grading or building permit associated with the proposed development: The applicant shall submit a final geotechnical engineering report to DEQ, the City's Building Official, and the City's Public Works Engineering Development Services for review and approval. The final Geotechnical Engineering Investigation Report shall document the following:
 - a. A comprehensive subsurface investigation,
 - b. Settlement calculations and assumed material properties,
 - c. Foundation recommendations and capacity calculations,
 - d. Pavement and utility construction and maintenance recommendations,
 - e. Floor slab and other flat concrete construction and maintenance recommendations,
 - f. Surcharge recommendations including dimension and time criteria,
 - g. Recommendations for applicable safety measures needed to minimize the risks of excessive differential building settlement, uneven settlements of the non-building areas affecting surface drainage, building and site settlements affecting gravity flow sewers, and methane accumulation and migration.
 - h. Recommendations for development to be in compliance with applicable International Building Codes and Oregon Structural Specialty Code.
 - i. Evaluation of impacts to the Redland Road and Highway 213 embankment from the site development and appropriate recommendations to mitigate for impacts. The City's geotechnical engineer shall provide a peer review of the final Geotechnical Engineering Report at the applicant's cost. The applicant shall have all comments and requirements from DEQ and the City addressed in the final report as applicable. (DS)
- 57. The geotechnical engineer of record shall review final grading, drainage, and foundation plans and specifications and confirm in writing that they are in conformance with the recommendations provided in their report. (DS)

- 58. Future Detailed Development Plans shall provide scaled drawings showing cross-sections in locations with the greatest proposed cuts and/or fill and provide the approximate volume of cuts and fills. (DS)
- 59. The applicant shall provide a hydrology report that addresses the effect of the stormwater outfall upon the local watershed. The future developer of DDPs shall a hydrology report to address the potential impact of the proposed development on wetlands, water resources, and groundwater supply. (DS)
- 60. The developer's geotechnical engineer shall respond to written comments provided by the City's peer reviewer, and the City's peer reviewer shall agree with the geotechnical evaluation/investigation report submitted for the development prior to issuance of the Building permit. Costs associated with geologic hazard review of the land use application by the City's geotechnical engineer shall be paid by the developer. (DS)
- 61. Grading, drainage improvements, or other land disturbances shall be restricted to between May 1 and October 31, unless extended by the City Engineer consistent with 17.44. The developer shall submit a work schedule that has been reviewed and approved by a licensed geotechnical engineer with regard to the viability of completing necessary project goals within the aforementioned time period. Erosion control measures shall be installed and functional prior any soil disturbance. Temporary protective fencing shall be established adjacent to all trees and vegetation designated for protection which are within five feet of a construction area prior to any soil disturbance. (DS)
- 62. The detailed development plans shall include final grading plans and sections showing proposed cuts and fill relative to the existing ground and landfill. Settlement and slope stability evaluation is required for all cuts and fills. Settlement analysis shall demonstrate surcharge loads will provide the satisfactory long-term performance of proposed streets and infrastructure. (DS)
- 63. OCMC 17.44.060 (D) requires that where cut or fill activity within a slope exceeds seven feet in vertical height, it must be terraced to have a maximum vertical height of five feet and a minimum vegetated width of 3 feet between. Total cut and fill slopes shall not exceed a vertical height of fifteen feet. The applicant has submitted a plan indicating cut and fill activity on existing slopes to be secured through retaining walls that exceed this standard in certain areas. Staff has found that this approach may be approvable under OCMC 17.44.060(D) from a technical perspective because the proposed wall will replace the slope and eliminate the potential hazard associated with the steep slope. Several wall types are technically feasible, but a wall system has yet to be selected. Thus, the applicant shall seek a variance either independently for the entire site or as part of each discrete development phase within the DDP review for the selected wall system. (DS)
- 64. The developer's geotechnical engineer shall certify, during construction, that the structural fill used on the site meets the provided design specifications and is placed as designed. The certification shall be in writing and shall be signed and stamped by a licensed engineer in the State of Oregon. (DS)
- 65. Construction of retaining walls over 4 feet in height and terraced walls which create total cut or fill greater than 4 feet in height shall be designed by a licensed engineer qualified for the design of such walls. The developer shall submit engineered stamped calculations for proposed retaining walls showing compliance with applicable building codes. The developer shall provide sliding, overturning, bearing capacity, and global stability design calculation for free-standing retaining walls over 4 feet in height in accordance with the Oregon Structural Specialty Code. (DS)
- 66. The developer shall retain the services of a licensed geotechnical engineer to conduct inspections prior to and during construction activities that involve the removal or addition of vegetation, building structures, retaining walls, or earth. The geotechnical engineer shall provide reports to confirm that standards from Section 17.44.100 are met. The geotechnical engineer of record shall observe all excavations and geologic conditions exposed during construction and document that the conditions are consistent with the conditions assumed in the geotechnical hazard evaluation. If

- the conditions are different than assumed in the preliminary report, the effect of the new observations shall be evaluated and mitigation provided as required. Additional geologic hazards review may be required at the City's discretion. (DS)
- 67. The placement of existing utilities underground within areas of landfill and geologic hazards shall be reviewed and approved by the City. (DS)
- 68. The developer's geotechnical consultant shall review the finalized erosion control plan, construction plans, and stormwater report associated with the development and certify that they are consistent with the conclusions and recommendations stated in their geologic assessment and geotechnical report. The city's geotechnical consultant shall review the finalized erosion control plan, construction plans and stormwater report and the cost of review shall be paid by the developer. (DS)
- 69. Areas identified as geologic hazard by the city shall have existing vegetative cover maintained to the maximum extent practicable. (DS)
- 70. The developer shall submit a waiver of damages, indemnity and hold harmless agreement completed by all owners of property disturbed by the development. (DS)
- 71. Conditions contained in this report shall not relieve the developer of the duty to comply with any other provision of law. In the case of a conflict, the more restrictive regulation shall apply. (DS)
- 72. A Performance Guarantee which is equal to 120% of the estimated cost for construction of public improvements as shown in city approved construction plans shall be provided prior to receiving a permit and beginning construction. The estimated costs shall be supported by a verified engineering estimate and approved by the city engineer. The guarantee shall be in a form identified in Code 17.50.140.A of the Oregon City Municipal Code. The guarantee shall remain in effect until the construction of all required improvements are completed and accepted by the city. (DS)
- 73. Maintenance Guarantee equal to fifteen percent of the estimated cost for construction of public improvements as shown in city approved construction plans shall be provided prior to occupancy. The estimated costs shall be supported by a verified engineering estimate approved by the City Engineer. The guarantee shall be in a form identified in Code 17.50.140.A of the Oregon City Municipal Code. The maintenance guarantee shall warrant to the City of Oregon City that construction of public improvements will remain, for a period of twenty-four (24) months from the date of acceptance, free from defects in materials and workmanship. (DS)
- 74. Public services for transportation, fire, sanitary waste disposal and storm-water disposal that are needed at the time of each DDP, shall be made capable by the time each phase of the development is completed. (DS)
- 75. All on-street parking on private streets with public access easement will be available to the general public. As with all public streets, time restrictions can be added by the city, as needed, through coordination with Oregon City Public Works Department. (P/DS).
- 76. The applicant has submitted a Master Plan development approach that appears to meet the Flood Overlay District's criteria; however, future DDPs affected by the Flood Overlay District are required to apply for separate DDP submittals to show that each application can comply individually with the Flood Overlay District requirements, including demonstrating that the site can show balanced cut and fill within each application.
- 77. Areas located in the Natural Resource Overlay District not subject to the Type I exemption process or a Type II NROD boundary verification will require review through a future Type II or Type III Natural Resource Review process when development is proposed that impacts those areas consistent with the provisions of OCMC 17.49 at or prior to the associated DDP review. (P)
- 78. The applicant shall comply with the following applicable Transportation Conditions:
 - a. The applicant will be required to perform a trip generation calculation for each phase of development and all previous phases and compare that value with the total trip generation

