



**State of Washington
DEPARTMENT OF FISH AND WILDLIFE**

Mailing Address: 600 Capitol Way N, Olympia, Washington 98501-1091 - (360) 902-2200

**ENVIRONMENTAL CHECKLIST
(WAC 197-11-960)**

A. BACKGROUND

- 1. Name of proposed project, if applicable:** Crescent Lake Culvert Replacement
- 2. Name of Applicant:** Washington Department of Fish and Wildlife
- 3. Address and phone number of applicant and contact person:**

Washington Dept of Fish and Wildlife
Capitol Programs & Engineering Division
600 Capitol Way North
Olympia, WA 98501-1091

Contact Person: Marty Peoples
Fish and Wildlife Biologist
Telephone Number: (360) 902-8426
Fax Number: (360) 902-8367
E-Mail: peoplmdp@dfw.wa.gov

- 4. Date checklist prepared:** January 26, 2010
- 5. Agency requesting checklist:** Washington Department of Fish and Wildlife.
- 6. Proposed timing or schedule (including phasing, if applicable):**
Summer 2010.
- 7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**
No.
- 8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal:**
None known.
- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**
None are pending.
- 10. List any government approvals or permits that will be needed for your proposal, if known.**

A Snohomish County Shoreline Exemption Permit and WDFW HPA, and Army CORP permit will be

needed.

- 11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.**

This project will improve and restore fish passage in Crescent Lake by modifying two road crossings used to access the Crescent Lake Wildlife Area. The first crossing (Site 1) will have a potentially impassable 36 inch culvert removed and replaced with a 20 foot arch culvert that is fish passable. At Site 2, the road crossing built through Crescent Lake will be decommissioned to allow unobstructed water flow across this site. Decommissioning will involve removing a 150 foot portion of the road bed and also an existing culvert to bring the elevation down to a point low enough to allow water to flow freely across and restore wetland functions.

- 12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The proposed project site is within the Snoqualmie Wildlife Area, Crescent Lake Unit. The site is reached by turning south off of the Highway 2 at Monroe and proceeding through town on Highway 203 for approximately 3.3 miles before turning onto 203rd Street. Proceed on 203rd approximately .5 miles to the end of the road where it meets Crescent Lake Road. Site 1 is approximately .5 miles to the right, and site 2 is .2 mile to the left. This project is located in Snohomish County, Section 23, Township 27 North, Range 6 East.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (underline one): flat, rolling, hilly, steep slopes, mountainous, other _____.**

- b. What is the steepest slope on the site (approximate percent slope)?**

10% slope.

- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of the agricultural soils, specify them and note any prime farmland.**

Soils in the vicinity are classified as Puget silty clay loam.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.** No.

- e. Describe the purpose, type and approximate quantities of any filling or grading proposed. Indicate source of fill.**

Site 1 will have cut and fill involved in excavating for the larger culvert and seating it. There will be a net cut of 308 cubic yards. Site 2 will have 530 cubic yards of old road bed material cut. There will be no fill placed at Site 2.

- f. **Could erosion occur as a result of clearing, construction or use? If so generally describe.**

Yes, culvert replacement activities will temporarily disturb road surfaces.

- g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

There will be no increase in impervious surfaces at Site 1 and 2.

- h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

Erosion impacts will be reduced by placing a sediment barrier around the construction sites to isolate the disturbed area from surface waters.

2. Air

- a. **What type of emissions to the air would result from the proposal (i.e., dust automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

Low levels of vehicle exhaust emissions and dust from construction activities are expected during project activities. No long-term effects in air quality are anticipated to result from the completed project.

- b. **Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.** No.

- c. **Proposed measures to reduce or control emissions or other impacts to air, if any:** None.

3. WATER

a. Surface

- 1) **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes ponds or wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

Crescent Lake is in the project site. Crescent Lake is connected to the Snoqualmie River.

- 2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

Yes, all components are directly adjacent to Crescent Lake (see attached plans).

