

STORM WATER POLLUTION PREVENTION PLAN

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1. PROJECT INFORMATION AND SITE DESCRIPTION

1.1. Project Information

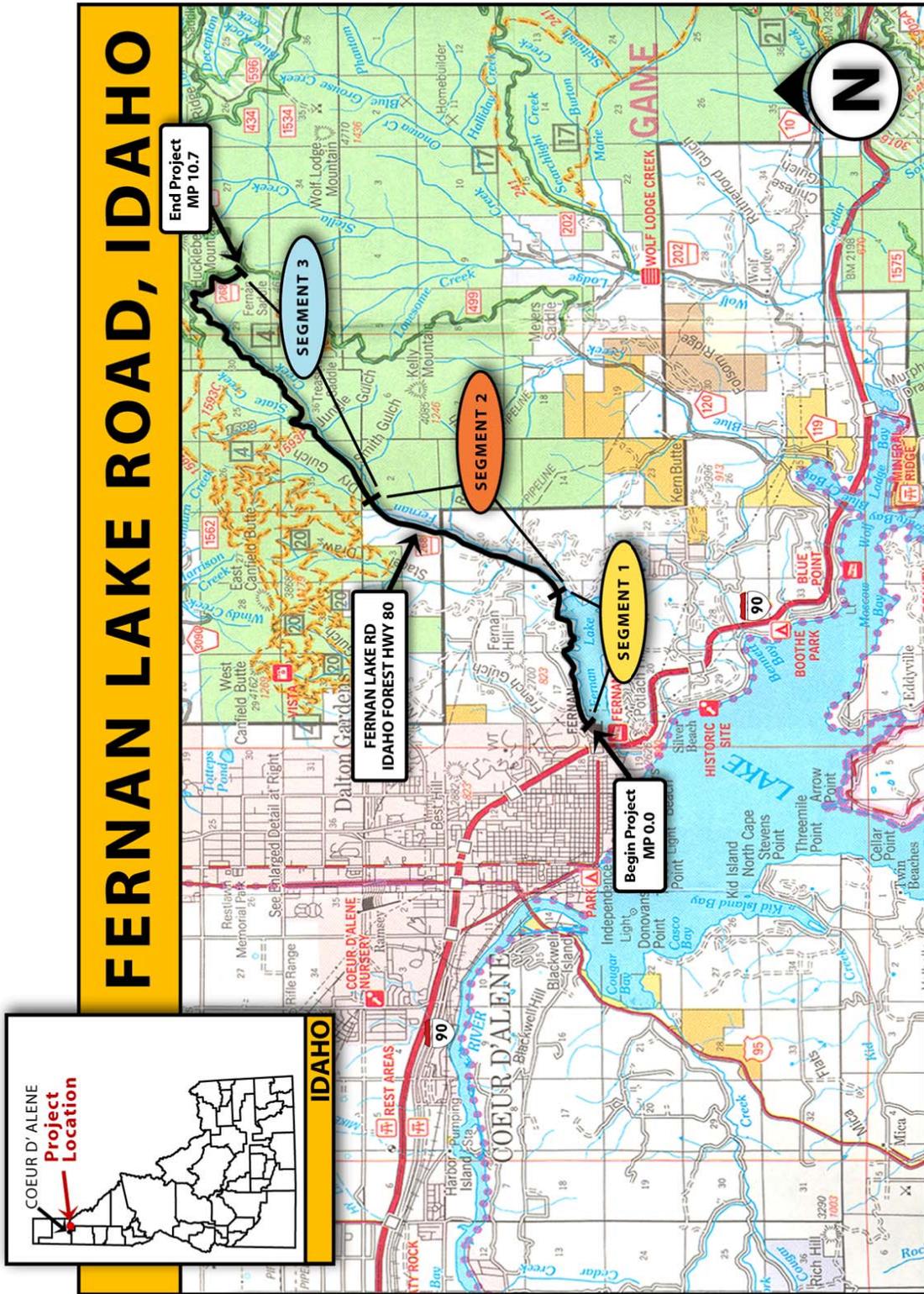
- **Project Name:** Fernan Lake Road
- **Project Number:** ID PFH 80-1(1)
- **Project Address:** Coeur d'Alene, Idaho
- **County, State:** Kootenai, Idaho
- **Township, Range, Section:** Reconstruction Section T50N, R3W, Sections 2,3,10,15,16,17,18
Overlay Section T51N, R3W, Section 25, 35, 36 and T51N, R2W Section 28,29,30
- **Latitude and Longitude:**

N 47° 40' 31.11"		N 47° 44' 07.72"
W 116° 44' 34.71"	to	W 116° 36' 20.52"
Elevation 2145		Elevation 4058
- **Owner and Maintenance Information:**

East Side Highway District (ESHD)
6095 East Mullan Trail Road
Coeur d'Alene, ID 83814

Federal Highway Administration (FHWA)
610 East Fifth Street
Vancouver, WA 98661-3801

The FHWA is responsible for preparing the design and will administer the construction which will be performed by the contractor who is awarded the construction contract. East Side Highway District is the owner and will maintain the road after construction is completed.



▪ Location Map

2. PROJECT DESCRIPTION AND SCHEDULE

2.1. Project Site, Vicinity, and Schedule

Idaho Forest Highway 80 (ID PFH 80), commonly known as the Fernan Lake Road, is a two-lane paved road between the City of Coeur d'Alene and Fernan Saddle, a geographic feature in the Idaho Pandhandle National Forests (IPNF) in Kootenai County.

The project will reconstruct or resurface approximately 10.7 miles of the Fernan Lake Road. The road is divided into three segments for this project:

Segment 1: MP 0.0 to MP 2.2, mostly along the north shore of Fernan Lake (Reconstruction, MSE walls, road widening, new bridge at LilyPad Bay)

Segment 2: MP 2.2 to MP 5.0, along the west side of lower Fernan Creek (Reconstruction, subexcavation, road widening, stream rehabilitation)

Segment 3: MP 5.0 to MP 10.7, entirely in IPNF along steep upper Fernan Creek (Shoulder stabilization, ditch reconditioning, overlay)

The project is needed because of the deteriorated pavement and narrow shoulders, narrow roadway, poor sight distance, and increased recreational and local traffic.

The project would likely begin construction in 2008 and last about two construction seasons and be completed by the Fall of 2009 or early 2010.

