

**Critical Areas Report**  
**for**  
**Ritchie Bros. Properties**  
**Auction Facility – Exit 68**  
**Lewis County, Washington**

*Prepared For:*

Ritchie Bros. Properties  
4000 Pine Lake Road  
Lincoln, Nebraska 68516  
(778) 331-5549

*Prepared By:*

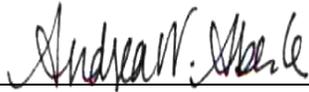
Ecological Land Services, Inc.  
1157 3<sup>rd</sup> Avenue, Suite 220  
Longview, WA 98632  
(360) 578-1371  
Project Number 1801.02

April 13, 2010

## **SIGNATURE PAGE**

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



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Andrea Aberle  
Senior Biologist



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## **INTRODUCTION**

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Ecological Land Services, Inc. (ELS) has been contracted by Ritchie Bros. Properties to complete a wetland delineation and critical areas report for a project site near Napavine in Lewis County, Washington (Figure 1). The site includes Lewis County Parcel Numbers:

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| 014859000000 | 014860001000 | 014860002000 | 014860012000 |
| 014860003000 | 014860004000 | 014860006000 | 014860007000 |
| 014860008000 | 014860011000 | 014860010000 | 014860009000 |
| 014872008001 | 014872008003 | 014872008004 | 014872008002 |

The site located in a portion of Section 1, Township 12 North, Range 2 West of the Willamette Meridian. This *Critical Areas Report* summarizes the findings of the site investigation completed between October and November 2009 according to the *Lewis County Code (LCC) Critical Areas, Chapter 17.35A*.

## **SITE DESCRIPTION**

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The project site is located near Napavine, Washington and is bordered to the east by Interstate 5, to the west by North Military Road, to the south by Avery Road West, and to the north by Koontz Road. The site consists of open fields used for hay production (south-central) and cattle grazing (north-central). A small portion of timber is located in the east-central portion of the site (Figure 2). Two gated gravel driveways provide current access to the site off North Military Road. The proposed new access is planned from Avery Road West into the site. Open agricultural fields, forested areas, and single-family residential homes are located west of the site. Twenty-one wetlands ranging from 44 square feet to 154,952 square feet were delineated on-site (Figure 2). Eleven of the on-site wetlands are considered exempt to *LCC* regulations due to size and/or low habitat function (Table 1). One stream and three agriculture ditches run through the site. No structures are currently located on site.

## **METHODS**

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This wetland delineation was performed by ELS following the Routine Determination Method according to the US Army Corps of Engineers *Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (2008), and the Washington State Department of Ecology's *Washington State Wetlands Identification and Delineation Manual* (1997). The Routine Determination Method examines three parameters – vegetation, hydrology, and soils – to determine if wetlands exist in a given area. Hydrology is critical in determining what is wetland but is often difficult to assess because hydrologic conditions can change periodically (hourly, daily, or seasonally). Consequently, it is necessary to determine if hydrophytic vegetation and hydric soils exist, which would indicate that water is present for a duration that is long enough to support a wetland plant community. By definition, wetlands are those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are regulated as “Waters of the United States” by the US Army Corps of Engineers (USACE), “Waters of the State” by the Washington Department of Ecology (WDOE), and locally by Lewis County's *LCC 17.35A*.

ELS evaluated the study area for wetlands in October 2009. Wetlands were flagged using consecutively numbered fluorescent flagging tape or pin flags. Boundaries were subsequently surveyed by Foresight Surveying, Inc. Vegetation, hydrology, and soil data were collected from twenty-eight test plots to verify boundaries of the wetlands (Appendix B).

## **VEGETATION**

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Dominant vegetation found in the study area is recorded on the attached routine on-site wetland determination forms (Appendix B). The indicator status, following the scientific names, indicates the likelihood of the species to be found in wetlands. Listed from most likely to least likely to be found in wetlands, the indicator status categories are:

- **OBL** (obligate wetland) - occur almost always (estimated probability >99%) under natural conditions in wetlands.
- **FACW** (facultative wetland) - usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands.
- **FAC** (facultative) - equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
- **FACU** (facultative upland) - usually occur in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%).
- **UPL** (obligate upland) - occur almost always (estimated probability >99%) under natural conditions in non-wetlands.
- **NI** (no indicator) - insufficient data to assign to an indicator category.

Dominant vegetation in the wetland test plots consists of common rush (*Juncus effusus*, FACW), bird's-foot trefoil (*Lotus corniculatus*, FAC), and slough sedge (*Carex obnupta*, OBL). Dominant vegetation in the upland test plots consists Kentucky bluegrass (*Poa pratensis*, FAC), tall fescue (*Schedonorus phoenix*, FAC), unidentified bentgrass species (*Agrostis* sp., FAC), white clover (*Trifolium repens*, FAC), hairy cat's ear (*Hypochaeris radicata*, FACU) and dandelion (*Taraxacum officinale*, FACU).

## **SOILS**

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The USDA Natural Resources Conservation Service (NRCS) *Soil Survey of Lewis County Area, Washington (1987)* maps Prather silty clay loam soil across the majority of the site. Prather silty clay loam (167) is generally found across 0 to 5 percent slopes and is a moderately well drained soil located on broad till plains and terraces. Lacamas silt loam (118) is mapped on the remaining portions of the site. This soil is generally found across 0 to 3 percent slopes and is a poorly drained soil located on broad plains, terraces, and bottom lands. Drainage of Lacamas soil is often altered by tiling. Both soils are listed as hydric on the NRCS *Hydric Soils List for Washington (2009)*.

