Land Use Exhibit

Cascade Renewable Transmission

Wasco, Hood River, and Multnomah Counties, Oregon

December 2025

Prepared for
Power Bridge LLC

Submitted to
Oregon Energy Facility Siting Council

Contents

Figures

Tables

Acronyms and Abbreviations

AC	alternating current
Applicant	Cascade Renewable Transmission, LLC (CRT)
ASC	Application for Site Certificate
BPA	Bonneville Power Administration
c	Conservation Environmental Overlay Zone
CE	Commercial Employment
CFU	Commercial Forest Use
CLI	Commercial Light Industrial
DSL	Oregon Department of State Lands
EFU	Exclusive Farm Use
ESCP	Erosion and Sediment Control Plan
ESEE	economic, social environmental, and energy analysis
f	Future Urban Overlay Zone
FAR	*floor area ratio*
FEMA	Federal Emergency Management Agency
FH	Flood Hazard Overlay
FP	Floodplain Overlay Zone
g	River General Greenway Overlay Zone
GMA	General Management Area
h	Aircraft Landing Overlay Zone
HDD	horizontal directional drilling
HRMC	Hood River Municipal Code
HVAC	high-voltage alternating current
HVDC	high-voltage direct current
i	River Industrial Greenway Overlay Zone
IG2	General Industrial Zone
IH	Heavy Industrial Zone
k	Prime Industrial Overlay Zone
kV	kilovolt
LCDC	Land Conservation and Development Commission
MCC	Multnomah County Code
MUF	Multiple Use Forest Zone
MW	megawatt
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NSA	National Scenic Area
OAR	Oregon Administrative Rules
ODEQ	Oregon Department of Environmental Quality
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
OR EFSC	Oregon Energy Facility Siting Council
ORS	Oregon Revised Statutes

OS	Open Space Zone
OZ	overlay zone
p	Protection Environmental Overlay Zone
PCC	Portland City Code
PGE	Portland General Electric
q	River Water Quality Greenway Overlay Zone
RF	Residential Farm/Forest
RMP	Residential Manufactured Dwelling Park
ROW	right-of-way
s	Scenic Resources Overlay Zone
SC	Stream Corridor Overlay Zone
TDMC	The Dalles Municipal Code
UGB	Urban Growth Boundary
USACE	U.S. Army Corps of Engineers
VESDA	Very Early Smoke Detection Apparatus
WCCP	Wasco County Comprehensive Plan
WCLUDO	Wasco County Land Use & Development Ordinance
x	Portland International Airport Noise Impact Overlay Zone

1 Introduction

Cascade Renewable Transmission, LLC (CRT; Applicant) proposes to construct and operate a high-voltage direct current (HVDC) (400-kilovolt [kV]), 1,100-megawatt (MW) electric transmission facility (Facility). The Facility would interconnect the existing Bonneville Power Administration (BPA) Big Eddy 500kV alternating current (AC) substation, located near The Dalles, Wasco County, Oregon (Eastern Interconnection), and the existing Portland General Electric (PGE) Harborton 230-kV AC substation, located in Portland, Multnomah County, Oregon (Western Interconnection). This exhibit demonstrates that the Applicant meets the submittal requirements in Oregon Administrative Rule (OAR) 345-022-0030(7)(b)(C).

To issue a site certificate, the Oregon Energy Facility Siting Council (OR EFSC) must find that the Facility complies with the Statewide Land Use Planning Goals adopted by the Land Conservation and Development Commission (LCDC). The Applicant has elected to satisfy OR EFSC's land use standard, OAR 345-022-0030, by seeking an OR EFSC determination under Oregon Revised Statute (ORS) 469.504(1)(b). Under this election, a finding of compliance is required when the OR EFSC determines the following:

> ***ORS 469.504(1)(b)(B)*** *For an energy facility or a related or supporting facility that must be evaluated against the applicable substantive criteria pursuant to subsection (5) of this section, that the proposed facility does not comply with one or more of the applicable substantive criteria but does otherwise comply with the applicable statewide planning goals, or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section; or*
>
> ***ORS 469.504(1)(b)(C)*** *For a facility that the council elects to evaluate against the statewide planning goals pursuant to subsection (5) of this section, that the proposed facility complies with all applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under subsection (2) of this section.*

This exhibit demonstrates the Facility's compliance with the applicable substantive criteria from the Wasco County 2040 Comprehensive Plan (2020a), The Dalles Comprehensive Land Use Plan (2024), the Management Plan for the Columbia River Gorge National Scenic Area, Multnomah County's Comprehensive Plan (2016), and the City of Portland's 2035 Comprehensive Plan. In addition, this exhibit demonstrates the Facility's compliance with the LCDC administrative rules and goals and any land use statutes directly applicable to the Facility. Finally, this exhibit provides evidence upon which OR EFSC may find that the Facility meets OAR 345-022-0030.

2 Land Use Analysis Areas and Maps (OAR 345-022-0030(7)(b)(A))

(A) Include a map showing the comprehensive plan designations and land use zones in the analysis area;

RESPONSE

To support the responses to the applicable substantive criteria, this section provides an existing land use conditions overview.

Pursuant to the Project Order, the analysis area of this exhibit is the area within the site boundary and extending 0.5-mile from out-of-river portions of the site boundary. The acreage by jurisdiction (in order of east to west) is shown in Table 1.

Table 1. Site Boundary and Analysis Area Acres

Jurisdiction	Site Boundary (acres)	Analysis Area (acres)
Wasco County	2,766	2,114
City of The Dalles	88	1,306
Hood River County	3,858	Same as site boundary. Facility located wholly within the Columbia River in Hood River County
City of Hood River	161	Same as site boundary. Proposal located wholly within the Columbia River
Multnomah County	3,869	1,170
City of Portland	1,356	4,189

The Project Order included The City of Mosier and the City of Cascade Locks. However, since the Project Order issuance, the site boundary was adjusted to exclude these jurisdictions; therefore, they are not included in this exhibit analysis.

Table 2 summarizes which Facility components are in each jurisdiction.

Table 2. Facility Components in Each Jurisdiction

Facility Components	Jurisdiction					
	Wasco County	City of The Dalles	Hood River County	City of Hood River	Multnomah County	City of Portland
Converter Station Laydown Area*	•	×	×	×	×	•
Converter Station	•	×	×	×	×	•
Driveway	•	×	×	×	×	×
Three-sided wet cofferdam*	×	•	×	×	×	•
Horizontal directional drilling (HDD) and Horizontal auger boring (HAB) areas*	×	•	×	×	•	•
HVAC transmission cable	•	×	×	×	×	•
HVDC transmission cable	•	•	•	•	•	•

*temporary
• = yes Facility component in jurisdiction
× = no, Facility component not in jurisdiction

This exhibit analyzes potential land use and zoning impacts within the site boundary and the analysis area generally. Each jurisdiction categorizes the components of the Facility as a different land use, as addressed below. The approach for analysis included the following steps for each jurisdiction:

- Identification of whether the facility components were temporary or permanent.
- Identification of the base zone where the facility component(s) are proposed and the land use category that aligns within each zone.
- Identification of any overlay zones, and/or special zoning districts.
- Review applicable substantive criteria.
- Analysis of the land use and development criteria for Facility components.

3 Overview of Facility Land Uses and Zoning

The Facility, including individual components and related or supporting facilities, is described in detail in the Background Information Exhibit of this Application for Site Certificate (ASC). As discussed in the Background Information Exhibit, the Applicant is requesting to permit construction and operation of a Facility interconnecting the existing BPA Big Eddy 500kV AC substation located near The Dalles, Wasco County, Oregon (Eastern Interconnection), and the existing PGE Harborton 230-kV AC substation located in Portland, Multnomah County, Oregon (Western Interconnection) within a site boundary that provides for micrositing flexibility in anticipation of perpetual technological advances and offering maximum efficiency in use of space, providing flexibility for construction requirements. Also discussed in the Background Information Exhibit, the Applicant requests micro siting flexibility within the site boundary, which represents the limits of the area that may be temporarily or permanently disturbed during construction of the Facility.

This ASC analyzes impacts associated with the facilities located in Wasco County, City of the Dalles, Hood River County, City of Hood River, Multnomah County, and the City of Portland.

Additionally, portions of the facility in Wasco County and the Columbia River are located within the Columbia River Gorge National Scenic Area (CRGNSA or NSA). These areas are subject to the Management Plan for the CRGNSA, developed under the National Scenic Area Act requirements.

The allowed land uses and underlying zoning designations within the Facility site boundary and analysis area are relevant for purposes of analyzing the Facility’s compliance with applicable substantive criteria and directly applicable state land use regulations.

4 Local Land Use Approval (OAR 345-022-0030(7)(b)(B)(i) through (iv)

(B) If the applicant elects to obtain local land use approvals:

(i) Identify the affected local government(s) from which land use approvals will be sought;

(ii) Describe the land use approvals required in order to satisfy the Council's land use standard;

(iii) Describe the status of the applicant's application for each land use approval;

(iv) Provide an estimate of time for issuance of local land use approvals;

RESPONSE

The Applicant has elected to address OR EFSC's Land Use standard by obtaining a land use determination from OR EFSC pursuant to ORS 469.504(1)(b) (see Section 5 for more information). Therefore, these standards do not apply.

5 Council Determination on Land Use

The Applicant has elected to address OR EFSC's Land Use standard by obtaining a land use determination from OR EFSC pursuant to ORS 469.504(1)(b). OR EFSC's rules state that an applicant seeking OR EFSC's land use approval must identify the "applicable substantive [land use] criteria" of the relevant local governments and must describe how the facility complies with those criteria, as well as any LCDC rules, goals, or land use statutes that apply directly to the facility under ORS 197.646(3). If an applicant cannot demonstrate compliance with one or more of the applicable substantive criteria, the applicant must describe how the facility either complies with the statewide planning goals adopted by the LCDC, or alternatively, warrants a goal exception (OAR 345-022-0030). This exhibit demonstrates how the Facility, as proposed, complies with the applicable substantive criteria, and where it does not comply, demonstrates the Facility, as proposed, justifies a goal exception.

6 Identification of Applicable Substantive Criteria (OAR 345-022-0030(7)(b)(C)(i) and (ii)

The Facility will be located within multiple zones and jurisdictions. Section 6 provides an assessment of compliance with the applicable local substantive criteria for the Facility components in each jurisdiction.

(C) If the applicant elects to obtain a Council determination on land use:

(i) Identify the affected local governments;

(ii) Identify the applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and that are in effect on the date the application is submitted and describe how the proposed facility complies with those criteria.

RESPONSE

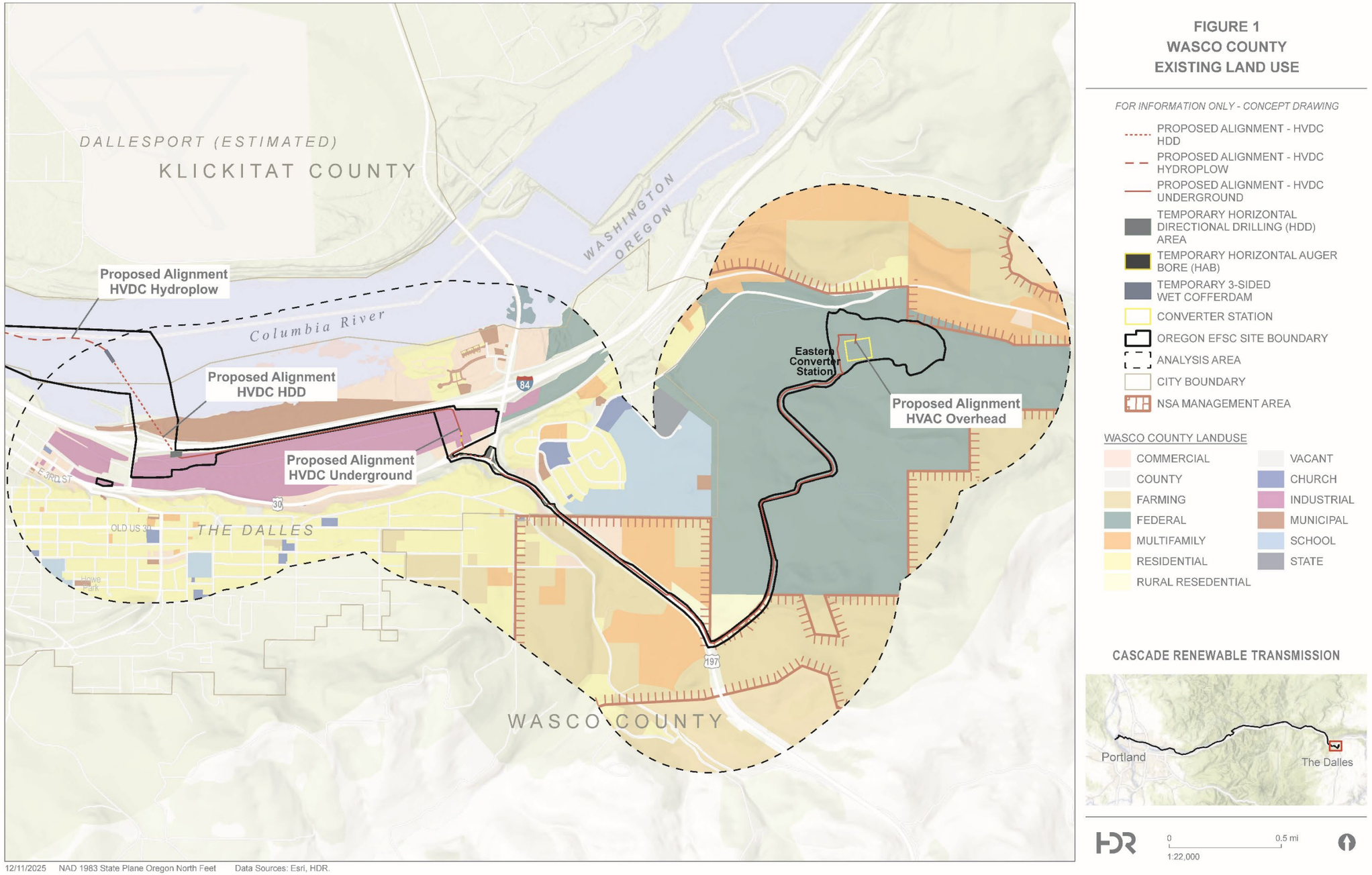
Applicable local substantive criteria are included below by jurisdiction. Code criteria that was procedural, administrative or not applicable were excluded from analysis.

6.1 Wasco County

The components of the Facility within Wasco County include the converter station laydown area, converter station, high-voltage alternating current (HVAC) transmission cable and HVDC transmission cable (Figure 1 Wasco County Existing Land Use, Figure 2A Wasco County Zoning and Overlay, Figure 2B NSA Zoning and Overlay). Portions of the HVAC transmission cable are also in the CRGNSA Management Area in Wasco County.

Table 3 shows a breakdown of the facility components within Wasco County and the CRGNSA Management Area, the zoning designations, overlay zones, land use and substantive criteria reviewed.

Figure 1. Wasco County Existing Land Use



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

Figure 2A. Wasco County Zoning and Overlay

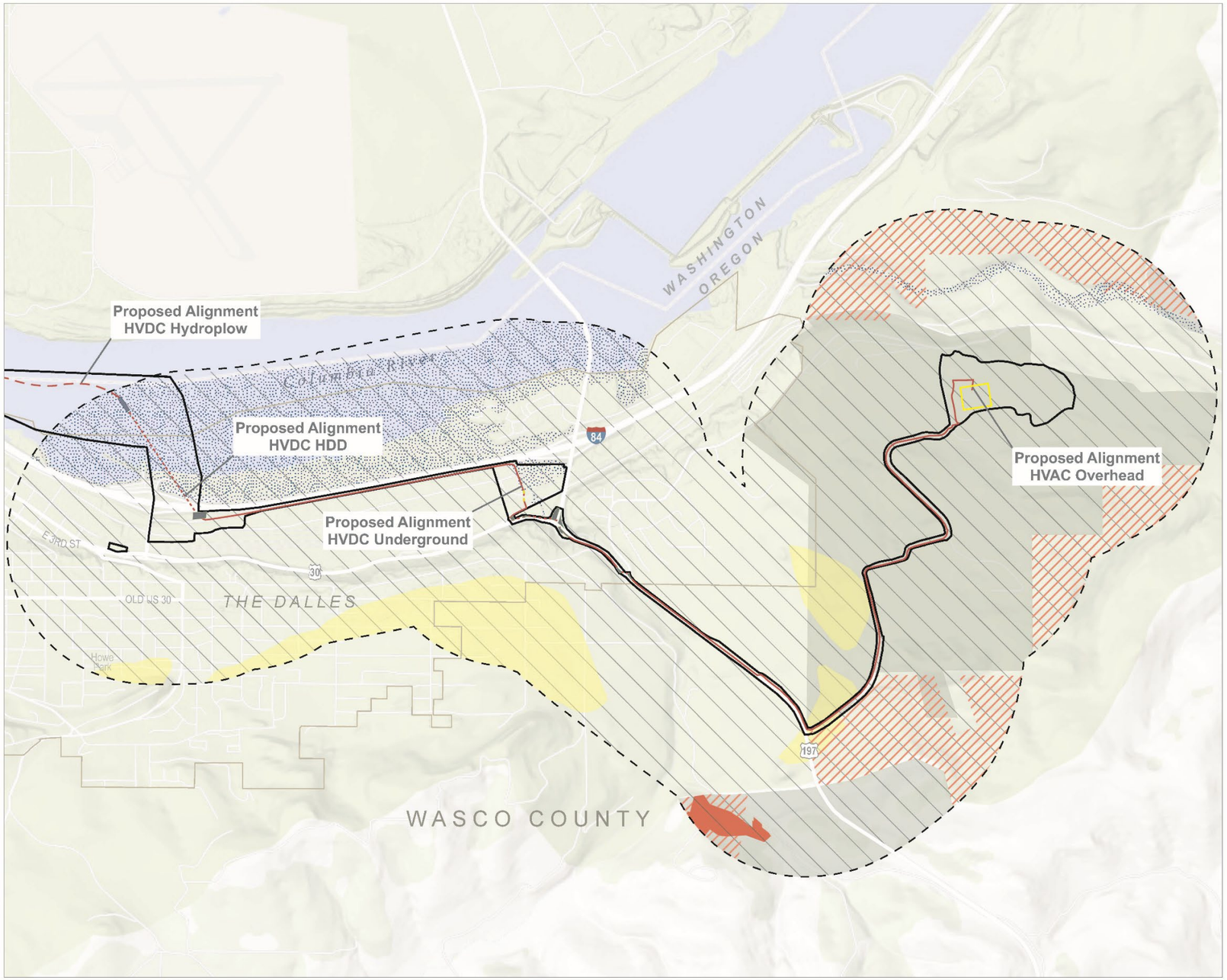


FIGURE 2A
WASCO COUNTY
ZONING AND OVERLAY

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- OREGON EFSC SITE BOUNDARY
- CONVERTER STATION
- ANALYSIS AREA

JURISDICTIONAL BOUNDARIES

- CITY/COUNTY

WASCO COUNTY BASE ZONES

- EXCLUSIVE FARM USE (A-1)
- RESIDENTIAL RURAL

WASCO COUNTY OVERLAY ZONES

- FLOOD HAZARD (OZ-1)
- GEOLOGIC HAZARD (OZ-2)
- SENSITIVE WILDLIFE HABITAT (OZ-8)
- MILITARY AIRSPACE (OZ-15)

CASCADE RENEWABLE TRANSMISSION

0 0.5 mi
1:22,000

12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

Figure 2B. NSA Zoning and Overlay

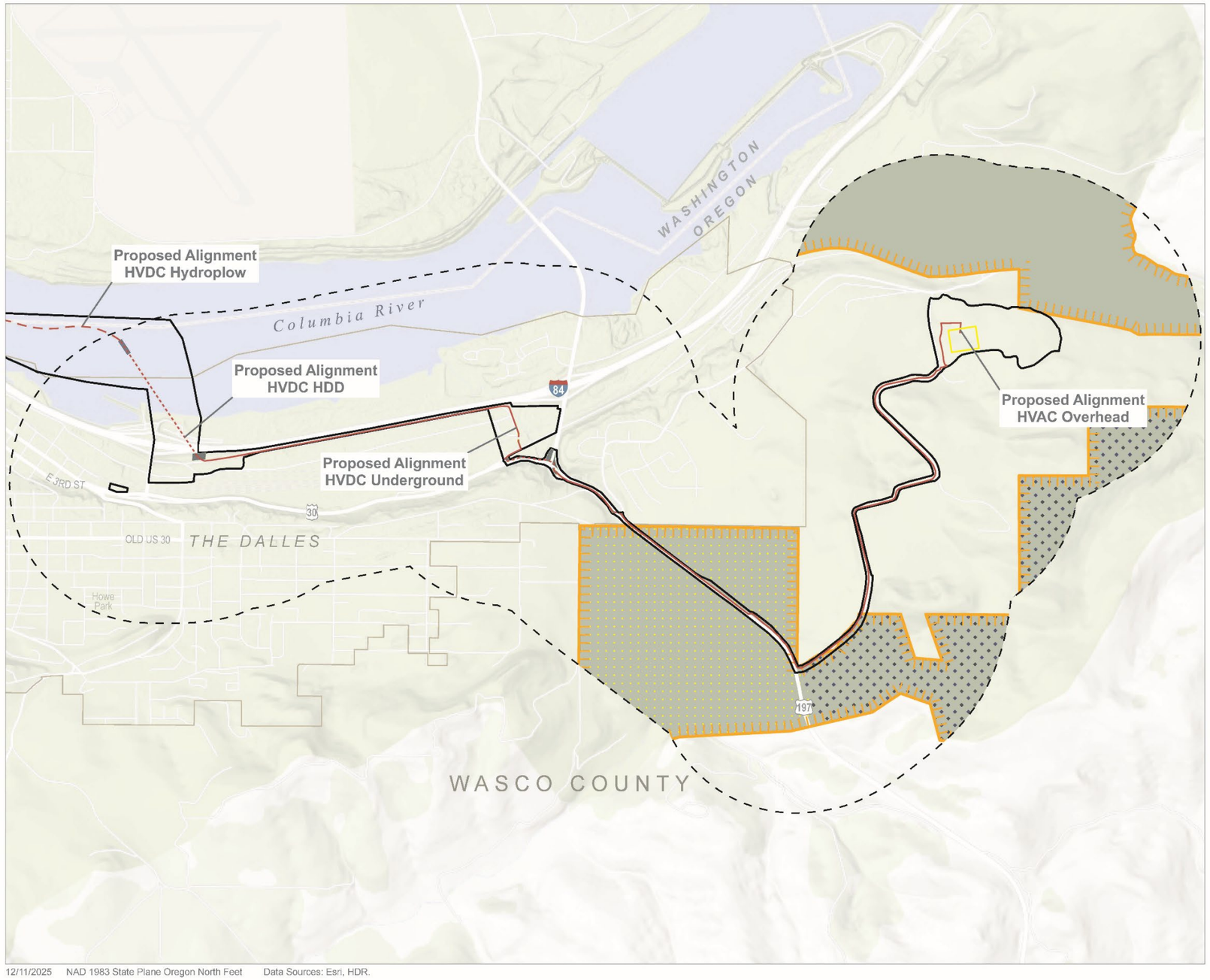


FIGURE 2B
NSA ZONING
AND OVERLAY

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- OREGON EFSC SITE BOUNDARY
- CONVERTER STATION
- ANALYSIS AREA

JURISDICTIONAL BOUNDARIES

- CITY/COUNTY
- NSA MANAGEMENT AREA

NSA BASE ZONE IN GMA

- LARGE SCALE AGRICULTURE (GMA A-1)

NSA OVERLAY ZONE

- GRASSLANDS (LANDSCAPE SETTING)
- PASTORAL (LANDSCAPE SETTING)

CASCADE RENEWABLE TRANSMISSION

0 0.5 mi
1:22,000

12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

Table 3. Breakdown of Facility components in Wasco County, Zoning Designations, Overlay Zones and Land Use

Facility Component	Description	Zone	Overlay Zone	Proposed Land Use
Converter station laydown area	Within the 5 acres at the converter station space. This area will be used for temporary laydown and staging during construction.	Exclusive Farm Use Zone (EFU A-1)	Military Airspace Overlay Zone (OZ 15)	Temporary construction
Converter station	On approximately 5 acres owned by the BPA (Wasco County tax lots 1N14E0900 and 2N14E31D1400)	Exclusive Farm Use Zone (EFU A-1)	Military Airspace Overlay Zone (OZ 15)	Utility facilities necessary for public service
Driveway	Approximately 275-foot driveway connecting the converter station to Columbia View Drive	Exclusive Farm Use Zone (EFU A-1)	None	Utility facilities necessary for public service
HVAC transmission cables	Approximately 500 feet connecting the converter station to the existing Big Eddy substation.	Exclusive Farm Use Zone (EFU A-1)	Military Airspace Overlay Zone (OZ 15)	Utility facilities necessary for public service
HVDC transmission cables	Approximately 2.43 miles, underground on-land	Exclusive Farm Use Zone (EFU A-1)	Military Airspace Overlay Zone (OZ 15), Geologic Hazard Overlay Zone, Sensitive Wildlife Habitat Overlay Zone (OZ 8)	Utility facilities necessary for public service
	Approximately 13.86 miles in-water	None	Flood Hazard Overlay Zone (OZ-1)	Utility facilities necessary for public service
	Approximately 1.15 miles, underground	NSA Large Scale Agriculture (A-1) GMA	Pastoral and Grasslands (landscape setting)	Utility facilities and railroads

The following criteria analysis demonstrates consistency of the Facility with identified applicable substantive criteria within Wasco County and the CRGNSA.

6.1.1 Exclusive Farm Use (EFU A-1) Base Zone

The on-land Facility components in Wasco County are primarily located within the Exclusive Farm Use (EFU) base zone (EFU A-1) (Figure 2C Proposed Facility Components in the EFU (A-1) Base Zone).

Criteria for development in the EFU A-1 base zone is in Section 3.210 of the Wasco County Land Use & Development Ordinance (WCLUDO).

WCLUDO: SECTION 3.214 - USES PERMITTED SUBJECT TO STANDARDS/TYPE II REVIEW

The following uses may be permitted on a legal parcel on lands designated Exclusive Farm Use (A-1) Zone subject to the Section 3.216 - Property Development Standards, Section 3.218 - Agricultural Protection, Chapter 10 - Fire Safety Standards, Chapter 20 - Site Plan Review only if the request includes off-street parking, off-street loading or bicycle parking, as well as any other listed, referenced or applicable standards:

UTILITY/ENERGY FACILITIES

Pursuant to Chapter 4 – Supplemental Provisions - Section 4.070, these uses do not require a variance if they exceed 35 feet in height.

N. Utility facilities "necessary" for public service, including wetland waste treatment systems and Electrical Transmission Facilities under 200 feet in height, but not including commercial utility facilities for the purpose of generating electrical power for public use by sale, or Electrical Transmission Facilities over 200 feet in height, subject to Section 3.219 G below.

RESPONSE

All proposed uses in Wasco County EFU A-1 zone meet the definition of a use consistent with "Utility Facilities Necessary for Public Service," defined in Section 1.090, Definitions, of the WCLUDO as,

Unless otherwise specified, any facility owned or operated by a public, private or cooperative company for the transmission, distribution or processing of its products or for the disposal of cooling water, waste or by-products, and including, major trunk pipelines, reservoirs (may require a Goal 3 or Goal 4 exception), dams & other hydroelectric facilities, water towers, sewage lagoons, cell towers, electrical transmission facilities (except transmission towers over 200' in height) including substations not associated with a commercial power generating facilities and other similar facilities.

The Facility would be operated by a public, private or cooperative company (managed at a local level through providers and/or utility companies) for the transmission electrical facilities under 200 feet in height (maximum height is estimated at 60 feet and the HVDC transmission cables would be underground), including substations and is not associated with a commercial power generating facility.

Figure 2C. Proposed Facility Components in the EFU (A-1) Base Zone

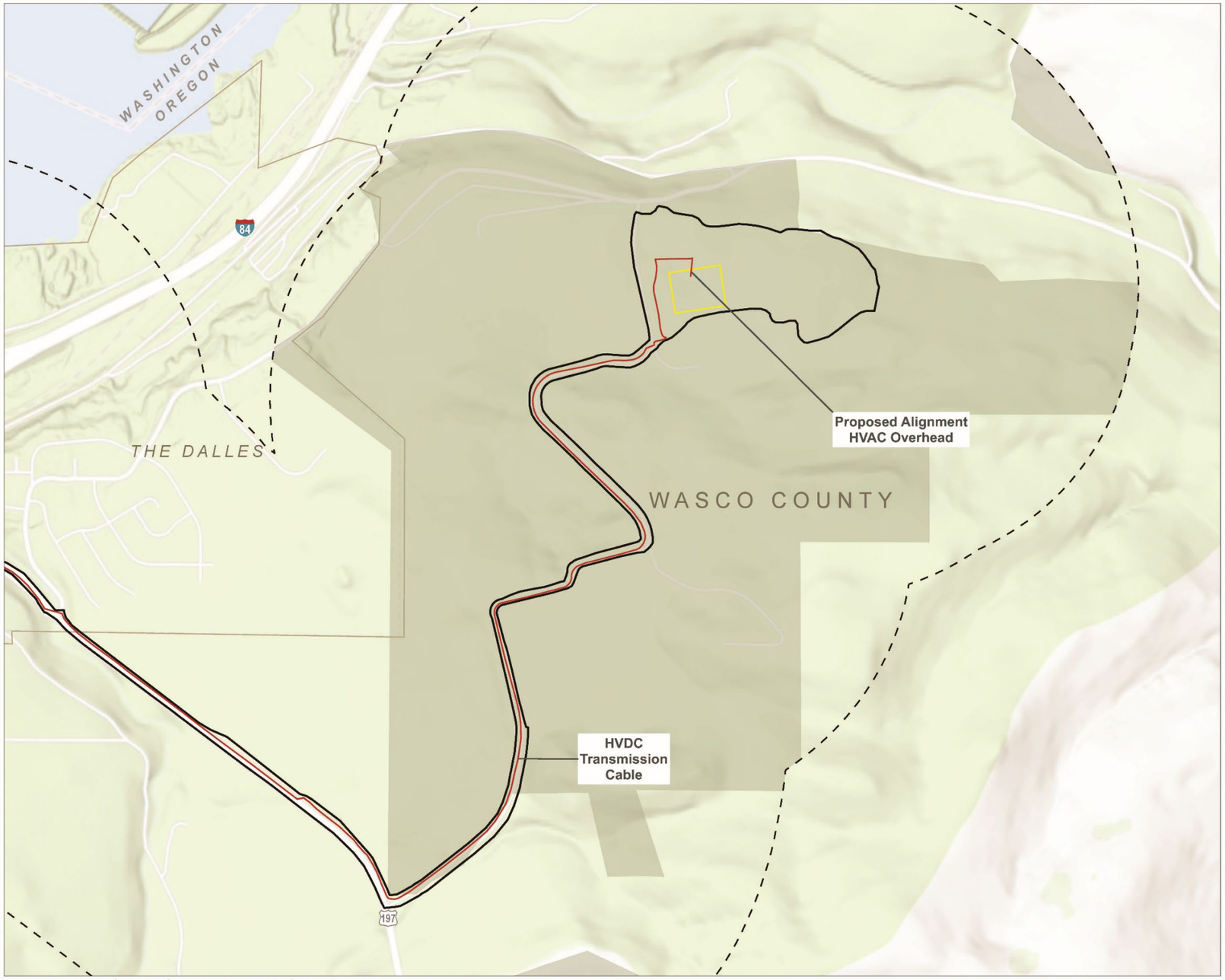


FIGURE 2C
PROPOSED FACILITY COMPONENTS
IN THE EFU (A-1) BASE ZONE

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- OREGON EFSC SITE BOUNDARY
- CONVERTER STATION
- ANALYSIS AREA

JURISDICTIONAL BOUNDARIES

- CITY/COUNTY

WASCO COUNTY ZONING

- EXCLUSIVE FARM USE (A-1)

CASCADE RENEWABLE TRANSMISSION

0 0.3 mi
1:12,000

10/16/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

Utility/Energy Facilities are listed as a permitted use in the EFU-A1 zone (Section 3.214), subject to compliance with standards of WCLUDO Section 3.216 – Property Development Standards, 3.218 – Agricultural Protection, 3.219 (G), Chapter 10 and Chapter 20, and requirements of a Type II Review for a Development Permit (WCLUDO Section 2.070(B) – Type II Administrative Review Procedures (Development Permit)).

Compliance with applicable standards of WCLUDO Sections 3.216, 3.218; 3.219 (G); Chapter 10; Chapter 20; and Section 2.070(B), are analyzed below.

WCLUDO: SECTION 3.216 – PROPERTY DEVELOPMENT STANDARDS

Property development standards are designed to preserve and protect the character and integrity of agricultural lands, and minimize potential conflicts between agricultural operations and adjoining property owners. A variance subject to WCLUDO Chapter 6 may be utilized to alleviate an exceptional or extraordinary circumstance that would otherwise preclude the parcel from being utilized. A variance to these standards is not to be used to achieve a preferential siting that could otherwise be achieved by adherence to these prescribed standards.

A. Setbacks

5. All development will be setback 25 feet from roads or access easements.

RESPONSE

Aboveground components of the Facility (the converter station, HVAC cables, and lattice structures) would be designed to meet all setback requirements in coordination with the landowner. The underground HVDC would be less than 25 feet from Columbia View Drive but would not interfere with roads or access easements.

D. Signs

RESPONSE

Signs would be erected in accordance with local, state, and federal requirements and regulations.

E. Lighting: Outdoor lighting shall be sited, limited in intensity, shielded and hooded in a manner that prevents the lighting from projecting onto adjacent properties, roadways and waterways. Shielding and hooding materials shall be composed of non-reflective, opaque materials.

RESPONSE

Outdoor lighting at the converter station would be designed in accordance with local, state, and federal requirements and regulations.

F. Parking: Off street parking shall be provided in accordance with Chapter 20.

RESPONSE

The converter station would have four to five parking spaces according to the parking space requirements for employees in industrial uses; off-street parking is not required as part of the proposal.

G. New Driveways: All new driveways and increases or changes of use for existing driveways which access a public road shall obtain a Road Approach Permit from the appropriate jurisdiction, either the Wasco County Public Works Department or the Oregon Department of Transportation.

RESPONSE

The vehicular route to the converter station is from Columbia View Drive. A new driveway would be constructed to connect the converter station to Columbia View Drive. The Applicant will obtain a Road Approach Permit, prior to construction, from the Wasco County Public Works Department or the Oregon Department of Transportation (ODOT). Therefore, the Applicant demonstrates that this criterion will be met.

WCLUDO: SECTION 3.218 – AGRICULTURAL PROTECTION

The uses listed in Section 3.214 – Uses Allowed Subject to Standards and Section 3.215 – Conditional Uses, must meet the following standards:

A. Forest Farm Management Easement: The landowner is required to sign and record in the deed records for the county a document binding the landowner, and the landowner's successors in interest, prohibiting them from pursuing a claim for relief or case of action alleging injury from farming or forest practices for which no action or claim is allowed under ORS 30.936 or 30.937.

B. Protection for Generally Accepted Farming and Forestry Practices – Complaint and Mediation Process: The landowner will receive a copy of this document.

RESPONSE

In the EFU A-1 zone, the Facility is a permitted use, under WCLUDO 3.214(N), subject to a Type II Review. The Applicant would ensure a Farm-Forest Management Easement is signed and recorded with the county by each of the landowners within the site boundary. As the landowner of the converter station site in the EFU A-1 zone, BPA is anticipated to sign the documentation required per WCLUDO Section 3.218. The criteria will be satisfied.

WCLUDO: SECTION 3.219 (G) – ADDITIONAL STANDARDS

G. Utility Facility:

1. A utility facility is necessary for public service if the facility must be sited in an exclusive farm use zone in order to provide the service. To demonstrate that a utility facility is necessary, an applicant must show that reasonable alternatives have been considered and that the facility must be sited in an exclusive farm use zone due to one or more of the following factors:

a. Technical and engineering feasibility;

b. The proposed facility is locationally dependent. A utility facility is locationally dependent if it must cross land in one or more areas zoned for exclusive farm use in order to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;

d. Availability of existing rights of way;

2. *Costs associated with any of the factors listed in a. may be considered, but cost alone may not be the only consideration in determining that a utility facility is necessary for public service. Land costs shall not be included when considering alternative locations for substantially similar utility facilities and the siting of utility facilities that are not substantially similar.*
3. *The owner of a utility facility approved under this section shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility. Nothing in this subsection shall prevent the owner of the utility facility from requiring a bond or other security from a contractor or otherwise imposing on a contractor the responsibility for restoration.*

RESPONSE

As described in more detail in Section 10 of the Background Information Exhibit, the Applicant selected the project corridor for construction and operation primarily in areas of existing road ROW and developed urban areas. The Applicant also elected to place components underground or install them in-river (under water) to the greatest extent possible to minimize disturbance to the environment and sensitive areas.

