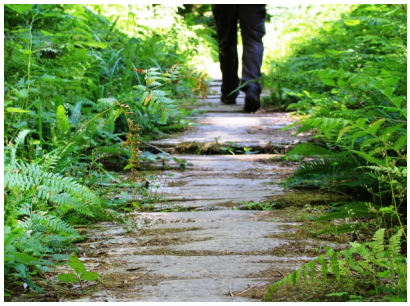
MITIGATION PLAN

August 26, 2025



Oliver's Terrace
Camas, Washington

Prepared for

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Prepared by
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SIGNATURE PAGE

The information in this report was compiled and prepared under the supervision and direction of the undersigned.

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INTRODUCTION

Ecological Land Servies, Inc. (ELS) has prepared this Mitigation Plan on behalf of the applicant, HSR Capital LLC, for the purpose of permitting an 11-lot residential subdivision. The project site includes the western portion of Clark County Tax Parcel 178221000 located near 1004 SE Everett Road, Camas, WA 98607 within the NW ¼ of Section 35, Township 2 North, Range 3 East of the Willamette Meridian (Figure 1). ELS biologists evaluated the property on April 11, 2025, and May 1, 2025, to determine the presence and extent of critical areas onsite. The results of the findings of critical areas are detailed in the *Critical Areas Report for Oliver's Terrace* (ELS 2025*)*.

The project proposes a wetland buffer reduction under *CMC 16.53.050-(C)(1)* to avoid and minimize impacts. Following the reduction, approximately 0.03 acres of temporary indirect impacts to Wetland A will result from the installation of a sewer main crossing its buffer.

To satisfy buffer reduction requirements and restore temporarily impacted areas, the applicant will:

- Protect an approximately 0.81-acre vegetated corridor with an average width of at least 100 feet connecting Offsite Wetland 2 to Wetland A through a conservation covenant.
- Enhance the southwest portion of Offsite Wetland 2 by removing invasive species and enhancing predominantly herbaceous areas with native tree and shrub plantings, improving conditions beyond pre-construction levels. This effort will extend through the newly created corridor and across the buffer of Wetland A.
- Restore temporarily disturbed areas by seeding with a native seed mix after construction activities are complete.
- Retain any trees removed during grading onsite and place them within the corridor as priority habitat features.

These measures will collectively meet the buffer reduction requirements, restore temporary impacts, improve habitat connectivity, and enhance ecological conditions in both wetlands and their buffers.

This mitigation plan was prepared according to Camas Municipal Code (CMC) *16.51-General Provisions for Critical Areas, 16.53- Wetlands, and 16.61- Fish and Wildlife Habitat Conservation Areas* (March 2017)*,* the Washington State Department of Ecology (Ecology) *Wetland Mitigation in Washington State Part 1: Agency and Policies and Guidance (version 2)* (2021), and the U.S. Army Corps of Engineers' (Corps) *Compensatory Mitigation for Losses of Aquatic Resources* (33 C.F.R. §332 (2008)).

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PROJECT DESCRIPTION

PROJECT LOCATION

The approximately 12.17-acre study area consists of a portion of Clark County Tax Parcel Number(s) 178221000, located near 1004 SE Everett Road in Camas, Washington within the NW ¼ of Section 35, Township 2 North, Range 3 East of the Willamette Meridian (Figure 1).

PROJECT PROPOSAL

The proposed project includes the development of an 11-lot residential subdivision with interior roads, sidewalks, utilities, and stormwater facilities on a terrace in the central west portion of the study area. The main construction elements of the project will include grading associated with lot development and interior roads, installing utilities, constructing proposed residential units, fencing, and building a stormwater pond. The extent of development will generally end at the top of the steep slope located in the central portion of the study area, with the exception of the stormwater pond located slightly downslope to the north. Additionally, a sewer main line is set to be installed which will cross through the buffer of Wetland A.

Before work begins, a construction entrance will be established. All construction and tree removal will strictly adhere to the designated construction area. Equipment used may include excavators, haul trucks, construction trucks, and hand tools. To minimize impacts, best management practices (BMPs) will be utilized before, during, and after construction. Utilized BMPs include installing silt fencing at the edge of grading during construction, locating equipment and staging areas in uplands outside of critical areas buffers, fueling equipment offsite to prevent spills, having a spill kit onsite to contain any unintended fuel spills, conducting work during normal daytime hours to prevent nighttime disturbance, applying native grass seed to disturbed areas, and making a water truck available to prevent wind erosion and dust blowing during construction.

The applicant proposes utilizing the buffer reduction allowed under *CMC 16.53.050-(C)(1*) to avoid and minimize indirect impacts to onsite and adjacent wetlands. The project fully avoids direct impacts to the onsite wetland and stream; however, due to the surrounding critical areas and topography restraints, the sewer line will extend through the buffer of Wetland A resulting in temporary impacts. Following implementation of avoidance and minimization measures, as detailed in the Avoidance and Minimization of Impacts section, the project proposes:

- 0.03 acres of temporary indirect impacts to Wetland A from the installation of a sewer main line.

All temporarily impacted areas will be restored to or enhanced beyond the pre-project conditions.

Existing Conditions

Site Description and Surrounding Land Uses

The study area encompasses approximately 12.17 acres within the western portion of an 18.45-acre parcel in the City of Camas, zoned for North Shore Lower Density Residential (LD-NS) and North Shore Mixed Use (MX-NS). The study area currently includes a single-family home, a barn housing cattle, some derelict farm equipment buried under brush, a driveway, a parking area, six to eight vehicles which appear to be both personal and project cars, and perimeter fencing. Access is provided via a private driveway from SE Everett Street. Adjacent properties include a residential subdivision under development to the west, established homes to the south and east, and undeveloped forested land to the north. The property lies approximately half a mile northeast of Lacamas Lake and approximately half a mile northwest of Camas High School.