2.2. Narrative Sequence of Major Activities

The following activities will be performed by the Contractor unless otherwise noted:

1. Mobilization, installation of erosion control, clearing and grubbing, and construction signage
2. Subexcavation areas, rock excavation, shoulder stabilization, culvert repairs, road widening, turnout and parking area improvements, ditch reconditioning
3. Riprap bank protection
4. MSE wall construction
5. Bridge construction over Lily-pad bay
6. Stream restoration and re-alignment
7. Pavement pulverization/removal and aggregate base installation (5 miles)
8. Pavement overlay (5.7 miles)
9. Paving, striping, and guardrail installation
10. Site cleanup and temporary stabilization
11. Revegetation (to be done by USFS)

2.3. Disturbance and Off Site Activities

The total area of work, including resurfacing as well as actual ground disturbance, is 43.9 acres for combined Segments 1 and 2 (reconstruction area) and 0.65 acres for Segment 3 (Overlay area) for a total combined area of 44.55 acres. Actual ground disturbance associated with ditch work, grading, subexcavation, bridge and wall construction, riprap bank protection, stream restoration and re-alignment and culvert replacement outside of the existing aggregate shoulder or asphalt surface area is approximately 27.0 acres.

This project will not require any offsite developments unless the contractor selects material sources that are not commercial, in which case the contractor will be required to address all permitting requirements and legal clearances. There are no government provided sources. It is anticipated that all offsite activities will take place at existing commercial facilities.

Details showing BMP use and locations, as well as disturbance areas, can be found in the contract plans and specifications. Erosion control plan sheets begin on Plan Sheet F.1

3. EROSION AND SEDIMENT CONTROLS AND SITE STABILIZATION

3.1. Name of Nearest Surface Water Body and Distance

Tributaries run through the project and drain to Fernan Creek and Fernan Lake.

3.2. Controls

3.2.1. Temporary Stabilization Practices

√	Practice or Measure	√	Practice or Measure	√	Practice or Measure
√	Temporary Seeding	√	Mulching		Straw Bale Dikes
	Erosion Control Blankets	√	Temporary Channel Diversion	√	Temporary Sediment Basins
	Brush Barriers		Silt Fences	√	Sediment Logs
√	Other (please specify):	Straw wattles			

3.2.2. Permanent Stabilization Practices

√	Practice or Measure	√	Practice or Measure	√	Practice or Measure
√	Permanent Seeding	√	Soil Stabilization	√	Check Dams
√	Vegetative Buffer Strips		Grassed Waterways		Erosion Blankets
	Drainage Swales		Earth Dikes		Pipe Slope Drain(s)

√	Practice or Measure	√	Practice or Measure	√	Practice or Measure
	Level Spreader(s)	√	Subsurface Drain(s)	√	Sediment Trap(s)
√	Drain Inlet Protection	√	Sediment Basin(s)/ Ponds(s)	√	Rock Outlet Protection
	Terraced Slopes	√	Retaining Walls	√	Riprap-lined Ditch
√	Disturbed Slopes:	Slopes will be seeded with native vegetation following construction by USFS			
√	Other (please specify):	The project will address drainage issues in a number of areas with grading and culvert improvements			

3.2.3. Storm Water Management Controls

√	Practice or Measure	√	Practice or Measure	√	Practice or Measure
	Wet Pond(s) or created wetland(s)		Infiltration Trench(es) or Basin(s)		Dry Pond(s)
√	Flow Attenuation by use of vegetation waterways and natural depressions (most highway projects)				
	Other (please specify):				

4. WASTES AND HAZARDOUS MATERIALS MANAGEMENT

The contract requires the contractor to provide a Hazardous Spill Plan containing more detailed information and implementation of the items described in Sections 4 and 5 of this plan.

4.1. Waste Disposal

Construction waste, including removed debris, soils from excavation, and removed culverts, will be removed from the project site and disposed of at an appropriate existing facility.

Excess material will be disposed of at specified sites near sta. 283+00 at the end of the reconstruction segment of the project and used to restore an old shooting area on the right and a recreational parking area on the left.

All hazardous waste and sanitary wastes will be removed from the project site, and treated as required by State and Federal laws.

4.2. Offsite Vehicle Tracking:

No offsite work is anticipated during this project. Haul vehicles will be cleaned prior to moving into and throughout sections of the project. Any vehicles arriving or leaving the project will be cleaned, except for vehicles only traveling on the pavement.

5. SPILL PREVENTION AND MATERIALS STORAGE PRACTICES

5.1. Materials Inventory (Materials Present Onsite During Construction)

√	Material or Item	√	Material or Item	√	Material or Item
√	Concrete	√	Culverts		Detergents
√	Fertilizers	√	Fuel	√	Geotextiles
√	Guardrails	√	Lumber	√	Masonry Blocks
√	Metal Studs or Signposts	√	Paints		Pesticides
	Roofing Shingles	√	Solvents		Tar
√	Petroleum-based Products:	√	Diesel	√	Gasoline
		√	Asphalt Cement	√	Emulsified Asphalt
	Other (please specify):				

5.2. Product-specific Storage Practices to be Followed Onsite

Petroleum: Areas for fuel storage, equipment storage (wheeled and non-wheeled), servicing of equipment and vehicles (including refueling, changing fluids, and other maintenance) will be located as far as possible from streams, lakes, and wetlands. A minimum distance of 100 feet as measured from the top of streambank, lake or edge of wetland is required. Overnight storage of non-wheeled construction equipment and machinery equipped with shut off valves is allowed within the riparian area between July 1st and October 1st. Construction equipment and machinery will not be refueled after 1:00 P.M. each day.

Fertilizers and Pesticides: No long-term storage at the project site.

Hazardous Materials: A Hazardous Spill Plan describing what actions will be taken in case of a spill will be submitted by the contractor prior to beginning work. The plan will incorporate measures to be implemented such as placement of refueling facilities, storage and handling of hazardous materials, etc.

5.3. Additional Best Management Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following best management practices (BMPs) will be followed for spill prevention and cleanup:

- If 40 CFR 112 regulations apply, a Spill Prevention, Control, and Countermeasure Plan will be required in lieu of the above-referenced Hazardous Spill Plan.
- Live water will be deflected from the work area by using sandbags, inflatable bags, turbidity curtains, etc. to minimize the potential for sediment transport.