The Facility is locationally dependent because it would interconnect the existing BPA Big Eddy 500kV AC substation and the existing PGE Harborton 230-kV AC substation. The Applicant selected the converter station site within the EFU A-1 zone because it is adjacent to the Big Eddy substation. The existing land use on the proposed converter station site is BPA federal use as electricity transmission assets. Adjacent land use within the analysis area is also classified as federal land use and includes the Big Eddy substation, a federal use, set aside for electrical/ industrial uses and farming near the extent of the analysis area. The converter station requires approximately 5 acres, is graveled and fenced with minimal parking, and includes appropriate site-specific drainage. The converter station would include conventionally designed converter transformers and protective circuit breakers and include a control room for operating the facility as well as basic facilities for staff (bathroom/kitchen). The HVAC and HVDC transmission cables are proposed in right-of-way (ROW) and industrial, farming and residential uses are immediately adjacent. Although the transmission cables are proposed primarily in areas of existing road ROW, the transmission cables must cross land zoned EFU A-1 for short distances in order to achieve a reasonably direct route.

WCLUDO: CHAPTER 10: FIRE SAFETY STANDARDS

A. *Applicability of Fire Safety Standards in Different Rural Zones: County Ordinances affect all rural zones (all zones outside an Urban Growth Boundary). All rural zones are subject to fire standards but the applicability of the specific standards varies by zone and by use type. Zoning terms used to classify groups of land use designations in the Fire Safety Standard Checklist, Sections 10.110 to 10.150, are defined in the following table (any more specific distinctions based on parcel shape or specific zoning designation are also called out in the checklist):*

RESPONSE

The Facility is a utility facility located within the EFU A-1 zone, which is considered a rural zone in Wasco County. WDLUCO defines a building as "[a]ny structure built for the shelter, or enclosure of any persons, animals, chattels, or property of any kind" (WCLUDO Section 1.090). None of the components of the Facility in Wasco County are consistent with the definition of a building.

WDLUCO defines a structure as "[a]nything constructed, erected or built, permanent or temporary, which requires location on the ground. Among other things, structure includes buildings, walls, fences, billboards, poster panels and parking lots. Retaining walls less than four (4) feet in height are not considered structures for the sake of general property line setbacks" (WCLUDO Section 1.090). The proposed converter station in Wasco County is consistent with the definition of a structure. Therefore, Fire Safety Standards (Sections 10.210, 10.130 and 10.140) are applicable to the converter station as a structure and are addressed below.

WCLUDO: SECTION 10.210 – FIRE SAFETY STANDARD REVIEW PROCESS

A. *Compliance with applicable fire safety standards is required by the ordinance for new, replacement, and modified structures in all rural zones.*

RESPONSE

The converter station would be equipped with fire protection and suppression systems in accordance with the applicable National Fire Protection Association (NFPA) codes, Oregon Fire Code, and municipal codes in Wasco County. In addition, the design would meet the recommendations stated in NFPA Standard 850, "Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations."

The proposed converter station buildings would have fire-resistant roofing.

WCLUDO: SECTION 10.130 - CONSTRUCTION STANDARDS FOR DWELLINGS AND STRUCTURES

A. *Is your building designed, built, and maintained to include the following features and materials necessary to make the structure more fire resistant?*
   1. *Roof Materials: Do you or will you have fire resistant roofing installed to the manufacturers specification and rated by Underwriter's Laboratory as Class A, B, or its equivalent (includes but not limited to: slate, ceramic tile, composition shingles, and metal)? NOTE: To give your structure the best chance of surviving a wildfire, all structural projections such as balconies, decks and roof gables should be built with fire resistant materials equivalent to that specified in the uniform building code.*
   4. *Utilities: If your private utility service lines are not underground will the utilities be: a. Kept clear along their route? b. Have a single point of access to the building? Do all new buildings and structures served by electricity include a clearly marked power disconnect switch at the pole or off-grid power source?*
   5. *Stand Pipe: Will a stand pipe be provided 50 feet from the dwelling or any structure served by a plumbed water system?*

RESPONSE

The proposed converter station buildings would have fire-resistant roofing. The converter station buildings would have power disconnect switches in compliance with NFPA codes, Oregon Fire Code, and municipal codes in Wasco County. Additionally, the converter building would house the following fire detection equipment:

- Ultraviolet (UV) flash detectors: These would detect an electrical flash and provide both fire alarm and high-voltage trip functions.
- Very Early Smoke Detection Apparatus (VESDA) equipment: The VESDA is a redundant and highly-sensitive smoke detection system. Again, different levels of detection would provide both fire alarm and high voltage trip functions.
- Addressable smoke and heat detection sensors, and pull stations connected to a fire panel. The detector loops would be supervised for continuity with any failure of a device indicated by a trouble alarm. The fire panel would typically report any fire alarms or troubles to a security monitoring service.
- An inert gas (FM-200) fire suppression system. This system is typically situated below the floor level to protect the cabling between the control and protection cubicles.
- Portable fire extinguishers, as required.

The proposed HVDC cables would not require fire detection and suppression. The cables would be located underground and underwater and have sensitive and rapid protection schemes to quickly trip the interconnection and remove all energy from the cable in the event of a fault.

WCLUDO: SECTION 10.140 – ACCESS STANDARDS

The Facility does not involve a dwelling; therefore, the residential driveway access standards in subsections (A)-(H) do not apply. However, as discussed in response to Section 3.216(G) above, the Facility will be accessed from Columbia View Drive. The Facility complies with access standards; therefore, the intent of this standard is satisfied.

WCLUDO: CHAPTER 20.030 – CONTENTS OF THE SITE PLAN

The Site Plan shall clearly indicate the following information:

A. Lot dimensions.

B. Location, size, height, of all existing or proposed buildings and structures, and illustrating the buildings and parking facilities on abutting properties.

C. Location, size and dimension of all yards and setbacks and all spaces between buildings.

D. Walls and fences: Location, height and materials.

F. Access: Pedestrian, vehicular, service; and definitions of all points of ingress and egress.

G. Signs: Location, size, height, material and method of illumination.

I. Lighting: General nature, location and hooding devices (not including interior building lighting).

K. A detailed plan for landscaping, if determined necessary by the Planning Director which shall clearly illustrate:

1. *Plants and tree species, their initial sizes and other proposed landscaping materials.*
2. *The location and dimensions of all areas to be devoted to landscaping, and location of automatic sprinkler systems.*

M. *Drainage and grading plan.*

N. *Identification of proposed trash storage locations, including proposed enclosure design construction and access for pick up purposes.*

O. *Location of existing utility poles.*

RESPONSE

A site plan is included in the Background Information Exhibit, Figures 10 through 12, which includes site plan contents that are applicable to the proposal. Contents that are not applicable include E (off-street parking), H (loading), J (general public property), and L (outdoor storage and activities).

WCLUDO: SECTION 2.070(B) – TYPE II ADMINISTRATIVE REVIEW PROCEDURES (DEVELOPMENT PERMIT)

6. *Additional Considerations for Decision:*
   a. *The applicant has the burden to demonstrate that the application complies with the applicable standards and criteria. The applicant shall demonstrate by substantial evidence in the record that:*
      i. *The proposed action fully complies with the applicable map elements of the Comprehensive Plan.*
      ii. *The proposed action fully complies with other applicable elements of the Comprehensive Plan.*
      iii. *The proposed action is in accordance with the applicable criteria of this Ordinance.*

RESPONSE

The Facility would comply with the land use and zoning maps, which indicate all facility components within Wasco County are in the EFU-A1 zone. This exhibit demonstrates the Facility's applicability with criteria in this ordinance. Compliance with applicable elements of the Wasco County Comprehensive Plan is summarized in Table 4.

Table 4. Wasco County Comprehensive Plan Consistency

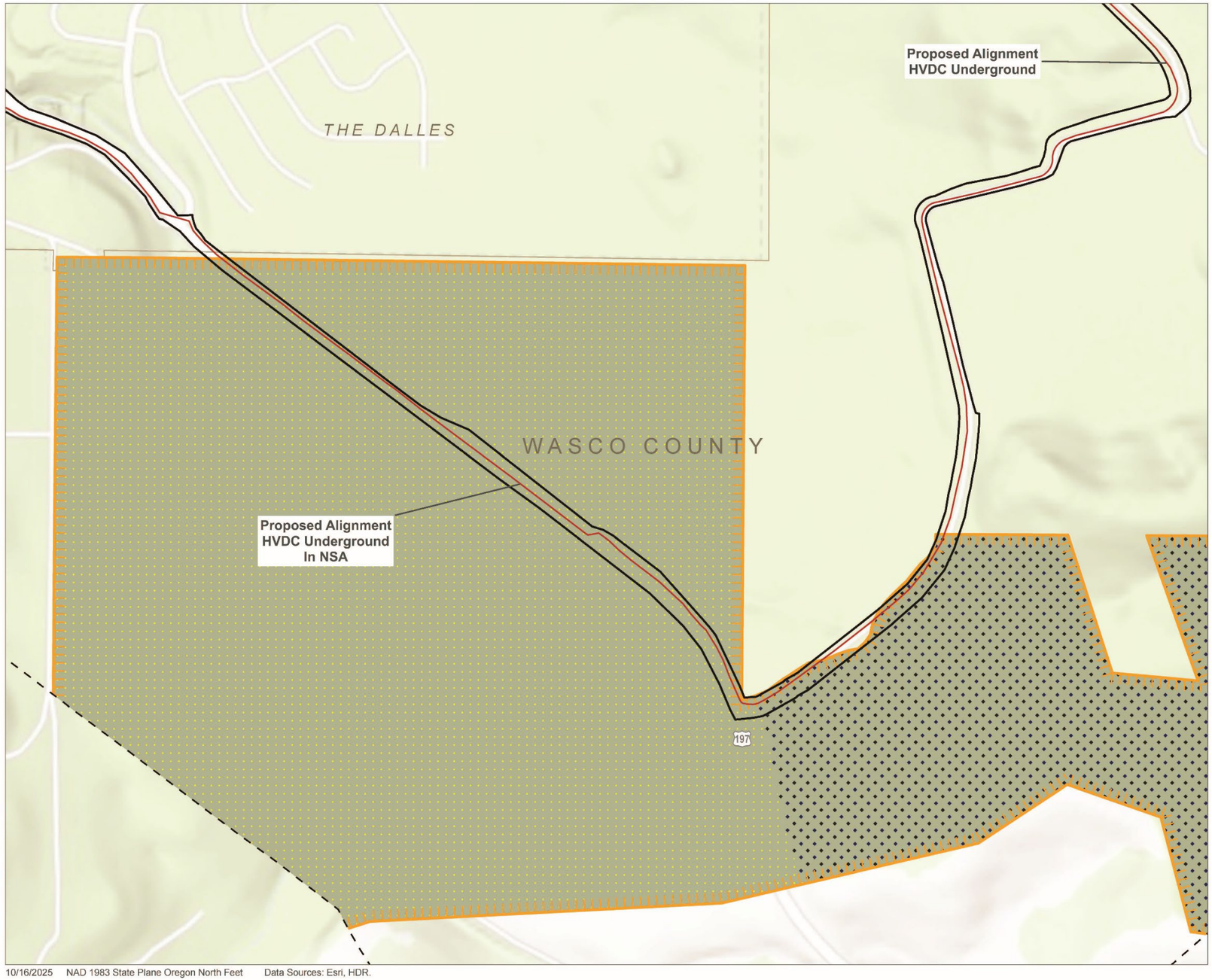
Wasco County Comprehensive Plan Goal	Objective/Policy	Consistency Determination
Goal #3: Agricultural Lands To preserve and maintain agricultural lands	**Policy 1: Maintain Exclusive Farm Use Zoning**	
	Policy 1b: Minimum lot sizes in agricultural zones shall be appropriate for the preservation of ground water resources, continued agricultural use and aesthetic qualities	**Consistent.** The Facility would not change the minimum lot size or the availability of water resources. It would maintain the existing level of agricultural use and aesthetic qualities which are related to existing uses of development in agricultural-rural areas.
	Policy 1b-3: Non-farm uses permitted within farm use zones adopted pursuant to O.R.S. 215.213 should be minimized to allow for maximum agricultural productivity	**Consistent.** The Facility is a utility facility necessary for public service and is allowed subject to standards.
Goal #11: Public Facilities and Services To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development	**Policy 3: Minimize adverse impacts resulting from power line corridor and utility development**	
	Policy 3b: When economically and physically feasible, transmission lines should be laid underground	**Consistent.** The Facility would place a majority of the transmission cables underground in the existing right-of-way.
	Policy 3e: Maximum utilization of existing utility right-of-way should be encouraged to minimize the need for additional rights-of-way	**Consistent.** The Facility would place a majority of the transmission cables underground in the existing right-of-way.
Goal #13: Energy Conservation To conserve energy, reduce waste, and increase self-sufficiency	**Policy 13.1.7:** Applications processed by OR EFSC or FERC shall be adopted into the Comprehensive Plan as significant energy sources. Energy sources are considered a Goal 5 resource and should be protected as required by OAR 660-023."	**Inconclusive.** OAR defines “Energy Sources” as including “naturally occurring locations, accumulations, or deposits of one or more of the following resources used for the generation of energy: natural gas, surface water (i.e., dam sites), geothermal, solar, and wind areas. However, this policy requires that applications processed by OR EFSC would be adopted into the Comprehensive Plan as significant energy sources under Statewide Planning Goal 5. Following issuance of the site certificate, the County could comply with this policy by adding the facility to its Goal 5 map.

6.1.2 NSA GMA Large Scale Agriculture (A-1) Base Zone

A portion of the HVDC transmission cable is in the General Management Area (GMA) of the NSA, in Zone A-1, “Large Scale Agriculture in the “Pastoral” and “Grasslands” landscape settings. Development in the NSA portion of Wasco County must conform to the Comprehensive Plan and Management Plan for the Columbia River Gorge National Scenic Area. The proposed land use would be consistent with a “Miscellaneous Use – Utility facilities,” which is permitted conditionally (Figure 2D Portion of the HVDC Transmission Cables in the NSA (GMA) A-1, Pastoral And Grasslands Landscape Settings).

Criteria for development in the NSA GMA A-1 base zone is in Section 3.120 and for Pastoral landscape settings Section 14.400 of the NSA Land Use and Development Ordinance (NSA LUDO).

Figure 2D. Portion of the HVDC Transmission Cables in the NSA (GMA) A-1, Pastoral And Grasslands Landscape Settings



10/16/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 2D
PORTION OF THE HVDC TRANSMISSION CABLES IN NSA (GMA) A-1, PASTORAL AND GRASSLANDS LANDSCAPE SETTINGS

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- NSA MANAGEMENT AREA

JURISDICTIONAL BOUNDARIES

- CITY/COUNTY

NSA BASE ZONE IN GMA

- LARGE SCALE AGRICULTURE (GMA A-1)

NSA OVERLAY ZONE

- GRASSLANDS (LANDSCAPE SETTING)
- PASTORAL (LANDSCAPE SETTING)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:7,000

NSA LUDO: SECTION 3.120 (E) – USES PERMITTED CONDITIONALLY

E. The following uses and activities may be allowed with conditions on a legal parcel designated Large Scale Agriculture subject to Subsection G - Property Development Standards, Chapter 5 - Conditional Use Review, Chapter 11 - Fire Safety Standards & Chapter 14 - Scenic Area Review, as well as any other listed or referenced standards.

MISCELLANEOUS USE

20. Utility facilities and railroads necessary for public service upon a showing that (GMA & SMA):

a. There is no practicable alternative location with less adverse effect on the scenic, cultural, natural, recreational, agricultural or forest lands; and

b. The size is the minimum necessary to provide the service.

RESPONSE

The portion of the HVDC transmission cables in the NSA GMA A-1 zone would be buried and would meet the definition of a use consistent with "Miscellaneous Use – Utility facilities." The HVDC transmission cables in the CRGNSA jurisdiction are within previously disturbed road right-of-way. Placement in the road ROW is also consistent with placement of buried utilities. Alternative locations considered included outside of road ROW, on private land, through forests or recreation areas - all of which were determined to have a higher degree of scenic, cultural, natural, recreational, agricultural or forest land impacts.

The size needed for the HVDC transmission cables would be the minimum footprint to safely install during construction. After construction, the footprint would be underground and would not interfere with scenic, cultural, natural recreational, agricultural or forest land uses.

Because the HVDC transmission cables in the CRGNSA LUDO in Wasco County would not involve establishing a parcel, developing a building or structure, no criteria apply from Subsection G – Property Development Standards and Chapter 11 - Fire Safety Standards. Analysis follows for Chapter 5 - Conditional Use Review, Chapter 14 - Scenic Area Review, as well as any other listed or referenced standards.

NSA LUDO: CHAPTER 5 - CONDITIONAL USE REVIEW, SECTION 5.020 AUTHORIZATION TO GRANT OR DENY CONDITIONAL USES, AND STANDARDS AND CRITERIA USED

Conditional uses listed in this Ordinance shall be permitted, enlarged or otherwise altered or denied upon authorization by Administrative Action in accordance with the procedures set forth in Chapter 2 of this Ordinance. In judging whether or not a conditional use proposal shall be approved or denied, the Administrative Authority shall weigh the proposal's appropriateness and desirability or the public convenience or necessity to be served against any adverse conditions that would result from authorizing the particular development at the location proposed, and to approve such use, shall find that the following criteria are either met, can be met by observance of conditions, or are not applicable.

A. The proposal is consistent with the goals and objectives of the Management Plan for the Columbia River Gorge National Scenic Area, and consistent with the provisions of the County's implementing ordinances.

RESPONSE

Applicable GMA goals and objectives of development in the Management Plan for the Columbia River Gorge NSA are addressed in Table 5.

Table 5. NSA Management Plan Consistency

NSA GMA Provision Section/Chapter	Goal/Objective/Policy	Consistency Determination
Chapter 1: Scenic Provisions	**Overall Scenic Provisions**	
	Goal: Protect and enhance the scenic resources of the Scenic Area.	**Not Applicable.** The scenic resources chapter includes guidelines that only regulate uses that will be seen from key viewing areas and scenic travel corridors. Since the portion of the Facility that is within the NSA is subterranean, scenic provisions are not applicable. For more information, see the Historic, Cultural and Archeological Resources Exhibit.
Chapter 2: Cultural Resources	**Protecting Cultural Resources**	
	Goal 1: Protect and enhance cultural resources.	**Consistent**. Most known resources have been avoided through project design. Avoidance has been achieved either through spanning overhead lines over the resource or through moving project components. Avoidance of these resources will be ensured through monitoring during construction. For more information, see the Historic, Cultural and Archeological Resources Exhibit.
	Goal 2: Ensure that proposed uses do not have an adverse effect on significant cultural resources	**Consistent.** The project, taking into account mitigation, has been designed to avoid significant impacts on historic, cultural, and archaeological resources identified within the analysis area. Despite this effort, some impacts may occur because of the project. All impacts will be mitigated to less than significant. The *Historical Resource Mitigation Plan (HRMP*) provided as an attachment to the Historic, Cultural and Archeological Resources Exhibit, identifies proposed mitigation measures for visual impacts to historic sites that may be eligible for NRHP listing and will have a view of the project. For more information, see the Historic, Cultural and Archeological Resources Exhibit.

NSA GMA Provision Section/Chapter	Goal/Objective/Policy	Consistency Determination
	Objective: Survey all lands in the GMA for cultural resources as soon as funds are available. The Gorge Commission shall facilitate a multiparty effort to seek funds for such a survey. The parties should include Indian tribal and local governments and state and federal agencies. The first phase of the inventory should consist of a Native American oral history program.	**Not Applicable. T**his objective directs the Gorge Commission to take action and does not apply to private applicants. As part of the OR EFSC process, lands in the GMA were surveyed as part of the whole project. The desktop and field surveys included areas that may be directly and indirectly impacted by the project. This includes all micro siting corridors and cultural resources survey corridors within the project site boundary.
Chapter 3: Natural Resources The natural resource objectives, policies, and guidelines for the GMA are divided into five sections: wetlands; streams, ponds, lakes, and riparian areas; wildlife habitat; rare plants; and natural areas. They regulate most uses, except low-intensity activities and forest practices.	**Wildlife Habitat**	
	Goal 1: Ensure that new uses do not adversely affect sensitive wildlife areas and sites. “Sensitive wildlife areas” means the 17 land and water areas that are include in the wildlife inventory (Table 2, GMA).	**Consistent.** The portion of the proposal that is in the NSA in Wasco County is located along paved roadways with disturbed ROW. No sensitive wildlife areas were observed during these surveys where ground disturbance from Project construction would occur.
	Rare Plants	
	Goal 1: Ensure that new uses do not adversely affect plant species.	**Consistent.** The majority of the Project Corridor is located along paved roadways within disturbed ROW. Special status plant surveys were conducted in May and June 2024, concurrently with the habitat verification and mapping surveys. No special status plant species were observed during these surveys within the Project corridor in areas where ground disturbance from Project construction would occur.
	Goal 2: Encourage the protection of plant species that are classified as “List 3 (Review)” or “List 4 (Watch)” by the Oregon Natural Heritage Program or “Monitor” by the Washington Natural Heritage Program	**Consistent.** Since there were no special status species observed, protection is not proposed.
	Goal 3: Enhance the natural habitat of rare plant species	**Not Applicable.** Since there were no special status species observed, enhancement is not proposed.
	Objective: Update the rare plant species inventory as new plant sites are discovered and federal or state rare plant lists are revised. The update will be conducted by the Gorge Commission.	**Consistent.** See response to Goal 1. If rare plant species are discovered, the Gorge Commission will be notified for updates.

NSA GMA Provision Section/Chapter	Goal/Objective/Policy	Consistency Determination
Section 2, Chapter 1: Agricultural Land	**Large-Scale and Small-Scale Agriculture**	
	Goal: Protect and enhance agricultural land for agricultural uses	**Consistent.** The portion of the HVDC transmission cables that are proposed in the NSA are in road ROWs and not on agricultural land.
	Policy 2: The following uses may be allowed on lands designated Large-Scale or Small-Scale Agriculture, subject to compliance with guidelines for the protection of scenic, cultural, natural, and recreation resources and the "Approval Criteria for Specified Review Uses", below: Utility facilities and railroads necessary for public service upon a showing that (1) there is no practicable alternative location with less adverse effect on agricultural or forest lands, and (2) the size is the minimum necessary to provide the service	**Consistent.** The placement of the HVDC transmission cables in the road right-of-way is the least adverse option. Any other option outside of ROW would be on agricultural land. Although, once constructed, the HVDC transmission cables would be underground and not interfere with any above-ground land uses, placement in the road ROW is still the alternative with the least adverse effect on neighboring agricultural land.
Section 2, Chapter 7: General Policies and Guidelines Standards for Applications, Expiration of Approvals, and Vested Rights	**Standards for Applications**	
	Guideline 1: Complete Application Required: Any proposed use, development or structure shall be reviewed according to the standards in effect on the date an applicant submitted a complete land use application to the reviewing agency. A complete application is one that the reviewing agency determines meets the Management Plan's requirements for: (1) a complete application form, (2) a complete site plan, and (3) all applicable information specified in the parts of the Management Plan titled Resource Protection and Enhancement, Land Use Designations, and Indian Tribal Treaty Rights and Consultation. Incomplete applications shall not be reviewed.	**Consistent.** The Applicant has elected to address OR EFSC's Land Use standard by obtaining a land use determination from OR EFSC pursuant to ORS 469.504(1)(b). A completed application form and site plan will be provided as part of the materials for the Land Use Exhibit compliance. No other information required was identified in the Resource Protection and Enhancement, Land Use Designations, and Indian Tribal Treaty Rights and Consultation sections of the Management Plan.

B. Taking into account location, size, design and operational characteristics of the proposed use, the proposal is compatible with the surrounding area and development of abutting properties by outright permitted uses.

RESPONSE

The HVDC transmission cables in the CRGNSA jurisdiction are within previously disturbed road ROW. Surrounding area and abutting property includes a combination of farming, multifamily and commercial land uses. The Facility is a non-farm use and is not allowed outright, but with a Conditional Use Permit.

C. The proposed use will not exceed or significantly burden public facilities and services available to the area, including, but not limited to: roads, fire and police protection, sewer and water facilities, telephone and electrical service, or solid waste disposal facilities.

RESPONSE

The portion of the Facility in the CRGNSA jurisdiction within Wasco County would be approximately 1.15 miles of the total 3.5 miles of HVDC transmission cable in Wasco County. Public facilities and services available to the area are discussed in the State and Local Laws and Regulations Exhibit: Water Use, Public Services Exhibit: Public and Private Service Providers, and Waste Minimization Exhibit: Solid Waste and Wastewater and summarized below in the context of the CRGNSA portion of the HVDC transmission cable.

During construction, sanitary waste would be collected on site in portable toilets maintained by a licensed subcontractor and disposed of in accordance with local jurisdictional regulations. Water would be used for mixing concrete, mixing drilling mud for horizontal directional drilling (HDD), site grading and compaction, and dust suppression. Solid waste disposal during construction and operations will be provided through a private contract with a local, licensed commercial hauler or haulers and is not anticipated to disrupt services already being provided in the greater The Dalles. The construction contractor will submit a plan for approval by the Applicant on how solid waste materials during construction will be reused, recycled, or disposed of in accordance with OAR 340-093-0010. That plan will specify the names and locations of appropriate recycling and waste disposal facilities, collection requirements, and hauling requirements.

The Facility is supported by various law enforcement service providers. The Applicant does not anticipate that the construction and operation of the Facility will impact law enforcement services in communities outside the major metropolitan areas. To reduce the potential for construction-related fires, the Applicant has prepared a draft fire prevention and suppression plan to ensure that fire prevention and suppression measures are carried out in accordance with federal, state, and local regulations.

During operation, public facilities and services would not be required for the HVDC transmission cable in the NSA jurisdiction within Wasco County.

D. The proposed use will not unduly impair traffic flow or safety in the area.

RESPONSE

The HVDC cable would be installed in the State Route 197 (SR 197) ROW, adjacent to and surrounded by rural uses and pavement ratings range from fair to good. The Applicant would provide a Traffic Control Plan with the ODOT Utility Accommodation application prior to construction to ensure traffic flow and safety are maintained during construction. Analysis related to traffic flow impacts and safety requirements for mitigation is in the Public Services Exhibit.

During operation, the HVDC transmission cable in the CRGNSA jurisdiction within Wasco County would not impair traffic flow or safety because it would be buried, and no maintenance is required.

E. The effects of noise, dust and odor will be minimized during all phases of development and operation for the protection of adjoining properties.

RESPONSE

Construction of buried cable would involve HDD. Open trenching on land would include a backhoe, front loader, dump truck, concrete mixer truck, grader, and roller. OAR 340-035-0035(5) specifically exempts construction activity from the state noise standards and regulations. Odor effects are not applicable as no odor producing materials or facilities are proposed.

F. The proposed use will not significantly reduce or impair sensitive wildlife habitat, riparian vegetation along streambanks and will not subject areas to excessive soil erosion.

RESPONSE

There is no sensitive wildlife habitat, riparian vegetation identified in the CRGNSA within Wasco County. All construction work would be done in compliance with an erosion and sediment control plan (ESCP) satisfactory to the Oregon Department of Environmental Quality (ODEQ) and as required under the National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit #1200-C. For more information on soils and erosion, and see the Soil Protection Exhibit.

G. The proposed use will not adversely affect the air, water, or land resource quality of the area.

RESPONSE

During construction of the HVDC transmission cable within the CRGNSA jurisdiction, air emissions and water use would occur, but not to the extent that would cause adverse impacts. The HVDC transmission cable would be constructed within the ROW, which is consistent with uses in a ROW and no land resource quality impacts would occur. No air, water or land resource quality impacts during operation would occur.

H. The location and design of the site and structures for the proposed use will not significantly detract from the visual character of the area.

RESPONSE

Within the CRGNSA jurisdiction, the Facility would be underground in road ROW. The Facility being underground means there would be no viewers from designated scenic resource areas that would be able to see the development. Road ROW is not considered an area or swath of land with of high visual character so the proposal would conform with the character of the existing area.

I. The proposal will preserve areas of historic value, natural or cultural significance, including archaeological sites, or assets of particular interest to the community.

RESPONSE

The Applicant has designed the Facility to avoid most known cultural resources. Avoidance has been achieved either through spanning overhead lines over the resource or through moving project components. Avoidance of these resources will be ensured through monitoring during construction. For more information, see the Historic, Cultural and Archeological Resources Exhibit.

For properties located within or adjacent to farm or forest zones, or located nearby agricultural and forest operations, the following shall apply:

J. The proposed use is compatible with agricultural uses and will not force a change in, or significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to, or available for, farm or forest use.

RESPONSE

The portion of the proposal that is in the CRGNSA in Wasco County is located along paved roadways with disturbed ROW and would not interfere with surrounding agricultural uses. Farm or forest practices on surrounding lands, availability for farm or forest use would continue as they did pre-project implementation.

K. The proposed use or development will be sited in such a way as to minimize the loss of forest or agricultural land suitable for the production of crops or livestock and to minimize the chance of interference and not force a change in accepted farm or forest practices on surrounding lands devoted to, or available for, farm or forest use.

RESPONSE

Similar to the response to Section 5.020(J) above, the HVDC transmission cable will be in disturbed ROW and would not interfere with surrounding farm or forest practices.

L. The use or development will not significantly increase fire hazard, fire suppression costs or risks to fire suppression personnel.

RESPONSE

Fire services would be needed during construction and not operation. To reduce the potential for construction-related fires, the Applicant has prepared a draft fire prevention and suppression plan to ensure that fire prevention and suppression measures are carried out in accordance with federal, state, and local regulations.

M. A declaration shall be signed by the landowner and recorded into county deeds and records specifying that the owners, successors, heirs and assigns of the subject property are aware that adjacent and nearby operators are entitled to carry on accepted agriculture or forest practices on lands designated Large-Scale or Small-Scale Agriculture, Agriculture-Special, Commercial Forest Land, or Large or Small Woodland.

RESPONSE

The Applicant acknowledges that the OR EFSC may impose a site certificate condition requiring that the underlying landowners sign and record a declaration confirming that adjacent and nearby operators are entitled to carry on accepted agricultural practices.

NSA LUDO: SECTION 14.400 LANDSCAPE SETTINGS (GMA) SCENIC AREA REVIEW

Criteria in Section 14.400 for the Pastoral and Grasslands Landscape settings (GMA only) are specific to structures visible from Key Viewing Areas. The Facility would not be a structure in a Key Viewing Area within the CRGNSA. Therefore, Section 14.400 does not apply and there is no analysis provided. The purpose of landscape settings is to provide design standards that would ensure new developments are compatible with and maintain the character of their settings. As described above, the cable would be below ground and would be both consistent with surrounding land uses and not retract character from the area.

6.1.3 Flood Hazard Overlay Zone (OZ-1)

The Facility includes 13.67 miles of in-river HVDC transmission cable within the Flood Hazard Overlay Zone (OZ-1) in unincorporated Wasco County of the Columbia River channel floodway (Figure 2E Portion of HVDC Transmission Cable in OZ-1).

WCLUDO: SECTION 3.712 – DEVELOPMENT

A. Establishment of Development Permit

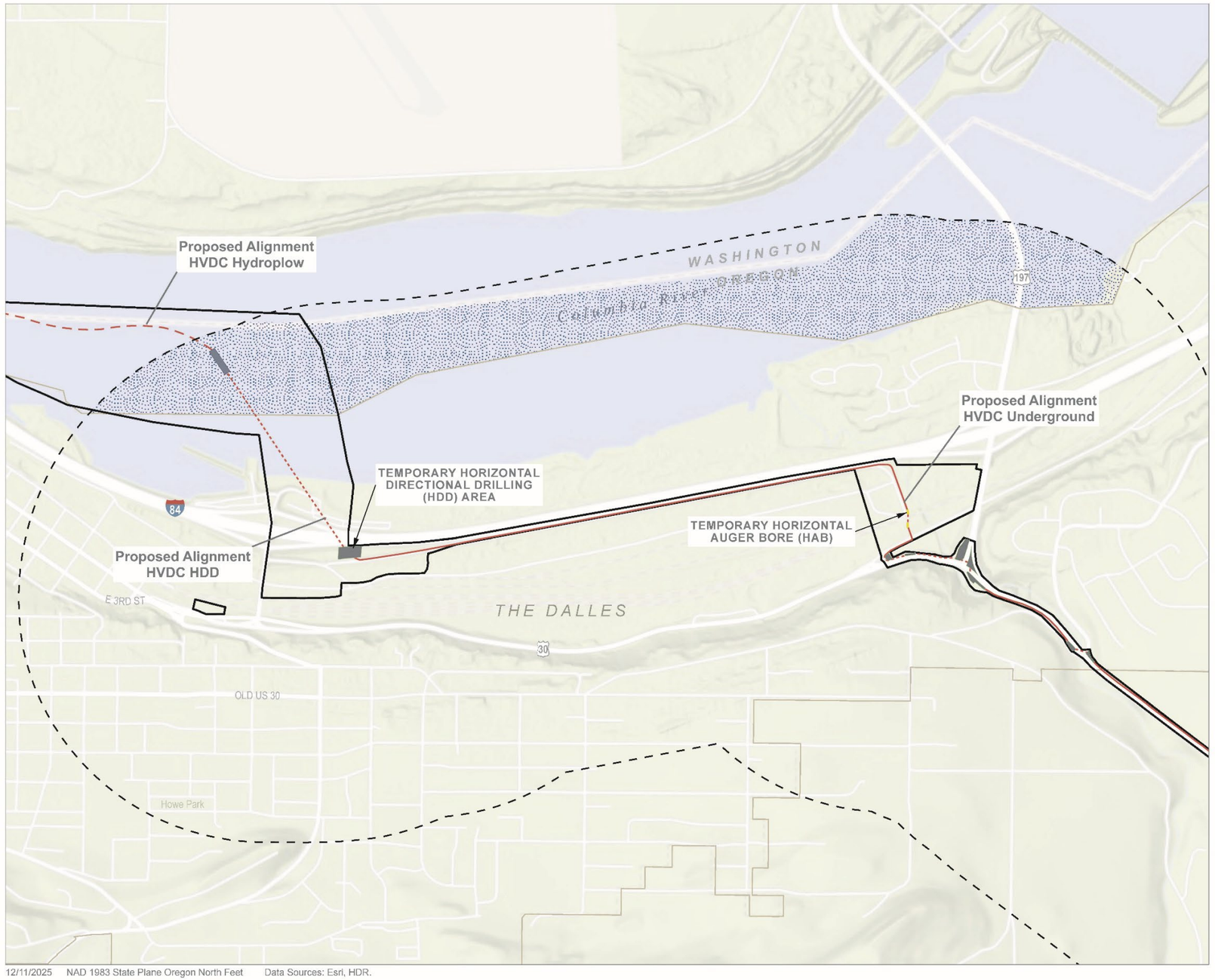
1. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.710.B – Applicability. The permit shall be for all structures including manufactured homes, as set forth in the "DEFINITIONS", and for all development including fill and other activities, also as set forth in the "DEFINITIONS".

RESPONSE

Per the Flood Emergency Management Agency (FEMA) Flood Insurance Rate Map 410229B (1984)[1], the portion of the HVDC transmission cables within OZ-1, is mapped as FEMA Zone A, an area of 100-year flood (base flood elevations and flood hazard factors not determined). Prior to construction, a Development Type II Permit would be obtained (3.712 (B)(1)) for a Utility Facility to determine if the proposal would cause damage to adjacent properties as a result of rises in flood stages. Since the HVDC cables would be buried and in-water, it is not anticipated that they would impact flood level. Notwithstanding Section 3.712(C)(6), Development Type II Permit application requirements in 3.712(C), (D) and (E) do not apply as the HVDC cables are not structures or buildings and are not altering a watercourse. The Applicant will provide copies of all permits required from any governmental agency through the OR EFSC application, as required by 3.712(C)(6).

[1] FEMA. 1984. Flood Insurance Rate Map 410229B. Available at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd

Figure 2E. Portion of HVDC Transmission Cable in OZ-1



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 2E
PORTION OF HVDC
TRANSMISSION
CABLE IN OZ-1

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- OREGON EFSC SITE BOUNDARY
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- ANALYSIS AREA

JURISDICTIONAL BOUNDARIES

- CITY/COUNTY

WASCO COUNTY OVERLAY ZONE

- FLOOD HAZARD (OZ-1)

CASCADE RENEWABLE TRANSMISSION

0 0.3 mi
1:12,635

6.1.4 Geologic Hazard Overlay Zone (OZ-2)

Within Wasco County's Geologic Hazard Overlay Zone (OZ-2) (Figure 2F Portion of HVDC Transmission Cable in OZ-2), the Applicant is proposing to install 0.20 miles of underground HVDC transmission cables.

The following analysis demonstrates how the 0.20 miles of underground HVDC transmission cables would comply with OZ-2 regulations in order to protect public health, safety, and welfare.

