



## CAMP LACAMAS STEP SEWER PROJECT

City Project: WS-681E

Application for Shoreline Conditional Use Permit

Submitted By:

City of Camas

Public Works Department

616 NE 4th Avenue

Camas, Washington 98607

December 19, 2017

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APPLICANT:

James Hodges

City of Camas

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Camas, Washington 98607

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PROPERTY OWNER:

Lacamas Creek Communities

2025 NE Goodwin Road

Camas, Washington 98607

(360) 834-3262

APPLICANT'S CONSULTANT:

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Natural Resource Scientists:

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LOCATION OF PROJECT:

Parcel Serial Number: 172543000

Comprehensive Plan Designation: Industrial (IND)

Zoning: Light Industrial/Business Park (LI/BP)

Overlay Zone(s): Gateway Corridor

Sec: 20 Township: 2N Range: 3E

Parcel Size: 9.63 acres

#### TYPE OF REVIEW

- ( ) Substantial Development Permit
- (X) Conditional Use Permit
- ( ) Variance

#### SUBMITTAL REQUIREMENTS

1. Name of water area and/or wetlands within which development is proposed:

No in-water work or work in wetland.

Work would occur within the shoreline and 100-year floodplain of Lacamas Creek.

2. Current use of the property with existing improvements:

Camp Lacamas is used seasonally as a retreat and conference center. There are two single family residences on the subject parcel, which are occupied year-round.

3. Proposed use of property:

The City of Camas (City) plans to install a new STEP (Septic Tank Effluent Pumping) system to serve Camp Lacamas at 2025 NE Goodwin Road, replacing the existing on-site septic system. This project supports the existing use at this location.

4. Nature of the existing shoreline. (Describe type of shoreline, such as marine, stream, lake, lagoon, marsh, bog, swamp, flood plain, floodway, delta; type of beach, such as accretion, erosion, high bank, low bank, or dike; material, such as sand, gravel, mud, clay, rock riprap; and extent and type of bulkheading, if any):

Lacamas Creek, a perennial stream, is approximately 160 feet north of the project site. This stream flows southeast, entering Lacamas Lake approximately 1 mile downstream of the site (lake level rises and falls based on seasonal drawdown). The site is within Water Resource Inventory Area (WRIA) 28 and the 6th field Hydrologic Unit Code (HUC) Lower Columbia/Sandy 170800010606.

A very small (0.026 acre or 1,112 square feet) palustrine scrub-shrub/emergent (PSS/PEM) depressional wetland with a forested fringe (Wetland K-1) is present on the northeast portion of the site, approximately 40 feet northeast of the project alignment, at the closest point. This wetland is located in a depression at the toe of a steep slope (30 to 35%) that separates the developed camp area on the upper terrace from the forested and relatively undisturbed lower terrace along Lacamas Creek.

5. In the event that any of the proposed buildings or structures will exceed a height of thirty-five feet above the existing grade level, indicate the approximate location of and number of residential units, existing and potential, that will have an obstructed view.

No buildings or structures exceeding a height of thirty-five feet are proposed.

6. Project Diagrams:

Engineering Drawings (Appendix F).

7. State Environmental Policy Act (SEPA) checklist.

Prepared by HHPR. Submitted as a separate, concurrent document.

8. Additional material or comments (included on other sheets if necessary).

Project Narrative (See below). Figures (Appendix A). Photographs (Appendix B). Tree Survey (Appendix C). Other Technical Reports (Appendix D). Mailing List—Properties within 300 feet (Appendix E). Engineering Drawings (Appendix F).

AUTHORIZATION:

The undersigned hereby certifies that all information submitted with this application is complete and correct to the best of my knowledge and belief. I understand that any errors and/or omissions may lengthen the time to process the request.

James Hodges (CAMAS)      12/27/2017  
Authorized Signature      Date

(letter of authorization required if other than property owner)

SUBMIT THIS APPLICATION TO THE PLANNING DEPARTMENT AT CITY HALL,  
616 NE 4TH AVENUE, CAMAS, WASHINGTON (360) 834-3451.

for office use only do not write below this line

Application No.: \_\_\_\_\_

Filing Date:

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## 1. PROJECT DESCRIPTION

### 1.1 Project Description

The City of Camas (City) plans to install a STEP (Septic Tank Effluent Pumping) system to serve Camp Lacamas at 2025 NE Goodwin Road (parcel number 172543000), replacing the existing on-site septic system. Camp Lacamas is 9.63 acres, and is used seasonally as a retreat and conference center. There are two single family residences on the subject parcel, which are occupied year-round.

The new system will connect to the existing public sewer via an existing stub that lies at the eastern edge of NE Goodwin Road. A new line will be extended from the existing stub to the parcel, by boring under the ditch along the roadway. The proposed STEP system consists of approximately 900 feet of sewer line and four underground septic tanks (three new STEP tanks and one existing septic tank to be modified), hereafter referred to as STEP tanks, to service two residences, the kitchen/dining hall, and two restrooms. Electric pumps are integrated into each STEP tank. One small electrical service panel (to provide power for the system) will be installed aboveground. Three existing septic tanks will be decommissioned in-place (pumped out and filled with sand). Excavations are planned to be either in the existing roadway, adjacent lawn, or areas regularly traversed by pedestrians. No new impervious surface will be created.

### 1.2 Shoreline Jurisdiction

The new STEP system is a Shoreline Conditional Use based on the following findings:

Lacamas Creek, which forms the north boundary of the parcel, is a perennial stream designated as a shoreline of the state by the City of Camas Shoreline Master Program (SMP) (City of Camas 2015). The designated floodway of Lacamas Creek (Figure 3, based on FEMA Flood Insurance Rate Map [FIRM] Map 53011C0414D effective September 5, 2012) is located along the north edge of the project site, and the entire project site is within the contiguous 100-year floodplain. Section 2.1 of the SMP states that jurisdictional shorelands include floodways and contiguous floodplains landward 200 feet from such floodways. The resulting shoreline boundary traverses the site in an east-westerly direction (Figure 2).

The following proposed project features would be within the shoreline boundary:

- One new STEP tank;
- One existing septic tank, modified to STEP tank;
- The connection to the existing public sewer stub in NE Goodwin Road (via a bore under the roadside ditch);
- Approximately 700 feet of new sewer line; and
- A small aboveground electrical service panel.

The shoreline designation for the parcel is Urban Conservancy. Table 6-1 of the SMP indicates that underground utilities within Urban Conservancy shorelines are a Conditional Use. Underground utilities parallel to the shoreline have a 100 foot setback from the ordinary high water mark (OHWM). All proposed utilities are outside of this setback.

Lacamas Creek, nearest the project alignment (from the NE Goodwin Road bridge to approximately 450 feet downstream), was reviewed on July 28, 2017. The OHWM in this location was identified based on a

change of vegetation from facultative herbaceous species dominated by reed canarygrass, to trees and shrubs dominated by upland species (e.g. Oregon white oak, cascara [*Frangula purshiana*], and common snowberry) and, typically, a recognizable slope break. At the downstream end of this area, the OHWM is located at the outer edge of an old backwater channel. Here the OHWM was determined by a distinct and abrupt rise in topography and a shift in vegetation from obligate wetland species (slough sedge [*Carex obnupta*]) to the upland forest described above.

Upstream of the NE Goodwin Road bridge for approximately 1000 feet the OHWM is typically at the back of the first stream terrace above the active channel (reviewed by Kent Snyder August 20, 2015 and March 2, 2017). Here the OHWM is readily defined by a distinct and abrupt rise in topography (typically 1 to 3 feet high), and vegetation changes from a facultative shrub or herbaceous (e.g., reed canarygrass) community to upland forest community (e.g., snowberry, sword fern, bigleaf maple, and Douglas fir). Movement of sediment is evident on the terrace below; no such sediment was observed above the OHWM. There were wrack lines in vegetation on active channel, but not above slope break. The uppermost segment of the OHWM follows the edge of an old stream meander. Here the boundary is defined by a lower (typically 1-foot) topographic break along a shallow channel. Either open water or scrub-shrub vegetation (typically red osier dogwood) lies on the stream side and an open ash forest is present on the other. Wrack and sediment from Lacamas Creek are present along the boundary.

