

APPROVED JURISDICTIONAL DETERMINATION FORM  
U.S. Army Corps of Engineers

Wetland A

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** February 15, 2017.

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Seattle District, Ott, Dave (SW 10th Avenue Delineation), NWS-2016-975.  
Name of water being evaluated on this JD form: Wetland A

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State: Washington County: Clark City: Battle Ground

Center coordinates of site (lat/long in degree decimal format): Lat: 45.7681 N, Long: -122.5500 W

Universal Transverse Mercator: \_\_\_\_\_

Name of nearest waterbody: Mill Creek.

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Lewis River.

Name of watershed or Hydrologic Unit Code (HUC): 17080002.

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different JD form. List other JDs: \_\_\_\_\_

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date: February 15, 2017.

Field Determination. Date(s): November 7, 2016.

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Non-wetland waters: 500 linear feet 3 width (ft) and/or \_\_\_\_\_ acres.

Wetlands: 1.45 acres.

**c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual, and Pick List**

Elevation of established OHWM (if known): Unknown.

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.  
Explain: \_\_\_\_\_

**SECTION III: CWA ANALYSIS**

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup> Supporting documentation is presented in Section III.F.

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

**1. TNW**

Identify TNW: \_\_\_\_\_.

Summarize rationale supporting determination: \_\_\_\_\_.

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent": \_\_\_\_\_.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both.

If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

**1. Characteristics of non-TNWs that flow directly or indirectly into TNW**

**(i) General Area Conditions:**

Watershed size: 1080 square miles

Drainage area: 380 acres

Average annual rainfall: 52.6 inches

Average annual snowfall: 1.70 inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are 20-25 river miles from TNW.

Project waters are Pick List river miles from RPW.

Project waters are 5-10 aerial (straight) miles from TNW.

Project waters are Pick List aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: \_\_\_\_\_.

Identify flow route to TNW<sup>5</sup>: Water enters this ditch from the offsite portion of Wetland A then flows under the maintenance road through two 12-inch diameter culverts. The culverts, located approximately 40 feet south of the southwest corner of the review area, allows water to drain northwesterly from Wetland A for approximately 1.8 mile and into Mill Creek, a perennial water. Mill Creek flows in a general southwesterly direction for approximately 5.0 miles and merges with Salmon Creek then flows into Lake River, then north and into the Columbia River, a TNW.

Tributary stream order, if known: \_\_\_\_\_.

**(b) General Tributary Characteristics (check all that apply):**

**Tributary is:**  Natural

Artificial (man-made). Explain: \_\_\_\_\_.

Manipulated (man-altered). Explain: The offsite tributary is an excavated ditch across emergent wetland and agricultural lands, becoming a natural stream course near the confluence with Mill Creek.

**Tributary properties with respect to top of bank (estimate):**

Average width: 3 feet

<sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Average depth: 3 feet  
Average side slopes: **Vertical (1:1 or less)**.

Primary tributary substrate composition (check all that apply):

- |  |  |                                   |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts   | <input type="checkbox"/> Sands                           | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles   | <input type="checkbox"/> Gravel                          | <input type="checkbox"/> Muck     |
| <input type="checkbox"/> Bedrock   | <input type="checkbox"/> Vegetation. Type/% cover: _____ |                                   |
| <input checked="" type="checkbox"/> Other. Explain: <u>silty clay loam (NRCS soil survey Clark County, Washington)</u> . |  |                                   |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: stable banks due to clay content of soils and low gradient to the unnamed tributary.

Presence of run/riffle/pool complexes. Explain: No riffle/pool complex due to shallow slope and substrate.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): <2 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **2-5**

Describe flow regime: seasonal.

Other information on duration and volume: Tributary has persistent flow for 7 to 8 months of the year.

Surface flow is: **Confined**. Characteristics: well-defined, excavated, channel.

Subsurface flow: **Yes**. Explain findings: presumed based on location of ditch abutting the wetland.

Dye (or other) test performed: \_\_\_\_\_.

Tributary has (check all that apply):

- |  |   |
|--|---|
| <input type="checkbox"/> Bed and banks   |   |
| <input checked="" type="checkbox"/> OHWM <sup>6</sup> (check all indicators that apply): |   |
| <input checked="" type="checkbox"/> clear, natural line impressed on the bank            | <input type="checkbox"/> the presence of litter and debris          |
| <input type="checkbox"/> changes in the character of soil                                | <input type="checkbox"/> destruction of terrestrial vegetation      |
| <input type="checkbox"/> shelving  | <input type="checkbox"/> the presence of wrack line                 |
| <input type="checkbox"/> vegetation matted down, bent, or absent                         | <input type="checkbox"/> sediment sorting                           |
| <input checked="" type="checkbox"/> leaf litter disturbed or washed away                 | <input type="checkbox"/> scour                                      |
| <input type="checkbox"/> sediment deposition   | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining  | <input type="checkbox"/> abrupt change in plant community           |
| <input type="checkbox"/> other (list): _____   |   |
| <input type="checkbox"/> Discontinuous OHWM. <sup>7</sup> Explain: _____.                |   |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- |  |  |
|--|--|
| <input type="checkbox"/> High Tide Line indicated by:              | <input type="checkbox"/> Mean High Water Mark indicated by:            |
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum;                    |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings;                            |
| <input type="checkbox"/> physical markings/characteristics         | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges                              |  |
| <input type="checkbox"/> other (list): _____                       |  |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: water color is clear with moderate organic debris; general water quality is good; watershed has been extensively developed for agricultural and residential uses; downstream waters of Mill Creek are on the WA State 303(d) list for temperature and fecal coliform.

