	INTRODUCTION			
Applications Narrative Guide	SECTION 1: FILTRATION FACILITY SITE OVERVIEW			
	Section 1.A	Filtration Facility – Conditional Use Application Narrative		
	Section 1.B	Filtration Facility – Design Review Application Narrative		
	Section 1.C	Communications Tower – Conditional Use & Design Review Application Narrative		
	SECTION 2: PIPELINES OVERVIEW			
	Section 2.A	Pipelines – Conditional Use Application Narrative		
	Section 2.B	Pipelines – Design Review Application Narrative		
	Section 2.C	Pipelines – EFU Review Application Narrative		
	Section 2.D	Pipelines – SEC Review Application Narrative		

Section 2.D: Pipelines
SEC Review Application Narrative

Contents

Introduction and Relation to Other Narrative Sections	1
Environmental Conservation as a Guiding Principle	1
Filtration Facility Design	1
Pipeline Design	2
Proposed Low Impact Work in SEC Zones	4
Raw Water Pipelines in SEC-h Overlay	5
MCC 5.H.1—SIGNIFICANT ENVIRONMENTAL CONCERN GENERAL PROVISIONS	7
MCC 39.5500 Purposes	7
MCC 39.5505 Area Affected	7
MCC 39.5510 Uses; SEC Permit Required	7
MCC 39.5520 Application for SEC Permit	8
MCC 39.5525 Applicable Approval Criteria	8
MCC 39.5530 SEC Permit—Required Findings	9
MCC 39.5535 Scope of Conditions	9
MCC 39.5540 Criteria for Approval of SEC Permit	10
MCC 5.H.2—SEC STANDARDS APPLICABLE IN THE WEST OF SANDY RIVER AREA ONLY	10
MCC 39.5560 General Requirements for Approval in the West of Sandy River Planning Area Designated as SEC-WR or SEC-H	10
MCC 5.H.10—WILDLIFE HABITAT (SEC-h)	
MCC 39.5850 SEC-H Clear and Objective Standards	11
MCC 39.5860 Criteria for Approval of SEC-H Permit—Wildlife Habitat	
Lusted Road Distribution Main In SEC-h Overlay	17
MCC 5.H.1 – SIGNIFICANT ENVIRONMENTAL CONCERN GENERAL PROVISIONS	
MCC 39.5500 Purposes	18
MCC 39.5505 Area Affected	
MCC 39.5510 Uses; SEC Permit Required	
MCC 39.5520 Application for SEC Permit	
MCC 39.5525 Applicable Approval Criteria	
MCC 39.5530 SEC Permit—Required Findings	
MCC 39.5535 Scope of Conditions	
MCC 39.5540 Criteria for Approval of SEC Permit	
MCC 5.H.2—SEC STANDARDS APPLICABLE IN THE WEST OF SANDY RIVER AREA ONLY	
MCC 39.5560 General Requirements for Approval in the West of Sandy River Planning Area Designated as SEC-WR or SEC-H	23
MCC 5.H.10—WILDLIFE HABITAT (SEC-H)	
MCC 39.5850 SEC-H Clear and Objective Standards	
MCC 39.5860 Criteria for Approval of SEC-H Permit—Wildlife Habitat	

Figures

Figure 1. Filtration Site with SEC Overlays	2
Figure 2. Finished Water Pipeline Routes Evaluated: Proposed Route Avoids Crossing Beaver Creek (SEC-wr Overlay)	
Figure 3. Raw Water Pipelines are Bored Deep Below the Full Extent of the SEC-h Overlay Zone	3
Figure 4. SEC Review Locations	⊿
Figure 5. Raw Water Pipeline Tunnel Alignment below SEC-h Overlay Zone	5
Figure 6. Tunnel Portal Alternatives Relative to SEC Zone	6
Figure 7. Tunnel Profile	6
Figure 8. Tunnel Plan	7
Figure 9. Raw Water Pipeline Driveway Diagram Showing Drive across Lusted Road	13
Figure 10. Lusted Hill Distribution Main Alignment	17
Figure 11. LRDM Alignment in SEC-h	19
Figure 12. LRDM through Lusted Hill Parking Area (looking east)	19
Figure 13. LRDM Receiving Pit in Lusted Hill Project Work Area (looking west), including Existing Cleared Utility Corridor Area in Foreground	20
Figure 14. Driveways Diagram	26
Figure 15. Forest plantings and Invasive Plant Clearing at LHTF	20

Introduction and Relation to Other Narrative Sections

This section:

- Includes background information, findings, and analysis in support of significant environmental concern (SEC) approval for the proposed pipelines;
- Demonstrates compliance with SEC approval criteria and development standards; and
- Builds on information provided in the Introduction and the Section 2 Overview.

The findings in Section 2.D complement the findings in Section 2.A Pipeline CU Review, Section 2.B Pipeline Design Review, and Section 2.C Pipeline EFU Review. Defined terms used in this Section 2.D are provided in the overall application Introduction.

Environmental Conservation as a Guiding Principle

The Water Bureau has prioritized avoidance of environmental resources throughout the design development process. As described in the **Introduction**, the proposed pipelines must pass through areas of SEC environmental overlay zones, which make up 20 percent of the study area. Throughout development of the design and evaluation of alternative facility site layout and pipeline alignment alternatives, the project has followed SEC conservation priorities, where the first priority is impact avoidance. As described in this section, because of these efforts, the project will have no significant impacts to habitat and water resources in the SEC overlays.

Filtration Facility Design

At the filtration facility site, there are two SEC overlays: SEC-water resource (SEC-wr) and SEC-habitat (SEC-h). These overlays are shown on Figure 1. The SEC-wr area provides a 200-foot buffer along Johnson Creek, located in the southwest corner of the filtration site. Project design options evaluated within the buffer included a perimeter access road, stormwater basins, and stormwater piping. In the proposed site design, all development is set back from the SEC-wr area, completely avoiding the protected water resource area. Native plantings are proposed on the exposed SEC slopes to enhance habitat functions.

The SEC-h overlay applies to forested habitat located on the steep slopes along the northeast edge of the site. Project design options evaluated in this habitat area included open-cut pipeline connections (to Dodge Park Boulevard and Lusted Road), site access to Dodge Park Boulevard, and a perimeter access road. The open-cut pipeline and site access alternatives in the SEC-h area were eliminated for environmental and seismic reasons. The perimeter road was relocated to avoid the SEC-h overlay. In the proposed site design, all development is set back from the SEC-h area, completely avoiding the protected habitat area.

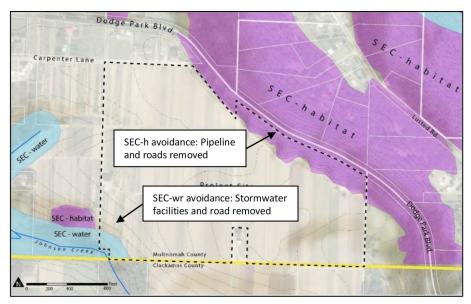


Figure 1. Filtration Site with SEC Overlays

Pipeline Design

Along the pipeline corridors, proposed raw and finished water pipeline alignments and construction methods were modified during the design process to avoid impacts to protected resources within the SEC zones. For the finished water pipelines, two separate crossings of the SEC-wr (North Fork of Beaver Creek) were evaluated, one on Lusted Road and one on private land south of Lusted Road (Figure 2, FW Alt 5, in blue). A second pipeline route was evaluated that crossed the SEC-wr (Middle Fork of Beaver Creek) in Altman Road (Figure 2, FW Alt 3, in yellow). The final pipeline design realigned the pathway connecting Dodge Park Boulevard and Lusted Road, avoiding all SEC crossings of Beaver Creek in this area (Figure 2, red line).