The study area features varied topography, with higher elevations along SE Everett Street and rolling slopes descending northwest toward a central depression that supports Wetland A (Figure 2). In the west, the terrain rises abruptly by about 30 feet to a broad relatively flat terrace. A long driveway bisects the eastern portion from north to south. Wetland A is bordered by mixed forest canopy extending offsite to the north, while its interior supports shrub patches, emergent vegetation, and permanently ponded areas. Invasive Himalayan blackberry (*Rubus armeniacus*) is widespread and is especially dense along a Type Ns (non-fish-bearing seasonal) stream corridor originating from the southwest edge of Wetland A. The slope west of the wetland is forested with a moss-dominated ground cover and sparse understory, transitioning at the terrace top to more open vegetation with widely spaced trees, shrubs, and grassy clearings.

Existing Critical Areas and Buffers

A delineation of one onsite wetland following the appropriate technical manuals: *The Routine Determination Method according to the Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (U.S. Army Corps of Engineers 2010), was completed by ELS in April 2025. ELS biologists determined the OHWM boundary of one onsite stream following *RCW 90.58.030 and Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Ecology 2016). Priority habitat and species are determined and regulated by the Washington Department of Fish and Wildlife (WDFW). ELS identified two Oregon white oaks (Quercus garryana) and two snags onsite. The details and delineation for two offsite wetlands was gathered from *Lacamas Farms Lot 2 Critical Areas Report* (ELS 2023). The delineation of onsite wetlands and streams is described in detail in the *Critical Areas Report for Oliver's Terrace* (ELS 2025).

Wetland A

Wetland A is an approximately 2.35-acre forested, scrub-shrub, emergent, depressional wetland located in the southeast portion of the study area. Wetland A includes hydroperiods that are seasonally flooded and saturated only. There are portions of the wetland that remain

permanently flooded but do not meet the threshold to be considered a hydroperiod. In the southwest corner, a Type Ns stream develops from a highly constricted outlet and continues to flow southwest, while the interior of the wetland is significantly lower than the outlet and water remains impounded throughout. Snags, and small and large woody debris were noted throughout. The wetland supports a diverse plant community with at least 19 different species observed. Interior areas contained ungrazed thick stemmed vegetation suitable for amphibians to use for laying eggs. Hydrology likely comes from precipitation, runoff from adjacent uplands, a shallow ground water table, and localized seeps. According to the *Washington State Wetland Rating System for Western Washington: 2014 Update Version 2.0* (Hruby & Yanke 2023; Rating System), Wetland A is a Category I wetland scoring, 8 points for water quality functions, 8 points for hydrological functions, and 8 points for habitat functions for a total of 24 points.

Offsite Wetland 1

According to a previous delineation (ELS 2023) Offsite Wetland 1 is part of a larger wetland unit that extends across several properties to the north and its total size is unknown. It is a forested, scrub-shrub, emergent depressional wetland. The wetland includes hydroperiods that are seasonally flooded, saturated only, and a permanently flowing stream in/adjacent to the wetland. Sources of hydrology likely include a shallow groundwater table, precipitation, runoff from adjacent uplands, and the adjacent stream. According to the Rating System, Offsite Wetland 1 is a Category III wetland scoring, 7 points for water quality functions, 5 points for hydrological functions, and 7 points for habitat functions for a total of 19 points.

Offsite Wetland 2

According to a previous delineation (ELS 2023) Offsite Wetland 2 is approximately 0.44 acres in size and is a scrub-shrub, depressional wetland located offsite north of the study area. The wetland includes hydroperiods that are seasonally flooded and saturated only. Sources of hydrology likely include a shallow groundwater table, precipitation, and runoff from adjacent uplands. According to the Rating System, Offsite Wetland 1 is a Category III wetland scoring, 5 points for water quality functions, 4 points for hydrological functions, and 7 points for habitat functions for a total of 16 points. Portions of the buffer are located within the study area and are predominantly forested with some gaps, and its shrub component is largely dominated by blackberries.

Stream A

One Type Ns stream (Stream A) was identified in the southwest portion of the study area. The stream originates from the southwest portion of Wetland A where drainage patterns in the wetland finally appear as a defined channel. The stream is not mapped by the Washington Department of Natural Resources (WDNR) and the stream type was determined based on observations in the field. Stream A flows from east to west where it continues offsite along the southern property boundary. The width between OHWM ranged from one to three feet, while it was generally less than 2 feet wide, and the wetted channel contained two to five inches of water on the May 1, 2025, site visit. The streambed consisted of clay and small cobbles. Dense

blackberry bordered the channel, and downed logs were observed both adjacent to and lying across the stream.

Wetland Buffers

Wetland A

Standard wetland buffers are based on wetland category and habitat score from the Rating System in conjunction with the intensity of land uses proposed on development sites. Category I wetlands with habitat scores of 8 and a high land use intensity receive buffers of 260 feet according to *CMC Table 16.53.040-2.* Due to topographical constraints, Wetland A's buffer is functionally isolated westward from the top of the slope per *CMC 16.53.040 (B)(4)(b)(i)* which states that:

> *b. Functionally Isolated Buffer Areas. Areas which are functionally separated from a wetland and do not protect the wetland from adverse impacts shall be treated as follows:*
>
> *i. Pre-existing roads, structures, or vertical separation shall be excluded from buffers otherwise required by this chapter;*

The buffer is effectively isolated by a steep slope, rising about 30 feet over a horizontal distance of 80 feet. This grade creates a strong vertical separation that limits connectivity between the buffer and surrounding areas.

Offsite Wetland 1 and 2

Offsite Wetlands 1 and 2 are Category III wetlands with habitat scores of 7. Due to a proposed high intensity land use the wetlands receive buffers of 150 feet according to *CMC Table 16.53.040-3*. Table 1 below summarizes the wetlands and the standard buffer widths.

Stream Buffers

Stream buffer widths are based upon the WDNR Water Typing System and further classification based upon fish presence (Fish bearing v. Non-fish Bearing) for streams existing in the City of Camas. The stream is not mapped on the WDNR Stream Type Map or local Clark County database. Due to the narrow width (most portions less than 2 feet wide), origination from a wetland, no connection to a mapped or observed stream, surrounding topography, absence of fish bearing streams in the vicinity, and landowner recollection of the stream being dry during portions of the year, it is assumed based on best available science the stream is a Type Ns. According to *16.61.040(D)* a Type Ns (non-fish bearing seasonal) stream receives a buffer of 25 feet. Table 2 below summarizes the stream and the standard buffer width.