Identify specific pollutants, if known: Fertilizers, herbicides.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): herbaceous and forest cover with an average width of 150 feet.
- Wetland fringe. Characteristics: \_\_\_\_\_.
- Habitat for:
- Federally Listed species. Explain findings: \_\_\_\_\_.
  - Fish/spawn areas. Explain findings: \_\_\_\_\_.
  - Other environmentally-sensitive species. Explain findings: \_\_\_\_\_.
  - Aquatic/wildlife diversity. Explain findings: \_\_\_\_\_.

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.

**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**(i) Physical Characteristics:**

**(a) General Wetland Characteristics:**

Properties:

Wetland size: 1.42 onsite acres

Wetland type. Explain: slope palustrine emergent.

Wetland quality. Explain: Moderate (Category III) based on WDOE Wetland Rating System using a scale of wetland categories of I to IV with Category I being the highest function..

Project wetlands cross or serve as state boundaries. Explain: NA.

**(b) General Flow Relationship with Non-TNW:**

Flow is: **Ephemeral flow**. Explain: Tributary has persistent flow for 7 to 8 months of the year.

Surface flow is: **Overland sheetflow**

Characteristics: The sheetflow flows into the steam channel that is 3 feet wide by 3 feet deep.

Subsurface flow: **Yes**. Explain findings: presumed based elevation and proximity of the ditch in relation to Wetland A..

Dye (or other) test performed: \_\_\_\_\_.

**(c) Wetland Adjacency Determination with Non-TNW:**

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain: \_\_\_\_\_.

Ecological connection. Explain: \_\_\_\_\_.

Separated by berm/barrier. Explain: \_\_\_\_\_.

**(d) Proximity (Relationship) to TNW**

Project wetlands are **20-25** river miles from TNW.

Project waters are **5-10** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters.**

Estimate approximate location of wetland as within the **500-year or greater** floodplain.

**(ii) Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: water color is clear with moderate organic debris; general water quality is good; watershed has been extensively developed for agricultural and residential uses; downstream waters of Mill Creek are on the WA State 303(d) list for temperature and fecal coliform.

Identify specific pollutants, if known: Fertilizers, herbicides.

**(iii) Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width): \_\_\_\_\_.

Vegetation type/percent cover. Explain: herbaceous (ag land)/100%.

Habitat for:

Federally Listed species. Explain findings: \_\_\_\_\_.

Fish/spawn areas. Explain findings: \_\_\_\_\_.

Other environmentally-sensitive species. Explain findings: \_\_\_\_\_.

Aquatic/wildlife diversity. Explain findings: \_\_\_\_\_.

**3. Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **1**

Approximately ( 1.42 ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
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Y	1.42		
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Summarize overall biological, chemical and physical functions being performed: The wetland directly abuts an excavated channel that receives sub-surface and surface flows, which drain directly into Mill Creek.

**C. SIGNIFICANT NEXUS DETERMINATION**

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: \_\_\_\_\_.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: \_\_\_\_\_.
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: \_\_\_\_\_.

**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):**

- 1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:  
 TNWs: \_\_\_\_\_ linear feet \_\_\_\_\_ width (ft), or \_\_\_\_\_ acres.  
 Wetlands adjacent to TNWs: \_\_\_\_\_ acres.
- 2. RPWs that flow directly or indirectly into TNWs.**  
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide rationale indicating that tributary flows perennial: \_\_\_\_\_.  
 Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: Tributary has persistent flow for 7 to 8 months of the year. Photograph taken July 11, 2016 shows water within drainage ditch.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **500** linear feet **3** width (ft).  
 Other non-wetland waters: \_\_\_\_\_ acres.  
Identify type(s) of waters: \_\_\_\_\_.

- 3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.**  
 Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: \_\_\_\_\_ linear feet \_\_\_\_\_ width (ft).  
 Other non-wetland waters: \_\_\_\_\_ acres.  
Identify type(s) of waters: \_\_\_\_\_.

- 4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**  
 Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: \_\_\_\_\_  
 Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: Wetland edge is contiguous with RPW with no intervening uplands.

Provide acreage estimates for jurisdictional wetlands in the review area: **1.42** acres.

- 5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**  
 Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: \_\_\_\_\_ acres.

- 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

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<sup>8</sup>See Footnote # 3.  
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- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: \_\_\_\_\_ acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or  
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  
 Demonstrate that water is isolated with a nexus to commerce (see E below).

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.  
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.  
 which are or could be used for industrial purposes by industries in interstate commerce.  
 Interstate isolated waters. Explain: \_\_\_\_\_.  
 Other factors. Explain: \_\_\_\_\_.

Identify water body and summarize rationale supporting determination: \_\_\_\_\_

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: \_\_\_\_\_ linear feet \_\_\_\_\_ width (ft).  
 Other non-wetland waters: \_\_\_\_\_ acres.  
Identify type(s) of waters: \_\_\_\_\_.  
 Wetlands: \_\_\_\_\_ acres.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.  
 Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.  
 Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).  
 Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: \_\_\_\_\_.  
 Other: (explain, if not covered above): \_\_\_\_\_.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): \_\_\_\_\_ linear feet \_\_\_\_\_ width (ft).  
 Lakes/ponds: \_\_\_\_\_ acres.  
 Other non-wetland waters: \_\_\_\_\_ acres. List type of aquatic resource: \_\_\_\_\_.  
 Wetlands: \_\_\_\_\_ acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): \_\_\_\_\_ linear feet \_\_\_\_\_ width (ft).  
 Lakes/ponds: \_\_\_\_\_ acres.  
 Other non-wetland waters: \_\_\_\_\_ acres. List type of aquatic resource: \_\_\_\_\_.  
 Wetlands: \_\_\_\_\_ acres.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Vicinity map, Wetland Delineation map, USGS topographic and soils map, USFWS wetland map, Clark County wetland map, wetland hydrographic map, wetland rating land use map.