- Construction debris will be prevented from falling into the lake, any stream or wetland area. Excavated materials will be placed in locations where they cannot enter the lake, streams or wetland areas. Native streambed materials excavated during pipe replacements at streams will not be stockpiled within the stream channel.
- Any material that falls into the lake or stream during construction will be removed in a manner that has minimum impact on the lake or stream water quality.
- Mud and debris will not be allowed to be tracked onto the roadway and any material being transported will be prevented from entering the lake or streams.
- Fertilizer will not be applied within 30 feet of the lake, stream or wetland system.
- A Spoil and Wastewater Containment Plan will be submitted at least 30 days prior to beginning pile driving, excavation, boring, and filling or any work within the ordinary high water line or the river. It will include details of how the existing road and fill will be removed from the lake and where the material will be disposed as well as how the proposed realigned channel will be constructed and how and where the wastewater from the site will be treated.
- Fresh concrete will not be allowed to come into contact with surface waters at any time.
- Only clean, inert material will be used when placed in contact with water bodies. Earth filled cofferdams will not be allowed in the lake or stream.

6. MAINTENANCE AND INSPECTION PROCEDURES

The FHWA will have a full-time Project Engineer (PE) on the project. The PE will conduct routine and weather-related inspections to ensure compliance with the proposed erosion control plan.

7. REFERENCES

Erosion control plan sheets begin on Plan Sheet F.1. Other details in this plan are also located in the Plans and Specifications of the construction contract.

The following are included in this plan by reference:

- Construction plans and cross sections, most specifically Sections: H - Drainage, F - Erosion Control. Construction limits are shown in Section D. Slope ratios are shown on the project cross-sections.
- *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-03* most specifically Sections 107, 157 and 624 by the contractor and 625, and 626 by the USFS.
- *Special Contract Requirements*, most specifically Sections 107, 108, 157, 204, 251, and 602.
- *Special Contract Requirements*, specifically Section H – Permits

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- *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects*, <insert FP-96 or FP-03> most specifically Sections 107,157, 625, and 629.
- *Special Contract Requirements*, most specifically Sections 107, 157, 204, 251, 602, 625, 626, 629, and 650.
- *Special Contract Requirements*, specifically Section H - Permits

8. PLAN CERTIFICATION

OWNER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

TERRI THOMAS
Name (Printed)

ENV. PROG. MGR.
Title


Signature

4/17/07
Date

Fire Protection and Suppression Plan

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FIRE PRECAUTIONS

This plan outlines the channels of responsibility for fire prevention and suppression activities and sets up an attack procedure in the event of fire within the Project Area. The Project Area is defined as that area, which is in and adjacent to the project rights-of-way and work areas and all roads, used in connection with the work.

I. Responsibilities

A. Contractor-Fire Suppression

1. It is understood and agreed that the Contractor will do all in his/her power to prevent and suppress fires on or adjacent to the Project Area, as stipulated in the contract.
2. Responsible for and will direct all fire activities on the project until relieved by a Forest Officer and will insure that prevention and suppression actions are in accordance with contract requirements, including this fire plan. Contractor shall delegate the next highest in authority on the job to be responsible for the above activities when he/she is not on the project.
3. In line with this agreement, individuals will be supplied from the Contractor's crews to fight fires on the project area up to the total number of individuals employed by the Contractor as they are needed by the Fire Boss. The Forest Service will make every effort to avoid calling on the Contractor for action on fires outside the contract project area except in emergencies and will call out all needed available help to control fires in the general area.
4. The Contractor insures that this Fire Plan will be complied to for the duration of the contract.

B. Forest Service District Ranger

1. Responsible for all fire activities on the Ranger District on which the contract project is located. District Ranger's representative will discuss the fire plan with the Contractor including needed equipment and action to be taken when a fire occurs. Will notify the Contractor through the Contracting Officer's Representative (PROJECT ENGINEER) to take correction measures when fire requirements are in compliance.

II. Contractor's Responsibility When Fire Occurs Within the Contract Project Area

- A. Immediately send the entire contract crew with tools and equipment to the fire and take initial-attack suppression action.

B. Immediately notify the nearest Forest Service Fire Control Officer or other Forest Service employee of fire location and action taken.

C. Designate a person to act as dispatcher who will handle messages and initiate action upon request until relieved.

III. Contractor Furnished Manpower, Tools, and Equipment Required on all Contracts During Fire Season

A. The Contractor shall furnish to the PROJECT ENGINEER a list of manpower and equipment used on the contract on forms furnished by the Forest Service. Changes in Contractor's personnel shall be reflected in amendment to the list.

Fire Prevention

Smoking: Prohibited in the woods during the fire season, May 10 - October 20, except in areas agreed upon by the Contractor and PROJECT ENGINEER. No smoking is permitted while walking or working in the woods.

Refueling Chainsaw/Soil Auger: Refueling will be confined to a six-foot diameter cleared to mineral earth. Chainsaws/soil auger spark arresters shall be U.S. Forest Service approved, and will be cleaned daily. A size "O" or larger round-pointed shovel with a minimum of a 38-1/2-inch handle and a fire extinguisher shall be within 10 feet of actual point of chainsaw/soil auger operation.

Burning, Blasting, or Welding: Permit will be required and will contain special stipulations pertinent to the particular job.

Spark Arresters: All internal combustion power equipment used by the Contractor on the project shall be equipped with an approved spark arrester as set forth in the publication of the USDA Forest Service, entitled "Standard 5100-1a for Spark Arresters for Internal Combustion Engines" as amended under date of July 1970, and be listed in the most recent "Spark Arrester Guide" as having been approved as meeting above standard. They shall be cleaned regularly and maintained in satisfactory working condition. The following are exempt from the requirements of the rule: (a) turbo-charged internal combustion engines in which 100 percent of the exhaust gasses pass through a turbo-charger; (b) engines of passenger carrying vehicles and light trucks equipped with a muffler with baffles that are kept in good repair (glass packs are not an approved muffler for wildland work); (c) water pumping equipment used in firefighting.

Spark arrester shall comply with all State and Federal fire requirements.

Lunch and Warming Fires: Cooking and warming fires will not normally be permitted and then only by written permit by the PROJECT ENGINEER which contains stipulations regulating use of such fires.

Hand Tools: The Contractor shall furnish one size "O" shovel (38 1/2 inch handle minimum) or larger, one axe or pulaski with 26 inch handle or larger, one 5 BC or larger rated pressurized fire extinguisher for each truck, each personal vehicle, each tractor, and each grader. For each welder he shall furnish one size "O" shovel and one backpack pump. For each gasoline power tools (power saw, soil auger, etc.), one shovel (38 1/2 inch handle minimum) and one 8 ounce or larger BC rated chemical-pressurized fire extinguisher.