Table 1. Summary of Wetlands

Wetland	Size Onsite (acre)	Hydrogeomorphic Classification[1]	Cowardin Class[2]	Habitat Score[1]	Category[1]	Buffer Width[3]
A	2.35	Depressional	Forested, Scrub-Shrub, Emergent,	8	I	260 ft.

Offsite 1	0.00	Depressional	Forested, Scrub-Shrub, Emergent	7	III	150 ft.
Offsite 2	0.00	Depressional	Scrub-Shrub	7	III	150 ft.

[1]Hruby 2014 [2]Cowardin et. al., 1979 [3]CMC Table 16.53.040

Table 2. Summary of Stream

Name	DNR Water Type[1]	Buffer Width (feet)[2]
Stream A	Type Ns (Seasonal, Non-fish-bearing)	25 ft.

[1]DNR 2024 [2]CMC 16.61.040(D)

Oregon White Oak

ELS biologists identified two Oregon white oak trees onsite. The diameter at breast height (DBH) of Oak 1 measures 12 inches and the DBH of Oak 2 measures 15 inches. Although the project does not currently propose any impacts to the Oregon white oaks located onsite, these trees have been mapped and documented in the figure set included with the submittal. The Oregon white oaks onsite do not meet the threshold for protection under *CMC 16.51.030.A.1.a* which states protection applies to:

a. ***Oregon White Oaks.***

i. Individual Oregon White Oak trees with a twenty-inch diameter at breast height (twenty inches dbh).

ii. Stands of Oregon white oak trees greater than one acre, when they are found to be valuable to fish and wildlife (i.e., may include trees with cavities, large diameter breast height (twelve inches dbh), are used by priority species, or have a large canopy.

iii. All Oregon white oak snags unless determined by an arborist to be a hazard.

Although the Oregon white oaks onsite do not meet these criteria, ELS biologists acknowledge that the oaks are considered a Priority Habitat by the Washington State Department of Fish and Wildlife.

Wetland Buffer Modification

This project proposes a reduction to the buffers of Wetland A and Offsite Wetland 2 from those required for high land use intensity to the moderate land use intensity identified in *CMC Table 16.53.040-3* and *16.53.040-4*, by meeting the required criteria (excerpted in italics below). Specifically, the buffer of Offsite Wetland 2 will be reduced from 150 feet to 110 feet, and the buffer of Wetland A will be reduced from 260 feet to 195 feet, with standard text below the excerpted italics detailing how each condition allowing the reduction is met by the proposed project in accordance with *CMC 16.53.050 (C)(1)(a):*

a. Lower Impact Land Uses. The buffer widths recommended for proposed land uses with high-intensity impacts to wetlands can be reduced to those recommended for moderate-intensity impacts if both of the following criteria are met:

i. A relatively undisturbed, vegetated corridor at least one hundred feet wide is protected between the wetland and any other priority habitats that are present as defined by the Washington State Department of Fish and Wildlife [8]; and

ii. Measures to minimize the impacts of the land use adjacent to the wetlands are applied, such as infiltration of stormwater, retention of as much native vegetation and soils as possible, direction of noise and light away from the wetland, and other measures that may be suggested by a qualified wetland professional.

A relatively undisturbed, vegetated corridor at least 100 feet wide will be established and protected between Wetland A and Offsite Wetland 2 (Figure 3). In total, the protected area will encompass 0.81 acres. Native vegetation will be retained to the greatest extent possible, except where necessary for residential lot and road development outside of critical areas. Additionally, all runoff from the proposed development will be directed to a stormwater facility where it will be treated and either infiltrate or outflow to the offsite wetland buffer during periods of heavy precipitation. Streetlights will be hooded and oriented downward and landscape lighting will be hooded or directed toward residential structures. The stormwater pond will be located adjacent to the reduced buffer, which will help reduce noise and disturbance from residential activities Back or side yards of future homes will be located adjacent to the reduced buffers, minimizing traffic noise and fencing will be placed along the side and rear of the lots to minimize pet and human disturbance to the wetland buffers.

The project proposes to further reduce the buffer of Offsite Wetland 2 from 110 to 83 feet as combined reductions are allowed under *CMC 16.53.050(C)(1)(c*) – which states:

c. Combined Reductions. Buffer width reductions allowed under subsections (C)(1)(a) and (C)(1)(b) of this section may be added provided that minimum buffer widths shall never be less than seventy-five percent of required buffer width for all Categories I and II, or less than fifty feet for Category III wetlands, and twenty-five feet for all Category IV wetlands.

Per this provision the moderate intensity land use buffer will be reduced by an additional 25 percent after meeting the criteria listed in *CMC 16.53.050-(C)(1)(b) –*

b. Restoration. Buffer widths may be reduced up to twenty-five percent if the buffer is restored or enhanced from a pre-project condition that is disturbed (e.g., dominated by invasive species), so that functions of the post-project wetland and buffer are equal or greater. To the extent possible, restoration should provide a vegetated corridor of a

minimum one hundred feet wide between the wetland and any other priority habitat areas as defined by the Washington State Department of Fish and Wildlife. The habitat corridor must be protected for the entire distance between the wetland and the priority habitat area by some type of permanent legal protection such as a covenant or easement. The restoration plan must meet requirements in subsection D of this section for a mitigation plan, and this section for a critical area report.

The project will enhance the onsite portion of the buffer of Offsite Wetland 2 from its pre-project condition through the removal of invasive species, as the area indicated in Figure 5 is currently dominated by Himalayan blackberries. These areas will then be replanted with native trees and shrubs. The stormwater pond and its outfall will be located adjacent to the reduced buffer, which has a low land use intensity and will provide hydrology to the buffer of Offsite Wetland 2. The project will also protect an approximately 146-foot-wide, 0.81-acre, vegetated corridor that will connect Offsite Wetland 2 and Wetland A. Signage will be installed and it will have permanent legal protection through a conservation covenant. Additionally, the restoration plan will meet the requirements of subsection D which includes avoiding, minimizing, and compensating for wetland impacts, as well as prioritizing onsite mitigation. There will be no impacts to Offsite Wetland 2 after buffer reductions are applied. Details regarding the enhancement measure and planting specifications to meet buffer reduction requirements are discussed in the Buffer Reduction Enhancement Section below and summarized in Table 6.