<sup>9</sup> To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup> Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: \_\_\_\_\_.
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas: \_\_\_\_\_.
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: \_\_\_\_\_
- USDA Natural Resources Conservation Service Soil Survey. Citation: \_\_\_\_\_.
- National wetlands inventory map(s). Cite name: \_\_\_\_\_.
- State/Local wetland inventory map(s): Clark County GIS
- FEMA/FIRM maps: \_\_\_\_\_.
- 100-year Floodplain Elevation is: \_\_\_\_\_ (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): Google Earth,  
or  Other (Name & Date): 11 July 2016.
- Previous determination(s). File no. and date of response letter: \_\_\_\_\_.
- Applicable/supporting case law: \_\_\_\_\_.
- Applicable/supporting scientific literature: \_\_\_\_\_.
- Other information (please specify): \_\_\_\_\_.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** Wetland A extends offsite to the south and east, abutting a drainage ditch adjacent to a maintenance road that forms the western wetland boundary. Water enters this ditch from the offsite portion of Wetland A then flows under the maintenance road through two 12-inch diameter culverts. The culverts, located approximately 40 feet south of the southwest corner of the review area, allow water to drain northwesterly from Wetland A and into an excavated channel that continues to flow for approximately 1.8 mile where it merges with Mill Creek, a perennial water. Mill Creek flows in a general southwesterly direction for approximately 5.0 miles and merges with Salmon Creek, which flows into Lake River, a tributary of the Columbia River, a TNW. The presence of water within the drainage ditch and channel during July confirms water would be present within the wetland at drainage channel for a minimum of three months and provide, at least, a seasonal connection to permanent waters and TNWs. The subject tributary has been documented to have a seasonal flow, originating from the wetland and persisting form more than 3 continuous months of the year. The subject wetland extends to edge of the tributary with no intervening uplands. Based on these findings, Wetland A is a regulated water of the U.S.

9/9/2016 10:12 AM S:\E\SI\WA\Clark\Battle Ground\2427-01-SW 10th Avenue Delineation\2427.01-Figures\SW 10th Ave DL.dwg cpavine

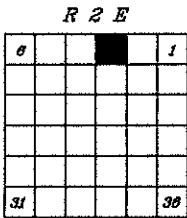
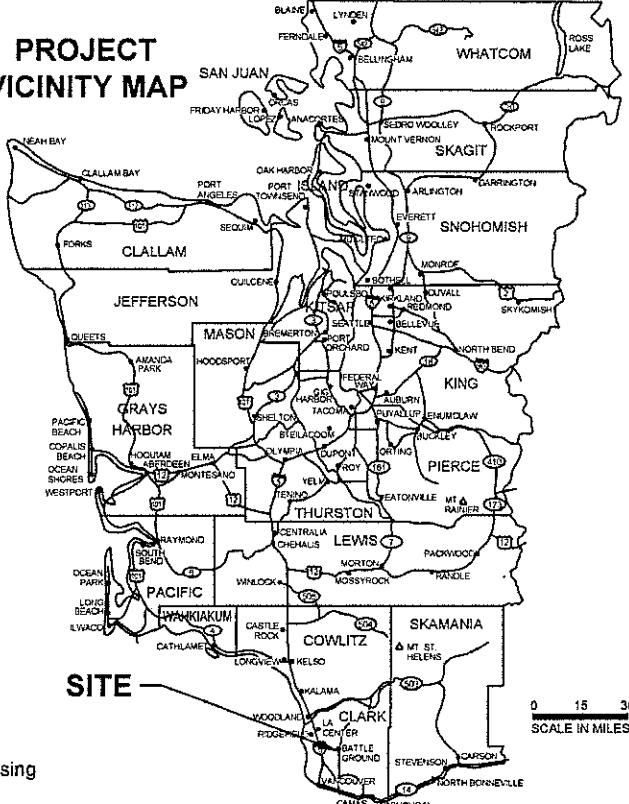
WASHINGTON