- specified in the TIA. Trip generation values shall be provided for the AM peak hour; PM peak hour; and Saturday mid-day peak hour.
- b. For development phases with planned occupancy dates before the end of 2022 and for development phases totaling 40 percent or less of the total trips generated by the buildout values in the TIA (both date and volume conditions must be met), the applicant will not be required to undertake additional traffic operations analysis or implement off-site mitigation measures for traffic operations or safety.
 - i. The calculated 40 percent values are:
 - ii. 395 weekday AM peak hour trips,
 - iii. 1,090 weekday PM peak hour trips, and
 - iv. 1,320 Saturday midday trips
- c. The TIA for the GDP has shown that buildout of the proposed master plan by the year 2025 will result in deficiencies at two intersections: Abernethy Road / Redland Road-Holcomb Boulevard and OR 213 / Redland Road. Unless otherwise determined by subsequent transportation analysis associated with a DDP, the following off-site transportation improvements shall be planned and funded or in place, prior to issuance of occupancy permits for the relevant DDP phase, if said DDP exceeds the total vested trip thresholds established in Condition b or the DDP has a horizon that exceeds beyond year 2022:
 - i. Abernethy Road / Redland Road / Holcomb Boulevard:
 - 1. Extend the striping for the northbound left-turn lane to 220 feet,
 - 2. Extend the striping for the eastbound left-turn lane to 260 feet, and
 - 3. Modify the traffic signal phasing and timing plans to optimize intersection efficiency, safety, and queue management.
 - ii. OR 213 / Redland Road:
 - Provide a third southbound through lane on OR 213, without modification
 to the Holcomb Road bridge crossing, taper back to two lanes prior to the
 Redland Road overcrossing, and construct a new southbound right turn lane
 between the existing sign bridge over OR 213 and the Redland Road
 intersection, and modify the traffic signal phasing and timing plans to
 optimize intersection efficiency, safety, and queue management or
 - Provide a third eastbound left-turn lane on Redland Road, restripe the
 northbound exit lanes to accommodate three travel lanes, provide the
 required northbound shoulder north of the intersection, relocate guardrail
 and signal poles, if necessary, and modify the traffic signal phasing and
 timing plans to optimize intersection efficiency, safety, and queue
 management.
- d. If the applicant does not elect to implement the improvements specified in condition c, the applicant shall conduct specific analysis for each DDP. For development phases with planned occupancy dates after 2022 or development phases where the proposed phase plus previous phases exceeds 40 percent of the total buildout trip generation (either condition shall individually trigger this requirement), the applicant shall provide supplemental transportation analyses for each phase of the development that demonstrates the ability of the transportation system to accommodate that phase of the development. In connection with the first detailed development plan submitted by the applicant after 2022 or when the trip generation of the phase and previous phases exceed 40 percent of the buildout total as

describe in the TIA (which ever comes first), the applicant shall obtain new AM peak, PM peak, and mid-day Saturday traffic counts and conduct new operational analyses for the following intersections:

- Washington Street/Home Depot Site Access A
- OR213/Redland Road
- Redland Road/Holcomb Boulevard/Abernethy Road

Absent meaningful evidence to the contrary, the new counts and new analyses submitted in support of the detailed development will be presumed to supersede the traffic volume estimates and analyses submitted in the March 2021 TIA.

- e. For development phases requiring transportation operations analysis as defined by c, above, the following is a non-comprehensive set of issues that should be addressed in additional analyses:
 - Intersection v/c and queuing must meet applicable standards with each phase.
 Partial development (some phases of the development) may be permissible without mitigation depending on background traffic and the status of adopted alternative mobility targets.
 - ii. Where the applicant is relying on the regional center's two-tiered v/c standard (i.e., 1.10 during the peak hour and 0.99 during the second hour), the applicant will need to provide evidence that both are met.
 - iii. A phase or combination of phases that causes traffic volumes at any access point to exceed volumes in this TIA, additional analyses will be required.
 - iv. The applicant will need to demonstrate the adequacy of queue storage or undertake appropriate mitigation to resolve queue storage issues at the intersection of Abernethy Road/Holcomb Boulevard/Redland Road in connection with each phase.
 - v. The applicant will need to demonstrate that the intersection of OR213/Redland Road meets applicable v/c standards and provides adequate queue storage in connection with each phase.
- f. With each detailed development plan including those exempt from intersection operational analysis as defined by b, above, the applicant will be required to address sight distance requirements in connection with the establishment of any new access to Washington Street or Abernethy Road, including those described in this TIA.
- g. With each detailed development plan including those exempt from intersection operational analysis as defined by b, above, the applicant will be required to address on-site circulation issues. These include, but are not limited to, adequacy of queue storage for drive-through service windows, maneuvering of trucks at loading areas, and maneuvering in parking lots.
- h. With each detailed development plan including those exempt from intersection operational analysis as defined by b, above, the applicant will work with TriMet to provide appropriate sidewalks and bus stop features on or adjacent to the site.
- i. With each detailed development plan including those exempt from intersection operational analysis as defined by b, above, the applicant will be required to update the predicted traffic using the intersection of OR213/Beavercreek Road. The applicant should use the updated value of \$380 per peak hour trip rather than the obsolete value of \$219 as used in this TIA. The developer shall participate in funding of this project according to the established formula.

- j. If traffic signal warrants are met and cause the installation of a traffic signal at any of the site access points on Washington Street or Abernethy Road, the applicant will bear the full cost of signal design and installation.
- k. The applicant shall participate in the funding of improvements for the intersection of OR213/Redland Road (TSP Project D79) in proportion to the development's traffic volume as a percentage of the predicted 2035 traffic volume at the intersection calculated in the TSP. The 2017 TSDC Project List shows a project cost of \$10,105,000. Participation shall apply to each phase of the development. Payments made by the applicant to facilitate the construction of OR 213/Redlands Road Mitigation A or Mitigation B or similar mitigation projects at the intersection may be credited against the applicant's share for TSP Project D79 to the extent to which such interim improvements reduce the cost of the final project. Interim improvements that do not reduce the cost of the final project are not creditable. Expenditures by the applicant on interim improvements that exceed the applicant's share of the final Jughandle Phase 2 project are not creditable and not refundable.
- I. The applicant's final share of project costs may be modified as necessary when the detailed development plan is approved to reflect a modification of the development's trip generation or a change in project costs resulting from revisions to project costs associated with updates to the City's Transportation System Plan or Capital Improvement Program.
- 79. The future developer of DDPs shall provide a north-south road within an 80-foot-wide right-of-way with, at a minimum, (2) 5-foot-wide sidewalk, (2) 5-foot-wide paved furnishing zone with street trees in wells, (2) 6-inch-wide curbs, (2) 6-foot-wide bike lanes, (2) 8-foot-wide parking lanes and (2) 11-foot-wide travel lanes. A shared-use path along the north-south road (proposed as Market St) may fulfill the 5-foot-wide sidewalk required within the west half of the 80-foot-wide right-of-way. The development shall incorporate street or pedestrian improvement within all of the 80-foot-wide right-of-way. (DS)
- 80. Post-approval staff recommends that the applicant work with staff to create a DDP summary sheet that allows for ease of DDP review to ensure that all applicable conditions of approval are met. (P)
- 81. The general and parking lot landscaping for this Master Plan is calculated based on the entire site area subject to the GDP. Each individual phase may or may not meet the minimum site-wide requirement, but the site shall satisfy the minimum requirement at full build-out. A phase will be permitted to develop below the required minimum as long as each phase demonstrates that the site will meet the minimum landscaping percentage requirements at full buildout. (P)



NORTH END PROJECT (October 2021)

An important economic development initiative for Oregon, Clackamas County and Oregon City

LOCATION: OREGON CITY, OREGON north of its Downtown

SITE: 64 acres

Former Rossman Landfill

• Received 60% of Portland Metro residential waste 1969-1983

• Site pays \$0 in property taxes since its closure

PROJECT PLAN: Mixed-Use Center

Plan unanimously approved by Oregon City Planning Commission, August 2021

Potential Uses:

Movie Theatre Bowling Center Fitness Center Grocery Store Large Format Retail Specialty Shops

Market Avenue Apartments Public Gathering Spaces

Large Entertainment Venues

SIZE: 1.1 million gross square feet, including 500-600 apartments

IMPACT: \$350 million investment results in:

- ✓ Major economic development for state, region, county, city
- ✓ Anchor for Willamette Falls Heritage Area
- ✓ Anchor for Downtown Oregon City as the North End entry point
- ✓ Tourism driver for Oregon City and End of Oregon Trail
- ✓ Estimated 1.77 million Annual Area Visitors
- ✓ Extensive environmental and transportation improvements
- √ Takes underutilized/polluted land to highest/best use
- ✓ Positive impact on underutilized surrounding properties
- ✓ 3,061 construction related jobs
- √ 988 new full/part time jobs when operational
- √ \$153.9 million in direct labor income
- √ \$77.1 million in annual gross economic activity
- √ \$33.8 million in labor income from new jobs
- √ \$115 million annual gross receipts
- ✓ \$3.3 million annual local property tax revenues
- ✓ \$366,000 local construction excise tax

All figures based on ECONorthwest: Rossman Land Development Assessment (April 2021)



NORTH END PROJECT (October 2021)

An important economic development initiative for Oregon, Clackamas County and Oregon City

PROJECT CHALLENGES:

Building on a large landfill, remediating a brownfield site and expanding the area's transportation system and public utility infrastructure are the main challenges to making the site feasible for development. ECONorthwest concluded that using only private financing is not feasible and that the project requires public investment to assist with landfill mitigation and infrastructure measures.