## **HYDROLOGY**

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### *Wetlands*

The majority of the on-site wetlands are considered depressional, containing areas of saturation and seasonal ponding. Two wetlands (Wetlands A and U) are considered slope wetlands,

containing small depressions on-site providing area for seasonal ponding. Wetland A outlets offsite and south-southwest to the Olequa Creek watershed and Wetland U outlets offsite and north to the Stearns Creek Watershed. The onsite wetlands primarily receive hydrology from groundwater and are supplemented by runoff from surrounding uplands and precipitation. Wetlands J, Q, R, and S may receive seasonal overbank flooding from the nearby stream and are also supplemented by groundwater, runoff from surrounding uplands, and precipitation.

### *Drainage*

Drainage A is associated with Wetland A. The DNR currently maps a Type Ns stream within the central portion of Wetland A (as delineated by ELS). However, this water type designation (Type Ns) will be removed by DNR. After reviewing the onsite habitat, DNR and WDFW have determined that this drainage ditch does not have the characteristics required to meet the definition of a stream, (See Appendix D, DNR Water Type Modification Documentation). Hydrology is supplied to the Wetland A/Drainage A area primarily from a culvert under I-5. Sheet flow (east to west) within Wetland A/Drainage A was observed by ELS during a site visit after a high rainfall event in October 2009. Hydrology within Wetland A/Drainage A ultimately flows off site and southwest into the scrub-shrub portion of the Wetland A unit. From this off site portion of Wetland A, the drainage is directed west under Avery Road West (at the North Military Road intersection) continuing through the Olequa Creek watershed.

### *Stream*

One stream channel is located within the northern portion of the property and flows east to west. This stream flows onsite as a Type Ns stream and offsite as a Type F stream. A small barrier culvert (or break in the stream) is present near the eastern property line causing the water type to change from Type Ns to Type F. The Type F stream crosses the remaining width of the site before continuing west and off-site through a culvert under North Military Road. This stream is within the Stearns Creek watershed.

The applicant initially questioned the water type of the onsite stream due to the poor condition of the onsite habitat. The onsite stream habitat is not adequate to support fish. Years of cattle grazing and trampling in and around the stream have damaged it, widening it in some areas and causing the banks to erode. The stream was re-routed in the past for agricultural purposes, has eroded banks, mucky substrate and little to no vegetation present. A meeting with WDFW and DNR to discuss a water type modification for this stream February 3, 2010, determined that the stream channel does have the characteristics to meet the stream definition (See Appendix D).

### *Agriculture Ditches*

AG Ditch 2 is located just east of the western property line, running north-south and parallel with North Military Road. Hydrology within this agricultural ditch flows north where it merges with the Type F stream (near the livestock pond). Two small culverts convey the ditch hydrology under gravel access roads. AG Ditch 2 is within the Stearns Creek watershed.

AG Ditch 3 is located east and parallel to AG Ditch 2 within the central portion of the property. Hydrology within the AG Ditch 3 flows north, merging with the onsite stream. AG Ditch 3 is within the Stearns watershed.

AG Ditch 4 is currently mapped by the Department of Natural Resources (DNR) as a Type Ns (non-fish bearing seasonal) stream. The applicant questioned the mapping of the onsite stream due to the lack of a defined stream channel onsite. A defined channel is required to classify a drainage as stream habitat (*LCC Article IV (C) Wildlife Habitat, Chapter 17.35A.660 and LCC 17.35A.375 Stream Definition* and WAC (Washington Administrative Code) 222-16-030. AG Ditch 4 is not a naturally occurring drainage and is best defined as a shallow, man-made drainage swale excavated and utilized for agricultural purposes. Hydrology is supplied to AG Ditch 4 primarily from groundwater, runoff from surrounding uplands, and precipitation. AG Ditch 4 continues offsite to the south.

A meeting with DNR to discuss a water type modification for this area on February 3, 2010, determined that no defined stream channel is present. AG Ditch 4 does have the required characteristics to meet the definition of a stream and DNR has approved a water type modification for this mapped Type N stream. The Type N stream designation will subsequently be removed from DNR Forest Practice Base Maps. See Appendix D for water type modification request and approval documentation.

#### *Livestock Pond*

There is a livestock pond located in the northwest property corner. The pond was excavated adjacent to AG Ditch 1 and is utilized for ongoing livestock watering.

### **AQUIFER RECHARGE AREAS**

Lewis County has mapped its aquifer recharge areas in order to better protect the water quality of its critical aquifers. The aquifer recharge areas are categorized by *LCC 17.35A.840* as Category I – Severe Aquifer Sensitivity, Category II – Moderate Aquifer Sensitivity, and Category III – Slight Aquifer Sensitivity. The majority of the site (central portion) is mapped by Lewis County GIS as Category II – Moderate Aquifer Sensitivity. Moderate aquifer recharge areas are those areas with aquifers present, but which have a surface soil material that encourages run-off and slows water entry into the ground. The predominant soil series and soil types associated with aquifer recharge areas are listed in Table 1 - Aquifer Sensitivity Rating for Lewis County Soil Types, *LCC 17.35A.850*. The majority of the site consists of the Prather silty clay loam soil (hydric), which is listed by Table 1 as having a moderate aquifer sensitivity rating. The northern stream habitat corridor and the southern Wetland A habitat corridor are located within the Lacamas silt loam soil series (hydric), which is listed by Table 1 as having a Category III – Slight Aquifer Sensitivity rating (Figure 6). Category III – Slight Aquifer Sensitivity areas are those with low ground water availability and whose soil series are derived from basaltic, andesitic, or sedimentary rock or ancient glacial till, which are parent material for soils with more clay at the surface. These geological formations do not provide abundant ground water.