WCLUDO: SECTION 3.721 – PURPOSE

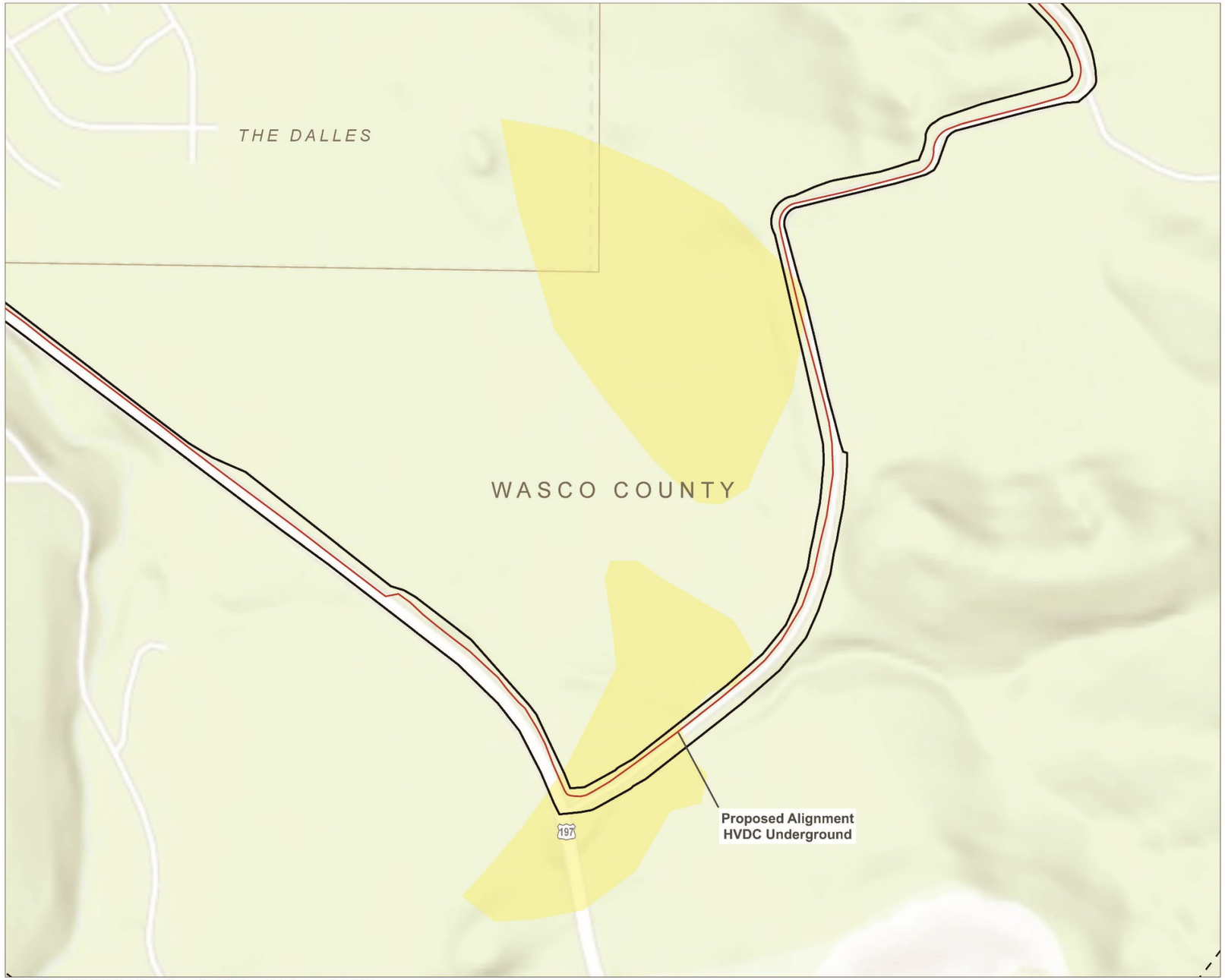
B. Approval Standards

2. Any proposed development in an identified geologic hazard area shall be preceded by a written report by an engineering geologist or an engineer who certifies he is qualified to evaluate soils for suitability.

RESPONSE

A site-specific geotechnical investigation is provided as part of the Structural Standard Exhibit, which demonstrates the Applicant's ability to design, engineer, and construct the Facility to the most current standards at the time of construction. Additionally, the Applicant would be required to apply for an NPDES stormwater construction permit, which includes an ESCP to identify structural and non-structural best management practices (BMPs) and a comprehensive list of mitigation measures to avoid any potential wind and water erosion and soil impacts.

Figure 2F. Portion of HVDC Transmission Cable in OZ-2



10/16/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 2F
PORTION OF HVDC TRANSMISSION CABLE IN OZ-2

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA

JURISDICTIONAL BOUNDARIES

- CITY/COUNTY

WASCO COUNTY OVERLAY ZONE

- GEOLOGIC HAZARD (Z4)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:6,000

6.1.5 Sensitive Wildlife Habitat Overlay (OZ-8)

Within Wasco County's Sensitive Wildlife Habitat Overlay Zone (OZ-8) or Environmental Protection District 8 (EPD-8) (Figure 2G HVDC Transmission Cables in OZ-8), the Applicant is proposing to install 0.02 miles of underground HVDC transmission cables.

Once constructed, the HVDC transmission cables would be underground and not interfere with aboveground resources. The following analysis demonstrates how the Facility would comply with OZ-8 regulations in order to conserve wildlife areas.

WCLUDO SECTION 3.805 – SITING STANDARDS

A. *Within EPD-8, subject to standards uses permitted in the underlying zone are subject to notice to and comment from the Oregon Department of Fish and Wildlife.*
B. *Within EPD-8, conditional uses permitted in the underlying zone are subject to notice and comment from the Oregon Department of Fish and Wildlife. This includes conditional use requirements per Section 5.020 F.*

RESPONSE

The Applicant has consulted regularly with the Oregon Department of Fish and Wildlife (ODFW) and other agencies regarding the appropriate protocols for documenting the presence of state sensitive species as required in OAR 345-022-0060(3)(d) and the classification of fish and wildlife habitat as required in OAR 345-022-0060(3)(b).

Per WCLUDO 3.214 (addressed in this exhibit), the Facility is subject to Standards/Type II Review in the EFU Zone (A-1), 5.020F, addressed above in Section 6.1.2.

Figure 2G. HVDC Transmission Cables in OZ-8]

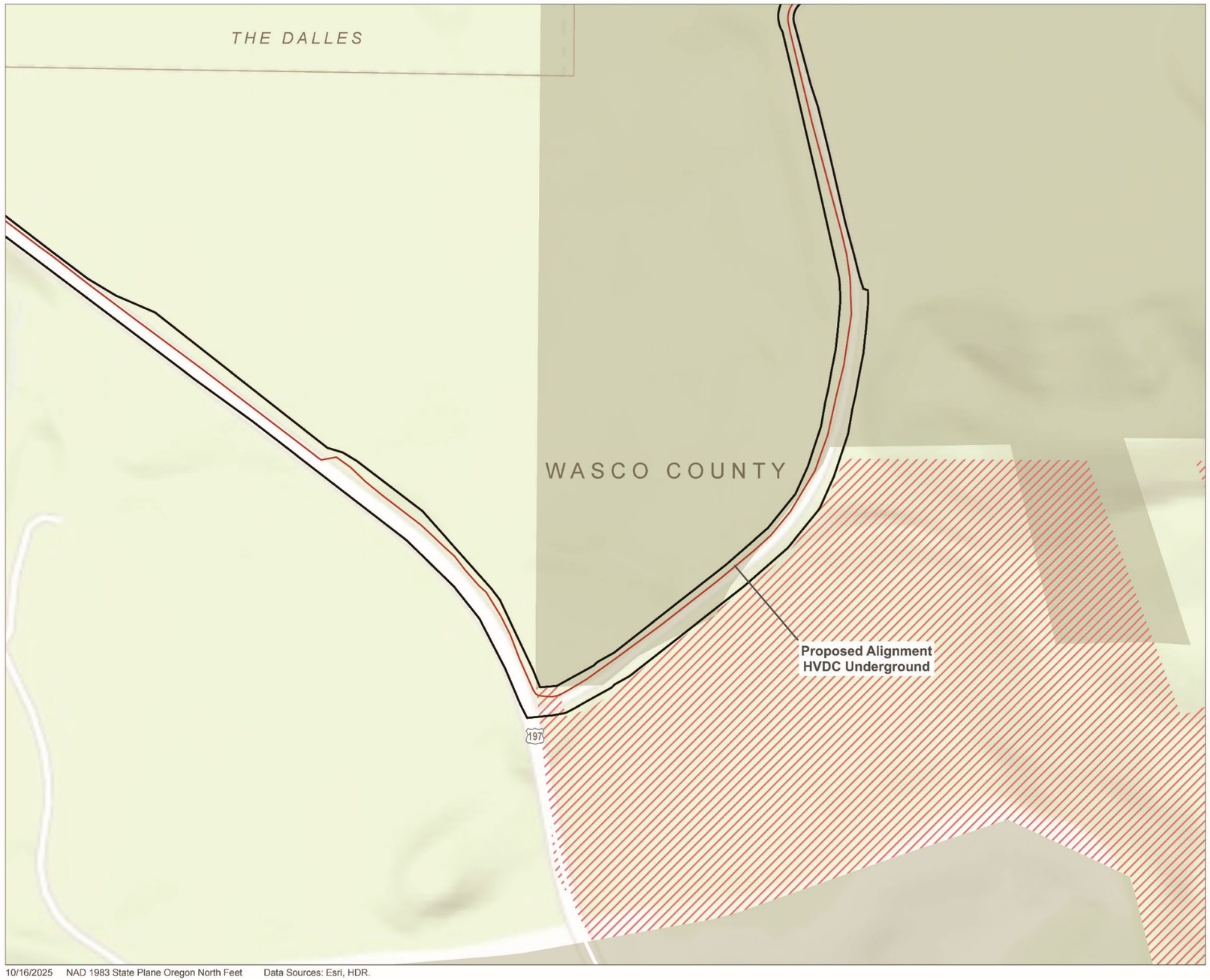


FIGURE 2G
HVDC TRANSMISSION CABLES IN OZ-8

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA

JURISDICTIONAL BOUNDARIES
- CITY/COUNTY

WASCO COUNTY BASE ZONES
- EXCLUSIVE FARM USE (A-1)

WASCO COUNTY OVERLAY ZONES
- SENSITIVE WILDLIFE HABITAT (OZ-8)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:5,000

6.1.6 Military Airspace Overlay Zone (OZ-15)

All Facility components are in the Military Airspace Overlay Zone (OZ 15).

WCLUDO: SECTION 3.872 – APPLICABILITY.

A. This overlay zone is applicable within the military airspace areas identified in the military airspace overlay zone map (OZ 15) and that includes encroachment of:

1. *Structures over 100 feet in height if within 200 feet above ground level (AGL) airspace, and over 400 feet in height if within the 500 feet AGL airspace;*
2. *Development or uses that create or cause interference within the radar line of sight;*
3. *Energy facility development or uses that produce light emissions, glare, or distracting lights which could interfere with pilot vision or be mistaken for airfield lighting*

RESPONSE

Development proposed within the OZ-15 overlay zone would be less than 100 feet in height (maximum height is estimated at 60 feet and the HVDC transmission cables would be underground).

Establishing a converter station in an area adjacent to existing critical energy infrastructure with greater heights would not create or cause interference with radar line of sight. Outdoor lighting at the converter station will be kept to the minimum required for safety, motion sensors will be installed, if required, to reduce lighting when an area is not in use, and lighting will be directed downward and inward to prevent off-site glare.

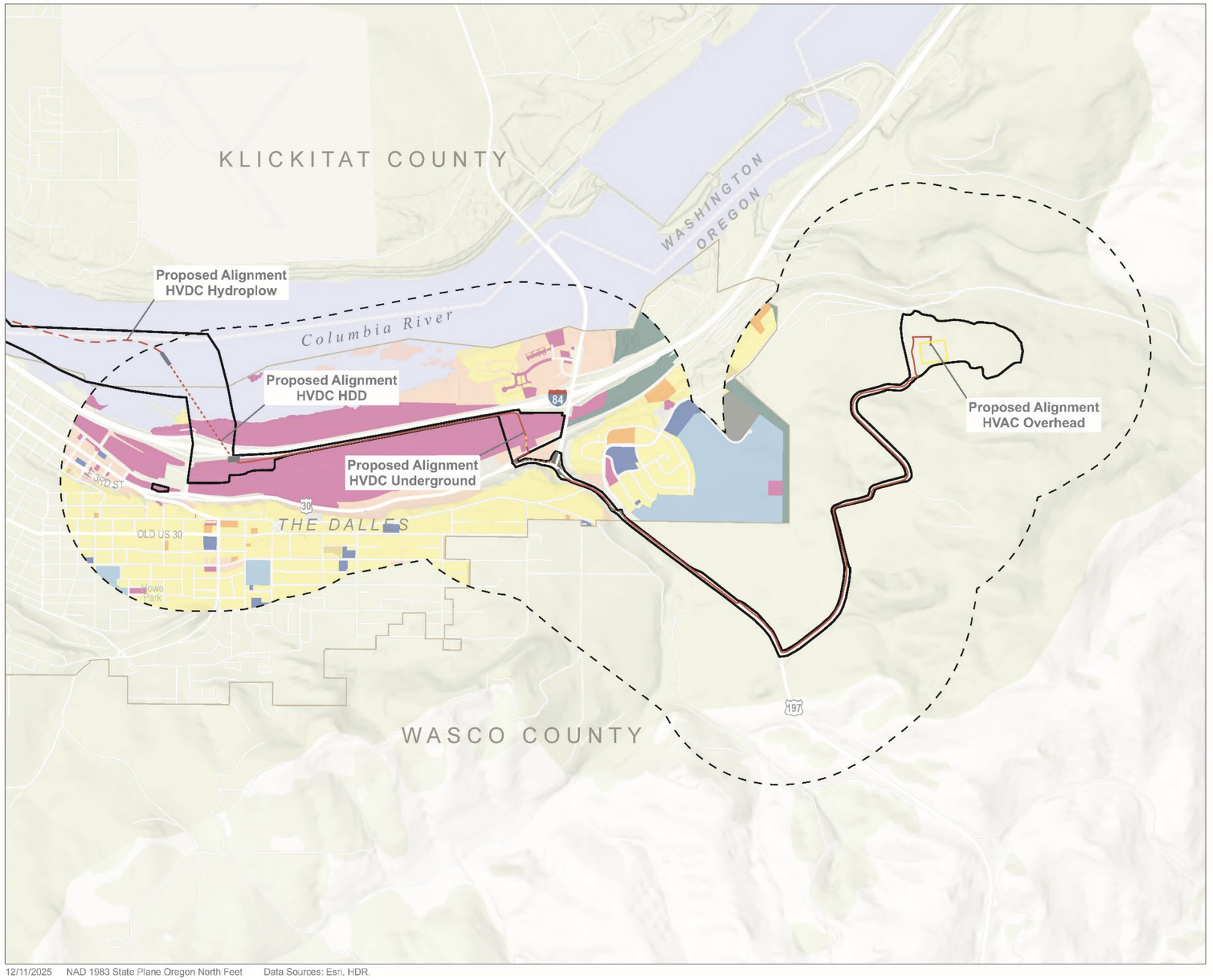
The Military Airspace Overlay Zone ensures early coordination with the Department of Defense when development projects represent potential encroachment to military airspace designated for military training and transport activities. The Facility is not anticipated to be an applicable development or use subject to Wasco County's OZ-15 regulations. The applicant is coordinating with the Department of Defense separately.

6.2 City of The Dalles

The components of the Facility within the City of The Dalles include temporary HDD, horizontal auger boring (HAB), three-sided wet cofferdam, and a portion of the HVDC transmission cable (Figure 3 City Of The Dalles Existing Land Use and Figure 4 City Of The Dalles Jurisdiction Zoning).

Table 6 shows a breakdown of the facility components within The Dalles, the applicable zoning designations, overlay zones, land use and substantive criteria reviewed.

Figure 3. City Of The Dalles Existing Land Use



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 3
CITY OF THE DALLES
EXISTING LAND USE

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

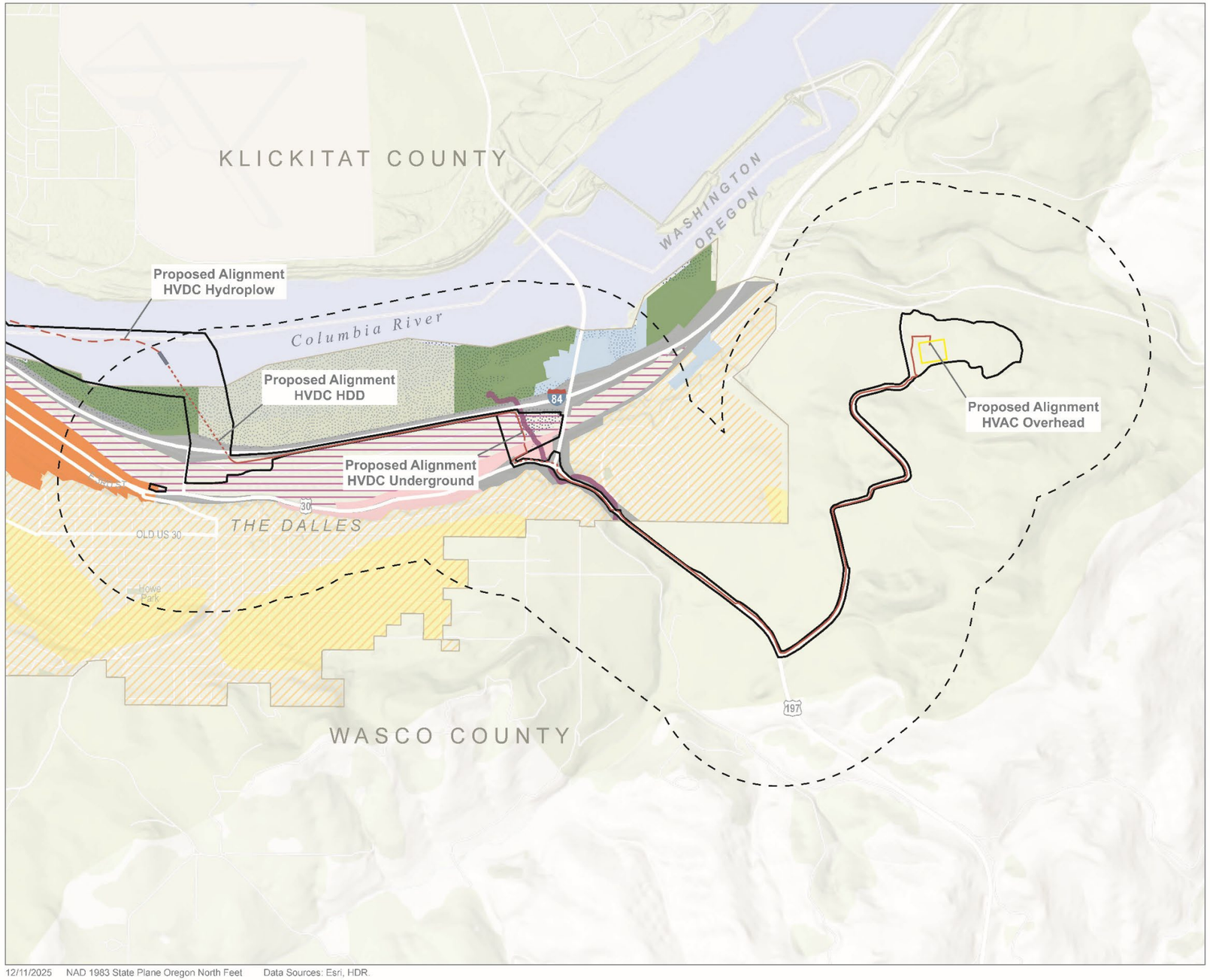
THE DALLES LANDUSE

- CHURCH
- COMMERCIAL
- COUNTY
- FARMING
- FEDERAL
- INDUSTRIAL
- MULTIFAMILY
- RESIDENTIAL
- SCHOOL
- STATE

CASCADE RENEWABLE TRANSMISSION

0 0.5 mi
1:24,058

Figure 4. City Of The Dalles Jurisdiction Zoning



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 4
CITY OF THE DALLES
JURISDICTION ZONING

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY 3-SIDED WET COFFERDAM
- ANALYSIS AREA
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- URBAN GROWTH BOUNDARY

CITY OF THE DALLES OVERLAY ZONE

- STREAM CORRIDOR (SC)
- GEOLOGIC HAZARD (Z4)
- FLOOD HAZARD (OZ-1)

CASCADE RENEWABLE TRANSMISSION

0 0.5 mi
1:23,986

Table 6. Facility Components in The Dalles

Facility Component	Description	Zone	Overlay Zone	Proposed Land Use
HDD temporary areas	Eight temporary areas for HDD entry and exit	Public Rights-of-way, Industrial (I)	None	Community Facility Public Utility
HAB temporary areas	Two jack and bore pits	Industrial (I), Commercial/Light Industrial (CLI)	None	Community Facility Public Utility
Three-sided wet cofferdam	Temporary three-sided wet cofferdam placed in the Columbia River to facilitate land-to-water cable transition	Recreational Commercial (CR)	None	Community Facility Public Utility
HVDC transmission cables	Approximately 2.43 miles underground	Public Rights-of-way, Industrial (I), Commercial/Light Industrial (CLI), Recreational Commercial (CR), and Parks and Open Space (P/OS)	Geohazard Zone (Z4); Stream Corridor (SC)	Community Facility Public Utility
	Approximately 0.2miles in-water	None	Flood Hazard	

The following criteria analysis demonstrates consistency of the Facility with identified applicable substantive criteria within The Dalles (The Dalles Municipal Code [TDMC]).

6.2.1 Commercial Light Industrial (CLI), Industrial (I), and Recreation Commercial (CR) Base Zones

All proposed uses in The Dalles meet the definition of a use consistent with a “community facility,” which includes public utilities as defined in ORS 757.005(1)(a)(A).

> *Any corporation, company, individual, association of individuals, or its lessees, trustees or receivers, that owns, operates, manages or controls all or a part of any plant or equipment in this state for the production, transmission, delivery or furnishing of heat, light, water or power, directly or indirectly to or for the public, whether or not such plant or equipment or part thereof is wholly within any town or city.*

Community facilities are listed as a conditional use in the CLI (TDMC 10.5.070), I (TDMC 10.5.090), and CR (TDMC 10.5.080) zones. Criteria for permitting community facilities as conditional uses are the same in each of the base zones for the Facility and are addressed together.

COMMERCIAL/LIGHT INDUSTRIAL DISTRICT (CLI) BASE ZONE

A portion of the HAB temporary areas (two jack and bore pits) and a portion of the underground HVDC transmission cables are proposed in the CLI base zone (Figure 4A HAB Temporary Areas and HVDC Transmission Cables in the CLI).

Criteria for development of in the CLI base zone is in Article 5.070 (10.5.070) of the TDMC. Development of portions of the HAB temporary areas and a portion of the underground HVDC transmission cables in the CLI base zone are considered a conditional use (TDMC 10.5.070.030) and require an approved Conditional Use Permit.

RECREATIONAL COMMERCIAL DISTRICT (CR) BASE ZONE

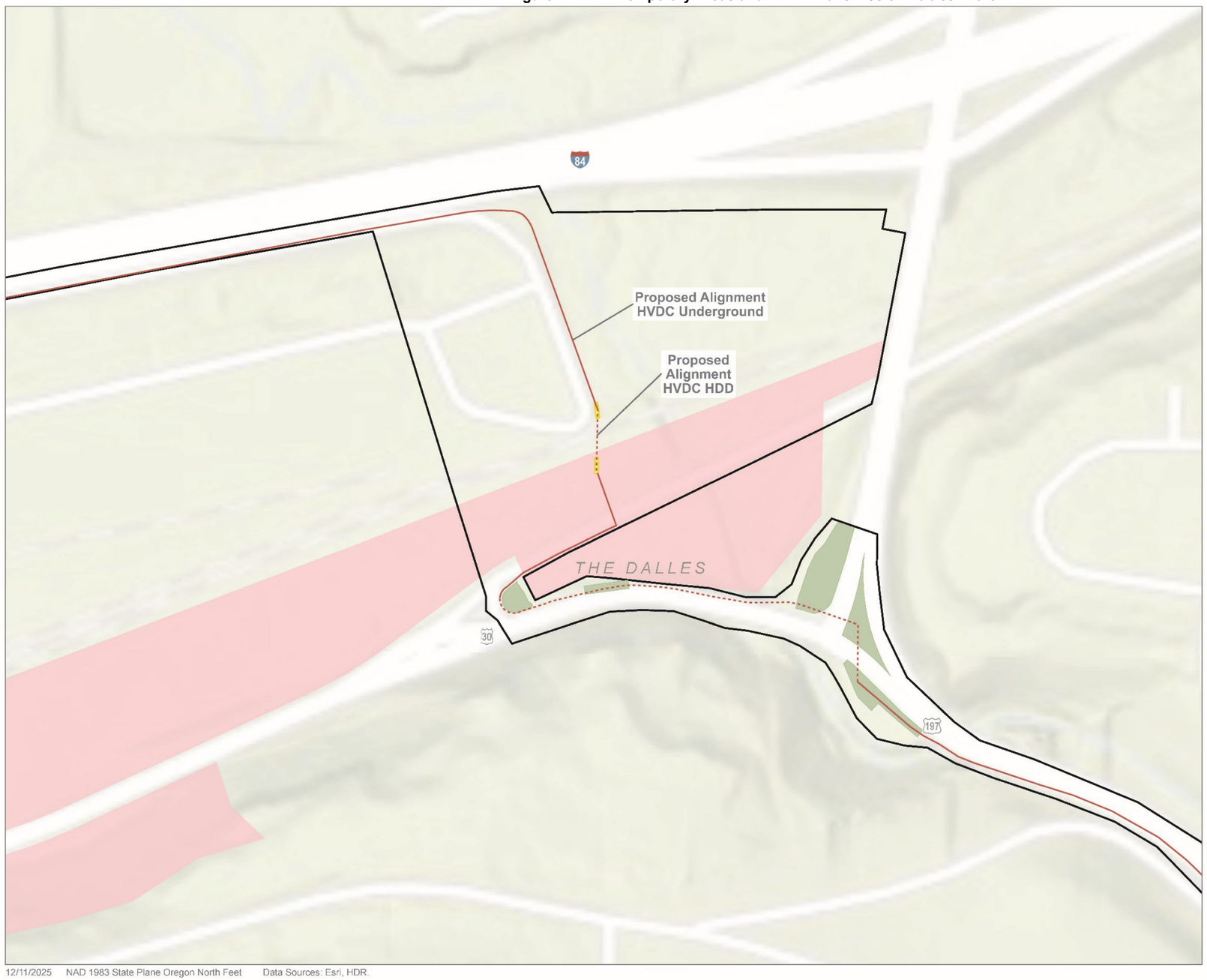
The temporary three-sided wet cofferdam placed in the Columbia River to facilitate land-to-water cable transition and a portion of the HVDC transmission cables are proposed in the CR base zone (Figure 4B Portion of Three-Sided Wet Cofferdam and HVDC Transmission Cables in CR).

Criteria for development in the CR base zone is in Article 5.080 (10.5.080) of the TDMC. Development of portions of the three-sided wet cofferdam and a portion of the underground HVDC transmission cables in the I base zone are considered a conditional use (TDMC 10.5.080.030) and require an approved Conditional Use Permit.

INDUSTRIAL DISTRICT (I) BASE ZONE

The HDD and HAB temporary areas, and HVDC transmission cables Facility components are proposed in the I base zone (Figure 4C Portion of the HDD & HAB Temporary Areas and HVDC Transmission Cable in I).

Figure 4A. HAB Temporary Areas and HVDC Transmission Cables in the CLI



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 4A
HAB TEMPORARY AREAS AND HVDC TRANSMISSION CABLES IN THE CLI

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- ANALYSIS AREA
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- OREGON EFSC SITE BOUNDARY
- CITY BOUNDARY

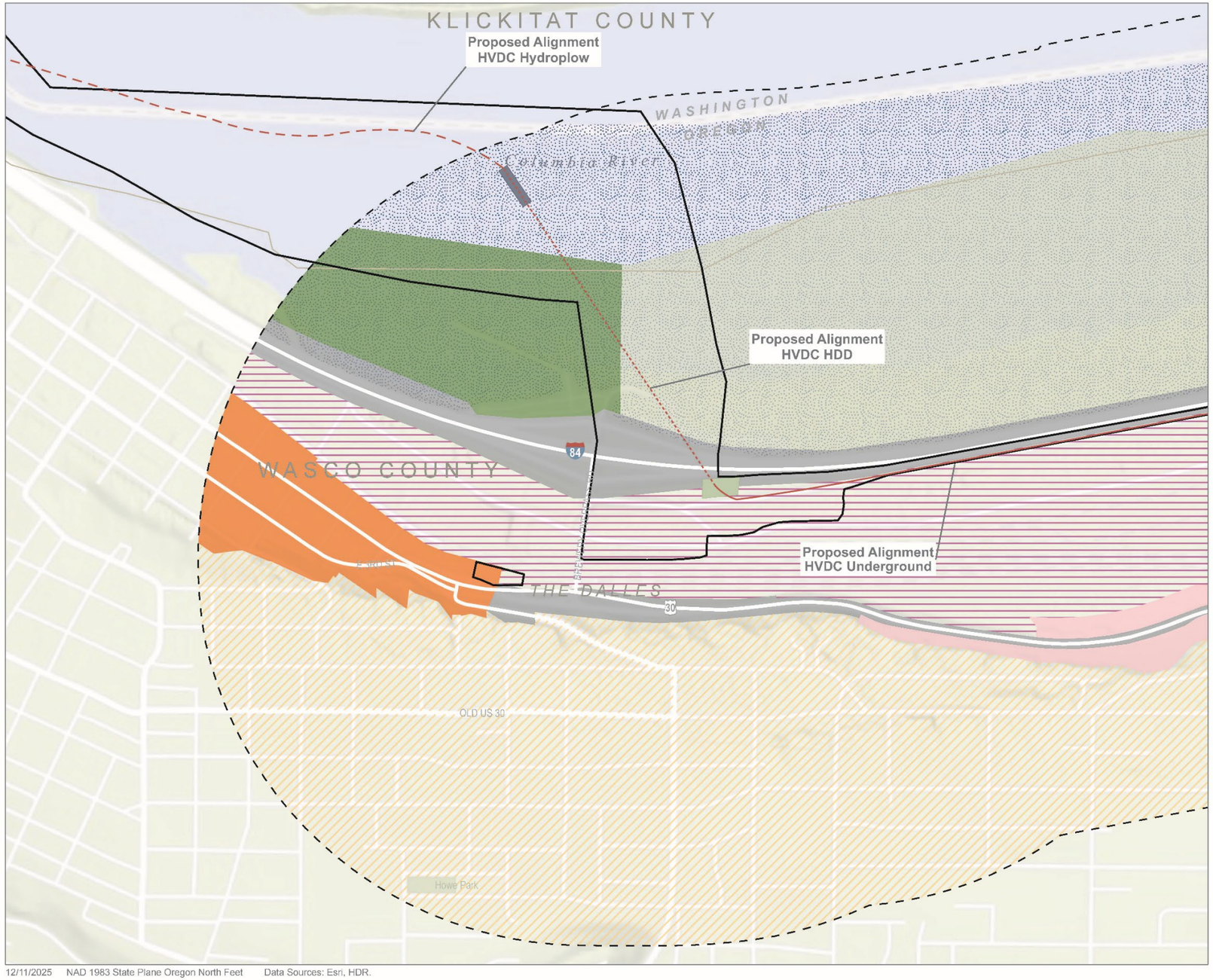
CITY OF THE DALLES BASE ZONE

- COMMERCIAL LIGHT/ INDUSTRIAL (CLI)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:3,000

Figure 4B. Portion of Three-Sided Wet Cofferdam and HVDC Transmission Cables in CR



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 4B
PORTION OF THREE-SIDED WET COFFERDAM AND HVDC TRANSMISSION CABLES IN CR

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY 3-SIDED WET COFFERDAM
- ANALYSIS AREA
- OREGON EFSC SITE BOUNDARY
- URBAN GROWTH BOUNDARY

CITY OF THE DALLES BASE ZONES

- CENTRAL BUSINESS COMMERCIAL
- COMMERCIAL LIGHT/INDUSTRIAL
- RECREATIONAL COMMERCIAL
- HIGH/MEDIUM/LOW DENSITY RESIDENTIAL
- INDUSTRIAL
- PARKS AND OPEN SPACES
- RIGHT OF WAY

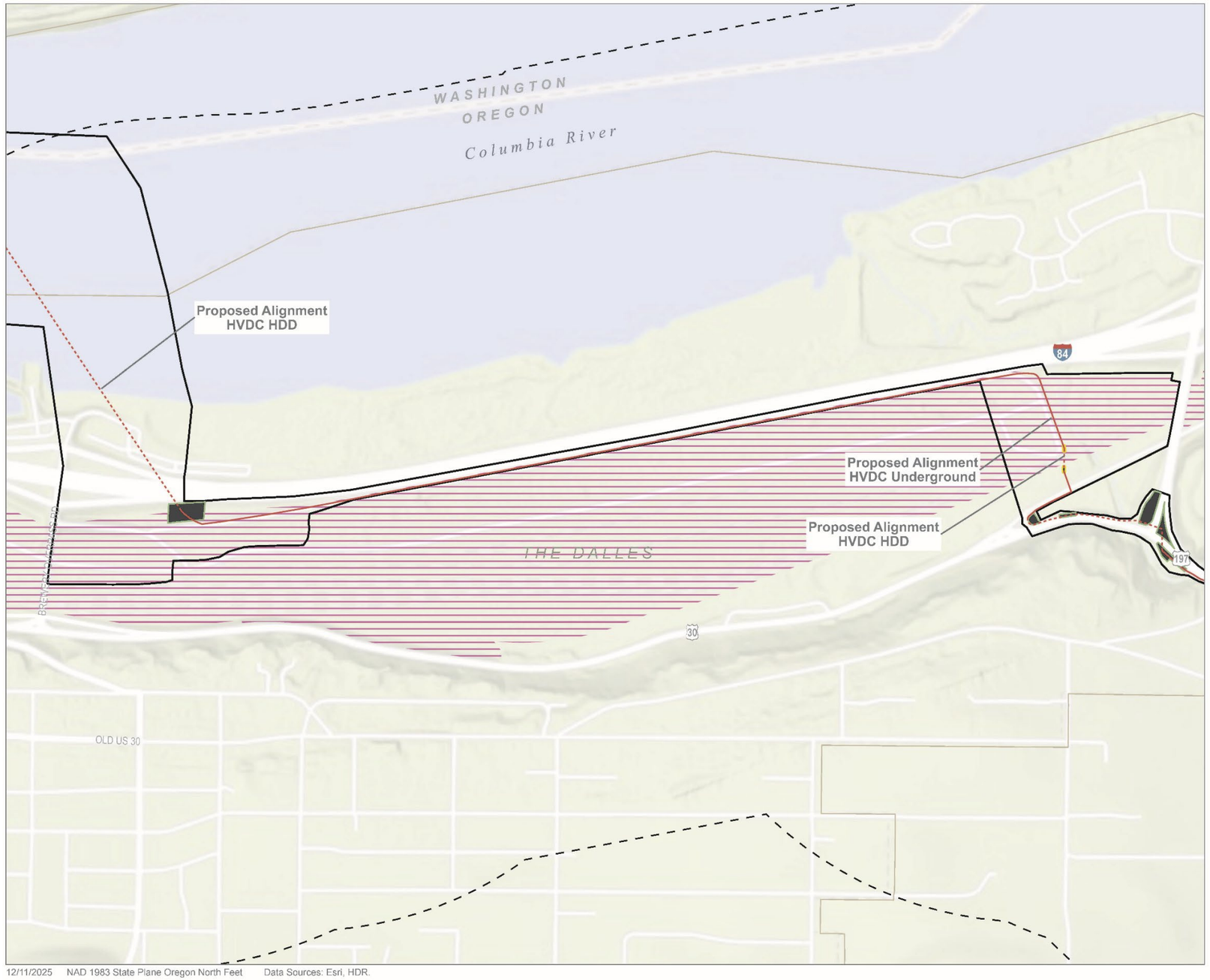
CITY OF THE DALLES OVERLAY ZONE

- FLOOD HAZARD (OZ-1)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:8,000

Figure 4C. Portion of the HDD & HAB Temporary Areas and HVDC Transmission Cable in I



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 4C
PORTION OF THE HDD & HAB TEMPORARY AREAS, AND HVDC TRANSMISSION CABLE IN I

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- ANALYSIS AREA
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- OREGON EFSC SITE BOUNDARY
- CITY BOUNDARY

CITY OF THE DALLES BASE ZONE

- INDUSTRIAL

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:8,000

Criteria for development in the I base zone is in Article 5.090 (10.5.090) of the TDMC. Development of portions of the HDD and HAB temporary areas and a portion of the underground HVDC transmission cables in the I base zone are considered a conditional use (TDMC 10.5.090.030) and require an approved Conditional Use Permit.

TDMC 10.5.070.030, 10.5.080.030 AND 10.5.090.030: CONDITIONAL USES

The following conditional uses are allowed subject to review and approval, per the appropriate provisions of either Article 3.050: Conditional Use Permits or Article 3.060: Administrative Conditional Use Permits:

A. *Community facilities sites, subject to the provisions of Article 5.100: Community Facilities Overlay District.*

RESPONSE

Community facilities are listed as a conditional use in the CLI, I, and CR base zones and would be required to comply with standards of Article 3.050: Conditional Use Permits (TDMC 10.3.050) and Article 5.100 Community Facilities Overlay District (TDMC 10.5.100). Compliance with applicable standards is analyzed below.