Contractor shall also furnish any other equipment called for elsewhere in the contract. The shovel and fire extinguisher will be located within 10 feet of the operating chainsaw/power auger.

Storage and Parking Areas: Equipment service area, parking area, and gas and oil drum storage areas will be cleared of all flammable material for a radius of at least fifty feet. These areas must be approved in writing by the PROJECT ENGINEER in advance of use. Small stationary engine sites shall be cleared of flammable material for a radius of at least five feet from such engine.

Fire Tool Box: A red fire toolbox will be required to be on each work site while work is being performed. This fire toolbox will contain sufficient tools to equip all persons engaged in Contractor's operation. Fire tools shall be used only for suppressing wildfires. Tools shall be stored in fireboxes provided by the Contractor and readily available to employees. Each toolbox shall be marked "Tools for Fire Only". The PROJECT ENGINEER will inspect the fire toolbox and then seal the box.

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**U.S. Department of Transportation
Federal Highway Administration
Western Federal Lands Highway Division
Vancouver, Washington**



"Commitment to Excellence"

ID PFH 80-1(1)

FERNAN LAKE ROAD

**Water Quality Notification
for
Dredging in Fernan Lake and Fernan Creek**

May 28, 2008

I. Project Description.

The project includes the reconstruction of the Fernan Lake Road beginning at MP 0.0 (10+00) which is the intersection of Fernan Lake Road, Lakeview Drive and Fernan Court and extending to MP 5.14 (281+50) which is at the turnoff for the gun range and beginning of the steeper grade to the Fernan Saddle. The project also includes the resurfacing of the roadway from MP 5.0 to the Fernan Saddle at MP 10.35 (556+69.67).

The portion of the project that will involve dredging and working within Fernan Lake and Fernan Creek are small segments extending from MP 0.0 (10+00) to MP 3.05 (171+00). Excavation will include keying in riprap along the lake shore, construction of new bridge abutments in Lily Pad Bay, removal of the causeway across Lily Pad Bay, excavating for the placement of riprap for roadway embankment construction and excavating for placement of riprap for stream rehabilitation work.

The excavation of the causeway, bridge abutments and riprap areas will be accomplished through the use of a large track-mounted hydraulic excavator. Erosion and sediment control features will be installed prior to beginning work, and the contractor will be limited to the minimum amount of disturbance necessary to complete the work. Containment provisions will be required at the loading area to prevent water from draining back into the lake from the saturated excavated materials. Saturated excavated materials will be trucked off-site to the approved waste storage area near station 280+00 or hauled off the project for proper treatment and disposal at an approved site. If the sediment contains water that may drain from the trucks, sealed end-dump beds or water tight side-dump trailers will be required.

De-watering of the excavated material will take place at the waste area away from surface waters. Sediment-laden water draining from the excavated materials at the waste area and the loading area will be treated through the use of sediment basins, straw wattles, vegetated buffer swales or similar methods and infiltrated to the ground surface. If initial dewatering is required at the excavation site prior to transporting the material, similar treatment methods will be in place. No water drained from the excavated material will be allowed to return to any stream, lake or wetland area via surface flows.

Erosion and sediment control features include a turbidity curtain that will be used at any location where work in live lake water is required (shown in the plans for Lilly Pad Bay protection, at MSE Wall Excavation for riprap placement and other riprap placements). Additionally, silt fence and sediment wattles as shown in the plans will be used as filtration devices where there is any potential for precipitation runoff to reach the lake from disturbed areas.

The contractor will assign personnel responsible for quality control of the operation to ensure all the requirements of this plan are met. Government personnel will perform field oversight and inspection of the project to monitor the contractors operations in the field and work with the contractor to identify and resolve potential problems before they occur. Additionally, the contractor is required to have additional sediment booms, silt fence, and sediment wattles on site if needed for unanticipated conditions. Finally, the contractor is required to have a hazardous spill plan in place with appropriate spill kits and response equipment readily available.

No chemical contaminants were identified in the geotechnical borings or environmental reconnaissance reports, nor are any anticipated during the excavation within the wetlands and in-water work. The existing causeway construction consists of fill materials from readily available materials from rock blasting and excavation operations very near the causeway site. Materials anticipated in the excavation/dredging operation include:

52+00 to 54+25 RT - native lake bottom soils, gravels

61+48.50 to 65+78.98 RT - native lake bottom soils, sandy silts and gravels

72+00 to 81+00 RT - native lake bottom soils, sandy silts and gravels

87+80 to 89+30 RT - native lake bottom soils, sandy silts and gravels

103+75 to 104+80 RT - native lake bottom soils, sandy silts and gravels

Bridge abutments (116+54 and 120+91) - native lake bottom soils, sandy silts and gravels, unconsolidated peat

Borings near the abutments and support bents show an unconsolidated peat depth of 23 feet. Excavation for the abutments and excavation of the causeway should result in removal of the existing roadway fills that were constructed of rock and soils from the immediate vicinity, and some removal of the unconsolidated peat.

The Bridge support bents are located at 117+13, 117+76, 118+39, 119+02, 119+65, and 120+28. Temporary work pads for pile driving during bent construction will be needed. This material will be placed using rock fill topped with gravel. Removal of these work pads will be completed with the removal of the causeway materials. Native lake bottom soils and unconsolidated peat are anticipated under the temporary work pads. Impacts at these locations are estimated to total 3240 square feet, and are included in the permit application.

The removal of the causeway is from 116+23 to 122+06 RT. This material consists of consolidated fill material consisting of silty sand with gravel. Native lake bottom soils and unconsolidated peat are anticipated adjacent to the causeway fill/roadway prism. Little if any of the native materials will be disturbed with the removal of the causeway fill. The causeway fill will be removed to a depth of 3 feet below the low water elevation, involving removal of approximately 3,188 cubic yards of material. The asphalt roadway and dry, non-saturated fill material will be removed using regular excavation practices, likely involving a track mounted excavator and dump truck. The asphalt will be hauled off site for proper disposal according to state and local regulations.

Stream bank stabilization work immediately adjacent to a wet stream channel will be completed between 150+00 to 165+50 RT and 166+50 to 170+00 RT. This work will also employ the sealed-haul vehicles and track mounted excavators to remove portions of the roadway prism adjacent to the stream. The material will be de-watered in a manner similar to what has been described for the causeway excavation.