Following are initial estimates of the unique costs associated with developing North End. Portions of these estimates are based on developments of similar scope/scale. This cost outline is intended to provide a road map for public funding assistance.

LANDFILL IMPROVEMENTS/MONITORING/MAINTENANCE

\$46.3 million

Systems to protect site/buildings and prevent leachate/methane migration

- Leachate recovery/treatment/monitoring system (\$1 million)
- Methane gas management/monitoring system (\$5.5 million)
- Additional soil for cap/cover and surcharging of trash layers (\$6.2 million)
- On-site storm water treatment (\$2.4 million)
- Special building foundation and utility systems including piles (\$26.4 million)
- Environmental Engineering (\$500,000)
- Oregon DEQ Fees (\$2.3 million)
- 30-year monitoring of gas emissions/migration (\$1.8 million)
- o 30-year monitoring of groundwater quality (\$200,000)

MULTI-MODAL AREA TRANSPORTATION IMPROVEMENTS

\$8 million

- Washington Street expansion/upgrades
- New Central Main Street and shared use path
- Abernethy Street expansion/upgrades
- o Rt. 213/Redland Intersection Improvements

PUBLIC OUTDOOR SPACES/PATHS

\$2 million

- Central Square
- Vertical Park
- Pedestrian Street and Paths
- Pocket Plazas

MUNICIPAL PERMITS + SYSTEM DEVELOPMENT CHARGES (SDCS)

\$27 million

Page 2 of 2



DATE: April 2nd, 2021

TO: Seth Henderson, Summit Development Group

FROM: Chris Blakney, James Kim and Erik Bagwell, ECONorthwest

SUBJECT: ROSSMAN LAND DEVELOPMENT ASSESSMENT

Executive Summary

The Rossman Landfill site, a former landfill that the State Department of Environmental Quality (DEQ) classifies as a brownfield, has been undeveloped since the 1970s when the landfill closed. Contaminates such as methane gas and leachate, a liquid pollutant, have been identified as potential risks to the community that emit from the landfill site. Summit Development Group (SDG) has put together a proposal and designed a mixed-use General Development Plan that includes a mitigation and clean-up plan for the site as approved by the DEQ. Development atop a former landfill however comes with high mitigation and infrastructure costs that are absent in typical, greenfield development projects. To make commercial and residential development financially viable on this site, public investment is required. This report provides an analysis of several factors and aspects of the proposed development that are important considerations for the Oregon City Urban Renewal Board, City officials and community members. These include:

- Mitigation and infrastructure measures needed and proposed to make the site safe for development;
- Market assessment of Oregon City and the project's market area;
- Financial feasibility assessment of the proposed development program; and
- Public benefits (i.e. jobs and tax revenues estimates).

Our research and analysis for proposed SDG development project resulted in the following findings:

- Infrastructure and mitigation work. Several measures are in place that are consistent
 with other local development projects constructed atop former landfills. These needed
 measures are to ensure that the high concentration of contaminates found on the site are
 mitigated and that ground is stabilized to accommodate development. The development
 and operations budget of the proposed SDG program includes engineering and
 structural support work, off-gas mitigation and monitoring, and ground water
 contamination prevention.
- *Population and economic growth*. Over the last 10 years Oregon City was the 11th fastest growing city in Oregon by population, growing 14.5 percent since 2010.¹ Such growth has led to increased demand for housing and retail services. The population is projected to grow an additional 5.5 percent over the next five years, adding approximately 15,000 new residents to the area (5,000 new households).² Median household incomes are also

¹ U.S. Census Bureau, Quick Facts: Oregon City, Oregon

² ESRI Retail Market Potential Report

- projected to rise grow 7.6 percent by 2025. The proposed SDG development is well positioned to meet the growing demand for housing and retail services.
- *Financial analysis*. The SDG development project with only private financing is not financially viable in today's market conditions, or the cost to realize is less than the value of the assets at completion. The infrastructure and mitigation costs are substantial, and the current relationship between rents and development costs are such that there is insufficient capital remaining for a developer to cover the full cost of infrastructure improvements required for mitigating the former landfill. To ensure feasibility, the project requires public investment to support the necessary infrastructure and mitigation measures.
- Market implications for development. Fluctuations in the market have a profound impact on development feasibility. While the current market conditions might be favorable and the outlook may appear positive, any upward movement on capitalization rates (i.e. the financial rate of return on the project) could add additional project risk. The residual land values of the development program are negative at the today's most favorable capitalization rates. Therefore, without public investment, this project's feasibility depends on market conditions substantially improving.
- Benefits of public investment in brownfield redevelopment. The public benefits of brownfield redevelopment have been broadly studied. These benefits extend from public health and safety, climate impacts and economic development, to property tax revenue growth and tax base expansion. These are just some of the benefits of redeveloping brownfield sites:
 - Land utilization. Land is a finite resource that is increasingly scarce. By definition brownfields are sites that are blighted and not maximizing their potential productive use. Brownfield redevelopment returns underutilized land to a higher and better use.
 - Property Value and Tax Base Increase. Brownfields do not maximize on-site tax benefit potential and in many cases have a depressing effect on neighboring property values. Brownfield redevelopment reverses this effect.
 - Leverage of Public Investment. In addition to private investment proposed for this site, public subsidy in brownfield redevelopment has been shown to leverage considerable other public investment. A 2015 study by the US Environmental Protection Agency found that every federal public dollar spent in brownfield subsidy leveraged \$20.13 in additional public investment from state and local sources³.
 - Land Efficiency and Vehicle Miles. Due to historical development trends, many brownfields have greater location efficiency, such as the Rossman Landfill site, meaning they have better access to existing markets and infrastructure relative to

ECONorthwest 2

_

³ U.S. Environmental Protection Agency. Overview of EPA's Brownfield Program. 2020. Retrieved February 26, 2021. https://www.epa.gov/brownfields/overview-epas-brownfields-program

greenfield sites. The EPA has found that brownfield redevelopment results in a 25 to 33 percent decrease in residential vehicle miles traveled (VMT) compared to greenfield development⁴.

- Economic impacts. Construction and operations of the proposed SDG development will support a variety of jobs and employment opportunities. We estimate that construction of the project could support approximately 3,061 direct, indirect and induced jobs over the construction period. Once operational, we estimate that businesses occupying space in and around the new development could support approximately 988 direct, indirect and induced jobs. It is likely that some portion of these workers will reside or already reside in Oregon City, which will contribute to the local economy and tax base.
- Property tax revenues. The Rossman Landfill site currently contributes \$0 in property tax revenues to the community but may produce undesired costs through air, soil and ground water contamination. Public investment to clean up the site will mitigate these risks while at the same time supply an additional stream of annual tax revenues. We estimate that the SDG project alone, not considering any increase in value and associated property taxes to additional parcels nearby, will provide \$3.3 million in annual property tax revenues to the community that otherwise would not exist without public investment.
- Attracting other investment. This development project has the potential to be a catalyst for other investment in Oregon City. While the specific details stemming from investment, development and their tax revenues cannot be quantified at this time, public investments in housing and quality of life have been shown to pay dividends over time to communities as they become more attractive places to live, work and play.

Rehabilitating a Former Landfill

The proposed site for the mixed-use downtown community is atop a former landfill. The Rossman Landfill collected about 60 percent of non-hazardous municipal waste in the Portland-Metro region from the 1960s to the 1980s. In 1976, Oregon DEQ detected contamination of shallow groundwater as well as odor and gas problems. Waste collection subsequently terminated in 1983.

Developing on landfills requires mitigation

Landfill gas (LFG) is a natural byproduct of decomposing organic material. It is predominantly composed of carbon dioxide and methane which are difficult to detect because they are

⁴ U.S. Environmental Protection Agency. Environmental Benefits of Brownfield Redevelopment—A Nationwide Assessment. May 2020.

colorless and odorless. LFG emissions continue after 20 years in small quantities and may remain for over 50 years.⁵

Off gassing of LFG can result in health and environmental challenges:

- Human exposure to high concentrations of LFG can lead to asphyxiation hazards. This is most likely in enclosed spaces.
- As methane is combustible, accumulation of LFG can lead to explosion and fire hazards.
- The land can sink or settle as the waste decomposes. The observed effects may not be uniform across a site.
- Waste decomposition can also produce leachate, a liquid that can contaminate the groundwater. Leachate releases were first identified on the site in 1976.