- 3) **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

Site 1 will have 12,165 cubic yards of cut and 11,857 cubic yards of fill for a net of 308 cut material. Most of this cut and fill material will actually occur in the roadway area crossing through Crescent Lake. Site 2 will have 530 cubic yards of material cut from the roadway crossing Crescent Lake.

- 4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes, the entire site is within the 100-year floodplain.

- 6) Does the proposal involve any discharges of waste material to surface waters? If so, describe the type of waste and anticipated volume of discharge. No.

b. Ground

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description purpose, and approximate quantities, if known. No.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Stormwater in the area sheet flows from impervious road surfaces onto adjacent farmland and is infiltrated before reaching surface waters. This project will not change storm water runoff patterns.

- 2) Could waste materials enter ground or surface waters? If so, generally describe. No.

d. Proposed measures to reduce or control surface, ground and runoff water impacts, if any:

None.

4. PLANTS

a. Check or underline types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other; Sitka spruce

shrubs

grass

pasture

crop or grain

wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

x water plants: waterlily, eelgrass, milfoil, other

 other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

At Site 1, approximately 10 shrubs will be removed. These shrubs primarily consist of red osier dogwood. At Site 2, four red alder trees and two large black cottonwood trees will be removed.

c. List threatened and endangered species [of plants] known to be on or near the site.

None.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Disturbed ground above ordinary high water will be planted with cuttings taken from on-site, including cottonwood, willow, and red osier dogwood.

5. ANIMALS

a. Underline any birds or animals, which have been observed on or near the site or are known to be on or near the site:

Birds: hawk, heron, eagle, songbirds, other: waterfowl.

Mammals: deer, bear, elk, beaver, other:

Fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

Endangered species are known to occur near this site in the Snoqualmie River. These include Puget Sound Chinook, Puget Sound Steelhead and Bull Trout.

c. Is the site part of a migration route? If so, explain.

Juvenile Coho salmon most likely utilize Crescent Lake as overwinter rearing habitat.

d. Proposed measures to preserve and enhance wildlife, if any:

This work will restore and enhance fish passage and benefit wetland associated species by creation of additional wetland.

6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. None.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: None.

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill or hazardous waste that could occur as a result of this proposal. No.

1) Describe special emergency services that might be required. None.

2) Proposed measures to reduce or control environmental health hazards, if any: None.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? None.

3) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Temporary increases in noise levels during construction activities are expected from this project. Hours of increased noise will be 8 am to 5 pm. No long term change in noise levels is expected from the completed project.

3) Proposed measures to reduce or control noise impacts, if any: None.

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties?

This site is used as a wildlife area to provide public access and protect valuable wildlife habitat.

b. Has the site been used for agriculture? If so describe?

Yes, portions of the wildlife area are farmed to provide cover and food for waterfowl species.

c. Describe any structures on the site.

Structures on this site include two gates, a vault toilet and small parking area.

d. Will any structures be demolished? If so what? No.

e. What is the current zoning classification of the site? Ag-10.

f. What is the current comprehensive plan designation of the site?

Rural.

g. If applicable, what is the current shoreline master program designation of the site?

Rural.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

No persons would reside here. Two wildlife area staff members work here on a limited basis.

- j. **Approximately how many people would the completed project displace?** None.
- k. **Proposed measures to avoid or reduce displacement impacts, if any:** None.
- l. **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**

Proposed culvert replacement and road decommissioning will enhance this area for wildlife which is its intended purpose.

9. HOUSING

- a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.** None.
- b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.** None.
- c. **Proposed measures to reduce or control housing impacts, if any:** None.

10. AESTHETICS

- a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

Proposed repairs would not extend above ground level. Dirt, rock and an aluminum culvert would be the principle building materials.

- b. **What views in the immediate vicinity would be altered or obstructed?** None.
- c. **Proposed measures to reduce or control aesthetic impacts, if any:** None.

11. LIGHT AND GLARE

- a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

The repair may produce minimal glare. The aluminum pipe will be seated low enough to be covered with water during most periods. Occasionally the top will be exposed causing minor glare.

