



7. Critical Areas Report



October 7, 2024

HSR Capital, LLC
Attn: Andy Swanson
500 Broadway Street #120
Vancouver, WA 98660

Subject: Critical Areas Determination – Camas Woods NW

Dear Mr. Swanson,

Ecological Land Services, Inc. (ELS) has assessed Clark County parcel numbers 178109000 and 178209000 in Camas, Washington for the presence of critical areas. The approximately 8.82-acre study area is located at 26416 SE 8th Street in Camas, Washington within Section 29, Township 4 North, and Range 1 East of the Willamette Meridian (Figure 1). ELS biologists conducted field work on September 13, 2024, to inventory site conditions. This memorandum summarizes the findings of field work in accordance with the *Camas Municipal Code (CMC), Title 16 – Environment (Updated Jul 12, 2024)*.

Methods

The property was evaluated for the presence of wetlands using the Routine Determination Method according to the U.S. Army Corps of Engineers' 1987 *Wetland Delineation Manual* and the *Regional Supplement to the Corps of Engineers' Wetland Delineation Manual* (Environmental Laboratory 1987); *Western Mountains, Valleys, and Coast Region (Version 2.0)* (Corps 2010). The Routine Determination Method and defining wetland criteria are discussed further in Attachment A. Wetlands are regulated as "Waters of the United States" by the U.S. Army Corps of Engineers (Corps) and as "Waters of the State" by the Washington Department of Ecology (Ecology), and locally by the City of Camas.

ELS biologists conducted a reconnaissance of the aforementioned parcels on September 13, 2024, to determine if critical areas exist within the study area. Prior to field work, ELS reviewed current and historic aerial photographs of the study area and consulted online databases for soil, wetland, and priority habitat and species records. No test plots were taken as there was no evidence of wetlands onsite. No hydric soils are mapped and vegetation consisted entirely of upland species. General vegetation was noted and is discussed later in this report.

Study Area Description

The study area is located just off SE 8th Street, east of SE Everett Street, and abuts Grace Foursquare Church. Existing structures within the study area include two separate single-family residences (Figure 2). In the northeast corner of parcel 178109000 lies a utility easement for transmission lines.

Topographically the study area is relatively flat. Vegetation is dominated by planted Douglas fir (*Pseudotsuga menziesii*, FACU) with typical native understory vegetation.

Vegetation

Two distinct areas of vegetation exist onsite. The area surrounding the residences consisted of tall, mature Douglas fir with some big leaf maples (*Acer macrophyllum*, FACU) throughout. Understory vegetation was sparse and consisted of low growing herbaceous species such as strawberry (*Fragaria vesca*, FACU), hairy cat's ear (*Hypochaeris radicata*, FACU), creeping buttercup (*Ranunculus repens*, FAC), and mowed grasses. The rest of the study area was dominated by Douglas fir trees planted in rows, with some deciduous trees, including big leaf maple, red alder (*Alnus rubra*, FAC), and cherry (*Prunus* sp., assumed FACU) spread throughout. Understory plants were typical of a forested area and included beaked hazelnut (*Corylus cornuta*, FACU), sword fern (*Polystichum munitu*, FACU), salal (*Gaultheria shallon*, FACU), trailing blackberry (*Rubus ursinus*, FACU), and vine maple (*Acer circinatum*, FAC). Invasive species included herb Robert (*Geranium robertianum*, FACU), English holly (*Ilex aquifolium*, FACU), Himalayan blackberry (*Rubus armeniacus*, FAC), burdock (*Arctium* sp., unknown), and old man's beard (*Clematis vitalba*, FAC)

The plant indicator status following the plant scientific name is defined by the *National Wetland Plant List Indicator Rating Definitions* (Corps 2012) and is in Attachment A.