ARTICLE 3.050: CONDITIONAL USE PERMITS – SECTION 10.3.050.040 REVIEW CRITERIA

A. *Permitted Conditional Use. The proposed use is conditionally permitted in the zone district where it is proposed to be located.*

RESPONSE

The proposed use, consistent with a community facility use, is conditionally permitted in the CLI, I and CR base zones.

B. *Standards. The proposed use conforms to all applicable standards of the zone district where the use is proposed to be located. The proposed use will also be consistent with the purposes of this Title, and any other statutes, ordinances, or policies that may be applicable.*

RESPONSE

Since no structures are proposed, no employees would be on site during operations and public access would not be required. Accordingly, development standards for the CLI zone district in 10.5.070.040, Development Standards and 10.5.070.040 - Design Standards, as well as 10.5.100.050 - Development Standards for the CLI overlay zone are not applicable.

For the same reasons (no structures), and because the Facility is not in an area designated as Historic Districts, TDMC 10.3.050.040 (C)(1-7), are not applicable.

The purpose of the title is to allow conditional uses where they serve a public good or meet a need, and to ensure that negative impacts from the use are mitigated (TDMC 10.3.050.010).

Other statutes, ordinances, or policies that are applicable because portions of the proposed HVDC transmission line fall within areas identified as constraints and a Physical Constraints Permit is required.

TDMC: 10.8.020.010 - PHYSICAL AND ENVIRONMENTAL CONSTRAINTS PERMIT REQUIREMENTS

A. Physical Constraints Permit. A physical constraints permit shall be required for all development:

1. In areas identified within the 100-year flood boundary on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps for the City of The Dalles.

3. In areas of the 2010 Geologic Hazards Study prepared by Mark Yinger designated within Zones 1 and 4, or land in Zone 3 which is located in areas of groundwater discharge.

5. Which includes grading, filling, cutting, or other earth-moving activity involving more than 50 cubic yards of material on any lot or parcel of land or which includes areas of highly erosive soils.

RESPONSE

Proposed construction of portions of the HVDC transmission line are in a floodway, Geological Hazard Zone 4, and meet the definition of development (development includes but is not limited to constructing, filling, grading, paving, excavating, and drilling – TDMC 10.2.030). Therefore, a Physical Constraints Permit is required. Provisions for flood control, geologic hazards and erosion, slope failure, and cuts and fill are addressed below.

TDMC 10.8.020.050 - REQUIRED PLANS

The following plans shall be required for any development requiring a physical constraints permit:

A. Site Plan. A site plan clearly showing the following:

1. Project name.

2. Vicinity map.

3. Scale (the scale shall be at least 1 inch equals 50 feet or larger).

4. North arrow.

5. Date.

6. Street names and locations of all existing and proposed streets within or on the boundary of the proposed development.

7. Lot layout with dimensions for all lot lines.

8. Location and use of all proposed and existing buildings, fences and structures within the proposed development. Indicate which buildings are to remain and which are to be removed.

9. Location and size of all public utilities affected by the proposed development.

10. Location of drainage ways or public utility easements in and adjacent to the proposed development.

11. *A topographic map(s) of the site at a contour interval of 5 feet or less showing existing and proposed ground contours.*
13. *Locations of all existing natural features, including, but not limited to, all trees of a caliper greater than 12 inches in diameter, natural drainage or creeks on the site, faults, and rock outcroppings. Indicate any contemplated modifications to a natural feature.*
14. *The proposed method of erosion control, water runoff control, and tree protection for the development.*

RESPONSE

No structures are proposed as part of the Facility in The Dalles and no elements of the HVDC transmission cable bundle would be visible once construction is complete. The Applicant would provide a site plan and construction plans that include the above elements to demonstrate the HVDC cable system segments of underground cable proposed in relation to surrounding characteristics in The Dalles.

TDMC 10.8.020.070 – REVIEW CRITERIA

Physical constraint permits shall be issued by the approving authority when the applicant has demonstrated the following:

A. *Hazards. The development will not cause damage or hazard to persons or property upon or adjacent to the area of development.*
B. *Mitigation. The applicant has considered the potential hazards that the development may create and implemented reasonable measures to mitigate the potential hazards caused by the development.*
C. *Impact. The applicant has taken all reasonable steps to reduce the adverse impact on the environment. Irreversible actions shall be considered more seriously than reversible actions. The approving authority shall consider the existing development of the surrounding area, and the maximum permitted development permitted by this Title.*

RESPONSE

(A-B) The proposed corridor on land was selected to be constructed in areas of existing road ROW and developed urban areas and placed underground. The alignment was sited to avoid or minimize disturbing wetland and waters of the state/U.S., shoreline/riparian areas, woody vegetation, and areas with known cultural resources (inclusive of historical and archaeological resources and traditional cultural places and properties).

The in-river corridor was sited to minimize use conflicts and potential impacts to the aquatic communities such as avoiding near shore/shallow habitats, sensitive fish and benthic habitat, inundated historic shorelines with cultural resources, and areas of known sediment contamination.

Based on the Applicant's direct experience with the installation and operation of underwater and underground HVDC cable systems, the Applicant believes that construction and operation of the Project within the proposed corridor can be accomplished with minor and predominately temporary impacts. Moreover, as discussed in detail in the Need for a Facility Exhibit, siting the Facility within the proposed corridor would produce fewer impacts and less risk to the natural environment, is more

feasible than a range of other possible alternatives intended to materially increase the availability of non-fossil fuel energy to load centers, and meets state and regional renewable energy goals.

TDMC 10.8.030 FLOOD CONTROL PROVISIONS

The Columbia River channel is a floodway and in-river segments of the HVDC transmission line in the City of The Dalles' Urban Growth Boundary are considered to be constrained for this reason.

TDMC 10.8.030.020 APPLICABILITY

These provisions apply to areas in the 100-year floodplain as identified by the Federal Emergency Management Agency (FEMA) on the Flood Insurance Rate Maps (FIRMs) for the City of The Dalles.

RESPONSE

Per FEMA Flood Insurance Rate Map 4102370002B and 4102370003B (effective January 18, 1984), approximately 1,670 linear feet of the Facility is located with an area mapped as Zone A14 and A15, area of the 100-year flood; base flood elevations and flood hazard factors are not determined.

TDMC 10.8.030.040 PERMIT REQUIREMENTS

A physical constraints permit shall be required for all structures and other development activities located in the floodplain or adjoining a natural drainage area, per the requirements of Article 8.020: Review Procedures. The following shall also be required as part of the physical constraints permit:

A. Additional Site Plan Requirements.

1. Location and description of proposed fill, retaining walls, materials storage, and drainage facilities.

B. Other Requirements.

3. Copies of all permits required from any governmental agency, together with a certification under penalties of perjury that all required permits have been obtained.

RESPONSE

The Applicant would provide a site plan and construction plans that include the above elements to demonstrate the proposed development in the floodplain is consistent with permit requirements. The Applicant would provide copies of all related permits required from other government agencies.

TDMC 10.8.030.060 FLOODPLAIN DEVELOPMENT STANDARDS

Development within the floodplain (Zones A, AH, A1-A30, AE, and AO on the Flood Insurance Rate Maps), including residential and nonresidential structures and the public and private facilities serving these structures, shall be constructed so as to minimize damage from flooding. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding. The following standards shall apply to all development within the floodplain:

E. Fill. The amount of fill in the floodplain shall be kept to a minimum, shall be designed per the requirements of Article 8.050: Erosion, Slope Failure, and Cuts and Fill, and shall meet the following minimum standards.

1. *The toe of the fill shall be kept at least 10 feet outside of the floodway channel.*
2. *US Army Corps of Engineers and Oregon Division of State Lands permit cut, fill and other activities displacing 50 or more cubic yards of material in any bed, bank, or water of the State of Oregon.*
3. *Fill and other material imported from off the lot that could displace floodwater shall be limited to the following:*
   a. *Poured concrete and other structural building materials necessary to build permitted structures on the lot.*
   b. *Aggregate base and paving materials.*
   c. *Plants and other landscaping material.*
   d. *A total of 50 cubic yards of other imported fill material, or 300 cubic yards for each acre. These amounts are the maximum cumulative fill that can be imported onto a site, regardless of the number of permits issued.*
4. *If any additional fill is necessary beyond the permitted amounts in paragraph 2 above, the material must be obtained from floodplain lands on the subject lot only to the extent necessary to create an elevated site for the permitted development*
5. *Adequate drainage shall be provided to ensure the stability of the fill.*
6. *Fill used to raise elevations for a building site shall be located as close as possible to the outside edge of floodplain.*

RESPONSE

Fill within the floodplain and the floodway channel would be associated with underground HVDC underground and in-water transmission cables. Installation of the HVDC transmission cable within the 100-year floodplain would consist of backfill for the trench following the cable installation.

Approximately 1,670 linear feet of underground in-water HVDC transmission cable would be located within Zone A near Tie Plant Road, River Front Road, and within the Columbia River. A temporary three-sided wet cofferdam located within the City of The Dalles would be placed in the river to facilitate a safe workspace for divers to conduct the land-to-water cable transition. Installation of a temporary three-sided wet cofferdam could require dredging to level out the floor of the cofferdam. The temporary three-sided wet cofferdam would be approximately 70 feet by 300 feet in size and would be removed after cable installation. The in-river transmission cables would be bundled together, with the bundle being approximately 12 inches, consisting of two 6-inch conductor cables (one positive and one negative) and one approximately 1-inch fiber optic cable for communication.

The Applicant would submit a Removal-Fill Permit & Wetland Delineation Concurrence to the Oregon Department of State Lands (DSL) and a 404 permit application to the U.S. Army Corps of Engineers (USACE). See discussion below for the Facility's consistency with TDMC 10.8.050: Erosion, Slope Failure, and Cuts and Fill.

TDMC 10.8.030.070 FLOODWAY STANDARDS

New construction, substantial improvements, and encroachments (including fill, excluding riprap and other channel linings) are prohibited within the floodway. The floodway is the portion of the floodplain where high volumes of moving water flow through stream or drainage ways as determined by the most recent data. Nonstructural development, such as parking lots, may be permitted within the floodway when a registered professional engineer certifies that encroachments will not result in any increase in flood levels and/or flood hazard during the occurrence of the base flood discharge.

RESPONSE

Development within the floodway would be nonstructural. It is anticipated that since the Facility would not add impervious surface or structures, that floodway standards would not result in any increase in the flood levels during the occurrence of the base flood discharge. A certification from a professional engineer on the increase in flood levels and/or flood hazards will be provided.

TDMC 10.8.040.020 GEOLOGICAL HAZARD PROVISIONS APPLICABILITY

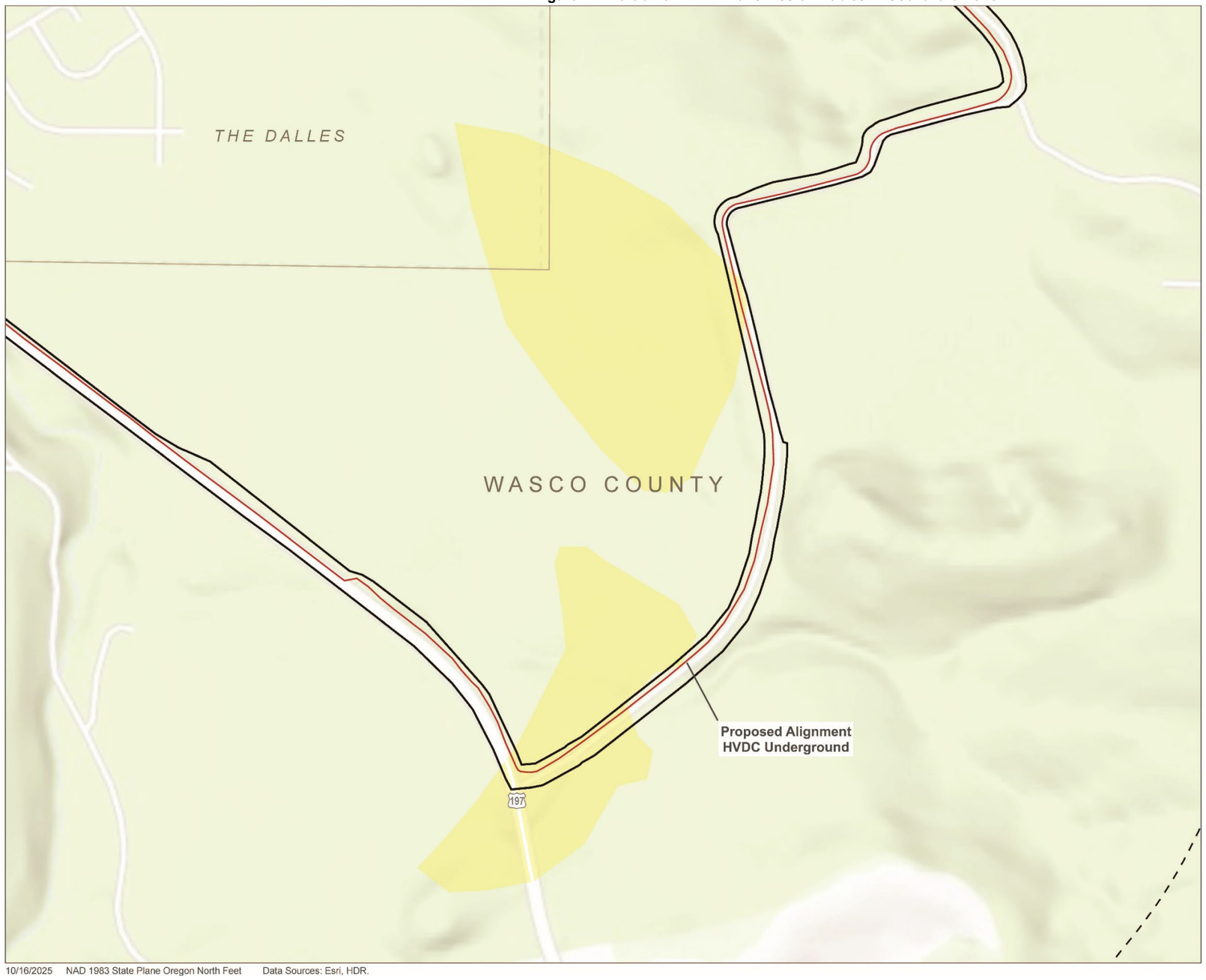
The requirements of this Article shall apply to all new development, including, but not limited to, streets, driveways, parking areas, sidewalks, retaining walls, drainage structures, buildings and other structures, and to additions and modifications to existing development which increase the footprint. Detached buildings of 200 square feet are exempt from the requirements of this Article.

RESPONSE

A portion of the underground HVDC transmission cables is proposed in the City's Rockfall Geohazard Zone (Z4) (Figure 4D Portion of HVDC Transmission Cables in Geohazard Zone).

Development of a portion of the underground HVDC transmission cables in the Z4 zone must comply with applicable requirements of TDMC 10.8.040 since it involves "new development" - constructing, filling, grading, paving, excavating, and drilling.

Figure 4D. Portion of HVDC Transmission Cables in Geohazard Zone



10/16/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 4D
PORTION OF HVDC TRANSMISSION CABLES IN Z-4

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- ANALYSIS AREA
- OREGON EFSC SITE BOUNDARY
- URBAN GROWTH BOUNDARY

CITY OF THE DALLES OVERLAY ZONE

- GEOLOGIC HAZARD (Z4)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:6,155

TDMC 10.8.040.030 PERMIT REQUIREMENTS

A physical constraints permit shall be required for new development and additions as described above in Section 10.8.040.020 for all proposed development activities located within hazard areas in Zones 1 through 6, per the requirements of Article 8.020: Review Procedures. The following shall also be required as part of the physical constraints permit:

A. Geologic Impact Statement. A site-specific geologic impact statement prepared by a qualified geotechnical engineer or an engineering geologist. If the size of a proposed development is increased, or the location of a proposed development is changed, a new impact statement may be required.

B. Certification of Plans. A statement prepared by a qualified geotechnical engineer or an engineering geologist certifying that the development plans and specifications comply with the limitations imposed by the geologic impact statement, and that the proposed construction will not adversely affect the site and adjacent properties.

RESPONSE

See the Structural Standard Exhibit for the Geologic and Soil Stability Analysis conducted for the Facility. With input from the Oregon Department of Geology and Mineral Industries (DOGAMI), the Applicant proposes to design, engineer, and construct the Facility to avoid dangers to human safety related to seismic hazards, and non-seismic hazards by conducting site-specific evaluations for the facilities, as shown in Section 5 of Structural Standard Exhibit.

TDMC 10.8.050.020 RUNOFF CONTROL

Any development which increases the natural runoff by decreasing the infiltration of the soil by any means shall conform to the following standards:

RESPONSE

Within the City of the Dalles, the Facility would consist of approximately 2.43 miles of underground and in-water HVDC transmission cable. Therefore, the Facility is not anticipated to increase the natural runoff or decrease infiltration.

TDMC 10.8.050.030 EROSION AND SLOPE FAILURE

All development on lands with highly erosive lands or slopes greater than 25% (4:1), and all development which removes vegetation or disturbs topsoil and leaves the disturbed soil at a slope of 50% (2:1) or more shall require a physical constraints permit, per the provisions of Article 8.020: Review Procedures, and comply with the following standards:

A. Re-vegetation. Any exposed soil shall be revegetated in a manner to reestablish a complete vegetative cover within 1 year of time of planting. If irrigation is not provided, then the exposed soil must be planted with species which can survive without irrigation.

B. Maintenance. Vegetative cover, rock, dry or conventional masonry, or other permanent cover must be maintained in perpetuity on areas which have been disturbed.

C. Temporary Erosion Control. During construction, erosion control measures such as straw bales, sediment fences, etc., shall be incorporated into plans to control erosion from the site as needed.

D. Exception. The above restrictions shall not apply to areas of exposed bedrock which exhibit no erosion potential.

RESPONSE

(A-D) Within the Zone 4 area, underground HVDC installation would be occur via HDD. A portion of one drill pit would also be located within Zone 4. Temporary sediment and erosion measures would be used, and any disturbed areas resulting from the drill pit would be restored to preexisting conditions following installation of the underground HVDC.

Erosion will be addressed through erosion control measures implemented to mitigate erosion potential identified in the Soil Protection Exhibit. A construction ESCP has been developed for the Facility to reduce the potential for soil erosion. Structural and nonstructural BMPs are included in the ESCP. Examples of nonstructural BMPs may include implementation of materials handling, spill prevention methods, or disposal requirements.

The Applicant's application for an NPDES stormwater construction permit is attached to the Soil Protection Exhibit and includes the ESCP. The Soil Protection Exhibit also contains a comprehensive list of mitigation measures to avoid wind and water erosion and soil impacts.

TDMC 10.8.050.040 CUTS AND FILL

All cuts, grading or fills shall be designed in a manner that will be stable for the intended use, conform to the applicable requirements of the most current versions of the Uniform Building Code and the Oregon Structural Specialty Code, and meet the following requirements:

A. Documentation. Prior to initiating any cut or fill in excess of 10 cubic yards, the applicant shall submit documentation showing the amount and location of each cut or fill.

B. Permits. Any cuts and/or fills outside of geohazard Zone 2 of the February 2011 Geohazard Study greater than 50 cubic yards but less than 250 cubic yards shall require a physical constraints permit with an application with a drawing having a primary focus on erosion control. Any cuts and/or fills in geohazard Zone 2 of the February 2011 Geohazard Study greater than 50 cubic yards shall require a physical constraints permit, per the provisions of Article 8.020: Review Procedures.

C. 250+ Cubic Yards.

Any cuts and/or fills outside of geohazard Zone 2 of the February 2011 Geohazard Study greater than 250 cubic yards but less than 500 cubic yards require a drawing and either engineered plans or a letter from a licensed professional engineer stating that no engineered plans are required in the engineer's professional opinion as the activity presents no danger to surrounding properties. Any cuts and/or fills in the Zone 2 of the February 2011 Geohazard Study over 250 cubic yards, or over 500 cubic yards outside Zone 2 of the February 2011 Geohazard Study, must be designed by a licensed professional engineer.

2. If the cut and/or fill is not a City street or a public right-of-way, a licensed professional engineer shall declare to the City, after the cut and/or fill is completed, that it was constructed to plans and meets all standards set forth in the approved plans.

RESPONSE

It is anticipated that more than 500 cubic yards of cut would occur outside of Zone 2 for construction of the Facility. The Facility would be designed by a licensed professional engineer.

All construction work would be done in compliance with an ESCP satisfactory to ODEQ and as required under the NPDES Stormwater Discharge Permit #1200-C. The Applicant will apply for the permit before construction and update the ESCP according to the final design.

BMPs described in the NPDES 1200-C ESCP would minimize the potential for wind or water erosion and sedimentation of soils disturbed by construction. Typical measures include putting sedimentation control measures in place prior to or concurrent to construction; spraying water on exposed soils and covering soil stockpiles that would be exposed longer term; placing gravel surfacing, where needed, immediately following clearing and grading; and revegetating disturbed areas as soon as practicable. The areas used only for construction would be reclaimed during the best season for replanting, typically, in the fall or spring. Reclamation activities may include replacing topsoil and revegetation.

6.2.2 Parks and Open Space (P/OS) Base Zone

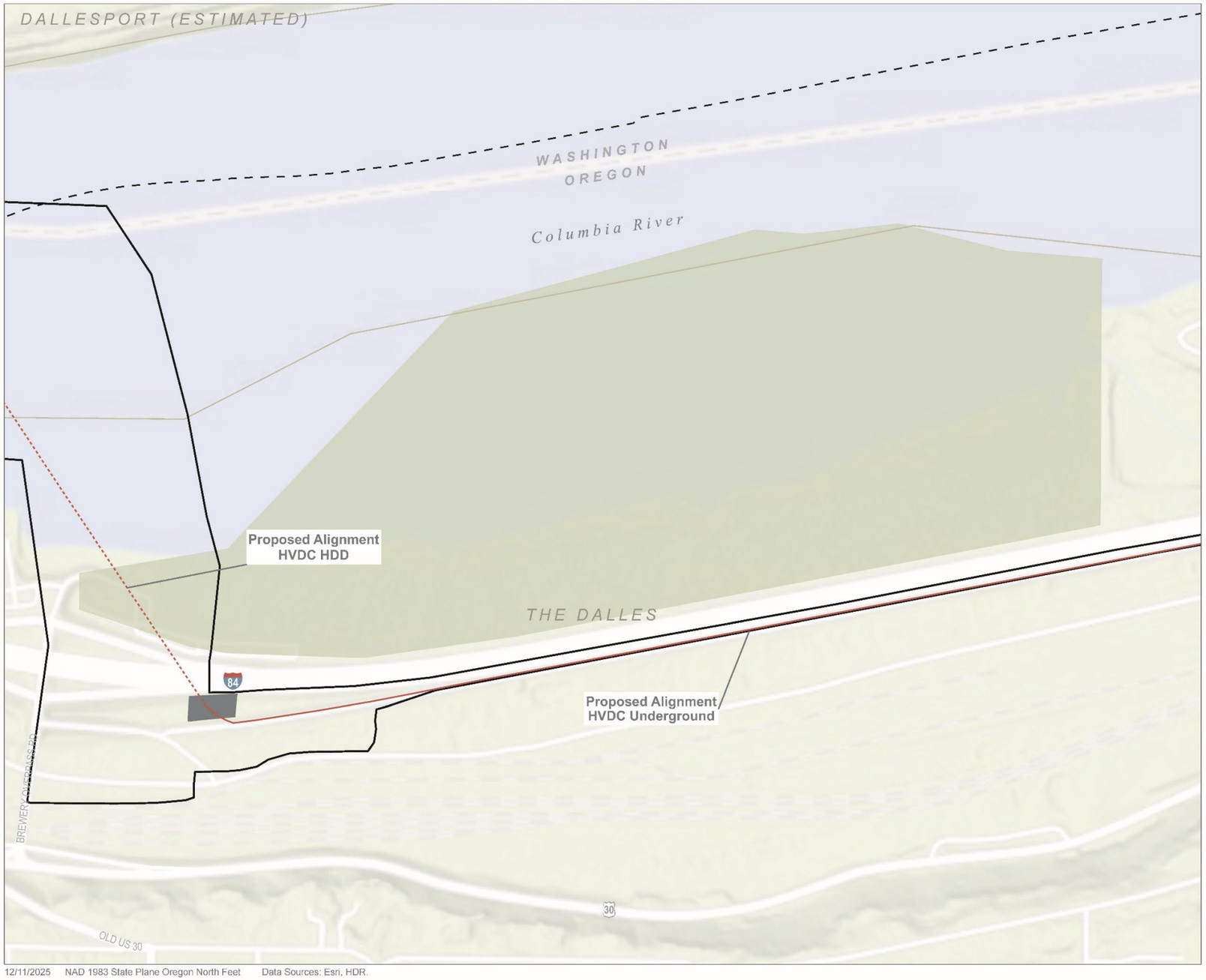
A portion of the HVDC transmission cable is in the Columbia River within the City's Urban Growth Boundary, in the P/OS base zone (Figure 4E City Of Dalles – HVDC Transmission Cables in P/OS).

There are no applicable substantive provisions in TDMC 10.5.110 for the portion of the HVDC transmission cable that is in the P/OS district. However, the Facility is not a prohibited use per TDMC 10.5.110.040. The intent of the P/OS criteria is to ensure sufficient areas throughout the community are safeguarded for public visual, environmental and recreational activities. The HVDC transmission cables would be underground and would not interfere with the intent of the P/OS zoning designation.

6.2.3 Public Rights-of-Way Base Zone

The HDD Temporary Areas and the HVDC transmission cables components are proposed in the Public Rights-of-Way base zone (Figure 4F Portions of the Facility in Public Rights-Of-Way). All construction activity in the public ROWs requires a ROW construction permit criteria for a ROW construction permit is in TDMC 2.24.060.

Figure 4E. City Of Dalles – HVDC Transmission Cables in P/OS



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 4E
CITY OF THE DALLES - HVDC TRANSMISSION CABLES IN P/OS

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- ANALYSIS AREA
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- OREGON EFSC SITE BOUNDARY
- CITY BOUNDARY

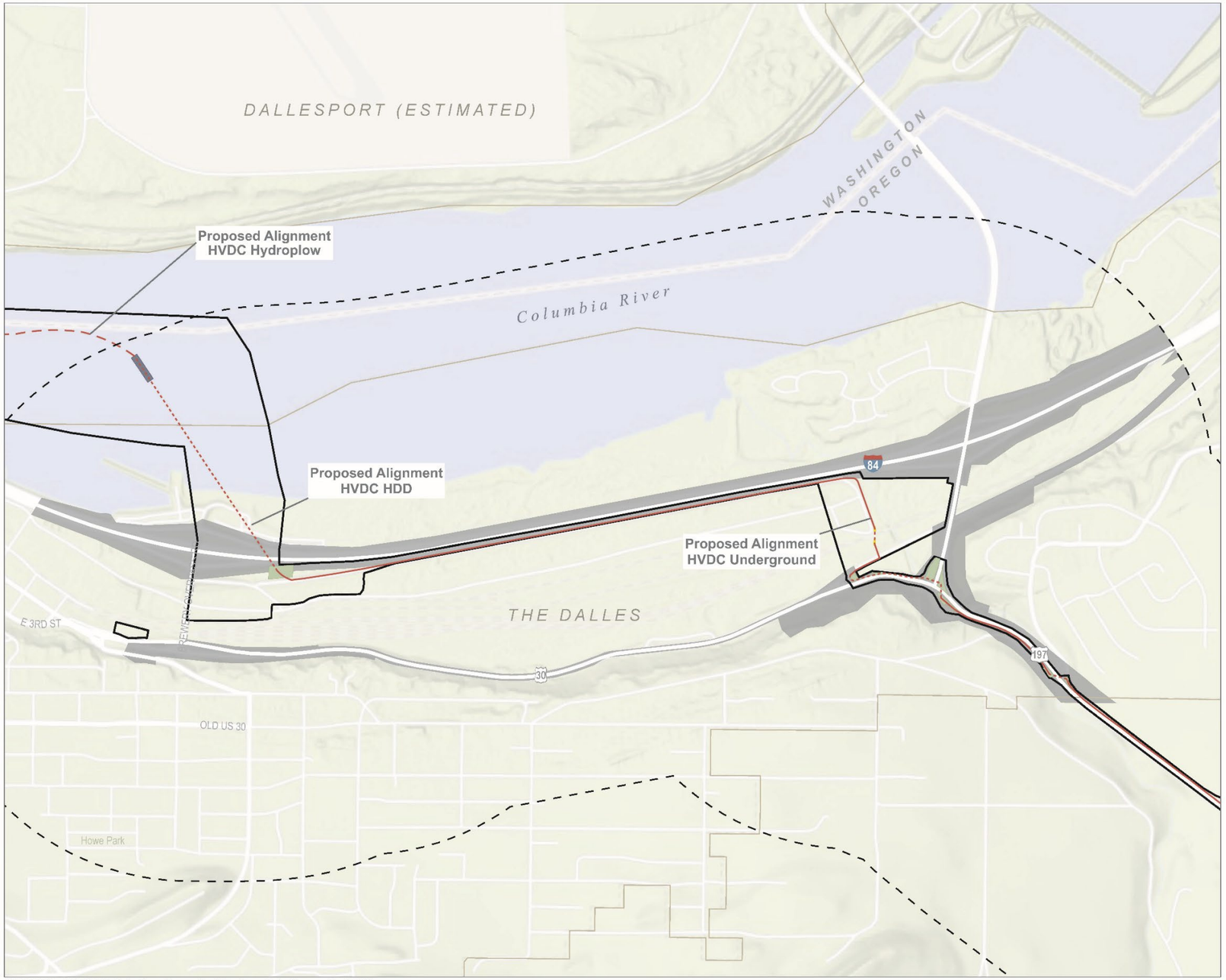
CITY OF THE DALLES BASE ZONE

- PARKS AND OPEN SPACES

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:6,000

Figure 4F. Portions of the Facility in Public Rights-Of-Way



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 4F
PORTIONS OF THE FACILITY IN PUBLIC RIGHTS-OF-WAY

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- ANALYSIS AREA
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- OREGON EFSC SITE BOUNDARY
- CITY BOUNDARY

CITY OF THE DALLES ZONING

- PUBLIC RIGHTS-OF-WAY

CASCADE RENEWABLE TRANSMISSION

0 0.3 mi
1:12,000

TDMC 2.24.060 RIGHT-OF-WAY CONSTRUCTION PERMIT—STREET/SIDEWALK CLOSURE PERMIT

A. Application for Permit. The application shall be filed with the Public Works Department, which application shall include a set of plans which comply with the requirements set forth in this subsection.

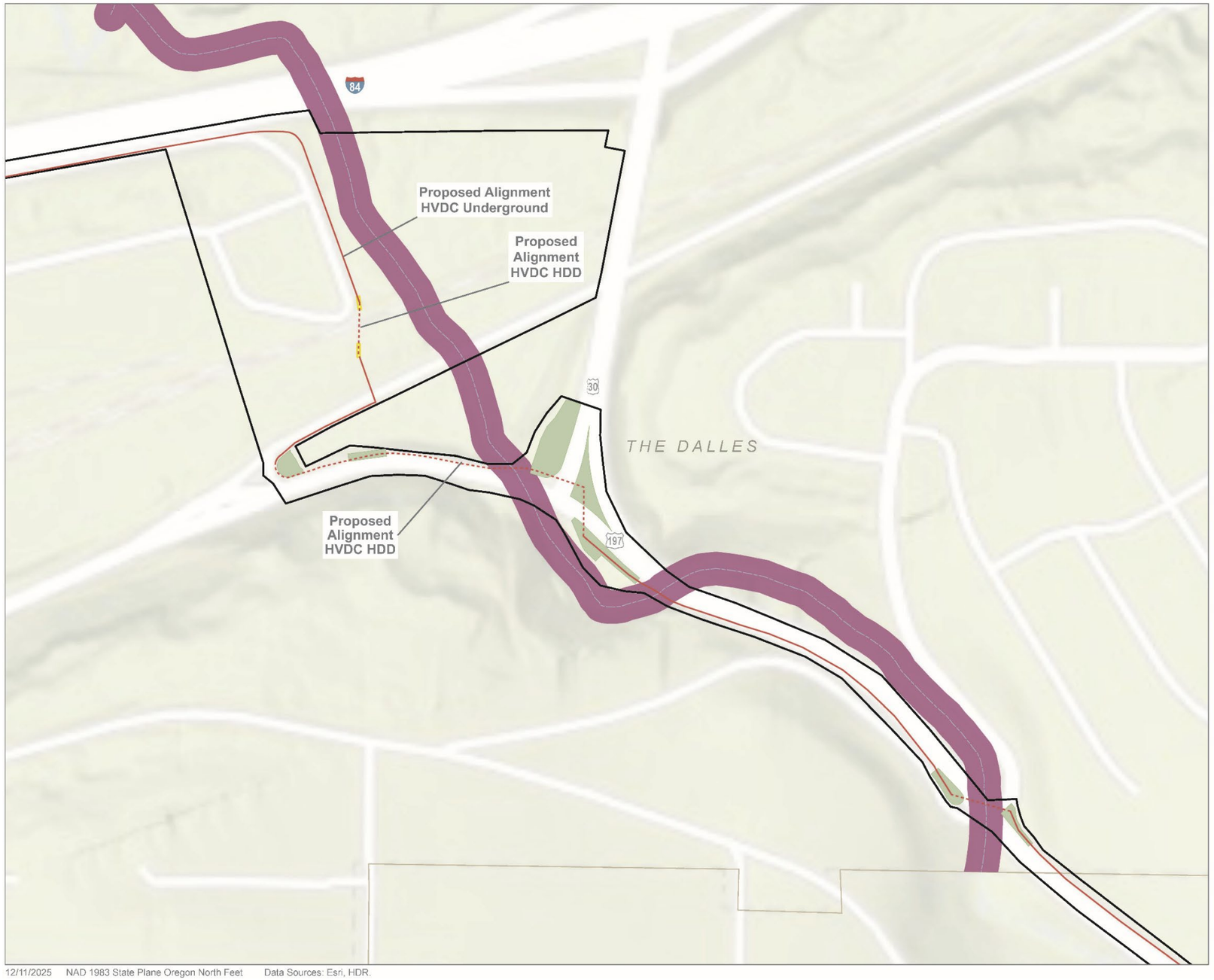
RESPONSE

Upon issuance of an OR EFSC ASC for the Facility, the Applicant would submit for the Right-of-Way Construction Permit Application to the City of the Dalles, Public Works Department. The Application will include requirements for a site plan showing existing utilities, horizontal separation from existing facilities, and traffic control plans. Construction would not commence prior to the Applicant obtaining the OR EFSC ASC.

6.2.4 Stream Corridor Overlay Zone (SC)

Any area within 50-feet from the tops-of-bank of Three-Mile Creek are within the City of The Dalle's Stream Corridor District overlay zone (SC). Portions of the HVDC transmission cable are within the SC (Figure 4G City of The Dalles – HDD Temporary Area and HVDC Transmission Cable in SC). Criteria for development in the Stream Corridor overlay zone is in Section 10.5.130 of the TDMC.

Figure 4G. City of The Dalles – HDD Temporary Area and HVDC Transmission Cable in SC



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 4G
CITY OF THE DALLES - HDD TEMPORARY AREA, AND HVDC TRANSMISSION CABLE IN SC

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA

JURISDICTIONAL BOUNDARY

- CITY BOUNDARY

WASCO COUNTY OVERLAY ZONE

- STREAM CORRIDOR (SC)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:3,500

TDMC 10.5.130.040 DEPARTMENT OF STATE LANDS NOTIFICATION

The Oregon Department of State Lands (DSL) shall be notified in writing of all applications to the City of The Dalles for development activities, including applications for plan authorizations, development permits, or building permits, and of development proposals within The Dalles UGB, that may affect known wetlands or streams.

RESPONSE

The Applicant would apply for a Removal-Fill Permit and Wetland Delineation Concurrence and Propriety Waterway Authorization/Easement/Lease from DSL for the Facility.

TDMC 10.5.130.050 PERMITTED AND PROHIBITED USES WITHIN SC OVERLAY DISTRICT

B. Prohibited Uses. Except as listed in Section 10.5.130.050(A), the following uses and activities are prohibited within stream corridor setback areas:

4. The placement of structures or impervious surfaces, including grading and the placement of fill; and

RESPONSE

Per the conceptual design, the Facility would cross the mapped stream corridor associated with Three-Mile Creek. The Facility would not place structures or impervious surfaces within the stream corridor setback areas. Grading and the placement of fill could occur as part of construction to place the HVDC transmission cable. The State and Local Laws and Regulations Exhibit: Waters of the State and Removal Fill, identified all impacts to wetlands and landward water resources can be avoided. For more information on avoidance and minimization, see the State and Local Laws and Regulations Exhibit. Regardless, as stated above, the Applicant would apply for a Removal-Fill Permit and Wetland Delineation Concurrence and Propriety Waterway Authorization/ Easement/ Lease from DSL for the Facility.

6.2.5 Comprehensive Plan

The Project Order did not provide applicable policies for analysis and no comprehensive plan goals, objectives or policies were identified as required for consistency in the development code analysis above.