### 1.3 Approval Request

The applicant requests approval of a Shoreline Conditional Use Permit and critical areas permit for the proposed STEP system.

## 2. CAMAS ZONING CODE (TITLE 18) – APPLICANT RESPONSE

The following is the applicant response to applicable approval criteria and code:

### 2.1 Permitted Uses (Chapter 18.07 – Use Authorization)

**Response:** The property is zoned Light Industrial/Business Park (LI/BP). Minor public facilities that serve a Communication, Utilities and Facilities Use are a permitted use per Section 18.07.030 – Table 1 - Commercial and industrial land uses. Therefore the proposed STEP system is a land use that is permitted outright in the LI/BP zone.

### 2.2 Light Industrial/Business Park (Chapter 18.21)

#### 2.2.1 *Site Development Criteria (Section 18.21.060)*

*E. Utilities. All utility service lines are to be located underground. All pad-mounted equipment and other visible utility and service equipment are to be carefully located to minimize appearance, and shall be appropriately screened consistent with required access and safety requirements.*

**Response:** The proposed utility consists of approximately 900 feet of underground sewer line and three new underground STEP tanks (one existing septic tank will be modified to a STEP tank). It is anticipated that excavations will be either in the existing roadway or adjacent lawn. No new impervious surface will be created. One small aboveground element will be installed adjacent to an existing power pole: a small electrical service panel on a 4 feet x 4 feet piece of plywood that is supported by two 4 inch x 4 inch wooden posts. This small panel would be located next to a power pole, thus clustering electrical functions/structures and minimizing visual impacts. Each of the three new STEP tanks will have a 24 inch and a 30 inch green fiberglass lid that will be raised slightly (1-2 inches) from the surrounding ground elevation.

## 2.3 Sensitive Areas and Open Space (Chapter 18.31)

### 2.3.1 Sensitive Area – Scope (Section 18.31.020)

*Land proposals below are subject to the criteria, guidelines, conditions, performance standards, and procedural requirements contained in this chapter:*

- A. Rezone;*
- B. Conditional use permit;*
- C. Variance;*
- D. Shoreline substantial development permit;*
- E. Planned development;*
- F. Subdivision;*
- G. Short subdivision;*
- H. Commercial development;*
- I. Business park development;*
- J. Any grading, filling, or clearing of land, or logging or removal of timber on land characterized by, or adjacent to (within three hundred feet of) an environmentally sensitive area; or*
- K. Open space designation standards and requirements shall apply to any application proposals involving a subdivision or planned development.*
- L. The standards and requirements of this chapter shall apply in addition to any other regulations of the city applicable to the underlying zone. In case of any conflict between these and any other regulation(s), the stricter regulation(s) shall apply.*

**Response:** Chapter 18.31 is applicable to the project because it requires Shoreline Substantial Development and a Conditional Use permit.

### 2.3.2 Sensitive Area – Administration (Section 18.31.030)

*The community development director shall determine, based on the city's sensitive area overlay maps, environmental information provided by the applicant, and field reconnaissance as necessary, whether a property for which development approval is requested contains the types of lands or areas subject to this chapter. If property for which development approval is requested does contain critical areas, as defined per CMC Section 16.51.070 Critical Areas Regulated, then a development application must be accompanied by relevant information pursuant to Title 16 Environment. The community development director may waive or modify the study and reporting requirements of this section if it is determined that the subject property does not contain such lands or areas.*

**Response:** The applicant has addressed critical areas within this applicant narrative (section 5).

### 2.3.3 Sensitive Areas—Tree Retention (Section 18.31.080)

- A. A tree survey, conducted by a qualified biologist, landscape architect, or arborist, shall be conducted for all lands proposed to be developed and listed under Section 18.31.020. A survey shall not be required for lands proposed to be retained as undeveloped open space.*
- B. To the extent practical, existing healthy significant trees shall be retained. Preservation of groups of significant trees, rather than individual trees shall be preferred. All grading shall take place outside the drip line of those significant trees to be retained, except that the city engineer may approve grading within the drip line if it can be demonstrated that such grading can occur without damaging the tree or trees.*

**Response:** A tree survey, conducted by a qualified biologist, is provided in Appendix C. Significant trees are defined by CMC 18.03, Definitions, as “evergreen trees eight inches dbh, and deciduous trees, other than red alder or cottonwood, twelve inches dbh”.

The route of the new sewer line and locations of the STEP tanks have been designed so that no removal of significant trees is necessary.

### 2.3.4 Sensitive Areas – Vegetation Removal (Section 18.31.090)

- A. Exceptions. This section shall not apply to:*
  - 1. Removal of vegetation outside of critical areas, in conservation areas, protected open space areas as shown on plats, or areas otherwise required to be protected;*
  - 2. Removal of trees four inches or less in diameter, as measured at the base;*
  - 3. Annual removal of vegetation from an area under one thousand square feet;*
  - 4. Removal of dead, diseased, or dying vegetation and trees;*
  - 5. Normal maintenance associated with residential properties, including mowing, rototilling, and pruning;*
  - 6. Removal of nonnative invasive plant species, such as Himalayan blackberries and ivy;*
  - 7. Removal of vegetation associated with land surveys and environmental surveys;*
  - 8. Removal of vegetation related to the construction, installation, and maintenance of public utilities.[...]*

**Response:** This section is superseded by greater vegetation protections provided by SMP requirements (see section 6.2.8 for full discussion).

### 2.3.5 Sensitive Areas – Mandatory Preservation (Section 18.31.110)

*As a condition of development approval for any development application set forth in Section 18.31.020(A) of this chapter, the applicant shall set aside and preserve all sensitive areas, except as otherwise permitted by this chapter. To insure that such areas are adequately protected, the applicant shall cause a protective mechanism acceptable to the city to be put in place.*

**Response:** The applicant does not propose any permanent impacts to sensitive areas.

## 2.4 Administrative Procedures (Chapter 18.55)

### 2.4.1 Shoreline Master Program Permits (Section 18.55.330)

A. *Camas Shoreline Master Program—Adopted. The city's policies and regulations for shorelines are contained in the master program document that is adopted by the city, and entitled Camas Shoreline Master Program (program).*

1. *Procedures. The process and procedures regarding shoreline master program permits are found in Appendix B of the Camas Shoreline Master Program (hereinafter referred to as the "program"). When a shoreline substantial development permit and a shoreline conditional use permit or variance is required for a development, then the submittal of the permits shall be made concurrently.*

2. *Consolidated Review. Unless an applicant requests otherwise, any other permits that are required for the development or use (e.g. permits within CMC Titles 15, 16, 17 and 18) and submitted concurrently with the shoreline permits, shall be processed simultaneously and a decision shall be issued as a single decision as required per RCW 36.70B.120-Permit Review Process.*

**Response:** The applicant has determined the proposed STEP system is a Shoreline Conditional Use based on the following findings:

The adopted Camas SMP is dated Effective July 27, 2015. Section 2.1 Applicability states that a site is within the shoreline jurisdiction when the following applies:

Such shorelands shall include those lands extending two hundred (200) feet in all directions as measured on a horizontal plane from the ordinary high water mark (OHWM), floodways and contiguous floodplain areas landward two hundred feet from such floodways, associated wetlands, critical areas with associated buffer areas, river deltas associated with the streams, and lakes and tidal waters that are subject to the provisions of this program, as may be amended; the same to be designated as to location by Ecology, as defined by RCW 90.58.

Lacamas Creek, which forms the north boundary of the parcel, is a year-round stream and a WDNR Type-S stream. The designated floodway of Lacamas Creek (per FEMA FIRM Map 53011C0414D, Effective September 5, 2012) is located along the north edge of the project site. Section 2.1 of the SMP states that jurisdictional shorelands include floodways and contiguous floodplains landward 200 feet from such floodways (Figure 3).