Proper Engineering and Management will Reduce Health and Safety Risks

Modern landfills are well-engineered and managed with monitoring systems to limit groundwater contamination and buildup of LFG. Stringent requirements for landfill development and monitoring are established under the Resource Conservation and Recovery Act of 1976 (RCRA), regulated by the U.S. Environmental Protection Agency (EPA), and codified under 40 CFR Part 258. In Oregon, the Department of Environmental Quality (DEQ) regulates landfills. DEQ has published *Solid Waste Landfill Guidance* to specify fundamental design criteria and requirements for environmental monitoring and mitigation.

Mitigation measures for developing on landfills include the construction or installation of the following.

- A permeable layer of gravel around the landfill to provide a pathway for LFG to escape.
- A protective membrane beneath buildings to keep the gas from entering.
- Gas pipes beneath buildings as well as wells to extract collected LFG.
- Active control and alarm systems with 24/7 auto-dial-phone capabilities on sites with a high risk of off-site gas migration.
- Concrete piles through and below the waste to provide structural support for buildings.
- Structural concrete slab above the waste to create a base surface for the building.
- Leachate treatment and removal system, including a leak detection system, watertight holding tanks, and liners.

ECONorthwest 4

_

⁵ The Centers for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry. "Landfill Gas Primer – An Overview for Environmental Health Professionals." Accessed August 20, 2020. https://www.atsdr.cdc.gov/HAC/landfill/html/ch2.html.

⁶ Oregon Department of Environmental Quality. Accessed February 26, 2021. https://www.deq.state.or.us/lq/ECSI/ecsidetail.asp?seqnbr=674

The development team is pursuing several mitigations measures

SDG engaged GeoDesign to conduct a geological survey of the Rossman Landfill site. GeoDesign recommended several mitigation measures required for site development.⁷ Key results include the following:

Structural Support - Landfill trash and uncompacted landfill cap are not able to structurally support the buildings.

- Recompact 12 inches of subgrade/topsoil and support buildings with deep foundations (i.e. piles).
- Provide structural fill 1-inch or smaller free of organic materials to improve the subgrade.
- Install corrosion resistant steel pipe piles or driven grout piles ranging from 12 to 18 inches in diameter. Piles to extend through debris layer to natural soil, typically ranging in the 50′ to 75′ length or depth.
- Extend slab supported by the piles 10 feet beyond the exterior of buildings to prevent landfill settlement from obstructing ADA building access.
- Periodically re-grade paved surfaces.
- Provide 10 feet of surcharge for a six-week minimum duration for any area with artificial or subgrade garbage (95% of the site) to create compaction and limit future settlement.

Gas mitigation and monitoring - As the landfill trash decomposes over time, methane will generate and needs to be mitigated. Typical methane gas mitigation measures include the following.

- Installation of impermeable barriers to prevent gas migration;
- Active or passive gas ventilation systems;
- Gas detection systems; and
- Routine monitoring.

Ground water contamination prevention - The soil at the site is not suitable for stormwater infiltration. The silt and clay cap fill material have a low permeability.

- The finished ground surface should be sloped away from foundations at a minimum of 2 percent gradient for a distance of at least 5 feet to collect surface water runoff at suitable discharge points.
- Roof downspouts should discharge to a solid pipe that carries the collected water to a stormwater collection system.

⁷ GeoDesign, Inc. *Preliminary Report of Geotechnical Engineering Services: Proposed Rivers Edge Development*. Project SDG-4-01. March 2, 2020.

Developing on landfills is safe and is a public benefit

With the proper mitigation and monitoring measures in place, developing on former landfills is safe. In fact, there are many successful examples across Oregon and throughout the U.S. (See appendix for case studies in Oregon and California). Case studies show that developing on former landfills is an opportunity to turn unproductive, often contaminated land into environmentally improved, productive uses that benefit local communities in a variety of ways.

Developing on landfills comes with additional costs that may not be supported by the market

Clearly from the analysis above, returning a landfill site to a productive use that delivers public benefit is a costly endeavor. The per-square-foot hard and soft costs, time costs (mainly related to surcharging), and on-going operational costs of mitigation and monitoring can lead to low or even negative residual land values and make development financially infeasible. This is the main reason why brownfield sites remain vacant for years, if not decades. Brownfield redevelopment is commonly accompanied by some form of public assistance to offset a portion of additional remedial costs.

Oregon City's economy is transitioning

Located just 13 miles south of Portland at the confluence of the Willamette and Clackamas Rivers, historically Oregon City's economy was dominated by the forestry industry. Today it has become an attractive suburb in the Portland-Metro region with light-industrial and manufacturing clusters and a growing tourism sector. Increased economic opportunity in the region has also increased housing and retail demand due to population growth. Over the last 10 years Oregon City was the 11th fastest growing city in the state by population, growing 14.5 percent since 2010.8

The proposed development is in a strong and growing market area

Access to I-205 offers the site strong local and regional accessibility. Proximity to a growing Oregon City downtown and with the Clackamas Community College campus less than 10-minute drive away, positions the development to take advantage of much of the city's and the region's projected economic and population growth in the coming years. Consequently, we expect the majority of residential and commercial demand to originate from within a fifteen-minute drive-time. The destination uses proposed on the site are likely to have much broader regional draw. These uses will typically draw from a thirty-minute drive-time or beyond. As such we define the Primary Market Area (PMA) as within a 30-minute drive time of the site.

⁸ U.S. Census Bureau, Quick Facts: Oregon City, Oregon

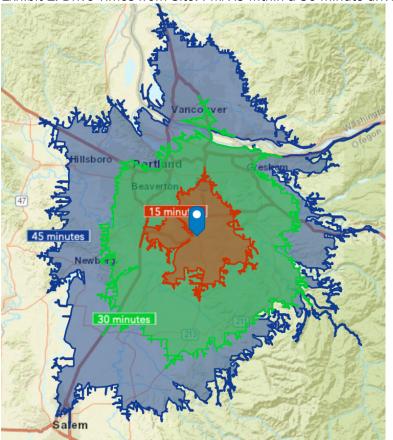


Exhibit 1. Drive Times from Site. PMA is within a 30-minute drive time.

Growth is projected to continue

ESRI and U.S. Census Bureau data projects that population, demographic, and economic growth will continue for the next five years. The following summarizes the prospective demographic and economic conditions in the PMA:

- Population is expected to grow 5.5 percent over the next five years, adding approximately 15,000 new residents to the area. This translates to roughly 5,000 new households.
- Median household income is \$78,000 and is expected to grow 7.6 percent by 2025. Incomes are currently on par with the regional metropolitan average.
- Median age is 40 years which is in-line with the state of Oregon (39.7) and modestly higher than Oregon City (37.9).
- 39 percent of the households in the PMA consist of three or more people; 35 percent are two person households, and 25 percent are single person households. This indicates that three-quarters of the market area consists of families with children and two person households who are starting to form families.

⁹ ESRI Retail Market Potential Report

Market Rate Rental Residential

Economic growth necessitates more housing development and variety

The 15,000 projected new residents (approximately 5,000 households) to the PMA will need housing over the next five years. Failure to develop adequate supply will put upward pressure on rents and home prices or will drive residents to other areas potentially outside of Oregon City or Clackamas County. Currently, the housing supply in the region is dominated by single family homes, accounting for nearly three quarters of all units. Since 2010, over 85 percent of residential growth in Clackamas County has been the result of net-migration¹⁰.

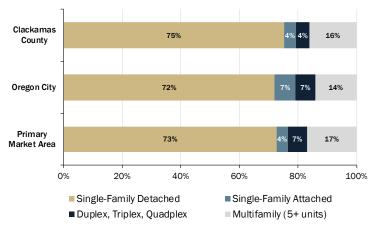
The majority of housing in the Primary Market Area is single-family detached.

All three comparable geographies have similar housing mixes.

The Primary Market Area has about 24 percent of housing that is duplex, triplex, quadplex, and multifamily.