Avoidance and Minimization of Impacts

Avoidance of Impacts

The mitigation requirements of the City specify that all regulated development activities proposing impacts to wetlands shall examine whether the impacts can be avoided and/or minimized prior to proposing compensation for the impacts. The applicant used preferred mitigation sequencing that first avoids, then minimizes, and finally compensates for unavoidable impacts. The proposed plan utilizes buffer modification through reduction to avoid all direct and indirect impacts to critical areas. Specific design measures have been taken to avoid indirect impacts to the offsite wetland, including a revised storm pond design utilizing existing topography and situating it as far west and south as possible given topography to avoid critical areas. In order to avoid impacts to the oaks or their associated dripline, silt fencing will be placed around the oaks at the edge of the canopy.

Minimization of Impacts

The project has been carefully designed to minimize impacts to critical areas and their associated buffers. Site planning prioritized the retention of existing vegetation and trees throughout the majority of the study area. Temporary buffer impacts to Wetland A have been minimized by designing the sewer main pathway to utilize an existing farm road where there are no trees and

minimal shrub and herbaceous cover, resulting in minimal temporary ground disturbance. The disturbed area will be seeded with a native seed mix following installation.

The project incorporates several minimization measures to reduce the degree and magnitude of impacts to critical areas. These efforts aim to limit disturbances while ensuring compliance with applicable codes and utilizing BMPs as follows:

- Clearing limits will be vividly marked with orange construction fencing or similar fencing.
- Silt fencing, or similar erosion control measures, will be installed at the edge of grading prevent sediment runoff.
- Equipment and staging areas will be located in uplands.
- Equipment will be fueled offsite.
- Ground disturbance will be limited strictly to areas necessary for the construction of project elements.
- Grading will be scheduled during the dry season to minimize surface runoff.
- A water truck will be available to control wind erosion and dust during construction.
- Bare areas will be seeded with a native seed mix suited to the local water regime.

UNAVOIDABLE IMPACTS

After implementing avoidance and minimization measures, the proposed project is anticipated to result in 0.03 acres of temporary buffer impacts to Wetland A from the installation of a sewer main line. Impacts include temporary ground disturbance and construction noise during installation.. Table 3 below summarizes anticipated impacts.

Table 3. Impact Summary

Location	Impact	Proposed Impact Area
Wetland A buffer	Temporary - Ground Disturbance	0.03 acres

TEMPORARY IMPACT RESTORATION

To restore the 0.03 acres of temporary buffer impacts to Wetland A, the disturbed area will be reseeded with a native upland seed mix. The proposed restoration is summarized in Table 4 below, and the seed specifications are summarized in Table 5 below.

Table 4. Summary of Proposed Enhancement and Restoration

Identifier	Type/Impact	Impact Amount	Proposed Mitigation Measures
Wetland A Buffer	Temporary- ground and vegetation disturbance	0.03 acres	▪ Reseed disturbed area with a native seed mix.

Table 5. Temporary Impact Area Seed Mix Specifications

Sunmark Seed International – Native Upland Seed Mix			
Common Name	**Scientific Name**	**Percent of Seed Mixture**	**Maximum Amount of Seed Mixture Anticipated**
Elymus glaucus	*Blue Wildrye*	50	1.5 lbs (1 pound per 1,000 square feet recommended)
Festuca rubra rubra	*Native Red Fescue*	30	
Bromus carinatus	*California Brome*	10	
Agrostis exarata	*Spike Bentgrass*	10	

BUFFER REDUCTION ENHANCEMENT PLAN

To meet the requirements for buffer reductions, the applicant proposes creating a protected vegetated corridor with a width of 146 feet and a total area of 0.81 acres. Enhancement will consist of removing invasive species, including but not limited to non-native black berries, along the western edge of the corridor spanning from the southwest buffer of Offsite Wetland 2 to the buffer of Wetland A followed by planting native trees and shrubs. Invasive species will be removed from approximately 0.24 acres. The applicant proposes to plant trees with a spacing radius of 10 foot on-center and shrubs with a spacing radius of 6 foot on-center across the 0.24 -acre invasive species removal/wetland buffer enhancement area, resulting in the installation of 100 trees and 50 shrubs (Figure 5). Plant specifications are summarized in Table 6 below.

Table 6. Summary of Proposed Enhancement

Identifier	Size	Proposed Measures
Vegetated Corridor	0.81 acres 146 ft. Max Width	▪ Connect Offsite Wetland 2 buffer to Wetland A ▪ Protect 0.81 in perpetuity under a recorded conservation covenant ▪ Place signs and fencing around boundary
Offsite Wetland 2/ Wetland A Buffers	0.24 acres	▪ Remove blackberry from 0.24 acres and plant with native trees and shrubs ▪ Monitor and report annually for 5 years

SITE PREPARATION

Invasive species, including but not limited to, nonnative blackberries, will be removed/controlled during the growing season following permit approval in the protected vegetated corridor. Invasives will be sprayed with herbicide approved for use near wetlands or will be removed mechanically. Follow-up control will occur throughout the growing season as necessary to fully suppress invasive species prior to native plant installation. Native trees and shrubs will be installed between late October and March after invasive have been removed. When ground disturbing activities related to the sewer main installation in the buffer of Wetland A are complete all bare areas within the protected vegetated corridor will be reseeded with a native seed mix appropriate for the water regime.

