

OAK BANK USE PLAN

October 2, 2023



13th Street Gas StationCamas, WA

Prepared for

PAK USA Camas, LLC c/o Taz Khan 3993 NW Currawong Court Camas, WA 98607 (512) 779-4999

Prepared by **Ecological Land Services**

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SIGNATURE PAGE

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

Julianne Blake

Biologist III

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INTRODUCTION

Ecological Land Services, Inc. (ELS) was contracted by PAK USA Camas, LLC to prepare this Oak Bank Use Plan to address Oregon white oak (oak) impacts resulting from the construction of a fuel station, convenience store, and associated parking lot. The site is approximately 0.97 acres and consists of Clark County Tax Parcel 176148000 located at 20101 NE 13th Street within the NW ¼ of Section 29, Township 2 North, and Range 3 East of the Willamette Meridian in Camas, Washington (Figure 1). Field work was conducted on August 29, 2023. The project will remove one existing oak (*Quercus garryana*) and impact 0.08 acres (3,456 square feet) of oak canopy. Canopy impacts will be offset by purchasing 0.238 credits from Terrace Oak Bank (Bank). This Bank Use Plan was prepared according to the *Camas Municipal Code (CMC) Title 16 Environment* (2023) and Washington Department of Fish and Wildlife's (WDFW) *Management recommendations for Washington's priority habitats: Oregon white oak woodlands (1998)*.

RESPONSIBLE PARTIES

PROPERTY OWNER/APPLICANT

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MITIGATION BANK

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PROJECT ENGINEER

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BIOLOGICAL CONSULTANT

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PROJECT DESCRIPTION

The project area is approximately 0.97 acres and consists of Clark County Tax Parcel 176148000 located at 20101 NE 13th Street within the NW ¼ of Section 29, Township 2 North, and Range 3 East of the Willamette Meridian in Camas, Washington (Figure 1). The project consists of constructing a fuel station, convenience store, and associated parking lot. The parking lot will contain electric vehicle charging stations and vacuum pumps as well as pedestrian crossing areas (Figure 3). The existing oak will be removed as part of the project, removing 0.08 acres (3,546 square feet) of oak canopy. Canopy impacts will be mitigated by purchasing 0.238 credits from Terrace Oak Bank. Construction is anticipated to start upon receipt of all necessary permits.

Best management practices (BMPs) that will be completed prior to construction include designating staging and stockpile areas outside of critical areas and associated buffers, establishing a standard construction entrance, and installing silt fencing to prevent sedimentation. When site preparation is complete, construction will occur. A water truck will be available to prevent dust blowing during construction, if needed. Equipment used may include haul trucks, bulldozers, excavators, pavers, and hand tools. Upon completion of construction activities, disturbed areas that will not be paved will be seeded with a native grass seed mix.

EXISTING CONDITIONS

EXISTING AND SURROUNDING LAND USES

The 0.97-acre site consists of Clark County Tax Parcel 176148000 and is accessed by a paved driveway off NE 13th Street. The site is zoned as Business Park (BP) and currently contains a single-family mobile home, shed, carport, and paved driveway. The site is bordered to the north by NE 13th Street, to the east by NW Friberg-Strunk Street, to the south by undeveloped land and commercial development in progress, and to the west by undeveloped land and a single-family residence (Figure 2).

EXISTING CRITICAL AREAS

A site visit was completed by ELS in August 2023 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). During the field visit, no wetlands were identified onsite (ELS 2023).

The WDFW Priority Habitats and Species online mapping tool depicts oak woodlands within the vicinity of the observed oak along the southern site boundary. One oak measuring approximately 52 inches diameter at breast height (DBH) was mapped along the southern site boundary during site reconnaissance (Figure 2). The oak has several live and dead branches, cavities, and has canopy connectivity with other trees in the vicinity but is not connected with other oaks. The oak location was mapped using a GPS system capable of submeter accuracy in ideal conditions. According to $CMC\ 16.61.010(3)(a)$, individual Oregon white oak trees with a twenty-inch DBH are considered a priority habitat.

Table 1. Oak Summary

Total Canopy Area	DBH	Number of Trunks	Noteworthy Habitat Features	
0.08 acres 3,456 square feet	52 inches	1	 Canopy is interconnected with adjacent trees, but not other oaks Two large cavities 	

AVOIDANCE AND MINIMIZATION

The preferred mitigation sequencing of first avoidance, then minimization, and finally compensation for unavoidable impacts was taken into consideration during the design process of this project; however, due to the single oak tree being located in an area of the site needed for a required driveway, avoiding Oregon white oak impacts altogether is not feasible. The Oregon white oak proposed for removal is the only oak tree onsite.