- b. **Could light or glare from the finished project be a safety hazard or interfere with views?** No.
- c. **What existing off-site sources of light or glare may affect your proposal?** None.
- d. **Proposed measures to reduce or control light and glare impacts, if any:** None.

12. RECREATION

- a. **What designated and informal recreational opportunities are in the immediate vicinity?**

There are hunting and fishing opportunities at this site. There are also waterfowl viewing opportunities available at this wildlife area.

- b. Would the proposed project displace any existing recreational uses? If so, describe.**

No recreational activities will be displaced. Access to the wildlife area will be preserved.

- c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any: None.**

13. HISTORIC AND CULTURAL PRESERVATION

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

None are known.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site. None are known.**

- c. Proposed measures to reduce or control impacts, if any:**

Excavation will only occur in areas of previously placed fill.

14. TRANSPORTATION

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

Crescent Lake Road serves this site.

- b. Is site currently served by public transit? If no, what is the approximate distance to the nearest transit stop?**

No. The nearest public transit stop is unknown.

- c. How many parking spaces would the completed project have? How many would the project eliminate? None.**

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

No, repairs will be made only to a gated service road.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

There is no established water, air or rail transportation nearby.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

No change in WDFW staff vehicle trips will occur. This area is closed to public vehicular traffic.

- g. Proposed measures to reduce or control transportation impacts, if any: None.**

15. PUBLIC SERVICES

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so generally describe. No.**
- b. **Proposed measures to reduce or control direct impacts on public services, if any: None.**

16. UTILITIES

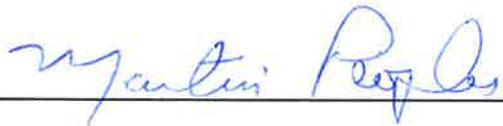
- a. **Underline utilities currently available at the site: Electricity, Natural Gas, Water, Refuse Service, Telephone, Sanitary Sewer, Septic System, Other.**

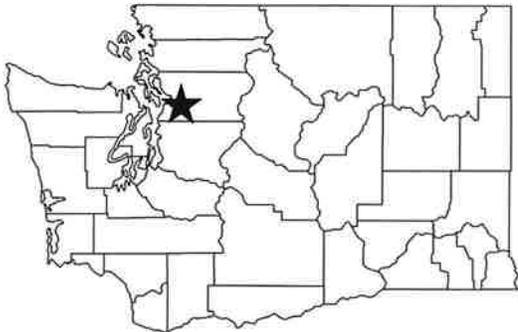
- b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity, which might be needed.**

No utilities will be added or changed from this project.

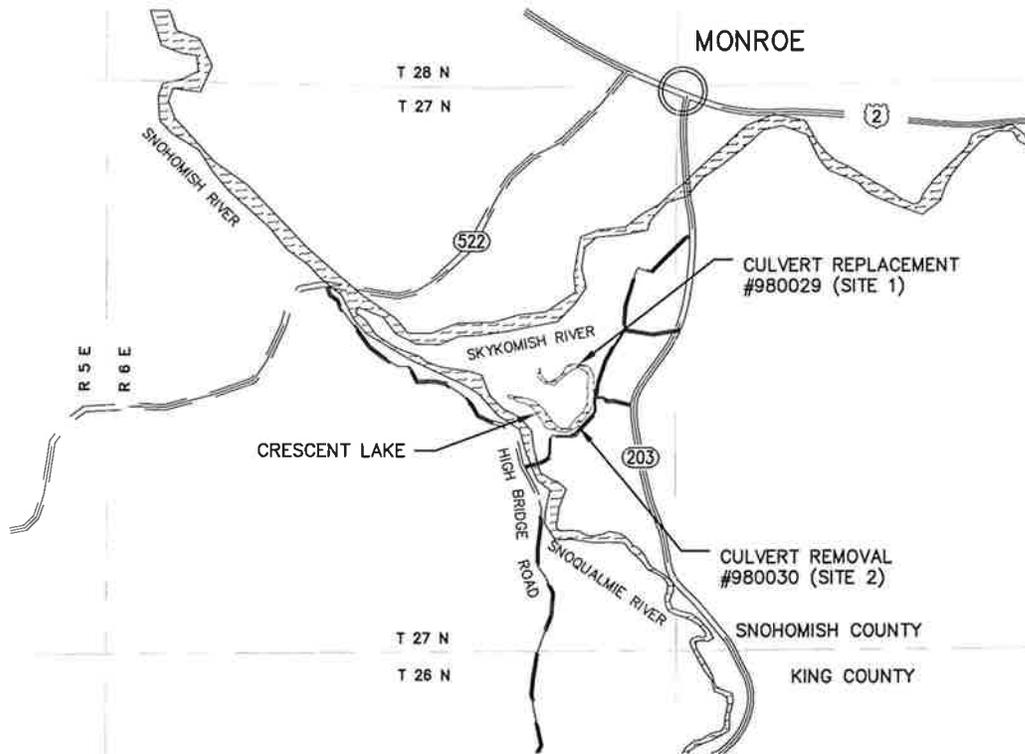
C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