Plant Specifications

The prescribed plantings will be installed during the late fall to early spring when the plants are dormant, and the soil moisture conditions are favorable for planting. Each planting will be flagged for monitoring purposes. Mulch may be placed in a 2-foot diameter circle around all plant species for moisture retention and to help suppress competing vegetation. Table 7 details the quantity of plants to be installed as well as the minimum spacing on-center to achieve the best survivorship for sub-canopy plantings. The enhancement area can be found on the Mitigation and Planting Plan (Figure 5).

Table 7. Buffer Enhancement Plant Specifications

Location	Common Name	Scientific Name	Planting Size	Amount	Spacing (on-center)[1]
Biodiversity and Riparian Mitigation Area	Douglas-fir	*Pseudotsuga menziesii*	One Gallon Potted	25	10’
	Red Alder	*Alnus rubra*		25	10’
	Nootka Rose	*Rosa nutkana*		50	6’
	Beaked Hazelnut	*Corylus cornuta*		50	6’
			Total	**Trees = 50 Shrubs = 100**	

Planting and Plant Material Specifications

Planting specifications for one gallon stock shrubs to be installed are as follows:

Planting Implementation

- Plant the specified shrubs in the fall (October-November) or early spring (Feb-March) at the intervals listed in the construction schedule. Space the plants somewhat irregularly and in groups to create heterogeneity in the density and appearance of the enhancement areas.
- Plant containerized stock using the guidance below.
- Irrigate all newly installed plants as site and weather conditions warrant.

Containerized Stock

- Containerized species will be purchased from a native plant nursery.
- Plants will be protected until installation by being refrigerated, covered with damp burlap, and placed in moist sand, peat, or other method of keeping the roots cool and moist.
- Plants will have well-developed roots and sturdy stems, with an appropriate root-to-shoot ratio.
- No damaged or desiccated roots or diseased plants will be accepted. Gallon potted stock will have well developed roots and sturdy stems, with an appropriate root-to-shoot ratio.

- One-gallon potted plants will be a minimum size of 18- to 36-inches tall.
- The planter will be responsible for inspecting the containerized stock prior to and during planting; unacceptable plant materials will not be planted.
- The environmental consultant will be responsible for inspecting potted plant stock prior to and during planting, culling unacceptable plant materials.

GOALS OBJECTIVES AND PERFORMANCE STANDARDS

The goal of this mitigation plan is to avoid and minimize impacts to the greatest extent possible and to restore temporarily impacted critical areas to pre-project conditions, additionally to ensure enhancement measures are being met. To accomplish this goal, the following objectives and performance standards have been established.

Objective A: *Create a protected vegetated corridor at least 100-feet wide connecting the impacted wetland to Wetland A and protect the mitigation area in perpetuity.*

Performance Standard 1a: Signage stating "Protected Critical Area. Please Retain in Natural State"

or similar approved wording, will be placed every 100 feet along the boundary of the mitigation area and remaining buffers.

Performance Standard 2a: Establish a deed restriction over the mitigation area and record with the Clark County auditor.

Objective B: *Restore 0.03 acres of temporarily impacted buffer of Wetland A seeding with the native seed mix specified in Table 5.*

Performance Standard 1b: Seed temporarily disturbed areas after construction elements are complete. This standard will be considered met when recorded on the as-built report.

Objective C: *Enhance Offsite Wetland 2 buffer through removal and control of invasive species and native tree and shrub plantings.*

Performance Standard 1c: Document plant species installation in the 0.24-acre planting area, and tree installation within the preservations area as specified, in an as-built report including planting area locations and photo documentation. The as-built assessment will be conducted within 30 days of plant installation.

Performance Standard 2c: Native trees and shrubs in the enhancement areas will achieve 90 percent survival in Year 1. If dead plants are replaced to meet this standard, this performance standard will be met.

Performance Standard 3c: In Years 2, 3, and 5 planted species will achieve at least 80 percent survival.

Performance Standard 4c: In all years, non-native invasive plant species including blackberries, will not exceed 20 percent aerial cover in the Invasive Species Removal Area.

Monitoring, Maintenance, and Contingency Measures

Monitoring

The goal of monitoring will be to determine if previously stated performance standards are being met. Monitoring and maintenance of the enhancement areas will occur for a 5-year period with annual monitoring and reporting occurring in Years 1, 2, 3, and 5. The applicant will conduct monitoring and maintenance unless otherwise assigned. Monitoring reports will be submitted to the City of Camas by November 1st of each monitoring year. Installed plantings will be counted to determine survival percentage and will be assessed for health during monitoring events. The preservation areas will be assessed for presence of invasive species including Himalayan black berry. At least five photo stations will be established to photo-document vegetation establishment over the monitoring period. Pictures will be taken from the same location and direction and will be provided in the monitoring report. Monitoring will occur annually during the growing season, preferably during the same two-week period to better compare data.

At minimum, the following items will be included in the report:

- Location map and as-built drawing, including any changes.
- Historic description of project, including dates of plant installation, current year of monitoring, and remedial actions taken (if any).
- Description of monitoring methods.
- Plant count and determination of percent survival for installed species.
- Assessment of invasive plant species and recommendations for management.
- Photographs from established photopoints.
- Summary of maintenance and contingency measures completed for the past year and proposed for the next year.

Maintenance

Maintenance will occur during the growing season and will include the following:

- Irrigating planting areas every other week or as needed in the dry season, taper watering in Years 2 and 3 as vegetation establishes.
- Remove competing herbaceous species within a 3-foot radius of planted species as needed.
- Weed-eat, spray, or mow non-native blackberries from within the planting areas as needed.
- Replace dead or failed saplings as described for the original installation to meet the minimum performance standards.

Contingency Plan

If the performance criteria are not met by Year 3, steps will be taken to correct the situation in a timely manner. The following steps may be implemented when area is identified as failing or potentially failing:

- Identify the cause(s) of the failure or potential failure.
- Implement corrective actions such as irrigating, fertilizing, and replanting.
- Document the activities and include this data in the monitoring reports.
- If routine corrective action will not correct the problem, immediately consult with the appropriate agencies.

LIMITATIONS

ELS bases this report's determinations on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our determinations. However, the information contained in this report should be considered preliminary and used at your own risk until it has been approved in writing by the appropriate regulatory agencies. ELS is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report.