The shoreline designation for the parcel is Urban Conservancy. Table 6-1 of the SMP indicates that underground utilities within Urban Conservancy shorelines are a Conditional Use. Underground utilities parallel to the shoreline have a 100 foot setback from the OHWM. All proposed utilities are outside of this setback.

B. *Expiration of Shoreline Master Program Permits.*

1. *The time requirements of this section shall apply to all substantial development permits and to any development authorized pursuant to a shoreline variance or conditional use permit. Upon a finding of good cause, based on the requirements and circumstances of the project*

*proposed and consistent with the policy and provisions of the program, the city may adopt different time limits from those set forth in this section as a part of an action on a substantial development permit. (WAC173-27-090)*

2. *Construction activities shall be commenced or, where no construction activities are involved, the use or activity shall be commenced within two years of the effective date of a substantial development permit. However, the shoreline administrator may authorize a single extension for a period not to exceed one year based on reasonable factors, if a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record on the substantial development permit and to DOE. (WAC173-27-090)*

3. *Authorization to conduct development activities shall terminate five years after the effective date of a substantial development permit. However, the shoreline administrator may authorize a single extension for a period not to exceed one year based on reasonable factors, if a request for extension has been filed before the expiration date and notice of the proposed extension is given to parties of record and to DOE. (WAC173-27-090)*

**Response:** The applicant intends to commence construction within the timelines stated in this section.

### **3. STATE ENVIRONMENTAL POLICY ACT (SEPA) COMPLIANCE (Title 16.01)**

The applicant has complete a SEPA checklist and submitted as a concurrent, separate document.

### **4. ARCHAEOLOGICAL COMPLIANCE (Title 16.31)**

Archaeological Investigations Northwest, Inc. (AINW) reviewed records held by the Washington Department of Archaeology and Historic Preservation (DAHP), AINW's library, the Clark County GIS, and other sources. AINW archaeologists conducted a pedestrian survey and shovel testing of the project area. The archaeological survey report will be submitted to DAHP and Tribes. The project has been redesigned to avoid and minimize impacts to archaeological resources. Where impacts cannot be avoided, controlled archaeological excavations and archaeological monitoring under a DAHP Archaeological Site Alteration and Excavation Permit may be needed.

If an item of possible archaeological interest is discovered on site, work will immediately cease, and notification of the find will be sent to the appropriate parties.

### **5. CRITICAL AREAS COMPLIANCE (SMP Appendix C, 16.51)**

The Growth Management Act (RCW 36.70A) and the City Critical Area Regulations (Appendix C of Camas SMP, Appendix C, 16.51) protect wetlands, critical aquifer recharge areas, frequently flooded areas, geologically hazardous areas, and fish and wildlife habitat conservation areas.

Pedestrian site visits on June 20, June 26, and July 28, 2017 assessed site conditions, delineated wetlands and OHWM, conducted non-protocol plant and animal surveys, conducted habitat assessments, and evaluated impacts of proposed project actions.

The project is partially or wholly within a Frequently Flooded Area, a Critical Aquifer Recharge Area, Fish and Wildlife Habitat Conservation Area, and a wetland buffer. Critical areas are shown in Figures 3 through 6.

## 5.1 Wetlands (SMP 16.53)

A very small (0.026 acre or 1,112 square feet) palustrine scrub-shrub/emergent (PSS/PEM) depressional wetland with a forested fringe (Wetland K-1) is present approximately 40 feet northeast of the project alignment, at the closest point (Figure 2) (HHPR 2017, Appendix A). This wetland is located in a depression at the toe of a steep slope (approximately 30%) that separates the developed camp area on the upper terrace from the forested and relatively undisturbed lower terrace along Lacamas Creek. This wetland could be occupying the bottom of an old, abandoned gravel pit, but this is uncertain.

Wetland K-1 was rated using Hruby (2014). The resulting scores indicated moderate to high water quality function (score of 7), with moderate hydrologic function (score of 6), and high habitat function (score of 8). Overall, these scores result in a 21 point, Category II rating.

Vegetation in the wetland consists of a mosaic of emergent and scrub-shrub communities, with a forested fringe. The emergent plant community is dominated by water parsley (*Oenanthe sarmentosa*), intermixed with native forbs (e.g. marsh bedstraw [*Galium palustre*], water smartweed [*Persicaria sp.*], mad dog skullcap [*Scutellaria lateriflora*], and small-fruited bulrush [*Scirpus microcarpus*]), and invasive species (e.g. reed canarygrass [*Phalaris arundinacea*], spotted touch-me-not [*Impatiens capensis*], and climbing nightshade [*Solanum dulcamara*]). The invasive species have not proliferated in the wetland, probably because mature trees in the forested fringe and adjacent upland shade the wetland from all sides. The scrub-shrub plant community is dominated by thickets of redosier dogwood (*Cornus alba*). The forested fringe is dominated by Oregon ash (*Fraxinus latifolia*), with an understory of emergent species, such as those described above.

Wetland buffer widths required for water quality functions protection (SMP Table 16.53.040-1) and habitat functions protection (SMP Table 16.53.040-2) are determined based on the intensity of the proposed land use (SMP Table 16.53.040-4 Land Use Intensity Matrix), the wetland rating, and the habitat score for each wetland. Underground utility lines are a low intensity land use according to the Land Use Intensity Matrix. Thus, the buffers designated by the City are 50 feet for water quality and 130 feet for habitat functions. The following discussion only references the buffer for habitat functions, as it is the larger of the two and therefore determines the boundary of the regulated buffer area.

The wetland buffer to the south of the wetland (toward the project alignment) extends up a steep slope and into the developed area of the camp. Here, the buffer is characterized by mature Douglas fir trees (*Pseudotsuga menziesii*, 24 to 55 inches diameter breast height [DBH]) that provide approximately 80 percent canopy cover throughout most of the buffer area. On the slope, the understory is dominated by a carpet of ivy (*Hedera helix*) with occasional shrubs (e.g. Western serviceberry [*Amelanchier alnifolia*], beaked hazelnut [*Corylus cornuta*], and common snowberry [*Symphoricarpos albus*]). In the camp area the understory is sparse and crisscrossed by footpaths. Where present, understory vegetation is dominated by non-native grasses and forbs (e.g. orchard grass [*Dactylis glomerata*], shiny geranium [*Geranium lucidum*], and common dandelion [*Taraxacum officinale*]), with occasional native forbs (e.g. fringecup [*Tellima grandiflora*] and Siberian springbeauty [*Claytonia siberica*]).

The buffer in this area also contains pre-existing buildings, including a restroom, "snack shack", and four cabins. These are functionally separate from the wetland and do not protect it from adverse impacts, and are therefore excluded from the buffer per SMP 16.53.040.B.4.b.i.

The restroom at the north edge of the complex of buildings sits at the edge of the slope above the wetland. Though the restroom building is excluded from the wetland buffer, it is served by a septic system and leach field located within the buffer, also at the top of the slope. The presence of an old septic system in the buffer poses a risk of water quality impacts, especially given the presence of an impermeable layer (the Troutdale Formation) 2 to 3 feet below the ground surface, dipping towards the wetland and Lacamas Creek.

The wetland would be protected during construction through implementation of appropriate Best Management Practices (BMPs) to control sediment and discharge. Proposed measures would be outlined in the completed temporary erosion and sediment control (TESC) plan.