Soils

Soils onsite are mapped as Hesson clay loam, 0 to 8 percent slopes (HcB) and Washougal gravelly loam, 8 to 30 percent slopes (WgE) as referenced on the Natural Resources Conservation Service (NRCS 2024a) website (Figure 3). HcB is identified as a well-drained soil, with an average depth to water table of more than 80 inches; this soil is typically found on terraces and is formed of the parent material alluvium. A typical profile for this soil consists of clay loam from 0 to 12 inches, and clay from 12 to 60 inches below ground surface (BGS). WgE is identified as somewhat excessively drained soil, with an average depth to water table of more than 80 inches; this soil is typically found on terraces and is formed of the parent material alluvium. A typical profile for this soil is made up of gravelly medial loam from 0 to 20 inches, very gravelly medial loam from 20 to 28 inches, and very cobbly coarse sand from 28 to 60 inches BGS. According to the *Washington State Hydric Soils List* HcB and WgE are not classified as hydric soils (NRCS 2024b)

Hydrology

No primary or secondary wetland hydrology indicators were observed within the study area.

National Wetlands Inventory

The U.S Fish and Wildlife Service's webpage National Wetland Inventory (NWI) does not identify wetlands onsite (Figure 4). ELS biologists agree with the NWI as no wetlands were found onsite. Two wetlands are present to the northwest of the study area, a Freshwater Emergent Wetland and a Freshwater Forested/Shrub Wetland. Neither connect nor convey water to the study area and are not within 300 feet of the study area, therefore buffers would not extend onto the study area. NWI maps are typically used to gather wetland information about a region and, because of the large scale necessary for regional mapping, are limited in accuracy for localized analysis.

Clark County Critical Areas Mapping

Clark County critical areas mapping (Figure 5) does not show any critical areas onsite. ELS field investigations are consistent with this mapping.

Results

No wetlands or other critical areas were identified onsite. No hydric soils or wetland hydrology were observed, and vegetation consisted primarily of upland species. ELS biologists were constrained to the boundaries of the study area; however, no offsite wetlands were observed which may have buffers that extend onsite.

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.

If you have any questions or need additional information, please contact me at (360) 835-9082 or Jess@eco-land.com.

Sincerely,



Jess Andrade
Biologist**Figures:**

- Figure 1 Vicinity Map
- Figure 2 Existing Conditions
- Figure 3 NRCS Soil Survey
- Figure 4 USFWS National Wetlands Inventory
- Figure 5 Clark County Critical Areas

Attachment A:

Routine Determination Methods and Plant Indicator Rating Definitions

References

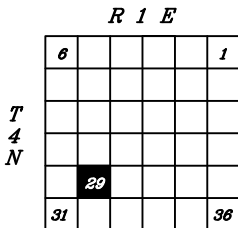
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1. U.S. Army Corps of Engineer Waterways Experiment Station, Vicksburg, Mississippi.
- City of Camas. July 12, 2024. *Camas Municipal Code (WMC)*, Chapter 16.51 Critical Areas. Camas, Washington.
- Clark County, 2024. Clark County Maps Online. Accessed online September 2024. <https://gis.clark.wa.gov/mapsonline/>.
- U.S. Army Corps of Engineers. 2010. *Final Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-13. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center.
- U.S. Army Corps of Engineers. 2012. *National Wetland Plant List Indicator Rating Definitions*, ed. R.W. Lichvar, N.C. Melvin, M.L. Butterwick, and W.N. Kirchner. ERDC/CRREL TN-12-1. Vicksburg, Mississippi: U.S. Army Engineer Research and Development Center.
- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). 2024a. *Soil Survey of Clark County, Washington*. Accessed online September 2024. http://www.or.nrcs.gov/pnw_soil/wa_reports.html.
- U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). 2024b. *Washington State Hydric Soils List*. Accessed online September 2024. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- U.S. Fish and Wildlife Service. 1988. *National Wetlands Inventory*. Accessed online September 2024. <http://wetlandsfws.er.usgs.gov/wtlnds/launch.html>.