REFERENCES

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FIGURES

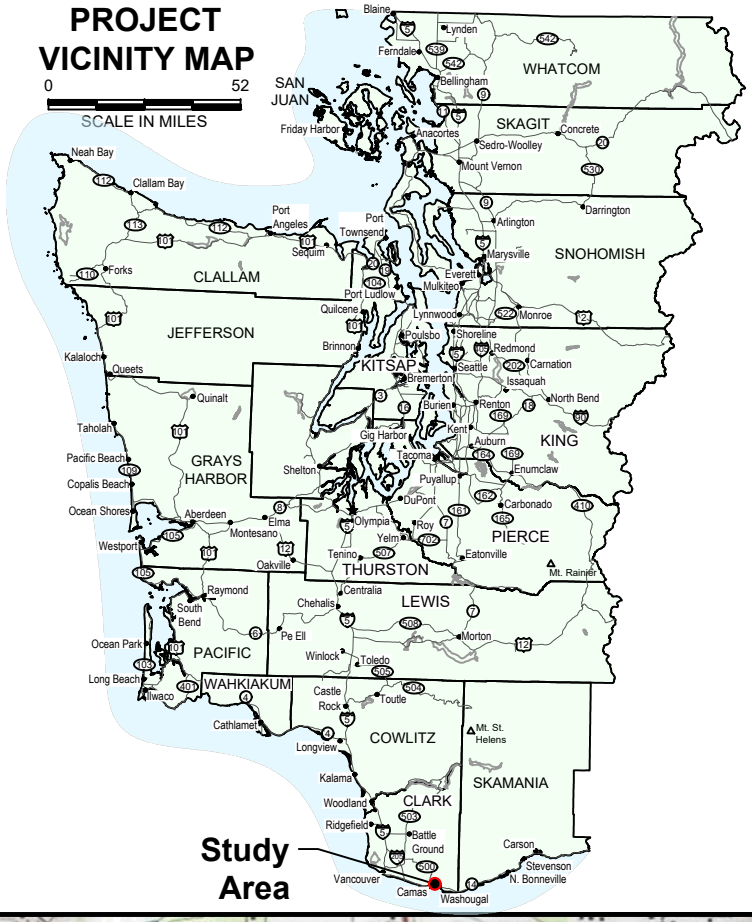
WASHINGTON

45.6510° Latitude
-122.4079° Longitude

LOCATION MAP

PROJECT VICINITY MAP

0 52
SCALE IN MILES



R 3 E

6					1
31				35	36

T 2 N

NOTE:
Quadrangle topographic map from USGS.

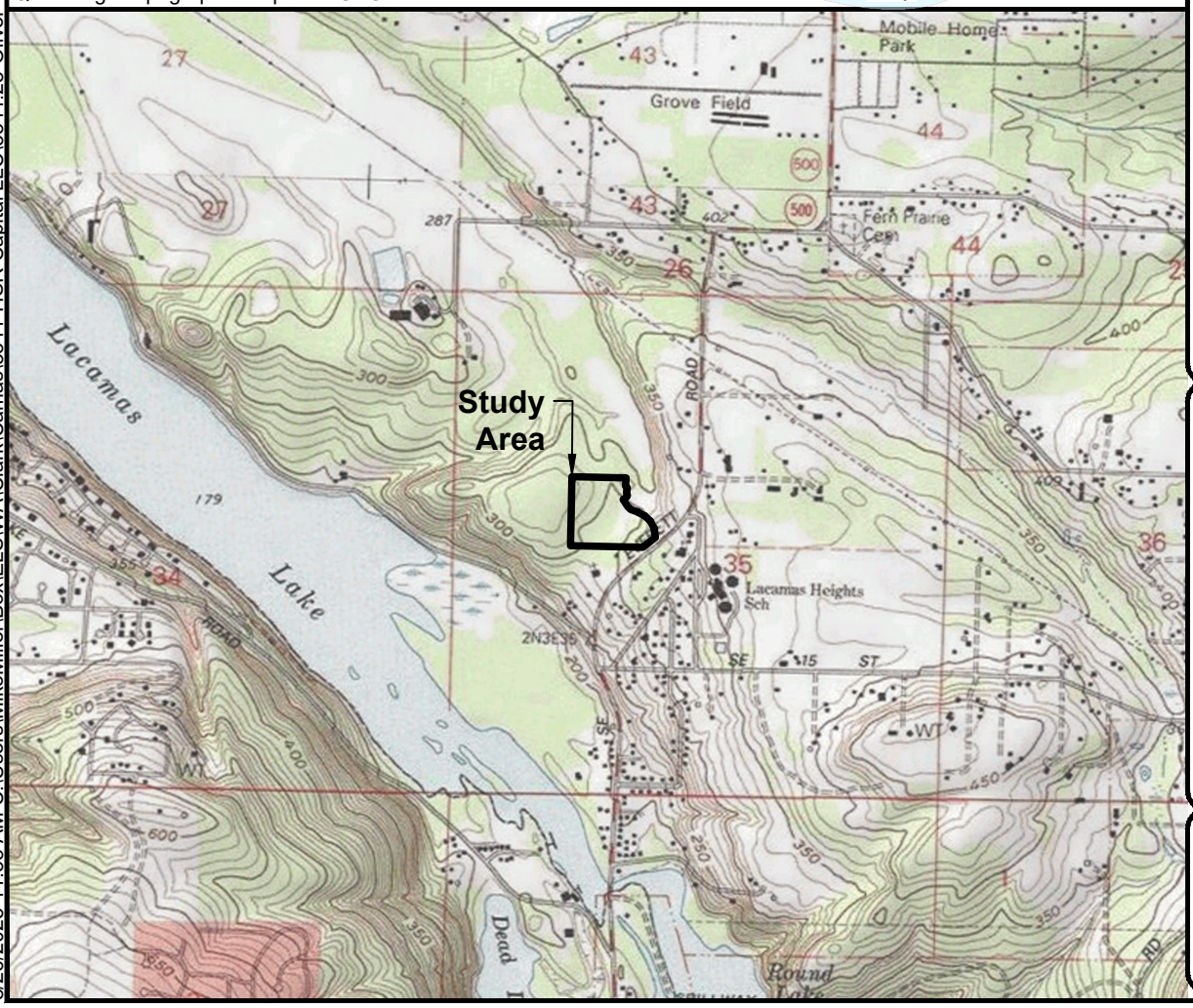


Figure 1
VICINITY MAP
Oliver's Terrace
HSR Capital LLC
City of Camas, Clark County, WA
Section 35, Township 2N, Range 3E, W.M.