SIGNATURE:  DATE SUBMITTED: 1/27/10

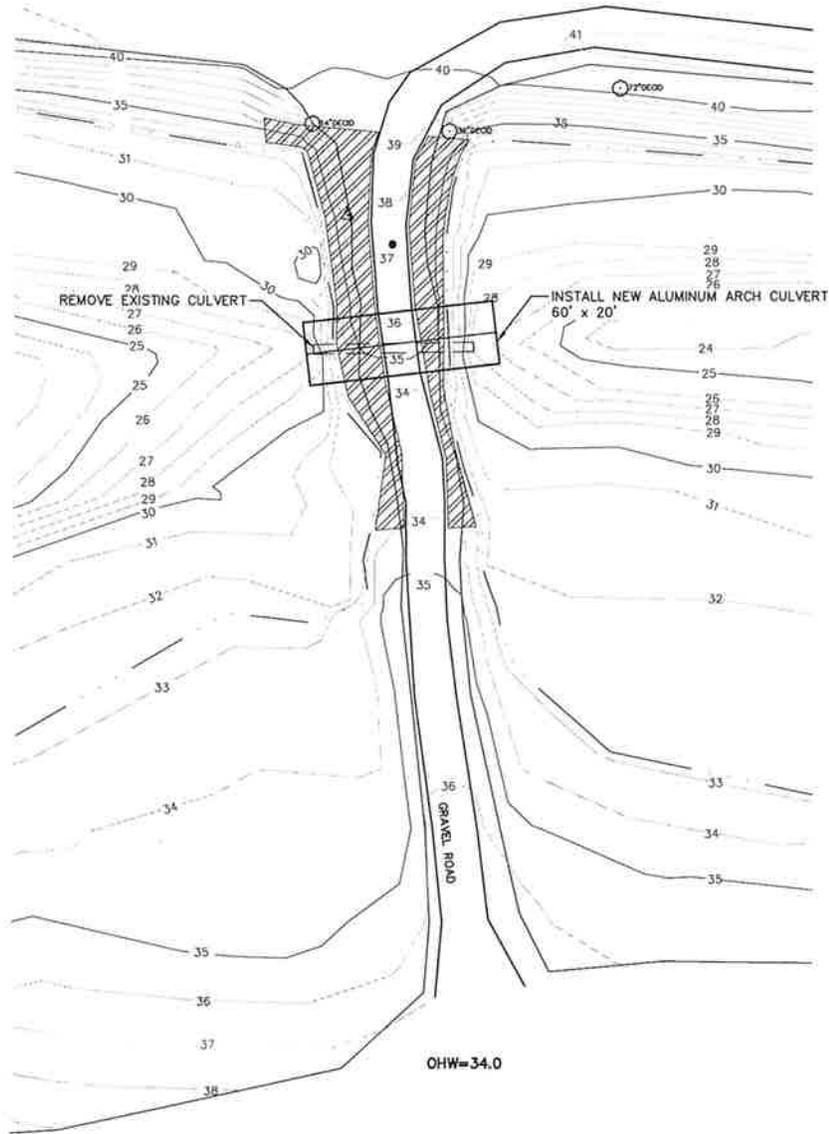


STATE MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE

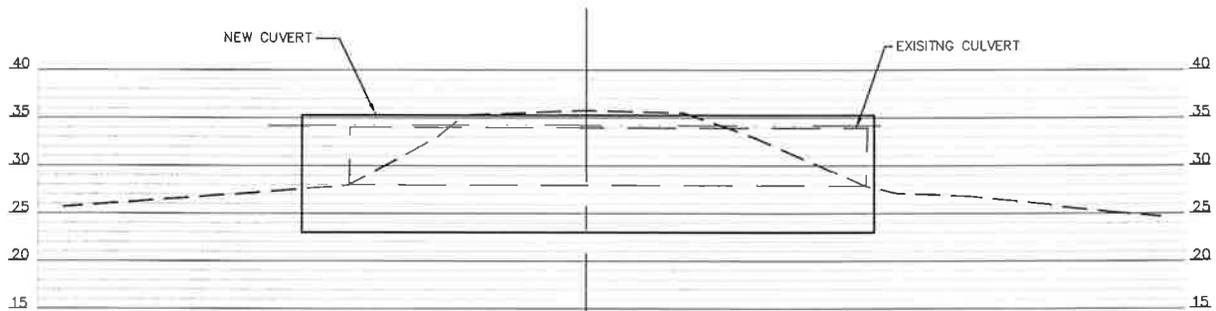
PURPOSE: REMOVE AND REPLACE BARRIER CULVERTS	WASHINGTON DEPT. of FISH & WILDLIFE 600 CAPITOL WAY N. OLYMPIA, WA 98501-1091	PROPOSED: REMOVE BARRIER CULVERT REPLACEMENT OF BARRIER CULVERT WITH NEW ARCH CULVERT
DATUM: ASSUMED ADJACENT PROPERTY OWNER: 1. TULALIP TRIBE 2. WILLIAM & DEBORAH MUNCEY ENG. PROJECT