Exhibit 18. Housing Mix, Primary Market Area, Oregon City, and Clackamas County, 2014-2018





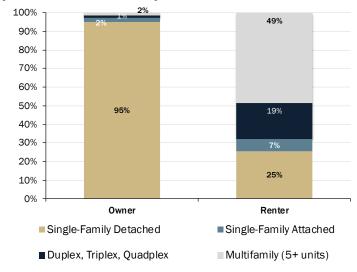
However, there is growing housing demand from one and two person households who are less likely to invest in single-family homes and often prefer to rent. Nearly one in three households rent in the PMA.

¹⁰ Portland State University Population Research Center

The majority of housing in the Primary Market Area is owner-occupied, singlefamily homes.

More housing variety is needed to satisfy population growth and household preferences.

Exhibit. Housing Tenure by Unit Type, Primary Market Area, Oregon City, and Clackamas County, 2014-2018



Source: US Census Bureau, 2014-18 ACS

Increasing the variety of housing supplied will attract a more diverse mix of residents and will enable younger working professionals to remain in the area and change housing types as they age.

Submarket trends are supportive of higher density development

While still small in relation to the total housing stock, the Oregon City submarket has been gradually developing a strong rental residential market. The U.S. Census bureau estimates that 31 percent of all housing inventory in thew PMA are now rentals. Well-performing schools alongside growth in high wage jobs in the region and comparatively lower rents and home prices have accelerated in-migration. CoStar data of the PMA suggest that the residential rental market has and continues to perform positively even into 2020.

Deliveries. The submarket has added 1,500 multifamily rental units since 2010, with most new product consisting of type V or wood frame.

Rent Growth. Rents on units developed since 2010 have grown 27.1 percent (3 annually).

Median rent. As of Q3 2020, median monthly rents on new construction multifamily units were at \$1.76 per square foot (\$1,822 per month).

Vacancy. Since 2010, vacancy rates across all rental units in the PMA have averaged 4 percent. As of Q3 2020, the vacancy rate was at 3.8 percent.

These market factors in combination with projected demographic and economic trends will continue to drive growth.

Commercial Retail

As the population continues to grow in the region, new and existing residents in the PMA will continue spending a portion of their earnings. Additional consumer spending necessitates the development of new commercial retail opportunities. To satisfy demand, the proposed Rossman Land Development includes approximately 500,000 square feet of new commercial retail and entertainment uses. Many of the proposed uses at the Rossman Land Development are considered destination uses that draw commercial activity from outside the city or even the region. From a local economic development perspective, the attraction of commerce from outside the region amplifies potential positive economic impacts through net-new economic activity and retention of local spending that could be "leaking" to other areas.

Consumer Spending and Market Potential

Households residing within the PMA currently spend approximately \$1.8 billion on commercial retail categories that align with many of the use categories that the development intends to attract. This is equal to \$17,000 in annual consumer spending per household. By 2025 demand for these same goods and services is expected to grow by \$317 million (17.5 percent).

Exhibit 2: Entertainment and Retail Consumer Spending and Demand Forecast by Retail Category, Fifteen-Minute Trade Area

Consumer Spending	Forecast Demand	Projected
2020	2025	New Demand
\$407,000,000	\$479,000,000	\$72,000,000
\$665,000,000	\$781,000,000	\$116,000,000
\$469,000,000	\$551,000,000	\$82,000,000
\$269,000,000	\$316,000,000	\$47,000,000
\$1,810,000,000	\$2,127,000,000	\$317,000,000
	2020 \$407,000,000 \$665,000,000 € \$469,000,000 \$269,000,000	2020 2025 \$407,000,000 \$479,000,000 \$665,000,000 \$781,000,000 € \$469,000,000 \$551,000,000 \$269,000,000 \$316,000,000

Source: ESRI

Forecasted demand suggests that the proposed Rossman Land Development would be well positioned to capture a share of projected market growth in consumer spending within the PMA.

Recent Commercial Retail Market Growth and Trends

The vicinity of the subject site has exhibited development and household growth in recent years. Since 2010, much of the commercial retail development has come in the form of freestanding retail or low-rise multiple tenancy attached retail, which align with the commercial retail types proposed for the subject site. The combination of the proposed retail types and projected population growth should augment commercial retail developments produced since 2010.

Rent and vacancy trend data are indicative of the general direction and stability of the market and inform our understanding of achievable pricing. CoStar data suggest the following market trends:

- Vacancy. For the past seven years, the vacancy rate on commercial in the PMA has been below 4.5 percent and as of Q3 2020, the vacancy rate was 4.4 percent on new commercial retail space developed since 2010.
- **Rent Growth.** Commercial retail rents in the PMA have grown 77 percent (10.9 percent annually) since 2014 for new construction retail space built since 2010.
- **Current Rent.** As of Q3 2020, per square foot triple-net (NNN) rents on new construction product built since 2010 were at \$27.51 per square foot.

The data from the analysis in the sections above suggest that market conditions in the PMA are supportive of new commercial retail and multifamily development.

Feasibility Study

Summit Development Group (SDG) asked ECONorthwest to develop an Excel-based pro forma model to test development feasibility of the proposed Rossman Land Development in the context of observed market fundamentals.

Methodology

A pro forma is a financial model that developers use to evaluate whether a development is financially feasible. Pro forma analyses require inputs regarding a physical building configuration: square footage, mix of uses (residential and commercial retail for example), and parking configurations.

We employed a *return on cost* approach to estimate the *residual land value* of the proposed full build-out of the properties. A residual land value model calculates the developer's land budget after they have paid for other development related inputs, e.g. site preparation costs (including brownfield remediation), building costs, parking, etc.

This approach has a key advantage over a cash flow model for analyzing a hypothetical development: it does not require the creation of assumptions about the sources and uses of funds for each development, i.e. where the funds are coming from, with what interest rates, for how long of a term, etc.

In a residual land value model, the project's value, from which the project costs are subtracted, is based on the net operating income (NOI) of the stabilized project. The NOI is the income (rents) less any operational costs from vacancies, operations, and operating reserves. The expected NOI from the project is then divided by either a capitalization rate or a return on cost percentage – both are ratios or percentages that are estimated by analyzing the recent sale prices of comparable properties compared to their NOIs.

Generally, if the result of a residual land value calculation is positive then the project is feasible subject to the current use of the property, other more valuable alternative uses, or the land-owners speculative value. If the residual land value is negative, the proposed project/use does not generate enough income to pay for land and is not feasible without additional subsidy.

Model Inputs

In addition to using the development plan provided by SDG, we collected other pro forma inputs through Letters of Intent (LOIs), interviews with developers and local contractors. We further vetted the construction cost numbers and comparable rents with SDG. We refined the inputs based on these interviews and also verified the range of feasible rents by working with local brokers and using the real estate data analytics platform, CoStar. For a more detailed table of assumptions, see Table 1.

Table 1. Development Plan Area Estimates from LRS Architects

	North District				Total Developable Area
Site area (SF)	744,368	710,731	459,821	549,692	2,464,612
Site area (acres)	17.09	16.32	10.56	12.62	56.6
Footprint					
Mixed-Use Residential A	64,800				64,800
Mixed-Use Residential B	68,040				68,040
Commercial (retail)	47,598	155,804	119,128	134,557	457,087
Theater	86,829				86,829
Total Building Footprint	267,267	155,804	119,128	134,557	676,756
Surface and on-street parking	58,385	324,770	156,244	157,042	696,441
Surface and on-street parking stalls	292	1,056	581	594	2,523
Implied stall size (gross)	200	308	269	264	
Pavillion and Other Impervious	313,366	126,996	120,407	148,841	709,610
Landscape	105,617	103,173	119,128	134,557	462,475
Landscape coverage	14%	15%	26%	24%	19%
Total Footprint	744,635	710,743	514,907	574,997	2,545,282
Site area check	(267)	(12)	(55,086)	(25,305)	(80,670)
GBA (by use)					
MU Residential A	216,000				216,000
MU Residential A Residential	194,361				194,361
MU Residential A Lobby	10,749				10,749
MU Residential A Retail	10,890				10,890
MU Residential B	220,382				220,382
MU Residential B Residential	205,922				205,922
MU Residential B Lobby	7,200				7,200
MU Residential B Retail	7,260				7,260
Commercial (retail)	47,598	155,804	140,779	162,326	506,507
Gas Station		_			-
Water Park			-		-
Hotel				-	-
Theater	81,829				81,829
Theater Retail	5,000				5,000
Total Residential	400,283				400,283
Total Residential Lobby	17,949				17,949
Total Retail	70,748	155,804	140,779	162,326	529,657
Total GBA	570,809	155,804	140,779	162,326	1,029,718

Source: Development Plan, prepared by LRS Architects

Estimates for the site development costs came from a variety of sources. ECONorthwest maintains an up-to-date database of construction hard costs and soft costs. We obtain per

square foot cost estimates for various construction and building types through quarterly interviews with developers and contractors. As discussed in the Project and Site Overview section, developing atop a former landfill requires additional mitigation and monitoring costs that are otherwise nonexistent in typical greenfield development. To account for these additional costs, SDG provided its contractor's cost estimates for site prep and infrastructure, including landscape and hardscape costs, which we then incorporated into the development budget. Table 2 below summarizes the per square foot costs assumptions used for this analysis.