DATE: 8/26/25
DWN: EF
REQ. BY: AF
PRJ. MGR: AF
CHK:
PROJECT NO: 3341.25

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com

Ecological Land Services

0 2000 4000
SCALE IN FEET

N
W E
S

8/26/2025 11:33 AM C:\Users\MikeMiller\Box\ELS\WA\Clark\Camas\3341-HSR Capital LLC\3341.25-Oliver Terrace in Camas\3341.25-Figures CAD Only\3341.25_CAR.dwg MikeMiller

LEGEND:

- Study Area (12.17 ac.)
- Parcel Boundary
- Wetland Boundary
- Possible Wetland Boundary
- Wetland Buffer
- Functionally Isolated Wetland Buffer
- Existing Building
- Existing Driveway
- Existing Farm Road
- Existing Contours
- Culvert
- Oak (2)
- Oak Dripline (0.06 ac.)
- Snag (2)
- Stream with Flow Direction
- 25' Stream Buffer
- TP-1 Test Plot Location
- 1 Photo Point Location

NOTE(S):

1. Aerial from Google Earth™ (2022).
2. Wetlands, photo points, test plots, stream, oaks, and culvert located using handheld GPS capable of submeter accuracy.
3. Parcel data from Clark County GIS. Offsite portion of the stream was determined from contours.
4. Contours generated from LiDAR provided by WDNR.
5. Wetland A's buffer is functionally istolated from the top of the slope per Camas Code 16.53.040 (B)(4)(b)(i).
6. Offsite boundaries per Lacamas Farms Lot 2 Critical Areas Report (ELS 2023).

Offsite Wetland 2
Category III
Depressional
Scrub-Shrub
Saturated Only
Seasonally Flooded

Existing House

Existing Farm Road

150'

260'

Parcel #: 178221000
(18.45 ac.)

Offsite Wetland 1
Category III
Depressional
Forested
Scrub-Shrub
Emergent
Saturated Only
Seasonally Flooded

Wetland A
Category I
Depressional
Forested
Scrub-Shrub
Emergent
Saturated Only
Seasonally Flooded
(2.47 ac.)

TP-1
TP-2
TP-3
TP-4
TP-5
TP-6

Oak Dripline
(0.06 ac.)

25'

Stream A
Type Ns

Existing Barn

N Adams St

N 47th Cir

SE Everett St

Figure 2
EXISTING CONDITIONS
Oliver's Terrace
HSR Capital LLC
City of Camas, Clark County, WA
Section 35, Township 2N, Range 3E, W.M.

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Ecological Land Services

SCALE IN FEET
0
120
240

N
W
E
S

LEGEND:

- Study Area (12.17 ac.)
- Parcel Boundary
- Wetland Boundary
- Possible Wetland Boundary
- Wetland Buffer
- Reduced Wetland Buffer
- Functionally Isolated Wetland Buffer
- Existing Building
- Existing Driveway
- Existing Contours
- Culvert
- Oak (2)
- Oak Dripline (0.06 ac.)
- Snag (2)
- Stream with Flow Direction
- 25' Stream Buffer
- Proposed Final Contours (1' Intervals)
- Proposed Lot
- Proposed Road
- Proposed Sewer Main
- Protected Vegetated Corridor (0.81 ac.)

NOTE(S):

1. Stream and culvert located using handheld GPS capable of submeter accuracy. Offsite portion of the stream was determined from contours.
2. Parcel data from Clark County GIS.
3. Wetland A's buffer is functionally istolated from the top of the slope per Camas Code 16.53.040 (B)(4)(b)(i).
4. Onsite critical areas were surveyed by SGA Engineering.
5. Proposed Conditions based on drawing file titled Preliminary Sanitary and Water Plan, (undated), prepared and provided by SGA Engineering.
6. Offsite boundaries per Lacamas Farms Lot 2 Critical Areas Report (ELS 2023).

Offsite Wetland 2
Category III
Depressional
Scrub-Shrub
Saturated Only
Seasonally Flooded

Existing House

83'

146'

195'

STORM TRACT

12 REMAINDER LOT

MX-NS ZONED LOT (WITH ADJUSTED ZONING LINE) FUTURE DEVELOPMENT

Offsite Wetland 1
Category III
Depressional
Forested
Scrub-Shrub
Emergent
Saturated Only
Seasonally Flooded

Wetland A
Category I
Depressional
Forested
Scrub-Shrub
Emergent
Saturated Only
Seasonally Flooded
(2.47 ac.)

PHASE I

PHASE II

OPEN SPACE TRACT

Oak Dripline
(0.06 ac.)

195'

25'

Stream A
Type Ns

Existing Barn

BARN TRACT

SE Everett St

N Adams St

N 47th Cir

Figure 3
PROPOSED CONDITIONS
Oliver's Terrace
HSR Capital LLC
City of Camas, Clark County, WA
Section 35, Township 2N, Range 3E, W.M.

DATE: 8/26/25
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Ecological Land Services

SCALE IN FEET
0
120
240

N
W
E
S

LEGEND:

- Study Area (12.17 ac.)
- Parcel Boundary
- Wetland Boundary
- Possible Wetland Boundary
- Wetland Buffer
- Reduced Wetland Buffer
- Functionally Isolated Wetland Buffer
- Existing Building
- Existing Driveway
- Existing Contours
- Culvert
- Oak (2)
- Oak Dripline (0.06 ac.)
- Snag (2)
- Stream with Flow Direction
- 25' Stream Buffer
- Proposed Lot
- Proposed Road
- Proposed Sewer Main
- Protected Vegetated Corridor (0.81 ac.)
- Temporary Impact Area (0.03 ac.)