Latitude: 45.7681°  
Longitude: -122.5507°

LOCATION MAP

PROJECT VICINITY MAP



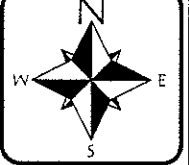
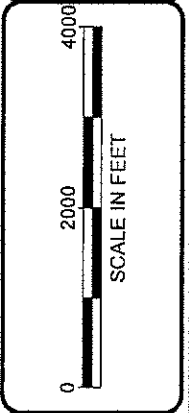
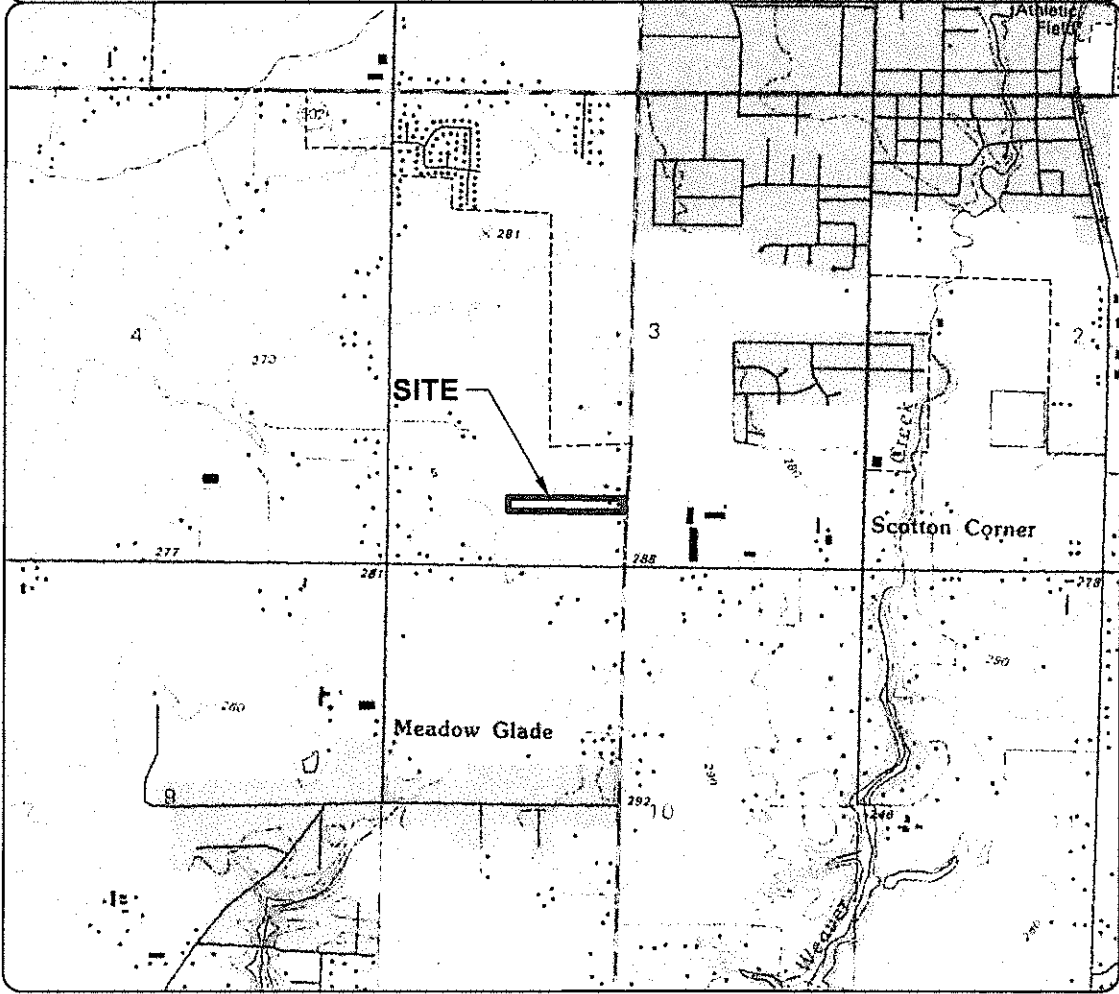
**NOTE:**  
USGS topographic quadrangle map reproduced using  
MAPTECH Inc., Terrain Navigator Pro software.

Figure 1  
**VICINITY MAP**  
SW 10th Avenue Delineation  
Dave Ott

DATE: 9/9/16  
DWN: CDP  
REQ. BY: KW  
PRJ. MGR: FN  
CHK:  
PROJECT NO: 2427.01

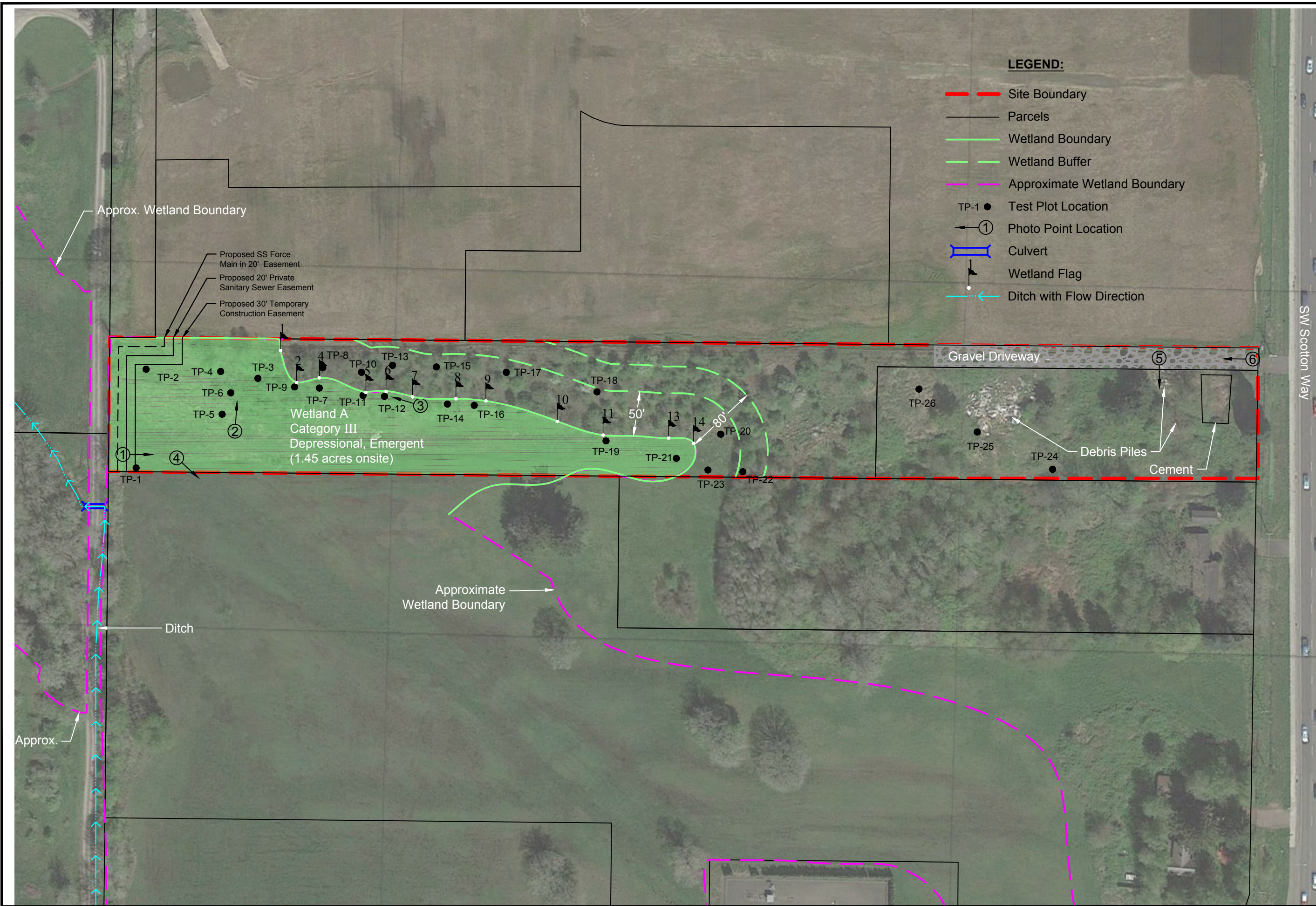
1157 3rd Ave., Suite 220A  
Longview, WA 98632  
Phone: (360) 578-1371  
Fax: (360) 414-9305  
www.eco-land.com