The riprap placement at 200+00 to 215+80 RT can be completed when the stream is dry as this is an intermittent stream at this location and will therefore not require in-water work.

Should any unanticipated material be discovered during dredging operations, contractor and government personnel will be on site to evaluate potential hazards. If the material presents a potential hazard to water quality, IDEQ and other authorities will be notified as appropriate. The material will be disposed of offsite in accordance with state and local regulations.

II. Project Location.

The project work is located approximately 0.4 miles northeast of the Sherman Avenue interchange (Exit 15) with Interstate 90 (I-90) at Coeur d'Alene, Idaho in Kootenai County. Project milepost (MP) 0.0, (Station 10+00) is located at the intersection of Fernan Lake Road with Lakeview Drive and Fernan Court. Approximate Global Positioning System(GPS) Coordinates for the beginning of the project are Latitude 47.67539, Longitude -116.74271

The locations of the in-water work for the placement of riprap include the following sites:

52+00 to 54+25 RT - Riprap Placement

61+48.50 to 65+78.98 RT - MSE Wall, Riprap protection

72+00 to 81+00 RT - Riprap Placement

87+80 to 89+30 RT - Riprap Placement

103+75 to 104+80 RT - Riprap Placement

The bridge abutments are located at 116+54 and 120+91- Riprap Placement

The bridge support bents are located at 117+13, 117+76, 118+39, 119+02, 119+65, and 120+28. Temporary work pads for bent construction will be needed for construction of the bridge. It is anticipated that the fill will be placed from the causeway, and removed during the causeway removal. Removal of the temporary fill will be to the natural bottom of the causeway impoundment. The removal of the causeway will occur between 116+23 and 122+06.

Stream bank stabilization work immediately adjacent to a wet stream channel will be completed between 150+00 to 165+50 RT and 166+50 to 170+00 RT.

The riprap placement at 200+00 to 215+80 RT can be completed when the stream is dry as this is an intermittent stream at this location and will therefore not require in-water work.

III. Name of Affected Water Body

The water bodies that will be directly affected by this project are Fernan Lake and Fernan Creek. Fernan Creek is an intermittent stream beginning at 178+75 and continuing to the end of the project.

IV. Start and Completion Dates

The Project is anticipated to begin in the Summer of 2008 and be completed in 2010.

Water Quality Notification for Dredging in Fernan lake and Fernan Creek
Project: ID PFH 80-1(1), Fernana Lake Road

V. Description of Planned Best Management Practices

The following best management practices have been incorporated into the project to reduce sedimentation to the lake and stream and to help protect the water quality of these waters. The following conditions are included in the Special Contract Requirements as a part of the contract requirements to be followed by the contractor. Federal contract administration personnel will be on site to ensure the contractor meets these requirements.

General Construction

Comply with the terms and conditions included in all permits and agreements obtained by the Government for performing the work included in this contract (See Section H). Notify the CO immediately of any changes, including modifications to government-obtained permits, or any additional permits or agreements that are required by the Contractor's methods of operation. Allow adequate time in the construction schedule for any additional permits or changes to government-obtained permits. Furnish copies of all acquired permits and agreements not in the contract.

Except as authorized by this contract, do not operate mechanized equipment, discharge or place material within the boundaries of any U.S. waters as identified by the ordinary high water mark, high tide line, or edge of the wetland. This includes wetlands, unless authorized by a permit issued by the U.S. Army Corps of Engineers according to 33 USC § 1344, and if required by the state agency having jurisdiction over the discharge of material into the waters of the U.S. In the event of an unauthorized discharge:

- (a) immediately prevent further contamination;
- (b) immediately notify appropriate authorities and the CO; and
- (c) mitigate damages as required.

Separate work areas, including material sources by the use of a suitable barrier that prevents sediment, petroleum products, chemicals, other liquids, or solid materials from entering the waters of the U.S. Construct and remove barriers to avoid discharge of material into the waters of the U.S. Remove and properly dispose of sediment or other material collected by the barrier.

Spill Prevention and Control

Submit a Hazardous Spill Plan describing what actions will be taken in case of a spill, and incorporate preventative measures to be implemented (such as the placement of refueling facilities, storage and handling of hazardous materials, etc).

Submit the plan at least 2 days before beginning work.

If there is a spill or release of a hazardous material, the State Communications Center shall be contacted immediately at 1-800-632-8000. Ensure this number is posted at the project office and that personnel, including subcontractors can easily access to the State Communications Center number.

Water Quality Notification for Dredging in Fernan lake and Fernan Creek
Project: ID PFH 80-1(1), Fernana Lake Road

Repair leaks on equipment immediately. Do not use equipment that is leaking. Keep a supply of acceptable absorbent materials at the job site in the event of spills. Acceptable absorbent materials are those that are manufactured specifically for the containment and clean up of hazardous materials. Maintain equipment regularly to limit the potential for leaks to occur.

Immediately notify the CO of all hazardous spills.

Maintain hazmat booms (both absorbent and containment) on-site in locations where there is potential for a toxic spill into stream, lake or wetland systems, and use as necessary to cleanup and contain spills. Provide personnel who are trained in using hazardous spill response material and hazmat booms.

Vehicle/Equipment Washing and Maintenance

Steam clean all equipment to remove all weeds and their seeds prior to moving the equipment onto National Forest System Lands. Remove all dirt, grease, debris, and materials that may harbor noxious weeds and their seeds. Make the equipment available for visual inspection by the CO prior to entering National Forest System Lands. Inspections will take place at a mutually agreeable location in advance of entry.

Clean all equipment that is used for in-stream or lake work prior to entering the stream channel or lake. Remove external oil and grease along with dirt and mud. Do not wash or rinse vehicles within the project boundaries, which includes the area between the begin and end stations. Do not permit wash water to enter streams, lakes or rivers.

Staging Areas/Stockpile Management

Store all stockpiles of materials outside of the 100-year floodplain. Do not refuel equipment within the 100-year floodplain.

Locate areas for fuel storage, equipment storage (wheeled and non-wheeled), servicing of equipment and vehicles (including refueling, changing fluids, and other maintenance) as far as possible from streams, lakes, and wetlands. A minimum distance of 100 feet as measured from the top of stream bank, lake or edge of wetland is required. In limited cases and only where necessary, overnight storage of non-wheeled construction equipment and machinery equipped with shut off valves is allowed within the riparian area at active work sites between July 1st and October 1st. Do not refuel this construction equipment and machinery after 1:00 pm each day. See Subsection 105.04 for additional requirements and restrictions for staging, storage and handling sites.