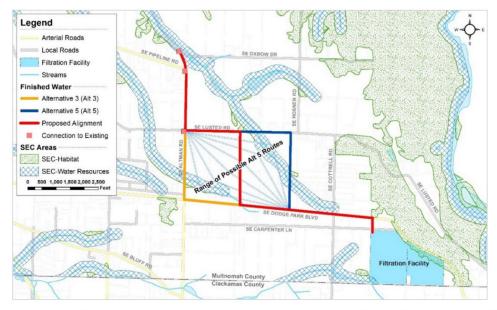


Figure 2. Finished Water Pipeline Routes Evaluated: Proposed Route Avoids Crossing Beaver Creek (SEC-wr Overlay)

Similarly, the project design team took significant steps to avoid environmental impacts for the raw water pipelines. Initially, conventional trench construction methods were considered to connect the pipelines between Lusted Road and the filtration site. An SEC-h overlay covers the steep forested slope adjacent to Dodge Park Boulevard (Figure 3). The trench construction would require a wide forest clearing with significant impacts to the protected SEC habitat resources. By selecting a trenchless (tunnel) alternative, the project entirely avoided forest clearing and soil disturbance within the SEC area. In evaluating the location of the tunnel portal at the base of the hillside, shallow and mid-level tunnel alternatives required placement in the SEC-h overlay. Project engineers identified another portal alternative, the "deep tunnel" option, that was entirely outside the SEC zone and provided increased geotechnical resiliency. This alternative was selected. The proposed tunnel with modified portal location completely avoids disturbance to the SEC-h forest and habitat resources.

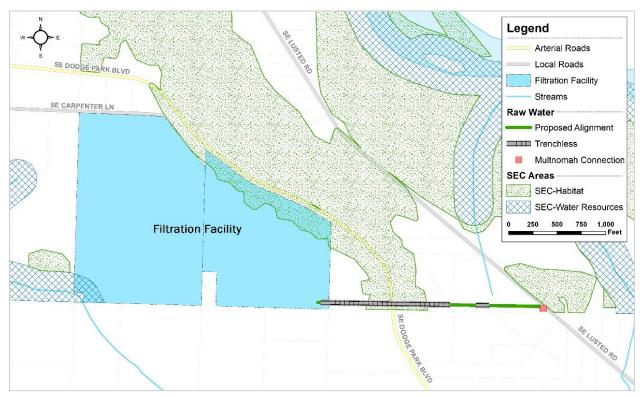


Figure 3. Raw Water Pipelines are Bored Deep Below the Full Extent of the SEC-h Overlay Zone

In addition to these direct avoidance actions, the project design limits environmental impacts through a variety of other means as well. For most of their lengths, for example, pipeline alignments are located within developed road ROWs. Pipelines buried within existing roads and road shoulders are an effective way to avoid disturbance to protected SEC resources. Some sections of these road ROWs are mapped with SEC overlay zones by the County. Because they are within existing, disturbed roadways, these pipelines will have no impact to SEC resources.¹

¹ For this reason, MCC 39.5515(A)(24) does not require an SEC permit for "The placement of utility infrastructure such as pipes, conduits and wires within an existing right-of-way."

Proposed Low Impact Work in SEC Zones

The proposed pipelines will need to encroach into SEC-zoned areas in only two locations outside of the ROW. These locations are shown in Figure 4 and are addressed in the following subsections of this Section 2.D:

- 1. Raw Water (RW) Pipelines in SEC-h zone
- 2. Lusted Road Distribution Main (LRDM) in SEC-h zone

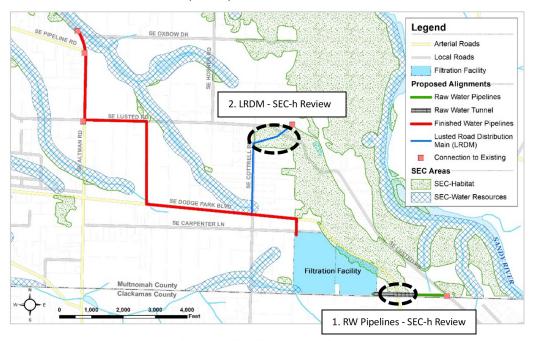


Figure 4. SEC Review Locations

At each site, the Water Bureau has implemented strategies that align with the purpose of the SEC regulations. The proposed conservation strategies avoid impacts to protected resources and protect adjoining resource areas. These include:

- The trenchless RW pipeline (tunnel) crossing avoids all forest and soil disturbance within the SEC-h area, and the tunnel portal is more than 100 feet back from the protected habitat area.
- Where the Lusted Road Distribution Main crosses an SEC-h area at the Lusted Hill Treatment
 Facility (LHTF), the main will extend under the existing driveway and then be bored underground
 to connect to the existing main, with no impact to protected habitat resources.

In sum, a consistent goal of the project has been to avoid impacts to natural resources within SEC overlays. These strategies, combined with effective construction Best Management Practices (BMPs²), serve to avoid and fully protect County SEC resources.

² Best Management Practices: Methods that have been determined to be the most effective, practical means of preventing or reducing erosion, sedimentation or landslides including but not limited to: use of straw bales, slash windows, filter fabric fences, sandbags, straw cover, and jute netting (MCC 39.6205).

Raw Water Pipelines in SEC-h Overlay

This subsection reviews the proposed RW pipeline tunnel below the SEC-h overlay, which is located on a forested slope east of the proposed filtration facility site, just north of the Multnomah/Clackamas County line. Similar to other impact avoidance actions along the pipeline alignments, the design of the RW pipelines in a deep tunnel with the proposed tunnel portal location completely avoids disturbance to SEC-h habitat resources.



Figure 5. Raw Water Pipeline Tunnel Alignment below SEC-h Overlay Zone

The raw water tunnel will supply water from the existing conduits to the filtration facility through the Lusted (North and South) raw water pipeline segments, each a welded steel pipe. The project will use subsurface boring to tunnel the pipelines from a tunnel portal located on tax lot 1500 (1S4E23C) to the west of SE Lusted Road (Figure 5). The tunnel will be driven from that tunnel portal upslope to the base of a shaft in the southeastern corner of the filtration facility site.

Four tunnel alternatives were evaluated to determine the best means to mitigate geotechnical risks while minimizing natural resource impacts within the SEC-h overlay. These tunnel alternatives are shown in Figure 6: Deep, Mid-Level Flat, Mid-level Steep, and Shallow. All of the alternative tunnel portal sites that were evaluated are located near the eastern edge of the SEC-h overlay zone. The Shallow and two Mid-Level Portals required surface disturbance within the SEC-h overlay zone, while the Deep Tunnel Portal would be constructed outside the SEC-h boundary. To avoid impact to SEC resources, the Deep Tunnel Portal alternative was selected as the preferred alternative in October 2021.

While all boring options would transit the SEC-h zone underground, the Deep Tunnel portal is the only portal option that lies outside the SEC-h zone. The tunnel portal will be constructed approximately 100 feet to the east of the SEC-h overlay zone.



Figure 6. Tunnel Portal Alternatives Relative to SEC Zone

The deep tunnel will be underground for the entirety of the SEC-h overlay. The top of the deep tunnel will be 30 feet below the ground surface at the east boundary of the SEC-h overlay and 192 feet below ground at the west boundary. The tunnel continues underground past the west boundary of the SEC-h zone for another 485-feet horizontally where it connects with the tunnel shaft on the filtration site, as shown in Figures 7 and 8. A Wildlife Conservation Plan (Appendix G.1), prepared by a professional environmental scientist, documents that there will be no impacts to resources protected by the SEC-h overlay.