**Ecological Land Services**





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**LEGEND:**

- Site Boundary
- Parcels
- Wetland Boundary
- - - Wetland Buffer
- - - Approximate Wetland Boundary
- TP-1 ● Test Plot Location
- ← ① Photo Point Location
- Culvert
- Wetland Flag
- Ditch with Flow Direction

Approx. Wetland Boundary

- Proposed SS Force Main in 20' Easement
- Proposed 20' Private Sanitary Sewer Easement
- Proposed 30' Temporary Construction Easement

Wetland A  
Category III  
Depressional, Emergent  
(1.45 acres onsite)

Gravel Driveway

Debris Piles  
Cement

Approximate  
Wetland Boundary

Ditch

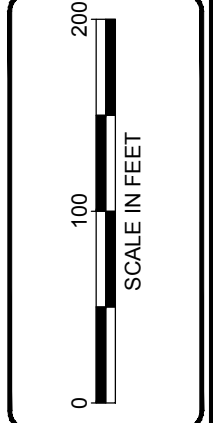
Approx.

SW Scotton Way

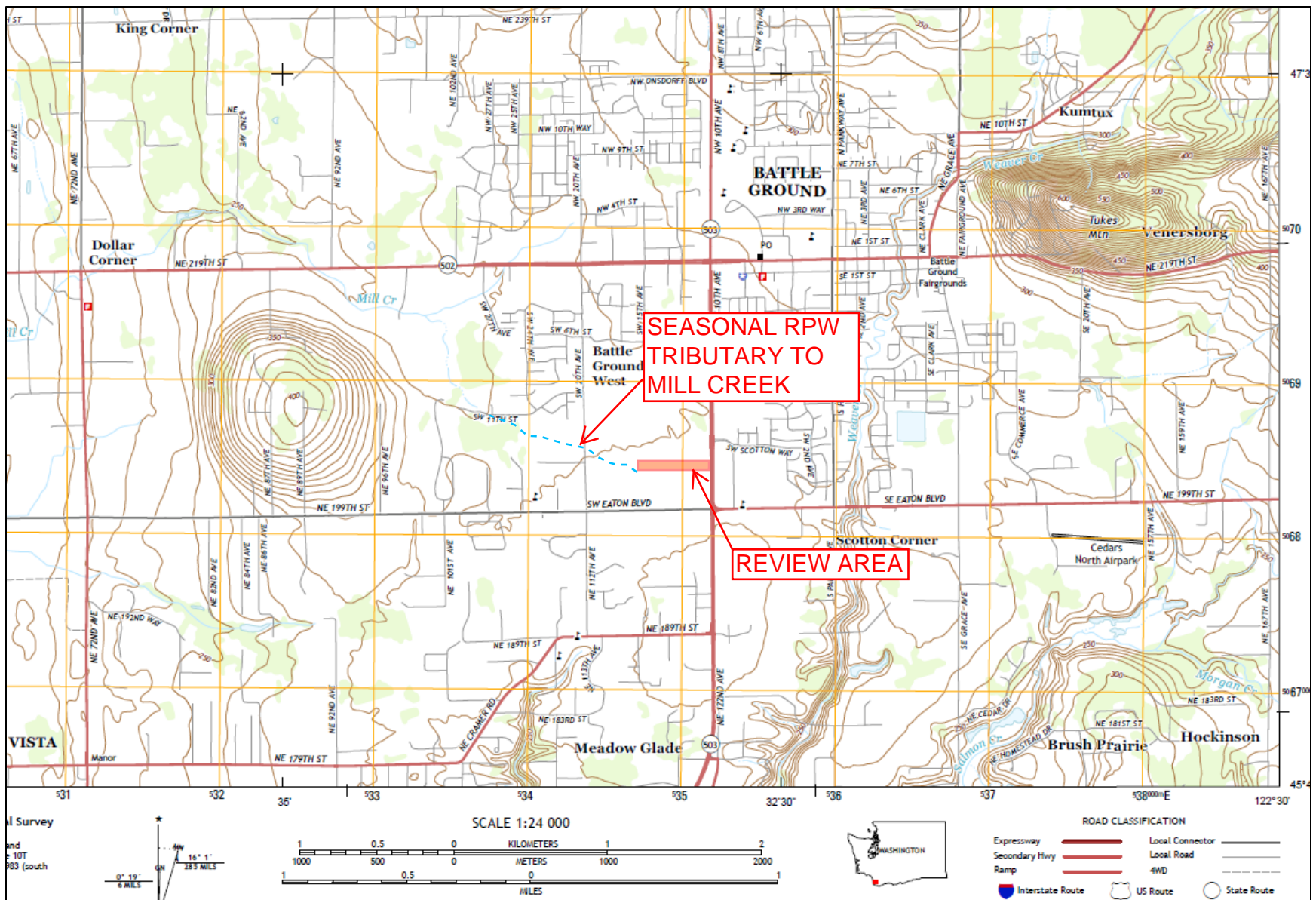
**Figure 2**  
**SITE MAP**  
 SW 10th Avenue Delineation  
 Dave Ott  
 City of Battleground, Clark County, Washington  
 Section 3, Township 3N, Range 2E, W.M.