Wetlands and Waters

Perform all work within the streams and lake between August 1 and March 31. Notify the CO at least 14 days prior to beginning any work in sensitive areas such as creeks, wetlands, and lakes.

Prevent construction debris from falling into the lake, any stream or wetland area. Place excavation materials in locations where they cannot enter the lake, streams or wetland areas. Do not stockpile the native streambed materials excavated during pipe replacements at streams

within the stream channel.

Immediately remove any material that falls into the lake or stream during construction in a manner that has minimum impact on the lake or stream water quality.

Do not apply fertilizer within 30 feet of the lake, stream or wetland system.

Submit a Spoil and Wastewater Containment Plan at least 30 days prior to beginning pile driving, excavation, boring, and filling or any work within the ordinary high water line or the river. Detail how the existing road and fill will be removed from the lake and where the material will be disposed. Also detail how the proposed realigned channel will be constructed and how and where the wastewater from the site will be treated.

Do not allow fresh concrete to come into contact with surface waters at any time.

Use only clean, inert material when placed in contact with water bodies. Do not use earth filled cofferdams in the lake or stream.

Instream Sediment Trapping Devices

Deflect live water from the work area by using sandbags, inflatable bags, turbidity curtains, etc. to minimize the potential for sediment transport.

Do not track mud and debris onto the roadway and prevent any material being transported from entering the lake or streams.

Fiber Rolls/Logs/Wattles/Silt Fence

Use wattles for temporary erosion control on all exposed slopes

Sediment Trap (basin) – Bridge Construction and Causeway Removal

Do not obliterate or remove the roadway across Lily-Pad Bay (116+00 to 121+50) until the new bridge is open to road traffic. Adjust and relocate portions of the roadway at the new bridge ends to accommodate traffic during construction of the bridge as shown on the plans and as directed by the CO.

Remove the entire roadway, except as noted below, to the natural lake bottom and dispose of the material in accordance with Subsection 204. This is estimated to be approximately 3 feet below water surface on the left side of the roadway and up to 6 feet deep on the right side of the roadway.

Filter sediment-laden water created by construction activities before it leaves the right-of-way or enters any stream, lake or wetland area. Install straw wattles as shown on the plans.

The contractor will be responsible for developing a system of water retention and sediment settling of the water during the excavation and hauling process as noted below.

Do not remove the entire roadway section at the locations shown on the plans for the vegetated buffer swales at 117+00 RT and 121+00 RT. Remove the asphalt portion of the roadway in accordance with the requirements of this Subsection and shape the buffer swales in the existing roadway material in accordance with the plans.

Construct temporary bridge work pads from the edge of the existing roadway between 117+00 and 121+00 for the construction of the bridge bents and the placement of the pre-stressed concrete beams. Construct the temporary work pads using piling, timber bents, rock, contained fill or other methods that will minimize impacts to Fernan Lake. Provide a temporary work pad plan to the CO for review 30 days prior to construction.

Construct berms and other sedimentation basins at the waste site at 280+00 Right. These will be field approved by the CO, and constructed as necessary to prevent draining of water from saturated materials into or near any surface waters or waterways. These BMPs will be in place prior to the delivery of any saturated materials.

Schedule a pre-work meeting with the CO at least two weeks prior to beginning work. Review specific proposals for methods, equipment and material to be used for construction of the temporary bridge work pads.

Prepare and submit construction drawings according to Subsection 104.03. Provide detail descriptions of equipment, materials, staging and any other information necessary to control the work and to minimize impacts to the surroundings of Fernan Lake.

Silt Curtains (instream sediment trapping devices)

Use turbidity curtains at locations shown on the plans to contain silt at construction locations in Fernan Lake. Install turbidity curtains prior to performing excavation at that site. Remove and reuse the curtain at other sites as needed. Install, anchor, maintain and handle the curtain in accordance with manufacturer's recommendations. Provide the CO with 3 copies of the shop drawings for approval at least 14 days prior to ordering materials for each site where turbidity curtains are used. Include methods and locations for anchoring and maintaining the curtains.

Do not remove the turbidity curtains or other erosion control devices installed in Fernan Lake until the turbidity of water inside the erosion control device collection area is equal to or less than the turbidity of water outside the erosion control device collection area. Determine turbidity of water according to Subsection 106.02 (Visual inspection)

Emergency Erosion Control Measures

Provide the following minimum amounts of emergency erosion control measures on hand during the duration of construction: 100 feet of unsupported silt fence and 150 feet straw wattle. Use these to address unexpected rain events, or failure of other measures to contain sediment.

VI. Permittee Contact Information

Andy Rasmussen
Environmental Specialist
FHWA/Western Federal Lands Highway Division
610 East Fifth Street
Vancouver, WA 98661
Phone 360.619.7899
Andrew.Rasmussen@fhwa.dot.gov

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**CULTURAL RESOURCE MONITORING
AND
UNANTICIPATED DISCOVERY PLAN**

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**CULTURAL RESOURCE MONITORING AND UNANTICIPATED DISCOVERY PLAN
FERNAN LAKE ROAD SAFETY IMPROVEMENT PROJECT
IDAHO PUBLIC FOREST HIGHWAY 80
ID PFH 80-1(1)
KOOTENAI COUNTY, IDAHO
April 23, 2008**

Introduction

This *Cultural Resource Monitoring and Unanticipated Discovery Plan* was prepared for construction activities associated with improvements to the Fernan Lake Road in Kootenai County, Idaho between the northeastern boundary of Fernan Lake Village (0.7 mile northeast of the Sherman Road-Interstate 90 interchange) and the Fernan Saddle where the project ends in the Idaho Panhandle National Forest 10.7 miles northeast. The plan provides a coordinated program for protection of significant cultural resources that may be located in areas disturbed by project activities. The plan also establishes protocol among consulting parties, contractors and construction engineers. Applicable federal and state laws are given in Appendix A, and a contact list is given in Appendix B.

Monitoring and Unanticipated Discovery Procedures

The procedures specified in this plan have a two-fold objective: 1) to specify actions that will be taken if cultural resource or suspected cultural resource materials are discovered within the construction zone and also including, but not limited to, material source, disposal, and staging areas and 2) address procedures that will be taken in the event that project activities disturb a burial site or suspected burial site within the construction zone.

