2016 Twisp River

Twisp Ponds Left Bank Side Channel Project

Columbia River
Honor. Protect.
Restore.

OFFICE
P.O. Box 151
401 Fort Road
Toppenish, WA 98948

PHONE
(509) 996-5005 ext. 1

FAX
(509) 865-6293

EMAIL
smih@yakamafish-nsn.gov

WEB
Yakamafish-nsn.gov

Dear Contractor: March 28, 2016

The Yakama Nation's Upper Columbia Habitat Restoration Project is requesting bids for construction of a **Salmon Habitat Enhancement Project** to be implemented adjacent to the Twisp River in July – September of 2016. The project will involve all work elements and specifications found in the Project Plans attached to this bid packet.

If you are interested in an award for this contract please attend the only pre-bid site visit scheduled on **Thursday, April 14, 2016, at 10:00 am** at the project location (**34 Yoakum Drive, Twisp, WA 98856**). This site visit will be conducted by Yakama Nation Fisheries Habitat Biologist Hans Smith, who is the project manager.

By the close of business on **Wednesday, April 27, 2016**, each contractor must have completed and submitted a signed copy of the attached Twisp Ponds Left Bank Side Channel Project Bid Sheet. Please specify in writing on the bid sheets that all bid prices will be valid for at least 150 days. All competitive bid materials must be either hand delivered or sent by parcel delivery service or postal mail to:

Yakama Nation
Attn: Jackie Olney
RE: Twisp Ponds Left Bank Side Channel Project
PO Box 151
Toppenish WA, 98948
(Shipping address: 401 Fort Road, Toppenish, WA 98948)

The project will be conducted between **July 15 and September 15, 2016**, to coincide with the permitted in-water work windows negotiated with NOAA, USFWS, and WDFW for this project. Some work within the Twisp River will need to be completed by August 15, 2016. The full project will occur when ESA-listed juvenile and adult salmon and steelhead may be present in or near the project area so turbidity control via cofferdam systems will be of the utmost importance. The winning contractor will understand the magnitude of this project and be equipped to perform all necessary elements for a project of this type within a critical habitat stream. The winning contractor will have extensive experience in the following: building cofferdams, de-watering following NMFS fish screening protocols, constructed log jams, excavating engineered channels and minimizing local disturbance.

All contractors submitting bids for this project shall provide and/or demonstrate, at a minimum, the following:

- ***A list of experienced equipment operators that will be on-site during project construction. Please provide details of their work on in-stream habitat enhancement structures within the past several years.***
- ***A detailed construction timeline of how you propose to get all project tasks completed within the stated project timeline.***
- ***Experience and preferably examples of the ability to create de-watered work areas through the use of coffering techniques. A cofferdam and surface water diversion plan should be submitted with the bid documents.***
- ***A list of key pieces of heavy equipment that will be used in construction of the project.***

Please note:

- Davis Bacon Wages apply to this contract. The winning contractor will adhere to the Davis Bacon rules and comply and submit all necessary paperwork to the Yakama Nation.

- The Yakama Nation is exempt from state taxes on this project. Please see the attached Treaty Fishery Exempt Cover Letter and Treaty Fishery Exempt Certificate. The winning contractor will receive signed copies for their records.

- This project has adopted by reference in the Engineer's Planset the 2014 Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction. Please download a digital copy of the WSDOT 2014 Standard Specifications from http://www.wsdot.wa.gov/publications/manuals/fulltext/M41-10/SS2014.pdf .

- This project will occur on private properties and no one is allowed on the property prior to the site visit without specific consent of the property owner.

- Awarded contractor must provide “san-i-can” service.

The attached Scope of Work Exhibit provides an overview of the scope of work likely to be incorporated into the awarded contract. Please make note of specific provisions provided in this Scope of Work Exhibit that may be in addition to the specifications and directions found in the Project Planset.

For your reference, I have also included with this RFP a copy of the latest Construction Services Contract template used by the Yakama Nation. Please make note of invoicing and reporting requirements listed within our contract template.

Also, please note that this project is pending on permitting and final landowner permission. The Yakama Nation reserves the right to accept or reject any and all of the proposals received as a result of this request, or to cancel in part or entirely this request if it is in the best interest of the Yakama Nation to do so. This request does not commit the Yakama Nation to pay any costs incurred in the preparation of a proposal.

For questions regarding the site visit, please contact me at the numbers provided below.

Sincerely,

Hans Smith
Yakama Nation Fisheries
2 Johnson Lane
Winthrop, WA 98862
(509) 996-5005 ext. 1 (office)
(509) 449-2750 (cell)
smih@yakamafish-nsn.gov

BID PROPOSAL for Twisp Ponds Left Bank Side Channel Project

Please use the Engineer's Stamped Project Plans and the bid packet to produce your competitive bids.

No.	Item	Quantity	Unit	Unit Price	Extended Price
1	TESC, SPCC Plan and Implementation	1	LS		
2	Mobilization	1	LS		
3	Channel Excavation Incl. Embankment	3,800	CY		
4	Removal of Structure	1	LS		
5	Cofferdams	1	LS		
6	Pumping	1	LS		
7	Logs	1	LS		
8	Well Casing Seal	1	LS		
9	Road Repair: Base Course	1,600	CY		
				TOTAL (do not include tax)	$ -

Company Name:

Date Prepared:

Certification

Printed Name and Title

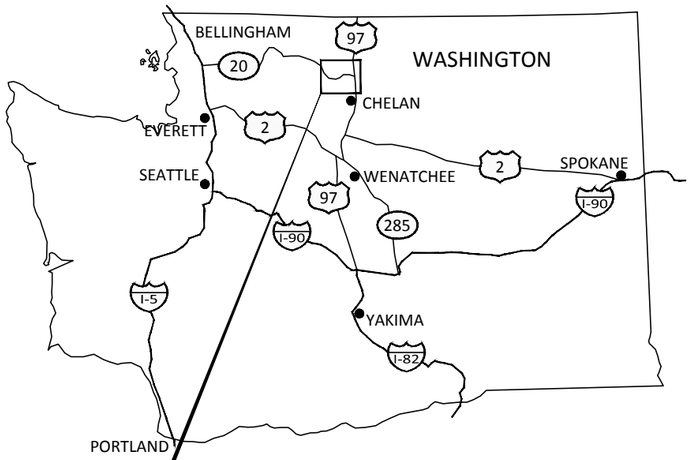
Signature

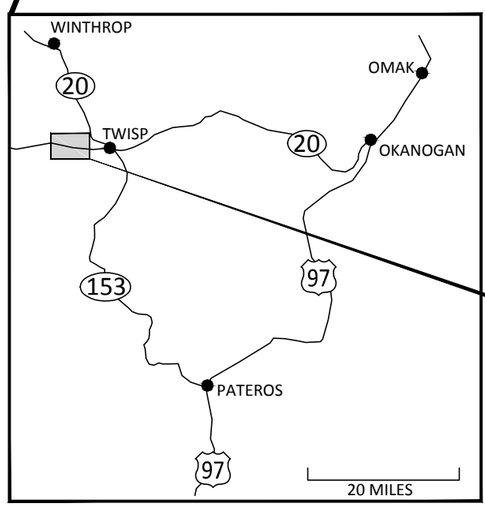
By signing and submitting this form you are agreeing to honor the completed competitive bid for a period of up to 150 days from the date this form was prepared.

LOWER TWISP RIVER - TWISP PONDS LEFT BANK HABITAT ENHANCEMENT PROJECT

OKANOGAN COUNTY, WASHINGTON
MARCH, 2016

THIS PROJECT WAS DESIGNED IN ACCORDANCE WITH THE BPA HABITAT IMPROVEMENT PROGRAM, PROGRAMMATIC BIOLOGICAL OPINION (HIP III).



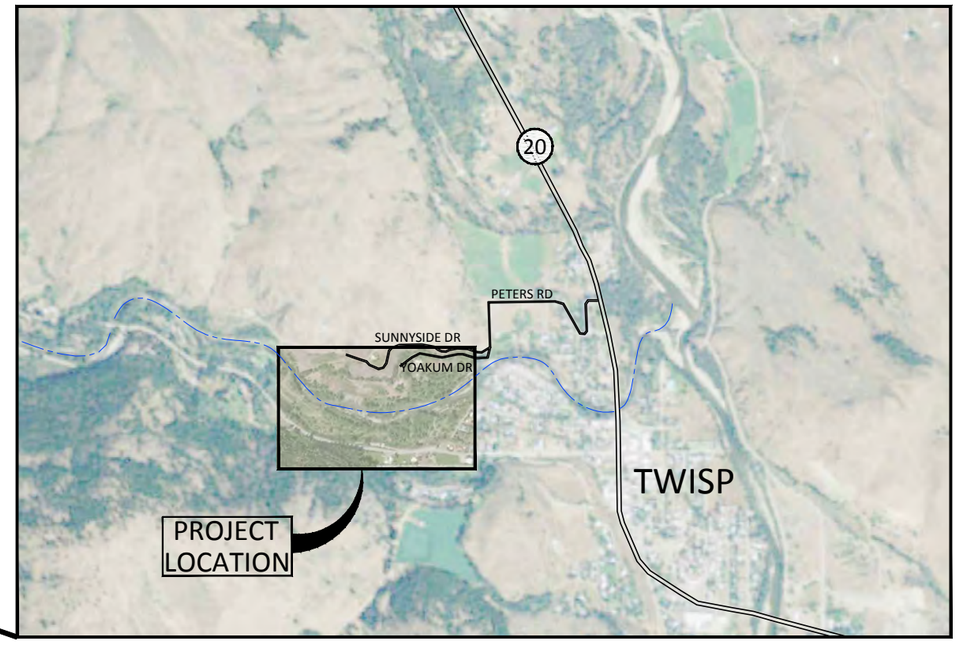


VICINITY MAP

COORDINATES:
LATITUDE 48° 22' 15.75" N
LONGITUDE 120° 9' 44.51" W

SECTIONS 11-12, TOWNSHIP 33N, RANGE 21E

WATERBODY: LOWER TWISP RIVER
TRIBUTARY OF: METHOW RIVER



SITE MAP

SHEET INDEX

1. COVER SHEET, SHEET INDEX, VICINITY MAPS
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3. PROPOSED CONDITIONS, PROJECT SITES OVERVIEW
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10. ALCOVE CROSS SECTIONS
11. DETAILS
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13. SPECIFICATIONS

MICHAEL R. McALLISTER
STATE OF WASHINGTON
38189
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES 08-25-2016