BMPs that would be employed throughout the project to minimize impacts include the following:

- Preserving Natural Vegetation (BMP C101)
- Construction Road/Parking Area Stabilization (BMP C107)
- Temporary and Permanent Seeding (BMP C120)
- Mulching (BMP C121)
- Dust Control (BMP C140)
- Certified Erosion and Sediment Control Lead (BMP C160)
- Scheduling (BMP C162)
- Silt Fence (BMP C233)
- Straw Wattles (BMP C235)

Minimization measures include:

- Minimizing the area of vegetation disturbance
- Utilizing areas of previous disturbance to the maximum extent practicable
- Avoid work in wetlands and wetland buffers

## 5.2 Critical Aquifer Recharge Areas (SMP 16.55)

The project site lies within a wellhead protection zone (Figure 4). It is within the 10-year zone of a well located on the parcel and serving Camp Lacamas (Clark County GIS 2017).

The Troutdale Aquifer, designated by the US Environmental Protection Agency (EPA) as a sole source aquifer, underlies the project.

### 5.2.1. *Applicability/Uses and Activities Prohibited (SMP 16.55.040)*

Per SMP 16.55.040.A., the proposed project is an allowed activity in the CARA.

### 5.2.2. *Critical Area Report and Hydrogeologic Assessment (SMP 16.55.050)*

A critical area report is in Appendix D. A hydrological assessment is not required because: the project is below the threshold for new impervious surface (5% or 2,500 square feet, whichever is greater); will not divert, alter, or reduce the flow of surface or ground waters, or otherwise reduce the recharging of the aquifer; will not use hazardous substances; and will not construct or use an injection well.

### 5.2.3. *Performance Standards (SMP 16.55.060-080)*

The proposed STEP system is intended to serve the existing camp and it will not result in a change of use or an increase in the use of hazardous substances (SMP 16.55.060.A). The project will provide a net benefit to the wellhead protection zone and underlying aquifer by decommissioning (pumping dry and backfilling with clean sand per Clark County Public Health regulations, Clark County Code 24.17.210) the existing septic systems.

In accordance with SMP 16.55.060.B, no vehicular repair, residential use of pesticides and nutrients, spreading or injection of reclaimed water, or storage tanks are associated with this project. Septic tanks and piping are exempt from consideration as underground storage tanks per WAC 173-360-11(2) (i).



In accordance with SMP 16.55.060.C, the project would comply with the water source protection requirements and recommendations of the EPA, Washington State Department of Health, and the local health district.

The project would be designed and constructed in accordance with the City Design Standards Manual (SMP 16.55.060.D).

None of the specific uses addressed in SMP 16.55.070 are proposed as part of the project.

None of the prohibited uses identified in SMP 16.55.080 are proposed as part of the project.

### 5.3 Frequently Flooded Areas (SMP 16.57)

#### 5.3.1. *Applicability/Uses and Activities Prohibited (SMP 16.57.010-020)*

The project site, and almost all of the parcel is located within a Frequently Flooded Area, as defined by SMP 16.57.010.A. The project site is within the 100-year floodplain for Lacamas Creek, as mapped on the FIRM for Clark County (FEMA 2012).

The base flood elevation at the project site is identified by FEMA as 193 feet (FEMA 2012). The majority of the proposed project is mapped as outside of the designated floodway shown on the same map. Two of the proposed STEP tanks (by the caretaker's house and by the restroom) and associated pipes are within the mapped floodway. However, local topography (i.e. relatively flat at the STEP tank sites with a steep slope to the north towards the lower terrace) suggests that the precise location of the floodway boundary lies beyond both STEP tanks.

No critical facilities, wells, on-site sewage or waste disposal systems, or additional lots are proposed as part of the project (SMP 16.57.020.A-D). The purpose of the project is to decommission on-site septic systems and connect to the City's sewer system.

In accordance with SMP 16.57.020.E, the proposed project does not include new development or encroachment into the floodway. The project would connect existing structures to the City's sewer system and discontinue use of existing septic systems, two of which are within the mapped floodway.

#### 5.3.2. *Additional Report Requirements (SMP 16.57.030)*

The project site and special flood hazard areas and other flood areas within 300 feet are shown in Figure 3 (SMP 16.57.030.B.1-3).

Proposed development, clearing limits, floodplain, floodway, other critical areas, and shoreline areas are shown in Figures 1-5; no management zones or buildings are proposed (SMP 16.57.030.C.1.).

The proposed project does not include buildings, so a floodproofing certificate is not required per SMP 16.57.030.C.2.

No watercourse alteration is proposed as part of this project (SMP 16.57.030.C.3).

Potential impacts to wetlands, fish and wildlife habitat, and other critical areas are addressed throughout section 5 of this report, in accordance with SMP 16.57.030.D.

#### 5.3.3. *Performance Standards (SMP 16.57.050-080)*

The project would obtain all necessary permits (SMP 16.57.050.A.).

SMP 16.57.050.B is not applicable because floodway has been designated (FEMA 2012).

SMP 16.57.050.C is not applicable because base flood elevation data is available. The base flood elevation at the project site is 193 feet (FEMA 2012).

In compliance with SMP 16.57.050.D.1, the project would be constructed using materials and methods that are flood resistance and/or minimize flood damage.

In compliance with SMP 16.57.050.D.2, no buildings are proposed within the floodplain.

Utilities would be installed underground (SMP 16.57.050.D.3). The STEP sewer system is water-tight, and all electrical components are NEMA 4 (for wet and submerged conditions). All electrical "J" Boxes are NEMA 4 and are also water-tight. All wire will be fully enclosed in water-tight conduit that will be buried in the same trench for the discharge piping from the STEP tank. Only several feet of wiring will extend from the ground surface to the electrical service panel.

SMP 16.57.050.E-G do not apply because no buildings are proposed.

In accordance with SMP 16.57.050.H, fill and grading proposed as part of this project would not block side channels, inhibit channel migration, increase flood hazards to others, or be placed in the channel migration zone (James Carothers, P.E., City of Camas, pers. comm., December 15, 2017). There are no side channels present on or adjacent to the project site. The project is underground and would not inhibit channel migration. The pipes and STEP tanks will be located underground and will not interfere with the movement of floodwaters. The project will be approximately 160 feet from the OHWM of Lacamas Creek, at the nearest point, and will not be located in slopes or banks that could be susceptible to erosion during a flood.

The sewer pipe will be located underground, and will not result in any change in topography. Pipe fill will be limited to pipe zone bedding material installed at the bottom of the trench and around the pipe. Bedding material will consist of pipe zone gravel backfill sourced from a local quarry. Grading for pipe installation will be limited to that necessary for access, staging, and installation of the pipe, and to restore the area to pre-construction conditions.

No residential units are proposed (SMP 16.57.060.A).

No non-residential buildings are proposed (SMP 16.57.060.B).

The proposed STEP system will be designed to eliminate infiltration of floodwaters into the systems, and discharges from the systems into floodwaters (SMP 16.57.060.C). Unlike the existing septic systems, the new STEP system installations will collect and transport all sewage from Camp Lacamas to the City of Camas Wastewater Treatment Plant. The remaining septic tanks will be decommissioned (per Clark County Public Health regulations) by pumping them dry and backfilling with clean sand. All infiltration of sewage into the underlying soil of the Camp Lacamas Property will upon connection of the new system to the existing residences.

No land division is proposed (16.57.060.D).

No watercourse alteration is proposed as part of this project (SMP 16.57.060.E).

The project would comply with SMP 16.57.070 because no recreational vehicles would be on site for 180 or more consecutive days as part of the proposed project.

No variance request is being made (SMP 16.57.080).

## 5.4 Geological Hazard Areas (SMP 16.59)

### *5.4.1 Erosion Hazards*

No erosion hazards exist in the vicinity of the proposed project. SMP 16.59.020.A defines erosion hazard areas as those not mapped as landslide hazard areas, but having a slope equal to or greater than 40 percent. The steepest slope on the site is approximately 30 percent, based on the topographic survey for the project. This slope is located at the north edge of the site, between the wetland and the restroom. The rest of the site is generally flat to gently sloping. Steep slopes also exist on the parcel at the banks of the Lacamas Creek channel. However, these are 160 feet or more from the proposed project. Clark County GIS does not identify the parcel or immediate vicinity as having severe erosion hazard or landslide hazard areas (Clark County GIS 2017).

