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

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 22 July 2008**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Seattle District –** Crown Point Development, NWS-2008-135-NO

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: WA County/parish/borough: Whatcom City: Ferndale
Center coordinates of site (lat/long in degree decimal format): Lat: 48º 51' 39.53", Long. 122º 24' 59.53"
Universal Transverse Mercator: Zone 10 N E
Name of nearest waterbody: Whiskey Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Nooksack River
Name of watershed or Hydrologic Unit Code (HUC): 17110004, Nooksack River
☒ 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.

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
☒ Office (Desk) Determination. Date: 23 April 2008
☒ Field Determination. Date(s): 1 February 2008 and 25 February 2008

## 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*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: .

**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):** [1]
☐ TNWs, including territorial seas
☐ Wetlands adjacent to TNWs
☐ Relatively permanent waters[2] (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: 1,160 linear feet: average 2' width (ft) and/or 0.05 acres.
Wetlands: 10 acres (1.85 on subject site, 8.15 off site)

**c. Limits (boundaries) of jurisdiction** based on:
Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):**[3]
☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

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[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] 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).
[3] Supporting documentation is presented in Section III.F.

## SECTION III: CWA ANALYSIS

### A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over 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):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under Rapanos have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). 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**.** Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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: Nooksack River (HUC 17110004) 795 **square miles**
Drainage area: 30 **acres**
Average annual rainfall: 34.8 inches
Average annual snowfall: 8.6 inches

**(ii) Physical Characteristics:**

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.
☒ Tributary flows through 1 tributaries before entering TNW.

Project waters are **1-2** river miles from TNW.
Project waters are **1 (or less)** river miles from RPW.
Project waters are **1 (or less)** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: Ditch system drains to Whiskey Creek, which flows into the Nooksack River, a designated navigable waterway (Section 10) used for interstate and foreign commerce
Tributary stream order, if known: 1.

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

**Tributary** is: ☐ Natural
☒ Artificial (man-made). Explain: Ditch system has replaced natural drainages in the area..
☐ Manipulated (man-altered). Explain:

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] 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.

**Tributary** properties with respect to top of bank (estimate):
Average width: 2-3 feet
Average depth: 3 feet
Average side slopes: **2:1.**

Primary tributary substrate composition (check all that apply):

| | | |
|---|---|---|
| ☒ Silts | ☒ Sands | ☐ Concrete |
| ☐ Cobbles | ☐ Gravel | ☐ Muck |
| ☐ Bedrock | ☒ Vegetation. Type/% cover: grass species, 65% | |
| ☐ Other. Explain: . | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable and vegetated.
Presence of run/riffle/pool complexes. Explain: none.
Tributary geometry: **Relatively straight**
Tributary gradient (approximate average slope): 3 %

(c) Flow:
Tributary provides for: **Seasonal flow**
Estimate average number of flow events in review area/year: **2-5**
Describe flow regime: intermittent and seasonal (responds to precipitation).
Other information on duration and volume: .

Surface flow is: **Confined.** Characteristics: See additional information below.

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

| | |
|---|---|
| ☒ clear, natural line impressed on the bank | ☐ the presence of litter and debris |
| ☐ changes in the character of soil | ☒ destruction of terrestrial vegetation |
| ☒ shelving | ☐ the presence of wrack line |
| ☒ vegetation matted down, bent, or absent | ☐ sediment sorting |
| ☐ leaf litter disturbed or washed away | ☐ scour |
| ☐ sediment deposition | ☐ multiple observed or predicted flow events |
| ☒ water staining | ☐ abrupt change in plant community |
| ☐ other (list): | |

☐ Discontinuous OHWM.[7] Explain: .

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

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

**(iii) Chemical Characteristics:**
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: Water is clear with moderate organic debris, general water quality is good, watershed has been extensively developed for commercial and residential uses, downstream waters of Whiskey Creek are not listed on the WA State 303(d) list.
Identify specific pollutants, if known: Herbicides, fertilizers, petrochemicals (road runoff0.

[6]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.
[7]Ibid.

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

☒ Riparian corridor. Characteristics (type, average width): shrub/herbaceous, 10-20 feet.
☒ Wetland fringe. Characteristics: PEM dominated by grass species.
☐ Habitat for:
- ☐ Federally Listed species. Explain findings: .
- ☐ Fish/spawn areas. Explain findings: .
- ☐ Other environmentally-sensitive species. Explain findings: .
- ☐ Aquatic/wildlife diversity. Explain findings: .