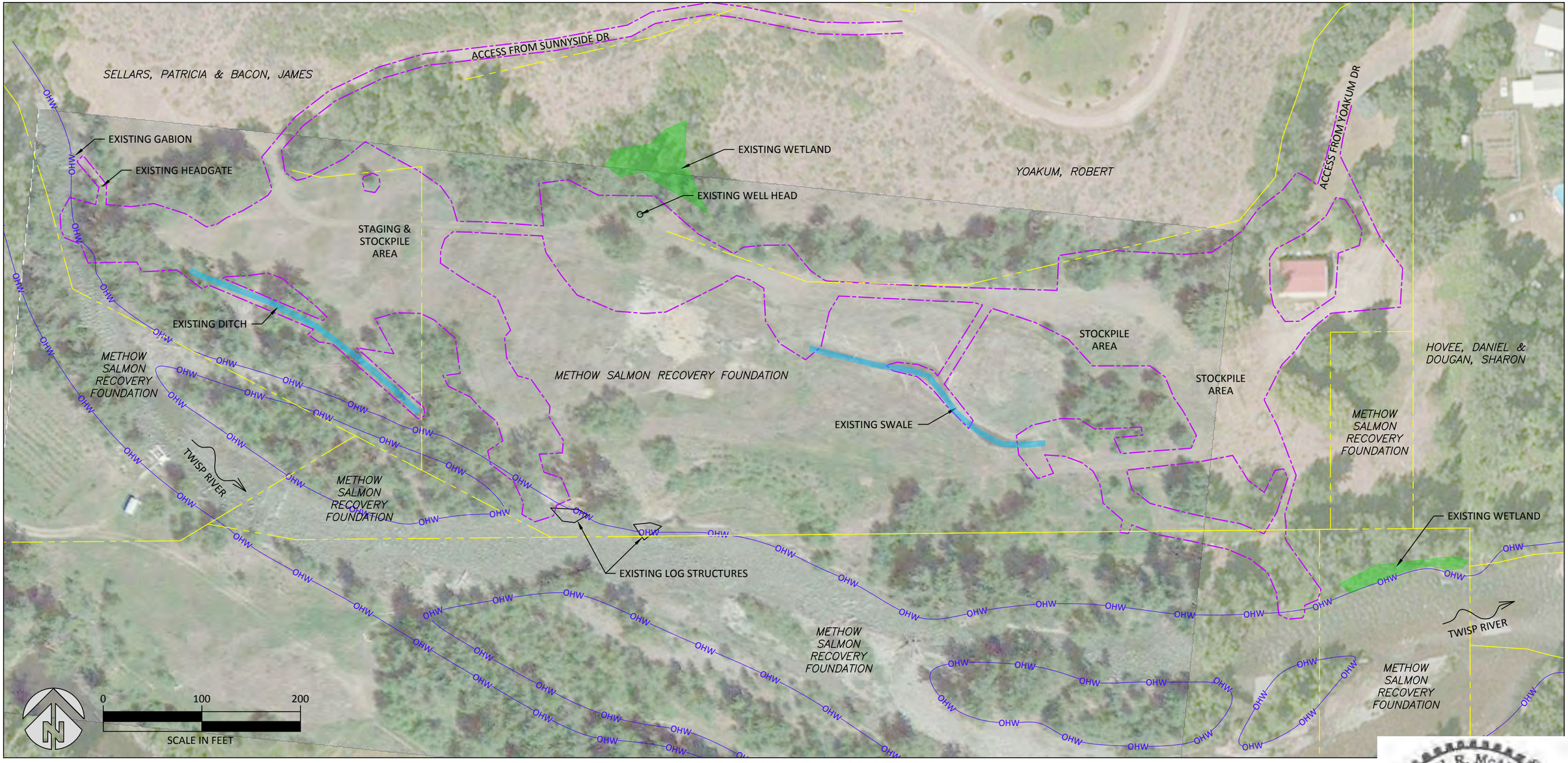
NO.	BY	DATE	REVISION DESCRIPTION

MM	MM	MB
DRAWN	DESIGNED	CHECKED
GJ	03/24/16	TWISP PONDS
APPROVED	DATE	PROJECT

CONFEDERATED BANDS AND TRIBES OF THE YAKAMA NATION
LOWER TWISP RIVER
TWISP PONDS LEFT BANK

inter·fluve
501 Portway Avenue, Suite 101
Hood River, OR 97031
541.386.9003
www.interfluve.com

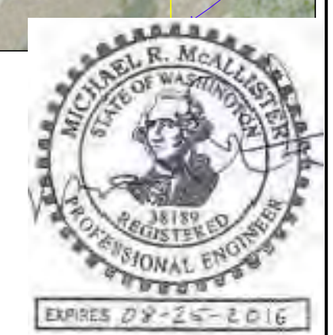
COVER SHEET
SHEET INDEX
VICINITY MAPS



EXISTING CONDITIONS

LEGEND

- LIMITS OF DISTURBANCE
- ORDINARY HIGH WATER
- WETLAND
- DEPRESSION (SEASONALLY WET)
- PROPERTY LINE *(OWNER)*



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EXISTING CONDITIONS
PROPERTY OWNERSHIP
SITE ACCESS AND PROJECT LIMITS

ACCESS FROM SUNNYSIDE DR

REMOVE GABION

REMOVE HEADGATE

WEST FILL AREA

STAGING & STOCKPILE AREA

SIDE CHANNEL

FILL EXISTING DITCH

TWISP RIVER

SIDE CHANNEL SHEET 7

EXISTING LOG STRUCTURES

EXISTING WELL HEAD

MIDDLE FILL AREA

ACCESS FROM YOAKUM DR

EAST FILL AREA

PARKING AREA

SHALLOW FILL

EXTEND SWALE

STOCKPILE AREA

RE-GRADE SWALE

EXISTING SWALE

ALCOVE

STOCKPILE AREA

ALCOVE SHEET 9

TWISP RIVER

OHW

MICHAEL R. McALLISTER
STATE OF WASHINGTON
38189
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES 08-26-2016

PROJECT SITES

LEGEND

- LIMITS OF DISTURBANCE
- ORDINARY HIGH WATER
- PROPOSED CONTOURS (1 FT)
- PROPOSED FILL AREA
- PROPOSED WOOD

0 100 200
SCALE IN FEET

NO.	BY	DATE	REVISION DESCRIPTION

MM DRAWN	MM DESIGNED	MB CHECKED
GJ APPROVED	03/24/16 DATE	TWISP PONDS PROJECT

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PROPOSED CONDITIONS
PROJECT SITES OVERVIEW

IT IS STRONGLY SUGGESTED THAT THE CONTRACTOR ATTEND A PRE-BID SITE MEETING.

THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH THE OWNER AND OWNER'S REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION.

ALL WORK SHALL CONFORM TO THE 2014 EDITIONS OF STANDARD PLANS AND SPECIFICATIONS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT), AND LOCAL STANDARDS UNLESS INDICATED OTHERWISE BY THE CONTRACT DOCUMENTS. IN CASE OF A CONFLICT BETWEEN THE REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT WILL PREVAIL.

IN CASE OF DISCREPANCY, BETWEEN NOTES, LOCAL REGULATIONS, OR OTHER CONTRACT DOCUMENTATION, CONTRACTOR SHALL OBTAIN CLARIFICATION/DIRECTION FROM OWNER.

EXISTING DATA

TOPOGRAPHIC SURVEY COLLECTED BY INTER-FLUVE, INC. BY RTK GPS AND TOTAL STATION IN OCTOBER AND DECEMBER 2013 AND JULY 2015. REFERENCED TO NAD83 WASHINGTON STATE PLANE, NORTH ZONE US FEET NAVD 88.

PROPERTY BOUNDARIES PROVIDED BY OKANOGAN COUNTY, 2015.

WETLAND BOUNDARIES DISPLAYED IN THIS SET ARE THE RESULT OF A WETLAND ASSESSMENT PERFORMED BY INTER-FLUVE, INC. IN OCTOBER 2013.

THE ORDINARY HIGH WATER (OHW) AND APPROXIMATE LOW WATER LINES DISPLAYED IN THE DESIGN PACKAGE WERE DELINEATED BY INTER-FLUVE STAFF IN 2014 AND 2015, AND ARE BASED UPON ANALYSIS, MODELING AND BEST PROFESSIONAL JUDGEMENT.

HYDRAULIC MODELING BY INTER-FLUVE USING USACE HEC-RAS (4.1.0). MODEL CALIBRATED USING SURVEYED WATER SURFACE ELEVATIONS AND EXISTING HIGH WATER MARKS.

SOILS

TWISP RIVER GRAVEL AND FLOODPLAIN SOILS.

PRESENCE OF CONTAMINANTS ON THIS SITE HAS BEEN EVALUATED THROUGH THE EXCAVATION OF TEST PITS IN THE PROJECT AREA, SITE VISITS, ANALYSIS OF THE HISTORICAL PHOTO RECORD, AND CONVERSATIONS WITH LANDOWNERS. THESE ANALYSES SUGGEST THAT IT IS UNLIKELY THAT CONTAMINANTS WILL BE ENCOUNTERED ON THIS SITE.

UTILITIES

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR HAVING UTILITIES LOCATED PRIOR TO CONSTRUCTION ACTIVITIES.

THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE AFFECTED UTILITY SERVICE TO REPORT ANY DAMAGED OR DESTROYED UTILITIES. THE CONTRACTOR SHALL PROVIDE EQUIPMENT OR LABOR TO AID THE AFFECTED UTILITY SERVICE IN REPAIRING DAMAGED OR DESTROYED UTILITIES AT NO COST TO THE OWNER.

WDFW IN-WATER WORK PERIODS

WORK SHALL OCCUR DURING THE PERMITTED IN-WATER WORK PERIOD STATED IN THE HYDRAULIC PROJECT APPROVAL.

FISH RESCUE

ALL FISH RESCUE EFFORTS SHALL BE SUPERVISED BY A QUALIFIED FISHERIES/AQUATIC BIOLOGIST EXPERIENCED WITH THE COLLECTION AND HANDLING OF SALMONID FISHES FROM CONSTRUCTION SITES.

ALL FISH TRAPPED IN RESIDUAL POOLS WITHIN THE PROJECT AREA WILL BE CAREFULLY COLLECTED BY SEINE AND/OR DIP NETS AND PLACED IN CLEAN TRANSFER CONTAINERS WITH ADEQUATE VOLUME OF WATER AND HELD WITHIN NO LONGER THAN 10 MINUTES.

CAPTURED FISHES SHALL BE IMMEDIATELY RELEASED INTO THE RIVER.

CULTURAL RESOURCES

IF ANY ARCHAEOLOGICAL RESOURCES AND/OR ARTIFACTS ARE ENCOUNTERED DURING CONSTRUCTION ALL CONSTRUCTION ACTIVITY SHALL IMMEDIATELY CEASE AND THE OWNER SHALL BE CONTACTED.

TREE SALVAGE

ALL SAPLING AND TREES TO BE REMOVED FOR ACCESS WILL BE APPROVED AND CLEARLY MARKED BY THE OWNER'S REPRESENTATIVE.

ALL REMOVED VEGETATION SHALL BE INCORPORATED INTO LOG JAM STRUCTURES AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IF EXCESS MATERIAL NEEDS DISPOSAL OUTSIDE OF CHANNEL WORK, IT SHALL BE DISTRIBUTED ON THE FLOODPLAIN AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

ALL TREES REMOVED WITHIN CLEARING LIMITS SHALL BE REMOVED WHOLE WITH ROOTS INTACT AND UTILIZED IN THE CHANNEL CONSTRUCTION AS DIRECTED BY OWNER'S REPRESENTATIVE.

LIVE TREES

ALL TREES NOT MARKED FOR REMOVAL SHALL BE PRESERVED AND UNDISTURBED. CONSTRUCTION ACTIVITY SHALL NOT DEBARK OR DAMAGE LIVE TREES.

KEEP OUT OF DRIP LINE OF ALL PRESERVED EXISTING TREES.

IMPORTED LOGS

WOOD WILL BE PROVIDED BY THE OWNER, AND HAS BEEN INSPECTED BY THE ENGINEER PRIOR TO PROJECT DESIGN. KEY PIECES OF LARGE WOOD WILL BE HARD, INTACT, AND NOT DECAYING.

CONSTRUCTION ACCESS

THE CONTRACTOR IS ADVISED THAT ACCESS TO THE SITE WILL BE BY RURAL ROADS OF LIMITED WIDTH.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR OBTAINING ANY REQUIRED TRAFFIC CONTROL OR ACCESS PERMITS, AND PROVIDING REQUIRED TRAFFIC CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, SIGNAGE AND FLAGGERS.

ALL EQUIPMENT, MATERIALS AND PERSONNEL SHALL REMAIN WITHIN THE LIMITS OF DISTURBANCE.

THE CONTRACTOR SHALL KEEP THE WORK AREAS IN A NEAT AND CLEAN CONDITION FREE OF DEBRIS AND LITTER FOR THE DURATION OF THE PROJECT.

ALL TEMPORARY ACCESS ROUTES SHALL BE DECOMMISSIONED BY OBLITERATION AND DECOMPACTION. STABILIZE SOIL AND REVEGETATE PER PLANTING PLAN. TEMPORARY ACCESS ROUTES IN AREAS PRONE TO INUNDATION DURING THE IN-WATER WORK WINDOW SHALL BE DECOMMISSIONED BEFORE THE END OF THE IN-WATER WORK WINDOW.

WHEN TEMPORARY VEGETATION REMOVAL IS REQUIRED, VEGETATION WILL BE CUT TO GROUND LEVEL (NOT GRUBBED).

CONSTRUCTION STAKING

THE OWNER WILL INSTALL STAKES AND OR FLAGGING TO DELINEATE WETLANDS, EQUIPMENT ENTRY AND AXIT POINTS, STAGING AND STOCKPILE AREAS, AND PROJECT LIMIT. THE OWNER WILL INSTALL GRADE STAKES, AND ELEVATION CONTROL POINTS. THE CONTRACTOR SHALL BE RESPOSIBLE FOR REPLACING DAMAGED OR MISSING STAKES.

CONTRACTOR SHALL MEET WITH THE OWNER AND OWNER'S REPRESENTATIVE TO DEFINE AND MARK LIMITS OF DISTURBANCE PRIOR TO MOBILIZATION OF EQUIPMENT OR MATERIALS ONTO THE SITE.

SOME FIELD ADJUSTMENTS TO THE LINES AND GRADES ARE TO BE EXPECTED. LOCATION, ALIGNMENT, AND ELEVATION OF LOGS AND LOGS WITH ROOTWADS ARE SUBJECT TO ADJUSTMENT BASED ON FIELD CONDITIONS, AND MATERIAL SIZE.

STAGING, STORAGE, AND STOCKPILE AREAS

STAGING AREAS (USED FOR CONSTRUCTION EQUIPMENT STORAGE, VEHICLE STORAGE, FUELING, SERVICING, AND HAZARDOUS MATERIAL STORAGE) WILL BE 150 FEET OR MORE FROM ANY NATURAL WATER BODY OR WETLAND, OR ON AN ADJACENT, ESTABLISHED ROAD AREA IN A LOCATION AND MANNER THAT WILL PRECLUDE EROSION INTO OR CONTAMINATION OF THE STREAM OR FLOODPLAIN.