6.3 Hood River County

In Hood River County, a portion of the HVDC transmission cables is entirely located within the Columbia River. Hood River County does not establish specific land use criteria that would apply to development occurring beneath the normal pool elevation of the Columbia River.

There is no on-land analysis area for Hood River County as the entire facility is located within the Columbia River. However, the Columbia River is a floodway, and the Facility must comply with Article 44 related to the Floodplain Overlay Zone. Although the project extends through the Columbia River Gorge NSA, the Columbia River itself is not zoned by either the NSA Management Plan or the Hood River County Comprehensive Plan.

Table 7 shows the component of the facility within Hood River County, the zoning designations, overlay zones, land use and substantive criteria reviewed.

Table 7. Facility Components in Hood River County

Facility Component	Description	Zone	Overlay Zone	Proposed Land Use
HVDC transmission cables	Approximately 10.79 miles, in-water	Floodway (Hood River County)	None	N/A

The following criteria analysis demonstrates consistency of the Facility with identified applicable substantive criteria within the Columbia River waterward of Hood River County.

6.3.1 Floodplain Overlay Zone (FP)

The HVDC transmission cable Facility components are proposed in the Floodplain overlay zone. Criteria for development in the Floodplain overlay zone is in Article 44 of the Hood River County Code.

HRCC SECTION 44.30 – COLUMBIA RIVER GORGE NATIONAL SCENIC AREA

All permit applications within the Scenic Area will be sent to the Scenic Area Manager for review and comment.

RESPONSE

The Facility area is located within the Columbia River Gorge NSA and scenic area regulations do not apply to the Columbia River itself. The Facility would be located wholly within the Columbia River within Hood River County, and review and comment by the scenic area manager would not be necessary. However, the Commission would receive notice and have an opportunity participate as part of the ASC review process.

HRCC SECTION 44.45 - FLOODPLAIN DEVELOPMENT PERMIT

A Floodplain Development Permit shall be obtained before construction or development begins within the floodplain, including floodway, as established pursuant to Section 44.10 - Ordinance Applicability. A Floodplain Development Permit is required for all structures, manufactured homes, and development as defined in Section 44.05 - Definitions. Applicants shall retain one of the following Oregon licensed individuals who is responsible for demonstrating through written documentation (report) of compliance with the requirements of this ordinance, specifically Section 44.50 - Floodplain Standards: engineer, architect, hydrologist, or geologist. Application may include but not be limited to the following information:

A. Scaled site plan showing the characteristics, location, dimensions, and site elevation; existing or proposed structures, development including fill, storage of materials, etc.

D. Description of the extent to which a water course(s) will be altered or relocated as a result of development, structures, etc.

RESPONSE

The Applicant would provide a site plan and construction plans that include the above elements to demonstrate the HVDC cable system segments of underground cable proposed in relation to surrounding characteristics in Hood River County.

Development of the Facility within the regulatory floodway of the Columbia River in Hood River County would include installation of 10.79 miles of in-river HVDC transmission cable.

Impacts to the Columbia River include temporary disturbances to the water associated with the installation of the HVDC transmission cable and the permanent fill associated with the cable bundle and cable protection. The localized, temporary direct impacts to water quality result from cable installation in the Columbia River using hydroplow techniques, as well as from installation of the cofferdams at land-to-water transitions, and possible preinstallation dredging. Impacts to turbidity because of this activity are expected to be short term and localized. The Columbia River substrate temporarily disturbed through the hydroplow would resettle and the benthic community would become re-established and populated from nearby areas within days or months. Therefore, there are no proposed restoration activities.

No watercourses will be altered as a result of the development.

E. Copies or all permits required from any governmental agency, etc.

RESPONSE

Section 17 of the Organizational Expertise Exhibit lists all the local, state, and federal permits applicable to the Facility. OR EFSC will, as a condition of the site certificate, require the Applicant to provide copies of all required permits, including third-party permits, to the Oregon Department of Energy (ODOE) prior to construction of the Facility.

The portion of the Facility within Hood River County would be located wholly within the Columbia River. Therefore, property access would not be required or provided. No building or sewage disposal systems would be constructed as part of the Facility and no pesticides or herbicides would be stored within 300 feet of the Columbia River. The Facility would apply for Section 401 of the Clean Water Certification Act certification with the ODEQ and would adhere to all water quality standards required by the State or Oregon during construction. No land use designation is associated with the Facility location, as it would be located within the Columbia River in Hood River County.

6.3.2 Comprehensive Plan

The portion of the Facility that is within Hood River County is located entirely in the riverbed of the Columbia River. The county's comprehensive plan does not establish specific land use policies for development below the water surface of the Columbia River; therefore, no comprehensive plan policies are analyzed.

6.4 City of Hood River

The components of the facility within the City of Hood River include the HVDC transmission cable. Within the City of Hood River, the Facility site boundary is entirely located within the bed of the Columbia River.

Table 8 shows the component of the Facility within the City of Hood River, the zoning designations, overlay zones, land use and substantive criteria reviewed.

Table 8. Facility Components in Hood River County and Overlay Zone

Facility Component	Description	Zone	Overlay Zone	Proposed Land Use
HVDC Cable	Approximately 0.66 mile of in-water HVDC cable	None	Flood Hazard	Development

The following criteria analysis demonstrates consistency of the Facility with identified applicable substantive criteria within the City of Hood River (Hood River Municipal Code [HRMC]).

6.4.1 HRMC Chapter 15.44 – Flood Hazards

A portion of the HVDC cable Facility components is proposed in the Flood Hazard overlay zone. Criteria for development in the Flood Hazard overlay zone is in Title 15 of the HRMC.

HRMC 15.44.020 LANDS TO WHICH THIS CHAPTER APPLIES

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city.

RESPONSE

The portion of the Columbia River within the City of Hood River's Urban Growth Boundary is not zoned and the City of Hood River has not established specific land use criteria for development below the ordinary high-water mark of the Columbia River. Development in the Columbia River would be subject to the City of Hood River's special flood hazard area requirements.

HRMC 15.44.040 ESTABLISHMENT OF DEVELOPMENT PERMIT.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 15.44.030. The permit shall be for all structures, including manufactured, as set forth in Section 15.44.010, and for all other development including fill and other activities, also as set forth in Section 15.44.010.

RESPONSE

All proposed uses in the City of Hood River meet the definition of a use consistent with "development," as defined in HRMC 15.44.010,

any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

Development within the Columbia River (the regulatory floodway) within the City of Hood River would include excavation and grading when installing the in-river HVDC transmission cable. Therefore, a Development Permit is required. Criteria for a Development Permit is in HRMC 15.44.040 and addressed below as applicable.

HRMC 15.44.070 GENERAL STANDARDS FOR FLOOD HAZARD PROTECTION

In all areas of special flood hazards, the following standards are required.

B. Construction Materials and Methods.

1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

RESPONSE

The Applicant has provided known information on building materials and methods in the Background Information Exhibit and the Soil Protection Exhibit.

The in-river methods for construction of the Facility in the floodplain are favorable because they are manufactured for in-water construction methods. For the in-river transmission cable, the conductor would be of a compacted circular design, constructed from annealed copper wires and filled with a water blocking material to limit water propagation in case of cable severance.

HRMC 15.44.090 FLOODWAYS.

Located within areas of special flood hazard established in Section 15.44.030 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply.

(A) Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge;

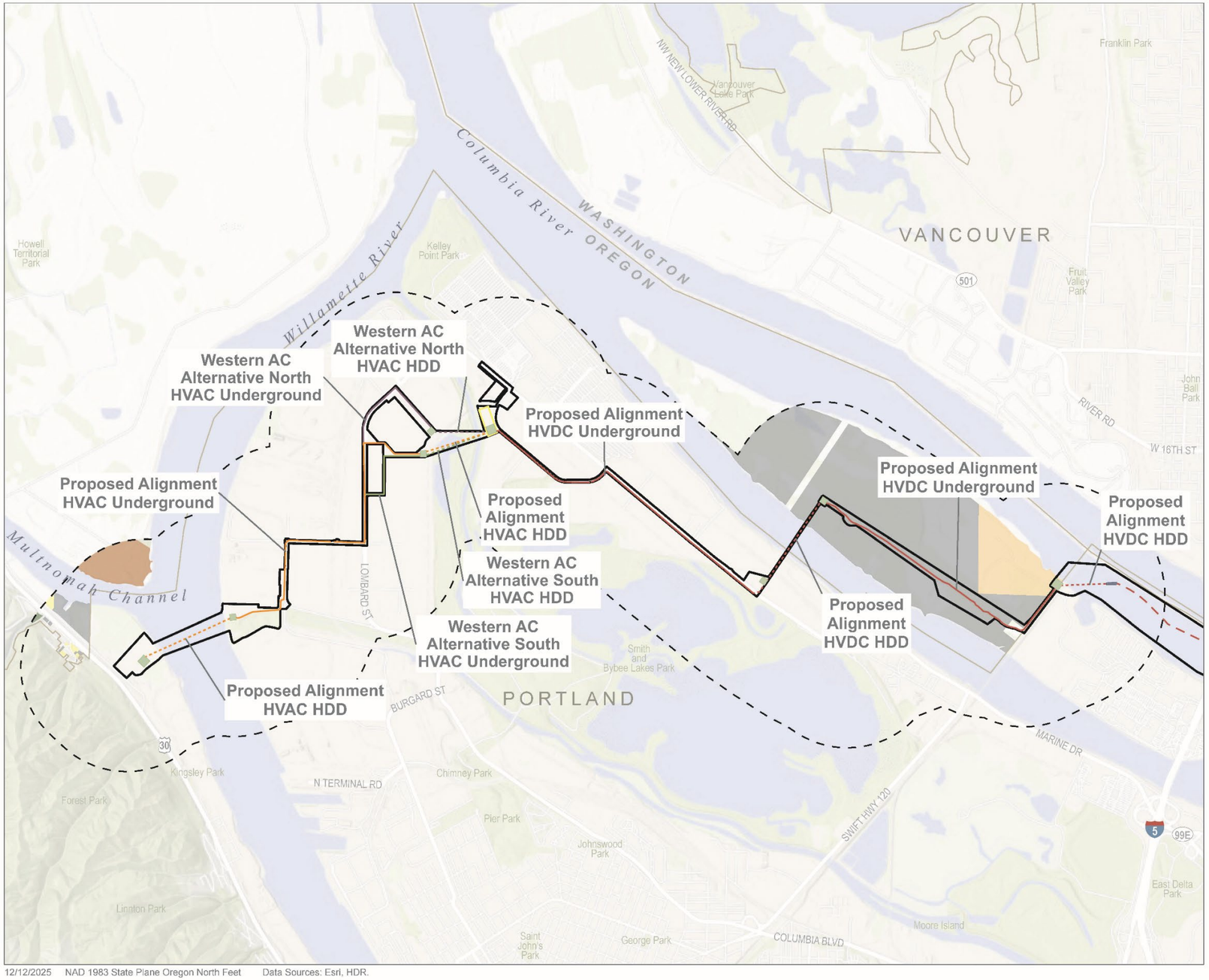
RESPONSE

Development within the floodway would be nonstructural. It is anticipated that since the HVDC transmission cables would be backfilled and no structures would be added to the river, Facility development would not result in any increase in the flood levels during the occurrence of the base flood discharge. A certification from a professional engineer on the increase in flood levels and/or flood hazards will be provided.

6.5 Multnomah County

The components of the Facility within Multnomah County include the HDD area, HVDC transmission cables (in-river), and the HVDC transmission cables (on-land, underground) (Figure 5 Multnomah County Existing Land Use, Figure 6A Multnomah County Jurisdiction Zoning, and Figure 6B Multnomah County Jurisdiction Overlay).

Figure 5. Multnomah County Existing Land Use



12/12/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 5
MULTNOMAH COUNTY EXISTING LAND USE

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVAC HDD
- PROPOSED ALIGNMENT - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE NORTH - HVAC HDD
- WESTERN AC ALTERNATIVE NORTH - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE SOUTH - HVAC HDD
- WESTERN AC ALTERNATIVE SOUTH - HVAC UNDERGROUND
- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY 3-SIDED WET COFFERDAM
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA

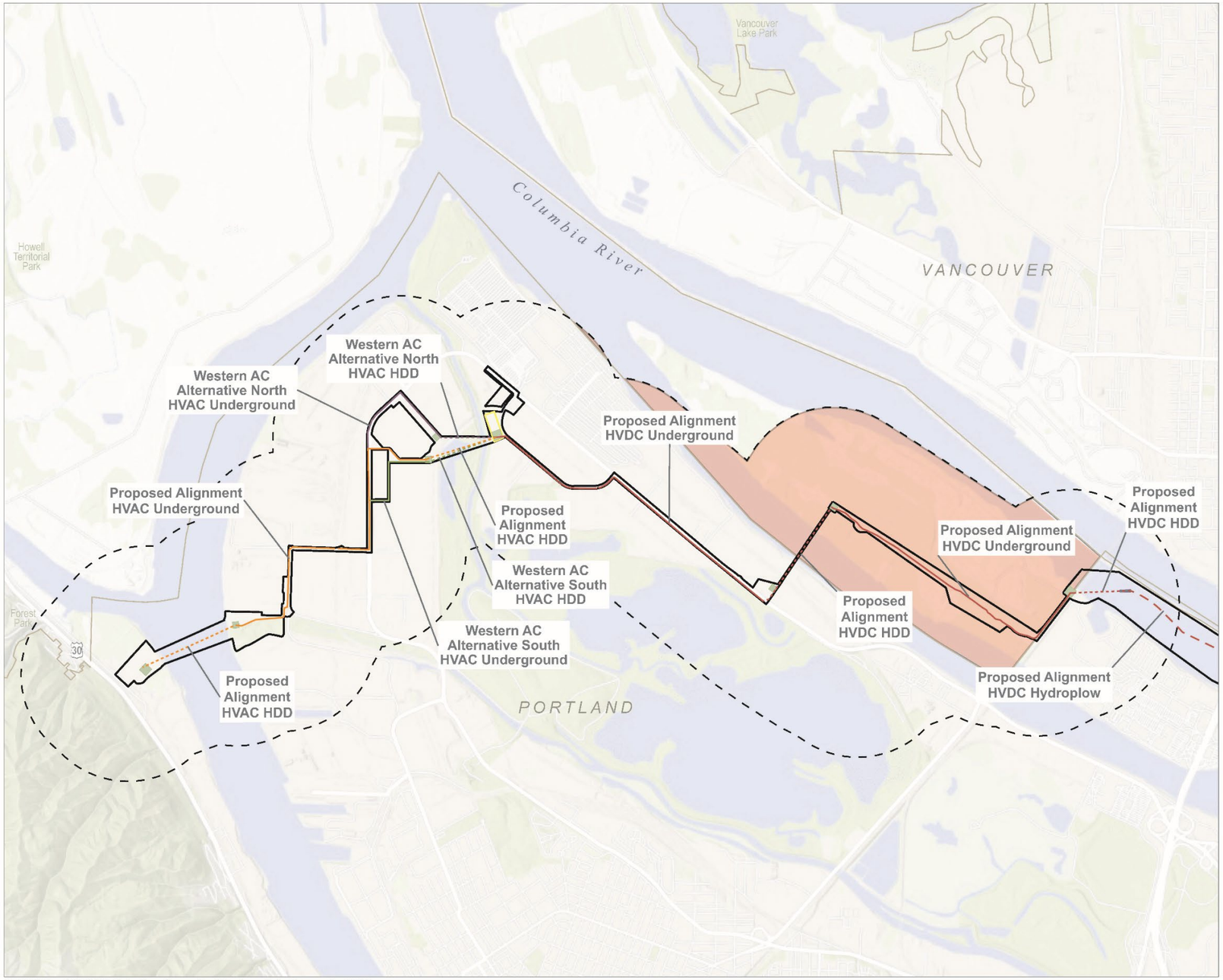
MULTNOMAH COUNTY LANDUSE

- AGRICULTURE
- COMMERCIAL
- FOREST
- RURAL
- SINGLE FAMILY RESIDENTIAL
- VACANT

CASCADE RENEWABLE TRANSMISSION

0 0.7 mi
1:33,000

Figure 6A. Multnomah County Jurisdiction Zoning



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 6A
MULTNOMAH COUNTY JURISDICTION ZONING

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVAC HDD
- PROPOSED ALIGNMENT - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE NORTH - HVAC HDD
- WESTERN AC ALTERNATIVE NORTH - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE SOUTH - HVAC HDD
- WESTERN AC ALTERNATIVE SOUTH - HVAC UNDERGROUND
- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

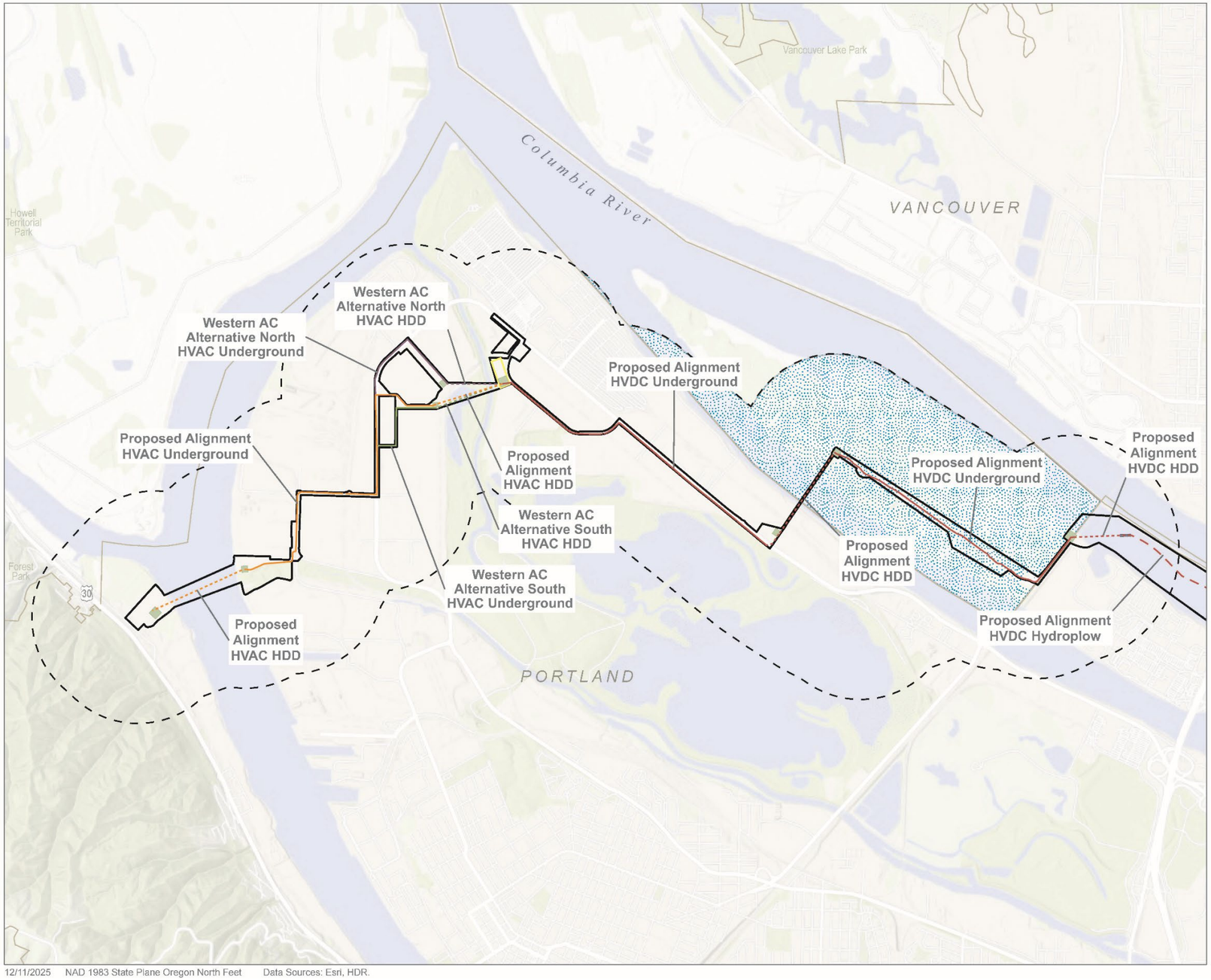
MULTNOMAH COUNTY BASE ZONE

- MULTIPLE USE FOREST (MUF)

CASCADE RENEWABLE TRANSMISSION

0 0.7 mi
1:33,000

Figure 6B. Multnomah County Jurisdiction Overlay



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 6B
MULTNOMAH COUNTY JURISDICTION OVERLAY

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVAC HDD
- PROPOSED ALIGNMENT - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE NORTH - HVAC HDD
- WESTERN AC ALTERNATIVE NORTH - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE SOUTH - HVAC HDD
- WESTERN AC ALTERNATIVE SOUTH - HVAC UNDERGROUND
- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- STEVENSON LANDING ALTERNATIVE - HVDC HDD
- STEVENSON LANDING ALTERNATIVE - HVDC HYDROPLOW
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

MULTNOMAH COUNTY OVERLAY ZONE

- FLOOD HAZARD OVERLAY (FH)

CASCADE RENEWABLE TRANSMISSION

0 0.7 mi
1:33,000

Table 9 shows a breakdown of the facility components within Multnomah County, the zoning designations, overlay zones (if applicable), land use and substantive criteria reviewed.

Table 9. Facility Components in Multnomah County

Facility Component	Description	Zone	Overlay Zone	Proposed Land Use
Horizontal directional drilling (HDD) area	Three temporary areas for HDD entry and exit	Multiple Use Forest (MUF)-19	Flood Hazard (FH)	Community Service Use
HVDC transmission cables (in-river)	8.61 miles, underground in-river	MUF-19	FH	Community Service Use
HVDC transmission cables (on-land, underground)	2.43 miles, on land	MUF-19	FH	Community Service Use

►Note: Multnomah County requested that the Applicant confirm the Facility was located outside of the Rural Center Zone. The Applicant has confirmed that the Facility site boundary is located outside of the Rural Center Base Zone. Therefore, the requirements of MCC 39.4000-39.4445 are not applicable to the Facility.

The following criteria analysis demonstrates consistency of the Facility with identified applicable substantive criteria within Multnomah County (Multnomah County Code [MCC]).

6.5.1 Multiple Use Forest (MUF) Base Zone

The HDD area and on-land HVDC transmission cable Facility components are proposed in the MUF base zone. Criteria for development in the MUF base zone is in Section 33 of the MCC.

MCC 39.4710 CONDITIONAL USES

> *The following uses may be permitted when found by the approval authority to satisfy the applicable standards of this Chapter: (A) Community Service Uses pursuant to the provisions of MCC 39.7500 through 39.7810.*

RESPONSE

All proposed uses in Multnomah County meet the definition of a use consistent with “Community Service Uses,” defined in MCC 39.7520(B)(6) as,

> *Utility facilities, including power substation or other public utility buildings or uses, subject to the approval criteria in MCC 39.7515(A) through (H).*

Community Service Uses are listed as a conditional use in the MUF zone, subject to compliance with standards of MCC 39.7500 through 39.7810.

Compliance with applicable standards of MCC Sections 39.7515(A) through (H) and MCC 39.7500 through 39.7810, are analyzed below.

MCC 39.7515 APPROVAL CRITERIA

In approving a Community Service use, the approval authority shall find that the proposal meets the following approval criteria,

(A) Is consistent with the character of the area;

RESPONSE

The area is generally characterized by existing industrial development, the Southern Pacific Railroad, and utility corridors. Existing utility and pipeline crossings – both in water and on-land – exist in the area to support these developments. The Facility would be entirely underground and in-water and would not affect the character of the area.

(B) Will not adversely affect natural resources;

RESPONSE

Natural resource in the area includes wetlands and the Columbia River. The in-water portion of the HVDC transmission cable would be buried in the bed of the Columbia River and the on-land portion of the HVDC transmission cable would be in previously disturbed ROWs. For a complete report on the impacts to wetlands and the Columbia River, see the State and Local Laws and Regulations: Waters of the State or U.S. All impacts to wetlands and landward water resources have been avoided. Impacts to the Columbia River are unavoidable, but avoidance and minimization efforts for these impacts have been and will continue to be implemented during Facility design to the extent practicable.

(C) The use will not:

(1) Force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use; nor

(2) Significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

RESPONSE

(1-2) As an underground and in-water HVDC transmission cable, the Facility would not change or impact land uses on site or in the surroundings, including those that involve farm or forest practices.

(D) Will not require public services other than those existing or programmed for the area;

RESPONSE

As an underground and in-water HVDC transmission cable, the Facility would not result in the need for additional public services.

(E) Will be located outside a big game winter habitat area as defined by the Oregon Department of Fish and Wildlife or that agency has certified that the impacts will be acceptable;

RESPONSE

Per a review of the ODFW's Compass Database, no big game winter habitat is located near the Facility.

(F) Will not create hazardous conditions;

RESPONSE

Construction site personnel will be required to attend hazard and safety training prior to working on-site. The Applicant's construction contractor would maintain a list of on-site construction personnel who have received the training. During operation, the Facility would be underground and would not require maintenance. There are no identifiable hazardous conditions that the Facility would be anticipated to create.

(G) Will satisfy the applicable policies of the Comprehensive Plan;

RESPONSE

The following policies from the Multnomah County Comprehensive Plan are applicable to the Facility.

Table 10. Multnomah County Comprehensive Plan Consistency

Multnomah County Comprehensive Plan Goal	Objective/Policy	Consistency Determination
Chapter 5: Natural Resources	**General Policies and Strategies**	
	Policy 5.1: Identify and protect natural resources in order to promote a healthy environment and natural landscape that contribute to Multnomah County's livability.	**Consistent**. The portions of the corridor within Multnomah are all underground and would be constructed and operated in areas of existing road ROW and developed urban areas, specifically selected to avoid or minimize disturbance to streams, rivers, and wetlands. Using HDD to transition from land to water would avoid wetlands and shorelines.
	Policy 5.2: Protect natural areas from incompatible development and specifically limit those uses which would significantly damage the natural area values of the site.	**Consistent.** Disturbance is proposed in previously disturbed areas or rights-of-ways to the extent possible. Any disturbance of existing vegetation would be returned to pre-construction conditions and re-vegetation would occur, if required.

Multnomah County Comprehensive Plan Goal	Objective/Policy	Consistency Determination
	Policy 7.30: Enhance in-water habitat for native fish and wildlife, particularly in the Oregon Slough and near-shore environments along the Columbia River.	**Consistent.** Facilities and the cable route have been sited to avoid Category 1 habitats, and minimize impacts to Category 3,4, and 5 habitats. Unavoidable habitat impacts will be mitigated consistent with OAR 635-415-0025.
Chapter 11: Public Facilities	**General Policies and Strategies**	
	Policy 11.14: Work with utility and communications companies that own transmission, distribution and communication lines to bury the lines to provide more secure power and communications service during emergency situations and improve scenic qualities.	**Consistent.** The Facility would consist of in-water and underground HVDC transmission cable.

MCC 39.8020 DESIGN REVIEW APPLICATION OF REGULATIONS

(A) Except those exempted by MCC 39.8015, the provisions of MCC 39.8000 through 39.8050 shall apply to all conditional and community service uses, and to specified uses, in any base zone.

RESPONSE

The Facility components proposed in Multnomah County do not qualify for any exemption listed in 39.8015.

(B) Uses subject to Design Review that require the creation of fewer than four new parking spaces pursuant to MCC 39.6590 shall only be subject to the following Design Review approval criteria: MCC 39.8040(A)(1)(a) and (1)(c), and (4) and (7), except when located in the RC, BRC, OR, OCI, PH-RC or SRC zone base zones.

RESPONSE

The Facility components proposed in Multnomah County do not propose any parking spaces. Therefore, only the provisions of MCC 39.8040(A)(1)(a) and (1)(c), and (4) and (7) that are applicable are analyzed below.

(4) Preservation of Natural Landscape - The landscape and existing grade shall be preserved to the maximum practical degree, considering development constraints and suitability of the landscape or grade to serve their functions. Preserved trees and shrubs shall be protected during construction.

RESPONSE

No buildings, structures, parking and circulation areas, outdoor storage areas, landscape areas, service and delivery areas, outdoor recreation areas, retaining walls, signs and graphics, accessways, or pedestrian walkways would be constructed as part of the Facility.

Soil disturbance is proposed in previously disturbed areas or ROWs to the extent possible. Any disturbance of existing vegetation would be returned to pre-construction conditions and re-vegetation would occur, if required. The existing grade will be maintained throughout the proposed corridor. Lastly, it is not anticipated that trees or shrubs would need to be removed during construction. Prior to construction, if protected trees and shrubs are identified as within the construction footprint during inventory and construction plan development, the trees and shrubs will either be preserved or the Applicant will comply with all applicable requirements and secure any necessary permits for removal.

MCC 39.8030 – FINAL DESIGN REVIEW PLAN

Prior to land use approval for building permit review or commencement of physical development where no additional permits are necessary, the applicant shall revise the plans to show compliance with the land use approvals granted, all conditions of approval and required modifications. Final design review plan shall contain the following, drawn to scale:

(A) Site Development and Landscape Plans drawn to scale, indicating the locations and specifications of the items described in MCC 39.8025, as appropriate;

RESPONSE

The Applicant will comply with 39.0830(A) by going through the final design review with the county.

6.5.2 MCC Flood Hazard Overlay (FH)

All Facility components in Multnomah County are in the county's Flood Hazard Overlay Zone Overlay zone. Criteria for development in the Flood Hazard overlay zone is in Section 39 of the MCC.

MCC 39.5010 - AREAS AFFECTED

The provisions of MCC 39.5000 through 39.5055 shall apply to all areas of special flood hazard.

RESPONSE

Per FEMA Flood Insurance Rate Maps, the Facility would be located within special flood hazard areas (the Regulatory Floodway (Zone AE and BFE) of the Columbia River. Applicable criteria of MCC 39.5000 through MCC 39.5055 (FH) is addressed below.

MCC 39.5015 - PERMITS

(A) No structure, dwelling or manufactured dwelling shall be erected, located, altered, improved, repaired or enlarged and no other new development including but not limited to grading, mining, excavation and filling (see "Development" under MCC 39.5005) shall occur in areas of special flood hazard unless a Floodplain Development Permit specifically authorizing the proposal has been obtained from Multnomah County. Variances to the Flood Hazard regulations are not allowed.

RESPONSE

The Applicant is proposing grading, excavation and filling and a Floodplain Development Permit is required for this work.

MCC 39.5025 APPLICATION INFORMATION REQUIRED.

An application for development subject to a Floodplain Development Permit shall include the following:

(A) A map showing the property line locations, the surveyed boundaries of the Areas of Special Flood Hazard on the parcel, roads, and driveways, existing structures, watercourses and the location of the proposed development(s), topographic elevations for the proposed development and areas of grading or filling required for the project. The FIRM map and panel number shall also be provided on the map.

(B) Detailed construction drawings showing compliance with the development standards specified in MCC 39.5030. A State of Oregon registered professional engineer or architect shall stamp the plans and include a statement that the plans meet the applicable requirements of MCC 39.5030.

RESPONSE

With the Floodplain Development Application, the Applicant would provide detailed construction plans prepared by a professional engineer that include the above elements to demonstrate the HVDC cable system segments of underground cable proposed in relation to flood hazards and satisfaction of requirements.

Upon issuance of an OR EFSC ASC for the Facility, the Applicant would submit for the Floodplain Development Permit to Multnomah County, if required. After review of the permits, permits would be issued without further conditions pursuant to ORS 469.401(3). As such, no development within the special flood hazard area would commence prior to the issuance of a site certificate for the Facility.

(C) An elevation certificate based on construction drawings which have been signed by a State of Oregon registered professional land surveyor, or a floodproofing certificate signed by a State of Oregon registered professional engineer or architect, depending on the type of development proposed. The certificate shall be accompanied by a plan of the property which shows the location and elevation of a benchmark on the property.

RESPONSE

An Elevation Certificate is required to show new buildings and substantial improvements in Special Flood Hazard Areas are elevated property to comply with floodplain management ordinances and obtain flood insurance. Since the Facility does not include a new building or substantial improvements, an elevation certificate is not required.

(D) A written narrative specifying building materials and methods that will be utilized to comply with the requirements of the floodplain development permit and this subpart.

RESPONSE

The Applicant has provided known information on building materials and methods in the Background Information Exhibit and Soil Protection Exhibit.

The in-river methods for construction of the Facility in the floodplain are favorable because they are manufactured for in-water construction methods. For the in-river transmission cable, the conductor would be of a compacted circular design, constructed from annealed copper wires and filled with a water blocking material to limit water propagation in case of cable severance. Trenching methods on-land would be used to lay the HVDC transmission cables. Temporary areas up to 1.4 acres in size would be used to establish HDD drill entry pits and temporarily stage equipment. The construction contractor would be required to develop a Spill Prevention Control and Countermeasures Plan prior to beginning Facility construction. The cables would not be structures or add impervious surfaces, and the flood elevation would not increase.

A narrative will be included with the Floodplain Development Permit Application that details compliance with MCC 39.5025 and 39.5030.

(E) Evidence that the applicant has obtained, when necessary, prior approval from those Federal, State and/or local governmental agencies with jurisdiction over the proposed development.

RESPONSE

The Organizational Expertise Exhibit provides information about permits that are required for constructing and operating. The Applicant is actively coordinating and submitting applications to obtain appropriate approvals from the relevant federal, state, and/or local government agencies. The Applicant may rely on contractors to obtain third party, federally delegated, state, or local permits not covered by the site certificate. Per OAR 345-022-0010(4), if the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time OR EFSC issues the site certificate, OR EFSC may issue the site certificate subject to the condition that the certificate holder would not commence construction or operation as appropriate until the third party has obtained the necessary permit or approval, and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.

MCC 39.5030 DEVELOPMENT STANDARDS

The following development standards shall apply within all portions of unincorporated Multnomah County to all new construction, substantial improvement or other development in areas of special flood hazard, as defined in MCC 39.5005:

(A) This section applies to all development within areas of special flood hazard in unincorporated Multnomah County as defined in MCC 39.5005.

RESPONSE

Per FEMA Flood Insurance Rate Maps, the Facility would be located within special flood hazard areas (the Regulatory Floodway (Zone AE and BFE) of the Columbia River. Facility development within the special flood hazard areas in Multnomah County would include installation of 10.4 miles of in-river and underground HVDC transmission cable within the FEMA flood Zone AE. Two temporary areas for HDD entry and exit would also be constructed within FEMA Zone AE.

(1) Development, excavation and fill shall be performed in a manner that maintains or increases flood storage and conveyance capacity and does not increase the design flood elevation.

RESPONSE

See response to MCC 39.5025(D) above.

(2) All fill placed at or below the design flood elevation in areas of special flood hazard shall be balanced with at least an equal amount of soil material removal.

RESPONSE

The Applicant is not proposing to place fill. The Applicant will backfill all excavated soils.

(3) Excavation shall not be counted as compensating for fill if such areas will be filled with water in non-storm winter conditions.

RESPONSE

The Facility would not have areas that would fill with water in non-storm winter conditions.

(4) Temporary fills permitted during construction shall be removed and not be allowed in the floodway during the wet weather season.

RESPONSE

The Applicant is not proposing temporary fills.

(5) Uncontained areas of hazardous materials as defined by the Oregon Department of Environmental Quality shall be prohibited in areas of special flood hazard.

RESPONSE

See response to MCC 39.5025(D) above.

MCC 39.6210 PERMITS REQUIRED

(A) Unless exempt under this Code, whether under MCC 39.6215, 39.5080, 38.5510 or otherwise, no ground disturbing activity shall occur except pursuant to one of the following permits: a Minimal Impact Project (MIP) permit, an Erosion and Sediment Control permit (ESC), an Agricultural Fill permit (AF), a Geologic Hazards permit (GH), or a Large Fill permit (LF).

RESPONSE

The Facility does not qualify for an exemption under MCC 39.6215, MCC 39.5080 or 38.5510.

The Applicant would not meet the threshold requirements for a Minimal Impact Project permit, an Agricultural Fill permit or a Geologic Hazards permit.

In the analysis area of Multnomah County, the estimated cubic yards of permanent rock or aggregate fill that would be deposited is under 5,000 cubic yards and a Large Fill Permit is not required. In water fill estimated to be 3,000 cubic yards per acre, with the net fill being much less. Approximately 1-acre of construction in Multnomah County is proposed. The extra fill (fill that is added to the removed fill) is approximately 10 percent of the total cubic yards.

The Applicant would be required to obtain an Erosion and Sediment Control permit (ESC) permit.

(B) The permits referenced in subsection (A) are required in addition to and not in lieu of any other local, state or federal permit, including but not limited to permits required for ground disturbing activities within a water body regulated by the Oregon Department of State Lands, the U.S. Army Corps of Engineers or the Oregon Department of Fish and Wildlife.

(C) No ground disturbing activity shall occur except in support of a lawfully established use or in support of the lawful establishment of a use.

RESPONSE

(B-C) See response to MCC 39.5025(E) above.