WASHINGTON



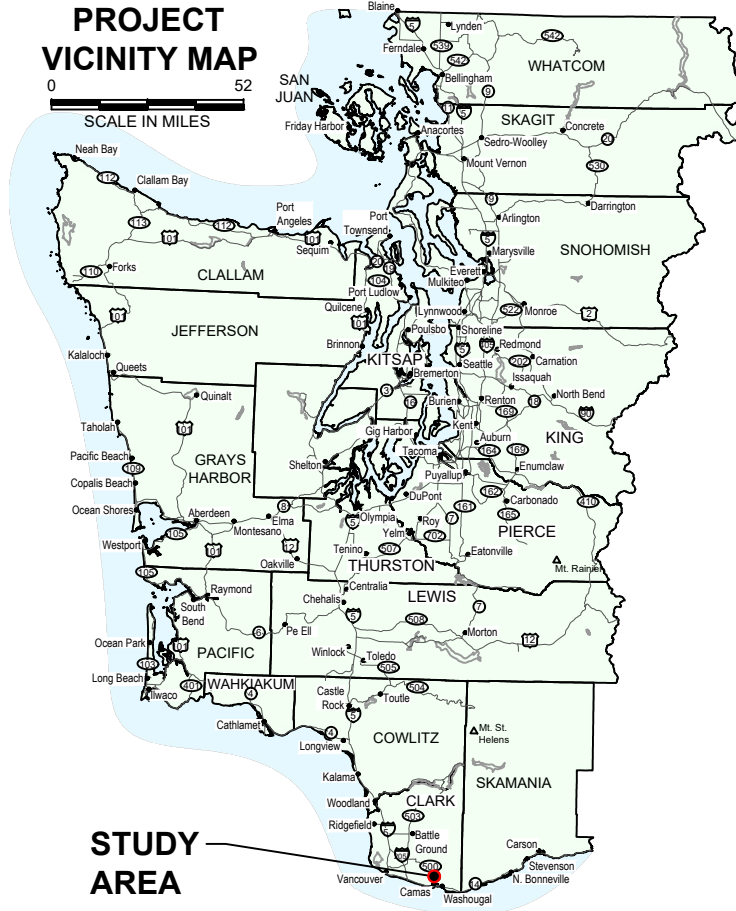
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-122.400263° Longitude

LOCATION MAP



NOTE:
Quadrangle topographic map from USGS.

PROJECT VICINITY MAP



STUDY AREA

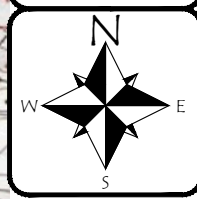


**Figure 1-
VICINITY MAP**
Camas Woods NW
HSR Capital, LLC
City of Camas, Clark County, WA
Section 29, Township 4N, Range 1E, W.M.