UNAVOIDABLE OREGON WHITE OAK IMPACTS

Removal of the oak will result in the loss of 0.08 acres (3,456 square feet) of Oregon white oak priority habitat as measured by the oak canopy coverage (drip line). The following table summarizes proposed oak impacts.

Table 2. Oak Impact Summary

Identifier	DBH	Canopy Coverage	Total Impact
Oregon White Oak	F2 inches	0.08 acres	0.08 acres
(Single Mature Tree)	52 inches	3,456 square feet	3,456 square feet

IMPACTED PRIORITY HABITAT FUNCTIONS

ELS assessed the functions provided by the oak during a site visit on August 29, 2023. The functional assessment is based on Washington Department of Fish and Wildlife's (WDFW) Management Recommendations for Washington's Priority Habitats, Oregon White Oak Woodlands (Guidance) (Larsen and Morgan 1998).

HABITAT FUNCTIONS

Oak woodlands are considered "priority habitat and species" by WDFW and are protected locally by the City of Camas Municipal Code (CMC). According to CMC 16.61.010(3)(a), individual Oregon white oak trees with a twenty-inch DBH are considered a priority habitat.

In urban or urbanizing areas west of the Cascades, WDFW defines priority oak habitat as single oaks, or stands of pure oak, or oak/conifer associations, 1 acre or greater in size. WDFW may also consider individual Oregon white oak trees a priority habitat when found to be particularly valuable to wildlife (i.e., contains many cavities, has a large DBH, is used by priority species, or has a large canopy) (Larsen and Morgan 1998). The project site is within the City of Camas (City). WDFW recommendation is that in urban and urbanizing areas, single trees should be maintained

if they are deemed important to species highly associated with Oregon white oak. Oaks and their associated flora comprise distinct woodland ecosystems with various plant communities providing valuable habitat that contributes to wildlife diversity. Oak woodlands provide a mix of feeding, resting, and breeding habitat for many wildlife species (Larsen and Morgan 1998).

The oak proposed for removal has several live and dead branches, cavities, and has canopy connectivity with other trees in the vicinity but is not connected with other oaks. Due to the placement of the oak within the City boundaries and lack of habitat connectivity, larger animals or those not adapted to urban conditions are not likely to be present. Therefore, removing the oak would likely result in habitat loss and a food source only for birds and small mammals that are well adapted to urban conditions.

OREGON WHITE OAK MITIGATION SELECTION RATIONALE

The Oregon white oak proposed for removal is located in the service area for the Terrace Oak Bank (Bank). The oak tree is approximately 4 miles southeast of the Bank, in the Lacamas Creek Watershed which is in the southeastern portion of the service area (Figure 4). The proposed oak removal will be mitigated by purchasing credits from the Bank at ratios specified in the Terrace Oak Bank's Mitigation Banking Instrument (MBI).

Rationale for selecting this mitigation bank is as follows:

- The oak onsite does not provide habitat for other priority species that should be replaced onsite. Habitat functions will be impacted for species common to urban areas, which can be fully replaced at the Bank.
- The habitat functions lost from the proposed oak removal correspond directly with the habitat creation purpose, goals, and objectives at the Bank which identifies 13.93 acres of existing Oregon white oak woodland WDFW Priority Habitat that will be restored to pre-agricultural conditions through creation, enhancement, and preservation. Creation and enhancement will be accomplished through planting oak saplings and/or native understory plantings, removing of Douglas-fir, and establishing a conservation easement over the entire 13.93 acres.

The 2008 Compensatory Mitigation for Losses of Aquatic Resources, Final Rule (Corps) recommends purchasing mitigation bank credits for ecological considerations (lower risk of failure and lower temporal loss of resources and services) and to avoid the maintenance and contingency issues and outright failures that often accompany permittee-responsible mitigation sites. Use of the Terrace Oak Bank substantially lowers the risk of failure and temporal loss of resource functions and services over newly established, permittee-responsible mitigation sites and offsite mitigation is anticipated to be more meaningful and beneficial to the watershed's habitat functions.