DATE: 11/28/16  
 DWN: GDP  
 REQ. BY: KW  
 PRJ. MGR: FN  
 CHK:  
 PROJECT NO:  
 2427.01

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

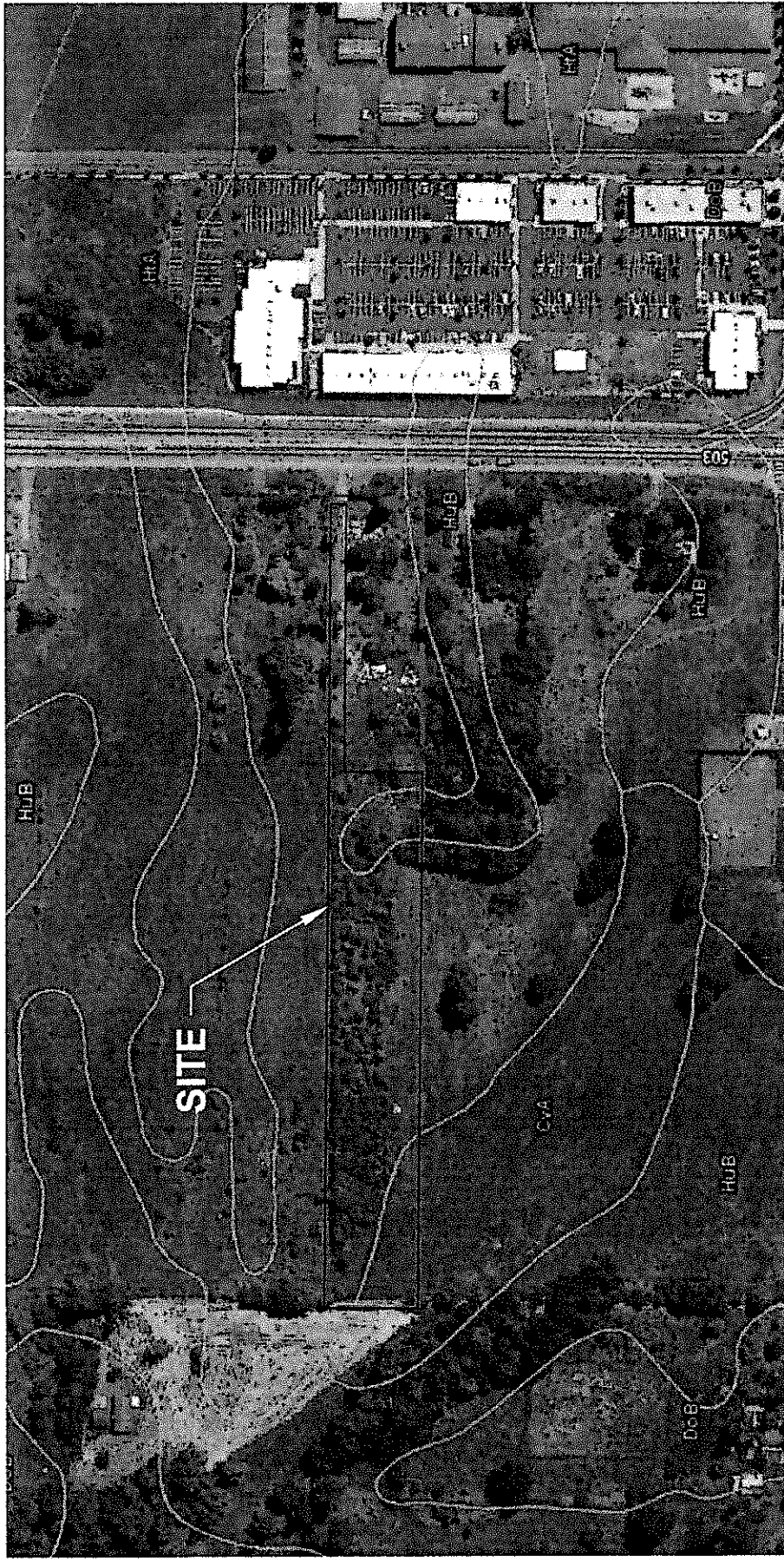






Source: USGS Topographic Map (Battle Ground Quadrangle; Washington, Clark County)

Figure 3

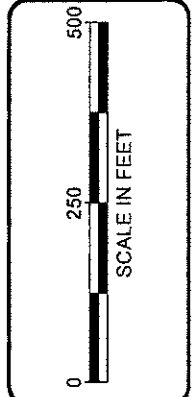
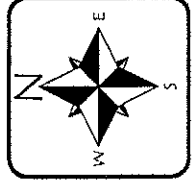


**LEGEND:**

- CvA Cove silty clay loam, 0 to 3 percent slopes. Hydric.
- DoB Dollar loam, 0 to 5 percent slopes. Not hydric.
- HuB Hockinson loam, moderately well drained, 0 to 8 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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DATE: 9/9/16  
 DWN: CDP  
 REQ. BY: KW  
 PRJ. MGR: FN  
 CHK:  
 PROJECT NO:  
 2427.01

SOIL SURVEY MAP  
 SW 10th Avenue Delineation  
 Dave Ott  
 City of Battleground, Clark County, Washington  
 Section 3, Township 3N, Range 2E, W.M.