Table 2. Preliminary Construction Cost Assumptions

Construction Cost Assumptions	·					
Variable	Low	High		Assumption		Unit of Measure
<u>Hard Costs: Vertical</u> Residentia		105	220	•	040	Double and the state of the sta
	-	195 160		-		Per square foot
Retai		100	215	Ф	1/5	Per square foot
Hard Costs: Horizontal						
Environmental Rem				\$	16	Per square foot of site area
						Per square foot of impervious
Other Impervious	6			\$	12	space other than building
Landscaping	3			\$	6	Per square foot of unbuilt space
Parking Costs						
Surface Parking	•			\$		Per square foot
Podium Parking	5			\$	100	Per square foot
Parking Size						
Surface Parking	s 5	260	280		317	Square foot per stall
Podium Parking	-		398			Square foot per stall
	•					·
Soft Costs						
						Percent of hard costs (excluing
A&E (plus permits, financing, insurance))				25%	site prep)
<u>Developer Fee</u>					3.0%	Percent of hard and soft costs
Contingency Fee					5.0%	Percent of hard and soft costs
Torrand lawrence and Octob	Ton out Insurance to Cooks					
Tenant Improvement Costs				•	70	Day a guara fa at
Retai	ı			\$	70	Per square foot

Source: ECONorthwest and Summit Development Group, February 2021

Project Income

In addition to the construction cost range, we observed a range of asking rents. We worked with local brokers to identify comparable commercial retail tenants and rents in the suburban-Portland region that align with the tenant profile of the Rossman Land Development. The comparable properties produced a wide range of rents. We then used these to determine the blended average NNN 11 rent for the entire development based on the proposed square footage

¹¹ A triple net lease (triple-Net or NNN) is a lease agreement on a property whereby the tenant or lessee promises to pay all the expenses of the property including real estate taxes, building insurance, and maintenance.

for each commercial tenant. We also identified suitable newly constructed multifamily properties in the suburban-Portland market. We used these comparables to determine average unit sizes and per square foot rents. Table 3 summarizes income assumptions for commercial retail and multifamily uses.

Table 3. Commercial Retail and Multifamily Leasable Square Feet and Rent by District

Commercial Retail			Mι	ıltifamily		
		Blended Rent			Average Unit	Average Rent
District	Leasable sf	(NNN)		Leasable sf	Size	(per sf)
North	70.748	\$35.66	Building A	205,110	601	\$3.06
NOILII	10,146	φ30.00	Building B	213,122	589	\$3.06
East	112,775	\$34.00		-	-	-
Central	140,779	\$24.38		-	-	-
South	127,967	\$32.00		-	-	-

In addition to commercial rents, SDG has indicated that three of the prospective uses have either already agreed or are in negotiations to purchase portions of the site. For a few of these land sales, SDG provided signed Letters of Intent (LOIs). They indicate that parcels greater than seven acres will sell for \$18 to \$24 per square foot, while smaller parcels (one acre) will sell for \$42 to \$50 per square foot. To account for land sales in the model, we assumed the midpoint of these ranges for those parcels still in negotiations.

Findings and Implications

Analysis Findings

The results of our analysis indicate that development is closer to feasible (residual land values across all uses are close to zero), in scenarios with either: (1) a public investment covering a portion of the public infrastructure cost needed to develop on a brownfield site; or (2) if the market dramatically improves and capitalization rates (the rate of return on the project) on multifamily and commercial retail uses are favorable.

Residual land values are positive on the residential portions of the development and only small portions of the retail. Several of the commercial retail districts have negative residual land values. This is not unusual. In mixed-use development, retail is often subsidized by residential uses. In turn, as retail uses increase, it can help increase rents or capture market share on other uses particularly for mixed-use multifamily residential. In scenarios where exit the capitalization rate (the rate of return on the project) is favorable (4.5 or less on residential and less than 5 on commercial retail¹²), the development is close to achieving a positive net residual land value. With public investment, the feasibility of the project becomes less dependent on

ECONorthwest 14

_

 $^{^{12}}$ Capitalization rates were derived from the CBRE U.S. Cap Rate Survey Special Report Q3 2020 for the Portland Class A Multifamily Suburban Rates (4.5% – 5%) and the Portland Class A Grocery-Anchored Center Rates (4.5% – 6%)

positive changes in market conditions which are less predictable. The following scenario matrices show the residual land value results at different cap rates:

Table 4. Residual Land Value Per Square Foot Results by Capitalization Rate

Commercial Retail Cap Rate

		low	mid	high
Cap Rate	low	(\$2.95)	(\$14.96)	(\$23.97)
Residential Ca	mid	(\$6.25)	(\$18.26)	(\$27.26)
MF Resi	high	(\$9.21)	(\$21.22)	(\$30.23)

Source: ECONorthwest and CBRE U.S. Cap Rate Survey Special Report Q3 2020

Note: Portland Class A Multifamily Suburban Cap Rates (low = 4.5%; mid = 4.75%; high = 5%). Portland Class A Grocery-Anchored Center Cap Rates (low = 4.5%; mid = 5.25%; high = 6%)

Implications

There are a few implications from the results of this analysis:

- To ensure feasibility the project requires public investment in the supporting
 infrastructure. The infrastructure costs are substantial, and the current relationship
 between rents and development costs are such that there is insufficient capital remaining
 for a developer to cover the full cost of infrastructure improvements required for
 mitigating a former landfill.
- Fluctuations in the market have a profound impact on development feasibility. While the current market conditions might be favorable to development and the outlook may appear positive, any upward movement on cap rates in the suburban-Portland market could add additional project risk. The residual land values of the development program are negative at the today's most favorable cap rates that this project's feasibility depends on market conditions substantially improving.

Public Investment and Benefits

The role of Public Investment in Development Feasibility

The challenge with developing atop any former brownfield site are the costs associated with environmental remediation. If the costs are too high, contaminated land will remain hazardous and undeveloped indefinitely without some public involvement. Public investment thus is required to attract private investment to redevelop such sites. In Oregon, a common tool for providing areawide or site-specific investment is Tax Increment Financing (TIF). TIF revenues are generated by the increase in total assessed value in an urban renewal area or district (URA), from the time the URA is first established. When investments in the district are made, property values increase in the district, and the increase in total property taxes is used to pay off bonds (taken out to pay for specific projects/investments in the area) and/or fund future projects. TIF is an attractive tool for these investments because it creates a nexus between the sources and uses of investment.

When a public investment is made for infrastructure, project subsidy, or public amenities, it is important for the jurisdiction to understand the benefits created by such investments. In the context of TIF, combined public and private investment to clean up a contaminated site drives future property values for the site *and* in the surrounding area. For example, one recent study found a 5 percent to 11.5 percent increase to neighboring property values following brownfield redevelopment¹³. Increases in property values can lead to increased property tax revenues. For designated URAs, such as the Oregon City URA (that includes the former Rossman land fill site), a portion of increased property tax revenues pay off the bonds issued to finance the infrastructure work needed to revitalize the contaminated site. In many instances, the netbenefit to the district is greater than the initial investment required to catalyze development. Without such public and leveraged private investment, it's possible that property tax revenues might rise slower, causing the community to miss out on both the opportunity to clean up contaminated land as well as the higher future property tax revenues needed to pay for it.

Benefits of Brownfield Redevelopment

The public benefits of brownfield redevelopment have been broadly studied. These benefits extend from public health and safety, to climate impacts and economic development. Some common benefits include:

Land utilization. Land is a finite resource that is increasingly scarce. By definition brownfields are sites that are blighted and not maximizing their potential productive use. Brownfield redevelopment returns underutilized land to a higher and better use.

¹³ Haninger, Ma, Timmins. "The Value of Brownfield Remediation". Association of Environmental and Resource Economists. 4-01. March 2017.

Property Value and Tax Base Increase. As detailed previously, brownfields do not maximize on-site tax benefit potential and in many cases have a depressing effect on neighboring property values. Brownfield redevelopment reverses this effect.