FUNCTIONS PROVIDED AT OAK BANK

The general goal of the Bank is to restore the approximately 13.93 acres to a state similar to its pre-agricultural condition through creation, enhancement, and preservation of an existing Oregon white oak woodland. All functions related to oak habitat are expected to increase as a result of design implementation. The primary ecological goals of the Bank are as follows:

- Removal of all existing impervious surfaces, including buildings, large equipment, gravel and paved areas, and debris, followed by replanting oak saplings and native understory species.
- Removal of invasive species in creation, enhancement, and preservation areas, primarily English ivy (Hedera helix) and Himalayan blackberry (Rubus armeniacus).
- Removal of Douglas-fir (Pseudotsuga menziesii) overstory as recommended by WDFW to reduce competition and further degradation of the Oregon white oak woodland from shading.
- Replanting of both creation and enhancement areas with oak saplings and and native understory species to augment and expand existing Oregon white oak habitat.
- Preserve the Bank through a conservation easement.

WILDLIFE HABITAT

The proposed development site plan will provide diverse habitat for a variety of large and small mammals, songbirds, waterfowl, amphibians, and insects by improving the condition of the existing Oregon White Oak habitat through creation and enhancement that includes replanting of oaks and native understory, removing invasive species, non-native debris, and impervious surfaces, and eliminating Douglas-fir encroachment.

ANTICIPATED FUNCTIONAL LIFT

The creation, enhancement, and Douglas-fir stand release activities proposed in the Bank will provide a variety of benefits lifting overall habitat functions. Invasive species eradication and installing oak trees and native understory in open areas will increase the site's potential to provide habitat by providing improved and increased diversity of plant species, structure, and interspersion of habitat. Removing Douglas-fir competition will allow the existing oaks to increase branching and smaller oak trees to become better established. The changes will increase acorn production, provide additional food for wildlife, and support a greater diversity of wildlife species as will removing impervious surfaces and debris. All functions impacted by removing an oak tree at the project site will be fully mitigated at the Bank.

PROPOSED MITIGATION CREDITS

As stated in the MBI (October 28th, 2020), the local jurisdiction with regulatory authority will determine both how impacts are measured¹ and the mitigation ratios required. The mitigation

Oak Bank Use Plan PAK USA Camas, LLC

¹ i.e., square foot of canopy area/root zone, DBH, etc.

credits required for impacts to Oregon white oak will be determined by using the local jurisdiction's mitigation ratio (6:1) and multiplying this ratio by a "risk reduction factor" of 0.5. Impacts to high functioning Oregon White Oak Priority Habitat stands will be determined by the regulatory agencies on a case-by-case basis. Table 3 summarizes the impact type, mitigation ratio, and total credits proposed for compensation.

Table 3. Credits for Oak Impacts at Terrace Oak Bank

Impact	Impact	Mitigation	Risk Reduction	Mitigation	Proposed
Type	Amount	Ratio	Multiplier	Area Required	Credit Purchase
Canopy loss	0.08 acres (3,456 sq. ft.)	6:1	0.5	0.238 acres (10,368 sq. ft.)	0.238 credits

CREDIT PURCHASE OR TRANSFER TIMING

Following permit issuance, PAK USA Camas, LLC, as the applicant, will enter into a Buy/Sell Agreement with Terrace Oak Bank, for purchase of mitigation credits (in the quantity specified in Table 3) that would appropriately mitigate for the proposed project impacts. The actual purchase of credits will occur upon permit issuance. Prior to impacting the project oak, the applicant will submit proof of transfer of mitigation credits to project managers for the City of Camas. Proof of the mitigation transfer will be provided in the form of a notification letter to the approving agencies. Upon service of this notification, the mitigation requirement to purchase 0.238 mitigation credits will be fully satisfied.

CONFIRMATION OF MITIGATION CREDIT AVAILABILITY

Proof of the current number of available mitigation credits at the Terrace Oak Bank site will be confirmed by the approving agency, City of Camas and through the advising members of the Oak Bank Review Team.