NO. KG:R37-09-1	REFERENCE NO. _____ SITE: SNOQUALMIE WILDLIFE AREA ADDRESS: CRESCENT LAKE MONROE	IN: CRESCENT LAKE NEAR: SNOQUALMIE RIVER COUNTY OF: SNOHOMISH STATE: WA PORTION OF: SEC 23 T27N R6E DATE: 01/27/2010 SHEET 1 OF 6



SITE 1 PLAN (980029)

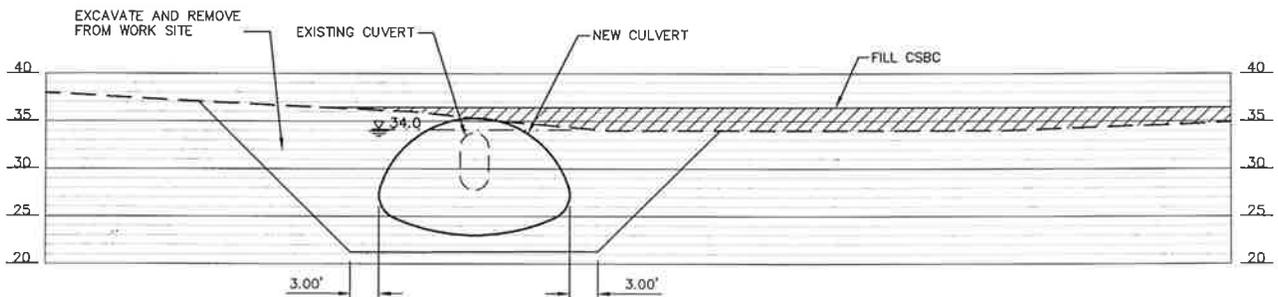
SCALE: 1" = 60'

REFERENCE NO. _____
APPLICANT: WASHINGTON DEPT. of FISH & WILDLIFE
SNOQUALMIE WILDLIFE AREA CRESCENT LAKE SITE PLAN (980029)
AT: MONROE _____, WASHINGTON
DATE: 01/27/2010 SHEET 2 OF 6