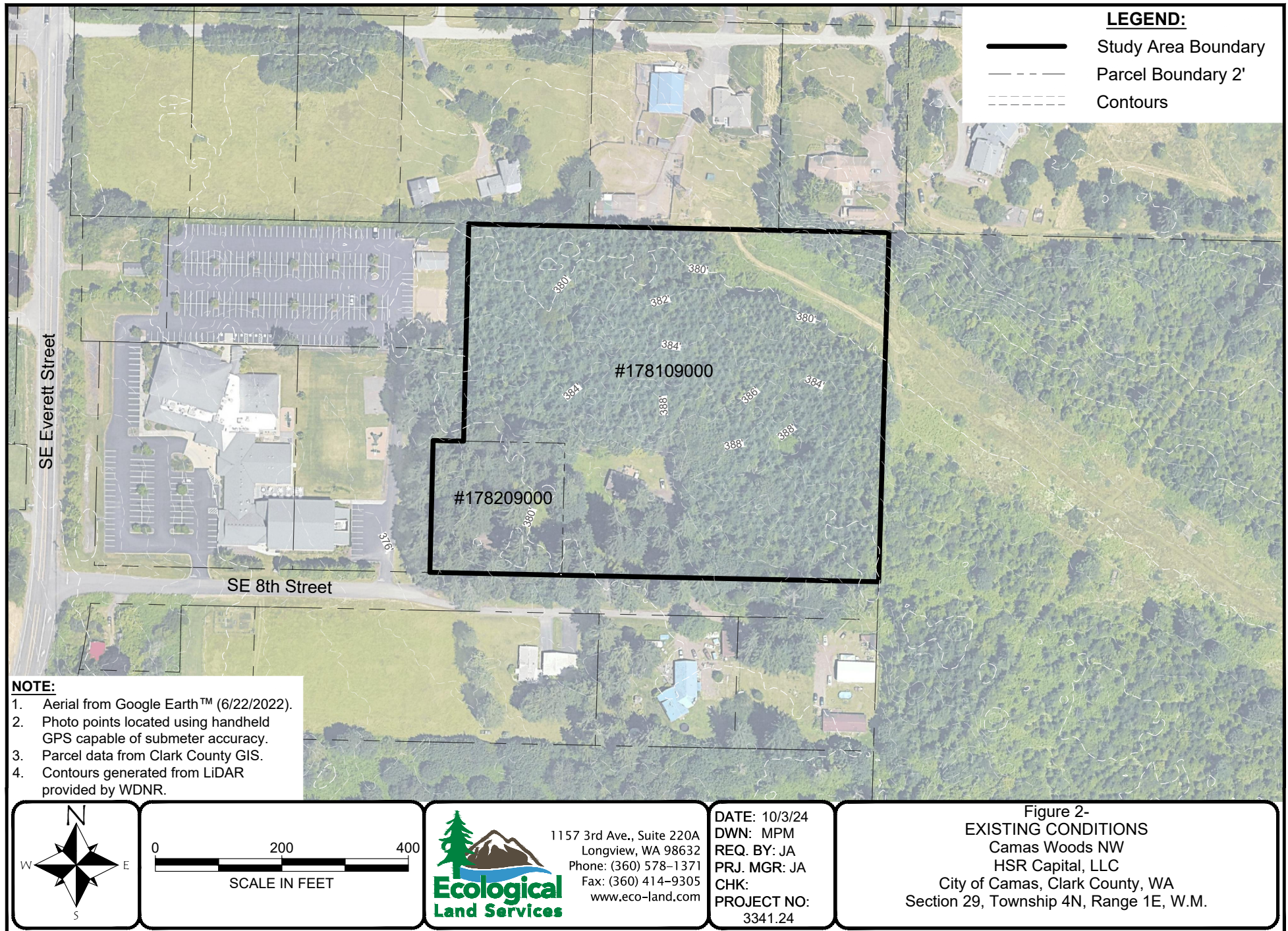
DATE: 10/3/24
DWN: MPM
REQ. BY: JA
PRJ. MGR: JA
CHK:
PROJECT NO: 3341.24

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

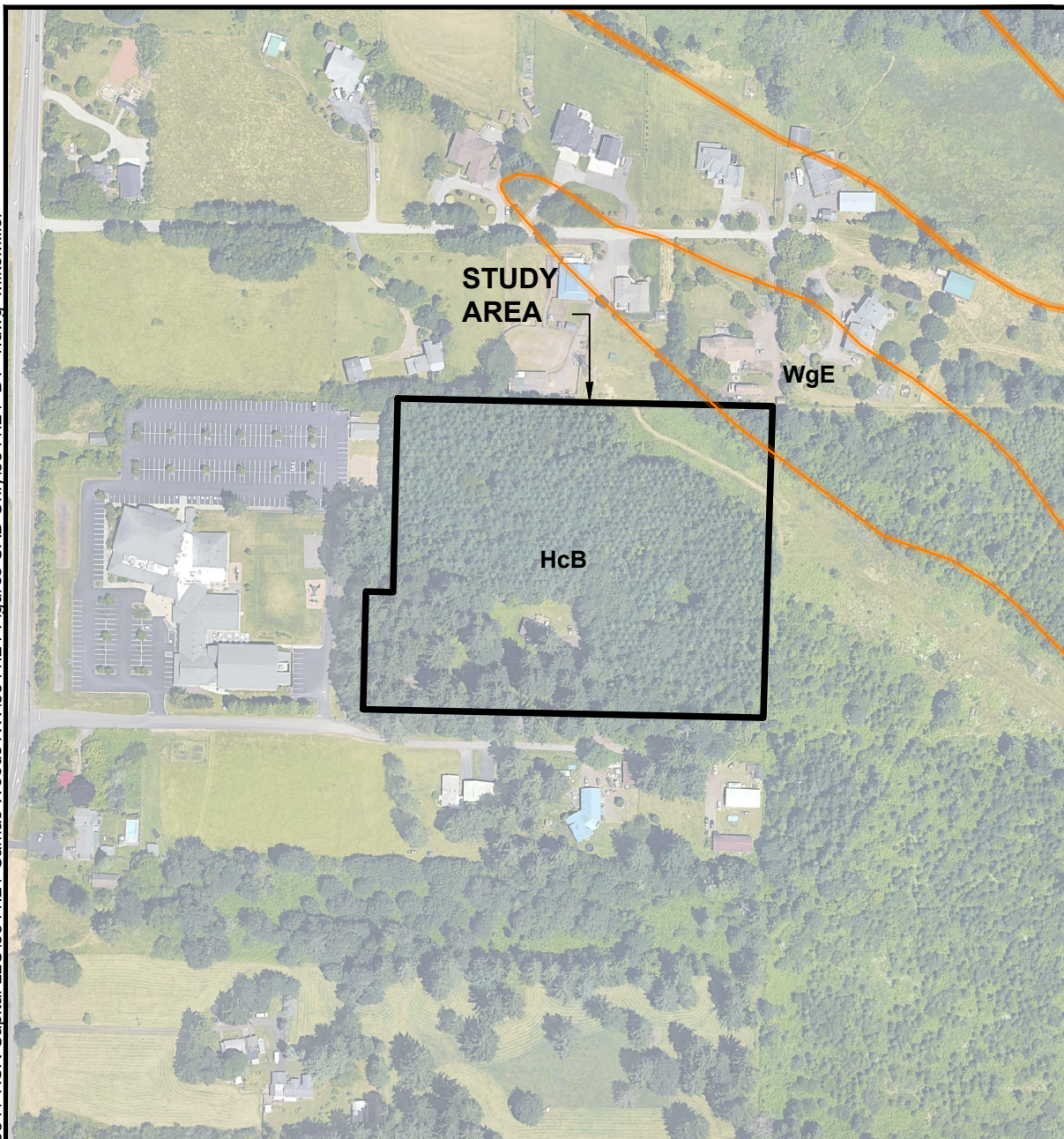
**Ecological
Land Services**



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LEGEND:

- Study Area Boundary
- NRCS Soil Boundary
- HcB** Hesson clay loam, 0 to 8 percent slopes. Not hydric.
- WgE** Washougal gravelly loam, 8 to 30 percent slopes. Not hydric.

NOTE(S):