Leverage of Public Investment. Public subsidy in brownfield redevelopment has been shown to leverage considerable public investment. A 2015 study by the US Environmental Protection Agency found that every public dollar in brownfield subsidy leveraged \$20.13 in public investment¹⁴.

Land Efficiency and Vehicle Miles. Due to historical development trends, many brownfields have greater location efficiency, meaning they have better access to existing markets and infrastructure relative to greenfield sites. The EPA has found that brownfield redevelopment results in a 25 to 33 percent decrease in residential vehicle miles traveled (VMT) compared to greenfield development¹⁵.

Other Public Benefits

This analysis has shown that public investment in infrastructure is needed to ensure development on brownfield sites. However, there are significant, additional benefits that stem from the increased economic activity that redevelopment of the site can produce (i.e., access to jobs, housing, and shopping opportunities). These are important factors that shape and influence the vibrancy of a community.

Overview of Economic Contributions

Depending on the activity being analyzed, economic contribution can be classified by changes in economic value (benefits and costs) or economic activity (changes in spending levels). The most common approach measures the short-run economic contributions associated with a project's or multiple projects' operations and capital spending, as well as spending by employees and construction workers. This captures the effects (in terms of dollars and jobs) to the local and regional businesses as the money is spent on local good and services. We will use specific terminology to discuss the various economic effects stemming from the development of the Rossman Land Development.

The three terms of interest are as follows.

• *Direct Effects* are those associated with an initial change in spending from a project, typically represented by new construction spending or expansion of operations spending. They also include the direct output of the activities associated with the private sector investment and public subsidy to support the project, which is estimated using an expenditure approach that sums labor and non-labor operating expenses.

¹⁴ U.S. Environmental Protection Agency. Overview of EPA's Brownfield Program. 2020. Retrieved February 26, 2021. https://www.epa.gov/brownfields/overview-epas-brownfields-program

¹⁵ U.S. Environmental Protection Agency. Environmental Benefits of Brownfield Redevelopment—A Nationwide Assessment. May 2020.

- *Indirect Effects* are the goods and services purchased to support new construction and operations. Because these expenditures represent interactions among businesses, these indirect effects are often referred to as "supply-chain" impacts.
- Induced Effects are the purchases of goods and services from new labor income. The
 direct and indirect increases in employment and income enhance the overall purchasing
 power in the economy, thereby inducing further consumption. These induced effects are
 often referred to as consumption-driven impacts.

Results of Economic Contribution Analysis

ECONorthwest used the 2018 version of IMPLAN, the most recent version available, and built an economic input-output model for Clackamas County. The underlying program data were provided to ECONorthwest from SDG. Other development assumptions were derived from interviews with local developers and contractors.

The development's effects were measured across the following areas: staff payroll, goods and services expenditures, capital expenditures. We assume that all spending used for this analysis is new spending to the local economy since the URA's inception and did not crowd out any other economic activity in the area.

Economic effects of redeveloping the site

The total development cost estimate excluding soft costs for the Rossman Land Development is equal to \$304.9 million. This includes environmental remediation, hardscape and landscape, hard costs, and parking. Such investment could support up to \$153.9 million in direct labor income (equal to \$70,100 per job in wages and benefits). That labor income, in turn, could support 2,196 jobs in the construction industry. Factoring in the indirect and induced economic effects, the proposed development could support an additional 865 jobs at businesses that supply the construction industry and at local restaurants and retailers (where workers will spend some of their earnings). Table 5 below summarizes the construction impact of the development program.

Table 5. Economic effect from construction

Impact	Employment	Labor Income	Output
Direct	2,196	153,948,175	304,898,719
Indirect	347	23,883,291	63,866,714
Induced	518	25,211,801	76,071,009
Total Effect	3,061	203,043,267	444,836,442

Source: ECONW estimates based on program data provided by SDG, ECONW cost estimates and IMPLAN software.

Annual economic effect from operations

Given that the proposed uses are not yet in operation, we relied on a couple of reliable sources to estimate the number of direct employees. The Institute of Transportation Engineers (ITE) and the U.S. Department of Energy (DOE) publish estimates for building area per employee by

¹⁶ All figures from the economic effects of site redevelopment are in 2020 dollar values.

business type. For a few types not listed in their data, we calculated the per square foot jobs and compared our estimates to industry reports. We estimate that the proposed development could support approximately 770 direct operations jobs across the uses.

Table 6. Total annual effect of during operations

Impact	Employment	Labor Income	Output
Direct	770	23,521,473	45,888,043
Indirect	129	5,997,320	18,188,728
Induced	89	4,316,558	13,023,128
Total Effect	988	33,835,351	77,099,899

Source: ECONW estimates based on program data provided by SDG, ECONW cost estimates and IMPLAN software.

When indirect and induced multipliers are taken into account, the businesses operating within the development could support \$77.1 million in annual gross economic activity. This new revenue coming into the region supports a total of \$33.8 million in labor income and a total 988 jobs from operations, the additional local business purchases and consumption spending from employees.

Broadening the tax base

A crucial benefit of development for any community is the opportunity to broaden the tax base. Development brings increased economic activity to an area, which enables a community to collect more tax revenues from a broader set of economic activities. For example, the proposed development would incur construction excise taxes equal to approximately \$366,000 that will go directly to the local government's general fund. Development of this scale often leads to more development in the surrounding community. This will lead to additional construction excise tax revenues, attracting more private investment, more residents, and more workers to the area, which will generate more economic activity and thus potentially more tax revenues to the City and County beyond just property tax revenues.

Contribution to local services

The Rossman Landfill site currently contributes \$0 in property tax revenues to the community but may produce undesired costs through soil and ground water contamination or the risk of methane gas release into the air. Public investment to clean up the site will mitigate these risks while at the same time supply an additional stream of annual tax revenues to the community that otherwise would not exist without public investment.

Assuming no other taxes accrue to the community beyond property taxes paid directly by the proposed development and assuming that property taxes grow by 1 percent per year, we estimate that the project will provide \$3.3 million in annual property tax revenues (See Table 7 below for the property tax calculation).

Table 7. Estimated Property Tax Revenues

Improvement Value*	\$ 315,610,184
Changed Property Ratio	58%
Property Tax Rate	1.81%
Annual Property Tax	\$ 3,331,383

^{*}Improvement Value is the sum of total hard costs and the \$59.8 million in site prep and mitigation costs

Of the \$3.3 million in annual property tax contributions, nearly half of these revenues will go towards local K-12 education and community colleges. Roughly one quarter will go to the County and City governments and the remaining quarter will going towards Fire and other services. Similarly, portions of the estimated 2,196 construction works who will build the proposed development and the 770 workers who will operate the businesses who own or lease commercial space on the site will contribute to the local community as well.

Some of these workers will choose to reside in Oregon City or may already live there. They will pay rent or purchase a home in the community, further increasing property tax revenues. They will pay incomes taxes, a portion of which will go to the City general fund. With these incomes, workers will shop and purchase food from local businesses, contributing to even more economic activity, further increasing tax revenues. Higher consumer demand will drive new business investment and development, which again will increase property and construction excise tax revenues over time. As Assessed Values in Oregon City increase over time, the increased property tax revenues will pay of the bonds used to make unproductive land productive for the community enjoy.

¹⁷ Clackamas County. Where Your Tax Dollars Go. Available at: https://www.clackamas.us/at/taxingdistrictexplanation.html

Appendix: Landfill Redevelopment Case Studies

Case study 1: Oregon City Home Depot Site

In 2002, Home Depot opened a store on a 17-acre site on the northern portion of the Rossman Landfill. Prior to the commercial development, DEQ's concerns included the following:

- Fire or explosion hazards due to potential LFG buildup in confined spaces.
- Potential human exposure to LFG emissions.
- Groundwater contamination from settlement of the refuse and construction activities.
- Potential disturbance to unknown wastes that may be in the landfill.

Home Depot enlisted Landau Associates and Parisi & Parisi to prepare the environmental engineering design report that summarized the key environmental design, construction, and monitoring provisions that would address DEQ's concerns.¹⁸ Environmental mitigation measures included the following¹⁹:

- Up to 10 feet of imported fill placed over the existing soil cover to achieve recommended site grades.
- Additional 5 feet of fill (surcharge load) placed to compress the onsite materials and reduce post-construction settlement. Surcharging did not affect groundwater.
- 1,230 steel piles (2-feet diameter) were installed across the site.
- LFG control and monitoring system was installed, including a gas barrier beneath the building, a gas extraction system, and 23 monitoring wells. Groundwater is monitored semiannually, and surface waters in Clackamette Lake and Abernethy Creek are also periodically monitored.