### **NATIONAL WETLAND INVENTORY**

The National Wetlands Inventory (NWI) Map indicates three palustrine, emergent, seasonally flooded wetlands (PEMC) and one palustrine, scrub-shrub seasonally flooded wetland (PSSC) within the study area (Figure 4). ELS identified wetlands within the general areas mapped by the NWI. In addition, ELS identified wetlands within areas not mapped by the NWI. A total of twenty-one wetlands were identified on site by ELS (Figure 2).

## CONCLUSIONS

### Wetlands

Twenty-one wetlands ranging from 44 square feet to 154,952 square feet were delineated on site. Eight of the on site wetlands (Wetlands B, D, L, M, N, O, P and T) are considered exempt to LCC regulations because the wetland square footage is 1,000 square feet or less (*LCC 17.35A.591(1)*). Three on site wetlands (Wetlands C, F and K) are also considered exempt by LCC. The square footage of Wetlands C, F and K is 2,500 square feet or less and they have habitat scores of 20 points or less on the WDOE Wetland Rating Form. The on-site wetlands considered exempt from the LCC regulations are still considered jurisdictional by state and federal agencies. Wetland buffers are regulated by the local jurisdiction (LCC). No wetland buffers are required for Wetlands B, C, D, F, K, L, M, N, O, P and T. See Table 1 below for wetland details.

**Table 1. Wetland Details**

| Name       | Category | Cowardin Class | HGM Class    | Size (square feet on site) | Required Buffer Width | Lewis County Jurisdiction |
|------------|----------|----------------|--------------|----------------------------|-----------------------|---------------------------|
| Wetland A* | III      | EM,SS          | Slope        | 154,952                    | 80 feet               | Yes                       |
| Wetland B  | (IV)     | EM             | Depressional | 282                        | N/A                   | Exempt^                   |
| Wetland C  | IV       | EM             | Depressional | 1,498                      | N/A                   | Exempt^^                  |
| Wetland D  | (IV)     | EM             | Depressional | 44                         | N/A                   | Exempt^                   |
| Wetland E  | IV       | EM             | Depressional | 14,778                     | 80 feet               | Yes                       |
| Wetland F  | (IV)     | EM             | Depressional | 211                        | N/A                   | Exempt^^                  |
| Wetland G  | IV       | EM             | Depressional | 4,523                      | 50 feet               | Yes                       |
| Wetland H  | III      | EM,SS          | Depressional | 7,897                      | 50 feet               | Yes                       |
| Wetland I  | III      | SS             | Depressional | 8,612                      | 80 feet               | Yes                       |
| Wetland J  | III      | EM,SS          | Depressional | 10,577                     | 80 feet               | Yes                       |
| Wetland K  | (IV)     | EM             | Depressional | 2,094                      | N/A                   | Exempt^^                  |
| Wetland L  | (IV)     | EM             | Depressional | 156                        | N/A                   | Exempt^                   |
| Wetland M  | (IV)     | EM             | Depressional | 264                        | N/A                   | Exempt^                   |
| Wetland N  | (IV)     | EM             | Depressional | 924                        | N/A                   | Exempt^                   |
| Wetland O  | (IV)     | EM             | Depressional | 255                        | N/A                   | Exempt^                   |
| Wetland P  | (IV)     | EM             | Depressional | 416                        | N/A                   | Exempt^                   |
| Wetland Q  | IV       | EM             | Depressional | 15,860                     | 80 feet               | Yes                       |
| Wetland R* | IV       | EM             | Depressional | 4,734                      | 50 feet               | Yes                       |
| Wetland S* | IV       | EM             | Depressional | 10,368                     | 50 feet               | Yes                       |
| Wetland T  | (IV)     | EM             | Depressional | 350                        | N/A                   | Exempt^                   |
| Wetland U* | IV       | EM, SS         | Slope        | 2,936                      | 50 feet               | Yes                       |

\*Wetland continues off site, ^Wetland is considered exempt by *LCC 17.35A.591(1)*, ^^Wetland is considered exempt by *LCC 07.35A.591(2)*.

### Wetland Categorization

Lewis County rates wetlands based on the WDOE *Western Washington Wetland Rating Form* according to *LCC 17.35A.580(1)*. Based on the *Wetland Rating Form*, the onsite wetlands are considered Category III and Category IV wetlands (Table 1). The majority of the onsite wetlands contain solely emergent vegetation. Wetlands A, H, I, J and U contain emergent and

scrub-shrub vegetation. Wetlands A, R, S and U continue off site (Figure 2). The onsite wetlands scored low overall for water quality, hydrologic and habitat functions. See attached Wetland Rating Forms, Appendix C.

#### *Wetland Buffers*

Lewis County established buffers according to level of habitat function determined on the WDOE *wetland rating form* and land use intensity according to *LCC 17.35A.610*. Based on *LCC 17.35A.610(1)(a)* wetlands that have a low level of function for wildlife habitat as indicated by a habitat function score of less than 20 points on the wetland rating form) and a high land use intensity (due to industrial use proposed), the Category IV wetlands on site will require a 50-foot buffer. The Category III wetlands on site will require an 80-foot buffer. The exempt wetlands under *LCC* will not require a buffer (Table 1). Wetlands are still considered jurisdictional by state and federal agencies. These state and federal agencies do not regulate wetland buffers. Wetland permitting and mitigation is required by the USACE and WDOE for wetland fill if proposed onsite at a later date.