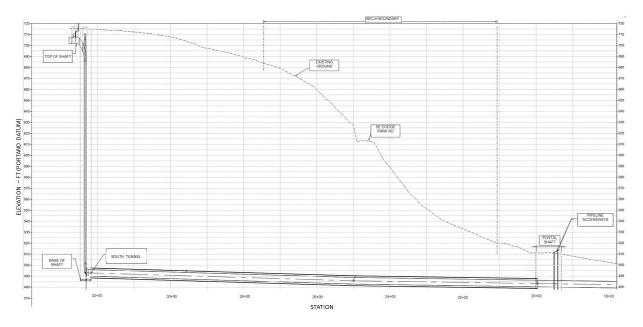


Figure 7. Tunnel Profile

Figure 8. Tunnel Plan

MCC 5.H.1—SIGNIFICANT ENVIRONMENTAL CONCERN GENERAL PROVISIONS

MCC 39.5500 Purposes

The purposes of the Significant Environmental Concern Overlays, MCC 39.5500 through MCC 39.5860 (collectively, the "SEC") are to protect, conserve, enhance, restore, and maintain significant natural and human-made features which are of public value, including among other things, river corridors, streams, lakes and islands, domestic water supply watersheds, flood water storage areas, natural shorelines and unique vegetation, wetlands, wildlife and fish habitats, significant geological features, tourist attractions, archaeological features and sites, and scenic views and vistas, and to establish criteria, standards, and procedures for the development, change of use, or alteration of such features or of the lands adjacent thereto.

Response: The project has actively sought to meet the purpose of the SEC zones by protecting and conserving County identified SEC resources, as noted above and in the **Introduction**. Impact avoidance has been the primary means of achieving this goal. At the proposed tunnel site, the project team determined that by boring below the SEC-h forest using the deep tunnel portal, protected SEC habitat resources could be entirely avoided.

MCC 39.5505 Area Affected

(A) Except as otherwise provided in MCC 39.5510 or MCC 39.5515, the SEC shall apply to those lands designated SEC on the Multnomah County Zoning Map consisting of the following resource area designations: [...] SEC-h: Wildlife Habitat Resource Area

Response: According to the Multnomah County Zoning Map, the SEC-h: Wildlife Habitat Resource Area applies to portions of tax lots 1500 (1S4E23C) and 2200 (1S4E23C) as shown in Figure 5. The proposed deep tunnel will extend beneath the mapped SEC-h area for approximately 650 lineal feet.

MCC 39.5510 Uses; SEC Permit Required

- (A) All uses allowed in the base zone are allowed in the SEC when found to satisfy the applicable approval criteria given in such zone and, except as provided in MCC 39.5515, subject to approval of an SEC permit pursuant to this Subpart.
- (B) Any excavation or any removal of materials of archaeological, historical, prehistorical or anthropological nature shall be conducted under the conditions of an SEC permit, regardless of the zoning designation of the site.

Response: The proposed pipelines are utility facilities identified as community service uses, which are allowed as conditional uses in the RR zone (MCC 39.4370(A)) and as review uses in the EFU zone (MCC 39.4225(A)), as identified in the **Section 2 Overview.** The proposal will be reviewed against the applicable approval criteria of the SEC-h zone. There is no anticipated excavation or removal of archaeological, historical, or related materials. Water Bureau construction specifications include Inadvertent Discovery Plan (Appendix G.3) provisions setting forth protocols for any potential materials discovered during construction.

MCC 39.5520 Application for SEC Permit

An application for an SEC permit for a use or for the change or alteration of an existing use on land designated SEC, shall address the applicable criteria for approval, under MCC 39.5540 through 39.5860.

- (A) An application for an SEC permit shall include the following:
 - 1. A written description of the proposed development and how it complies with the applicable approval criteria of MCC 39.5540 through 39.5860.
 - 2. A map of the property showing:
 - a. Boundaries, dimensions, and size of the subject parcel;
 - b. Location and size of existing and proposed structures;
 - c. Contour lines and topographic features such as ravines or ridges;
 - d. Proposed fill, grading, site contouring or other landform changes;
 - e. Location and predominant species of existing vegetation on the parcel, areas where vegetation will be removed, and location and species of vegetation to be planted, including landscaped areas;
 - f. Location and width of existing and proposed roads, driveways, and service corridors.

Response: The narrative description and findings are contained in this **Section 2.D** of the application. A map showing the subject properties with the listed map features is provided in Appendix A.3 (Sheet LU-600).

MCC 39.5525 Applicable Approval Criteria

(A) The approval criteria that apply to uses in areas designated SEC-sw, SEC-v, SEC-w, SEC-wr, SEC-h on Multnomah County zoning maps shall be based on the type of protected resources on the property, as indicated by the subscript letter in the zoning designation, as follows:

Zoning Designation	Approval Criteria (MCC#)
SEC-h (wildlife habitat)	Type I Permit – 39.5850 Type II Permit – 39.5560 and 39.5860

Response: Approval criteria MCC 39.5560 and 39.5860 (SEC-h Type II) apply to this proposal and are addressed below.

(B) An application for a use on a property containing more than one protected resource shall address the approval criteria for all of the designated resources on the property. In the case of

conflicting criteria, approval shall be based on the ability of the proposed development to comply as nearly as possible with the criteria for all designated resources that would be affected.

Response: Only one protected resource (SEC-h) is found on the subject properties.

(C) For protected stream resources, the approval criteria shall be used to determine the most appropriate location, size and scope of the proposed development, in order to make the development compatible with the purposes of this Overlay, but shall not be used to prohibit a use or be used to require removal or relocation of existing physical improvements to the property. Any proposed development must comply with the approval criteria in order to be approved.

Response: The subject SEC-h zone is upland forest habitat that does not contain protected stream resources.

MCC 39.5530 SEC Permit—Required Findings

A decision on an application for an SEC permit shall be based upon findings of consistency with the purposes of the SEC and with the applicable criteria for approval specified in MCC 39.5540 through 39.5860.

Response: Findings of consistency with SEC purpose are provided above and in response to MCC 39.5500 standards below. Findings of consistency with applicable SEC-h criteria are provided under MCC 39.5560 and 39.5860, below.

MCC 39.5535 Scope of Conditions

- (A) Conditions of approval of an SEC permit, if any, shall be designed to bring the application into conformance with the applicable criteria of MCC 39.5540 through 39.5860 and any other requirements specified in the Goal 5 protection program for the affected resource. Conditions may relate, but are not limited to relating, to the locations, design, and maintenance of existing and proposed improvements, including but not limited to buildings, structures and use areas, parking, pedestrian and vehicular circulation and access, natural vegetation and landscaped areas, fencing, screening and buffering, excavations, cuts and fills, signs, graphics, and lighting, timing of construction and related activities, and mitigation.
- (B) Approval of an SEC permit shall be deemed to authorize associated public utilities, including energy and communication facilities.
- (C) The approval criteria for an SEC permit shall be used to determine the most appropriate location, size and scope of the proposed development in order to ensure that it meets the purposes of this Overlay, but shall not be used to deny economically viable use or be used to require removal or relocation of existing physical improvements to the property.

Response: The Hearings Officer may impose conditions of approval consistent with the scope set forth above. No disturbance to the subject SEC-h wildlife habitat resource is proposed.

MCC 39.5540 Criteria for Approval of SEC Permit

The SEC designation shall apply to those significant natural resources, natural areas, wilderness areas, cultural areas, and wild and scenic waterways that are designated SEC on Multnomah County Zoning Maps. Any proposed activity or use requiring an SEC permit shall be subject to the following:

Response: This set of criteria apply to the SEC zone, as listed in the table in MCC 39.5525. The County zoning maps provide that this general SEC zone is located along the Sandy River and is not impacted by this proposal. Because it is not in the mapped SEC overlay, the MCC 39.5540 criteria do not apply to the project.

MCC 5.H.2—SEC STANDARDS APPLICABLE IN THE WEST OF SANDY RIVER AREA ONLY

MCC 39.5560 General Requirements for Approval in the West of Sandy River Planning Area Designated as SEC-WR or SEC-H

The requirements in this section shall be satisfied for development in the SEC-wr and SEC-h areas located in the West of Sandy River Planning Area in addition to the provisions of MCC 39.5800 or 39.5860 as applicable.