MCC 39.6225 EROSION AND SEDIMENT CONTROL PERMIT

(B) An Erosion and Sediment Control (ESC) permit shall not be issued unless the application for such permit establishes compliance with MCC 39.6210 and satisfaction of the following standards:

(1) The total cumulative deposit of fill, excluding agricultural fill pursuant to an Agricultural Fill permit, on the site for the 20-year period preceding the date of the ESC permit application, and including the fill proposed in the ESC permit application, shall not exceed 5,000 cubic yards. Fill physically supporting and/or protecting a structure or access road for essential and public facilities subject to earthquake or tsunami building code requirements of the Oregon Structural Specialty Code is not included in this 5,000 cubic yard calculation. For purposes of this section, the term "site" shall mean either a single lot of record or contiguous lots of record under same ownership, whichever results in the largest land area.

RESPONSE

All construction work would be done in compliance with an ESCP satisfactory to ODEQ and as required under the NPDES Stormwater Discharge Permit #1200-C. The Applicant will apply for the permit before construction and update the ESCP according to the final design. The Facility would comply with federal, state, and local statutes and regulations related to construction stormwater runoff, including drainage districts and other flood protection providers, including but not limited to the Multnomah County Drainage District regarding potential impacts to the Portland Metro Levee System and the NPDES 1200-C ESCP, which would be completed prior to construction. Construction BMPs associated with these permits are expected to reduce any stormwater impacts below the established requirements as outlined in ODEQ's 1200-C permit requirements.

Soil erosion can be influenced by increased exposure to wind or water and may be influenced by construction activities. Construction activities can potentially increase soil erosion from disturbance, exposure (from vegetation removal or loss), compaction from equipment, and changes to surface drainage patterns. Wind erosion is influenced by wind intensity, soil texture and moisture, grain size of the unprotected soil surface, topography, vegetative cover, and the frequency at which soil is disturbed. Runoff potential and water erosion hazards for identified soils within the site boundary range from low to high. Average annual precipitation in The Dalles, Oregon, is approximately 14.55 inches (U.S. Climate Data 2024a), while average annual precipitation for Portland, Oregon, is 36.03 inches (U.S. Climate Data 2024b). The high erosion potential of some of the site soils and the available precipitation makes site soils sensitive to water erosion, primarily in the winter and spring months when most precipitation occurs, especially on steeper slopes.

BMPs described in the NPDES 1200-C ESCP would minimize the potential for wind or water erosion and sedimentation of soils disturbed by construction. Typical measures include putting sedimentation control measures in place prior to or concurrent to construction; spraying water on exposed soils and covering soil stockpiles that would be exposed longer term; placing gravel surfacing, where needed, immediately following clearing and grading; and revegetating disturbed areas as soon as practicable.

(2) Fill shall be composed of earth materials only.

RESPONSE

Proposed fill includes only earth materials.

(3) Cut and fill slopes shall not exceed 33 percent grade (3 Horizontal; 1 Vertical) unless a Certified Engineering Geologist or Geotechnical Engineer certifies in writing that a grade in excess of 33 percent is safe (including, but not limited to, not endangering or disturbing adjoining property), and suitable for the proposed development.

RESPONSE

There are no cut and fill slopes over 33 percent grade.

(5) Fills shall not encroach on any water body unless an Oregon licensed Professional Engineer certifies that the altered portion of the water body will continue to provide equal or greater flood carrying capacity for a storm of 10-year design frequency.

RESPONSE

Within Multnomah County, ground disturbing activities associated with Facility construction would occur within the bed of the Columbia River and on Hayden Island. To ensure the Facility's consistency with Oregon water quality requirements, the Applicant would receive a Section 401 Water Quality Certification from the ODEQ.

(8) Ground disturbing activity shall be done in a manner which will minimize soil erosion, stabilize the soil as quickly as practicable, and expose the smallest practical area at any one time during construction.

RESPONSE

Potential impacts to soil from construction, operations, and decommissioning would be mitigated by adhering to BMPs identified in the ESCP.

(9) Development plans shall minimize cut or fill operations and ensure conformity with topography so as to create the least erosion potential and adequately accommodate the volume and velocity of surface runoff.

RESPONSE

The Facility would not change the topography.

(10) Temporary vegetation and/or mulching shall be used to protect exposed critical areas during development.

RESPONSE

Localized impacts to soils from temporary disturbance areas would be minimized through the use of BMPs and efforts to restore soil surfaces and vegetation following disturbances. The draft Revegetation and Noxious Weed Control Plan (in the Fish and Wildlife Habitat Exhibit) and/or the ESCP would include, but are not necessarily limited to, minimization measures and BMPs, including mulching.

(11) Whenever feasible, natural vegetation shall be retained, protected, and supplemented;

(a) A 100-foot undisturbed buffer of natural vegetation shall be retained from the top of the bank of a stream, or from the ordinary high watermark (line of vegetation) of a water body, or within 100 feet of a wetland;

(b) The buffer required in subsection (11)(a) may only be disturbed upon the approval of a mitigation plan which utilizes erosion, sediment and stormwater control measures designed to perform as effectively as those prescribed in the most recent edition of the City of Portland Erosion and Sediment Control Manual and the City of Portland Stormwater Management Manual and which is

consistent with attaining equivalent surface water quality standards as those established for the Tualatin River drainage basin in OAR 340-041- 0345(4)

RESPONSE

Mitigation efforts required by the NPDES 1200-C ESCP are expected to limit impacts to soils from Project construction and operations; therefore, a formal monitoring program is not anticipated. Visual observation and inspections would be conducted during construction and operations, as required by the NPDES 1200-C ESCP, and would include visual review of BMPs, soil conditions, rutting/runoff, and other factors. If problems are observed, measures to mitigate or reclaim these areas would be implemented and a formal monitoring program established and implemented for those areas.

(12) Permanent plantings and any required structural erosion control and drainage measures shall be installed as soon as practical.

RESPONSE

The areas used only for construction would be reclaimed during the best season for replanting, typically, in the fall or spring. Reclamation activities may include replacing topsoil and revegetation.

(13) Provisions shall be made to effectively accommodate increased runoff caused by altered soil and surface conditions during and after development. The rate of surface water runoff shall be structurally retarded where necessary.

(14) Sediment in the runoff water shall be trapped by use of debris basins, silt traps, or other measures until the disturbed area is stabilized.

(15) Provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surface of fills by installation of temporary or permanent drainage across or above such areas, or by other suitable stabilization measures such as mulching or seeding.

(18) Erosion and sediment control measures must be utilized such that no visible or measurable erosion or sediment shall exit the site, enter the public right-of-way or be deposited into any water body or storm drainage system. Control measures which may be required include, but are not limited to: (a) Energy absorbing devices to reduce runoff water velocity; (b) Sedimentation controls such as sediment or debris basins. Any trapped materials shall be removed to an approved disposal site on an approved schedule; (c) Dispersal of water runoff from developed areas over large undisturbed areas

(19) Disposed spoil material or stockpiled topsoil shall be prevented from eroding into water bodies by applying mulch or other protective covering; or by location at a sufficient distance from water bodies or by other sediment reduction measures.

(20) Such non-erosion pollution associated with construction such as pesticides, fertilizers, petrochemicals, solid wastes, construction chemicals, or wastewaters shall be prevented from leaving the construction site through proper handling, disposal, continuous site monitoring and clean-up activities.

(21) Ground disturbing activities within a water body shall use instream best management practices prescribed in the most recent edition of the City of Portland Erosion and Sediment Control Manual.

RESPONSE

(13-21) See response to 10, above.

(22) The total daily number of fill haul truck trips shall not cause a transportation impact (as defined in the Multnomah County Road Rules) to the transportation system or fill haul truck travel routes.

RESPONSE

The Multnomah County Road Rules defines a “transportation impact” as new construction or alteration that increases the number of trips generated by a site by more than 20 percent, 100 trips per day or more than 10 trips in peak hour. A maximum of 3.2 daily truck trips per day are estimated during construction. Construction of the Facility would not increase trips generated to cause a transportation impact in Multnomah County.

(23) Fill trucks shall be constructed, loaded, covered, or otherwise managed to prevent any of their load from dropping, sifting, leaking, or otherwise escaping from the vehicle. No fill shall be tracked or discharged in any manner onto any public right-of-way.

RESPONSE

The Applicant would use a dump truck for spoilage haul.

6.5.3 Comprehensive Plan

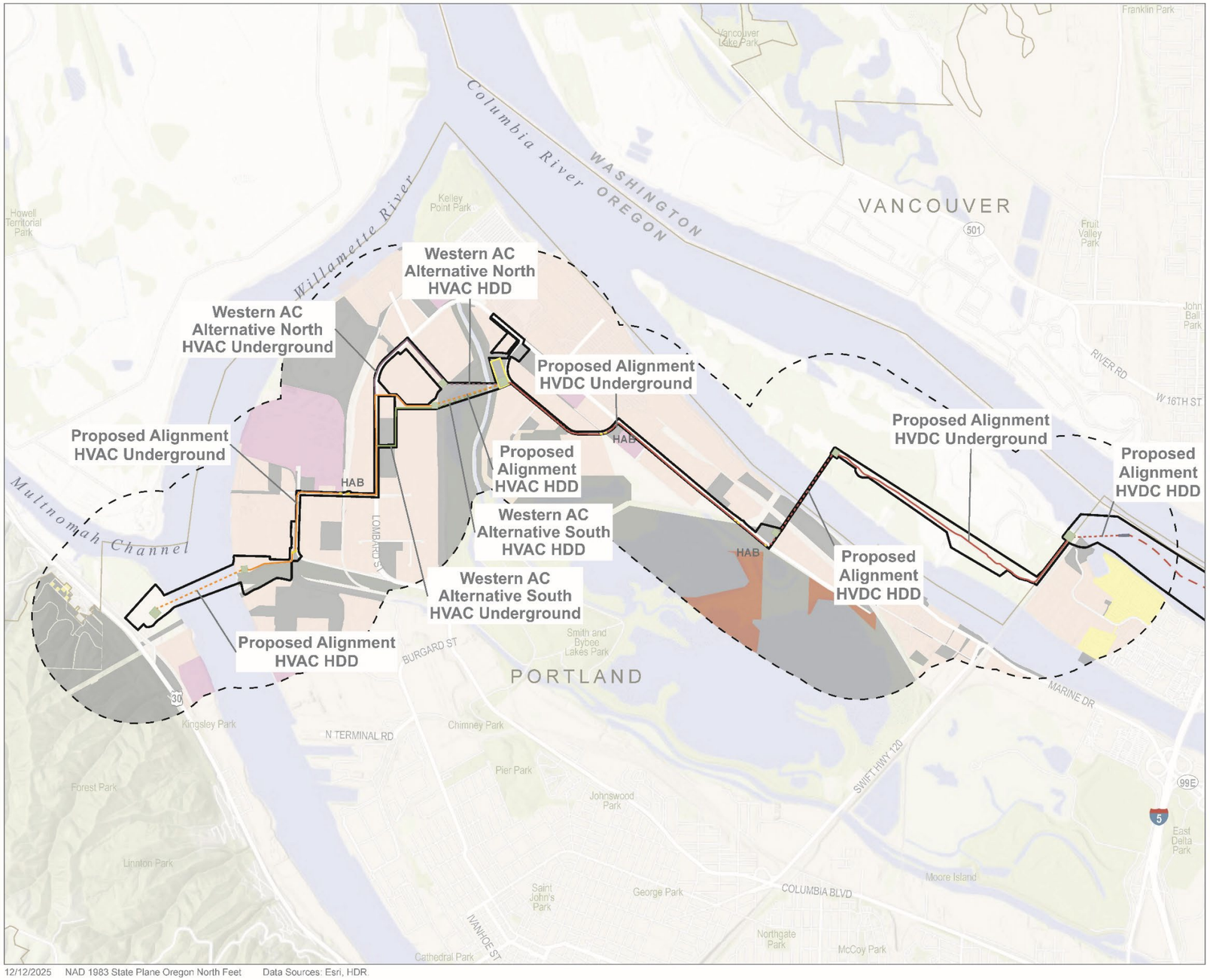
Comprehensive plan goals, objectives or policies that were identified as required for consistency in the development code analysis is provided above.

6.6 City of Portland

The components of the Facility within the City of Portland include the converter station, converter station laydown area, HDD drill pits, HVAC and HVDC transmission cables and trenches, and a three-sided cofferdam (Figure 7 City Of Portland Existing Land Use and Figure 8 City Of Portland Jurisdiction Zoning).

Table 11 provides a breakdown of the facility components within Portland, the applicable zoning designations, overlay zones, land use and substantive criteria reviewed.

Figure 7. City Of Portland Existing Land Use



12/12/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 7
CITY OF PORTLAND EXISTING LAND USE

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVAC HDD
- PROPOSED ALIGNMENT - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE NORTH - HVAC HDD
- WESTERN AC ALTERNATIVE NORTH - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE SOUTH - HVAC HDD
- WESTERN AC ALTERNATIVE SOUTH - HVAC UNDERGROUND
- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- TEMPORARY 3-SIDED WET COFFERDAM
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA

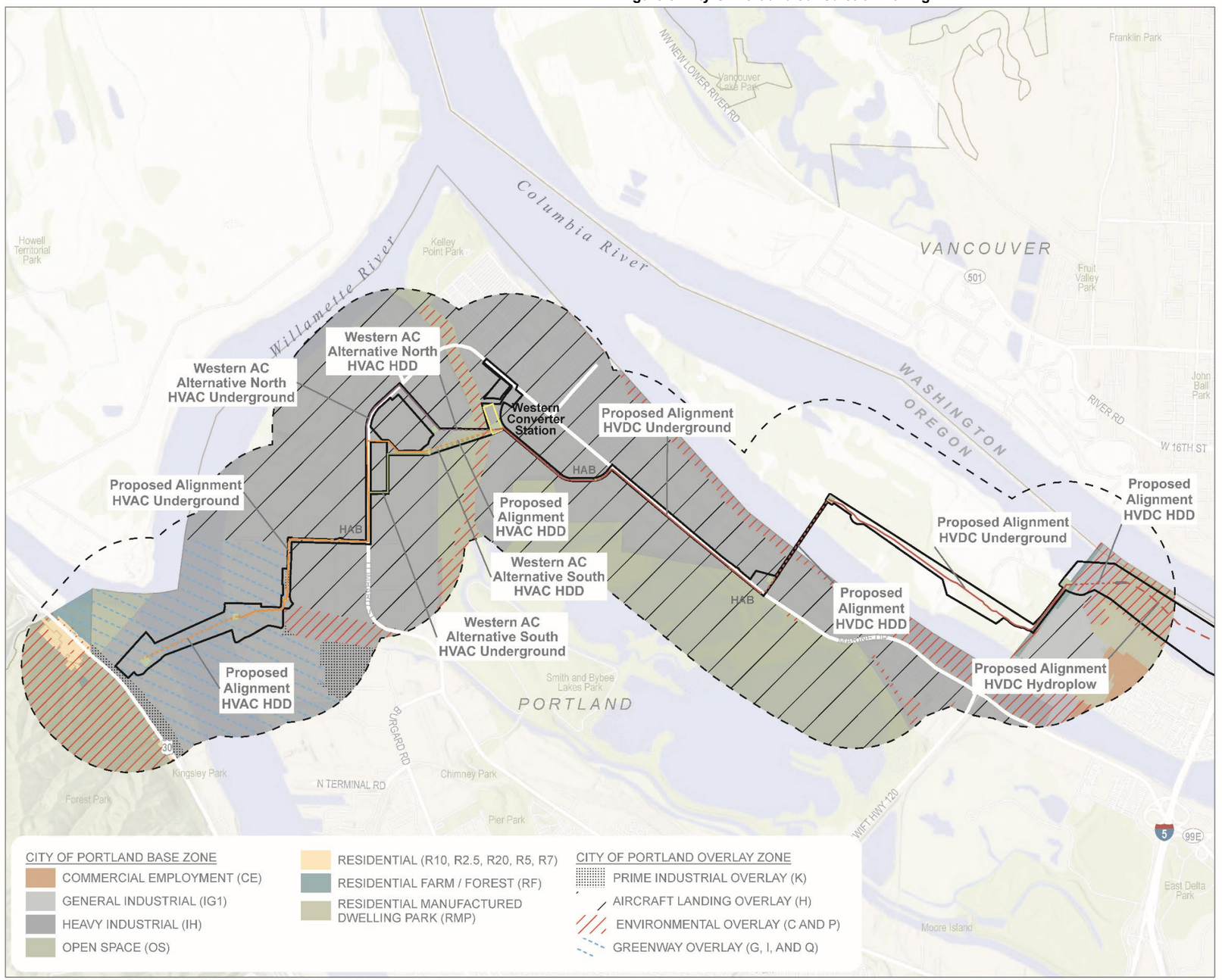
CITY OF PORTLAND LAND USE

- COMMERCIAL
- INDUSTRIAL
- RURAL
- SINGLE FAMILY RESIDENTIAL
- VACANT

CASCADE RENEWABLE TRANSMISSION

0 0.7 mi
1:33,000

Figure 8. City Of Portland Jurisdiction Zoning



CITY OF PORTLAND BASE ZONE
- COMMERCIAL EMPLOYMENT (CE)
- GENERAL INDUSTRIAL (IG1)
- HEAVY INDUSTRIAL (IH)
- OPEN SPACE (OS)
- RESIDENTIAL (R10, R2.5, R20, R5, R7)
- RESIDENTIAL FARM / FOREST (RF)
- RESIDENTIAL MANUFACTURED DWELLING PARK (RMP)

CITY OF PORTLAND OVERLAY ZONE
- PRIME INDUSTRIAL OVERLAY (K)
- AIRCRAFT LANDING OVERLAY (H)
- ENVIRONMENTAL OVERLAY (C AND P)
- GREENWAY OVERLAY (G, I, AND Q)

12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 8
CITY OF PORTLAND JURISDICTION ZONING

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVAC HDD
- PROPOSED ALIGNMENT - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE NORTH - HVAC HDD
- WESTERN AC ALTERNATIVE NORTH - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE SOUTH - HVAC HDD
- WESTERN AC ALTERNATIVE SOUTH - HVAC UNDERGROUND
- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

CASCADE RENEWABLE TRANSMISSION

0 0.7 mi
1:33,000

Table 11. Facility Components in Portland

Facility Component	Description	Base Zone	Overlay Zone(s)	Proposed Land Use
Converter station	5.0 acres	IH	(h, k)	Rail Lines and Utility Corridor
Converter station laydown areas	10.3 acres	IH	(h, k, x)	Temporary Activity
	On 0.002 acres regardless of which alignment is chosen	OS	(c)	
HDD area	5.6 acres	IH	(c, h, k, x, g, q, i)	Temporary Activity
	0.7 acres	OS	(h)	
HVAC transmission cables	10.8 acres	IH	(c, k, h, p, g, q, i)	Rail Lines and Utility Corridor
	On 2.2 acres, perpendicularly under the Columbia Slough	OS	(c, h, k, x, p)	
	0.1 acres in the Columbia River	IG2	(c, h, k, x)	
	2.9 acres in the Columbia River	IH	(c, p)	
	1.1 acres, perpendicularly under the Columbia Slough	OS	(c, h, p)	
	0.6 acres in the Columbia River	RMP	(c, h, x)	
Three-sided wet cofferdam	0.5 acres, north of Hayden Island and West of the BNSF bridge	RMP	(c)	Temporary Activity

Source: Parcel Data Set from the City of Portland

The following criteria analysis demonstrates consistency of the Facility with identified applicable substantive criteria within Portland (Portland City Code [PCC]).

6.6.1 Open Space (OS) Base Zone

Portions of the temporary HDD areas and HVAC transmission cable are proposed in the OS base zone (Figure 8A Portions of the Facility in OS).

Criteria for development in the OS base zone is in Section 33.100 of the PCC. Development of Facility components in the OS base zone require a Type III Procedure. A Type III Procedure is a discretionary review for a Conditional Use Permit (PCC 33.730.030).

PCC 33.100.100 PRIMARY USES

C. *Conditional uses. Uses which are allowed if approved through the conditional use review process are listed in Table 100-1 with a "CU". These uses are allowed provided they comply with the conditional use approval criteria for that use, the development standards, and other regulations of this Title. Uses listed with a "CU" that also have a footnote number in the table are subject to the regulations cited in the footnote. In addition, a use or development listed in the 200s series of chapters is also subject to the regulations of those chapters. The conditional use review process and approval criteria are stated in Chapter 33.815, Conditional Uses.*

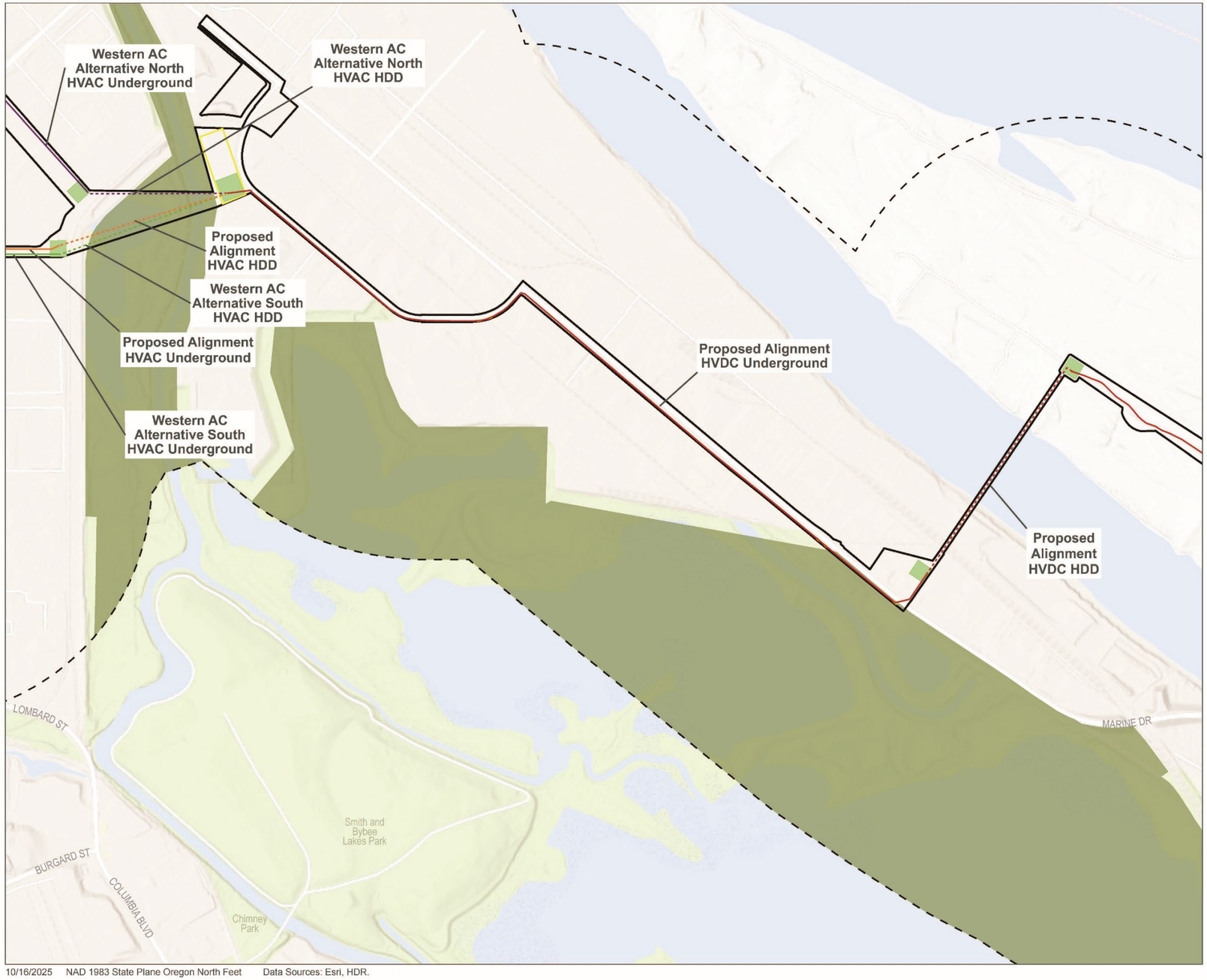
RESPONSE

All proposed uses in the OS base zone meet the definition of a use consistent with the "Rail Lines and Utility Corridor" use category, which includes a regional electric transmission line (PCC 33.920.550).

A Rail Lines and Utility Corridor use is listed as a Conditional Use in the OS zone, subject to compliance with standards of PCC Section 33.815 - Conditional Uses and PCC 33.100.200(B) – Development Standards.

Compliance with applicable standards of Section 33.815 and 33.100.200(B) are analyzed below.

Figure 8A. City of Portland Portions of the Facility in OS



10/16/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 8A
CITY OF PORTLAND
PORTIONS OF THE FACILITY IN OS

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVAC HDD
- PROPOSED ALIGNMENT - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE NORTH - HVAC HDD
- WESTERN AC ALTERNATIVE NORTH - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE SOUTH - HVAC HDD
- WESTERN AC ALTERNATIVE SOUTH - HVAC UNDERGROUND
- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

CITY OF PORTLAND BASE ZONE

- OPEN SPACE (OS)

CASCADE RENEWABLE TRANSMISSION

0 0.3 mi
1:13,000

PCC 33.815.230 - RAIL LINES AND UTILITY CORRIDORS

These approval criteria allow Rail Line And Utility Corridor uses where their location will not unduly interfere with other land uses and with the street system. The approval criteria are as follows:

A. The proposed rail line or utility corridor is sufficiently separated from nearby land uses so as to allow for buffering of the uses, especially in residential areas. In the case of railroad lines, separation distances should consider the expected number, speed, size, types, and times of trains; and

B. The rail line or utility corridor will not substantially impact the existing or planned street system, or traffic, transit, pedestrian, and bicycle movement and safety.

RESPONSE

Within the OS base zone, the Applicant is proposing to install underground HVAC cables, underground HVDC cables, and in-water HVDC cables. Alternatives 1 through 3 and Alternatives 4 through 6 have the same features within the same locations of the OS base zone.

The proposed locations of the utility corridor would not interfere with other land uses or the street system as they would be underground. The requirement for separation from nearby land uses would not be an issue because there is no above-ground physical structure that would require separation for compatibility. The HVAC cable would be installed in the OS base zone perpendicularly under the Columbia Slough via HDD. The two HDD drill pits associated with crossing the Columbia Slough (Alternatives 1-3) would be in the Heavy Industrial (IH) Zone, not the OS Zone.

Similarly, because the utility corridor will be underground, neither existing nor planned street systems, traffic, transit, pedestrian and bicycle movement and safety would be impacted. Once the cables are installed, the ground surface (or river bottom) would be returned to pre-construction conditions.

PCC 33.100.200(B) DEVELOPMENT STANDARDS

B. Conditional uses are subject to the development standards stated below.

1. Generally. Except as modified by paragraph B.2 and B.3, the development standards of Table 110-9, in Chapter 33.110, Single-Dwelling Zones, apply.

2. Minimum setbacks. Buildings must be set back from all property lines a minimum of 1 foot for each foot of building height. Setbacks for structures that are accessory to recreational fields used for organized sports are subject to Chapter 33.279, Recreational Fields for Organized Sports.

3. Parking. Conditional uses must meet the parking standards for that use in the CE zone, as stated in Chapter 33.266, Parking and Loading.

RESPONSE

The development standards of Table 110-9 in Chapter 33.110, Single-Dwelling Zones, 33.100.200(B)(2) and (3) were reviewed in context of the proposal. The Facility components proposed in the OS base zone are not above ground structures, none of the development standards apply.

6.6.2 Residential Farm/Forest (RF) Base Zone

Portions of the underground HVDC cables, in-water HVDC cables and HDD area Facility components are proposed in the RF base zone (Figure 8B City of Portland Portions of the Facility in RF).

Criteria for development in the RF base zone is in Section 33.110 of the PCC. Development of Facility components in the RF base zone require a Type III Procedure. A Type III Procedure is a discretionary review for a Conditional Use Permit (PCC 33.730.030).

PCC 33.110.100 PRIMARY USES

C. Conditional uses. Table 110-1. Uses that are allowed if approved through the conditional use review process are listed in Table 110-1 with a "CU". These uses are allowed provided they comply with the conditional use approval criteria for that use, the development standards, and other regulations of this Title. Uses listed with a "CU" that also have a footnote number in the table are subject to the regulations cited in the footnote. In addition, a use or development listed in the 200s series of chapters is also subject to the regulations of those chapters. The conditional use review process and approval criteria are stated in Chapter 33.815, Conditional Uses.

RESPONSE

All proposed uses in the RF base zone meet the definition of a use consistent with “Rail Lines and Utility Corridor” use category, which includes a regional electric transmission line (PCC 33.920.550).

A Rail Lines and Utility Corridor use is listed as a Conditional Use in the RF zone, subject to compliance with standards of PCC Section 33.815 - Conditional Uses and PCC 33.100.200(B) – Development Standards.

Compliance with applicable standards of PCC Section 33.815 and PCC 33.100.200(B) are analyzed below.

Figure 8B. City of Portland Portions of the Facility in RF

10/16/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 8B
CITY OF PORTLAND
PORTIONS OF THE FACILITY IN RF

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY 3-SIDED WET COFFERDAM
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

CITY OF PORTLAND BASE ZONE

- RESIDENTIAL FARM / FOREST (RF)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:7,000

PCC 33.100.230 – RAIL LINES AND UTILITY CORRIDORS

A. The proposed rail line or utility corridor is sufficiently separated from nearby land uses so as to allow for buffering of the uses, especially in residential areas. In the case of railroad lines, separation distances should consider the expected number, speed, size, types, and times of trains; and

B. The rail line or utility corridor will not substantially impact the existing or planned street system, or traffic, transit, pedestrian, and bicycle movement and safety.

RESPONSE

Within the RF base zone, the Applicant proposes to install portions of the underground HVDC cables, in-water HVDC cables, and a portion of the HDD area on Hayden Island within the railroad corridor. The in-water HVDC cable would be installed via jet plow in the RF base zone within the Columbia River.

The proposed locations of the utility corridor would not interfere with other land uses or the street system as they would be underground. The requirement for separation from nearby land uses would not be an issue because there is no above-ground physical structure that would require separation for compatibility.

Similarly, because the utility corridor will be underground, neither existing nor planned street systems, traffic, transit, pedestrian and bicycle movement and safety would be impacted. Once the cables are installed, the ground surface (or river bottom) would be returned to pre-construction conditions.

PCC 33.100.200(B) DEVELOPMENT STANDARDS

B. Conditional uses are subject to the development standards stated below.

1. Generally. Except as modified by paragraph B.2 and B.3, the development standards of Table 110-9, in Chapter 33.110, Single-Dwelling Zones, apply.

2. Minimum setbacks. Buildings must be set back from all property lines a minimum of 1 foot for each foot of building height. Setbacks for structures that are accessory to recreational fields used for organized sports are subject to Chapter 33.279, Recreational Fields for Organized Sports.

3. Parking. Conditional uses must meet the parking standards for that use in the CE zone, as stated in Chapter 33.266, Parking and Loading.

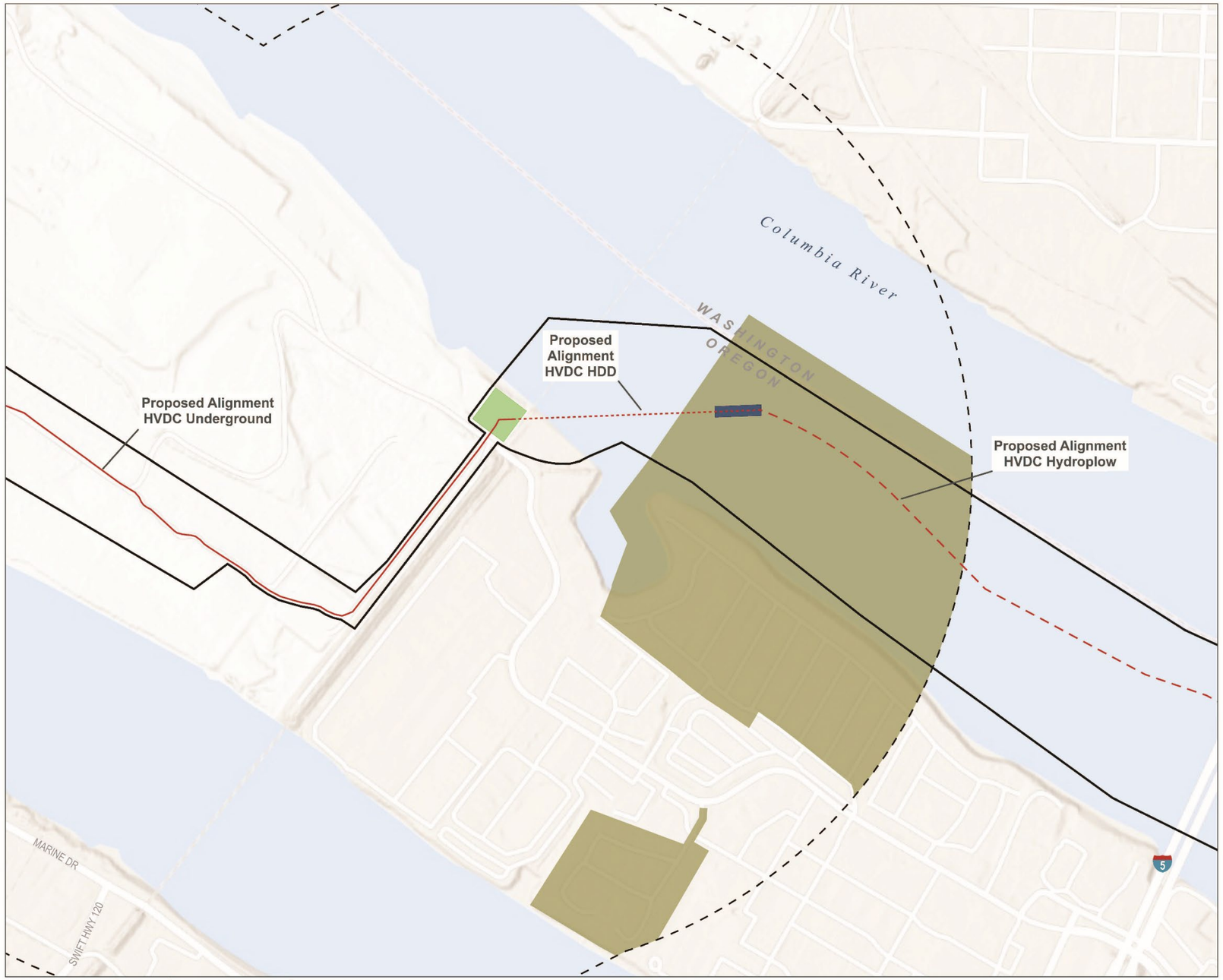
RESPONSE

The development standards of Table 110-9 in Chapter 33.110, Single-Dwelling Zones, 33.100.200(B)(2) and (3) were reviewed in context of the proposal. Facility components proposed in the RF base zone are not aboveground structures; none of the development standards apply.

6.6.3 Residential Manufactured Dwelling Park (RMP) Base Zone

Portions of the in-water HVAC transmission cable and the entire temporary three-sided wet cofferdam are proposed in the Columbia River water-ward of the Residential Manufactured Dwelling Park (RMP) base zone (Figure 8C Portions of the Facility in the RMP). Criteria for development in the RMP base zone is in Section 33.120 of the PCC.

Figure 8C. City of Portland Portions of the Facility in the RMP



10/16/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 8C CITY OF PORTLAND PORTIONS OF THE FACILITY IN THE RMP

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- TEMPORARY 3-SIDED WET COFFERDAM
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

CITY OF PORTLAND BASE ZONE

- RESIDENTIAL MANUFACTURED DWELLING PARK (RMP)

CASCADE RENEWABLE TRANSMISSION

0 0.1 mi
1:7,610

PCC 33.120.100 PRIMARY USES

C. Conditional uses.

1. Table 120-1. Uses which are allowed if approved through the conditional use review process are listed in Table 120-1 with a "CU". These uses are allowed provided they comply with the conditional use approval criteria for that use, the development standards, and other regulations of this Title. Uses listed with a "CU" that also have a footnote number in the table are subject to the regulations cited in the footnote. In addition, a use or development listed in the 200s series of chapters is also subject to the regulations of those chapters. The conditional use review process and approval criteria are stated in Chapter 33.815, Conditional Uses.

RESPONSE

All proposed uses in the RMP base zone meet the definition of a use consistent with "Rail Lines and Utility Corridor" use category which includes a regional electric transmission line (PCC 33.920.550). Development of the three-sided cofferdam in the RMP base zone is a Temporary Activity (construction) but has an environmental overlay zone (c) and must be analyzed as a permanent use.

A Rail Lines and Utility Corridor use is listed as a Conditional Use in the RMP zone (PCC 33.120, Table 120-1), subject to compliance with standards of PCC Section 33.815 - Conditional Uses. Development of Facility components in the RMP base zone require a Type III Procedure. A Type III Procedure is a discretionary review for a Conditional Use Permit (PCC 33.730.030).

Compliance with applicable standards of Section 33.815 is analyzed below. There are no development standards for Rail Lines And Corridors in RMP base zone code (PCC 33.120). There are no relevant regulations specific to the Rail Lines And Corridors use in the 200s series chapters.

PCC 33.815.230 - RAIL LINES AND UTILITY CORRIDORS

These approval criteria allow Rail Line And Utility Corridor uses where their location will not unduly interfere with other land uses and with the street system. The approval criteria are as follows:

A. The proposed rail line or utility corridor is sufficiently separated from nearby land uses so as to allow for buffering of the uses, especially in residential areas. In the case of railroad lines, separation distances should consider the expected number, speed, size, types, and times of trains; and

B. The rail line or utility corridor will not substantially impact the existing or planned street system, or traffic, transit, pedestrian, and bicycle movement and safety.