PROFILE (SITE 1)

SCALE: 1" = 20'



CROSS SECTION (SITE 1)

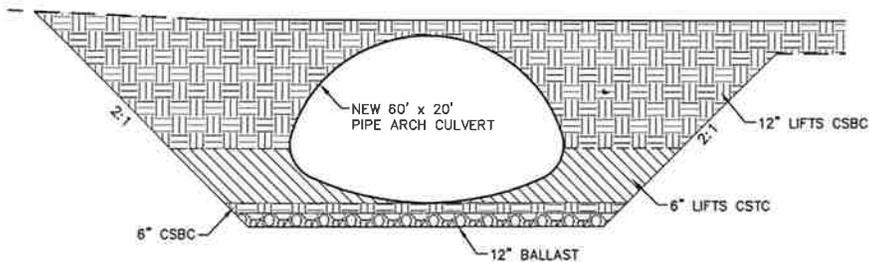
SCALE: 1" = 20'

APPROX. QUANTITIES:

CUT = 12165cy

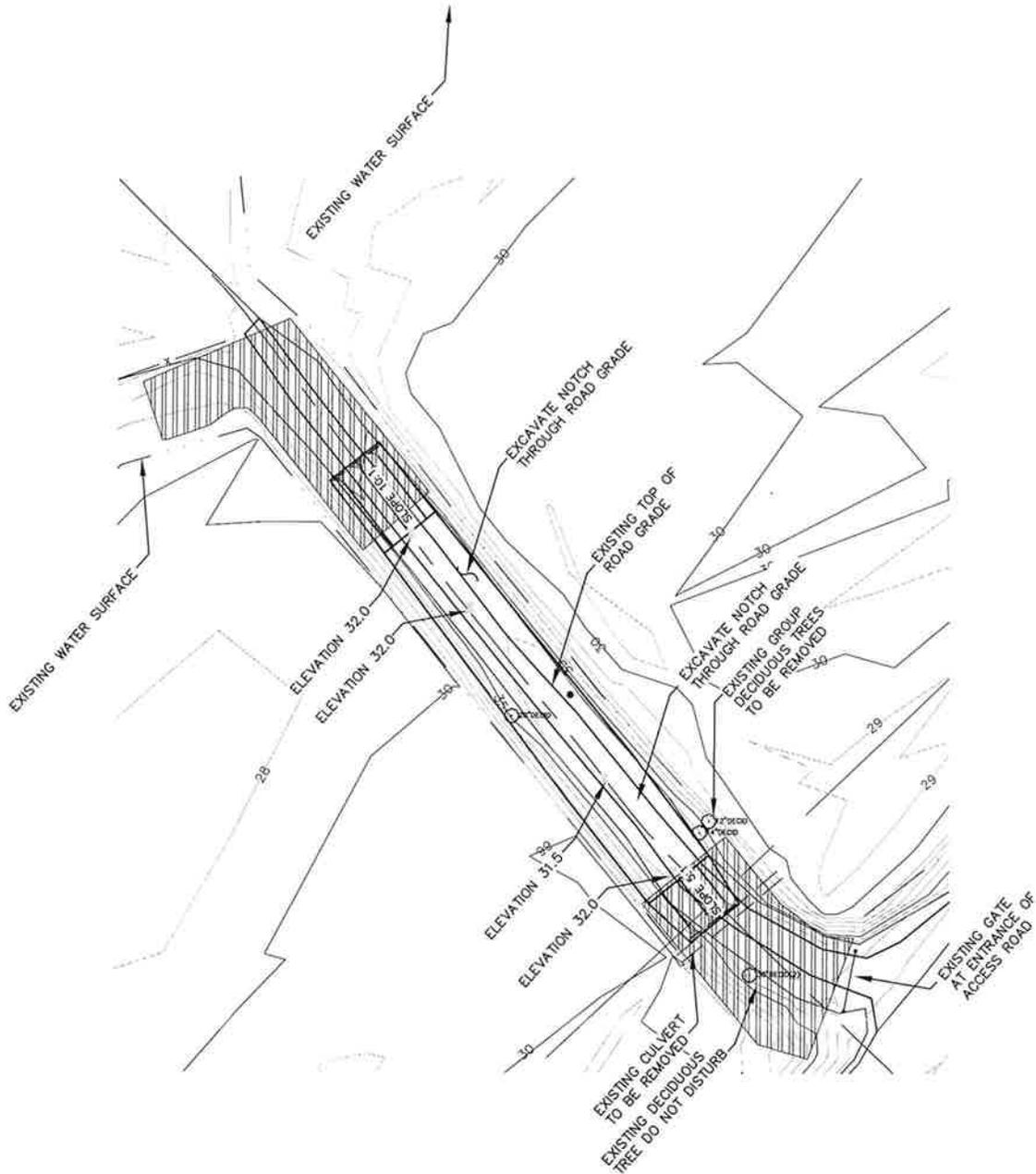
FILL = 11857cy

NET = 308cy CUT



FILL DETAIL