1. Map provided on-line by NRCS at web address:
<http://websoilsurvey.nrcs.usda.gov/app/>

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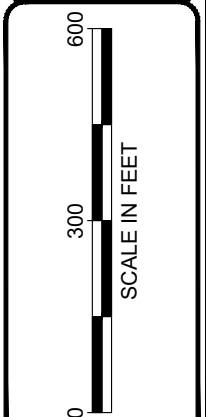
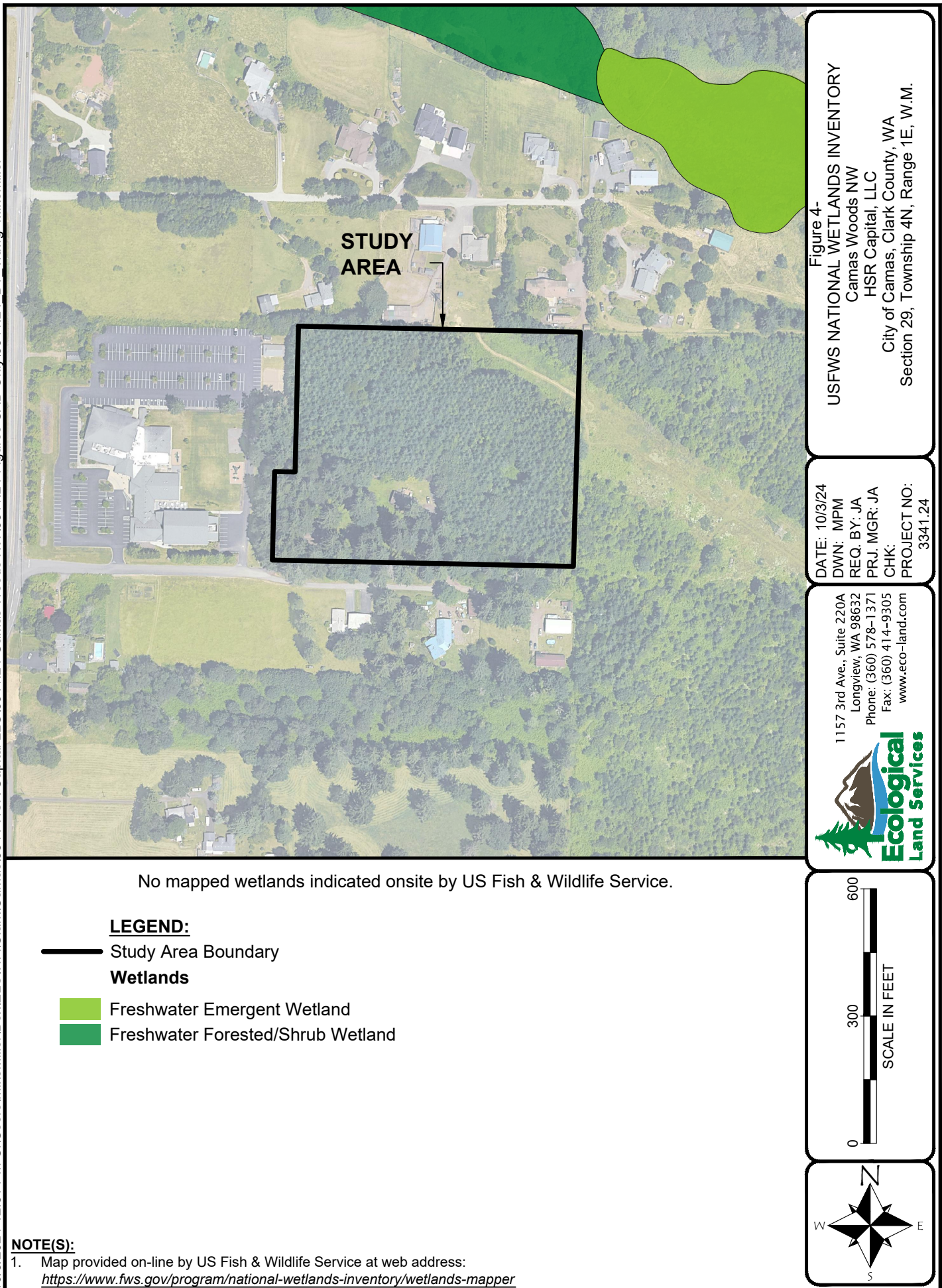


Figure 3-
NRCS SOIL SURVEY
Camas Woods NW
HSR Capital, LLC
City of Camas, Clark County, WA
Section 29, Township 4N, Range 1E, W.M.



No mapped wetlands indicated onsite by US Fish & Wildlife Service.