Home Depot continues to operate on the site and has been successful in mitigating any potential health and safety challenges posed by the landfill.

Case Study 2: Bridgeport Village, Tigard, Oregon

The Bridgeport Village is another local, successful case of commercial development on a former landfill site. The 28-acre development consists of an office park, an upscale shopping center and a 4-story parking garage. Until 2004 the site was owned by Washington County which subsequently transferred it over for development. When it opened in 2005 it was the 10th largest shopping center in the nation.

The site was formerly occupied by Durham Pit/Quarry, which was operated by Washington County from 1950s to 1970s and then backfilled in the 1980s and 1990s. The site is known to have high subsurface methane concentrations and elevated concentrations of oil and

ECONorthwest 21

-

¹⁸ Daily Journal of Commerce. "Home Depot Builds atop an old Oregon Landfill", available at: https://www.djc.com/news/en/11135649.html

¹⁹ Oregon Department of Air Quality Report ECSI – Environment Cleanup Site Information

benzo(a)pyrene. The unexpected finding of methane gas and oil contamination delayed the development by about a year and increased the cost of the project by about \$5 million.²⁰

GeoDesign conducted Bridgeport Village's remediation study and recommended the following mitigation measures²¹:

- Partial removal of organics to facilitate installation of soil cement pad.
- Active sub-slab vents under buildings to extract methane gas.
- Active horizontal vents and vertical gas extraction wells at the site perimeter.
- Active vertical gas extraction wells near hot spots within the site.
- Sealed building penetrations.
- Isolation of utility corridors.

In response the developer took the following measures:

- Poured a concrete slab above the site to provide structural support.
- Located a passive sub-slab venting system and a low permeability gas membrane beneath each building slab to control the flow of methane gas.
- Installed an active gas extraction system at various depths around and on the site to remove methane gas.
- Attached interior gas sensors on buildings.
- Established low permeability membrane collars or trench plugs for every utility in each building or that crosses a site boundary. The collar and plugs limit the spread of contamination by providing a seal around the utility pipes.
- Instituted ongoing monitoring of methane levels.

Bridgeport Village remains an example of developing atop a former landfill that continues to successfully mitigate and monitor the health and environmental challenges inherent to landfills.

Case Study 3: City Place, Santa Clara, CA

The Related Companies, the developer of NYC's Hudson Yards, started constructing in 2020 one of the largest commercial developments in California. The development is a mixed-use complex with office, retail, hotel, and 1,680 residential units, including affordable housing. The

²⁰ Metro Report. *Oregon Landfill Legacy*. Available at: https://www.oregonmetro.gov/sites/default/files/2014/04/17/03152004_landfill_history.pdf

²¹ GeoDesign Inc. *Methane Remedial Investigation and Focused Feasibility Study. Former Durham Quarry. Proposed Bridgeport Village Development*. September 2003. Available at: https://www.deq.state.or.us/Webdocs/Controls/Output/PdfHandler.ashx?p=4b2ab251-858a-4b49-8ca9-a82b8100fa21pdf&s=DurhamQuarry_RIFS_092403.pdf

239-acre site currently has a golf course and a BMX track. Construction is expected to be completed in 2023.

183 acres of the development site is on a former landfill. The landfill began its operations in the 1960s and closed in 1993. Permitted materials included construction debris and non-hazardous municipal waste. The landfill was capped with 1 to 7 feet of clay and 1 to 34 feet of artificial fill consisting of mixed sands, gravels, and silts.²² To address safety concerns related to combustible methane gas and groundwater contamination caused by the decomposing waste, the City and the Developer are taking the following measures²³:

- Installing sub-slab landfill gas protection systems.
- Construction of an enormous platform over the landfill.
- Placing 12 inches of clay barrier and 12 inches of concrete barrier over 30 central acres of the site.
- Placing piles up to 150 feet into the ground.
- Replacing existing gas collection and removal systems.
- Monitoring landfill gas during (and after) project construction.
- Protecting and repairing existing leachate recovery systems.
- Prohibiting enclosed basements.
- Limiting residential development to a parcel where no municipal waste was placed and over open-air podium level garages or ground-floor, commercial space.
- The City is covering some portion of the infrastructure work cost needed to redevelop
 the site.²⁴

https://www.santaclaraca.gov/Home/Components/BusinessDirectory/BusinessDirectory/216/2495

ECONorthwest 23

-

²² City of Santa Clara. *Project Listing*. Available at:

²³ City of Santa Clara. *Environmental Impact Analysis*. Available at: https://www.santaclaraca.gov/home/showdocument?id=15544

²⁴ San Jose Spotlight. *Santa Clara to Talk Traffic Plan Funding for Massive Related Development*. Available at: https://sanjosespotlight.com/santa-clara-to-talk-traffic-plan-funding-for-massive-related-development/



BIPARTISAN INFRASTRUCTURE LAW:

A HISTORIC INVESTMENT IN BROWNFIELDS

President Biden's leadership and bipartisan Congressional action have delivered the single-largest investment in U.S. brownfields infrastructure ever. The Bipartisan Infrastructure Law invests more than **\$1.5 billion** through EPA's highly successful Brownfields Program.

\$1.2 BILLION IN PROJECT GRANTS \$300 MILLION TO STATE AND TRIBAL RESPONSE PROGRAMS

With EPA's funding and direct technical assistance, overburdened communities can begin to address the economic, social and environmental challenges caused by brownfields and reposition these properties for investment and revitalization.

A historic \$1.5 billion investment in EPA's Brownfields Program will transform countless lives and spur life-changing revitalization in communities large and small, urban and rural; all with the same desire to keep their neighborhoods healthy, sustainable and reflective of the people who call it home.

The funding will be used to:

- Remove barriers to brownfields reuse and spur new redevelopment to transform communities into sustainable and environmentally just places.
- Align with the President's Environmental Justice Executive Order by stimulating economic opportunity and environmental revitalization in more than 1,700 historically overburdened communities.
- **Enhance climate resiliency** and promote equitable and sustainable redevelopment through expanded technical assistance for "Climate Smart Brownfields Redevelopment."
- Provide necessary funds to **states/territories and over 100 tribes**, as the **lead agencies** in ensuring **all brownfields** are safely cleaned up.
- Direct grants and technical assistance funded with the Brownfields Projects appropriation will cleanup hundreds of brownfields, assess **18,000** sites, train **3,650**/place **2,550** people in environmental jobs and assist **hundreds of communities** in identifying equitable reuse options to cultivate healthy, resilient, livable neighborhoods.
- **Leverage 154,000 jobs and \$30.2 billion** in other public/private funding.



\$1.5 BILLION Investment Highlights	2022 OFFERINGS*
\$150 MILLION in Multipurpose Grants	UP TO \$10 MILLION per grant for communities, states, tribes and nonprofits to plan, assess and cleanup sites No cost share requirement Proposals due July 2022 • Projects awarded November 2022
\$600 MILLION in Assessment Grants	UP TO \$10 MILLION per grant for communities, states, tribes and nonprofits to determine extent of contamination and plan revitalization at brownfield sites No cost share requirement Proposals due July 2022 • Projects awarded November 2022
\$160 MILLION in Cleanup Grants	UP TO \$5 MILLION per grant for communities, states, tribes and nonprofits to cleanup contamination on brownfield sites No cost share requirement Proposals due July 2022 • Projects awarded November 2022
\$150 MILLION in Revolving Loan Fund (RLF) Grants	UP TO \$10 MILLION per grant for communities, states, tribes and nonprofits to provide loans and subgrants for the cleanup of contamination and revitalization of brownfield sites No cost share requirement Supplemental requests from existing grantees due April 2022 Funds awarded August 2022
\$30 MILLION in Job Training Grants	UP TO \$1 MILLION per grant for communities, states, tribes and nonprofits to develop a job training program that supports revitalization at brownfield sites Proposals due July 2022 • Projects awarded November 2022
\$300 MILLION in Cooperative Agreements to State and Tribal Response Programs	\$60 MILLION available per year in cooperative agreements for states and tribes to build response program capacity, oversee brownfields cleanups and conduct limited site assessment and cleanup activities FY22 requests due July 2022 • Funds awarded November 2022
\$110 MILLION in Technical Assistance, Including Targeted Brownfields Assessments	The largest investment ever in direct contracts and cooperative agreements to provide communities with technical assistance to adapt to a changing climate and remove barriers to safe and sustainable property reuse Projects awarded on a rolling basis • First round of Targeted Brownfields Assessments awarded April 2022

^{*}Funding amounts and deadlines are tentative and subject to change.