EXCAVATED MATERIALS SHALL BE STOCKPILED NEATLY IN AN APPROVED LOCATION WITHIN THE STOCKPILE AND STAGING AREA. AT COMPLETION OF WORK, THE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ANY PERMITS AND FEES REQUIRED FOR LEGAL DISPOSAL.

NATURAL MATERIALS USED FOR IMPLEMENTATION OF AQUATIC RESTORATION, SUCH AS LARGE WOOD, GRAVEL, AND BOULDERS, MAY BE STAGED WITHIN THE 100-YEAR FLOODPLAIN.

ANY LARGE WOOD, TOPSOIL, AND NATIVE CHANNEL MATERIAL DISPLACED BY CONSTRUCTION WILL BE STOCKPILED FOR USE DURING SITE RESTORATION AT A SPECIFICALLY IDENTIFIED AND FLAGGED AREA.

ANY MATERIAL NOT USED IN RESTORATION, AND NOT NATIVE TO THE FLOODPLAIN, WILL BE REMOVED TO A LOCATION OUTSIDE OF THE 100-YEAR FLOODPLAIN FOR DISPOSAL.

EQUIPMENT

MECHANIZED EQUIPMENT AND VEHICLES WILL BE SELECTED, OPERATED, AND MAINTAINED IN A MANNER THAT MINIMIZES ADVERSE EFFECTS ON THE ENVIRONMENT (E.G., MINIMALLY-SIZED, LOW PRESSURE TIRES; MINIMAL HARD-TURN PATHS FOR TRACKED VEHICLES; TEMPORARY MATS OR PLATES WITHIN WET AREAS OR ON SENSITIVE SOILS). ALL VEHICLES AND OTHER MECHANIZED EQUIPMENT WILL BE:

STORED, FUELED, AND MAINTAINED IN A VEHICLE STAGING AREA PLACED 150 FEET OR MORE FROM ANY NATURAL WATER BODY OR WETLAND OR ON AN ADJACENT, ESTABLISHED ROAD AREA;

REFUELED IN A VEHICLE STAGING AREA PLACED 150 FEET OR MORE FROM A NATURAL WATERBODY OR WETLAND, OR IN AN ISOLATED HARD ZONE, SUCH AS A PAVED PARKING LOT OR ADJACENT, ESTABLISHED ROAD (THIS MEASURE APPLIES ONLY TO GAS-POWERED EQUIPMENT WITH TANKS LARGER THAN 5 GALLONS);

BIODEGRADABLE LUBRICANTS AND FLUIDS SHOULD BE USED, IF POSSIBLE, ON EQUIPMENT OPERATING IN AND ADJACENT TO THE STREAM CHANNEL AND LIVE WATER.

INSPECTED DAILY FOR FLUID LEAKS BEFORE LEAVING THE VEHICLE STAGING AREA FOR OPERATION WITHIN 150 FEET OF ANY NATURAL WATER BODY OR WETLAND; AND

THOROUGHLY CLEANED BEFORE OPERATION BELOW ORDINARY HIGH WATER, AND AS OFTEN AS NECESSARY DURING OPERATION, TO REMAIN GREASE FREE.

ABBREVIATIONS

APPROX	APPROXIMATE	INV	INVERT
CY	CUBIC YARDS	LWM	LARGE WOODY MATERIAL
°	DEGREES	MAX	MAXIMUM
DIA or Ø	DIAMETER	MIN	MINIMUM
DBH	DIAMETER AT BREAST HEIGHT	OHW	ORDINARY HIGH WATER
EA	EACH	%	PERCENT
EL or ELEV	ELEVATION	RMx	RIVER MILE x
ESC	EROSION AND SEDIMENT CONTROL	STA	STATION
EXIST	EXISTING	TBD	TO BE DETERMINED
FT or '	FEET	TYP	TYPICAL
FTR	FULLY THREADED ROD	VERT	VERTICAL
HORIZ	HORIZONTAL	WSE	WATER SURFACE ELEVATION
IN or "	INCH	YR	YEAR

NO.	BY	DATE	REVISION DESCRIPTION

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GJ	03/24/16	TWISP PONDS
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GENERAL NOTES

EROSION CONTROL

CONTRACTOR SHALL BE SOLELY RESPONSIBLE AT OWN EXPENSE FOR PROVIDING AND MAINTAINING ALL NECESSARY EROSION CONTROL FACILITIES TO COMPLY WITH APPLICABLE EROSION CONTROL REGULATIONS AND TO MAINTAIN CLEAN ACCESS ROUTES.

EROSION/SEDIMENTATION CONTROL (ESC) PLAN

THE EROSION AND SEDIMENT CONTROL (ESC) PLAN PROVIDED IS FOR INFORMATIONAL PURPOSES ONLY, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING EROSION CONTROL MEASURES TO COMPLY WITH APPLICABLE REGULATIONS. EROSION CONTROL MEASURES IN THE ESC PLAN SHALL BE COMPATIBLE WITH BPA HIP3 CONSERVATION MEASURES FOR EROSION CONTROL.

THE RECOMMENDATIONS FOR AN ESC PLAN INCLUDED HEREIN WILL PROVIDE A GUIDELINE FOR THE CONTRACTOR TO DEVELOP AND IMPLEMENT AN ESC PLAN.

A. THE IMPLEMENTATION OF AN ESC PLAN AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.

B. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.

ESC FACILITIES AS APPROXIMATELY SHOWN ON THIS PLAN ARE TO BE CONSTRUCTED PRIOR TO CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM.

STABILIZE SOILS AND PROTECT SLOPES

FROM MAY 1 THROUGH SEPTEMBER 30, ALL EXPOSED SOILS SHALL BE PROTECTED FROM EROSION BY MULCHING, PLASTIC SHEETING, HYDROSEED COVERING, OR OTHER APPROVED MEASURES WITHIN THREE DAYS OF GRADING. FROM OCTOBER 1 THROUGH APRIL 30, ALL EXPOSED SOILS MUST BE PROTECTED WITHIN 2 DAYS OF GRADING. SOILS SHALL BE STABILIZED BEFORE A WORK SHUTDOWN, HOLIDAY OR WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST. SOIL STOCKPILES MUST BE STABILIZED AND PROTECTED WITH SEDIMENT TRAPPING MEASURES. MULCH AS SOON AS PRACTICAL ALL DISTURBED AREAS NOT INDICATED IN THE CONTRACT DOCUMENTS FOR OTHER PERMANENT STABILIZATION MEASURES. HAY, STRAW, AND MULCH USED ON SITE MUST BE 99.9% WEED-FREE.

DESIGN, CONSTRUCT, AND PHASE CUT AND FILL SLOPES IN A MANNER THAT WILL MINIMIZE EROSION. REDUCE SLOPE VELOCITIES ON DISTURBED SLOPES BY PROVIDING TEMPORARY BARRIERS. STORMWATER FROM OFF SITE SHOULD BE HANDLED SEPARATELY FROM STORMWATER GENERATED ON SITE.

AFTER FINAL SITE STABILIZATION

ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED FROM THE SITE OR INCORPORATED INTO FINISHED GRADING. DISTURBED SOIL AREAS RESULTING FROM REMOVAL SHALL BE PERMANENTLY STABILIZED.

DUST CONTROL

THE CONTRACTOR SHALL CONTROL DUST FOR THE DURATION OF THE PROJECT. CONTROL MEASURES SHALL BE IN ACCORDANCE WITH APPLICABLE REGULATIONS, AND IN ACCORDANCE WITHH BPA HIP-III CONSERVATION MEASURES PERTAINING TO DUST ABATEMENT.

CONSTRUCTION DEWATERING

CONTRACTOR SHALL PERFORM CONSTRUCTION DEWATERING IN SUCH A MANNER AS TO AVOID THE RELEASE OF TURBID OR SEDIMENT-LADEN WATER IN ORDER TO PREVENT CONTAMINATION OR INCREASE TURBIDITY OF SURFACE WATERS. EXCAVATION OF DEWATERING SUMPS BEYOND LIMITS SHOWN SHALL BE AT NO ADDITIONAL COST. SEDIMENT LADEN WATER MAY BE PUMPED TO AN UPLAND DISCHARGE LOCATION AND ALLOWED TO SHEET FLOW THROUGH EXISTING VEGETATION BEFORE INFILTRATING INTO THE GROUND. IF THIS METHOD IS NOT SUFFICIENT TO PREVENT RETURN OF TURBID WATER TO SURFACE WATERS OR SENSITIVE FLOODPLAIN AREAS, A 'DIRT-BAG' OR SEDIMENT RETENTION STRUCTURE MAY BE REQUIRED AS NECESSARY TO COMPLY WITH LAWS AND PERMIT REQUIREMENTS AT NO ADDITIONAL COST.

CONTRACTOR SHALL PROVIDE, OPERATE, AND MAINTAIN NUMBER AND SIZE OF PUMPS AS NECESSARY TO ACHIEVE DEWATERING NEEDS. AT A MINIMUM, CONTRACTOR SHALL PROVIDE A 6" DRI-PRIME DIESEL POWERED PUMP AND A PORTABLE 2" PUMP. ADDITIONAL PUMPS AND OF DIFFERENT CAPACITIES MAY BE REQUIRED AT CONTRACTOR'S EXPENSE.

OWNER OR OWNER'S REPRESENTATIVE SHALL APPROVE DEWATERING DISCHARGE LOCATION PRIOR TO IMPLEMENTATION.

A. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED AT NO ADDITIONAL COST FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.

B. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

C. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A STORM EVENT.

D. STABILIZED CONSTRUCTION ENTRANCES AND ADDITIONAL MEASURES MAY BE REQUIRED AND SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT.

SPILL PREVENTION, CONTROL, AND COUNTER MEASURES

THE USE OF MECHANIZED MACHINERY INCREASES THE RISK FOR ACCIDENTAL SPILLS OF FUEL, LUBRICANTS, HYDRAULIC FLUID, OR OTHER CONTAMINANTS INTO THE RIPARIAN ZONE OR DIRECTLY INTO THE WATER. ADDITIONALLY, UNCURED CONCRETE AND FORM MATERIALS ADJACENT TO THE ACTIVE STREAM CHANNEL MAY RESULT IN ACCIDENTAL DISCHARGE INTO THE WATER. THESE CONTAMINANTS CAN DEGRADE HABITAT, AND INJURE OR KILL AQUATIC FOOD ORGANISMS AND ESA-LISTED SPECIES. THE PROJECT SPONSOR WILL ADHERE TO THE FOLLOWING MEASURES:

A DESCRIPTION OF HAZARDOUS MATERIALS THAT WILL BE USED, INCLUDING INVENTORY, STORAGE, AND HANDLING PROCEDURES WILL BE AVAILABLE ON-SITE.

WRITTEN PROCEDURES FOR NOTIFYING ENVIRONMENTAL RESPONSE AGENCIES WILL BE POSTED AT THE WORK SITE.

SPILL CONTAINMENT KITS (INCLUDING INSTRUCTIONS FOR CLEANUP AND DISPOSAL) ADEQUATE FOR THE TYPES AND QUANTITY OF HAZARDOUS MATERIALS USED AT THE SITE WILL BE AVAILABLE AT THE WORK SITE.

WORKERS WILL BE TRAINED IN SPILL CONTAINMENT PROCEDURES AND WILL BE INFORMED OF THE LOCATION OF SPILL CONTAINMENT KITS.

ANY WASTE LIQUIDS GENERATED AT THE STAGING AREAS WILL BE TEMPORARILY STORED UNDER AN IMPERVIOUS COVER, SUCH AS A TARPAULIN, UNTIL THEY CAN BE PROPERLY TRANSPORTED TO AND DISPOSED OF AT A FACILITY THAT IS APPROVED FOR RECEIPT OF HAZARDOUS MATERIALS.

VEGETABLE BASED HYDRAULIC FLUIDS (BIODEGRADABLE OIL) WILL BE USED IN ANY VEHICLE THAT WILL BE OPERATED NEAR THE WATER.

INVASIVE SPECIES CONTROL

THE FOLLOWING MEASURES WILL BE FOLLOWED TO AVOID INTRODUCTION OF INVASIVE PLANTS AND NOXIOUS WEEDS INTO PROJECT AREAS:

PRIOR TO ENTERING THE SITE, ALL VEHICLES AND EQUIPMENT WILL BE POWER WASHED, ALLOWED TO FULLY DRY, AND INSPECTED TO MAKE SURE NO PLANTS, SOIL, OR OTHER ORGANIC MATERIAL ADHERES TO THE SURFACE.

