

September 28, 2006

Jamie Flynn  
Campus Crest Development  
963 13<sup>th</sup> Avenue East  
Seattle, Washington 98102

RECEIVED  
OCT 02 2006  
Huibregtse Louman  
Associates, Inc.

Re: Wetland Delineation Study

Dear Ms. Flynn:

On September 21, 2006, Watershed Company biologists completed a wetland delineation study along Mercer Creek at 2420 Airport Grove near Ellensburg in unincorporated Kittitas County. This letter summarizes the findings of this study and details applicable federal, state, and local wetland regulations. The following attachments are included:

- Delineation Sketch
- Wetland Photos
- Wetland Determination Data Forms

#### Methods

Wetlands were identified using methodology from the *Washington State Wetlands Identification and Delineation Manual* (Washington Department of Ecology 1997). Vegetation, soils, and hydrology were examined, and areas meeting the criteria set forth in the manual were determined to be wetland. Pink- and black-striped flagging was used to mark wetland boundaries, wetland data pits were marked with yellow- and black-striped flagging. The Ordinary High Water Mark (OHWM) of Mercer Creek on site was marked previously with orange flagging. Surveying was done by Huibregtse Louman Associates Consulting Engineers, Inc. The approximate locations of all delineated wetland boundaries and stream features are shown on the attached figure.

#### Findings

A single wetland associated with Mercer Creek was delineated; see map and photographs attached to this report. This wetland was identified as Wetland A. The features of this wetland area are described in the following sections.

#### Wetland A

Wetland A is situated in the northwest portion of the site, associated with the existing channels of Mercer Creek. The wetland is bounded by Airport Road on the west, Mercer Creek and grasslands on the east and south, with a small fringe of wetland on the east side of the stream. The wetland extends slightly off property to the north.

Vegetation in the wetland is dominated by large Pacific willows along the banks of Mercer Creek. There are also many Pacific willow and coyote willow seedlings throughout. Ground cover is primarily pasture grasses, soft rush, scouring rush, sedge, horsetail, buttercup, and yellow iris. Other plant species present in the wetland include black cottonwood, rose, and cedars and spruce near the on-site pond. Upland vegetation is dominated by grasses and weedy species such as thistle, dandelion, plantain, clover and other herbaceous species.

Soils in Wetland A were typically very dark gray (10YR 3/1), black (10YR 2/1), and very dark brown (10YR 2/2, 7.5Y 2.5/2) silty clay loam, mostly with heavy mottling. Wetland soils were damp or saturated at the time of observation. Soils beyond the delineated wetland boundary were mostly very dark grayish brown (10YR 3/2) and very dark brown (10YR 2/2) with few or no mottles.

This riparian wetland is hydrologically connected to Mercer Creek, which flows through the site from north to south. The stream splits into two channels, a roadside ditch along Airport Road on the west and a larger channel through an existing pond on the east. The stream exits the site through a concrete box culvert under Airport Road. There is also a grass-lined swale which carries overflow through Wetland A; see site map.

According to a letter from Brent Renfrow of Washington Department of Fish and Wildlife (WDFW) to Joanna Valencia, Kittitas County Staff Planner, dated 6/21/06, Mercer Creek is a distributary channel of Wilson Creek and should be presumed to have the same fish species as Wilson Creek. According to WDFW, mid-Columbia steelhead, a "threatened" species under the federal Endangered Species Act, may be present in the project area.

#### **Local Regulatory Implications**

Kittitas County regulates wetlands and streams through Title 17A/Critical Areas of the Kittitas County Code (KCC).