NOT TO SCALE

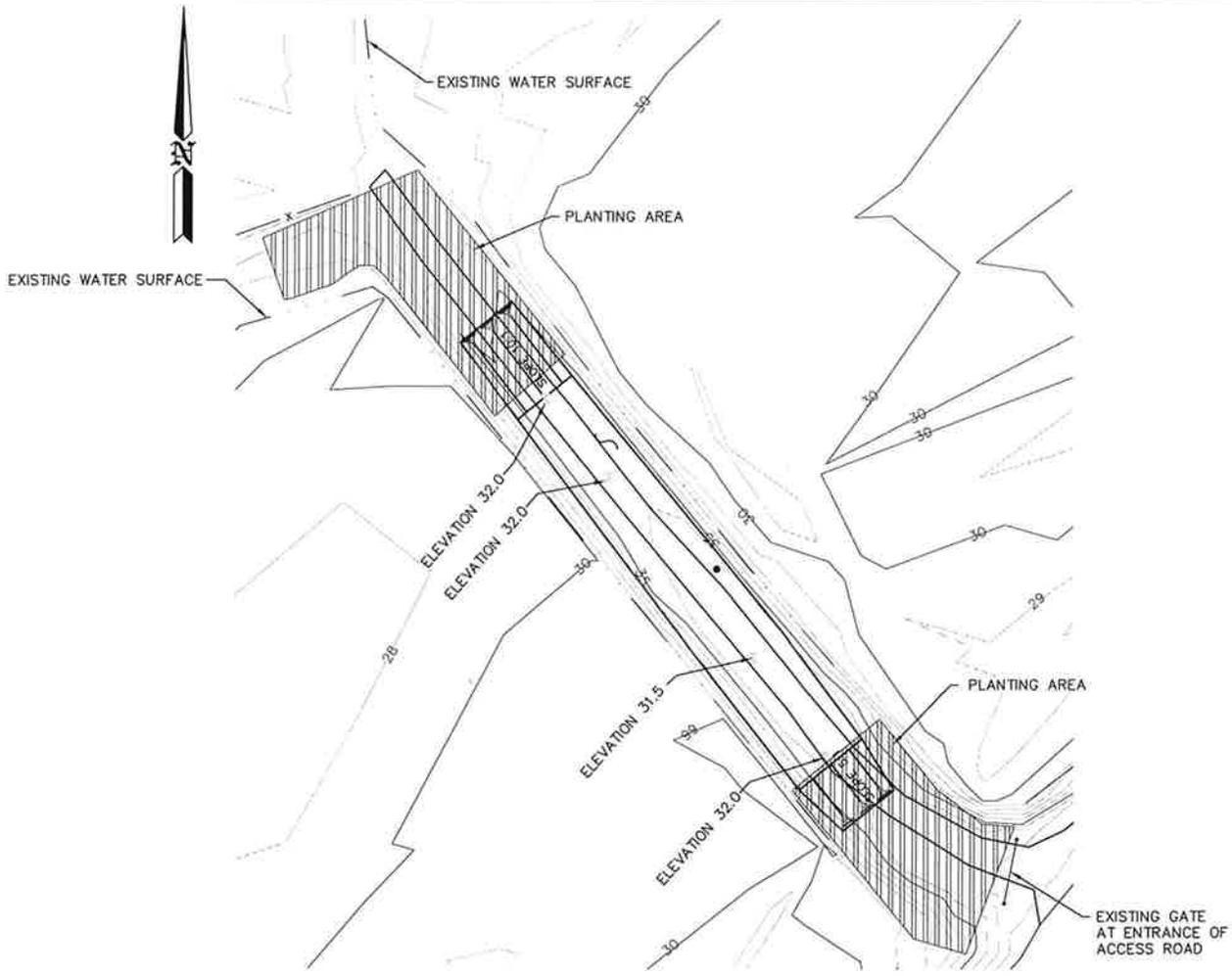
REFERENCE NO. _____
APPLICANT: WASHINGTON DEPT. of FISH & WILDLIFE
SNOQUALMIE WILDLIFE AREA CRESCENT LAKE PROFILE AND SECTION (980029)
AT: MONROE _____, WASHINGTON
DATE: 01/27/2010 SHEET 3 OF 6