#### 5.4.2 Landslide Hazard Areas

No landslide hazards as defined in the SMP 16.59.020.B exist on-site or within 300 feet of the project (Clark County GIS 2017). There is no evidence of unstable or recent landslides, and no areas meeting the definition in SMP 16.59.020.B.2-7.

#### 5.4.3 Seismic Hazard Areas

The project does not lie within a Seismic Hazard Area. Per SMP 16.59.020.C, Seismic Hazard Area is defined as an area subject to severe risk of damage as a result of earthquake-induced soil liquefaction, ground shaking amplification, slope failure, settlement, or surface faulting. The project site is mapped as Site Class C on the National Earthquake Hazard Reduction Program (NEHRP) site class map of Clark County (Clark County GIS 2017). The project site is mapped as Very Low for risk of liquefaction (Clark County GIS 2017).

#### 5.4.4 Other Hazard Areas

No other hazards as defined in the SMP 16.59.020.D exist on-site.

### 5.5 Fish and Wildlife Habitat Conservation Areas (SMP 16.61)

Lacamas Creek, a perennial stream, forms the parcel boundary to the north, outside of the project site. The proposed project would be approximately 160 feet south of Lacamas Creek, at the nearest point. Lacamas Creek flows south and east, entering Lacamas Lake approximately 1 mile downstream of the parcel.

The project site, located on a terrace above Lacamas Creek, is developed with camp buildings, gravel access roads, and mowed fields.

Mowed fields near the camp entrance are characterized by non-native lawn grasses (e.g. annual bluegrass [*Poa annua*]) and weedy forbs (e.g. English plantain [*Plantago lanceolata*], common dandelion [*Taraxacum officinale*], rough cat's ear [*Hypochaeris radicata*], and white clover [*Trifolium repens*]).

Cabins and several other buildings at the east end of the camp are in the understory of a stand of mature Douglas fir trees (24 to 55 inches DBH) that provide approximately 80 percent canopy cover throughout most of this area. The understory is sparse and crisscrossed by footpaths. Where present, understory vegetation is dominated by non-native grasses and forbs (e.g. orchard grass, shiny geranium, and common dandelion), with occasional native forbs (e.g. fringe cup and Siberian spring beauty).

A stand of Oregon white oaks (*Quercus garryana*, 16 to 24 inches DBH), part of a larger woodland along the creek, is present north and south of the main camp area, and overlaps the project site slightly. In some places this stand has a grassy understory characterized by the same species found in the mowed field. Elsewhere, it has an understory of shrubs (e.g. common snowberry and Himalayan blackberry [*Rubus armeniacus*]). On the lower terrace along Lacamas Creek, oaks are intermixed with riparian trees and shrubs, including bigleaf maple (*Acer macropylum*), Oregon ash, Douglas fir, cascara (*Frangula purshiana*), cluster rose (*Rosa pisocarpa*), and red osier dogwood.

#### 5.5.1 Threatened, Endangered, or Sensitive (TES) Plants

No TES plant species or associated habitats are known to occur within the project site and none were observed during site visits.

An Endangered Species Act (ESA) list of species potentially affected by activities at the project site, obtained from the USFWS IPaC service (2017), included two federally-listed plant species: golden paintbrush (*Castilleja levisecta*, federally-listed Threatened, state-listed Endangered) and Bradshaw's lomatium (*Lomatium bradshawii*, federally- and state-listed Endangered).

The possible presence of TES plant species in the project site was evaluated through WDNR WNHP

spatial data (2017) and site visits. WNHP rare plant spatial data indicates the presence of six additional state-listed species in the project vicinity: Oregon coyote-thistle (*Eryngium petiolatum*, state-listed Threatened), Hall's aster (*Symphyotrichum hallii*, state-listed Threatened), dense sedge (*Carex densa*, state-listed Sensitive), small-flowered trillium (*Trillium parviflorum*, state-listed Sensitive), Nuttall's quillwort (*Isoetes nuttallii*, state-listed Sensitive), and California compassplant (*Wyethia angustifolia*, state-listed Sensitive). WNHP data show that although the site is part of the historic range of golden paintbrush (last known observation 1889), there are no current populations mapped in the area.

No evidence of any TES plant species was observed within the project site. Small-flowered trillium has been identified in the southwest corner of the parcel, outside of the project site. Site visits established that none of the necessary habitats for Bradshaw's lomatium, golden paintbrush, Oregon coyote-thistle, Hall's aster, dense sedge, Nuttall's quillwort, or California compassplant occur in the project site. Bradshaw's lomatium occurs in grasslands and wet prairies. Golden paintbrush inhabits flat grasslands, mounded prairies, and steep, grassy bluffs. Oregon coyote-thistle inhabits wetlands in prairies and open spaces. Hall's aster inhabits moist to dry prairies and open places. Dense sedge inhabits wet meadows and remnant prairies. Nuttall's quillwort occurs in seasonally wet ground, seeps, and vernal pools. California compass plant occurs in seasonally wet open ground and grassy openings. None of these habitats are present within the project site. The grassy areas in the project site are disturbed lawns composed of non-native species. The small wetland adjacent to the project site is enclosed on all sides by riparian forest and will not be disturbed by the project.

#### 5.5.2 TES Fish

No TES fish species, associated Critical Habitat, or Essential Fish Habitat occur in Lacamas Creek upstream of Lacamas Lake Dam, a total passage barrier approximately 4 miles downstream of the project site (WDFW 2017, NOAA 2016, USFWS 2017).

The project would provide a net benefit to water quality in Lacamas Creek by replacing on-site septic systems with city sewer service.

#### 5.5.3 TES Wildlife

No TES wildlife species or associated habitat occur in the vicinity of the project site.

An ESA list of species potentially affected by activities at the project site, obtained from the USFWS IPaC service (2017), indicates the potential presence of three TES wildlife species: Oregon spotted frog (*Rana pretiosa*, federally-listed Threatened, state-listed Endangered), streaked horned lark (*Eremophila alpestris strigata*, federally-listed Threatened, state-listed Endangered), and yellow-billed cuckoo (*Coccyzus americanus*, federally-listed Threatened, state-listed Species of Concern). The project site is not located in designated Critical Habitat for any species.

The possible presence of TES wildlife species in the project site was evaluated through site visits and review of WDFW PHS data (WDFW 2017). PHS does not show any record of these species in or near the project site, and none were observed during site visits.

Site visits also established that none of the necessary habitat for these species occurs at the project site or in abutting areas. Oregon spotted frog habitat is large complexes of meadow and wetland, with pools, a continuum of vegetation densities, and an absence of non-native predators (USFWS 2016). Streaked horned larks nest and winter in flat, open areas with sparse low-stature vegetation and substantial areas of bare ground. Western yellow-billed cuckoos require large (typically larger than 40 hectares and wider than 100 meters) patches of cottonwood and willow dominated riparian habitat for nesting (Wiles and Kalasz 2017). None of these habitats are present.

#### 5.5.4 State Priority Habitats and Species

Three priority habitat and species areas (WDFW 2017) are mapped in and abutting the project site: a Cave-rich Area, an Oak Woodland, and a Wood Duck Breeding Area (Figure 5).

The project site lies within the approximately 6 mile by 8.5 mile rectangle mapped across southeastern

Clark County as a Cave Rich Areas. However, no caves were observed in the vicinity.

The Oregon white oaks on the parcel are part of the Sifton/Lacamas Oaks mapped by WDFW (2017). The proposed project is mostly outside of the canopy of these trees. At the northwest extent of the proposed project alignment, in the lawn of the caretaker's house, approximately 115 feet of piping would be installed in the vicinity of several Oregon white oaks (19 to 25 inches DBH). The excavation would be more than 30 feet from the trunks.