Response: The proposed tunnel development will pass through the SEC-h habitat resource area within the West of Sandy River Planning Area. The requirements of this section are addressed below.

(A) Areas of erosion or potential erosion shall be protected from loss by appropriate means.

Appropriate means shall be based on current Best Management Practices and may include restriction on timing of soil disturbing activities.

Response: There are no areas of erosion or potential erosion within the SEC-h zone since pipelines will be bored below ground and the nearest ground disturbance area is at the tunnel portal, which is 100 feet down-slope of the SEC-h zone. Nevertheless, erosion control BMPs will be implemented at the tunnel portal and shaft locations, to prevent any potential erosion at the site (Appendix A.3, Sheet LU-600). This standard is met.

(B) Outdoor lighting shall be of a fixture type and shall be placed in a location so that it does not shine directly into undeveloped water resource or habitat areas. Where illumination of a water resource or habitat area is unavoidable, it shall be minimized through use of a hooded fixture type and location. The location and illumination area of lighting needed for security of utility facilities shall not be limited by this provision.

Response: No outdoor lighting is planned along the RW pipelines, either inside or outside the SEC-h zone. This standard is met.

(C) The nuisance plants in MCC 39.5580 Table 1, in addition to the nuisance plants defined in MCC 39.2000, shall not be used as landscape plantings within the SEC-wr and SEC-h Overlay Zone.

Response: No nuisance plants listed in either Table 1 or as defined in MCC 39.2000 are proposed to be installed as part of this project, as documented in Appendix A.3 (Sheet LU-600) and the Raw Water Pipeline Wildlife Conservation Plan (Appendix G.1). This standard is met.

MCC 5.H.10—WILDLIFE HABITAT (SEC-h)

MCC 39.5850 SEC-H Clear and Objective Standards

(A) At the time of submittal, the applicant shall provide the application materials listed in MCC 39.5520(A) and 39.5860(A). The application shall be reviewed through the Type I procedure and may not be authorized unless the standards in MCC 39.5860(B)(1) through (4)(a)- (c) and (B)(5) through (7) are met. For development that fails to meet all of the criteria listed above, a separate land use application pursuant to MCC 39.5860 may be submitted.

Response: As demonstrated under 39.5520(A), this subsection provides the subject narrative and SEC map for the site. An area map is provided in Appendix A.3 (Sheet LU-601) that addresses MCC 39.5860(A). Since the proposed tunnels will be bored below the entire width of the SEC-h resource area, there are no proposed impacts to SEC-h forested areas. However, as indicated below, two of the objective access standards (MCC 39.5860(B)(2) and (B)(3)) cannot be met at this site, so an application is submitted pursuant to MCC 39.5860.

(B) The proposed development shall meet the applicable stormwater and ground disturbing activity requirements of MCC 39.6200 through 39.6235. Ground disturbing activity within 100 feet of a water body as defined by MCC 39.2000 shall be limited to the period between May 1st and September 15th. Revegetation and soil stabilization must be accomplished no later than October 15th.

Response: There is no proposed ground disturbance or impervious surfaces within the SEC-h area. Therefore, there are no applicable stormwater or ground disturbing activity standards.

(C) The nuisance plants listed in MCC 39.5580 Table 1 shall not be used as landscape plantings within the SEC-h Overlay Zone.

Response: No nuisance plants are proposed to be installed within the SEC-h zone.

(D) For development that fails to meet all of the standards listed in this section, a separate land use application pursuant to MCC 39.5860 may be submitted.

Response: This application will be reviewed against the standards of MCC 39.5860.

MCC 39.5860 Criteria for Approval of SEC-H Permit—Wildlife Habitat

- (A) In addition to the information required by MCC 39.5520 (A), an application for development in an area designated SEC-h shall include an area map showing all properties which are adjacent to or entirely or partially within 200 feet of the proposed development, with the following information, when such information can be gathered without trespass:
 - (1) Location of all existing forested areas (including areas cleared pursuant to an approved forest management plan) and non-forested "cleared" areas;

For the purposes of this section, a forested area is defined as an area that has at least 75 percent crown closure, or 80 square feet of basal area per acre, of trees 11 inches DBH and larger, or an area which is being reforested pursuant to Forest Practice Rules of the

Department of Forestry. A non-forested "cleared" area is defined as an area which does not meet the description of a forested area and which is not being reforested pursuant to a forest management plan.

- (2) Location of existing and proposed structures;
- (3) Location and width of existing and proposed public roads, private access roads, driveways, and service corridors on the subject parcel and within 200 feet of the subject parcel's boundaries on all adjacent parcels;
- (4) Existing and proposed type and location of all fencing on the subject property and on adjacent properties and on properties entirely or partially within 200 feet of the subject property.

Response: The area map in Appendix A.3 (Sheet LU-601) for the proposed RW pipelines includes properties within 200 feet of the proposed development in the SEC-h zone. The map includes existing forested areas, existing and proposed structures, roads, driveways, fences, and other information visible in aerial imagery.

- (B) Development standards:
 - (1) Where a parcel contains any nonforested "cleared" areas, development shall only occur in these areas, except as necessary to provide access and to meet minimum clearance standards for fire safety.

Response: Proposed development is focused on the cleared area of the subject parcels. The SEC-h zone is predominantly forested. Dodge Park Boulevard is the only "cleared" area along the pipeline alignment which as described above must cross through the forested SEC-h zone to reach the filtration facility. These pipelines are buried in tunnels that extend deep below the SEC-h forested area, avoiding all forest impacts.

(2) Development shall occur within 200 feet of a public road capable of providing reasonable practical access to the developable portion of the site.

Response: Property access is taken from Lusted Road at the east side of the property, while the SEC-h resource area is at the western end of the property. The RW pipelines must cross through the SEC-h zone to reach the filtration site to the west. Therefore, the pipelines must extend more than 200 feet from Lusted Road and an SEC review application is triggered. MCC 39.5850(A).

(3) The access road/driveway and service corridor serving the development shall not exceed 500 feet in length.

Response: No part of the access road serving the tunnel portal is within the SEC-h zone. The access road from Lusted Road will be approximately 1,000 feet long and will follow an existing access drive for most of its length. To the extent this standard applies to driveways outside the SEC-h zone, an SEC review application would be triggered. MCC 39.5850(A).

- (4) For the purpose of clustering access road/driveway approaches near one another, one of the following two standards shall be met:
 - (a) The access road/driveway approach onto a public road shall be located within 100 feet of a side property line if adjacent property on the same side of the road has an existing access road or driveway approach within 200 feet of that side property line; or
 - (b) The access road/driveway approach onto a public road shall be located within 50 feet of either side of an existing access road/driveway on the opposite side of the road.

Response: The proposal meets both of the alternative standards; only one needs to be met. As illustrated in Figure 9, the driveway approach onto Lusted Road is directly across from and within 50 feet of an existing driveway on the opposite side of the road. In addition, the adjacent property to the south has an existing driveway within 200 feet of the common side property line. The driveway approach onto Lusted Road is within 40 feet from the side (south) property line. As noted above, no part of the access road, including the driveway, is within the SEC-h zone. However, to the extent this standard applies outside the SEC-h zone, it is met.

(c) Diagram showing the standards in (a) and (b) above.

Response: Figure 9 shows a diagram of the above standards.