WATERCRAFT, WADERS, BOOTS, AND ANY OTHER GEAR TO BE USED IN OR NEAR WATER WILL BE INSPECTED FOR AQUATIC INVASIVE SPECIES.

WADING BOOTS WITH FELT SOLES ARE NOT TO BE USED DUE TO THEIR PROPENSITY FOR AIDING IN THE TRANSFER OF INVASIVE SPECIES.

INSPECTION AND MAINTENANCE

ALL ESC FACILITIES SHALL BE INSPECTED, MAINTAINED, AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL ESC FACILITIES SHALL BE INSPECTED DAILY AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES OF RAIN PER 24 HOUR PERIOD AND AFTER EVENTS EXCEEDING 2 HOURS DURATION.

CONTRACTOR'S ESC RECORD

WEEKLY REPORTS SUMMARIZING THE SCOPE OF INSPECTIONS, THE PERSONNEL CONDUCTING THE INSPECTION, THE DATE(S) OF THE INSPECTION, MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE CONTRACTOR'S EROSION AND SEDIMENT CONTROL PLAN, AND ACTIONS TAKEN AS A RESULT OF THESE INSPECTIONS SHALL BE PREPARED AND RETAINED ON SITE BY THE CONTRACTOR. IN ADDITION, A RECORD OF THE FOLLOWING DATES SHALL BE INCLUDED IN THE REPORTS:

1. WHEN MAJOR GRADING ACTIVITIES OCCUR,
2. DATES OF RAINFALL EVENTS EITHER EXCEEDING 2 HOURS DURATION OR MORE THAN 0.5 INCHES/24 HOURS,
3. WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON SITE, OR ON A PORTION OF THE SITE,
4. WHEN STABILIZATION MEASURES ARE INITIATED FOR PORTIONS OF THE SITE.

ESC RECORDS SHALL BE MADE AVAILABLE TO THE OWNER AND OWNER'S REPRESENTATIVE ON REQUEST AND SHALL BE PROVIDED FOR REVIEW AND APPROVAL PRIOR TO APPLICATION FOR PAYMENT.

NO.	BY	DATE	REVISION DESCRIPTION

MM	MM	MB
DRAWN	DESIGNED	CHECKED
GJ	03/24/16	TWISP PONDS
APPROVED	DATE	PROJECT

CONFEDERATED BANDS AND TRIBES OF THE YAKAMA NATION
LOWER TWISP RIVER
TWISP PONDS LEFT BANK

inter·fluve
501 Portway Avenue, Suite 101
Hood River, OR 97031
541.386.9003
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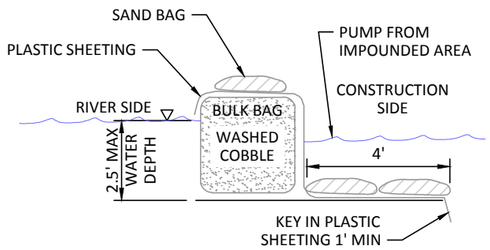
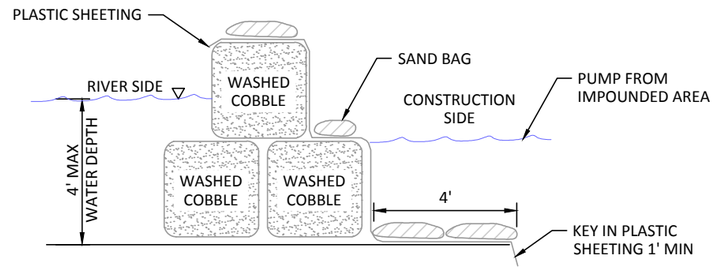
EROSION CONTROL



SECTION - WATER DEPTHS LESS THAN 2.5'



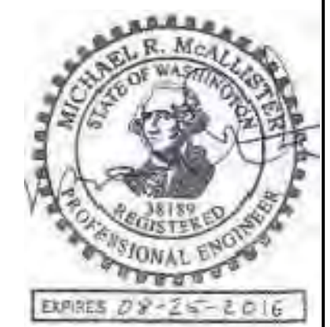
SECTION - WATER DEPTHS GREATER THAN 2.5'

1/6 TYPICAL DETAIL - TEMPORARY COFFERDAM

NOT TO SCALE

BULK BAG NOTES:

1. BULK BAG COFFERDAM SHALL BE CONSTRUCTED OF SEVERAL UNITS OF BULK BAGS FILLED WITH WASHED COBBLE, AND ABUTTED SIDE BY SIDE TO CREATE A ROW THAT ISOLATES THE CONSTRUCTION SITE.
2. IF WATER DEPTH EXCEEDS 85% OF THE BULK BAG HEIGHT, AN ADDITIONAL TOP ROW OF BULK BAGS SHALL BE INSTALLED, SUPPORTED BY TWO BOTTOM ROWS OF BULK BAGS. BULK BAG COFFERDAM SHALL BE SEALED BY COVERING THE COFFERDAM WITH PLASTIC SHEETING HELD IN PLACE BY STANDARD SANDBAGS PLACED IN ROWS ON TOP OF COFFERDAM, AND AT TOE OF COFFERDAM.
3. THE PLASTIC SHEETING SHALL BE DRAPED ALONG THE CHANNEL BOTTOM ON BOTH SIDES OF THE COFFERDAM WITH OUTWARD EDGE OF SHEETING MINIMUM 4-FEET FROM TOE OF COFFERDAM. THE DRAPED PORTION OF PLASTIC SHEETING SHALL BE PINNED TO THE CHANNEL BED BY MINIMUM TWO ROWS OF STANDARD SANDBAGS. ALL SANDBAGS SHALL BE FILLED WITH WASHED PEA GRAVEL.
4. THE CONSTRUCTION SIDE EDGE OF PLASTIC SHEETING SHALL BE TOED INTO THE CHANNEL BED MINIMUM 1-FT. TOEING IN THE OUTWARD EDGE OF PLASTIC SHEETING SHALL OCCUR AFTER THE COFFERDAM IS CLOSED TO PREVENT TURBIDITY RELEASE TO THE WATERWAY.
5. THE TERMINAL ENDS OF BULK BAG COFFERDAM, WHERE IT CONNECTS TO CHANNEL BANK OR HIGH GROUND, SHALL BE SEALED WITH PLASTIC SHEETING AND STANDARD SANDBAGS.
6. BULK BAGS SHALL BE CUBE-SHAPED POLYPROPYLENE WOVEN FABRIC BAGS WITH FULLY OPEN TOP, FLAT BOTTOM, FOUR LOOPS, MINIMUM 2-TON WEIGHT CAPACITY, MINIMUM 5:1 SAFETY FACTOR.
7. PLASTIC SHEETING SHALL BE MINIMUM 6-MIL THICKNESS. ROLL LENGTH SHALL BE LONG ENOUGH TO ENSURE THAT ENTIRE LENGTH OF COFFERDAM WILL BE COVERED WITHOUT A SEAM. MINIMUM 12-FT WIDE ROLL SHALL BE USED FOR SINGLE LAYER BULK BAG COFFERDAM. MINIMUM 16-FT WIDE ROLL SHALL BE USED FOR 2-LAYER STACKED BULK BAG COFFERDAM.
8. BULK BAG COFFERDAM SHALL BE COMPLETELY REMOVED AFTER CONSTRUCTION IS COMPLETED AND TURBIDITY HAS BEEN REMOVED. BULK BAG FILL (WASHED COBBLE) AND SANDBAG FILL (WASHED PEA GRAVEL) SHALL BE DISPOSED OF ON SITE. BAGS SHALL BE REMOVED FROM THE SITE ONCE CONSTRUCTION IS COMPLETED.
9. MEASUREMENT AND PAYMENT FOR BULK BAG COFFERDAM, SAND BAGS, PLASTIC SHEETING, WASHED COBBLE PLACEMENT, MAINTENANCE AND REMOVAL OF ALL MATERIALS SHALL BE INCIDENTAL TO THE LUMP SUM ALL INCLUSIVE COST FOR DIVERSION AND DEWATERING.
10. ALTERNATE COFFERDAM MATERIALS AND CONFIGURATIONS MAY BE ALLOWED BUT SHALL NOT BE IMPLEMENTED WITHOUT REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND/OR VENDOR CUT SHEETS FOR SUBSTITUTIONS.



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APPROVED	DATE	PROJECT

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LOWER TWISP RIVER
TWISP PONDS LEFT BANK

inter·fluve
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Hood River, OR 97031
541.386.9003
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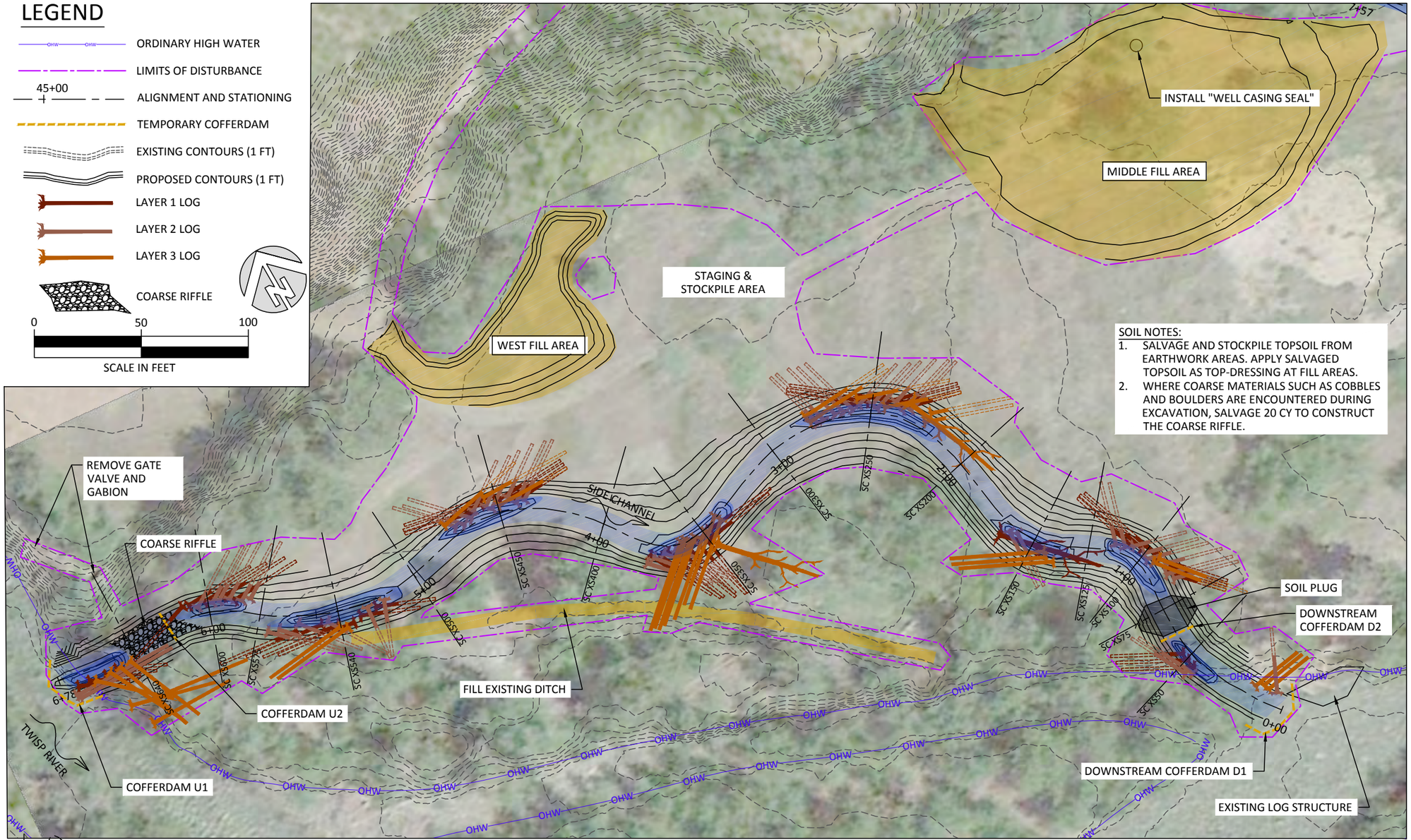
EROSION CONTROL

LEGEND

- ORDINARY HIGH WATER
- LIMITS OF DISTURBANCE
- 45+00 ALIGNMENT AND STATIONING
- TEMPORARY COFFERDAM
- EXISTING CONTOURS (1 FT)
- PROPOSED CONTOURS (1 FT)
- LAYER 1 LOG
- LAYER 2 LOG
- LAYER 3 LOG
- COARSE RIFFLE

0 50 100
SCALE IN FEET



SOIL NOTES:
1. SALVAGE AND STOCKPILE TOPSOIL FROM EARTHWORK AREAS. APPLY SALVAGED TOPSOIL AS TOP-DRESSING AT FILL AREAS.
2. WHERE COARSE MATERIALS SUCH AS COBBLES AND BOULDERS ARE ENCOUNTERED DURING EXCAVATION, SALVAGE 20 CY TO CONSTRUCT THE COARSE RIFFLE.