The mapped wood duck (*Aix sponsa*) breeding area is a corridor along both sides of Lacamas Creek, completely overlapping the project site. This species is typically sensitive to disturbance and would not be expected to utilize the developed camp area. The only area identified during site visits as potential wood duck breeding habitat is the oak stand on the lower terrace next to the creek.

Coastal cutthroat trout (*Oncorhynchus clarki*) and Rainbow Trout, WDFW Priority Species, are mapped in Lacamas Creek, adjacent to the project site (WDFW 2017). The project would provide a net benefit to water quality in Lacamas Creek by replacing on-site septic systems with city sewer service.

#### 5.5.5 *Habitats of Local Importance*

The Oregon white oaks described in section 5.5.4 meet the criteria for designation as a Habitat of Local Importance by the City of Camas (SMP 16.61.010.A.3.a).

No other Habitats of Local Importance are mapped at or immediately abutting the project site and none were observed during site visits.

#### 5.5.6 *Analysis of Performance Standards*

The proposed project complies with SMP 16.61.030.A.1 by avoiding disturbance of the potential wood duck breeding area located along the creek and maintaining the level of habitat function and values present in the oak woodland identified in section 5.5.4-5, and by minimizing habitat disruption and alteration to the extent needed to complete the project.

Disturbance in the oak woodland would be limited to temporary disturbance of understory and any trimming necessary to avoid removal of trees. Work would occur at the outer edge of the stand, next to a residence, where the understory is mowed field. The project would not remove trees and work within the dripline of the trees would be avoided wherever possible and minimized elsewhere. Trimming would be avoided if possible. If necessary to avoid removal, trimming would be in compliance with the National Arborist Association pruning standards and meet the criteria of SMP 5.8.5-7.

In accordance with SMP 16.61.030.A.2, no net loss of function and values would occur in the oak stand or wood duck breeding area and no compensatory mitigation is required.

No work is proposed in the specific habitats addressed in SMP 16.61.040. No work is proposed in the small-flowered trillium habitat in the southwest corner of the parcel (SMP 16.61.040.A). No work is proposed in Lacamas Creek (SMP 16.61.040.B) and impacts to the floodplain will be temporary. Likewise, no work is proposed in Wetland K-1 and impacts to the wetland buffer will be temporary (SMP 16.61.040.C). The project will provide a benefit to water quality in the creek and wetland by decommissioning an existing on-site septic system.

The stream buffer width designated for Type S streams is 150 feet from the OHWM (SMP 16.61.040.D). The project would be a minimum of 160 feet from the OHWM of Lacamas Creek.

Erosion control and re-vegetation measures would further protect adjacent habitats from impacts during construction.

## 6. CITY OF CAMAS SHORELINE MASTER PROGRAM

### 6.1 Conditional Use Permit

Table 6-1 of the SMP identifies underground utilities parallel to the shoreline as a Conditional Use with a 100 foot right-of-way setback in Urban Conservancy shorelines and underground utilities perpendicular to the shoreline as a Conditional Use with no setback. The project must demonstrate consistency with both City of Camas conditional use criteria, contained in the SMP, and State of Washington conditional use criteria, contained in WAC 173-27-160.

#### 6.1.1 *Camas Shoreline Conditional Use Criteria (SMP Appendix B section X)*

Conditional use approval is contingent on the applicant demonstrating consistency with four criteria (SMP Appendix B, X.A.1-4).

The proposed project is consistent with X.A.1 because it would avoid permanent adverse effects to the environment or other shoreline uses and achieve a net benefit to water quality. The project has been located and designed to avoid wetlands, use existing disturbed areas (driveways) to the extent possible, and avoid removal of woody vegetation, including the many large trees on the project site. The STEP system will be installed underground, using minimally invasive methods, and all disturbed areas will be returned to their original contours. Vegetated areas (grass), will be reseeded and the use of BMPs during construction will minimize temporary impacts. Decommissioning four existing septic systems and leach fields will provide a net benefit by protecting water quality and water resources in the vicinity, including wetlands, Lacamas Creek, and the Troutdale aquifer.

The proposed project is an underground system on private property and as such will have no impact on public use of public shorelines, and is therefore consistent with X.A.2.

The proposed STEP system is consistent with X.A.3. The proposed system would be located underground on private property and thus would not interfere with surrounding authorized uses. It would provide a net benefit to the resources and ecology of the shoreline, including critical areas, by decommissioning on-site septic systems and is thus compatible with the SMP. Connecting existing structures within the city limits to the City's septic system is consistent with the comprehensive plan.

Consistent with X.A.4, the proposed use is consistent with the general intent of the Program and the Act. Both the Program and the Act emphasize protection of shoreline ecological functions and public access to the shoreline. This project has been designed to avoid ecological impacts and provide a net benefit through the disconnection of on-site septic systems. Further, the project will not interfere with other shoreline uses, including public access.

For conditional uses, reviewers must also consider the cumulative impact of additional requests for like actions in the vicinity of the proposed project (X.B). The applicant is not aware of, nor does it anticipate, additional requests for STEP sewer systems at this location or in the vicinity of the proposed project. The proposed STEP system should address Camp Lacamas needs for the indefinite future and the land use of the surrounding land is largely recreational open space.

Consistent with X.C, the proposed project does not seek conditional use authorization for a prohibited use. The proposed project does not include any unclassified uses. Underground utilities within Urban Conservancy shorelines are designated as a Conditional Use. Underground utilities parallel to the shoreline have a 100 foot setback from the ordinary high water mark (OHWM). All proposed utilities are outside of this setback.

#### 6.1.2 *State Conditional Use Review Criteria (WAC 173-27-160)*

Conditional use approval is contingent on the applicant demonstrating consistency with five criteria (WAC 173-27-160 (1) (a-e)).

In accordance with WAC 173-27-160(1)(a), the proposed STEP system is consistent with the policies of RCW 90.58.020 and the SMP. Use preferences identified in RCW 90.58.020 include the protection of

statewide and long-term interests over local and short term interests, preservation of natural character, protection of resources and ecology, increased public access to publicly owned shorelines, and increased public recreational opportunities. The SMP emphasizes protection of shoreline ecological functions and public access to the shoreline. The proposed project would protect water quality and ecology of the shoreline by decommissioning on-site septic systems. This provides a benefit to public and long-term interests. The project is also designed to avoid impacts to the resources, ecology, and natural character of the shoreline on-site. Further, the project would not create a conflict with the other use preferences, as it would be located underground and designed to serve an existing use.

Consistent with WAC 173-27-160(1)(b), the proposed use would not interfere with normal public use of public shorelines. The project would be located underground, primarily on private property.

Consistent with WAC 173-27-160(1)(c), the proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under the comprehensive plan and shoreline master plan. The STEP system would be located underground, primarily on private property, and serve an existing use.

Consistent with WAC 173-27-160(1)(d), the proposed use would not cause significant adverse effects to the shoreline environment in which it would be located. The project would avoid significant adverse effects on the environment through a design that avoids wetlands and minimizes impacts to other critical habitat areas on the site (see sections 5.1 and 5.5 for a full discussion), minimizes vegetation impacts by retaining significant trees and avoiding permanent impacts (see section 2.3.3), and protects water quality through decommissioning of on-site septic systems (see section 1.1).

Consistent with WAC 173-27-160(1)(e), the public interest would suffer no substantial detrimental effect from the proposed project. The project would have a positive effect on the public interest by protecting water quality.

WAC 173-27-160(2) states that, in granting conditional use permits, reviewers must also consider the cumulative impact of additional requests for like actions in the area. The applicant is not aware of, nor does it anticipate, additional requests for STEP sewer systems at this location or in the vicinity of the proposed project. The proposed STEP system should address Camp Lacamas needs for the indefinite future and the land use of the surrounding land is largely recreational open space. As long as such requests are limited to the expansion necessary to support the approved or existing use and are designed to avoid ecological impacts including water quality impacts, no significant adverse cumulative impacts would be expected from approval of such requests. Decommissioning of on-site septic systems within the shoreline, especially with the floodplain and adjacent to wetlands, would cumulatively provide an ecological benefit to the shoreline through improved water quality.