#### *Drainage*

Drainage A is associated with Wetland A. A defined channel is not present within Drainage A (onsite). A defined channel is required to classify the presence of stream habitat. Therefore, no additional buffers above that of the required wetland buffer (80-feet) are warranted for Drainage A. The area is best defined as a wetland swale.

#### *Stream*

One stream is located in the northern portion of the site and consists of two classifications (Type F and Type Ns) with the division in classification due to a stream barrier culvert near the eastern property line. This stream barrier culvert divides or breaks the water type classification because it is impassable to fish. DNR and WDFW have confirmed the onsite stream classifications, See Appendix D.

#### *Stream Buffer*

The required buffer for the onsite stream is 100-feet for the Type F portion and 80 feet for the Type Ns portion, per the *LCC* and as depicted on Figure 2.

#### *Agriculture Ditches*

The on-site ditches (AG Ditches 2, 3, and 4) were excavated for agriculture use are not regulated by the *LCC* and are therefore exempt from buffer requirements. The *LCC* does not have a specific exemption for agriculture ditches. *LCC* does specify however, that agriculture ditches are exempt from stream regulations. *LCC 17.35A.375* explains that watercourses that “*were created entirely by artificial means, such as irrigation ditches, canals, roadside ditches...*” are not regulated by *LCC*.

#### *Livestock Pond*

The livestock pond is not regulated by the *LCC* because it is not meet the definition of aquatic habitat under *LCC 17.35A.651*. The livestock pond was artificially created, from uplands and is therefore not considered a water of the state.

**Table 2. Stream, Agricultural Ditches and Drainage Details**

| Name                  | Current DNR Mapped Classification | New DNR Classification         | Required Buffer          |
|-----------------------|-----------------------------------|--------------------------------|--------------------------|
| Type F Stream         | Type F Stream                     | Type F Stream                  | 100 feet                 |
| Type Ns Stream        | Type Ns Stream                    | Type Ns Stream                 | 80 feet                  |
| Drainage A*           | Type Ns^                          | Drainage assoc. with Wetland A | 80 feet (Wetland Buffer) |
| Agricultural Ditch 2  | N/A                               | Excavated AG Ditch             | N/A                      |
| Agricultural Ditch 3  | N/A                               | Excavated AG Ditch             | N/A                      |
| Agricultural Ditch 4* | Type Ns^                          | Excavated AG Ditch             | N/A                      |
| Livestock Pond        | N/A                               | Excavated livestock pond       | N/A                      |

\*continues off site.

^This DNR stream classification will be removed per a determination made by DNR onsite February 3, 2010 and per the subsequent approval of the submitted Water Type Modification (reference number PC26100007 dated 2-13-10), See Appendix D.

## **LIMITATIONS**

ELS bases the above listed determinations and conclusions on standard scientific methodology and best professional judgment. In our opinion, the conclusions should agree with local, state, and federal regulatory agencies. However, this should be considered a preliminary jurisdictional determination and should be used at your own risk until it has been reviewed and approved in writing by the appropriate regulatory agencies.

## **REFERENCES**

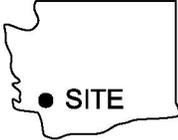
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## **Appendix A**

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Figures

WASHINGTON



46° 33' 27" N Latitude  
122° 52' 47" W Longitude

LOCATION MAP

R 2 W

|    |    |  |  |  |    |
|----|----|--|--|--|----|
|    | 6  |  |  |  | 1  |
|    |    |  |  |  |    |
| T  |    |  |  |  |    |
| 12 |    |  |  |  |    |
| N  |    |  |  |  |    |
|    |    |  |  |  |    |
|    | 31 |  |  |  | 36 |

NOTE:

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

PROJECT VICINITY MAP

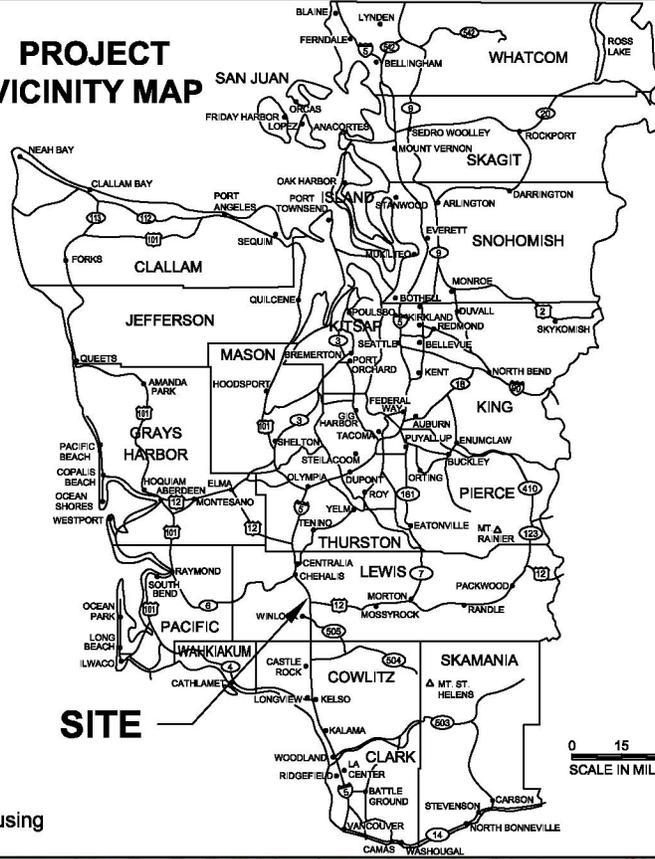


Figure 1

VICINITY MAP  
Exit 68 Facility

Ritchie Bros. Properties  
Lewis County, Washington  
Section 1, Township 12N, Range 2W, W.M.