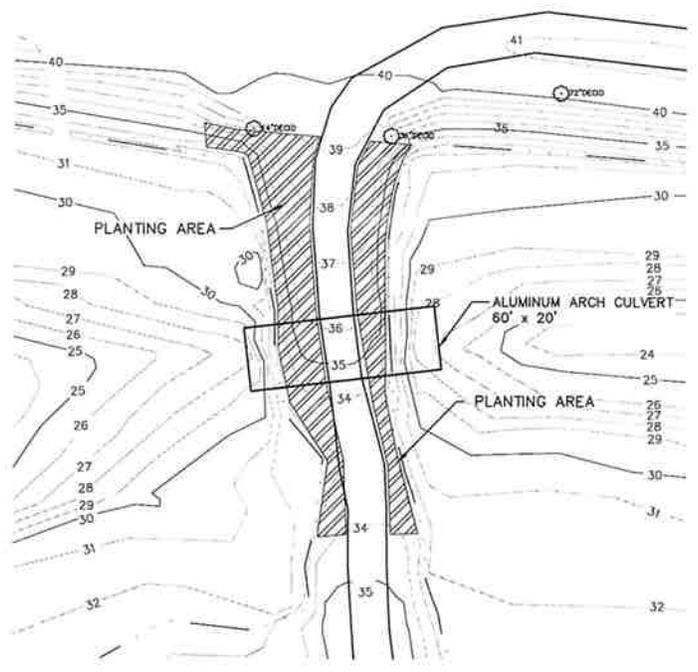
SITE 2 PLAN (980030)

SCALE: 1" = 60'

REFERENCE NO. _____
APPLICANT: WASHINGTON DEPT. of FISH & WILDLIFE
SNOQUALMIE WILDLIFE AREA CRESCENT LAKE SITE PLAN (980030)
AT: <u>MONROE</u> , WASHINGTON
DATE: <u>01/27/2010</u> SHEET <u>4</u> OF <u>6</u>



SITE 2 PLANTING PLAN (980030)
SCALE: 1" = 60'



SITE 1 PLANTING PLAN (980029)
SCALE: 1" = 60'

- PLANTING GUIDE:**
- PLANT EQUAL DISTRIBUTION OF
 - RED TWIG DOGWOOD
 - BLACK COTTONWOOD
 - WILLOW (SP.)
 - PLANT AT 3' x 3' SPACING, ABOVE WATER SURFACE LEVEL
 - SITE 1 AREA = APPROX. 2800sf
 - SITE 2 AREA = APPROX. 5000sf

REFERENCE NO.	
APPLICANT:	WASHINGTON DEPT. of FISH & WILDLIFE
SNOQUALMIE WILDLIFE AREA CRESCENT LAKE	
SITE 1 & 2 PLANTING PLAN (980029)	
AT:	MONROE _____, WASHINGTON
DATE:	01/27/2010 SHEET 6 OF 6