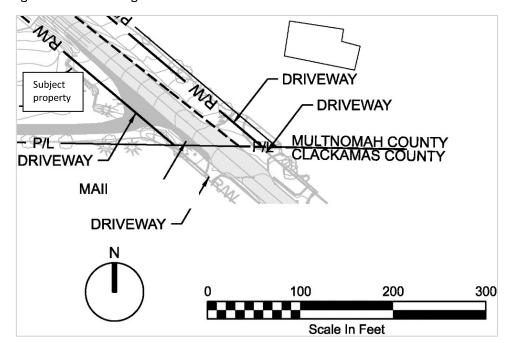


Figure 9. Raw Water Pipeline Driveway Diagram Showing Drive across Lusted Road

- (d) The standards in this subsection (4) may be modified upon a determination by the County Road Official that the new access road/driveway approach would result in an unsafe traffic situation using the standards in the Multnomah County "Design and Construction Manual," adopted June 20, 2000, (or all updated versions of the manual). Standards to be used by the Road Official from the County manual include Table 2.3.2, Table 2.4.1, and additional referenced sight distance and minimum access spacing standards in the publication A Policy on Geometric Design of Highways and Streets by the American Association of State Highway and Transportation Officials (AASHTO) and the Traffic Engineering Handbook by the Institute of Transportation Engineers (ITE).
 - 1. The modification shall be the minimum necessary to allow safe access onto the public road.
 - 2. The County Road Official shall provide written findings supporting the modification.

Response: The standards of Subsection 4 are met, to the extent they apply. No modification is needed.

(5) The development shall be within 300 feet of a side property line if adjacent property has structures and developed areas within 200 feet of that common side property line.

Response: A property to the south of the site has structures or developed areas within 200 feet of the adjacent side property line. All development on the subject property will be located no more than 200 feet from the common side (south) property line. This standard is met.

- (6) Fencing within a required setback from a public road shall meet the following criteria:
 - (a) Fences shall have a maximum height of 42 inches and a minimum 17 inch gap between the ground and the bottom of the fence.
 - (b) Wood and wire fences are permitted. The bottom strand of a wire fence shall be barbless. Fences may be electrified, except as prohibited by County Code.
 - (c) Cyclone, woven wire, and chain link fences are prohibited.
 - (d) Fences with a ratio of solids to voids greater than 2:1 are prohibited.
 - (e) Fencing standards do not apply in an area on the property bounded by a line along the public road serving the development, two lines each drawn perpendicular to the principal structure from a point 100 feet from the end of the structure on a line perpendicular to and meeting with the public road serving the development, and the front yard setback line parallel to the public road serving the development. (See Figure 4 below.)
 - (f) Fencing standards do not apply where needed for security of utility facilities.

Response: No fencing is proposed within the SEC-h zone or on the parcels through which the raw water pipelines will pass. This standard is met.

(7) The nuisance plants in MCC 39.5580 Table 1 shall not be planted on the subject property and shall be removed and kept removed from cleared areas of the subject property.

Response: No nuisance plants will be planted at the subject property. The limited existing cleared areas within the SEC-h zone are dominated by a mix of native and non-native (non-nuisance) grasses and shrubs. The project work area is located entirely outside of the SEC-h zone. Although outside of the SEC-h zone, native plantings are proposed to restore temporary disturbance areas following utility installation (Appendix A.3, Sheets LU-600-601). These plantings will provide erosion control and prevent colonization by nuisance species, and will support habitat functions in the nearby SEC-h overlay. This standard is met.

- (C) Wildlife Conservation Plan. An applicant shall propose a wildlife conservation plan if one of two situations exist.
 - (1) The applicant cannot meet the development standards of subsection (B) because of physical characteristics unique to the property. The applicant must show that the wildlife conservation plan results in the minimum departure from the standards required in order to allow the use; [...]

Response: As described above, the application cannot meet the development standards of subsection (B) because the only available property access is from Lusted Road at the east side of the property, while the SEC-h resource area covers the entirety of the western, sloped end of the property. These unusual physical characteristics mean that for the pipeline to reach the filtration facility site on the other the side of the SEC-h zone, the (B)(2)-(3) standards related to distance from the road and restriction to cleared areas cannot be met. Therefore, a Wildlife Conservation Plan is proposed. The proposal is the minimum departure from the standards in (B)(2)-(3) in order to allow the use, as the raw water pipelines must cross under the SEC-h zone that covers the entirety of the western end of the property in order to reach the filtration facility site on the other side. The Raw Water Pipelines Wildlife Conservation Plan (Appendix G.1) shows that all trees and forested areas within the SEC-h zone are protected; the plan meets the applicable standards below.

(3) Unless the wildlife conservation plan demonstrates satisfaction of the criteria in subsection (C)(5), the wildlife conservation plan must demonstrate the following:

Response: The Wildlife Conservation Plan demonstrates that the project meets the standards in this subsection (C)(3), as discussed below. Therefore subsection (C)(5) does not apply.

(a) That measures are included in order to reduce impacts to forested areas to the minimum necessary to serve the proposed development by restricting the amount of clearance and length/width of cleared areas and disturbing the least amount of forest canopy cover.

Response: The **Introduction** and this Section 2.D describe measures included to reduce impacts to forested areas.

The Water Bureau selected a set of tunnels as the least impactful alternative. The Water Bureau also selected the deep tunnel option, which allowed the entry portal to be located outside the SEC-h zone, avoiding all surface impacts within the SEC-h overlay zone. Potential impacts were further minimized by locating all construction staging and access outside the SEC-h overlay zone. The proposal avoids fragmentation of forest areas adjacent to the SEC-h and reuses existing cleared areas to preserve forest canopy near the SEC-h zone.

These combined measures eliminated impacts to protected SEC-h habitat resources. This standard is met.

(b) That any newly cleared area associated with the development is not greater than one acre, excluding from this total the area of the minimum necessary accessway required for fire safety purposes.

Response: No newly cleared areas are proposed. This standard is met to the extent it applies.

(c) That no fencing will be built and existing fencing will be removed outside of areas cleared for the site development except for existing cleared areas used for agricultural purposes.

Response: No fencing exists or is proposed in the SEC-h area. This standard is met.

(d) That revegetation of existing cleared areas on the property at a 2:1 ratio with newly cleared areas occurs if such cleared areas exist on the property.

Response: No newly cleared areas are proposed within the SEC-h resource area; therefore, no revegetation is required. All areas temporarily disturbed by the project outside the SEC-h zone will be revegetated. This standard is met.

(e) That revegetation and enhancement of disturbed stream riparian areas occurs along drainages and streams located on the property.

Response: The SEC-h resource at this location is an upland forest. There are no stream riparian areas within the subject SEC-h zone. This standard does not apply.

(4) For a property meeting subsection (C)(1) above, the applicant may utilize the following mitigation measures for additions instead of providing a separate wildlife conservation plan...

Response: This proposal is not for an addition. This standard does not apply.

(5) Unless the wildlife conservation plan demonstrates satisfaction of the criteria in subsection (C)(3) of this section, the wildlife conservation plan must demonstrate the following...

Response: Subsection (C)(3) is addressed above so Subsection (C)(5) does not apply.

Lusted Road Distribution Main In SEC-h Overlay

This subsection includes background information, findings, and analysis in support of SEC-h approval for the Lusted Road Distribution Main (LRDM) located within the SEC-h overlay. As described in **Section 2.A**, the existing LRDM currently supplies water to local water customers and five wholesale water districts. Once the filtration facility is online, the water supply to this LRDM will need to receive water from the filtration facility. A proposed new main will connect the new FW pipelines to the existing LRDM north of Lusted Road, passing through the SEC-h overlay on the LHTF property.