DATE: 6/9/10

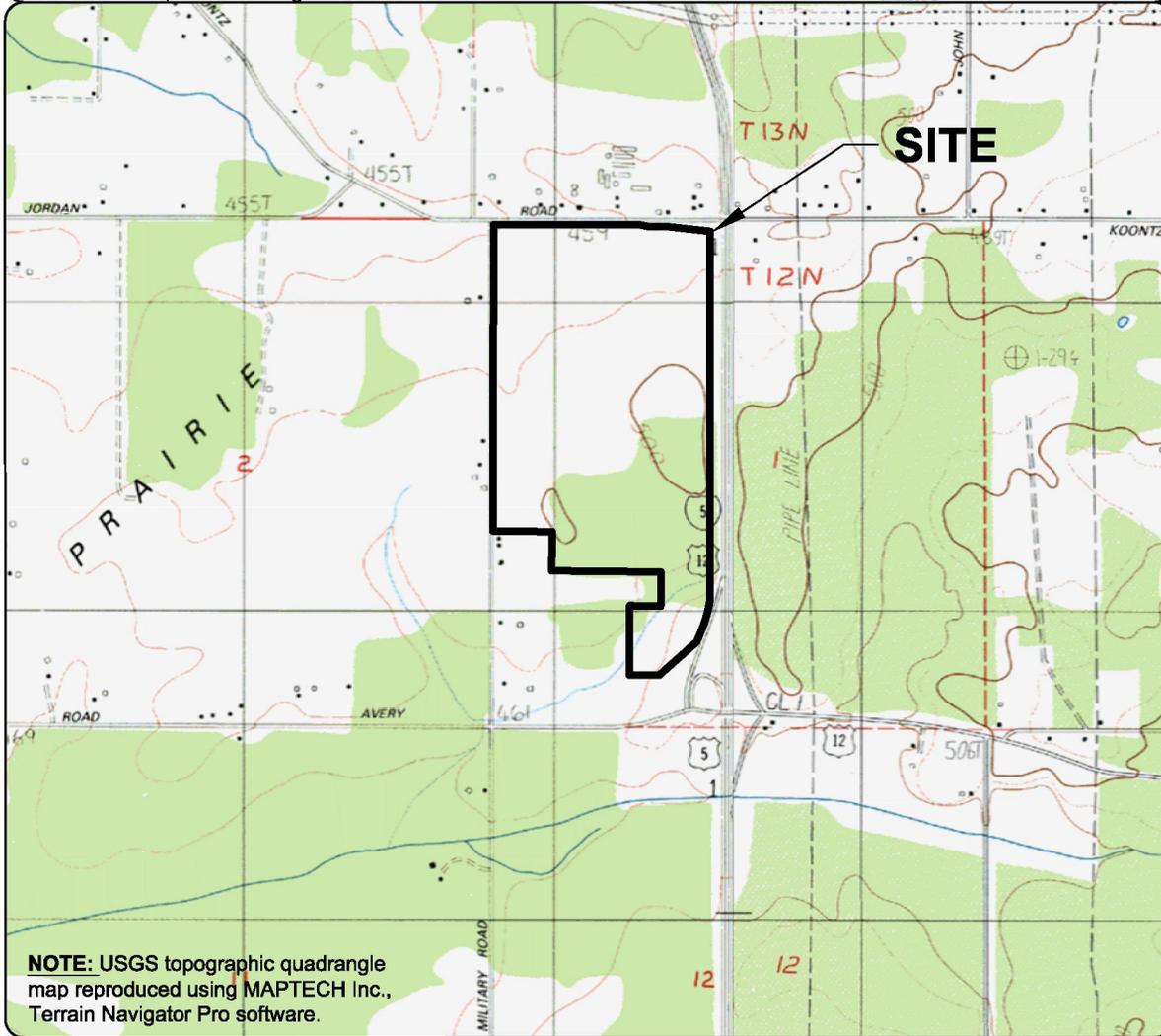
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REQ. BY: TH

PRJ. MGR: TH

CHK:

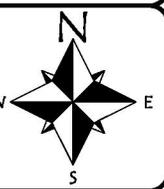
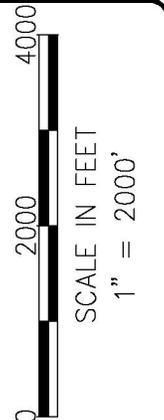
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1801.02