The proposed project does not include any unclassified uses (WAC 173-27-160(3)) and, consistent with WAC 173-27-160(4), the proposed project does not seek conditional use authorization for a prohibited use. Underground utilities within Urban Conservancy shorelines are designated as a Conditional Use. Underground utilities parallel to the shoreline have a 100 foot setback from the OHWM. All proposed utilities are outside of this setback.

## **6.2 General Shoreline Use and Development Regulations (SMP 5)**

SMP Chapter 5, *General Shoreline Use and Development Regulations*, provides general regulations to which all use and development activities are subject. These apply to the proposed project as follows.

### ***6.2.1 General Shoreline Use and Development Regulations (SMP 5.1)***

Though not a water dependent use, the proposed project is consistent with SMP 5.1.1 because it does not interfere with any water dependent uses. The STEP system will be located underground and serve the existing use.

In accordance with SMP 5.1.2, the proposed project would not cause impacts that require remedial action or loss of shoreline function on other properties. The project would be located underground and mostly on

private property. The project will avoid impacts during construction through implementation of appropriate BMPs to control sediment and discharge. Proposed measures would be outlined in the completed temporary erosion and sediment control (TESC) plan.

BMPs that would be employed throughout the project to minimize impacts include the following:

- Preserving Natural Vegetation (BMP C101)
- Construction Road/Parking Area Stabilization (BMP C107)
- Temporary and Permanent Seeding (BMP C120)
- Mulching (BMP C121)
- Dust Control (BMP C140)
- Certified Erosion and Sediment Control Lead (BMP C160)
- Scheduling (BMP C162)
- Silt Fence (BMP C233)
- Straw Wattles (BMP C235)

Minimization measures include:

- Minimizing the area of vegetation disturbance
- Utilizing areas of previous disturbance to the maximum extent practicable
- Avoid work in wetlands and wetland buffers

In accordance with SMP 5.1.3, no shoreline stabilization would be necessary as a result of the project, at the time of development or in the future.

In accordance with SMP 5.1.4, no land would be cleared, graded, filled, excavated, or otherwise altered prior to issuance of necessary permits and approvals.

No single family residential development is proposed as part of the project (SMP 5.1.5).

In accordance with SMP 5.1.6, the project would fully comply with CMC title 17 and 18.

The project is not located on navigable waters or their beds (SMP 5.1.7).

In accordance with SMP 5.1.8, hazardous materials would be disposed of and other steps taken to protect the ecological integrity of the shoreline area in accordance with applicable policies and regulations.

No in-water work is proposed as part of this project (SMP 5.1.9).

In accordance with SMP 5.1.10, all reasonable efforts have been taken in project design, and would be made during construction, to avoid, minimize, and mitigate impacts to critical area and shoreline functions; no net loss of function would result from the project. See sections 2.3, 5, and 6.2.8 for a full discussion.

No in-stream structures are proposed (SMP 5.1.11).

The project is not requesting relief from use and development regulations (SMP 5.1.12).

## *6.2.2 Archaeological, Cultural and Historic Resources (SMP 5.2)*

AINW reviewed records held by the Washington Department of Archaeology and Historic Preservation (DAHHP), AINW's library, the Clark County GIS, and other sources. AINW archaeologists conducted a pedestrian survey and shovel testing of the project area. The archaeological survey report will be



submitted to DAHP and Tribes. The project has been redesigned to avoid and minimize impacts to archaeological resources. Where impacts cannot be avoided, controlled archaeological excavations and archaeological monitoring under a DAHP Archaeological Site Alteration and Excavation Permit may be needed.

If an item of possible archaeological interest is discovered on site, work will immediately cease and notification of the find will be sent to the appropriate parties.

### *6.2.3 Critical Areas Protection (SMP 5.3)*

Compliance with Critical Areas Regulations is discussed in section 5.

The project does not include any non-conforming uses, stream buffers along the Columbia River, Washougal River, or Lacamas Lake.

### *6.2.4 Flood Prevention and Flood Damage Minimization (SMP 5.4)*

In accordance with SMP 5.4.1, the proposed development would not significantly or cumulatively increase flood hazard and is consistent with an adopted comprehensive flood hazard management plan. The STEP system would be located underground, with the exception of the STEP tank caps that will extend 1 to 2 inches above the ground surface, and a small electrical service panel that serves to monitor system operations needs to be located above for access, resulting in only several feet of wiring aboveground.

In accordance with SMP 5.4.2, no structural flood hazard reduction measures within the floodway (FEMA 2012) or channel migration zone are reasonably foreseeable to become necessary as a result of this project. The pipes and STEP tanks will be located underground and will not interfere with the movement of floodwaters. The project will be approximately 160 feet from the OHWM of Lacamas Creek, at the nearest point, and will not be located in slopes or banks that could be susceptible to erosion during a flood.

No new structural flood hazard reduction measures are proposed (SMP 5.4.3).

The sources identified in SMP 5.4.4 are used in this application to identify areas of special flood hazard.

No in-stream structures are proposed (SMP 5.4.5).

In accordance with SMP 5.4.6, no fills are proposed. Pipes and STEP tanks will be installed underground and the site will be returned to the existing grade.

No dikes or levees are proposed (SMP 5.4.7).

No removal of gravel for flood management purposes is proposed (SMP 5.4.8).

No removal of beaver dams is proposed (SMP 5.4.9).

### *6.2.5 Public Access (SMP 5.5)*

Consistent with SMP 5.5, the proposed project would not interfere with public access to the shoreline. The parcel is bordered to the south by the Lacamas Heritage Trail, which provides public access to the shorelines of Lacamas Creek and Lacamas Lake.

In accordance with SMP 5.5.2.c, additional public access is not incorporated into the project because the estimated cost of providing it would be disproportionate with the proposed project, which is limited to connecting existing camp buildings to the public sewage system.

No public access is proposed (SMP 5.5.3-10).

### *6.2.6 Restoration (SMP 5.6)*

No restoration is proposed as part of this project (SMP 5.6.1-4).

### *6.2.7 Site Planning and Development (SMP 5.7)*

In accordance with SMP 5.7.1.1, land disturbing activities such as grading and cut/fill would be conducted in such a way as to minimize impacts to soils and native vegetation. Clearing of vegetation would be kept to the minimum necessary to develop the proposed project and all areas of temporary disturbance would be revegetated. Construction would occur during the dry seasons and BMPs would be implemented in order to control erosion and runoff during construction (see section 5.1).

No new impervious surface would be created as part of the proposed STEP system, in accordance with SMP 5.7.1.2.

The proposed project would be located within existing transportation corridors wherever possible, consistent with SMP 5.7.1.3. The pipes would be installed in, or adjacent to, existing gravel driveways and access roads/paths in the camp where possible.

No vehicle or pedestrian circulation is proposed as part of this project, in accordance with SMP 5.7.1.4. The STEP system would be underground and would not create any new barriers to wildlife movement.

In accordance with SMP 5.7.1.5, the proposed project does not include any parking, storage, or other non-water dependent accessory structures.

There are no dissimilar uses or scenic areas abutting the site that would require screening (SMP 5.7.1.6). The proposed STEP system would be located underground within the existing conference center.

No walkways or similar crossings are proposed as part of this utility project (SMP 5.7.1.7).

No fences, walls, hedges, or similar features are proposed as part of this utility project. The project would not create new barriers to wildlife movement (SMP 5.7.1.8).

No exterior lighting is proposed as part of this project (SMP 5.7.1.9).

In accordance with SMP 5.7.1.10, utilities, including pipes, STEP tanks, and electrical would be located within roadway, driveways, and right-of-way wherever feasible. The pipes would be installed in, or adjacent to, existing driveways and access roads where possible. Where this is not possible, footpaths and disturbed open areas will be used in order to minimize vegetation disturbance.

The project is not located near a legally established aquaculture enterprise, as described in SMP 5.7.1.11.