RESPONSE

Within the RMP zone, the Applicant is proposing to install portions of the HVAC transmission cable and the entire temporary three-sided wet cofferdam.

The three-sided cofferdam would be placed in the river just north of Hayden Island and east of the BNSF bridge and would be removed after cable installation.

The proposed locations of the utility corridor would not interfere with other land uses or the street system as they would be in the Columbia River. The requirement for separation from nearby land uses would not be an issue because there is no above-ground physical structure that would require separation for compatibility.

Similarly, because the utility corridor will be entirely in water, neither existing nor planned street systems, traffic, transit, pedestrian and bicycle movement and safety would be impacted. This includes in-water activities such as recreation on the Columbia River and boat traffic. Cable installation would occur in the winter months when aquatic recreational activities are less common. Any recreational effects would be temporary, and individuals could choose to recreate upstream or downstream of the hydroplow's location. Consequently, no mitigation measures are proposed to avoid, reduce, or otherwise mitigate significant adverse impacts. Once the cables are installed, the river bottom would be returned to pre-construction conditions.

6.6.4 General Industrial 2 (IG2) Base Zone

Portions of the in-water HVAC transmission cable are proposed in the IG2 base zone (Figure 8D City of Portland Portions of the Facility in IG2).

Criteria for development of the Rail Lines and Utility Corridor use in the IG2 base zone is in Section 33.140 of the PCC.

33.140.100 PRIMARY USES

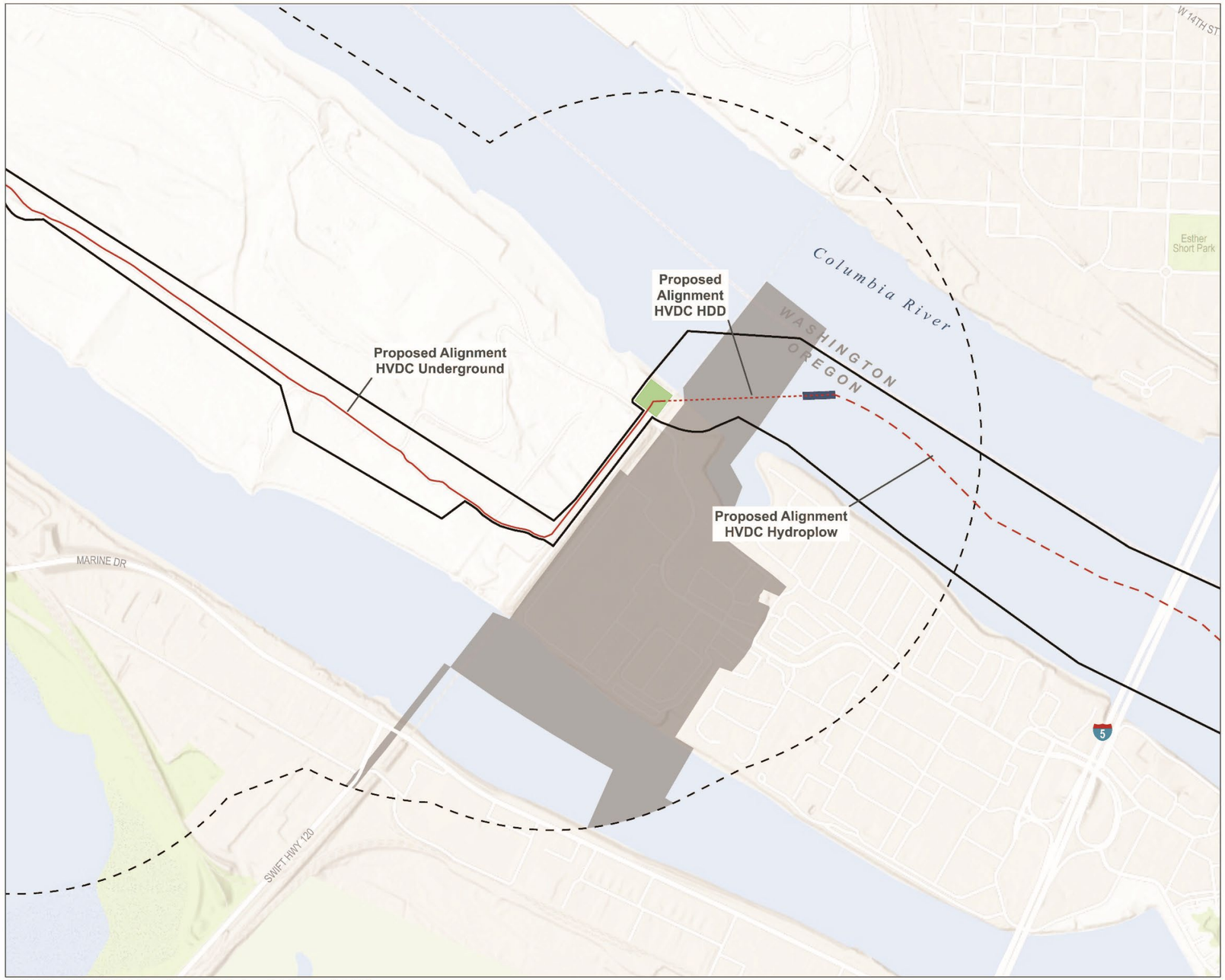
A. Allowed uses. Uses allowed in the employment and industrial zones are listed in Table 140-1 with a "Y". These uses are allowed if they comply with the development standards and other regulations of this Title. Being listed as an allowed use does not mean that a proposed development will be granted an adjustment or other exception to the regulations of this Title. In addition, a use or development listed in the 200s series of chapters is also subject to the regulations of those chapters.

RESPONSE

All proposed uses in the IG2 base zone meet the definition of a use consistent with the "Rail Lines and Utility Corridor" use category, which includes a regional electric transmission line (PCC 33.920.550).

Development of Facility components in the IG2 base zone are a permitted use (PCC 33.140, Table 140-01), subject to compliance with standards of PCC 33.140.225 – Landscaped Areas and PCC 33.140.277 – Trees.

Figure 8D. City of Portland Portions of the Facility in IG2



10/16/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 8D CITY OF PORTLAND PORTIONS OF THE FACILITY IN IG2

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY 3-SIDED WET COFFERDAM
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

CITY OF PORTLAND BASE ZONE

- GENERAL INDUSTRIAL (IG2)

CASCADE RENEWABLE TRANSMISSION

0 0.2 mi
1:11,000

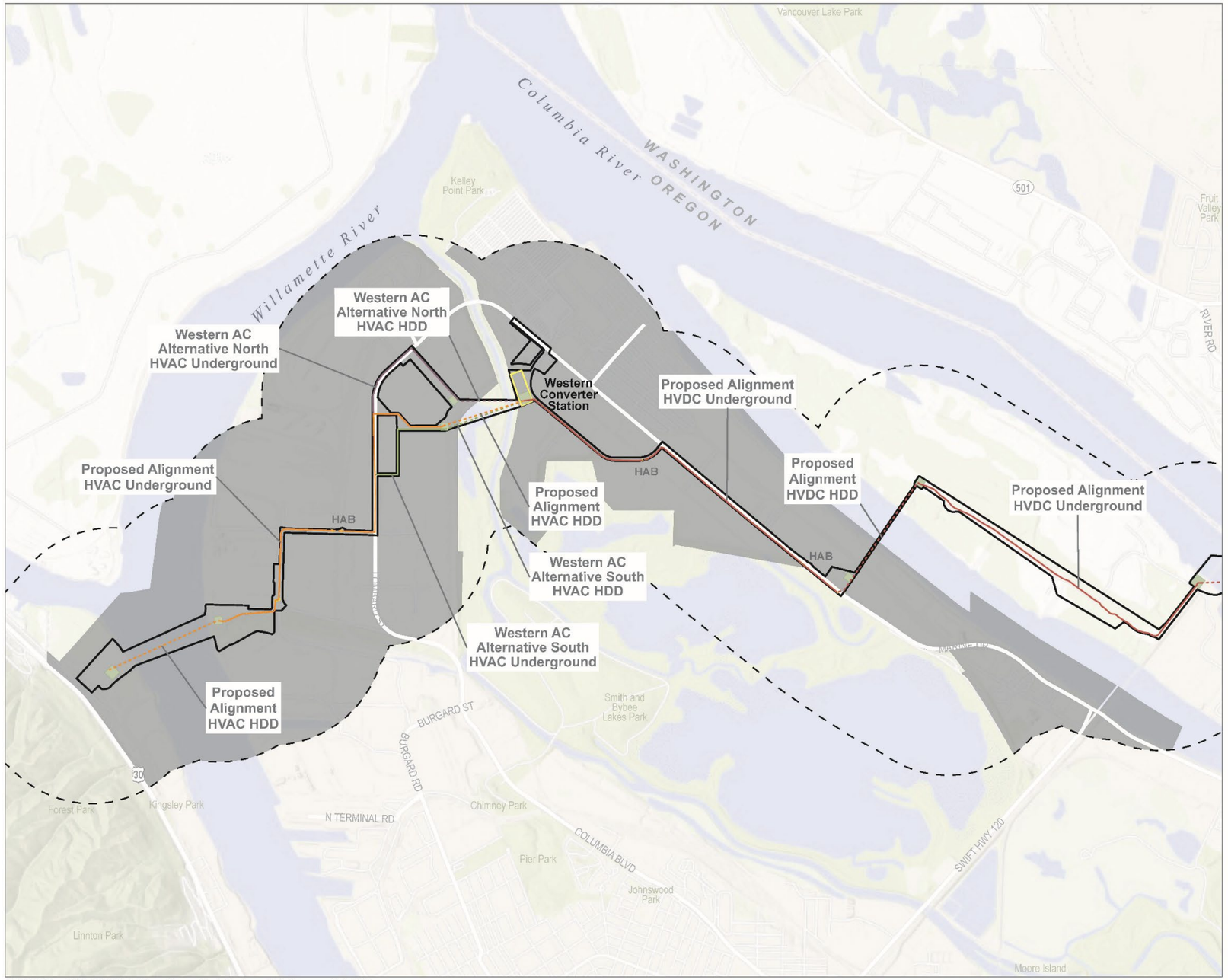
PCC 33.140.225 LANDSCAPED AREAS

A. Purpose. Landscaping is required to help soften the effects of built and paved areas. Landscaping also helps cool the air temperature, intercept rainfall and reduce stormwater runoff by providing non-paved permeable surface. Landscaping can also provide food for people and habitat for birds and other wildlife. Landscaping is required for all employment and industrially zoned lands abutting R-zoned lands to provide buffering and promote the livability of the residential lands.

RESPONSE

The IG2 parcel is between RF and RMP zoned parcels, so PCC 33.140.225 technically applies. The intent of the criteria is to provide a landscaped area that would buffer development on IG2 parcel with neighboring R-zoned lands, which are categorically residential. However, the proposal in the IG2 zone is entirely in-water and there would be no on-land development or paving that would need screening or buffering with landscaped areas (Figure 8E City of Portland Portions of the Facility in the IH).

Figure 8E. City of Portland Portions of the Facility in the IH



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 8E CITY OF PORTLAND PORTIONS OF THE FACILITY IN THE IH

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVAC HDD
- PROPOSED ALIGNMENT - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE NORTH - HVAC HDD
- WESTERN AC ALTERNATIVE NORTH - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE SOUTH - HVAC HDD
- WESTERN AC ALTERNATIVE SOUTH - HVAC UNDERGROUND
- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- CONVERTER STATION
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

CITY OF PORTLAND BASE ZONE

- HEAVY INDUSTRIAL (IH)

CASCADE RENEWABLE TRANSMISSION

0 0.6 mi
1:28,170

6.6.5 Heavy Industrial (IH) Base Zone

The converter station, converter station laydown areas, temporary HDD drill pits and portions of the underground HVAC cables, underground HVDC cables, and in-water HVDC cables are proposed in the IH base zone.

33.140.100 PRIMARY USES

A. Allowed uses. Uses allowed in the employment and industrial zones are listed in Table 140-1 with a "Y". These uses are allowed if they comply with the development standards and other regulations of this Title. Being listed as an allowed use does not mean that a proposed development will be granted an adjustment or other exception to the regulations of this Title. In addition, a use or development listed in the 200s series of chapters is also subject to the regulations of those chapters.

RESPONSE

All proposed uses in the IH base zone meet the definition of a use consistent with the “Rail Lines and Utility Corridor” use category, which includes a regional electric transmission line (PCC 33.920.550).

Criteria for development of the Rail Lines and Utility Corridor use in the IH base zone is in Section 33.140 of the PCC. Development of Facility components in the IH base zone are a permitted use (PCC 33.140, Table 140-01), subject to compliance with Development Standards in PCC 33.140.

The converter station laydown areas, temporary HDD drill pits and portions of the underground HVAC cables, underground HVDC cables, and in-water HVDC cables, are not above ground structures. None of the Development Standards in PCC 33.140 apply.

Analysis of the Development Standards in PCC 33.140 criteria that is applicable to the converter station is analyzed below.

Development of Facility components in the IH base zone are a permitted use (PCC 33.140, Table 140-01), subject to compliance with standards of PCC 33.140.205 – Floor Area Ratio, PCC 33.140.210 - Height, PCC 33.140.215 – Setbacks, PCC 33.140.220 - Building Coverage, PCC 33.140.277 – Trees, PCC 33.140.245 Exterior Display, Storage and Work Activities, PCC 33.140.274 Fences , PCC 33.266.100 Motor Vehicle Parking – General Regulations, and PCC 33.266.115 Maximum Allowed Parking Spaces.

PCC 33.140.205 FLOOR AREA RATIO

Purpose. Floor area ratios (FARs) regulate the amount of use (the intensity) allowed on a site. FARs provide a means to match the potential amount of uses with the desired character of the area and the provision of public services. FARs also work with the height, setback, and building coverage standards to control the overall bulk of development.

The floor area standards. The FARs are stated in Table 140-2. The FAR standards of plan districts supersede the FAR standards of this chapter.

RESPONSE

The converter station would be entirely within the IH Zone. Zone IH does not have a maximum FAR.

PCC 33.140.210 HEIGHT

A. Purpose. The height standards work with the FAR, building setback, and building coverage standards to control the overall bulk and intensity of an area. The EG1 zone height limit is the same as the General Commercial zone because the EG1 zone often functions as a transition zone between industrial and residential or commercial zones. The EX zone height limit reflects its use in intense urban areas and the range of uses that are allowed. The other zones do not have height limits because tall buildings in these areas have traditionally not been a problem.

RESPONSE

The converter station would be entirely within zone IH, which does not have a maximum height limit.

PCC 33.140.215 SETBACKS

A. Purpose. The setback standards promote different streetscapes. The EG2 and IG2 zone setbacks promote a spacious style of development. The EG1, IG1, and EX zone setbacks reflect the generally built-up character of these areas. The IH zone requires only a minimal setback to separate uses from the street. The setback standards are also intended to ensure that development will preserve light, air, and privacy for abutting residential zones. In the EG1 and EX zones, the setback requirements along transit streets and in Pedestrian Districts create an environment that is inviting to pedestrians and transit users.

RESPONSE

The converter station would be required to comply with the 5-foot minimum setback to separate uses from the street. The converter station is not abutting residential zones.

PCC 33.140.220 BUILDING COVERAGE

A. Purpose. The building coverage standards work with the FAR, height, and setback standards to control the overall bulk of structures. The standards assure that taller buildings will not have such a large footprint that their total bulk will overwhelm adjacent development or be inconsistent with the desired character of the zone. In the EG1, EG2, and IG2 zones, the standards work to assure that buildings will not dominate areas they are in. There is no limit to building coverage in the EX and IG1 zones because of the existing built-up character of the zones. There is no limit in the IH zone because the zone is designed to provide development flexibility.

RESPONSE

The converter station would have a maximum building overage of 100 percent of the site area. However, the converter station would be entirely within the IH base zone where there is no building coverage limit.

PCC 33.140.225 LANDSCAPED AREAS

A. Purpose. Landscaping is required to help soften the effects of built and paved areas. Landscaping also helps cool the air temperature, intercept rainfall and reduce stormwater runoff by providing non-paved permeable surface. Landscaping can also provide food for people and habitat for birds and other wildlife. Landscaping is required for all employment and industrially zoned lands abutting R-zoned lands to provide buffering and promote the livability of the residential lands.

RESPONSE

The converter station does not abut R-zoned land and is not required to provide landscaped areas.

PCC 33.140.227 TREES

Requirements for street trees and for on-site tree preservation, protection, and overall tree density are in Title 11, Trees. See Chapter 11.50, Trees in Development Situations.

RESPONSE

The analysis area in the IH zone was compared at high-level to the City of Portland's Tree Inventory.[2] It is likely that the Applicant will meet the threshold for requiring a Tree Plan (11.50.020) with application of a Development Permit for removal of street trees outside of Urban Pocket Areas. Prior to construction, the Applicant would apply for a Tree Permit according to PCC 11.40.020, depending on the results of the Tree Plan.

The converter station site would be exempt from the on-site tree density standards under 11.50.050 (2)(h).

PCC 33.140.245 EXTERIOR DISPLAY, STORAGE AND WORK ACTIVITIES

B. Exterior display

2. Industrial zones. Exterior display of goods is allowed in the I zones. The setback and landscaping standards for exterior display areas are stated in Table 140-4

C. Exterior storage

2. Industrial zones. Exterior storage is allowed in the I zones. The setback and landscaping standards for exterior storage areas area stated in Table 140-4

D. Exterior work activities. Exterior work activities are allowed in the industrial zones but not the employment zones. The setback and landscaping standards for exterior activity areas are stated in Table 140-4.

E. Other exterior activities. Outdoor eating areas are allowed as an exterior activity in the employment and industrial zones.

[2] City of Portland. 2025. Tree Inventory. Available online: https://pdx.maps.arcgis.com/apps/webappviewer/index.html?id=b4671f4591144530b1c590731923b182.

RESPONSE

This requirement would apply to the southwest portion of the western converter station parcel, which abuts the OS zone and the portion of the parcel that abuts N Ledbetter Road. PCC 33.140.245 - Table 140-4 requirements are summarized below.

Table 12. PCC 33.140.245 - Table 140-4 Requirements

Requirement	IH-street		IH-OS zone	
	Setback (feet)	Landscape Standard	Setback (feet)	Landscape Standard
Exterior Display	5	L1	10	L3
Exterior Storage	5	L3	10 or 25	L3 or L4
Exterior Work Activities	5	L3	N/A	N/A

A typical layout of a converter station is provided in Figure 1 of the Background Information Exhibit. During design, the general arrangement of buildings, equipment and structures will be adjusted to fit the shape of the parcel identified and incorporate these requirements.

PCC 33.140.274 FENCES

C. Location and heights.

1. Fences along street lot lines, including pedestrian connections.

a. EG1, IG1 and IH zones. In EG1, IG1, and IH zones, fences up to 3-1/2 feet high are allowed in a required street building setback, including setbacks from pedestrian connections.

2. Fences along other lot lines. Fences up to 8 feet high are allowed in required building setbacks along all other lot lines.

RESPONSE

The converter station would include converter transformers, protective circuit breakers, a control room for operating the facility, basic facilities for staff (bathroom/kitchen), minimal parking, and appropriate site-specific drainage. It would be graveled, fenced, and accessed via a short curb cut driveway from N Leadbetter Road.

PCC 33.266.100 MOTOR VEHICLE PARKING – GENERAL REGULATIONS

A. Where the regulations apply. The regulations of this chapter apply to all parking areas in all zones. Parking areas include those accessory to a use, part of a Commercial Parking use, or for a park and ride facility in the Community Services use category.

B. Calculations of amounts of maximum allowed parking.

C. Proximity of parking to use. Parking spaces must be located on the site of the use or in parking areas whose closest point is within 500 feet of the site.

RESPONSE

The proposed parking spaces would be located on the site of the converter station and are considered accessory to the converter station. The converter station would have approximately 4-5 surface parking spaces.

PCC 33.266.115 MAXIMUM ALLOWED PARKING SPACES

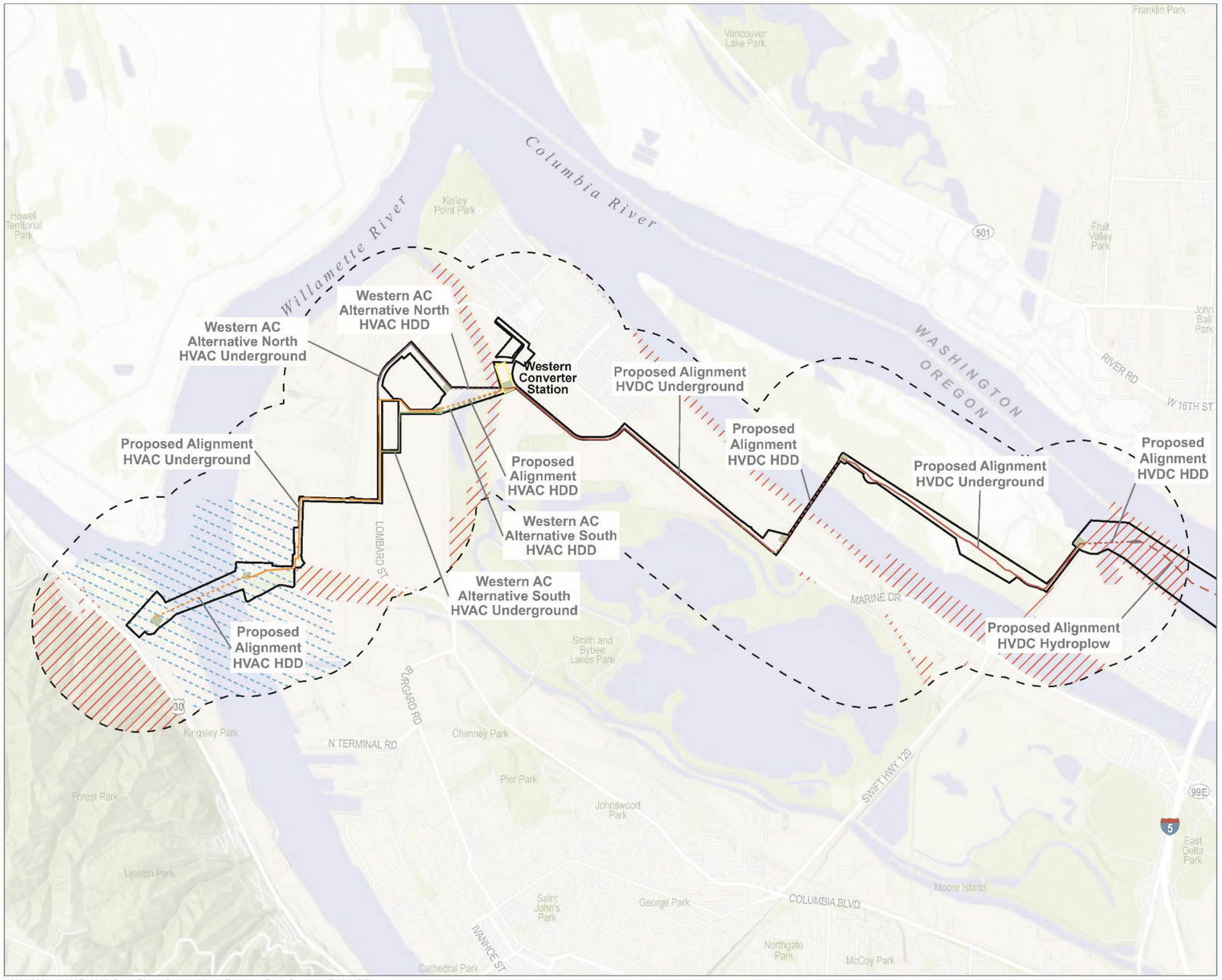
The Rail Lines & Utility Corridors use does not have standards for parking spaces. The converter station is within overlay zones, but neither zone has parking regulations that would supersede this section.

6.6.6 Overlay Zones

The Facility would cross several overlay zones, including the Aircraft Landing Zone (h), Environmental Zones (c and p), Greenway Zones (g, i, and q), and Portland International Airport Noise Impact Zone (x) (Figure 8F City of Portland Portions of the Facility in the Environmental and Greenway Overlay).

The Facility would be within the City of Portland overlay zones, as shown in Table 13 and Table 14.

Figure 8F. City of Portland Portions of the Facility in the Environmental and Greenway Overlay



12/11/2025 NAD 1983 State Plane Oregon North Feet Data Sources: Esri, HDR.

FIGURE 8F
CITY OF PORTLAND
PORTIONS OF THE FACILITY IN THE ENVIRONMENTAL AND GREENWAY OVERLAY

FOR INFORMATION ONLY - CONCEPT DRAWING

- PROPOSED ALIGNMENT - HVAC HDD
- PROPOSED ALIGNMENT - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE NORTH - HVAC HDD
- WESTERN AC ALTERNATIVE NORTH - HVAC UNDERGROUND
- WESTERN AC ALTERNATIVE SOUTH - HVAC HDD
- WESTERN AC ALTERNATIVE SOUTH - HVAC UNDERGROUND
- PROPOSED ALIGNMENT - HVDC HDD
- PROPOSED ALIGNMENT - HVDC HYDROPLOW
- PROPOSED ALIGNMENT - HVDC UNDERGROUND
- CONVERTER STATION
- TEMPORARY 3-SIDED WET COFFERDAM
- TEMPORARY HORIZONTAL DIRECTIONAL DRILLING (HDD) AREA
- TEMPORARY HORIZONTAL AUGER BORE (HAB)
- OREGON EFSC SITE BOUNDARY
- ANALYSIS AREA
- CITY BOUNDARY

CITY OF PORTLAND OVERLAY ZONE

- ENVIRONMENTAL OVERLAY (C AND P)
- GREENWAY ZONES (G, I, AND Q)

CASCADE RENEWABLE TRANSMISSION

0 0.7 mi
1:33,000

Table 13. Overlay Zones – Temporary Disturbance

Facility component	Base Zone(s)	Overlay	In ROW	Outside ROW	On Land	In-Water
All Alignment Alternatives						
HVAC	IH	c, k	•	•	•	Never in-water
		g, k, q	×	•	•	Never in-water
		h, i, k	•	×	•	Never in-water
		h, k	•	•	•	Never in-water
		i, k	×	•	•	Never in-water
		k	•	•	•	Never in-water
	OS	c, h	×	•	•	Never in-water
		h, p	×	•	•	Never in-water
HVDC	IG2	c, h, x	×	•	×	Yes
	IH	h, k	•	•	•	×
		h, k, p	•	×	•	×
		h, k, x	•	•	•	×
	OS	c, h, s, x	×	•	×	•
		c, h, x	×	•	×	•
		f, h, x	•	•	×	•
		h, p	•	×	•	×
	RMP	c, h, x	×	•	×	•
Laydown Areas	IH	h, k	×	•	•	Never in-water
		h, k, x	×	•	•	Never in-water
	OS	c, h	×	×	×	Never in-water
3-sided cofferdam	IG2	c, h, k, x	×	•	Never on-land	•
	RMP	c, h, x	×	•	Never on-land	•
HDD	IH	g, k, q	×	•	•	Never in-water
		h, k	×	•	•	Never in-water
		i, k	×	•	•	Never in-water

• = yes, Facility component in location of zone
× = no, Facility component not in location of zone

Table 14. Overlay Zones – Permanent Disturbance

Facility component	Base Zone(s)	Overlay	In ROW	Outside ROW	On Land	In-Water
All Alignment Alternatives						
Converter Station	IH	h, k	×	•	•	Never in-water
HVAC	IH	c, k	•	•	•	Never in-water
		g, k, q	×	•	•	Never in-water
		h, i, k	•	×	•	Never in-water
		h, k	•	•	•	Never in-water
		i, k	×	•	•	Never in-water
		k	•	×	•	Never in-water
	OS	c, h	×	•	•	Never in-water
		h, p	×	•	•	Never in-water
HVDC	IG2	c, h, k, x	×	•	•	•
		c, h, x	×	•	×	•
	IH	h, k	•	•	•	×
		h, k, p	•	×	•	×
		h, k, x	•	•	•	×
	OS	c, h, s, x	×	•	×	•
		c, h, x	×	•	×	•
		f, h, x	•	•	×	•
		h, p	•	×	•	×
	RMP	c, h, x	×	•	×	•
Alternatives 1-3: Hayden Island Proposed Alignment						
HVDC	IH	c, h, k, x	×	•	•	•
Alternatives 3 & 6: Columbia Slough Alternative South						
HVAC	IH	h, k, p	×	•	•	Never in-water

• = yes, Facility component in location of zone
× = no, Facility component not in location of zone

6.6.7 Environmental Overlay Zones (c and p)

PCC 33.430.020 ENVIRONMENTAL REPORTS

The application of the environmental zones is based on detailed studies that have been carried out within six separate areas of the City. The City's policy objectives for these study areas are described in reports. Each study identifies the natural resource features and describes the functional values within resource sites. Functional values are the benefits provided by resources. The values for each resource site are described in the inventory section of these reports. The City has adopted the following six environmental study reports:

- *Environmental Overlay Zone Map Correction Project*
- *Columbia Corridor Industrial and Environmental Mapping Project*
- *East Buttes, Terraces and Wetlands Conservation Plan*
- *Johnson Creek Basin Protection Plan*
- *Northwest Hills Natural Areas Protection Plan*
- *Middle Columbia Corridor/Airport Economic, Social, Environmental and Energy (ESEE) Analysis*

RESPONSE

Portions of the Facility that are in the Columbia Slough wetlands within the Columbia Corridor Industrial and Environmental Mapping Project overlay zone include the temporary areas for HDD entry and exit and underground HVDC cables. The Columbia Slough area is identified as having both an existing Environmental Conservation (c) and Environmental Protection (p) overlay zones. Therefore, the portions of the Facility that are within these overlay zones must comply with (c) and (p) criteria to be consistent with the Environmental Report. Criteria for (c) and (p) overlay zones are addressed below.

PCC 33.430.030 RELATIONSHIP TO OTHER ENVIRONMENTAL REGULATIONS

Some of the six study areas discussed under Section 33.430.020 impose additional environmental regulations in Plan Districts. These additional regulations either supplement or supersede the regulations of this Chapter. Paragraph 33.700.070.E describes the hierarchy of regulations within the Zoning Code.

Additionally, Natural Resource Management Plans may contain regulations that supersede or supplement the regulations of this chapter. Whenever natural resource management plan provisions conflict with other provisions of this chapter, the natural resource management plan provisions supersede. Non-conflicting provisions supplement the provisions of this chapter. Maps 430-6, 7, and 8 show Natural Resource Management Plan areas.

The following Plan Districts and Natural Resource Management Plans have additional regulations that may supersede or supplement the environmental regulations of Chapter 430:

- *The Balch Creek Watershed (see Chapter 33.563, Northwest Hills Plan District)*
- *Cascade Station / Portland International Center Plan District (see Chapter 33.508, Cascade Station / Portland International Center [CS/PIC])*
- *The Columbia South Shore within the Columbia Corridor (see Chapter 33.515, Columbia South Shore Plan District)*
- *Johnson Creek Basin (see Chapter 33.537, Johnson Creek Basin Plan District)*

- *Northwest Hills Natural Areas (see Chapter 33.563, Northwest Hills Plan District)*
- *Skyline West Conservation Plan area (see Chapter 33.563, Northwest Hills Plan District)*
- *East Columbia Neighborhood Natural Resources Management Plan (separate document)*
- *Forest Park Natural Resources Management Plan (separate document)*
- *Natural Resources Management Plan for the Peninsula Drainage District No. 1 (separate document)*
- *Portland International Airport Plan District (see Chapter 33.565, Portland International Airport Plan District)*

This chapter contains only the City's environmental regulations. Activities which the City regulates through this chapter may also be regulated by other agencies. In cases of overlapping City, Special District, Regional, State, or Federal regulations, the more stringent regulations will control. City approval does not imply approval by other agencies.

RESPONSE

Of these supplemental plans, the Portland International Airport Plan District would apply.

PCC 33.430.060 WHERE THESE REGULATIONS APPLY

These regulations apply to all environmental zones, except those in the Columbia South Shore Plan District that are south of NE Marine Drive, those in the Cascade Station/Portland International Center Plan District, City-owned land within the Forest Park Natural Resources Management Plan area, and the Peninsula Drainage District No. 1 Natural Resources Management Plan area. See also Section 33.430.030, Relationship to Other Environmental Regulations.

RESPONSE

The Applicant is proposing work in the Portland International Airport Plan District, listed as an exception to this section. All Facility components, except for the converter station site, have either c (conservation) or p (protection) or both c and p designation in the City of Portland. Therefore, the regulations of PCC 33.430 apply to the portions of the Facility that are outside of the Portland International Airport Plan District.

PCC 33.430.070 WHEN THESE REGULATIONS APPLY

Unless exempted by Section 33.430.080, below, the regulations of this chapter apply to the following:

E. Changing topography, grading, excavating, and filling;

RESPONSE

The portions of the HVDC cables that are proposed in the public ROWs would be exempt as new utilities installed below developed portions of public ROWs PCC 33.430.080(E)(4).

The regulations of PCC 430 would apply to the grading, excavating, and filling activities of the HVAC and HVDC cables, converter station laydown areas and temporary areas for HDD entry and exit, outside of the public ROWs and the Portland International Airport Plan District (PCC 33.439.070)(E)).

PCC 33.430.120 PROCEDURE

A. Generally. Compliance with the development standards of this chapter is required for all development in the environmental zones and is determined as part of the building permit or development permit application process. For proposals that cannot meet all of the standards, Environmental Review is required. Where a proposal can meet all the standards, the applicant may choose to go through the discretionary environmental review process, or to meet the objective standards of this chapter.

RESPONSE

The proposal would meet all applicable development standards. Environmental Review is not required. A review of the criteria required for compliance with development standards of this chapter is provided below.

PCC 33.430.130 PERMIT APPLICATION REQUIREMENTS

A building permit or development permit application that is reviewed for compliance with the standards of this chapter requires more information than a permit not affected by these provisions. The information in Subsections A and B must be submitted with permit application plans. Submission of the information in Subsection C is optional.

A. An existing conditions site plan including:

1. Location of all Environmental Zone lines on the site;

2. Outline of any existing disturbance area, including existing utility locations;

3. Location of any wetlands or water bodies on the site or within 50 feet of the site. Indicate the location of the top of bank, centerline of stream, or wetland boundary as appropriate;

4. Within the disturbance area, all trees that are 6 or more inches in diameter must be indicated by size and species. Trees outside of the disturbance area must be shown as crown cover with an indication of species composition;

5. Topography shown by contour lines at 2 foot vertical contours in areas of slopes less than 10 percent and at 5 foot vertical contours in areas of slopes 10 percent or greater; and

6. Extent of the combined flood hazard area.

B. Proposed development plan including:

1. Outline of the proposed disturbance area, including all areas of proposed utility work;

2. Location and description of all proposed erosion control devices;

3. A stormwater management plan;

4. A landscape plan indicating the size, species, and location of all vegetation to be planted in the environmental zone;

5. Trees proposed to be preserved and trees proposed to be removed. For trees to be preserved, tree protection, meeting the requirements of Chapter 11.60, Technical Specifications, must be shown. A tree plan may also be required to comply with Chapter 11.50, Trees in Development Situations;

6. Where applicable, the location and specifications of the site enhancement option with dimensions, a list of plants on the Nuisance Plants List to be removed, and a landscape plan indicating the size, species, and location of all vegetation to be planted;

7. Location and volume (cubic yards) of fill to be placed within the combined flood hazard area; and

8. Location, volume (cubic yards), and design of proposed cut within the combined flood hazard area.

C. Photographs of the site are not required but are encouraged to supplement the existing conditions site plan.

RESPONSE

Portions of the Facility are within the c and p environmental overlay zones. The Applicant would provide a site plan and construction plans that include existing conditions and construction proposed to permit the Facility.

PCC 33.430.140 GENERAL DEVELOPMENT STANDARDS

The standards below apply to all development in the environmental zones except as follows:

- *Utilities subject to Section 33.430.150;*
- *Septic systems subject to Section 33.430.155;*
- *Land divisions subject to Section 33.430.160;*
- *Property line adjustment subject to Section 33.430.165;*
- *Resource enhancement projects subject to Section 33.430.170;*
- *Rights-of-way improvements subject to Section 33.430.175;*
- *Stormwater outfalls subject to Section 33.430.180;*
- *Flood and water control facilities subject to Section 33.430.185;*
- *Public recreational trails subject to Section 33.430.190; and*
- *Tree removal in scenic resources zone subject to Section 33.430.195.*

Standards A through C and G through S apply to new development in the resource area. Standards D through S except L apply to alterations to existing development in the resource area. Only standards E, J, K, N, Q, R, and S apply to new development and alterations to existing development in the transition areas. All of the applicable standards must be met.

RESPONSE

The regulations of PCC 33.430.140 would apply to the grading, excavating, and filling activities for portions of the converter station laydown areas, temporary areas for HDD entry, HVAC transmission cables, and the three-sided wet cofferdam in c and p environmental overlay zones.

The Facility components would be consistent with the definition of “New Development,” since the activities will be on a “site that was previously unimproved or that has had previously existing buildings demolished.” Facility components in c and p overlay zones and their base zones are in Table 15.