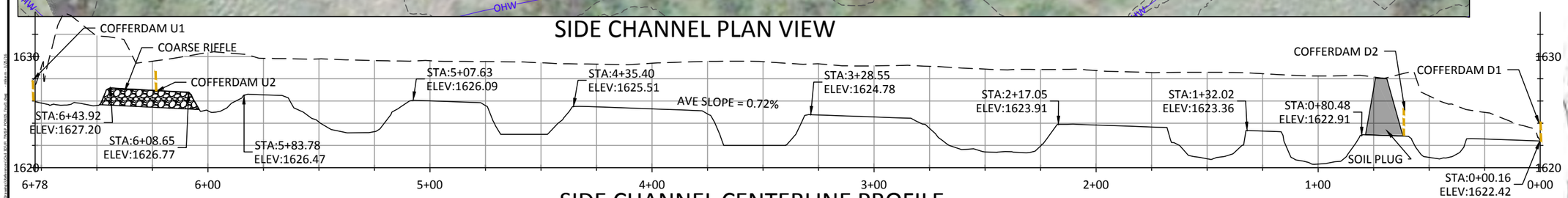
SIDE CHANNEL PLAN VIEW

CONSTRUCTION MATERIALS

ITEM	QUANTITY
COFFERDAM	110 FEET
LOGS WITH ROOTS	138
SALVAGED TREES	3
SLASH	200 CY
EXCAVATION	2600 CY
WEST FILL	320 CY
MIDDLE FILL	940 CY
DITCH FILL	100 CY

RECOMMENDED CONSTRUCTION SEQUENCE

1. REMOVE GABION AND HEADGATE.
2. AT SIDE CHANNEL INLET AREA, INSTALL FISH EXCLUSION NET AND UPSTREAM COFFERDAM U1 .
3. STARTING AT UPSTREAM END, CONSTRUCT SIDE CHANNEL AND LOG STRUCTURES WITHIN OHW, AND CONTINUE CHANNEL CONSTRUCTION FOR A SHORT DISTANCE DOWNSTREAM. CONSTRUCT THE COARSE RIFFLE USING SALVAGED COBBLES AND BOULDERS.
4. INSTALL UPSTREAM COFFERDAM U2.
5. REMOVE COFFERDAM U1 (FISH SCREEN REMAINS).
6. INSTALL FISH EXCLUSION NET AND DOWNSTREAM COFFERDAM D1.
7. STARTING AT DOWNSTREAM END, CONSTRUCT SIDE CHANNEL AND LOG STRUCTURES WITHIN OHW, AND CONTINUE CHANNEL CONSTRUCTION FOR A SHORT DISTANCE UPSTREAM.
8. INSTALL DOWNSTREAM COFFERDAM D2.
9. REMOVE COFFERDAM D1 (FISH SCREEN REMAINS).
10. STARTING AT DOWNSTREAM END, CONTINUE CHANNEL CONSTRUCTION UPSTREAM OF COFFERDAM D2. A TEMPORARY SOIL PLUG OF EXISTING GROUND WILL REMAIN IN PLACE AS A WATER BAR.
11. PUMP CONSTRUCTION WATER TO INFILTRATION AREAS.
12. PLACE FILL AT DESIGNATED ON-SITE FILL AREAS. (WORK AT THE MIDDLE FILL AREA IS IN CONJUNCTION WITH INSTALLING A "WELL CASING SEAL".
13. STABILIZE COMPLETED SLOPES.
14. WHEN SIDE CHANNEL IS COMPLETE, REMOVE SOIL PLUG.
15. GRADUALLY REMOVE UPSTREAM COFFERDAM D2 TO RINSE CHANNEL. PUMP CHANNEL RINSE WATER FROM DOWNSTREAM POOL (STA 1+00) TO INFILTRATION AREAS.
16. WHEN RINSE WATER RUNS CLEAN, REMOVE COFFERDAM D2. REMOVE REMAINING PORTIONS OF COFFERDAM U2.
17. REMOVE FISH EXCLUSION.
18. SCARIFY TO 12" DEPTH TO DECOMPACT TEMPORARY ACCESS ROUTES AND STAGING AREAS



SIDE CHANNEL CENTERLINE PROFILE

MICHAEL R. McALLISTER STATE OF WASHINGTON 38189 REGISTERED PROFESSIONAL ENGINEER
EXPIRES 08-25-2016

NO.	BY	DATE	REVISION DESCRIPTION

MM DRAWN	MM DESIGNED	MB CHECKED
GJ APPROVED	12/30/15 DATE	TWISP PONDS PROJECT

CONFEDERATED BANDS AND TRIBES OF THE YAKAMA NATION
LOWER TWISP RIVER
TWISP PONDS LEFT BANK

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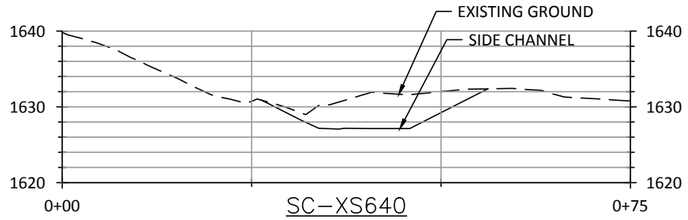
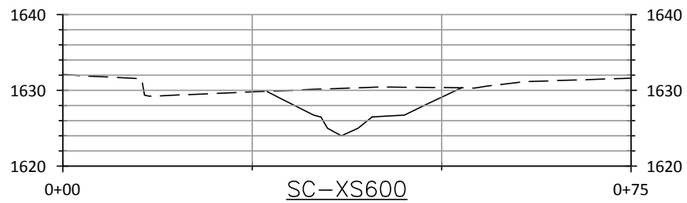
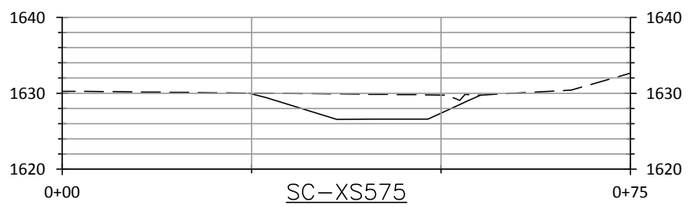
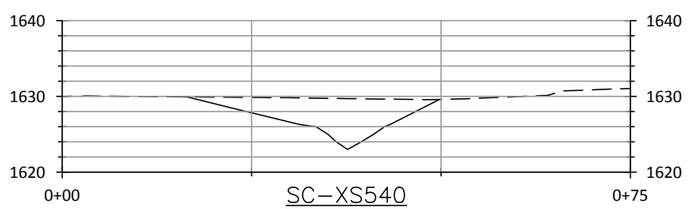
SIDE CHANNEL PLAN AND PROFILE

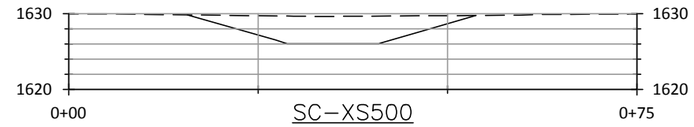


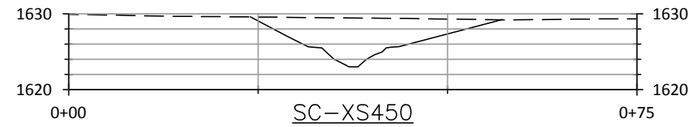


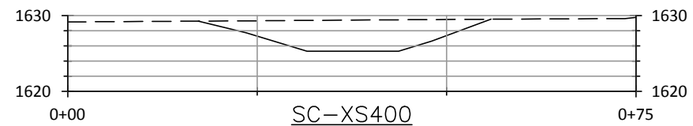


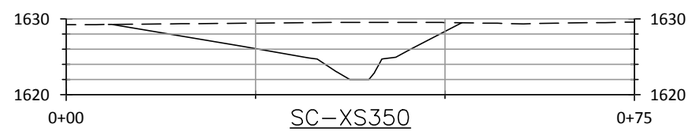


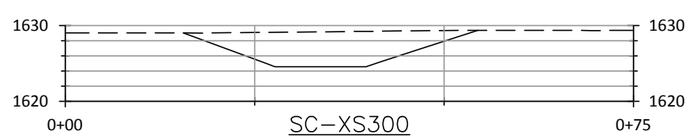
SECTIONS ARE VIEW LOOKING DOWNSTREAM

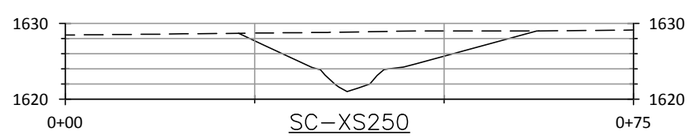


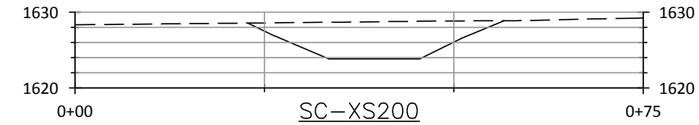


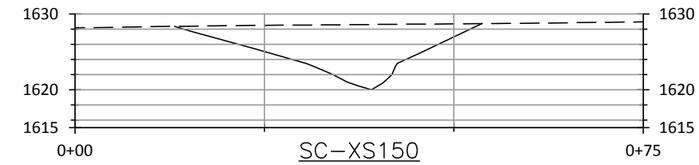


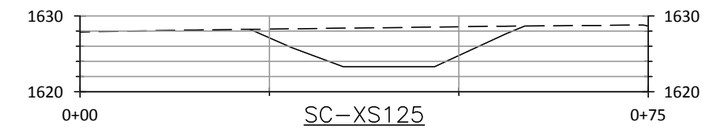


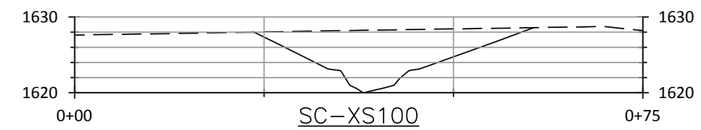


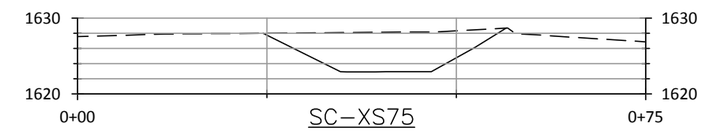


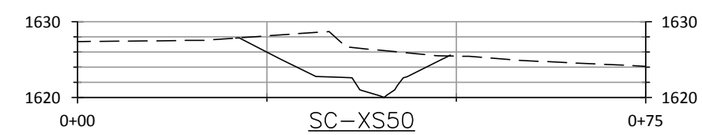












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LOWER TWISP RIVER
TWISP PONDS LEFT BANK