Chair:

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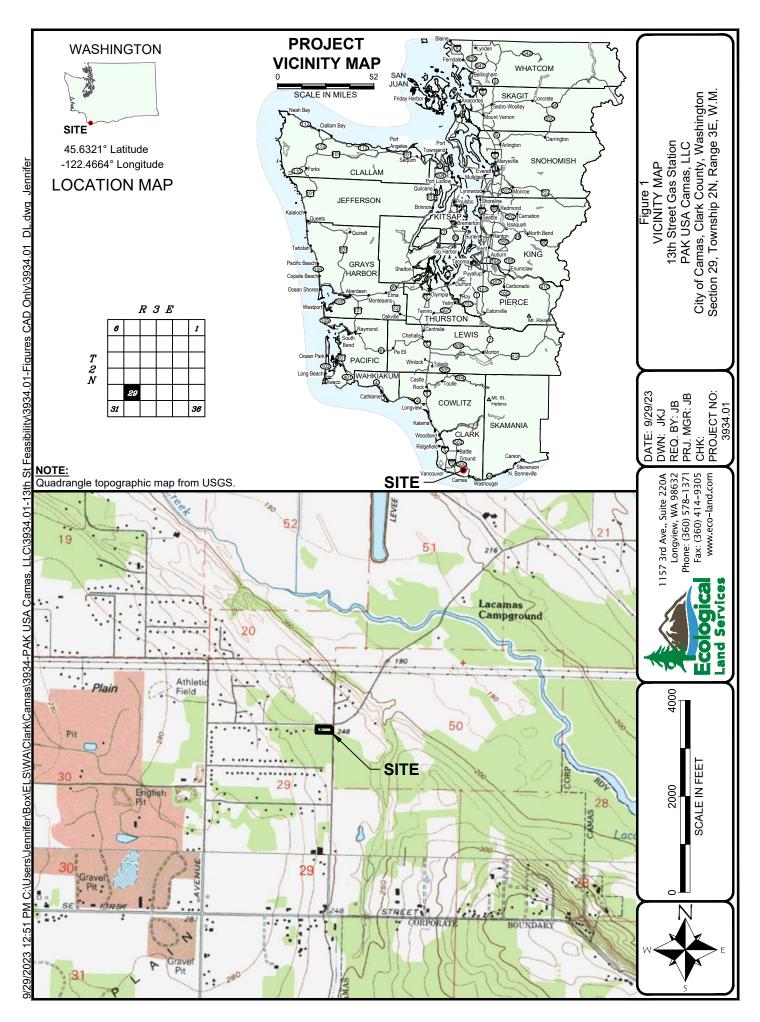
LIMITATIONS

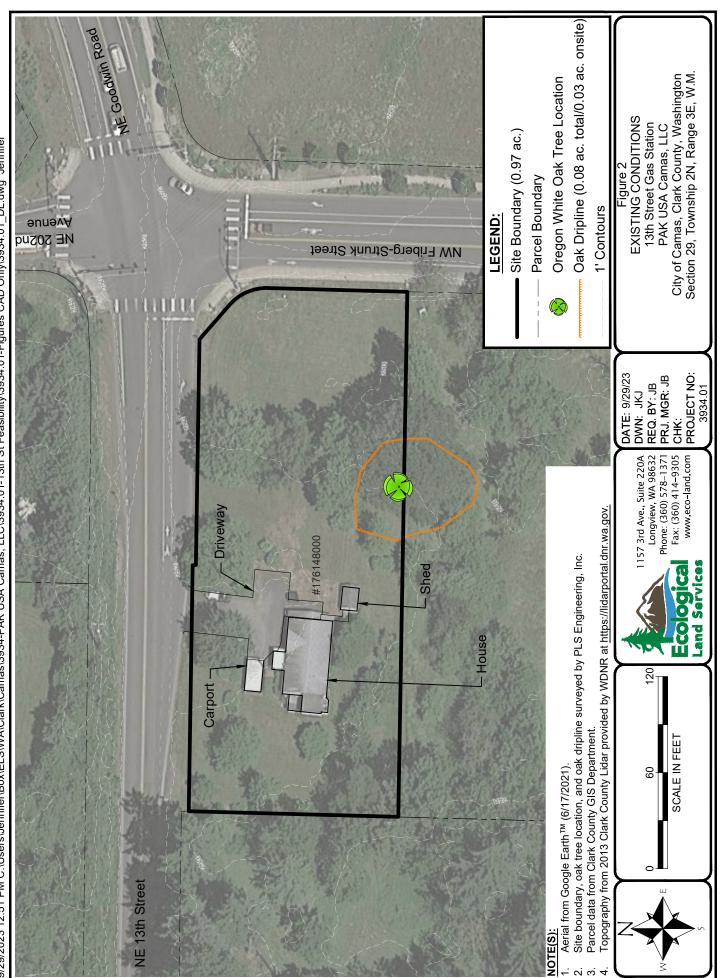
ELS bases this report's determinations on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our determinations. However, the information contained in this report should be considered preliminary and used at 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.

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FIGURES





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