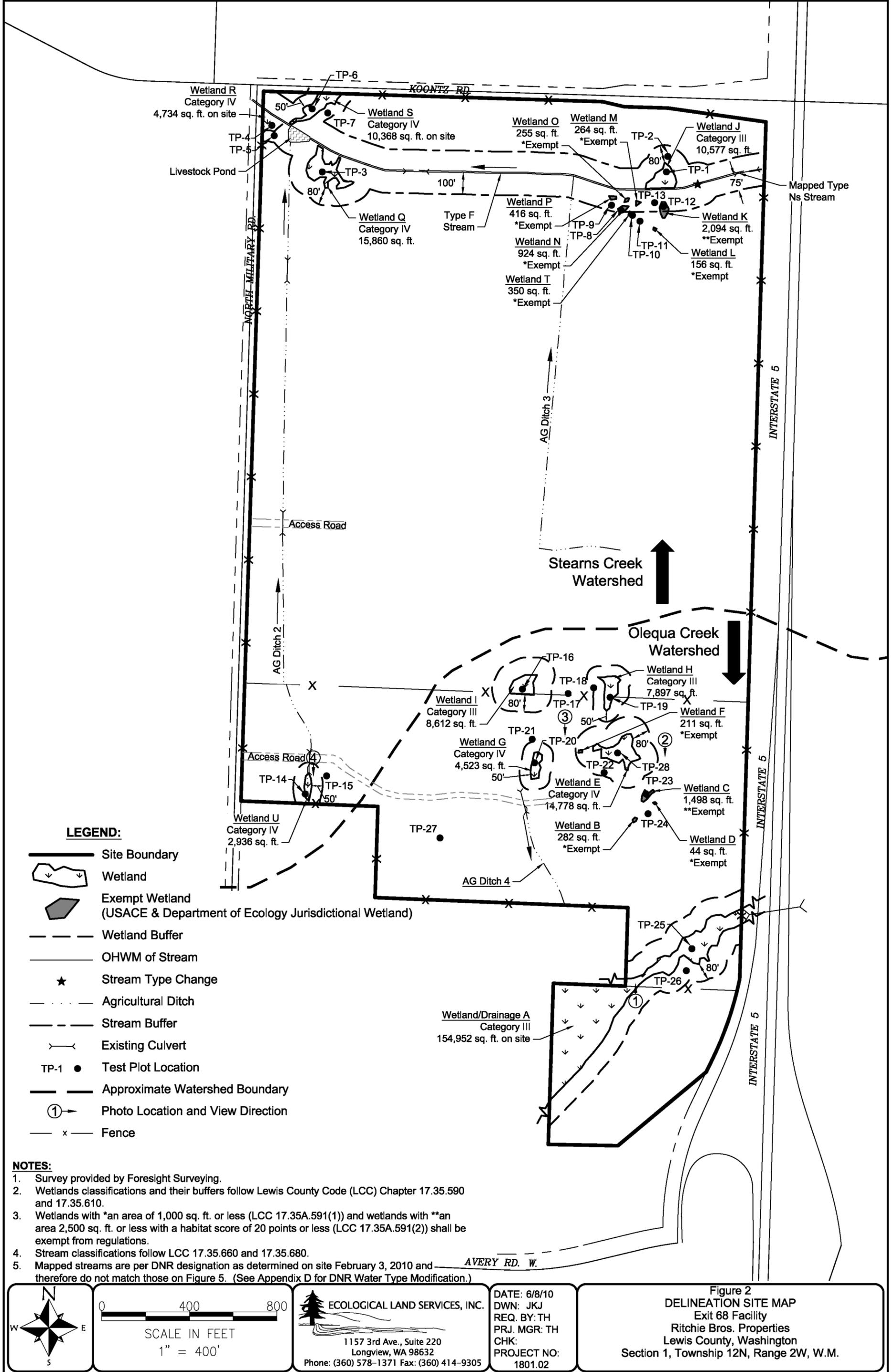


NOTE: USGS topographic quadrangle map reproduced using MAPTECH Inc., Terrain Navigator Pro software.

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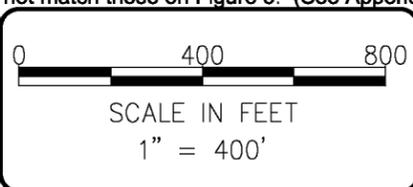


**LEGEND:**

- Site Boundary
- Wetland
- Exempt Wetland (USACE & Department of Ecology Jurisdictional Wetland)
- Wetland Buffer
- OHWM of Stream
- Stream Type Change
- Agricultural Ditch
- Stream Buffer
- Existing Culvert
- Test Plot Location
- Approximate Watershed Boundary
- Photo Location and View Direction
- Fence

**NOTES:**

1. Survey provided by Foresight Surveying.
2. Wetlands classifications and their buffers follow Lewis County Code (LCC) Chapter 17.35.590 and 17.35.610.
3. Wetlands with \*an area of 1,000 sq. ft. or less (LCC 17.35A.591(1)) and wetlands with \*\*an area 2,500 sq. ft. or less with a habitat score of 20 points or less (LCC 17.35A.591(2)) shall be exempt from regulations.
4. Stream classifications follow LCC 17.35.660 and 17.35.680.
5. Mapped streams are per DNR designation as determined on site February 3, 2010 and therefore do not match those on Figure 5. (See Appendix D for DNR Water Type Modification.)



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 CHK:  
 PROJECT NO:  
 1801.02

**Figure 2  
 DELINEATION SITE MAP**  
 Exit 68 Facility  
 Ritchie Bros. Properties  
 Lewis County, Washington  
 Section 1, Township 12N, Range 2W, W.M.



**LEGEND:**

- 118** Lacamas silt loam, 0 to 3 percent slopes. **Hydric.**
- 167** Prather silty clay loam, 0 to 5 percent slopes. **Hydric.**

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



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**Figure 3**  
**SOIL SURVEY MAP**  
 Exit 68 Facility  
 Ritchie Bros. Properties  
 Lewis County, Washington  
 Section 1, Township 12N, Range 2W, W.M.



**LEGEND:**

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland

- PEMC** Palustrine, emergent, seasonally flooded.
- PSSC** Palustrine, scrub-shrub, seasonally flooded.