Table 15. Facility Components in c and p Overlay Zone and their Base Zones

Facility Component	Base Zone	c and p Environmental Overlay Zone(s)
Converter station laydown areas	OS	(c)
Temporary areas for HDD entry	IH	(c, h, k, x, g, q, i)
HVAC transmission cables	IH	(c, k, h, p, g, q, i)
	OS	(c, h, k, x, p)
	IG2	(c, h, k, x)
	IH	(c, p)
	OS	(c, h, p)
	RMP	(c, h, x)
Three-sided wet cofferdam	RMP	(c)

Standards A through C and G through S are addressed below, as applicable.

Portions of the HVDC cable would be in transition areas. Standards E, J, K, N, Q, and R also address the portions of the HVDC cable that would be in transition areas, as applicable.

A. The maximum disturbance area allowed within the resource area on the site is determined by subtracting all portions of the site outside the resource area from the number listed in Table 430-1.

Table 430-1
Maximum Disturbance Area Allowed

	OS and RF Zone	R20	R10	R7	R5	All Other Zones
Maximum Disturbance Area	5,000 sq. ft. [1]	5,000 sq. ft. [1]	5,000 sq. ft. [1]	3,500 sq. ft. [1]	2,500 sq. ft. [1]	50% of the base zone building coverage or 1 acre, whichever is less [1]

Note:
[1] Subtract the amount of area on the site outside the resource area from the number given in the table.

RESPONSE

The maximum disturbance area in the OS zone with c or p overlay is approximately 87 square feet (0.002 acres) of the converter station laydown area on the Western Converter Station parcel.

Other zones that are associated with c or p overlays are the RMP, IH and IG2 zones. Disturbance is associated with the three-sided wet cofferdam, HDD area and HVAC transmission cables. Since the Facility is not site-specific and there is no building coverage, it would be subject to the 1-acre limit. There is a potential for the disturbance area to be more than 1 acre where the HVAC transmission cables are proposed in the alignment that crosses the IH-c, k, h, p, g, q and i zones. The disturbance associated with the HVAC cables would be in existing disturbance areas (the soil or vegetation has previously been disturbed).

B. The disturbance area is set back at least 5 feet from the resource area of any environmental protection zone;

C. The disturbance area must be set back at least:

1. Fifty feet from the edge of any identified wetland;

4. Thirty feet from the top of bank of any identified water body within a conservation zone except those within the Columbia Corridor; and

RESPONSE

Per the conceptual design, the HVAC transmission cables would be within the Environmental protection zone ("p" overlay) in base zones IH and OS. The placement avoids all impacts to wetlands and landward water resources. However, if required, adjustments can be made if needed for compliance with the above standards.

I. Temporary disturbance areas and portions of the resource area where removal of non-native vegetation occurs must be replanted so that the area achieves a 90 percent vegetation cover within one year;

RESPONSE

Proposed vegetation management associated with construction and operation are discussed in the Fish and Wildlife Habitat Exhibit, the *Draft Revegetation and Noxious Weed Control Plan* (Attachment 4), which includes this requirement. The Applicant's objective is to prevent the introduction of new noxious weed populations and the spread of existing noxious weed populations. The methods described in Attachment 4 would be implemented to minimize the spread of noxious weeds during construction activities. New noxious weeds detected during post-construction revegetation would be considered a result of construction activities and would be controlled accordingly.

J. Tree removal and replacement standards.

1. Removal of native trees is allowed as follows:

a. Trees removed from resource and transition areas must be replaced as shown in Table 430-3. Trees less than 6 inches in diameter do not have to be replaced.

b. In resource and transition areas, the combined total diameter of all trees removed may not exceed 225 inches, counting only native trees that are at least 6 inches in diameter;

c. In resource areas, trees may be removed only if one of the following is met:

(1) Within 10 feet of existing or proposed buildings and structures attached to buildings, such as decks, stairs, and carports;

(2) Within 10 feet of proposed driveways or right-of-way improvements; or

RESPONSE

Prior to construction, the Applicant would apply for a Tree Permit according to PCC 11.40.020, depending on the results of the Tree Plan. The Tree Plan would address the requirements of 1a and 1b. The proposed alignment would allow for J.1.C(1) and (2) to be met as it is proposed in these areas.

E. The proposed development is set back at least 5 feet from the resource area of any environmental protection zone;

RESPONSE

Review of preliminary site plans indicate that the converter station layout would allow for at least a 5 feet distance from the resource area.

I. Temporary disturbance areas and portions of the resource area where removal of non-native vegetation occurs must be replanted so that the area achieves a 90 percent vegetation cover within one year;

RESPONSE

Localized impacts to soils from temporary disturbance areas would be minimized through the use of BMPs and efforts to restore soil surfaces and vegetation following disturbances. The draft Revegetation and Noxious Weed Control Plan (in the Fish and Wildlife Habitat Exhibit) and/or the ESCP would include, but are not necessarily limited to, minimization measures and BMPs, including mulching.

J. Tree removal and replacement standards.

1. Removal of native trees is allowed as follows:

a. Trees removed from resource and transition areas must be replaced as shown in Table 430-3. Trees less than 6 inches in diameter do not have to be replaced.

b. In resource and transition areas, the combined total diameter of all trees removed may not exceed 225 inches, counting only native trees that are at least 6 inches in diameter;

c. In resource areas, trees may be removed only if one of the following is met:

(1) Within 10 feet of existing or proposed buildings and structures attached to buildings, such as decks, stairs, and carports;

(2) Within 10 feet of proposed driveways or right-of-way improvements; or

(3) To create up to 500 square feet of permanent disturbance area for uses such as gardens and play area.

2. Non-native non-nuisance trees may be removed if each tree at least 6 inches in diameter is replaced as shown in Table 430-3;

3. Trees listed on the Nuisance Plants List may be removed, if each tree at least 6 inches in diameter is replaced with one native tree; and

4. For replacement of non-native trees, applicants may pay a revegetation fee as described in Table 430-2 in lieu of planting on the site. The fee is based on the number of trees required under Table 430-3, Option A.

K. Replacement trees must be at least one-half inch in diameter; shrubs must be in at least a 1-gallon container or the equivalent in ball and burlap. All trees and shrubs must be selected from the Portland Plant List and planted on the site within the environmental zone. Conifers must be replaced with conifers and shrubs must consist of at least two different species;

RESPONSE

Soil disturbance is proposed in previously disturbed areas or ROWs to the extent possible. It is not anticipated that trees or shrubs would need to be removed during construction. Prior to construction, if protected trees and shrubs are identified as within the construction footprint during inventory and construction plan development, they will either be preserved or compliance with removal and replacement will be sought.

M. All vegetation planted in a resource area is native and listed on the Portland Plant List. Plants listed on the Nuisance Plants List are prohibited;

RESPONSE

Revegetation efforts in areas of temporary ground disturbance as soon as practicable and within the appropriate season to facilitate germination, as described in the *Draft Revegetation and Noxious Weed Control Plan* (the Fish and Wildlife Habitat Exhibit, Attachment 4). The *Draft Revegetation and Noxious Weed Control Plan* promotes native plant establishment, or non-invasive and non-persistent non-native species when native plants are not available and contains measures to avoid and minimize the spread of noxious weeds due to Facility disturbance.

6.6.8 Greenway Overlay Zones (g, i, and q)

PCC 33.440.100 USE-RELATED RESTRICTIONS

Any changes to land or development within the greenway zones, including rights-of-way, are subject to the development standards of this chapter.

RESPONSE

Portions of the HVAC and HDD are in Greenway Zones - River General (g), River Industrial (i), and River Water Quality (q) overlay zones. The base zone for these portions of the Facility that are in the Greenway Zones is the IH base zone. The Applicant is proposing installation of underground HVAC cables and an HDD drill pit for placing the cable under the Willamette River.

PCC 33.440.210 DEVELOPMENT IN THE GREENWAY SETBACK

C. Development regulations.

1. Development landward of the greenway setback. Development, exterior alterations, excavations, and fills landward of the greenway setback are not required to be river-dependent or river-related and are subject to greenway review, unless exempt under Section 33.440.320, Exemptions.

RESPONSE

The temporary areas for HDD entry and exit would be in the River Industrial "i" overlay. Exemptions allow alterations to development in the River Industrial zone that are not "within 50 feet landward of the greenway setback" (PCC 33.440.320(A)(1)). The temporary areas for HDD entry and exit would be further than the minimum 50-foot limit from the greenway setback, and therefore, exempt from greenway review.

2. Development within the greenway setback.

b. Development that is not river-dependent or river-related.

(1) General. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related require greenway review and a Greenway Goal Exception to locate in the greenway setback.

(2) Exception. Within the River Water Quality zone, development, exterior alterations, excavations, and fills that are not river-dependent or river-related do not require a Greenway Goal Exception when located outside of the area that is within the first 25 feet landward of the top of bank. See Exhibit 440-3.

RESPONSE

Portions of the underground HVAC cables proposed in the greenway setback would be subject to greenway review. Since the development is not river-dependent or river-related, a Greenway Goal Exception would also be required for the portion of the underground HVAC cables within 25 feet from the top of the bank.

3. Development riverward of the greenway setback. Development, exterior alterations, excavations, fills, and associated tree removal riverward of the greenway setback that are river-dependent or river-related may be allowed if approved through greenway review, unless exempt under Section 33.440.320, Exemptions. Development, exterior alterations, excavations, or fills that are not river-dependent or river-related require greenway review and a Greenway Goal Exception to locate riverward of the greenway setback.

RESPONSE

Portions of the underground HVAC cables proposed riverward of the greenway setback would require a greenway review (see 33.440.350 below) and a Greenway Goal Exception.

33.440.230 LANDSCAPING

A. Required landscaping. Landscaping must be provided to conserve or re-establish vegetative cover within or riverward of the greenway setback.

RESPONSE

Since boring would occur underground, beginning and ending from temporary areas for HDD entry and exit that are outside of the greenway setback, there would be no vegetative cover disturbance within or riverward of the greenway setback.

33.440.345 SUPPLEMENTAL APPLICATION REQUIREMENTS- GREENWAY REVIEW

In addition to the application requirements of Section 33.730.060, Application Requirements, the information below is required for Greenway review applications.

33.440.350 APPROVAL CRITERIA

The approval criteria for a greenway review have been divided by location or situation. The divisions are not exclusive; a proposal must comply with all of the approval criteria that apply to the site. A greenway review application will be approved if the review body finds that the applicant has shown that all of the approval criteria are met.

A. For all greenway reviews. The Willamette Greenway design guidelines must be met for all greenway reviews

RESPONSE

The below criteria is applicable to the proposed Facility as it relates to development in greenway and the Willamette Greenway design guidelines.

E. Development within the greenway setback. The applicant must show that the proposed development or fill within the greenway setback will not have a significant detrimental environmental impact on Rank I and II wildlife habitat areas on the riverbank. Habitat rankings are found in the Lower Willamette River Wildlife Habitat Inventory

RESPONSE

According to the Willamette River Wildlife Habitat Inventory (1986), a portion of the facility components would be within the Lower Willamette River Management Plan's Zone 4. Zone 4 has one Rank I site within Zone 4 segment. The Rank I site is located at the Harborton property, consisting of upland riparian forest with forested wetlands, and a riparian forested shoreline with a freshwater marsh and mudflats (Bureau of Planning 1986).

Zone 4 was part of the mapped habitats within the OR EFSC study area, conducted in 2023 and 2024. The 2023 and 2024 field studies confirmed the presence of vegetation that includes developed open space, mixed forest, woody wetland, and grassland herbaceous and barren land near the Harborton property. Figure 1 from the Fish and Wildlife Habitat Exhibit shows the land cover results of the survey within the site boundary. Figure 2 from the Fish and Wildlife Habitat Exhibit shows the habitat area results of the field survey within the site boundary. There would be no permanent impacts on the Rank I site (see Table 9 of the Fish and Wildlife Habitat Exhibit).

F. Development riverward of the greenway setback. The applicant must show that the proposed development or fill riverward of the greenway setback will comply with all of the following criteria:

1. The proposal will not result in the significant loss of biological productivity in the river;

RESPONSE

Portions of the underground HVAC cables in the Willamette River are riverward of the greenway setback. Approximately 0.5 miles of transmission cable would cross under the bed of the Willamette River, installed by HDD to a final landing site at Harborton substation. Table 9 of the Fish and Wildlife Habitat Exhibit identifies that there would not be impacts to the Willamette River or associated species or habitats.

2. The riverbank will be protected from wave and wake damage;

3. The proposal will not:

a. Restrict boat access to adjacent properties;

b. Interfere with the commercial navigational use of the river, including transiting, turning, passing, and berthing movements;

c. Interfere with fishing use of the river;

d. Significantly add to recreational boating congestion; and

4. The request will not significantly interfere with beaches that are open to the public

RESPONSE

(2-4) The HVDC cables will be subterranean beginning landward outside of the greenway setback – no wave and wake damage would occur as a result of the proposal. Likewise, no boat access or interference with use of the river would occur.

G. Development within the River Water Quality overlay zone setback. If the proposal includes development, exterior alterations, excavations, or fills in the River Water Quality overlay zone setback the approval criteria below must be met. River-dependent development, exterior alterations, excavations, and fills in the River Water Quality zone are exempt from the approval criteria of this subsection

RESPONSE

The Facility would involve non-river-dependent fills for the in the River Quality overlay zone (q) .

5. Other development, excavations, and fills in the River Water Quality overlay zone setback. Where development, exterior alterations, excavation, or fill is proposed in the River Water Quality overlay zone setback, the applicant's impact evaluation must demonstrate that all of the following are met:

a. Proposed development minimizes the loss of functional values, consistent with allowing those uses generally permitted or allowed in the greenway overlay zone without a land use review;

b. Proposed development locations, designs, and construction methods are less detrimental to the functional values of the water quality resource area than other practicable and significantly different alternatives including alternatives outside the River Water Quality overlay zone setback;

c. There will be no significant detrimental impact on functional values in areas designated to be left undisturbed;

d. Areas disturbed during construction that do not contain permanent development will be restored with native vegetation appropriate to the site conditions and found in the Portland Plant List;

e. All significant detrimental impacts on functional values will be offset through mitigation;

f. The mitigation plan meets the requirements of Subsection 33.440.350.H;

g. The mitigation plan ensures that the proposed development will not contribute to a cumulative loss of functional values over time; and

h. Where significant restoration or enhancement opportunities have been identified in City-adopted watershed restoration plans or where previous restoration projects have taken place, the proposed development will not preclude those restoration or enhancement opportunities or damage existing restoration projects.

RESPONSE

Impacts identified are either avoidable or temporary and a mitigation or remediation plan is not required. Temporary impact areas are those areas that would be disturbed during construction activities but restored and revegetated following construction. Examples of temporary impacts include impacts from trenching for cable installation, and excavated pits for HDD, which would be restored to pre-construction conditions or better (i.e., replanting with native vegetation). Habitat mitigation and vegetation management associated with construction and operation are discussed in the Fish and Wildlife Habitat Exhibit, the *Draft Habitat Management Plan* (Attachment 3), and the *Draft Revegetation Plan* (Attachment 4). Characterization of temporary impacts to the Willamette River and surroundings are in Table 9 of the Fish and Wildlife Habitat Exhibit. Notably, HDD would avoid Willamette River stream impacts.

6.6.9 Flood Hazard Areas PCC 24.50.060

In all flood hazard areas defined in Section 24.50.050, the following requirements apply:

A. Permits. All permit applications will be reviewed to determine whether proposed development and building sites comply with the provisions of this Chapter and will be reasonably safe from flooding. A development or building permit must be obtained before construction or development begins within any flood hazard area. The development or building permit is required for all structures, including manufactured homes, and for all other development, as defined in this Chapter, including fill. Such applications for permits must include the following information:

1. Boundary of flood hazard areas.

2. Boundaries of the high hazard area, top of bank, and 50-foot setback as applicable.

3. The base flood elevation and design flood elevation.

4. Elevation of lowest floor, including basement, for all structures and floodproofed elevations for nonresidential structures.

5. When required by the Floodplain Administrator, documentation necessary to verify substantial improvement or substantial damage.

6. Elevation of lowest point of bridge structures.

7. Existing and proposed topography of the site taken at a contour interval (normally 1 foot) sufficiently detailed to define the topography over the entire site and adjacent

watercourses subject to flooding. Ninety percent of the contours must be plotted within 1 contour interval of the true location.

8. *All necessary permits obtained from the federal and state governmental agencies from which prior approval is required.*
9. *Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (see Subsection 24.50.050 I.), applications for building permits will be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of any available hydrological data, drainage basin hydrology, historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least 2 feet above grade in these zones may result in higher insurance rates.*

B. *Elevation reference. The survey reference datum for finished lowest floor including basement, floodproofed elevations, and finished site grades must be either the North American Vertical Datum of 1988 or City of Portland datum, whichever is appropriate. When approved by the City Engineer, a local onsite survey reference datum may be adopted for FIRM Zones A and Unidentified Watercourse Flood Zones. The survey reference datum must be indicated on all relevant plan and section drawings, calculations, and the certified FEMA Elevation Certificate.*

D. *Floodway. Encroachments into the floodway by development and structures defined in Section 24.50.030 are prohibited unless it is demonstrated by technical analysis from a registered engineer that the development will result in no increase in the base flood elevation. In areas where a regulatory floodway has not been designated, no new construction, substantial improvement or other development (including fill) will be permitted within Zone AE, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than 1 foot at any point within the flood hazard areas regulated by the City. Technical analysis will be reviewed and approved by the Sewage System Administrator. However, the minimum width of the floodway shall not be less than 15 feet, unless otherwise approved by the Sewage System Administrator.*

F. *Flood hazard areas.*

1. *General. All new construction and substantial improvements must be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrostatic and hydrodynamic loads and effects of buoyancy.*
4. *Nonresidential construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure must either have the lowest floor, including basement, elevated to the level of the flood protection elevation, or, together with attendant utility and sanitary facilities, must:*
    a. *Be floodproofed so that below the flood protection elevation the structure is watertight with walls substantially impermeable to the passage of water;*
    b. *Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and*

c. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this Subsection based on the professional engineer's or architect's development or review of the structural design, specifications and plans. Such certifications must be provided to the Portland Permitting & Development.

d. Nonresidential structures that are elevated, but not floodproofed, must meet the same standards for space below the lowest floor as described for residential structures.

e. Applicants floodproofing nonresidential buildings will be notified that flood insurance premiums will be based on rates as if the building is 1 foot below the floodproofed level (i.e., a building constructed to the base flood level will be rated as 1 foot below that level).

7. Construction materials and methods. All new construction and substantial improvements must be constructed with materials and utility equipment resistant to flood damage, using methods and practices that minimize flood damage. Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities must be protected to or above the flood protection elevation.

11. AH/AO Zone Drainage. Adequate drainage paths must be provided around structures on slopes to guide floodwaters around and away from proposed structures.

G. Compensatory excavation or removal required.

1. The following compensatory excavation or removal regulations apply at the time of a building or development permit application.

The provisions of this Subsection apply exclusively to the compensatory excavation and removal requirements of Subsection 24.50.060 G.

a. Applications for building or development permits will be processed based on the compensatory excavation or removal regulations in effect on the date a complete permit application is filed with the City. For the purposes of this Section, a complete building or development permit application contains the information necessary to determine whether the proposal conforms with all applicable regulations and development standards.

b. Exceptions to the application of Subsection 24.50.060 G.1.a.:

(1) Applications for building or development permits for development approved by an Environmental Review, Greenway Review, South Waterfront Greenway Review, Land Division, Conditional Use Master Plan, Planned Development Review, or River Review land use decision that has not expired may be processed based on the compensatory excavation or removal regulations in effect on the date the land use application was filed with the City, as specified in Chapter 33.700, provided a

2. In all flood hazard areas regulated by the City: The application must provide for a compensatory volume, consisting of either the excavation of soil or rock or the removal of permanent structures that displace floodwater, or both, to compensate for the loss of flood storage volume as described in the subsections below. The compensatory volume must be located within the same flood hazard area, identified

in Subsections 24.50.050 A. through J., as the fill or structure causing the loss of flood storage, except for the Johnson Creek flood zones, where the compensatory volume must be on the same site.

a. Columbia River Flood Zones, Willamette River Central and South Reach Flood Zones, and Fanno Creek Flood Zones: The volume of floodwater displaced by fill and structures placed within the special flood hazard area at or below the base flood elevation requires a compensatory volume below the base flood elevation as follows:

(1) Within the high hazard area, the compensatory volume must be equal to or greater than twice the displaced volume (a ratio of 2 to 1) and must be located within the high hazard area.

(2) Within a 50-foot setback measured landward from top of bank, the compensatory volume must be equal to or greater than one and a half times the displaced volume (a ratio of 1.5 to 1) and must be located within the same setback, the high hazard area, or both.

(3) Landward of the 50-foot setback from top of bank, the compensatory volume must be equal to or greater than the displaced volume (a ratio of 1 to 1).

(4) Exceptions to the application of Subsections 24.50.060 G.2.a.(1) – (3):

(a) Subsections 24.50.060 G.2.a.(1) – (3) do not apply to areas with Heavy Industrial (IH), General Industrial 2 (IG2), or General Employment 2 (EG2) zoning.

(b) Subsections 24.50.060 G.2.a.(1) – (3) do not apply to the portion of the South Waterfront Subdistrict of the Central City Plan District north of Willamette River mile 14.6 as described in the Flood Insurance Study.

(c) Subsections 24.50.060 G.2.a.(1) – (3) do not apply to the portion of the University District/South Downtown Subdistrict of the Central City Plan District south of Willamette River mile 13.4 as described in the Flood Insurance Study.

c. February 1996 Flood Inundation Areas: The volume of floodwater displaced by fill placed within the February 1996 Flood Inundation Area requires a compensatory volume below the February 1996 Flood Inundation Elevation as follows:

(1) In areas outside of the special flood hazard area, the compensatory volume must be equal to or greater than the displaced volume (a ratio of 1 to 1).

(2) In areas within both the special flood hazard area and the February 1996 Flood Inundation Area, where the February 1996 Flood Inundation Elevation is greater than the base flood elevation, the compensatory volume must be equal to or greater than the displaced volume between the February 1996 Flood Inundation Elevation and the base flood elevation (a ratio of 1 to 1). Compensatory excavation requirements at and below the base flood elevation are described in Subsections 24.50.060 G.2.a. and b.

3. Excavation of soil or rock or the removal of permanent structures from an area may not be counted as compensatory volume if the area will be filled with water in non-storm winter or spring conditions.

4. Compensatory excavation areas must be designed to freely drain to the source of flooding to the extent practicable to avoid stranding fish.

5. Temporary fills permitted during construction must be removed prior to final inspection approval of the permit.

6. Mitigation bank credits may be substituted for compensatory excavation or removal of permanent structures, provided the mitigation bank has been approved by the City and the mitigation bank is located within the same flood hazard area as the development and satisfies the requirements of Subsections 24.50.060 G.2.a. through c.

RESPONSE

The HVDC transmission and 230-kV HVAC transmission line corridors would cross into floodway waters (the Columbia and Willamette Rivers) and floodplain fringe that are designated as Flood Hazard Areas within the City of Portland. The Applicant is proposing work within Columbia River and Willamette River FIRM Flood Zone AE (floodway), and FIRM Flood Zone X (0.2 percent annual chance flood hazard). The Facility is not within the Johnson Creek Flood Area. The Applicant is not proposing watercourse alteration or relocation.

As required in the ESCP, stormwater runoff would be directed away from structures, via engineered access roads and drainages, and diverted to drainage ditches and culverts (see Soil Protection Exhibit). The Facility will be designed and engineered to comply with zoning ordinances and building codes that establish flood protection standards that ensure all construction would avoid dangers to infrastructure, human safety, and the environment. This includes compliance with requirements for a No-Rise Certification for work in the floodway to detail the projects impact on flood heights.

6.6.10 Temporary Activities

PCC 33.296.030 TEMPORARY ACTIVITIES ALLOWED

F. Construction activities

4. General construction projects. Staging areas for construction projects in the RX, C, E, and CI2 zones are allowed subject to subparagraph .030.F.4.c. The staging area must be located within 500 feet of the construction site, however in no case can the staging area be located within an OS or single-dwelling zone.

RESPONSE

Portions of the converter station laydown/construction staging areas in the IH-hkx base-overlay zone and are subject to the temporary activity requirements. The estimated construction staging area is 5.239 acres that will not be in the OS or single-dwelling zone.

c. Staging area standards. Adjustments to the following standards are prohibited

(1) Staging areas that last more than one year require that a community relations representative is designated for the project. The community relations representative must be available to respond to neighbors related to the operation of the staging area. The community relations representative must also be available to meet on at least a quarterly basis with the affected neighborhood association and business association until the staging area is removed.

(2) Staging areas that last longer than 3 years are subject to the regulations for permanent uses, except for staging areas located within an Environmental, River Environmental, or River Natural overlay zone, in which case the staging area is subject to the regulations for a permanent use regardless of the length of time the staging area will be in place.

RESPONSE

See schedule for construction in the Background Information Exhibit, Section 12. Construction is anticipated to be more than 1 year but less than 3 years.

(3) Dust, mud and erosion control. During the construction project, erosion control measures must be maintained in order to reduce dust on the site and to reduce dust and mud on adjacent streets from vehicles entering and leaving the site. During the length of the project, the site must be enclosed or protected in a manner to prevent on-site erosion and to prevent sediment from leaving the site.

RESPONSE

Erosion will be addressed through erosion control measures implemented to mitigate erosion potential identified in Soil Protection Exhibit. A construction ESCP has been developed for the Facility to reduce the potential for soil erosion. Structural and nonstructural BMPs are included in the ESCP. Examples of nonstructural BMPs may include implementation of materials handling, spill prevention methods, or disposal requirements.

(4) Final condition. When the construction project is final, the staging area must be prepared and seeded with a mixture of 100 percent perennial rye grass to create a low maintenance vegetative ground cover. This requirement does not apply to portions of the staging area that were paved before the project started.

RESPONSE

The areas used only for construction would be reclaimed during the best season for replanting, typically, in the fall or spring. Reclamation activities may include replacing topsoil and revegetation.

PCC 33.296.040 GENERAL REGULATIONS

All temporary activities are subject to the regulations listed below.

A. Permanent development or alterations to existing development are prohibited, unless consistent with the development standards for uses allowed by right in the underlying zone or required by applicable building, fire, health, or safety codes.

RESPONSE

The proposed temporary activities would cease when construction is complete. Where construction involves alterations such as fill or grading, development standards for that zone were applied. Therefore, temporary activities would not be permanent or alter existing development.

B. Temporary activities may occupy parking areas but cannot block driveways that provide site access for emergency vehicles.

RESPONSE

Temporary activities are not proposed in parking areas. Regardless, temporary activities will not block driveways or access for emergency vehicles. The location and exact timing of the temporary activities would be the responsibility of the contractor. However, specifications defined during the building permit application would include requirements for compliance with B-E, including prohibiting blockage of driveways used for emergency access, compliance with time limits, and requirements for other permits during construction.

C. Temporary activities that are maintained beyond the allowed time limits are subject to the applicable use and development standards of the zoning code.

RESPONSE

It is not anticipated that temporary activities would extend beyond the allowed time limits.

D. Temporary activities on sites where the primary use is a conditional use may not violate the conditions of approval for the primary use, except as allowed by Subsection B.

RESPONSE

The primary use proposed in the OS zone (Rail Lines and Corridors) is a conditional use and would be subject to the conditions of approval.

The primary use proposed in the IH zone (Rail Lines And Corridors) is an allowed use.

E. These regulations do not exempt the operator from any other required permits such as sanitation facility permits or electrical permits

RESPONSE

Prior to construction, required permits for construction would be obtained, even if the work is considered temporary.

6.6.11 Erosion and Sediment Control Regulations

PCC 10.30.020 – MINIMUM REQUIREMENTS

The following minimum requirements apply to all development and ground disturbing activities.

B. Requirements and standards. Minimum requirements and standards are established in the Erosion and Sediment Control Manual.

RESPONSE

Minimum standards under PCC 10.30.020 and the requirements of the City of Portland's Erosion and Sediment Control Manual are provided in the draft ESCP provided in Attachment to Soil Protection Exhibit.

PCC 10.30.030 – ADDITIONAL REQUIREMENTS FOR SPECIAL SITES

When the City Administrator determines that special site conditions may prevent compliance with Section 10.30.020, the City Administrator may require additional erosion, sediment and pollutant control measures. Conditions that constitute a special site and additional requirements for special sites are established in the Erosion and Sediment Control Manual.

RESPONSE

Ground disturbing activities in the City of Portland would include construction of the converter station; trenches to install underground HVAC and HVDC cables; temporary areas for HDD entry and exit to install the HVAC and HVDC cables under roadways, railroads, or waterways; and construction laydown areas. The ground-disturbing activities during construction would total up to 8.24 acres in the ROW and up to 23.5 acres outside the ROW. The total disturbance would depend on which alternative alignment is chosen. The Applicant acknowledges that a street opening permit for work in ROW and street would be required.

According to Section 2.3 of the Portland Erosion and Sediment Control Manual – ENB-4, a special site condition could include: 1. Slopes before development that are greater than 10 percent (1 Vertical: 10 Horizontal); 2. Ground disturbance of a natural vegetative buffer within 50 feet of a wetland and or water body; 3. The development site is located entirely or partially within an Environmental Overlay Zone or Greenway Overlay Zone; 6. Project timing is such that ground-disturbing activity will take place between October 1 and April 30. Item 3 may apply but it is not anticipated to prevent compliance from being met. However, if the City Administrator determines that compliance cannot be met because of special site conditions, additional erosion, sediment and pollutant control measures would be added to the ESCP, as required.

PCC 10.40 – PERMITS AND PLANS

A. The responsible party must submit an erosion, sediment and pollutant control plan for any ground disturbing activity that requires a permit to the City Administrator for review if:

1. The disturbance area is 500 square feet or greater in area; or

C. Where a plan is required, the responsible party may not commence any development before the City Administrator has approved the proposed plan and the required pre-construction inspection has been approved.

RESPONSE

The Applicant will submit an ESCP for disturbance that is 500 square feet or greater and comply with pre-inspection requirements.

PCC 10.40.020 – PERMIT AND PLAN REQUIREMENTS

A. All permit applications or contract submittals that require an erosion, sediment, and pollutant control plan must be accompanied by the plans at the time of application or submittal. The number of erosion, sediment and pollutant control plans required will be determined by the applicable permit or contract process. All erosion, sediment, and pollutant control plans must comply with minimum requirements established in the Erosion and Sediment Control Manual.

PCC 33.266.130 DEVELOPMENT STANDARDS FOR ALL OTHER DEVELOPMENT

C. On-site locations and size of vehicle areas.

1. Location of vehicle areas. The allowed on-site location of all vehicle areas is stated in Table 266-3. Additionally, on sites in single dwelling zones or multi-dwelling zones that abut an alley and are 10,000 square feet or less in total site area, vehicle area may only be accessed from the alley.

2. Building setbacks for structures that contain vehicle areas.

a. Structures that contain vehicle areas are subject to the building setbacks of the base zone, where exiting in a forward motion is provided.

RESPONSE

The proposed converter station would be in an I zone (the IH zone); therefore, there would be no restrictions on the location of parking spaces per Table 266-3. The converter station parking would be on site.

For information about the base zone (IH) and required setbacks, see response to Section 33.140 Employment and Industrial Zones. In the Background Information Exhibit, Figure 1 shows typical converter station site plan and a photo of an example (Trans Bay project converter station). See Soil Protection Exhibit for conceptual site plans as part of the ESCP for each converter station.

PCC 33.266.200 MINIMUM REQUIRED BICYCLE PARKING

B. Number of spaces required.

1. The required minimum number of bicycle parking spaces for each use category is shown in Table 266-6. No bicycle parking is required for uses not listed. Minimum bicycle parking is calculated on a geographic hierarchy based on the current and future bicycle usage. Standard A in Table 266-6 applies to the areas shown as Standard A on Map 266-1. Standard B in Table 266-6 applies to all other areas of the city.

RESPONSE

No bicycle parking is required per Table 266-6 and Section 33.266.200(B)(1). The proposed converter station is defined as a Basic Utility per Section 33.920.400. For Basic Utilities, Table 266-6 only specifies bicycle parking standards for transit centers and light rail stations. Section 33.266.200(B)(1) states that "No bicycle parking is required for uses not listed."

6.6.12 Comprehensive Plan

The Project Order provides applicable comprehensive plan goals, objectives, or policies identified as required for consistency in the development code analysis above. Facility compliance with applicable elements of the City of Portland Comprehensive Plan is described in Table 16.

Table 16. City of Portland Comprehensive Plan Goals

City of Portland Comprehensive Plan Goal	Objective/Policy	Consistency Determination
Chapter 2: Community Involvement	**Policy 2.4: Eliminate Burdens** Ensure plans and investments eliminate associated disproportionate burdens (e.g., adverse environmental, economic, or community impacts) for communities of color, low-income populations, and other under-served or under-represented groups impacted by the decision.	
	Policy 2.4a: Minimize or mitigate disproportionate burdens in cases where they cannot be eliminated.	**Consistent.** The Facility is not identified as being in a "disadvantaged tract" (EJ Screen 2024, Version 2.3). Potential disproportionate impacts on tribes and tribal communities are being determined through engagement and consultation with each potentially affected tribe.
	Policy 2.4b: Use plans and investments to address disproportionate burdens of previous decisions.	

City of Portland Comprehensive Plan Goal	Objective/Policy	Consistency Determination
Chapter 7: Environment and Watershed Health	**Watershed-specific Policies**	
	Policy 7.30: Enhance in-water habitat for native fish and wildlife, particularly in the Oregon Slough and near-shore environments along the Columbia River.	**Consistent.** Work on-land (i.e., converter stations, transmission elements, temporary areas for HDD entry and exit) outside the Columbia River, would not result in permanent impacts to wetlands, waters, and vegetated riparian areas. To the extent practicable, work has been cited within paved and/or previously distributed areas (e.g., roadway ROWs) or in locations with limited vegetation (e.g., graveled areas). For more information see the State and Local Laws and Regulations Exhibit.
	Policy 7.31: Enhance grassland, beach, riverbanks, wetlands, bottomland forests, shallow water habitats, and other key habitats for wildlife traveling along the Columbia River migratory corridor, while continuing to manage the levees and floodplain for flood control.	**Consistent.** Areas that would be disturbed during construction activities would be restored and revegetated to pre-construction conditions or better (i.e., replanting with native vegetation). The Project would not measurably alter river or shoreline habitat; the Columbia River in the analysis area would continue to be used primarily as a migratory corridor the same as under current conditions.
	Policy 7.32: Maintain plans and regulations that recognize the needs of river-dependent and river-related uses while also supporting ecologically-sensitive site design and practices.	**Consistent.** The proposal would not interfere with the needs of river-dependent and river-related uses. Once constructed, the Facility will be underground and ecological sensitivity would be supported.
	Policy 7.33: Provide adequate intervals of ecologically-functional shallow-water habitat for native fish along the entire length of the Willamette River within the city, and at the confluences of its tributaries.	**Consistent.** The narrow strip of affected river bottom is not considered high-quality habitat for fish and the Project route would avoid important near-shore and more productive habitats, including salmon spawning areas and tributary mouths.
	Policy 7.35: Preserve existing river bank habitat and encourage the rehabilitation of river bank sections that have been significantly altered due to development with more fish and wildlife friendly riverbank conditions.	**Consistent.** The Facility will preserve the existing river bank by not disturbing it.

City of Portland Comprehensive Plan Goal	Objective/Policy	Consistency Determination
	Policy 7.38: Protect and enhance grasslands, beaches, floodplains, wetlands, remnant native oak, bottomland hardwood forest, and other key habitats for native wildlife including shorebirds, waterfowl, and species that migrate along the Pacific Flyway and the Willamette River corridor.	**Consistent.** The Facility would protect habitats for native wildlife by not disturbing it.
	Policy 7.39: Increase the width and quality of vegetated riparian buffers along the Willamette River.	**Consistent.** The Facility would not have impacts on the vegetated riparian buffers along the Willamette River. Therefore, opportunities for increased width and quality are limited to the areas that would be temporarily disturbed during construction activities would be restored and revegetated to pre-construction conditions or better (i.e., replanting with native vegetation).
	Policy 7.40: Enhance habitat quality and connectivity between the Willamette riverfront, the Willamette's floodplain, and upland natural resource areas**.**	**Consistent.** The Facility would not have impacts on the habitat quality and connectivity between Willamette riverfront, floodplain and uplands. Therefore, opportunities for enhancement are limited to areas that would be temporarily disturbed during construction activities would be restored and revegetated to pre-construction conditions or better (i.e., replanting with native vegetation).
Chapter 8: Public Facilities and Services	**Public rights-of-way**	
	Policy 8.50: Encourage undergrounding of electrical and telecommunications facilities within public rights-of-way, especially in centers and along Civic Corridors.	**Consistent.** The Facility is primarily underground and in public ROW.

7 Materials Analysis (OAR 345-022-0030(7)(c)(A) through (C)

A materials analysis is included in the Soil Protection Exhibit. The materials analysis addresses the following:

(A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;

(B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and

(C) The applicant's plans to manage non-hazardous waste materials during construction and operation.

8 References

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