NOTE(S):

1. Stream and culvert located using handheld GPS capable of submeter accuracy. Offsite portion of the stream was determined from contours.
2. Parcel data from Clark County GIS.
3. Wetland A's buffer is functionally istolated from the top of the slope per Camas Code 16.53.040 (B)(4)(b)(i).
4. Onsite critical areas were surveyed by SGA Engineering.
5. Proposed Conditions based on drawing file titled Preliminary Sanitary and Water Plan, (undated), prepared and provided by SGA Engineering.
6. Offsite boundaries per Lacamas Farms Lot 2 Critical Areas Report (ELS 2023).

Offsite Wetland 2
Category III
Depressional
Scrub-Shrub
Saturated Only
Seasonally Flooded

Existing House

83'

146'

195'

STORM TRACT

12 REMAINDER LOT

MX-NS ZONED LOT (WITH ADJUSTED ZONING LINE) FUTURE DEVELOPMENT

Offsite Wetland 1
Category III
Depressional
Forested
Scrub-Shrub
Emergent
Saturated Only
Seasonally Flooded

Wetland A
Category I
Depressional
Forested
Scrub-Shrub
Emergent
Saturated Only
Seasonally Flooded
(2.47 ac.)

PHASE I

PHASE II

OPEN SPACE TRACT

Oak Dripline
(0.06 ac.)

195'

25'

Existing Barn

BARN TRACT

SE Everett St

Stream A
Type Ns

N 47th Cir

N Adams St

Figure 4
IMPACT ANALYSIS
Oliver's Terrace
HSR Capital LLC
City of Camas, Clark County, WA
Section 35, Township 2N, Range 3E, W.M.

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Ecological Land Services

0 120 240
SCALE IN FEET

N W E S

LEGEND:

- Study Area (12.17 ac.)
- Parcel Boundary
- Wetland Boundary
- Possible Wetland Boundary
- Wetland Buffer
- Reduced Wetland Buffer
- Functionally Isolated Wetland Buffer
- Existing Building
- Existing Driveway
- Existing Contours
- Culvert
- Oak (2)
- Oak Dripline (0.06 ac.)
- Snag (2)
- Stream with Flow Direction
- 25' Stream Buffer
- Proposed Lot
- Proposed Road
- Proposed Sewer Main
- Protected Vegetated Corridor (0.81 ac.)
- Seeding Area (0.03 ac.)
- Invasive Species Removal Area/ Wetland Buffer Enhancement Area (0.24 ac.)

NOTE(S):

1. Stream and culvert located using handheld GPS capable of submeter accuracy. Offsite portion of the stream was determined from contours.
2. Parcel data from Clark County GIS.
3. Wetland A's buffer is functionally istolated from the top of the slope per Camas Code 16.53.040 (B)(4)(b)(i).
4. Onsite critical areas were surveyed by SGA Engineering.
5. Proposed Conditions based on drawing file titled Preliminary Sanitary and Water Plan, (undated), prepared and provided by SGA Engineering.
6. Offsite boundaries per Lacamas Farms Lot 2 Critical Areas Report (ELS 2023).

Planting Diagram
(Not to Scale)

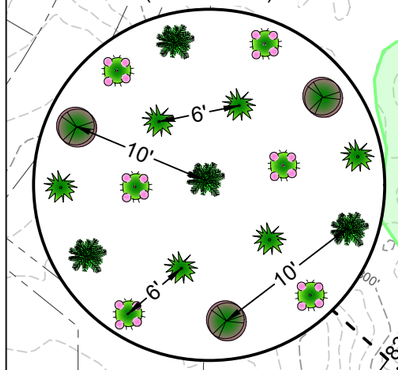

Table 1. Buffer Enhancement Plant Specifications

Location		Common Name	Scientific Name	Planting Size	Amount	Spacing (on-center)[1]
Offsite Wetland 2 Buffer/ Wetland A Buffer/ Vegetated Corridor		Douglas-fir	*Pseudotsuga menziesii*	One Gallon Potted	25	10'
		Red Alder	*Alnus rubra*		25	10'
		Nootka Rose	*Rosa nutkana*		50	6'
		Beaked Hazelnut	*Corylus cornuta*		50	6'
				Total	**Trees = 50 Shrubs = 100**	

Table 2. Temporary Impact Area Seed Mix Specifications

Sunmark Seed International – Native Upland Seed Mix			
Common Name	**Scientific Name**	**Percent of Seed Mixture**	**Maximum Amount of Seed Mixture Anticipated**
Elymus glaucus	*Blue Wildrye*	50	1.5 lbs (1 pound per 1,000 square feet recommended)
Festuca rubra rubra	*Native Red Fescue*	30	
Bromus carinatus	*California Brome*	10	
Agrostis exarata	*Spike Bentgrass*	10	

Figure 5
MITIGATION AND PLANTING AREA
Oliver's Terrace
HSR Capital LLC
City of Camas, Clark County, WA
Section 35, Township 2N, Range 3E, W.M.

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Ecological Land Services

Offsite Wetland 2
Category III
Depressional
Scrub-Shrub
Saturated Only
Seasonally Flooded

Offsite Wetland 1
Category III
Depressional
Forested
Scrub-Shrub
Emergent
Saturated Only
Seasonally Flooded

Wetland A
Category I
Depressional
Forested
Scrub-Shrub
Emergent
Saturated Only
Seasonally Flooded
(2.47 ac.)

Oak Dripline
(0.06 ac.)

Stream A
Type Ns

Existing House
Existing Barn
12 REMAINDER LOT
STORM TRACT
OPEN SPACE TRACT
BARN TRACT
PHASE I
PHASE II
MX-NS ZONED LOT (WITH ADJUSTED ZONING LINE) FUTURE DEVELOPMENT
N 47th Cir
SE Everett St
SE 47TH CIRCLE (PUBLIC ROAD)
183'
146'
195'
195'
25'

SCALE IN FEET
0
120
240

N
W
E
S