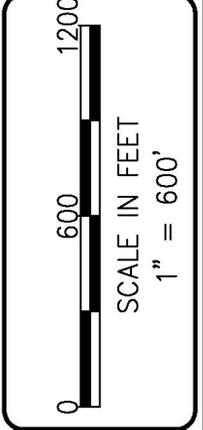
**NOTES:**

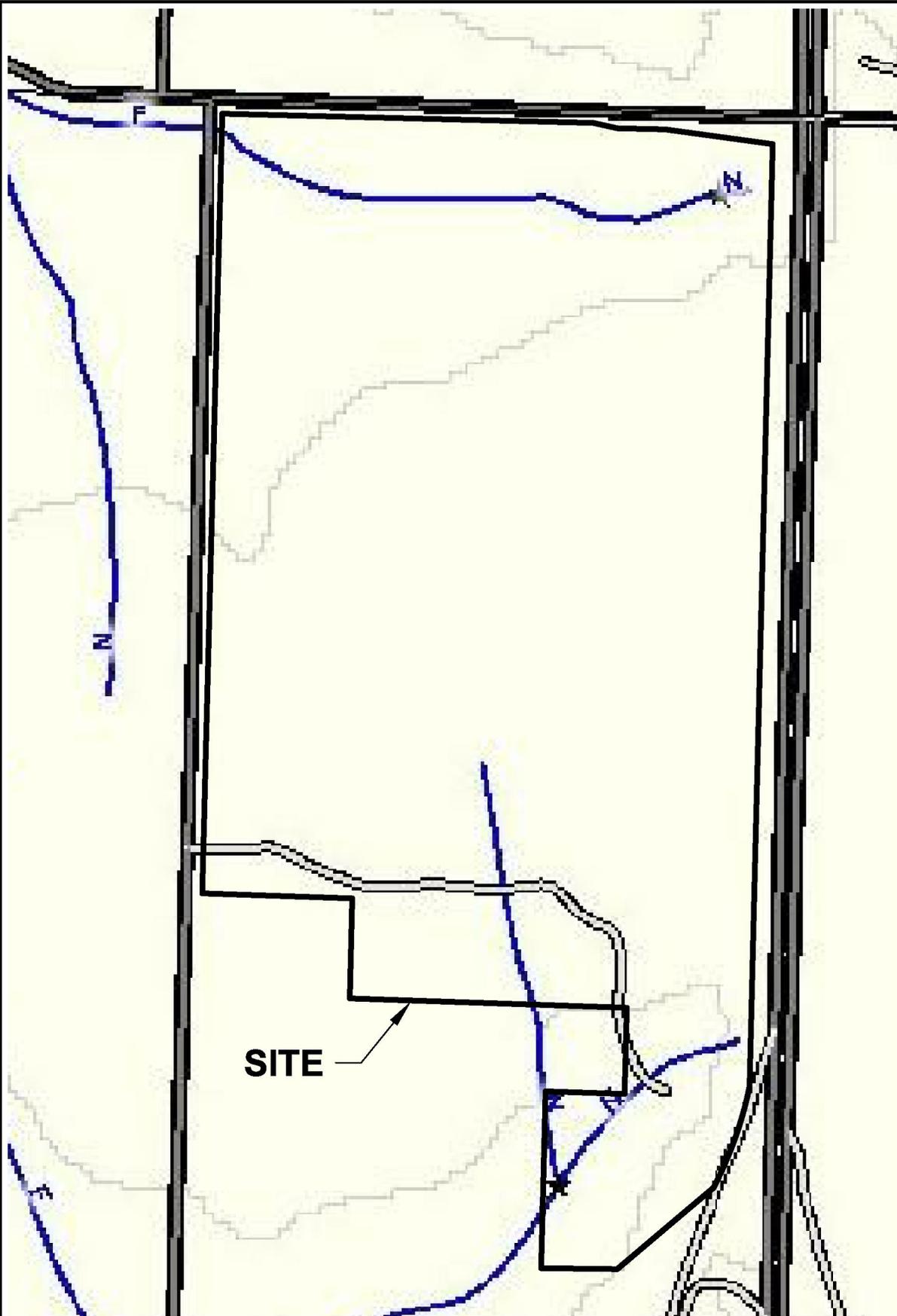
1. Map provided on-line by US Fish & Wildlife Service at web address: <http://www.fws.gov/wetlands/data/index.html>
2. 2006 aerial photo provided by Google Earth™.

Figure 4  
**NATIONAL WETLANDS INVENTORY MAP**  
 Exit 68 Facility  
 Ritchie Bros. Properties  
 Lewis County, Washington  
 Section 1, Township 12N, Range 2W, W.M.

DATE: 6/9/10  
 DWN: JKJ  
 REQ. BY: TH  
 PRJ. MGR: TH  
 CHK:  
 PROJECT NO: 1801.02

**ECOLOGICAL LAND SERVICES, INC.**  
  
 1157 3rd Ave., Suite 220  
 Longview, WA 98632  
 Phone: (360) 578-1371 Fax: (360) 414-9305

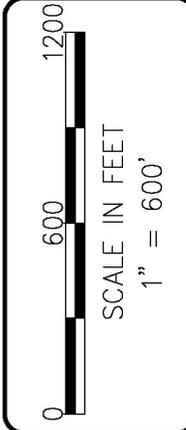
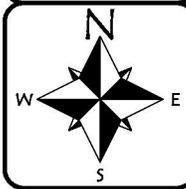




**NOTE:** Map provided on-line by Washington State Department of Natural Resources at web address: <http://fortress.wa.gov/dnr/app1/Fpars/viewer.htm>