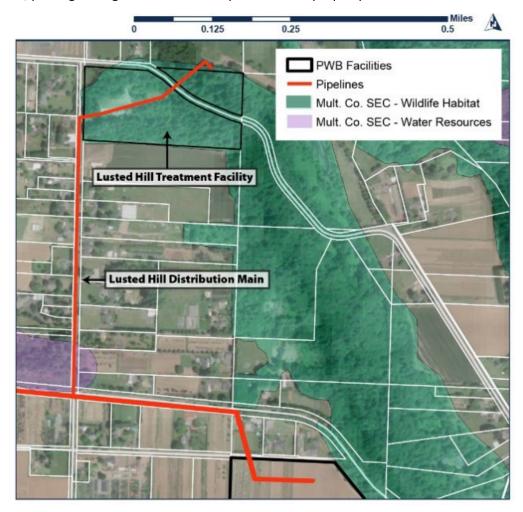


Figure 10. Lusted Hill Distribution Main Alignment

The gravity main will be installed below ground using trenchless construction methods for most of its length. At the LHTF, the pipe will be open cut in the LHTF driveway and parking area and then bored below ground, parallel to existing Conduit 3, to the connection with the existing LRDM in an easement on tax lot 801 (1S4E15C). The connection with the existing LRDM is located outside the SEC-h overlay.

Similar to other impact avoidance actions along the pipeline alignments, the Water Bureau proposes trenchless installation and siting within an existing, cleared utility corridor for the entirety of the SEC-h area. The proposal completely avoids disturbance to the SEC-h forest habitat resources at this site.

MCC 5.H.1 – SIGNIFICANT ENVIRONMENTAL CONCERN GENERAL PROVISIONS

MCC 39.5500 Purposes

The purposes of the Significant Environmental Concern Overlays, MCC 39.5500 through MCC 39.5860 (collectively, the "SEC") are to protect, conserve, enhance, restore, and maintain significant natural and human-made features which are of public value, including among other things, river corridors, streams, lakes and islands, domestic water supply watersheds, flood water storage areas, natural shorelines and unique vegetation, wetlands, wildlife and fish habitats, significant geological features, tourist attractions, archaeological features and sites, and scenic views and vistas, and to establish criteria, standards, and procedures for the development, change of use, or alteration of such features or of the lands adjacent thereto.

Response: As described in the **Introduction** and this Section 2.D, the Water Bureau has consistently met the purpose of the SEC zones by protecting and conserving County-protected SEC resources. Impact avoidance has been the primary means of achieving this goal. At this site, the underground main will extend under existing paved vehicle area and then be installed using trenchless methods for 650 linear feet parallel to an existing conduit in the SEC-h overlay (Figure 10), completely avoiding disturbance to the SEC-h forest resources at this site.

MCC 39.5505 Area Affected

(A) Except as otherwise provided in MCC 39.5510 or MCC 39.5515, the SEC shall apply to those lands designated SEC on the Multnomah County Zoning Map consisting of the following resource area designations: [...]

Response: According to the Multnomah County Zoning Map, the SEC-h: Wildlife Habitat Resource Area applies to portions of tax lots 200 (1S4E22BA), 100 (1S4E22BA), and 801 (1S4E15C) as shown in Figure 11 (Appendix A.3, Sheet LU-602). The proposed LRDM will be constructed through the existing LHTF driveway and parking area on tax lot 200 and then bored below tax lot 100 before reaching the existing LRDM located on tax lot 801, which is located outside the SEC-h zone.

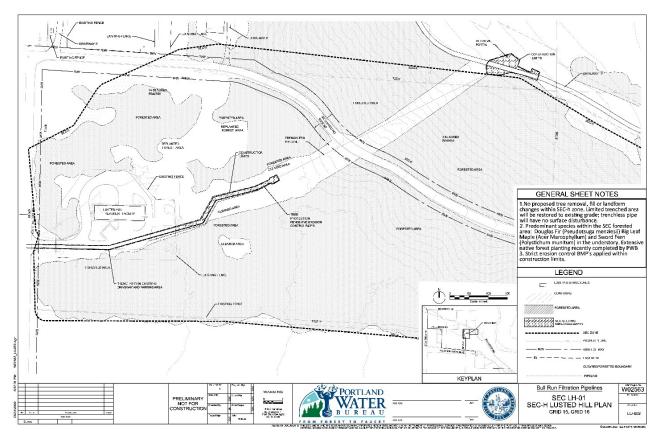


Figure 11. LRDM Alignment in SEC-h



Figure 12. LRDM through Lusted Hill Parking Area (looking east)



Figure 13. LRDM Receiving Pit in Lusted Hill Project Work Area (looking west), including Existing Cleared Utility

Corridor Area in Foreground

MCC 39.5510 Uses; SEC Permit Required

- (A) All uses allowed in the base zone are allowed in the SEC when found to satisfy the applicable approval criteria given in such zone and, except as provided in MCC 39.5515, subject to approval of an SEC permit pursuant to this Subpart.
- (B) Any excavation or any removal of materials of archaeological, historical, prehistorical or anthropological nature shall be conducted under the conditions of an SEC permit, regardless of the zoning designation of the site.

Response: The proposed LRDM is a water distribution line identified as a community service use in the CFU zone (MCC 39.4080(A)). The proposal will be reviewed against the applicable approval criteria of the SEC-h zone. The proposal will be reviewed against the applicable approval criteria of the SEC-h zone. There is no anticipated excavation or removal of archaeological, historical, or related materials. Water Bureau construction specifications include Inadvertent Discovery Plan (Appendix G.3) provisions setting forth protocols for any potential materials discovered during construction.

MCC 39.5520 Application for SEC Permit

An application for an SEC permit for a use or for the change or alteration of an existing use on land designated SEC, shall address the applicable criteria for approval, under MCC 39.5540 through 39.5860.

- (A) An application for an SEC permit shall include the following:
 - (1) A written description of the proposed development and how it complies with the applicable approval criteria of MCC 39.5540 through 39.5860.

- (2) A map of the property showing:
 - (a) Boundaries, dimensions, and size of the subject parcel;
 - (b) Location and size of existing and proposed structures;
 - (c) Contour lines and topographic features such as ravines or ridges;
 - (d) Proposed fill, grading, site contouring or other landform changes;
 - (e) Location and predominant species of existing vegetation on the parcel, areas where vegetation will be removed, and location and species of vegetation to be planted, including landscaped areas;
 - (f) Location and width of existing and proposed roads, driveways, and service corridors.

Response: The narrative description and findings are contained in this Section 2.D of the application. A map showing the subject properties with the listed map features is provided in Appendix A.3 (Sheet LU-602).

MCC 39.5525 Applicable Approval Criteria

(A) The approval criteria that apply to uses in areas designated SEC-sw, SEC-v, SEC-w, SEC-wr, SEC-h on Multnomah County zoning maps shall be based on the type of protected resources on the property, as indicated by the subscript letter in the zoning designation, as follows:

Zoning Designation	Approval Criteria (MCC#)
SEC-h (wildlife habitat)	Type I Permit – 39.5850
	Type II Permit – 39.5560 and 39.5860

Response: Approval criteria MCC 39.5560 and 39.5860 (SEC-h Type II) apply to this proposal and are addressed below.

(B) An application for a use on a property containing more than one protected resource shall address the approval criteria for all of the designated resources on the property. In the case of conflicting criteria, approval shall be based on the ability of the proposed development to comply as nearly as possible with the criteria for all designated resources that would be affected.

Response: Only one protected resource (SEC-habitat) is found on the subject properties.

(C) For protected stream resources, the approval criteria shall be used to determine the most appropriate location, size and scope of the proposed development, in order to make the development compatible with the purposes of this Overlay, but shall not be used to prohibit a use or be used to require removal or relocation of existing physical improvements to the property. Any proposed development must comply with the approval criteria in order to be approved.

Response: The subject SEC-h zone is upland forest habitat that does not contain protected stream resources.

MCC 39.5530 SEC Permit—Required Findings

A decision on an application for an SEC permit shall be based upon findings of consistency with the purposes of the SEC and with the applicable criteria for approval specified in MCC 39.5540 through 39.5860.