**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: 1.85 acres
Wetland type. Explain: PSS depressional (A); PFO depressional (B and C); PEM depressional (D)
Wetland quality. Explain: Wetland A, B, and C – Category III; Wetland D –Category IV.
Per Washington State wetland rating System (based on a scale of I to IV, I being the highest functioning)

.

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

(b) General Flow Relationship with Non-TNW:

Flow is: **Ephemeral flow**. Explain: Wetlands outflow into non-RPW during annual rain events.

Surface flow is**: Discrete and confined**
Characteristics: .

Subsurface flow: **Unknown**. Explain findings: .
☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting
☒ Not directly abutting
- ☒ Discrete wetland hydrologic connection. Explain: See additional information section.
- ☐ Ecological connection. Explain: .
- ☒ Separated by berm/barrier. Explain: Wetlands on subject site partially separated by fill placed on site to north..

(d) Proximity (Relationship) to TNW

Project wetlands are **1-2** river miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from TNW.
Flow is from: **Wetland to navigable waters.**
Estimate approximate location of wetland as within the **100 - 500-year** 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 flowing from wetlands is clear, general water quality is good, watershed has been extensively developed for commercial and residential uses, downstream waters of Whiskey Creek are not on the WA State 303(d) list.

Identify specific pollutants, if known: herbicides, fertilizers.

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

☒ Riparian buffer. Characteristics (type, average width): Emergent (herbaceous), 10-20 feet.
☐ Vegetation type/percent cover. Explain: Emergent (grass species) 45% cover; scrub shrub 55% cover.
☐ 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: **6**
Approximately 10 acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

| Wetland | Directly abuts? (Y/N) | Size (in acres) |
|---|---|---|
| A | N | 0.18 |
| B | N | 0.03 |
| C | N | 1.58 |
| D | Y | 0.06 |
| Parcel A wetlands | Y | 1.50* |
| Parcel B wetlands | Y | 4.80* |

*Approximate acreage

Summarize overall biological, chemical and physical functions being performed: see Section C below for summary.

**C. SIGNIFICANT NEXUS DETERMINATION**

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:**

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

**Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:**

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:

4. Subject wetlands have a significant nexus to downstream TNW.
   Subject reach includes the on site drainage paths from wetlands A-D and the off-site conveyance to Whiskey Creek. Water from on-site wetlands and contiguous wetlands on properties to the north (Parcels A and B) flows into an unnamed tributary (ditch system) of Whiskey Creek, which flows into the Nooksack River, a designated navigable waterway. Whiskey Creek, a perennial waterbody, is approximately 0.30 miles downstream from the subject site. The Nooksack River is approximately 1.9 miles downstream from the subject site.

   Watershed has been extensively developed for commercial and residential uses, downstream waters of Whiskey Creek receive stormwater and urban runoff from an 870 acre basin. Essential Fish Habitat for Pacific Salmon (designated under the Magnuson-Stevens Fishery Conservation and Management Act) extends from the TNW (Nooksack River) upstream into Whiskey Creek. Fish species listed under the Endangered Species Act utilize the waters of the Nooksack; designated critical habitat for chinook salmon and bull trout exists in the Nooksack River.

   Associated wetland functions are minimal to moderate wildlife habitat and habitat diversity, moderate enhanced food web support, moderate floodwater storage/attenuation, and moderate sediment input reduction and toxin removal.

The wetlands create and transfer organic carbon which supports the downstream food web of the TNW. Wetlands improve downstream water quality in TNW through sediment and toxin interception. The lengthy vegetated tributary/wetland complexes have the capacity to capture pollutants (road runoff petrochemicals, herbicides, pesticides and sediments) to reduce the amount of pollutants, sediments or flood waters from reaching the TNW. Wetlands attenuates downstream flooding by reducing peak flow in the watershed during major storm events and attenuates erosion by detaining high flows during storms and reduce the duration of erosive flows, thus decreasing downstream erosion in streams.

**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 seasonally: .
   ☐ 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: Tributaries identified as having continuous flow for 3-6 months. See additional information for details.

   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: .

3. **Non-RPWs[8] 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: **1,160 linear feet: average 2' width (ft) and/or 0.05 acres**
   ☐ 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.

   ☐ 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:

   Provide acreage estimates for jurisdictional wetlands in the review area: **8.6** 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.

   Provide acreage estimates for jurisdictional wetlands in the review area: **10** acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
   ☐ 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.[9]**
   As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
   ☐ Demonstrate that impoundment was created from "waters of the U.S.," or

[8]See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

☐ 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):[10]**

☐ 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: 0.71 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: Wetland delineation report dated May 2006.
☒ 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: Ferndale Quad
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☒ State/Local wetland inventory map(s): WA State Department of Ecology, 2001
☐ FEMA/FIRM maps: .