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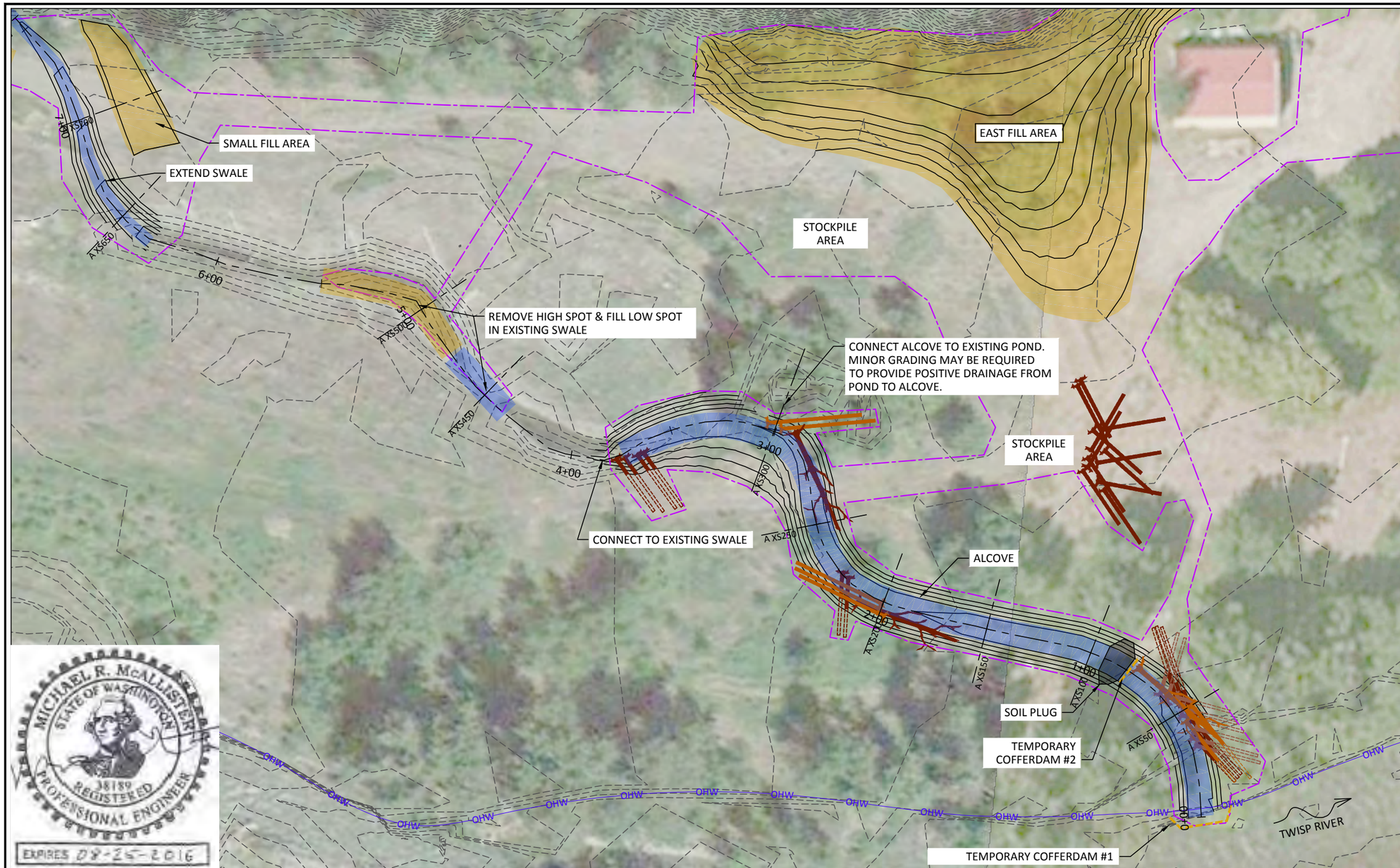
SIDE CHANNEL
GRADING SECTIONS



LEGEND

- ORDINARY HIGH WATER
- LIMITS OF DISTURBANCE
- 45+00 ALIGNMENT AND STATIONING
- TEMPORARY COFFERDAM
- EXISTING CONTOURS (1 FT)
- PROPOSED CONTOURS (1 FT)
- LAYER 1 LOG
- LAYER 2 LOG
- LAYER 3 LOG

0 50 100
SCALE IN FEET

ALCOVE PLAN VIEW

CONSTRUCTION MATERIALS

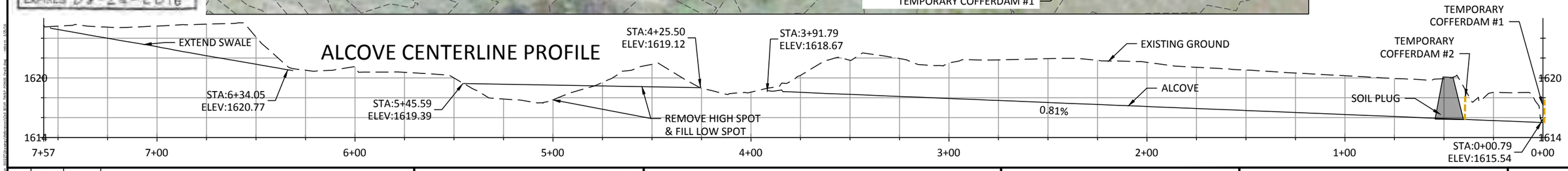
ITEM	QUANTITY
COFFERDAM	55 FEET
LOGS WITH ROOTS	40
SALVAGED TREES	2
SLASH	100 CY
EXCAVATION	1060 CY
EAST FILL	2500 CY

RECOMMENDED CONSTRUCTION SEQUENCE

1. INSTALL COFFERDAM #1 AND FISH SCREEN.
2. STARTING AT DOWNSTREAM END, CONSTRUCT ALCOVE CHANNEL AND LOG STRUCTURES WITHIN OHW, AND CONTINUE CHANNEL CONSTRUCTION FOR A SHORT DISTANCE UPSTREAM.
3. REMOVE COFFERDAM #1 (FISH SCREEN REMAINS).
4. CONTINUE CHANNEL CONSTRUCTION UPSTREAM OF COFFERDAM #2. A TEMPORARY SOIL PLUG OF EXISTING GROUND WILL REMAIN IN PLACE AS A WATER BAR. PUMP CONSTRUCTION WATER TO INFILTRATION AREAS.
5. PLACE FILL AT DESIGNATED ON-SITE FILL AREAS. STABILIZE COMPLETED SLOPES.
6. WHEN CHANNEL IS COMPLETE, REMOVE SOIL PLUG.
7. REMOVE COFFERDAM #2.
8. REMOVE FISH SCREEN.
9. SCARIFY TO 12" DEPTH TO DECOMPACT TEMPORARY ACCESS ROUTES AND STAGING AREAS.

MICHAEL R. McALLISTER
STATE OF WASHINGTON
38189
REGISTERED
PROFESSIONAL ENGINEER
EXPIRES 08-25-2016

ALCOVE CENTERLINE PROFILE



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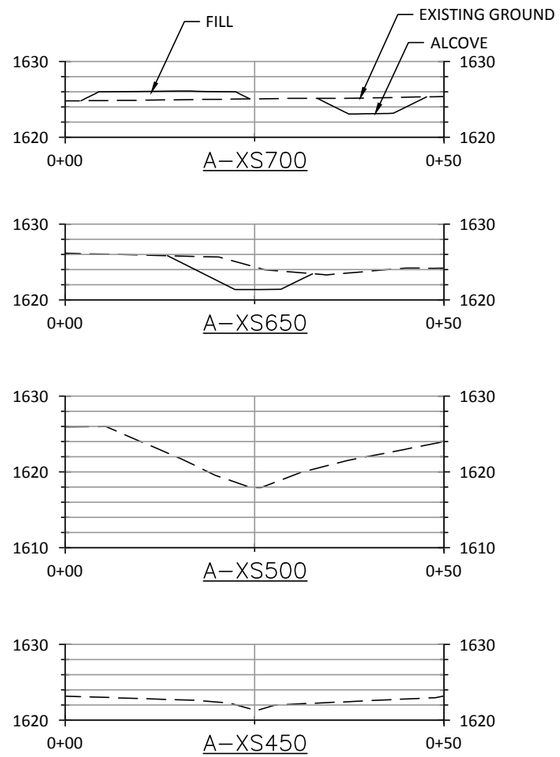
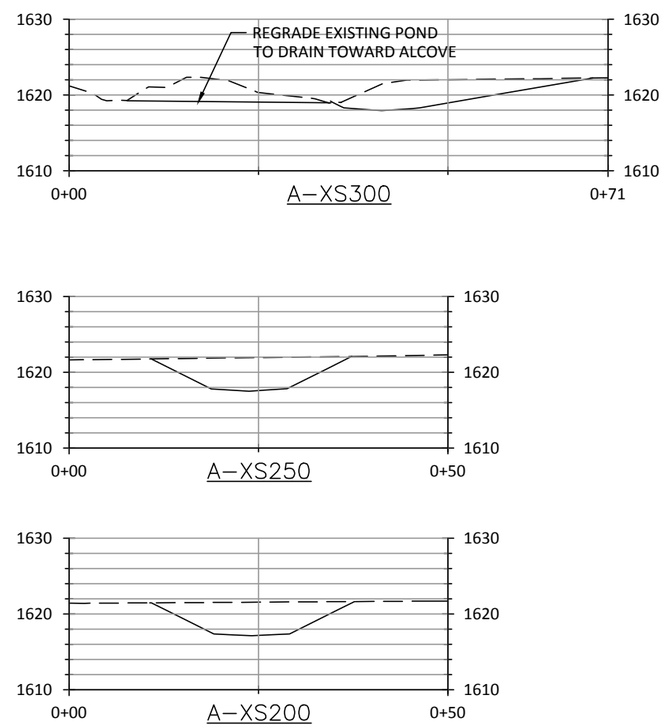
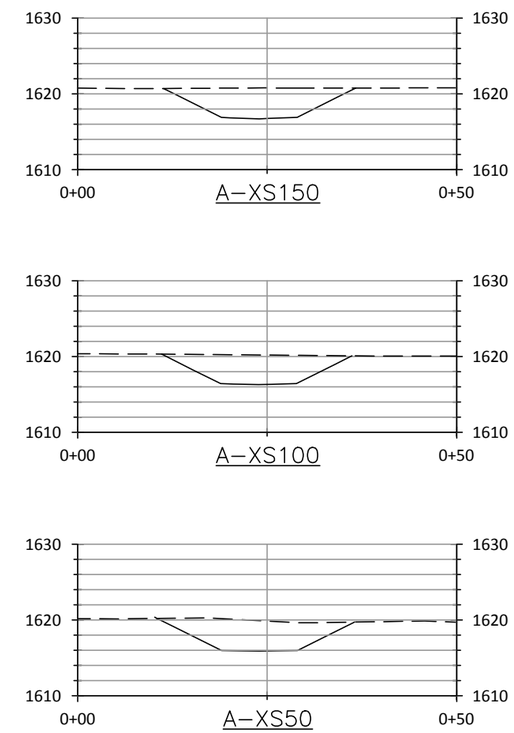
ALCOVE
PLAN AND PROFILE







SECTIONS ARE VIEW LOOKING DOWNSTREAM

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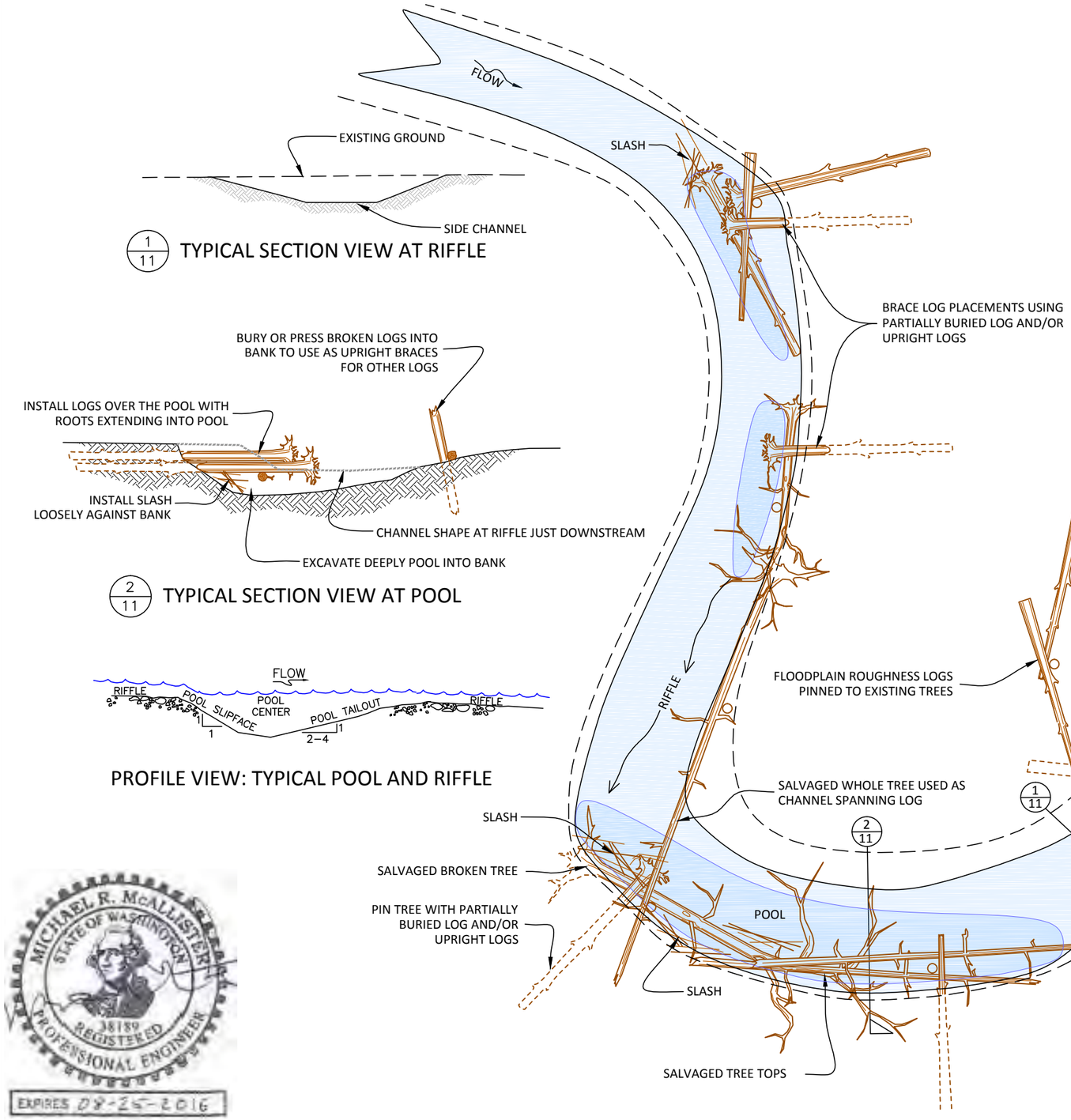
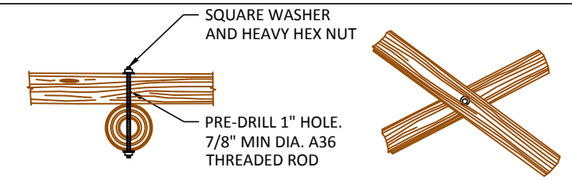
ALCOVE
GRADING SECTIONS