**Figure 4**



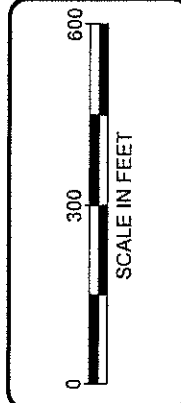
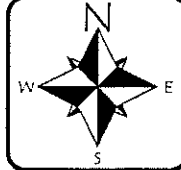
9/9/2016 10:12 AM S:\EL\SIWA\Clark\Battle Ground\2427-01\SW 10th Avenue Delineation\2427.01-Figures\SW 10th Ave DL.dwg cpayne



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

**NOTE(S):**

1. Map provided on-line by US Fish & Wildlife Service at web address:  
<http://www.fws.gov/wetlands/data/index.html>

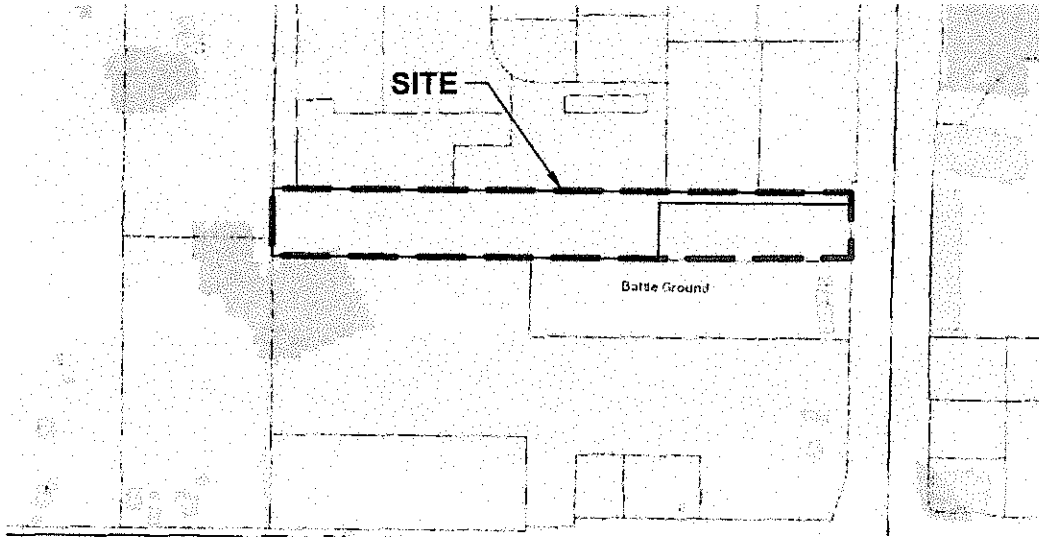


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 CHK:  
 PROJECT NO:  
 2427.01

NATIONAL WETLANDS INVENTORY MAP  
 SW 10th Avenue Delineation  
 Dave Ott  
 City of Battleground, Clark County, Washington  
 Section 3, Township 3N, Range 2E, W.M.  
**Figure 5**

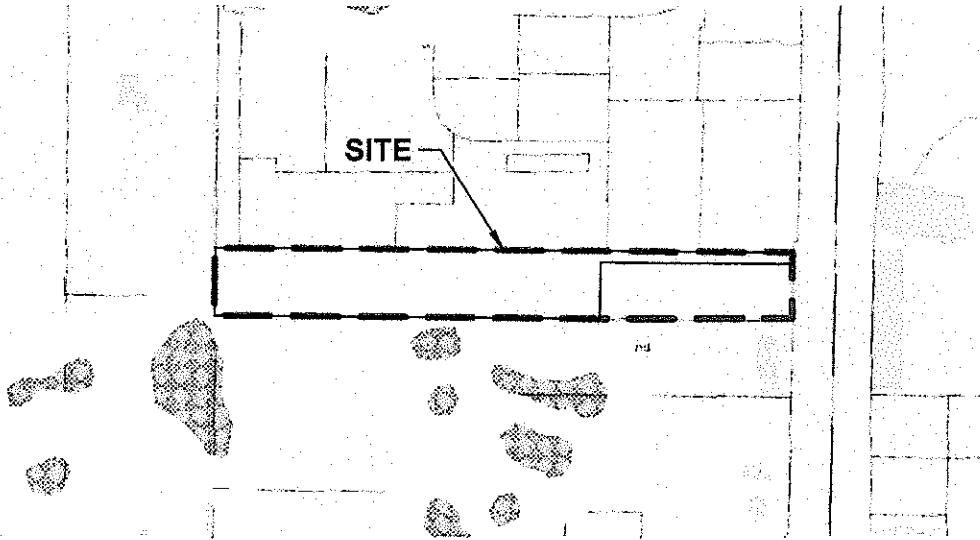
9/9/2016 10:12 AM S:\EL\SWA\Clark\Battle Ground\2427-01-SW 10th Avenue Delineation\2427.01-Figures\SW 10th Ave DL.dwg cpayne



**Clark County Soils and Wetlands Inventory**

**LEGEND:**

 County Wetland Inventory



**Clark County Priority Habitat and Species**

**LEGEND:**

 Non-Riparian Habitat Conservation Area

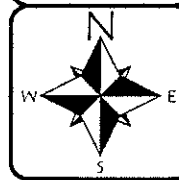
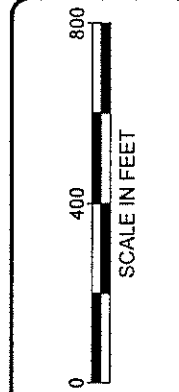
 Priority Habitat Buffer

CLARK COUNTY SENSITIVE & HABITAT MAP  
 SW 10th Avenue Delineation  
 Dave Ott  
 City of Battleground, Clark County, Washington  
 Section 3, Township 3N, Range 2E, W.M.