According to current regulations, wetland classes are determined according to a four-tiered system. Wetlands are considered extreme high value (Category I), high value (Category II), average value (Category III), or less than average value (Category IV), as determined by the planning manager (KCC 17A.04.010). Similarly, buffer width requirements are presented as ranges from a minimum of 20 feet to a maximum of 200 feet, depending on the wetland category and other considerations such as intensity of proposed land use; presence of threatened, endangered, or sensitive species; potential for erosion; and use of a buffer enhancement plan (KCC 17A.04.020). Buffers are measured from the edge of the delineated wetland. Wetland buffer averaging may be allowed when certain conditions are met (KCC 17A.04.030). In addition to wetland buffers, a building setback equal to the side yard setback requirement of the applicable zoning district is required from the edge of the wetland buffer. Minor intrusions may be allowed if they do not negatively impact the wetland (KCC 17A.04.050). On this site, it is likely that any required wetland buffer will be within, and superseded by, the stream buffer.

Streams are classified in Kittitas County according to the state five-tier typing system in WAC 222-16-030 (KCC 17A.02.300). According to WDFW (6/21/06 letter referenced above), Mercer Creek is considered a Type 3 stream. The KCC (17A.07.010) prescribes a buffer width range of 20 to 50 feet for Type 3 waters, as determined by the planning manager in consideration of criteria such as intensity of proposed land use; presence of threatened, endangered, or sensitive species; potential for erosion or channel instability; presence of multiple channels; use of a buffer enhancement plan; and width of the stream. Buffers are measured from the OHWM. Buffer averaging may be allowed when certain conditions are met (KCC 17A.07.010).

#### **State/Federal Regulatory Implications**

Work proposed within the OHWM of the stream would require a Hydraulic Project Approval (HPA) from Washington Department of Fish and Wildlife. As was indicated in the 6/21/06 WDFW letter referenced above, WDFW has generally recommended that buffers for fish-bearing streams be 100 to 150 feet wide using a "variable width" concept.

Streams and wetlands are also regulated by the U.S. Army Corps of Engineers (Corps), under Section 404 of the Clean Water Act. Any filling of Waters of the State, including the roadside stream channel and wetlands (except isolated wetlands), would require notification and permits from the Corps. Wetland A would not be considered isolated. Federally permitted actions that could affect threatened or endangered species may also require a Biological Evaluation and consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service. Application for Corps permits may also require an individual 401 Water Quality Certification and Coastal Zone Management Consistency determination from the Washington Department of Ecology. Generally, neither the Corps nor the Department of Ecology regulates wetland buffers.

Please note that the findings of this letter, including the wetland boundary locations, classifications, and determination of buffer widths, are subject to the verification and agreement of local, state, and federal regulatory authorities.

Please call if you have any questions or if we can provide additional information.

Sincerely,



Jennifer Creveling  
Professional Wetland Scientist  
Senior Wetland/Wildlife Biologist

Cc: Dennis Whitcher, Huibregtse Louman Associates Inc.

NO.	DATE	ISSUE
1	6/22/06	REVIEW SET
2	9/26/06	REVIEW SET

REMARKS/NOTES:  
**FIELD SKETCH ONLY.  
ALL LOCATIONS ARE  
APPROXIMATE ONLY.**

Project Manager: JC  
Designed:  
Drafted: GL  
Checked: JC  
File name:  
060526STREAM\_WETLAND\_DELI.DWG