Response: Findings of consistency with SEC purpose are provided above and in the response to MCC 39.5500 standards below. Findings of consistency with applicable SEC-h criteria are provided under MCC 39.5560 and 39.5860, below.

MCC 39.5535 Scope of Conditions

- (A) Conditions of approval of an SEC permit, if any, shall be designed to bring the application into conformance with the applicable criteria of MCC 39.5540 through 39.5860 and any other requirements specified in the Goal 5 protection program for the affected resource. Conditions may relate, but are not limited to relating, to the locations, design, and maintenance of existing and proposed improvements, including but not limited to buildings, structures and use areas, parking, pedestrian and vehicular circulation and access, natural vegetation and landscaped areas, fencing, screening and buffering, excavations, cuts and fills, signs, graphics, and lighting, timing of construction and related activities, and mitigation.
- (B) Approval of an SEC permit shall be deemed to authorize associated public utilities, including energy and communication facilities.
- (C) The approval criteria for an SEC permit shall be used to determine the most appropriate location, size and scope of the proposed development in order to ensure that it meets the purposes of this Overlay, but shall not be used to deny economically viable use or be used to require removal or relocation of existing physical improvements to the property.

Response: The Hearings Officer may impose conditions of approval consistent with the scope set forth above. The proposed underground main avoids any significant impacts to the protected SEC-h habitat resource, as documented below.

MCC 39.5540 Criteria for Approval of SEC Permit

The SEC designation shall apply to those significant natural resources, natural areas, wilderness areas, cultural areas, and wild and scenic waterways that are designated SEC on Multnomah County Zoning Maps. Any proposed activity or use requiring an SEC permit shall be subject to the following:

Response: This set of criteria apply to the SEC zone, as listed in the table in MCC 39.5525. The County zoning maps provide that this general SEC zone is located along the Sandy River and is not impacted by this proposal. Because it is not in the mapped SEC overlay, the MCC 39.5540 criteria do not apply to the project.

MCC 5.H.2—SEC STANDARDS APPLICABLE IN THE WEST OF SANDY RIVER AREA ONLY

MCC 39.5560 General Requirements for Approval in the West of Sandy River Planning Area Designated as SEC-WR or SEC-H

The requirements in this section shall be satisfied for development in the SEC-wr and SEC-h areas located in the West of Sandy River Planning Area in addition to the provisions of MCC 39.5800 or 39.5860 as applicable.

Response: This proposal is within the West of Sandy River Planning Area. The proposed underground LRDM satisfies the requirements of this section as documented below.

(A) Areas of erosion or potential erosion shall be protected from loss by appropriate means.

Appropriate means shall be based on current Best Management Practices and may include restriction on timing of soil disturbing activities.

Response: Erosion control BMPs will be implemented at this site to prevent potential erosion within the SEC-h resource area. Erosion control plans are provided in Appendix A.3 (Sheet LU-602). This standard is met.

(B) Outdoor lighting shall be of a fixture type and shall be placed in a location so that it does not shine directly into undeveloped water resource or habitat areas. Where illumination of a water resource or habitat area is unavoidable, it shall be minimized through use of a hooded fixture type and location. The location and illumination area of lighting needed for security of utility facilities shall not be limited by this provision.

Response: No outdoor lighting is planned for the LRDM. This standard is met

(C) The nuisance plants in MCC 39.5580 Table 1, in addition to the nuisance plants defined in MCC 39.2000, shall not be used as landscape plantings within the SEC-wr and SEC-h Overlay Zone.

Response: No nuisance plants listed in either Table 1 or as defined in MCC 39.2000 are proposed to be installed as part of this project, as documented in Appendix A.3 (Sheet LU-602) and the *Distribution Main Wildlife Conservation Plan* (Appendix G.2).

MCC 5.H.10—WILDLIFE HABITAT (SEC-H)

MCC 39.5850 SEC-H Clear and Objective Standards

(A) At the time of submittal, the applicant shall provide the application materials listed in MCC 39.5520(A) and 39.5860(A). The application shall be reviewed through the Type I procedure and may not be authorized unless the standards in MCC 39.5860(B)(1) through (4)(a)- (c) and (B)(5) through (7) are met. For development that fails to meet all of the criteria listed above, a separate land use application pursuant to MCC 39.5860 may be submitted.

Response: As demonstrated under 39.5520(A), this subsection provides the subject narrative and SEC map for the site in Appendix A.3 (Sheet LU-602). The area map, Sheet LU-603, addresses MCC 39.5860(A), as reviewed below. While the proposed LRDM will have minimal impacts to protected SEC-h resources, two access standards (MCC 39.5860(B)(2) and (B)(5)) cannot be met at this site, so this application is submitted pursuant to MCC 39.5860.

(B) The proposed development shall meet the applicable stormwater and ground disturbing activity requirements of MCC 39.6200 through 39.6235. Ground disturbing activity within 100 feet of a water body as defined by MCC 39.2000 shall be limited to the period between May 1st and September 15th. Revegetation and soil stabilization must be accomplished no later than October 15th.

Response: There are no new impervious surfaces proposed in conjunction with the LRDM. The Pipeline Stormwater Report in Appendix H.3 demonstrates compliance with applicable standards. No ground disturbing activity is planned within 100 feet of a water body in the SEC-h zone.

(C) The nuisance plants listed in MCC 39.5580 Table 1 shall not be used as landscape plantings within the SEC-h Overlay Zone.

Response: No nuisance plants are proposed to be installed within the SEC-h zone.

(D) For development that fails to meet all of the standards listed in this section, a separate land use application pursuant to MCC 39.5860 may be submitted.

Response: This application will be reviewed against the standards of MCC 39.5860.

MCC 39.5860 Criteria for Approval of SEC-H Permit—Wildlife Habitat

- (A) In addition to the information required by MCC 39.5520 (A), an application for development in an area designated SEC-h shall include an area map showing all properties which are adjacent to or entirely or partially within 200 feet of the proposed development, with the following information, when such information can be gathered without trespass:
 - (1) Location of all existing forested areas (including areas cleared pursuant to an approved forest management plan) and non-forested "cleared" areas;
 - For the purposes of this section, a forested area is defined as an area that has at least 75 percent crown closure, or 80 square feet of basal area per acre, of trees 11 inches DBH and larger, or an area which is being reforested pursuant to Forest Practice Rules of the Department of Forestry. A non-forested "cleared" area is defined as an area which does not meet the description of a forested area and which is not being reforested pursuant to a forest management plan.
 - (2) Location of existing and proposed structures;
 - (3) Location and width of existing and proposed public roads, private access roads, driveways, and service corridors on the subject parcel and within 200 feet of the subject parcel's boundaries on all adjacent parcels;

(4) Existing and proposed type and location of all fencing on the subject property and on adjacent properties and on properties entirely or partially within 200 feet of the subject property.

Response: The area map (Appendix A.3, Sheet LU-603) for the proposed LRDM site includes properties within 200 feet of the proposed development in the SEC-h zone. The map shows existing forested areas, existing and proposed structures, roads, driveways, fences and other information visible in aerial imagery.

- (B) Development standards:
 - (1) Where a parcel contains any nonforested "cleared" areas, development shall only occur in these areas, except as necessary to provide access and to meet minimum clearance standards for fire safety.

Response: As shown on Figures 10-12 and in Appendix A.3 (Sheet LU-602), proposed development is located only within existing cleared areas of the site. The LRDM will be installed under the existing driveway and parking area at LHTF and within a cleared non-forested area to the east. The LRDM will be bored deep below the SEC-h resource area in the northern portion of the site.

(2) Development shall occur within 200 feet of a public road capable of providing reasonable practical access to the developable portion of the site.

Response: The LRDM must extend more than 200 feet from Cottrell Road, which provides access to the site, in order to make the required connection to the existing main.

(3) The access road/driveway and service corridor serving the development shall not exceed 500 feet in length.