**LEGEND:**

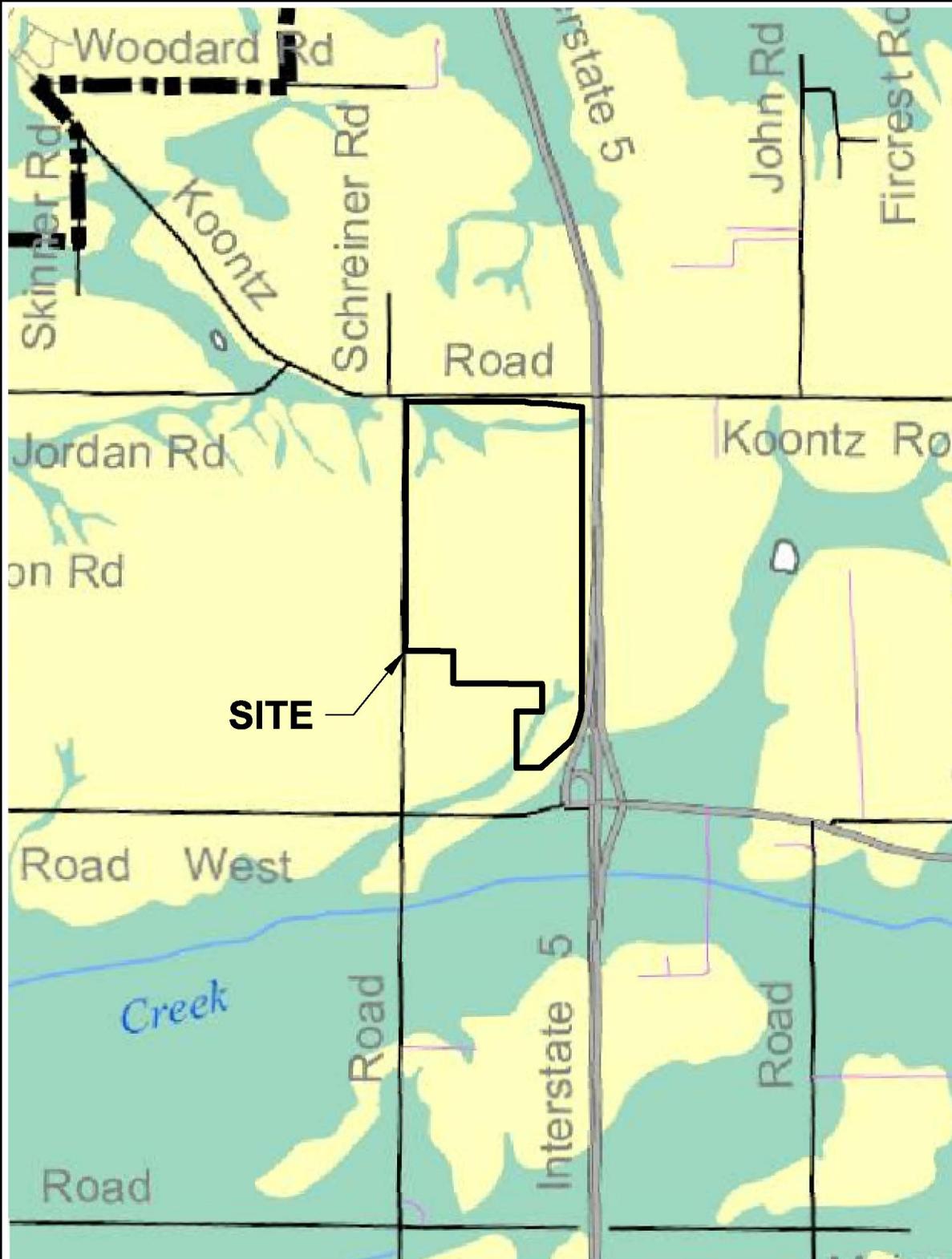
-  Stream Water Type S, F, N
-  Water Type Change



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**Figure 5**  
**DNR STREAM TYPE MAP**  
 Exit 68 Facility  
 Ritchie Bros. Properties  
 Lewis County, Washington  
 Section 1, Township 12N, Range 2W, W.M.



**LEGEND:**

- II - Moderate Aquifer Sensitivity
- III - Slight Aquifer Sensitivity

**NOTE:** Map provided on-line by Washington State Department of Natural Resources at web address: <http://fortress.wa.gov/dnr/app1/Fpars/viewer.htm>

**Figure 6**  
**AQUIFER RECHARGE AREAS**  
 Exit 68 Facility  
 Ritchie Bros. Properties  
 Lewis County, Washington  
 Section 1, Township 12N, Range 2W, W.M.

DATE: 6/9/10  
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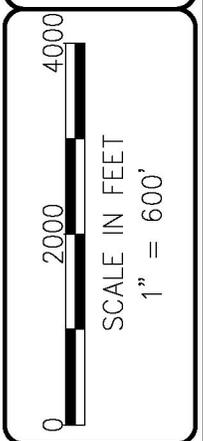




Photo 1  
View of Wetland A.



Photo 2  
View of south-central wetlands.

Photoplate 1  
SITE PHOTOS  
Exit 68 Facility  
Ritchie Bros. Properties  
Lewis County, Washington  
Section 1, Township 12N, Range 2W, W.M.

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NOT TO SCALE



**Photo 3**  
View of south central wetlands.



**Photo 4**  
View of Wetland U.

Photoplate 2  
SITE PHOTOS  
Exit 68 Facility  
Ritchie Bros. Properties  
Lewis County, Washington  
Section 1, Township 12N, Range 2W, W.M.

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