In accordance with SMP 5.7.2.1, clearing and grading shall be scheduled to minimize adverse impacts, including, but not limited to, damage to water quality and aquatic life. Construction activities would take place during late spring and summer in order to avoid the rainy season. No in-water work is proposed.

In accordance with SMP 5.7.2.2, clearing and grading for the proposed project would not result in substantial changes to surface water drainage patterns off the project site and onto adjacent properties. After installation of the STEP system, disturbed areas would be revegetated and returned to existing grade so drainage patterns would not be altered.

In accordance with SMP 5.7.2.3, the project would control erosion during construction by following an approved TESC Plan meeting City standards. Prior to construction, the work limits would be demarcated with orange construction fence, or similar, and areas of sensitive native vegetation, including the wetland, wetland buffer, and oaks, would be preserved. Areas of temporary disturbance would be revegetated with native vegetation.

In accordance with SMP 5.7.2.4, any grading and grubbing areas that would remain exposed for an extended time would be planted with a native grass cover crop until construction activities are complete.

In accordance with SMP 5.7.2.5, no clearing, filling, or excavation is proposed in locations where shoreline stabilization would be necessary.

No fills are proposed as part of this project (SMP 5.7.2.6).

In accordance with SMP 5.7.2.7, any substrate transported to the site for fill would be screened and

documented as uncontaminated.

No fills are proposed (SMP 5.7.2.8).

No fills are proposed (SMP 5.7.2.9). The pipes and STEP tanks will be located underground and will not interfere with the movement of floodwaters. The project will be approximately 160 feet from the OHWM of Lacamas Creek, at the nearest point, and will not be located in slopes or banks that could be susceptible to stream erosion during a flood.

No fill is proposed waterward of the OHWM (SMP 5.7.2.10).

No fills for beach nourishment or enhancement, or fills along the Columbian River are proposed (SMP 5.7.2.11).

No excavation below the OHWM is proposed (SMP 5.7.2.12).

In accordance with SMP 5.7.2.13, upon completion of construction, remaining cleared areas would be replanted with native species (grass mix) approved by the City and fully re-established within 3 years.

No conversion of land, as described in SMP 5.7.2.14, would occur at the project site.

No structures are proposed as part of this project (SMP 5.7.3.1-4).

#### *6.2.8 Vegetation Conservation (SMP 5.8)*

In accordance with SMP 5.8.1, removal of native vegetation would be avoided to the extent possible. The STEP system would be installed in existing access roads and footpaths to the extent possible. Where it would cross vegetated areas, it would be located in open fields and lawns or the sparsely vegetated understory of Douglas fir trees, dominated by non-native grasses and forbs. The location of pipes and STEP tanks has been designed to avoid the need for tree removal. Areas of temporary disturbance will be revegetated with native vegetation (grass mix) when construction is complete.

In accordance with SMP 5.8.2, no permanent vegetation removal is proposed and no net loss of functions would occur. Only herbaceous vegetation, dominated by non-native species, will be temporarily disturbed, and these areas will be revegetated with native vegetation.

No control of invasive or non-native vegetation is proposed beyond the temporary clearing required for construction activities (SMP 5.8.3).

In accordance with SMP 5.8.4, areas of temporary disturbance to non-native vegetation would be revegetated with native vegetation (grass mix).

Pruning of trees would be avoided to the extent possible. If pruning is necessary to avoid removal of a tree, pruning would be conducted in compliance with the National Arborist Association pruning standards and the criteria in SMP 5.8.5. No more than 20 percent of the limbs of any single tree would be removed and no more than 20 percent of canopy in a stand of trees would be removed in a given five year period without a shoreline permit.

In accordance with SMP 5.8.6, no trees would be topped as part of this project.

No hazardous trees, or portions of trees are identified for evaluation at this time. If such trees are identified, removal would be limited to the hazardous portion, per SMP 5.8.7.

No natural features, including snags, stumps, logs, or uprooted trees would be disturbed (SMP 5.8.8).

No natural in-stream features would be disturbed (SMP 5.8.9).

No aquatic weed control is proposed (SMP 5.8.10).

#### *6.2.9 Visual Access (SMP 5.9)*

The proposed project would not alter visual access to the shoreline (SMP 5.9.1). Pipes and STEP tanks would be located underground, within the existing developed area of the camp.

### *6.2.10 Water Quality and Quantity (SMP 5.10)*

In accordance with SMP 5.10.1, the proposed project would protect the quality and quantity of surface and groundwater adjacent to the site. Replacing on-site septic systems with city sewer service will protect water quality.

In accordance with SMP 5.10.2, all development will comply with the applicable requirements of CMC Chapter 14.02 Stormwater Control. No new impervious surface will be created as part of this project.

In accordance with SMP 5.10.3, BMPs for erosion and sediment control would be implemented in compliance with CMC 14.06. See section 5.1 for a discussion of proposed measures to control erosion and sediment during construction.

In accordance with SMP 5.10.4, no harmful materials, including but not limited to oil, chemicals, tires, or hazardous materials, would be allowed to enter any body of water or wetland. The only waterbody or wetland adjacent to the proposed project is wetland K-1. See section 5.1 for a discussion of proposed measures to protect wetland K-1. Construction measures to prevent harmful materials from leaving the site with runoff are discussed in section 5.1. In addition, the contractor would be required to prepare and implement a Spill Prevention, Control, and Countermeasures (SPCC) Plan.

In accordance with SMP 5.10.5, no use of herbicides, fungicides, fertilizers, and pesticides is proposed. The shoreline designation in the vicinity of the project is not Aquatic (SMP 5.10.6). The shoreline is designated Urban Conservancy.

No substance not composed entirely of surface and stormwater would be conveyed to water resources (SMP 5.10.7).

No new septic systems are proposed (SMP 5.10.8).

### 6.3 Specific Shoreline Use Regulations

Table 6-1 of the SMP indicates that underground utilities within Urban Conservancy shorelines are a Conditional Use. Underground utilities parallel to the shoreline have a 100 foot setback from the OHWM. All proposed utilities are 160 feet or more from the OHWM of Lacamas Creek.

The specific use regulations contained in SMP 6.3.15, Utilities Uses, apply to the project as follows:

#### *6.3.1 Utilities Uses (SMP 6.3.15)*

The proposed STEP system cannot be located outside of the shoreline because of the need to connect to existing structures located within the shoreline. Pipes, STEP tanks, and practically all electrical wires will be located underground, in accordance with SMP 6.3.15.1. Only a small electrical panel that serves to monitor system operations needs to be located above for access, resulting in only several feet of wiring aboveground.

No overhead electrical transmission lines are proposed as part of this project (SMP 6.3.15.2).

In accordance with SMP 6.3.15.3, the STEP system is designed to minimize adverse environmental and aesthetic impacts and conflicts with other uses. Essentially all of the pipes, STEP tanks, and electrical wires will be located underground. No removal of trees or native woody vegetation will result from the project.

In accordance with SMP 6.3.15.4, the STEP system would be installed in existing access roads and other existing disturbed areas. Where pipes and STEP tanks must be located outside of existing roads in order to connect to structures, they would be located along the shortest feasible route, except where deviation is necessary to avoid tree removal.

In accordance with SMP 6.3.15.5, no utility production or processing facilities are proposed within the shoreline as part of this project.

In accordance with SMP 6.3.15.6, no stormwater control facilities within the shoreline (or otherwise) are

proposed as part of this project.

No new outfalls or modifications to existing outfalls are proposed as part of this project (SMP 6.3.15.7).

No injection wells are proposed as part of this project (SMP 6.3.15.8).

The proposed STEP system would be bored underneath the ditch along NE Goodwin Road, thereby avoiding any disturbance to habitat that may be present (SMP 6.3.15.9).

No underwater pipes are proposed (SMP 6.3.15.10).

No work is proposed on the banks of Lacamas Creek or any other waterbody (SMP 6.3.15.11).

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