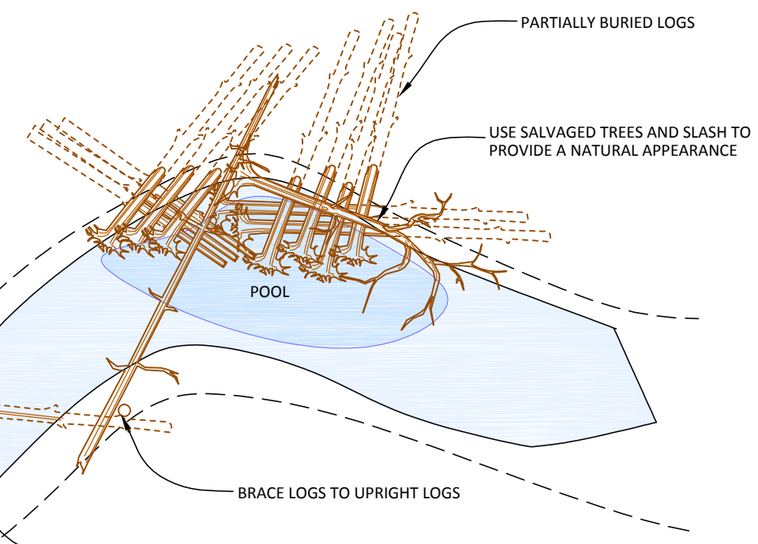


FULLY THREADED ROD (FTR) CONNECTION

NOT TO SCALE

NOTES:

1. BOLTS SHALL BE MINIMUM 7/8" DIAMETER THREADED ROD. BOLTS SHALL BE GRADE A36 STEEL AND MEET THE REQUIREMENTS OF ASTM F1554. WASHERS SHALL BE SQUARE PLATE, 1/4" x 4" x 4" MIN. NUTS SHALL BE HEAVY HEX. ALL HARDWARE SHALL BE HOT-DIP GALVANIZED.
2. DRILL 1" HOLE THROUGH LOGS.
3. INSERT 7/8" DIA ALL-THREAD REBAR.
4. INSTALL STEEL PLATES AND HEAVY HEX NUTS. SECURE NUTS BY CHISELING THREADS.
5. EXCESS THREDED ROD SHALL BE CUT WITH A MAXIMUM OF 2 INCHES EXTENDING FROM THE TOP OF THE NUT TO THE CUT LOCATION.
6. FILE OR GRIND OFF SHARP EDGES.

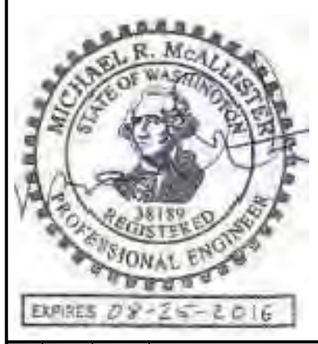


PLAN VIEW: TYPICAL LWD CONFIGURATIONS

NOT TO SCALE

NOTES:

1. TREES AND SHRUBS WITHIN CLEARING LIMITS SHALL BE SALVAGED AND REUSED AS LOGS AND SLASH IN HABITAT STRUCTURES. TO THE EXTENT PRACTICABLE, PRESERVE BRANCHES AND ROOTS ON TREES REMOVED DURING CLEARING AND GRUBBING.
2. WOOD STRUCTURES SHALL BE STABILIZED. STABILIZATION METHODS INCLUDE PARTIAL BURIAL, BRACING AGAINST STANDING TREES, OR UPRIGHT LOGS. FULLY THREADED ROAD SHALL BE USED TO ATTACH LOGS TO UPRIGHT LOGS AND LOGS TO LOGS.



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GJ	03/24/16	TWISP PONDS
APPROVED	DATE	PROJECT

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LOWER TWISP RIVER
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DETAILS

Provisions

INTRODUCTION

The *Washington State Department of Transportation's Standard Specifications for Road, Bridge and Municipal Construction 2014* (WSDOT Standard Specifications) shall apply unless otherwise noted in the following Special Provisions. The "Contracting Agency" or "Owner" shall be the Confederated Tribes and Bands of the Yakama Nation. Additional specifications in the following contract sections are included for items not covered by the WSDOT Standard Specifications.

DIVISION 1 - GENERAL REQUIREMENTS

Sections 1-02, 1-03, and 1-08 (except 1-08.6, 1-08.7, 1-08.8) of the Standard Specifications do not apply.

ITEM 001- TESC, SPCC PLAN AND IMPLEMENTATION

Description

This work shall provide for preparation, implementation, and removal of a Temporary Erosion Sediment Control (TESC) plan and for the preparation and implementation of a Spill Prevention Control and Countermeasure (SPCC) plan in accordance with Section 1-07.15 of the Standard Specifications, and as amended by these Special Provisions.

1. The Contractor shall submit a TESC for the project to the Owner for approval. The TESC must satisfy the requirements of the Washington Department of Ecology NPDES Stormwater General Permit for Construction Activity and all other applicable permits. The TESC included in the Drawings and described herein is intended to provide a baseline for sediment and erosion control and does not ensure that the standards established by any applicable permits will be met. The Contractor may use these measures or alternative measures of his own design to ensure satisfactory performance and that the erosion control requirements of all applicable permits are met. The contractor shall be named as the permit holder. The contractor shall be responsible for implementing, inspecting and filing reports, maintaining, replacing, and removing TESC and SPCC measures. The plan shall include the name, address and 24-hour contact number of the person responsible for erosion prevention and sediment control measures.
2. A spill Containment Kit shall be on site and crews shall be trained in its use.
3. Biodegradable Hydraulic Fluid shall be installed into each piece of heavy machinery working within 50 feet of the river.
4. This item includes installation, maintenance, and removal of sediment and water controls for pump discharge, such as dewatering bag, ditch checks, silt fence, or other suitable measures for treating sediment laden water before it enters the river.

Measurement

"TESC, SPCC Plan and Implementation," including the above amendments to the item will be measured by lump sum.

Payment

Payment shall be considered full compensation for all equipment, labor, tools, materials, and incidentals necessary to complete this work as specified. Payment will be made in accordance with Section 1-04.1 for the following bid items: "TESC, SPCC Plan and Implementation" per lump sum.

ITEM 002 - MOBILIZATION

This item shall consist of preparation work and operations performed by the Contractor in accordance with the provisions of Section 1-09.7 of the Washington Department of Transportation Standard Specifications (Standard Specifications).

Temporary site access shall be along alignments shown in the plans. Minor deviations to the alignments may occur as directed by the Owner to preserve sensitive areas or trees, or to avoid damage to fence posts or other features identified in the field. Deviations from the alignments shown in the plans shall be approved by Owner prior to use. If fence is removed to facilitate access or construction, the Contractor shall replace or repair fence at no additional cost to the Owner. Site access routes shall be maintained and restored to original or better condition.

This item includes temporary traffic controls including barricades and construction signage at the entrance to the project site and any other measures per Section 1-10 and local regulations.

Measurement and Payment

Payment for Mobilization shall be by the lump sum contract price for, 'Mobilization', partial payments will be made as in accordance with Section 1-09.9 of the Standard Specifications. Payment shall be considered full compensation for all equipment, labor, tools, materials, and incidentals necessary to complete this work as specified.

Payment will be made in accordance with Section 1-09.9 for the following bid items: "Cofferdams" per lump sum.

DIVISION 2 - EARTHWORK

ITEM 003 CHANNEL EXCAVATION INCL. EMBANKMENT

1. This item consists of excavating, loading, hauling, placing, and embankment compacting, or otherwise disposing of the material in accordance with Section 2-03 of the Standard Specifications, and as amended by these Special Provisions.
2. Portions of work will be in water. The Contractor is advised that shallow groundwater will be encountered throughout excavation area.
3. This item includes hauling of excavated material to onsite fill areas, and embanking within the fill footprints shown in the Plans and staked in the field. As directed by the Owner, care will be taken to place fill around existing woody vegetation in a manner that prevents damage or mortality to said vegetation.
4. Clearing and grubbing shall be incidental to this item. Any removed trees, shrubs, or woody debris shall be salvaged for re-use in channel construction. Trees shall be removed with roots attached to the tree. Care shall be taken to keep branches and roots unbroken.
5. This item includes detail grading to shape the channel, including creating pools within the channel, as shown in the Plans. Pools shall be overexcavated into the banks to provide room to install logs.
6. At all earthwork areas, topsoil shall be stripped and stockpiled for use as top-dressing at fill areas.
7. Where excavations encounter cobbles and boulders, 20 cy of the material shall be salvaged and stockpiled for construction of "Coarse Riffle" as shown in the Plans.
8. Where soil compaction has occurred as a consequence of construction activities, this item shall include decompacting soils to a depth of at least 12 inches.
9. Care shall be taken to prevent damage to a well head that exists within the Middle Fill Area. Fill in this area will be in conjunction with Item 008 - Well Cap.
10. No work shall occur outside of the limits of disturbance shown in the Plans unless authorized by the Owner.

Measurement

"Channel Excavation Incl. Embankment" will be measured by cubic yard. All excavated material will be measured in the position it occupied before the excavation was performed. An original ground measurement was taken using digital terrain modeling survey techniques. The original ground will be compared with the planned finished section shown in the Plans. Slope/ground intercept points defining the limits of the measurement will be as staked by the Owner. No additional compensation will be made for excavated material that is stockpiled, re-excavated, and moved again. Incidental to this item are: clearing and grubbing, and stockpiling salvaged trees and shrubs; stripping, stockpiling and placement of topsoil; soil decompaction; and salvaging and placement of Coarse Riffle material.

Payment

Payment shall be considered full compensation for all equipment, labor, tools, materials, and incidentals necessary to complete this work as specified. Payment will be made in accordance with Section 1-04.1 for the following bid items: "Channel Excavation Incl. Embankment" per cubic yard.

ITEM 004 - REMOVAL OF STRUCTURE

Description

The work includes removal of one or more gabion baskets from the river, and removal of a gate valve in a dry canal ditch.

Construction Requirements

Section 2-02.3 is supplemented with the following:

While removing gabion baskets from the river, care shall be taken to limit turbidity to the largest practicable extent. The quality of wire appears to be poor, and breakup of the baskets might occur. An excavator is allowed to pull the gabions, but hand labor shall be required if the baskets break up into small pieces. Do not dig in the river bed. The wire and any other deleterious materials shall be removed from the site and disposed of at the Contractor's expense.

A gate valve and supporting concrete shall be removed from the head of the existing ditch. The valve and all associated deleterious materials shall be removed from the site and disposed of at the Contractor's expense.

Measurement

"Removal of Structure" "will be measured by lump sum.

Payment

"Removal of Structure", lump sum.

DIVISION 8 - MISCELLANEOUS CONSTRUCTION

ITEM 005 - COFFERDAMS

Description

This item consists of providing and installing, maintaining, and removing measures to bypass the surface waters of the stream around in-channel work areas, and to prevent turbidity from entering the river.

Cofferdams shown in the Plans is one acceptable method. The Contractor may use this method or propose a different method that provides equal or better isolation of the work area from the flow. If a different method is proposed, Contractor shall submit drawings showing details of proposed methods for providing temporary isolation of surface water during construction activities. Review and approval of the Cofferdam Plan shall not relieve the Contractor from full responsibility for the adequacy of cofferdam work if the proposed plan is not successful at properly isolating the work area.

The work includes coordinating with the Owner for fish salvage relocation activities.

Materials

The Contractor shall provide all required materials for the project. If Bulk Bag Cofferdam is the method to be used, see details for Bulk Bag Cofferdams on the Plans.

Construction Requirements

The contractor shall isolate the work area from the waterway by installing cofferdam per the plans. No turbidity from construction activities shall enter the waterway. Construction methods for Bulk Bag Cofferdams are described in the project plans. If Contractor elects to use alternate method(s) for temporary cofferdams, Contractor shall provide to the Owner shop drawings and/or vendor cut sheets for substitutions and submit cofferdam/diversion plan for review prior to implementation.