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**[10] 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.***

☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): WA State Department of Ecology, 2005; City of Bellingham, 2004.
or ☐ Other (Name & Date): .
☐ 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:**

**Dates of Site Visits**: 1 February 2008 and 25 February 2008
**Investigator(s):** Randel Perry
Mr. Jim Wiggins (ATSI – wetland consultant) was also on site at the time of the visits.

1. **Site Description and Significant Resources in the area:** The subject property is a 10 acre parcel adjacent to, and immediately east of, Portal Way in the City of Ferndale. Parcel was previously developed for residential use. The review property is a rectangular shaped parcel trending east-west and sloping generally north-northeast. Wetland delineation dated May 21, 2007 identified 4 wetlands on the subject property. The property has had significant amounts of vegetation removed; old houses were demolished and some refuse piles remain. The surrounding vicinity is moderately developed for commercial, residential, and agricultural uses. Property to the north has been developed for commercial use and areas that appear to be continuation of wetlands on the subject site have had fill placed in them along the boundary between the two properties.

2. **Project Purpose and Description:** Fill/grade associated with commercial development.

3. **Physical / Chemical Characteristics:**
   a. Streamflow c.f.s.:
   b. Salinity: NA
   c. Soils: Edmonds-Woodlyn loam – 0-2% slopes (hydric).
      Lynden sandy loam 0-3% slope (non-hydric w/ hydric inclusions)
      Tromp loam - 0-2% slopes (non-hydric w/ hydric inclusions)
      Wetlands - 0”-12” - 10YR 2/1 silt loam
      Below 12” 10YR 3/2 loam w/ 10YR 4/6 mottles
      Uplands – 10YR 3/2 silt loam
   d. Hydrology: Saturation at shallow depth and signs of inundation at center of wetlands.

4. **Biological Characteristics:**
   a. Percentage of dominant vegetation FAC or wetter: 95% in wetlands
   b. Vegetation species list:

<u>Wetland A</u>
Sitka willow (Salix sitchensis), FACW
Reed canarygrass (*Phalaris arundinacea*), FACW
Creeping buttercuo (Ranunculus reperns), FACW

<u>Wetlands B and C</u>
Reed canarygrass (*Phalaris arundinacea*), FACW
Black cottonwood (*Populus balsamifera*), FAC
Quaking aspen (*Populus tremuloides*), FAC
Paper birch (*Betula papyrifera*), FAC
Red alder (*Alnus rubra*), FAC
Black twinberry (*Lonicera involucrate*), FAC+
Hardhack (*Spirea douglasii*), FACW

<u>Wetland D</u>
Reed canarygrass (*Phalaris arundinacea*), FACW
Soft rush (*Juncus effusus*), FACW+

<u>Uplands</u>
Canadian thistle (*Cirsium arvense*), FACU+
Reed canarygrass (*Phalaris arundinacea*), FACW
Red alder (Alnus rubra), FAC

Vine maple (Acer circinatum), FAC
Red elderberry (Sambucus racemosa), FACU
Himalayan blackberry (*Rubus discolor*), FACU
Orchard grass (*Dactylis glomerata*), FACU

c. Fauna: bird presence.
d. NWI Classification, associations/communities: PFO/PSS/PEM

**5. Lateral Extent of Jurisdiction:**

a. OHW, MHHW, MHW and datum: 3' average
b. Acreage of wetlands to be impacted: Approximately 0.34 acres
c. Total acreage of wetlands/waters on site: 1.85 acres of wetlands (some continue offsite)

**Additional information:** Corps personnel walked around the identified boundaries of all wetlands and followed the apparent flow paths offsite. The flagged wetland boundaries appear to accurately delineate the wetland edges. Wetlands have been disturbed by vegetation removal and equipment used to demolish houses.

Wetlands on the subject property appear to be part of a larger wetland complex that extends across properties to the north (Parcels A, B, and C) to Whiskey Creek. Development of Parcel C and the installation of Newkirk Road have separated the wetlands from direct connection to the creek. Wetlands on site and across Parcels A and B form a continuum that drains into a ditch along Newkirk Road and then water is conveyed via culvert and additional ditch channel to Whiskey creek.

**Areas are jurisdictional wetlands.** Wetlands A, B, C, and D are considered adjacent, per the definition found at 33 CFR 328.2(c), to non-relatively permanent waters that flow into Whiskey Creek, a tributary of the Nooksack River, a designated Section 10 navigable waterbody used for interstate and foreign commerce. These wetlands and drainages have a significant nexus to downstream traditional navigable waters and are jurisdictional waters of the U. S.