**Figure 6**

DATE: 9/9/16  
 DWN: CDP  
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 CHK:  
 PROJECT NO: 2427.01

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**NOTE:** Map provided on-line by Clark County, Washington at web address: <http://gis.clark.wa.gov/imf/imf.jsp?site=zoning>

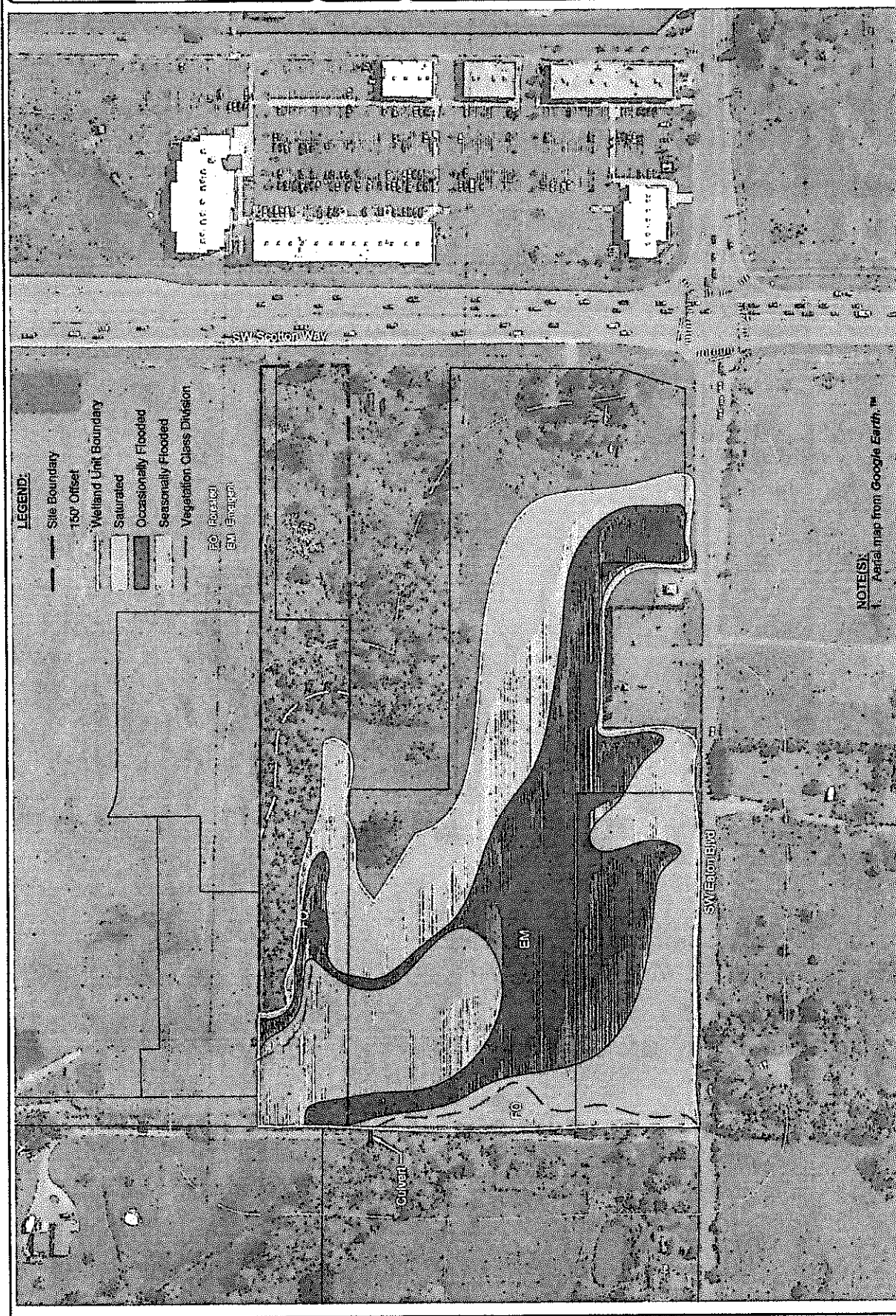


150' OFFSET WETLAND RATING MAP  
 SW 10th Avenue Delineation  
 Dave Ott  
 City of Battleground, Clark County, Washington  
 Section 3, Township 3N, Range 2E, WM.

DATE: 9/9/16  
 DWN: CDF  
 REQ. BY: KW  
 PRJ. MGR: FN  
 Phone (360) 414-9305  
 Fax (360) 414-9305  
 www.eco-land.com

Ecological Land Services  
 1157 3rd Ave., Suite 220A  
 Longview, WA 98632

SCALE IN FEET  
 0 150 300



- LEGEND:**
- Site Boundary
  - 150' Offset
  - Wetland Limit Boundary
  - Saturated
  - Occasionally Flooded
  - Seasonally Flooded
  - Vegetation Class Division
  - PO Palustrine
  - EM Emergent

NOTE(S)  
 1. Aerial map from Google Earth.™





Source: Google Earth (7/23/2016): Showing review area (red) and photo point location and direction (yellow).

NWS-2016-975  
Photo Point Map  
Sheet 1 of 4





Photo 1: Looking southeast from offsite maintenance road showing west portion of emergent Wetland A.

NWS-2016-975  
Photo Point 1  
Sheet 2 of 4





Photo 2: Looking south from offsite maintenance road showing water level adjacent to offsite portion of Wetland A.

NWS-2016-975  
Photo Point 2  
Sheet 3 of 4





Photo 3: Looking westerly from offsite maintenance road outlet drainage channel from Wetland A and shotgun culverts.

NWS-2016-975  
Photo Point 3  
Sheet 4 of 4