JOB NUMBER:  
**060526**


SHEET NUMBER:  
**1 OF 1**


**WETLAND DELINEATION FIELD SKETCH**

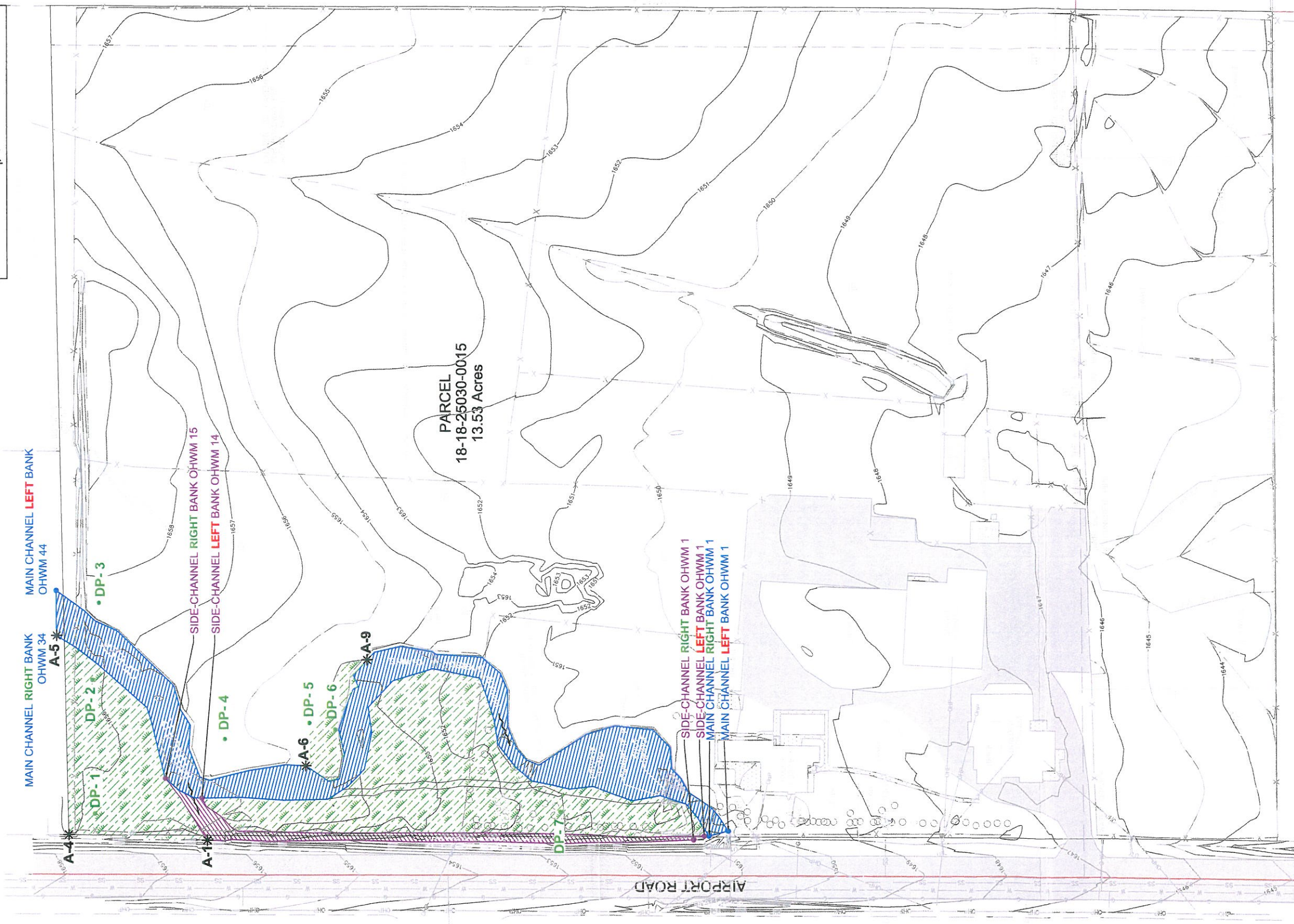
- DELINEATED WETLANDS SHOWN IN APPROXIMATE SHAPE, SIZE, AND LOCATION
- DATA POINTS SHOWN IN APPROXIMATE LOCATION

**STREAM ORDINARY HIGH WATER MARK (OHWM) DELINEATED ON-SITE WITH SOLID ORANGE FLAGGING, WETLAND WITH PINK/BLACK STIPED FLAGGING, AND DATAPPOINT WITH YELLOW/BLACK FLAGGING**

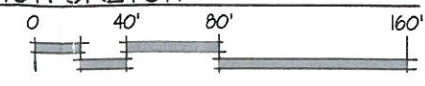
**LEGEND**

 APPROXIMATE WETLAND AREAS

 DP-# APPROXIMATE DATA POINT LOCATION



**STREAM & WETLAND DELINEATION SKETCH**  
SCALE: 1" = 80'-0"





Wetland A view from southwest.



Wetland A view from south.