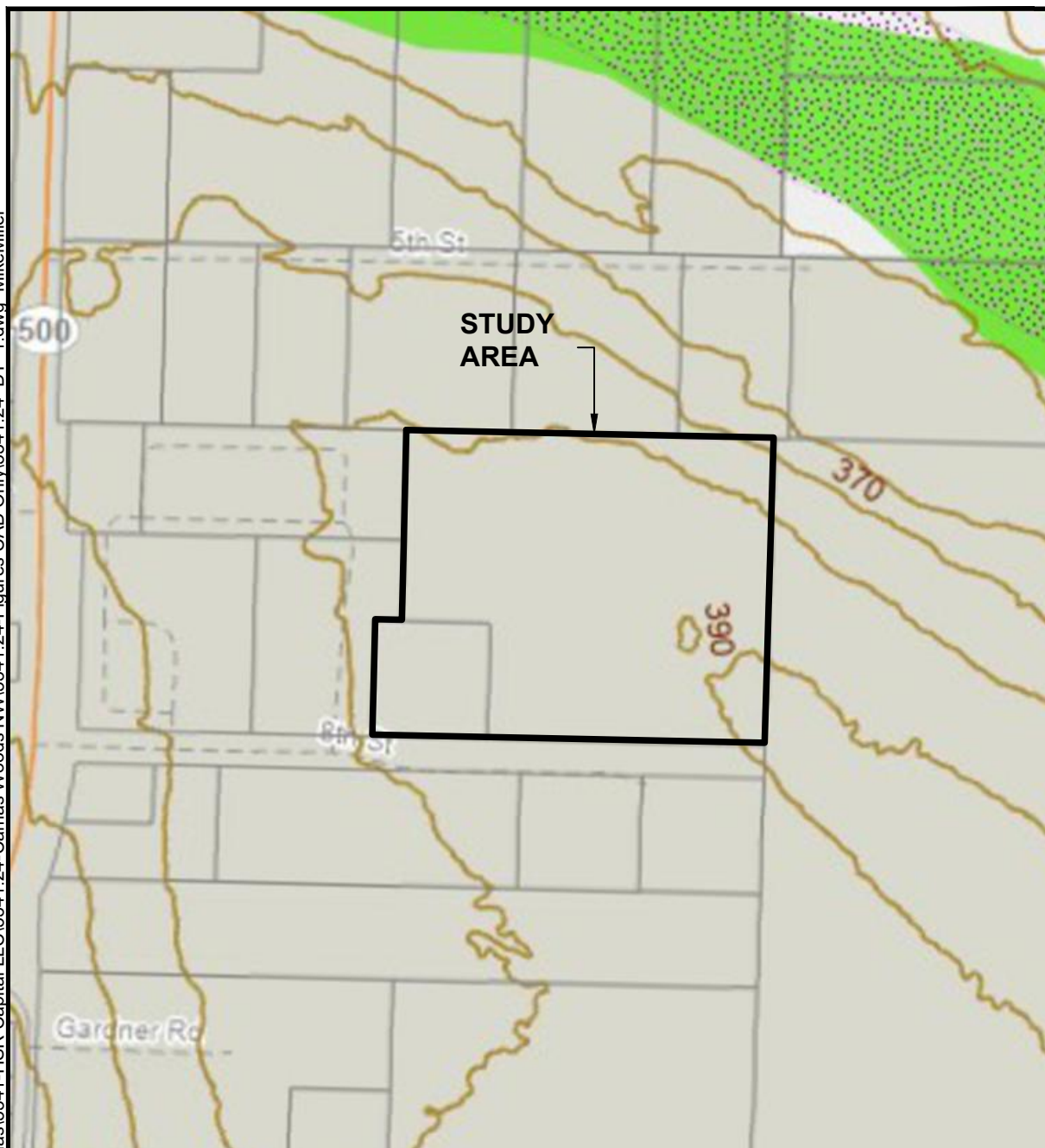


Figure 5-
CLARK COUNTY CRITICAL AREAS
 Camas Woods NW
 HSR Capital, LLC
 City of Camas, Clark County, WA
 Section 29, Township 4N, Range 1E, W.M.

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 DWN: MPM
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Ecological Land Services

LEGEND:

- Study Area Boundary
- Slopes and Geologic Hazards Group
- Contour Lines
- Contour Lines - 10 ft

- Soils and Wetlands Inventory**
- Hydric Soils
 - Potential Wetlands Presence

NOTE(S):

1. Map provided on-line by Clark County at web address: <https://gis.clark.wa.gov/maponline/index.cfm?site=Environmental>