Policies and Protocols

As a general policy, and as far as practically feasible, all cultural resources and buried human remains will be avoided and actively preserved. If instances arise where modification of the project to accommodate avoidance is not possible, the resource or resources in question will be treated in the manner described below. "Cultural resource" is defined here to mean both isolated artifacts and intact cultural deposits and may include the remains of both prehistoric and historic activities and occupations. Typical markers of prehistoric activity include fire modified rock (FMR), animal bone, concentrations of freshwater shell, ground and flaked stone tools and flaked stone tool-making debris, burned earth, cordage or fiber, organically stained sediments, charcoal, ash, and exotic rocks and minerals. Markers of historic development prior to the mid-twentieth century may include milled lumber, masonry features, concrete, glass, ceramic, brick, and metal fragments as well as personal items such as buttons, pipes, and beads. Collection of artifacts and human remains by employees, construction personnel, or others with access to the project is prohibited. The Western Federal Lands Highway Division (WFLHD) and the Construction Contractor will keep all cultural resources information strictly confidential.

Information will only be shared with a contractor or subcontractor with the concurrence of the Cultural Resource Monitor or the secondary or tertiary contacts. If information is shared with a contractor or subcontractor, that person will be fully informed about the confidentiality requirements and will agree to keep the information confidential. If any of these requirements are not met, the information will not be shared.

Chain of Communication and Preliminary Procedures

The WFLHD Contracting Officer (CO) will ensure that the provisions of this document are carried out. A qualified archaeologist who meets the Secretary of Interior's Standards will perform the duties of the Cultural Resource Monitor for WFLHD and will be on site for all monitoring activities. At the time this plan was drafted, through an interagency agreement with the Coeur d'Alene Tribe, Jill Wagner has agreed to perform the duties of the Cultural Resource Monitor. The Cultural Resource Monitor will coordinate with the CO to schedule monitoring requirements and to identify cultural remains. The Cultural Resource Monitor will report directly to the CO. The Cultural Resource Monitor will be present when road improvement project activities may impact potential cultural properties.

During construction activities, the CO will have overall authority to immediately address potential cultural resources or discovery and will be responsible for communicating any such event to the Cultural Resource Monitor and the WFLHD Environment Team. The WFLHD Environment Team will then contact the Idaho State Historic Preservation Office (SHPO), Coeur d'Alene Tribal Historic Preservation Office (THPO), and the Idaho Panhandle National Forest (IPNF) Archaeologist when applicable. The CO has the authority to immediately stop work and redirect construction activities. The Cultural Resource Monitor will request any work stoppage through the CO. If the CO cannot be reached immediately, an on-site designated representative shall be alerted and will assume responsibility to minimize effects to cultural resources. The Cultural Resource Monitor will be responsible for reporting daily work and for documentation of any discoveries to the CO.

Monitoring Procedures

Monitoring is defined as observation of construction activities by the designated Cultural Resource Monitor as specified in this plan. When not present on site, the Cultural Resource Monitor will function on an on-call basis throughout the duration of the project. The primary goal of Cultural Resource Monitoring will be ensuring documentation of cultural material found during construction activities.

1. The CO will notify the Cultural Resource Monitor at least seven days prior to the pre-construction meeting with the contractor. The Cultural Resource Monitor may attend the meeting and brief construction personnel on the cultural resource issues associated with the project.

2. The CO will notify all contractors and subcontractors involved in ground disturbing activities of the cultural resource monitoring requirement as well as the notification schedule and process.
3. The CO will provide the Cultural Resource Monitor with notice of all safety regulations relevant to monitors and visitors in each area of the project. This notice shall be provided as soon as it is available, and no later than the two weeks before monitoring will be required in an area with relevant safety requirements. Notification of any change in safety requirements will be provided to the Cultural Resource Monitor, via phone and either e-mail or fax, the day that the change is made.
4. The Construction Contractor and the CO will work together to devise a two week work schedule which the CO will give to the Cultural Resource Monitor at weekly meetings or through e-mail. In order for the Cultural Resource Monitor to schedule availability, the two week work schedule will be provided to the Cultural Resource Monitor at the beginning of every work week. The schedule will include a detailed description of work activities and locations for the first week of work and a general description of work activities and locations for the second week of work. The CO will notify the Cultural Resource Monitor of any changes to the daily schedule of work by 6 a.m. the day of the scheduled work.
5. The CO will contact the Cultural Resource Monitor if potential cultural deposits are found. The CO will halt construction temporarily at the location of any potential discovery until the appropriate discovery procedures described in the following sections can be applied.
6. The Cultural Resource Monitor will be allowed on site during ground-disturbing project activities that may disturb the ground surface in the vicinity of potential cultural properties along the road improvement project area. The Cultural Resource Monitor will examine exposures and excavation spoils to identify any previously undocumented cultural material that may be present in the area monitored. The Cultural Resource Monitor will be positioned to have a clear view of surfaces exposed by excavation and spoils piles, while adhering to project safety protocols. The Cultural Resource Monitor will watch for culturally sensitive areas and determine when monitoring is no longer necessary in any given area. The Cultural Resource Monitor will not interfere with the activities of construction personnel, except in the case of the discovery of cultural resources, suspected cultural resources, human remains, and suspected human remains. In the event of such discovery, the Cultural Resource Monitor will follow the procedures outlined below under “Discovery Procedures”.

Discovery Procedures: Cultural Resources or Suspected Cultural Resources

The following steps will occur if resources are discovered during construction:

1. When cultural resources or suspected cultural resources are discovered, the Construction Contractor will notify the CO or his/her designated representative who will require cessation of all work within 50 feet in all directions of the discovery, clear all unnecessary personnel, and redirect work elsewhere while the evaluation is undertaken. The discovery site will be secured in a safe manner. The CO or his/her designated representative will immediately notify the

Cultural Resource Monitor who will a) identify the nature of the discovery, and b) conduct a preliminary evaluation.

2. When cultural resources or suspected cultural resources are discovered, the CO will notify the WFLHD Environment Team of the discovery immediately and arrange an independent site visit if requested. The Environment Team will then notify the SHPO and THPO. If the discovery site is located within the Idaho Panhandle National Forest, the IPNF Archaeologist will also be contacted.

3. The Cultural Resource Monitor will record, on standard forms, all prehistoric and historic cultural material. Initial efforts will focus on establishing the nature, provenience, and integrity of any discovery. Documentation methods may include photographs, sketches, scaled drawings, and written descriptions.