Response: The existing driveway at the LHTF extends 350 feet into the site. This project will not alter or extend the driveway.

- (4) For the purpose of clustering access road/driveway approaches near one another, one of the following two standards shall be met:
 - (a) The access road/driveway approach onto a public road shall be located within 100 feet of a side property line if adjacent property on the same side of the road has an existing access road or driveway approach within 200 feet of that side property line; or
 - (b) The access road/driveway approach onto a public road shall be located within 50 feet of either side of an existing access road/driveway on the opposite side of the road.

Response: As illustrated in Figure 14, the access road/driveway approach onto Cottrell Road is directly across from an existing driveway on the opposite side of the road. Therefore, standard (b) is met.

(c) Diagram showing the standards in (a) and (b) above.

Response: Figure 14 shows a diagram of the above standards.

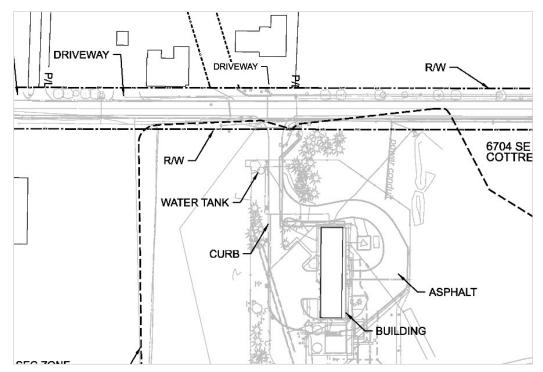


Figure 14. Driveways Diagram

- (d) The standards in this subsection (4) may be modified upon a determination by the County Road Official that the new access road/driveway approach would result in an unsafe traffic situation using the standards in the Multnomah County "Design and Construction Manual," adopted June 20, 2000, (or all updated versions of the manual). Standards to be used by the Road Official from the County manual include Table 2.3.2, Table 2.4.1, and additional referenced sight distance and minimum access spacing standards in the publication A Policy on Geometric Design of Highways and Streets by the American Association of State Highway and Transportation Officials (AASHTO) and the Traffic Engineering Handbook by the Institute of Transportation Engineers (ITE).
 - 1. The modification shall be the minimum necessary to allow safe access onto the public road.
 - 2. The County Road Official shall provide written findings supporting the modification.

Response: The standards of Subsection 4 are met. No modification is needed.

(5) The development shall be within 300 feet of a side property line if adjacent property has structures and developed areas within 200 feet of that common side property line.

Response: A property to the south of the site has structures or developed areas within 200 feet of the adjacent side property line. The proposed surface disturbance will be within 300 feet of the common side property line; however, the bored pipe must extend more than 300 feet north to connect with the existing main north of Lusted Road.

- (6) Fencing within a required setback from a public road shall meet the following criteria:
 - (a) Fences shall have a maximum height of 42 inches and a minimum 17 inch gap between the ground and the bottom of the fence.
 - (b) Wood and wire fences are permitted. The bottom strand of a wire fence shall be barbless. Fences may be electrified, except as prohibited by County Code.
 - (c) Cyclone, woven wire, and chain link fences are prohibited.
 - (d) Fences with a ratio of solids to voids greater than 2:1 are prohibited.
 - (e) Fencing standards do not apply in an area on the property bounded by a line along the public road serving the development, two lines each drawn perpendicular to the principal structure from a point 100 feet from the end of the structure on a line perpendicular to and meeting with the public road serving the development, and the front yard setback line parallel to the public road serving the development. (See Figure 4 below.)
 - (f) Fencing standards do not apply where needed for security of utility facilities.

Response: No fencing is proposed.

(7) The nuisance plants in MCC 39.5580 Table 1 shall not be planted on the subject property and shall be removed and kept removed from cleared areas of the subject property.

Response: No nuisance plants will be planted at the subject property (Appendix A.3, Sheet LU-602). Existing Water Bureau management of nuisance plants, including Himalayan blackberry, will continue at the LHTF.

- (C) Wildlife Conservation Plan. An applicant shall propose a wildlife conservation plan if one of two situations exist.
 - (1) The applicant cannot meet the development standards of subsection (B) because of physical characteristics unique to the property. The applicant must show that the wildlife conservation plan results in the minimum departure from the standards required in order to allow the use; [....]

Response: The LRDM must cross through the SEC-h zone to reach the existing main located in a Water Bureau easement to the northeast of the LHTF. The project objectives and unusual physical characteristics of the site—including the existing cleared utility corridor and Water Bureau infrastructure—mean that for the LRDM to connect to the existing pipe, the subsection (B)(2) standard related to distance from the road cannot be met. Therefore, a Wildlife Conservation Plan is proposed. The proposal is the minimum departure from the subsection (B) standard in order to allow the use, as the LRDM must cross the SEC-h zone that covers the entirety of the LHTF site in order to reach the existing distribution main connection. The Distribution Main Wildlife Conservation Plan (Appendix G.2) shows that all trees and forested areas within the SEC-h zone are protected; the plan meets the applicable standards below.

(3) Unless the wildlife conservation plan demonstrates satisfaction of the criteria in subsection (C)(5), the wildlife conservation plan must demonstrate the following:

Response: The Wildlife Conservation Plan demonstrates that the project meets the standards in this subsection (C)(3), as discussed below. Therefore subsection (C)(5) does not apply.

(a) That measures are included in order to reduce impacts to forested areas to the minimum necessary to serve the proposed development by restricting the amount of clearance and length/width of cleared areas and disturbing the least amount of forest canopy cover.

Response: The proposed underground LRDM will have no impacts to forested areas or to forest canopy cover. The LRDM was specifically designed to avoid all such impacts:

- Extending east from Cottrell Road, the LRDM will be located beneath the existing LHTF driveway and parking area;
- The LRDM will extend north from the parking area within an existing cleared area to a jacking pit in an existing utility corridor; and
- The LRDM will be bored below the SEC-h zone for the northern 600-foot section.

Thus, there is no proposed clearance of forest vegetation and the existing forest canopy cover within the SEC-h zone will be fully preserved. Therefore, impacts to forested areas have been reduced to the minimum necessary—as impacts are at zero. This standard is met.

(b) That any newly cleared area associated with the development is not greater than one acre, excluding from this total the area of the minimum necessary accessway required for fire safety purposes.

Response: No newly cleared areas are proposed. This standard is met.

(c) That no fencing will be built and existing fencing will be removed outside of areas cleared for the site development except for existing cleared areas used for agricultural purposes.

Response: No new fencing is proposed at the site. Fencing standards do not apply "where needed for security of utility facilities" (MCC 39.5860(B)(6)(f)). This standard is met.

(d) That revegetation of existing cleared areas on the property at a 2:1 ratio with newly cleared areas occurs if such cleared areas exist on the property.

Response: No newly cleared areas are proposed within the SEC-h resource area; therefore, no revegetation is required. This standard does not apply.

The Water Bureau is actively reforesting the cleared areas of the LHTF site that do not serve existing development (Figure 15). Three acres of the site have been revegetated since 2018.

(e) That revegetation and enhancement of disturbed stream riparian areas occurs along drainages and streams located on the property.

Response: The SEC-h resource at this location is an upland forest. There are no stream riparian areas located on the subject property. This standard does not apply.



Figure 15. Forest plantings and Invasive Plant Clearing at LHTF

(4) For a property meeting subsection (C)(1) above, the applicant may utilize the following mitigation measures for additions instead of providing a separate wildlife conservation plan...

Response: This proposal is not for an addition. This standard does not apply.

(5) Unless the wildlife conservation plan demonstrates satisfaction of the criteria in subsection (C)(3) of this section, the wildlife conservation plan must demonstrate the following...

Response: Subsection (C)(3) is addressed above so Subsection (C)(5) does not apply.