4. The Cultural Resource Monitor will record, on standard forms, all prehistoric and historic cultural material. Initial efforts will focus on establishing the nature, provenience, and integrity of any discovery. Documentation methods may include photographs, sketches, scaled drawings, and written descriptions.

5. If in the judgment of the Cultural Resource Monitor, the discovery retains integrity and has the potential to provide important information about prehistoric or historic activities it will be recommended eligible to the SHPO/THPO. Criteria and integrity requirements for listing on the National Register of Historic Places (36 CFR 60.4) will provide the standards for identification and evaluation of significance. The Cultural Resource Monitor will ensure that the CO is fully briefed on the discovery. Project activity will be prohibited in the immediate vicinity of the site and may not proceed until consultations with the SHPO/THPO have concluded that further activities will not adversely affect the resource.

Potential adverse project effects to a discovered historic property (i.e., a prehistoric or historic site eligible or assumed eligible to the NRHP) will be addressed in accordance with a treatment plan developed and implemented by the Cultural Resource Monitor and WFLHD in consultation with the SHPO and THPO. The Secretary of the Interior's *Standards for Archaeological Documentation* will apply to the treatment plan, including provisions for a research design, reporting, and curation of recovered materials.

A letter report will be submitted to FHWA and the SHPO by the Cultural Resource Monitor at the conclusion of the project reporting the results of the monitoring.

Discovery Procedures: Human Remains or Suspected Human Remains

1. At the time that any bone that may be human, or any funerary object, is discovered by the Construction Contractor or the CO, the CO and Cultural Resource Monitor will be immediately notified and immediately order the cessation of construction activities within line of site to the remains or within 150 feet of the remains, whichever is the greater area, and secure that area. The area will be cleared of all personnel other than one or two WFLHD staff members who will stay with the remains until THPO staff, Tribal Police, or other Tribe staff are on site. If the Cultural Resource Monitor is not present at the time that any bone that may be human, or any

funerary object, is discovered, the Construction Contractor will immediately contact the CO. The CO will then immediately contact the Cultural Resource Monitor who will proceed with the steps that follow. Upon discovery, no additional earth moving or stockpiling of materials will occur and the area of discovery will be avoided. The Cultural Resource Monitor will be allowed to conduct preliminary analysis of the discovery to determine if the remains are human.

2. No photography of human remains, suspected human remains, or funerary objects is allowed by anyone. Until Tribe staff arrive, the remains will be completely covered with loose soil from the immediate vicinity at a depth of up to 12 inches. No new ground disturbance should occur if at all avoidable. The source of the soil must be noted and communicated to Tribe staff. If no soil source is available, the remains may be covered with a tarp or plain piece of cloth such as a rug, towel, or blanket. The remains will not be touched, moved, or in anyway caused to change position from that noted upon discovery. All information related to the discovery will be held in strictest confidence. All information related to the discovery known to the construction contractor or WFLHD staff will be provided to the Tribal Police and Cultural Resource Monitor. All appropriate laws and policies will be followed to the best of the WFLHD and Tribe staff abilities.

3. If the material is determined to be human or possibly human, the Cultural Resource Monitor will immediately advise the CO who will ensure that the Kootenai County Sheriff and Coroner are contacted immediately along with the WFLHD Environment Team. The WFLHD Environment Team will then immediately contact the SHPO, THPO and IPNF Archaeologist, when applicable. The Cultural Resource Monitor and Coroner will make a determination of whether the remains are Native American. If the Coroner determines they are not Native American, or they represent a recent crime scene, he/she will take charge of the remains. If the remains are determined to be Native American, the WFLHD, SHPO, THPO and IPNF Archaeologist, when applicable, will confer to develop a treatment plan.

4. Exposed human remains and any associated or non-associated funerary objects will be treated with respect. Prior to disposition these remains and/or funerary objects will be temporarily re-buried or protected in other ways in accordance with the wishes of the THPO. No additional excavation of these remains and/or funerary objects will take place without THPO and SHPO consent, and no exposed remains or funerary objects will be left unattended in the field unless the THPO requests otherwise.

5. The construction delay will not end until the proper authorities who must include the WFLHD, SHPO and THPO and may include the Coroner, have determined proper disposition of the remains and have given permission, in writing, to proceed.

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APPENDIX A: Federal and State Cultural Resource Laws

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Federal Law

Federal lands, meaning lands managed by a federal agency, are subject to Federal regulation. The primary laws important for unanticipated discoveries are the following:

Archaeological Resources Protection Act (ARPA) of 1979

This Act prohibits the excavation or removal of archaeological resources from Federal or Indian lands without a permit from the land manager. ARPA imposes prohibitions on looting and vandalism and prohibits interstate trafficking in cultural remains recovered from Federal lands.

Native American Graves Protection and Repatriation Act (NAGPRA) of 1990

This act establishes the rights of Native American groups to human remains, associated cultural objects and objects of cultural patrimony recovered from federal or Indian lands; it establishes procedures and consultation requirements for intentional excavation or accidental discovery of Native American remains on federal or tribal lands.

State Law

Idaho Protection of Graves Statute (IC 27-502). This statute prohibits willful damage or removal of any cairn or grave and requires inadvertently disturbed graves to be re-interred. It also prohibits possession of artifacts or human remains from burials and public display or sale of human remains or artifacts taken from a cairn or grave.

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APPENDIX B: Contacts

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Cultural Resource Monitor

Jill Wagner (Coeur d’Alene Tribe THPO).....208-686-1572
cell: 208-582-1347
e-mail: jwagner@cdatribe-nsn.gov
Secondary Contact: Quanah Matheson (Cultural Resource Department
Director).....208-686-0675
cell: 208-699-3570
Tertiary Contact: John Hartman (CRIS Manager).....208-686-8402
cell: 208-301-0014

Western Federal Lands Highway Division Environment Team

Primary: Michael Schurke (Cultural Protection Specialist) 360-619-7636
cell: 503-806-4167
Secondary: Andy Rasmussen (Project Environmental Manager) 360-619-7899
Tertiary: Terry Schumann (Environment Protection Specialist) 360-619-
7607

Kootenai County Sheriff’s Office: 208-446-1300

Kootenai County Coroner: 208-446-2199

Coeur d’Alene Tribal Historic Preservation Office

Quanah Matheson (Cultural Resource Department Director) 208-686-0675

Idaho Panhandle National Forest

Steve Matz (Forest Archaeologist) 208-765-7306

Idaho State Historic Preservation Office:

Mary Anne Davis 208-334-3847

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