A temporary soil plug consisting of undisturbed native ground shall remain near the downstream end of the side channel and alcove sites. Its purpose will be to provide water retention, and sediment deposition and filtration. Remove soil plug after all side channel construction is completed. Removal of soil plug requires a temporary cofferdam and pumping to control turbidity.

The Contractor shall provide minimum 2 days advance notice to the Owner before each cofferdam installation date. The Contractor shall understand that cofferdam installation requires coordination with the Owner and only after the Owner has completed fish rescue can the cofferdams be completed.

Measurement

Measurement will be based on the item from the bid list installed and the work for that portion completed.

"Cofferdams" will be measured by lump sum.

Payment

Payment will be made in accordance with Section 1-09.9 for the following bid items: "Cofferdams" per lump sum.

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SPECIFICATIONS

ITEM 006 - PUMPING

This item includes dewatering and controlling turbidity within construction areas isolated from the river by Cofferdams.

Description

The work consists of furnishing, monitoring, operating, maintaining, and removing pumps, coordinating with the Owner for fish salvage relocation activities, and installation of control of water BMPs.

Materials

1. Two 6" trash pumps, each with pumping capacity greater than 600 gpm, assuming 12 feet of vertical lift and 300 feet of discharge hose. To prevent turbidity from entering the river, pumps may need to run 24 hrs or until water is clear. Pumps shall have soundproofing. Electric pumps with generators and quiet packs are a preferred and approved method.

2. Each water intake shall have a fish screen installed, operated and maintained according to NMFS' fish screen criteria (NMFS 1997; NMFS 2008).

3. Environmental Protection Measures such as straw bales, perforated pipe for discharge flow distributors, geotextiles, filter bags, or other means of controlling water and turbidity. No turbidity shall be allowed to enter the river or wetlands.

Construction Requirements

Surface water and groundwater will be encountered during excavations. Two pumping schemes shall be required: one to prevent surface/groundwater that has mixed with construction water from entering the river; and one to dewater construction areas.

1. To help prevent turbidity from leaking through cofferdams, the contractor shall provide and operate 6" trash pump(s) to lower the water surface within the isolated area and discharge to an infiltration area.

2. During side-channel construction, construction water shall be pumped away from work areas to be infiltrated into the ground and without entering the waterway. The contractor shall provide and operate one 3" pump and one 2" pump.

Environmental Protection Measures

If infiltration becomes an ineffective means to control turbidity, additional and alternative methods, such as pumping into stilling basins or filtration geotextile fabric shall be required at the Contractor's expense.

Measurement

Measurement will be based on the item from the bid list installed and the work for that portion completed.

"Pumping" will be measured by lump sum.

Payment

Payment will be made in accordance with Section 1-09.9 for the following bid items: "Pumping" per lump sum. The unit contract prices for "Pumping" shall be full compensation for all costs incurred for equipment, materials and labor for furnishing, installing, securing, maintaining and removal of pumping equipment as outlined in the plans. If additional environmental protection measures are required to control turbidity, they shall be considered incidental to pumping and no additional compensation will be made.

ITEM 007 - LOGS

Description

Log Structures includes all references to installing logs, logs with roots, upright logs, salvaged trees, slash and securing with threaded rod in the Plans and these Special Provisions. This item includes movement from stockpiles to installation areas, excavation and backfill to partially bury Log Structures, and installing Threaded Rod.

Materials

1. Logs

Logs and Logs with roots will be supplied by the Owner to the site staging areas. Quantities for each site are shown in the Plans. Owner supplied Logs will have the following characteristics:

Logs with Roots: 40' long and 18-24" diameter at breast height (dbh).

Logs: 40' long and 12-18" dia diameter at scaled end.

The Contractor shall make 15 upright logs by breaking 10-15 feet off of the cut end of Owner supplied logs.

2. Salvaged Trees

Included in this item are the removal and salvage of approximately 10 trees, varying in size from 10" to 30" dbh.

3. Slash

Slash includes shrubs and small trees removed within the clearing limits.

4. Threaded Rod

Specifications for threaded rod are shown in the Plans. Up to 30 threaded rod connections may be required.

Construction Requirements

Logs:

Locations of Logs shall generally be as indicated on the Plans. However, final location will depend upon the size, shape and quantity of material delivered or salvaged. Installation of Logs shall be understood to require a "fit in the field" approach as directed by the Owner's Representative. Logs shall be stabilized by partial burial and/or bracing provided by upright logs. Some Logs shall be secured to upright logs or other Logs via Fully Threaded Rod.

Upright logs:

Construction of upright logs shall include partial burial of logs so that they project upwards from the ground to provide bracing points for other logs. The Specific locations shall be determined in the field and directed by the Owner. The broken end of upright logs shall be the above ground part. The required embedment depth shall be 5 feet or greater.

Salvaged Trees:

Salvaged Trees shall be reused as woody debris during construction Side Channel and Alcove. To the maximum practical extent, the Contractor shall excavate the root wads and then push over the trees in order to salvage logs with intact attached roots. Salvaged Trees shall be moved to installation locations and designated in the field by the Owner, and installed as directed by the Owner.

Slash:

Slash shall be incorporated into log structures as directed by the Owner.

Intermingle, stack, and rack slash material to the installed logs and piles to emulate natural accumulations of wood material.

Earthwork:

Where partial burial of logs is required, excavate to subgrade. Stockpile the fill within the designated disturbance area. Backfill the logs as each layer is installed.

Threaded Rod:

Install threaded rod where directed by Owner and as shown in the Plans.

Measurement

Measurement will be based on the portion of work completed, measured as each completed site.

"Logs" will be measured by lump sum.

Payment

Payment will be made in accordance with Section 1-09.9 for the following bid items: "Logs" per lump sum.

The contract price for "Logs" shall be full compensation for all costs incurred for equipment, materials and labor for installing and securing logs, timber piles, and salvaged trees as outlined in the plans. Excavation and backfill, installing slash and threaded rod shall be incidental to Log Structures.

ITEM 008 - WELL CASING SEAL

This item includes all work associated with protecting and improving an existing well head in the Middle Fill Area, including excavation around the well head down to groundwater depth, providing and installing a protection case around the well during construction, and installing a bentonite seal down to groundwater depth aroundthe well head once all fill has been placed. Bentonite will be provided by the Owner. Coordination and scheduling with a well drilling contractor and electrician will be required for this item. This work will be in conjunction with earthwork at the Middle Fill Area shown in the Plans.

Measurement

"Well Casing Seal" will be measured by lump sum.

Payment

The contract price for "Well Casing Seal" shall be full compensation for all costs incurred for equipment, materials and labor for protecting, excavating around, backfilling around, and placing a bentonite seal around the existing well head.

ITEM 009 - ROAD REPAIR: CRUSHED SURFACING

This work consists of constructing one gravel base course layer upon a prepared subgrade in accordance with Section 4.04 of the Standard Specifications and the following supplements:

The work area is the gravel road components of Peter's Road, Yoakum Drive, and Sunnyside Drive, commencing at the intersection of Burgar Street and Peter's Road, and extending to the project site (approximately 1 mile in length). This work shall be conducted after completion of all other parts of the project.

Materials

Materials shall meet the requirements of Crushed Surfacing Base Course 9-03.9(3).

Construction Requirements

Mixing, placement and spreading of crushed surfacing shall be done using the Road Mix Method. Crushed Surfacing shall be shaped and compacted per 4-04.3(5) and 4-04.3(7). The compacted depth of Crushed Surfacing shall be greater than 0.3 feet.

Measurement

Road Repair: Crushed Surfacing will be measured by the cubic yard.

Payment

Payment will be made in accordance with Section 4-04.5, for "Crushed Surfacing Base Course" per cubic yard. Water used in placing and compacting surfacing materials on the Roadway will be incidental to this item.

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SPECIFICATIONS

Exhibit A – Draft Scope of Work

Overview
Yakama Nation Fisheries (Owner) is conducting a salmon habitat restoration project along the Methow River known as the Twisp Ponds Left Bank Side Channel Project.

The project site is located on private properties at 34 Yoakum Drive, Twisp, WA 98856, and includes many adjacent parcels.

All work on this project will be directed by the Owner's Designated Representatives. All project specifications including technical specifications, engineered plan sheets, material standards, and quantities are contained or referenced within the attached **Exhibit D, Project Plans.** By reference in Exhibit D, specific sections within the Washington State Department of Transportation 2014 Standard Specifications Manual for Road, Bridge, and Municipal Construction are adopted for defining the standard specifications governing this contract. No changes to the Project Plan will be allowed without prior approval from the Designated Representatives.

The attached **Exhibit B** provides the contract Line Item Budget which is referenced to the Work Tasks described on the Specifications Sheet in **Exhibit D. Exhibit C** outlines the payment plan associated with this contract**.**

Designated Representative
The Owner's Designated Representatives for this project include Yakama Nation Habitat Biologist Hans Smith, as well as other Yakama Nation Habitat Biologists associated with the Yakama Nation Upper Columbia Habitat Restoration Project and construction oversight staff provided by the engineering firm who produced the project planset.

Project Tasks
All Project Tasks will be completed as per **Exhibit D.** Major project elements include but are not limited to the following:

- TESC, SPCC Plan and Implementation
- Mobilization
- Channel Excavation Incl. Haul
- Removal of Structure
- Cofferdams
- Pumping
- Logs
- Well Casing Seal
- Road Repair: Base Course

Contractors Obligations
The Contractor shall furnish all supervision, labor, equipment and tools necessary to complete the project as described in **Exhibit D**.

Consistent Satisfactory Progress
Consistent satisfactory progress in construction of this project will be required. Satisfactory progress will be measured by both the quality and quantity of work. If for any reason no work is performed for a period of 10 consecutive days, the contractor may be given a notice of contract cancellation. Consistent satisfactory progress will also be determined by the contractor's demonstrated ability to perform on time any work tasks described in **Exhibit D** subjected to the permitted work windows. If it appears that the contractor is unable to complete project tasks needed to be completed within the permitting work windows the contractor may be given a notice of contract cancellation. The Owner's Designated Representatives will monitor progress closely.

Project Timeline and Construction Hours
This project will occur adjacent to private lands containing inhabited residences. Construction noise disturbances outside of normal work hours will not be allowed. Work producing construction noise should only be conducted between 6:30 am and 6:30 pm.

Environmental permits for this project require some work be performed during the normal in-water work window for the Twisp River to avoid adverse impacts to spawning salmonids and fertilized redds. Environmental permits will dictate the implementation timeline for portions of the project that could affect aquatic habitats.

Fish Removal
In-water construction activities will require fish removal of all isolated in-water work sites. Fish removal will be conducted in a timely manner by the Owner's Designated Representatives and the time taken to implement proper fish removal protocols will be considered incidental to the contractor's work tasks.

Fire Suppression
The contractor will be familiar with and prepared for the requirements associated with IFPL Levels II & III and the restrictions associated with those. The contractor may seek to acquire IFPL shut down exemptions to allow work to continue on schedule.

Road Signage
The Contractor will observe all road signage regulations regardless of the project location and **as per Exhibit D if applicable.**

Utilities Location
The Contractor will locate all utilities prior to any excavation.

Communication with Landowners
The Contractor expressly agrees that Contractor and his staff will not communicate with the Landowner in any manner, whether it be in regard to the project or otherwise, without express permission from, or the presence of the Designated Representative.

Exclusivity
During the term of this Agreement, including time taken for mobilization and demobilization of construction equipment, Contractor shall not conduct any work on the property designated in this Agreement unless so directed by the Designated Representative. Contractor shall require in all contracts with subcontractors that subcontractors not conduct any work on the property designated in this Agreement unless so directed by the Designated Representative. Any additional work conducted on the property designated in this Agreement by Contractor without the express consent of the Designated Representative shall constitute a material breach of this Agreement, thereby relieving the Yakama Nation from all payment obligations to the Contractor.

CONSTRUCTION SERVICES AGREEMENT

BETWEEN

THE YAKAMA NATION

AND

Contractor
Address
City, State zip

THIS AGREEMENT is entered into on the date shown below between the Yakama Nation and _____ (hereinafter "Contractor").

1. TERM

The period of this agreement will be from Date to Date.

2. PERFORMANCE

The Contractor agrees to perform the services set forth in the attached scope of work, Exhibit "A," which is incorporated by reference in this agreement.

3. COMPENSATION

The Yakama Nation agrees to compensate the Contractor for services provided in the amounts and under the terms and conditions set forth below. [The nature and payment of compensation depends on the type of contract, e.g. fixed fee/lump sum, fixed fee part payment, time and materials, cost plus fixed fee, etc.]

4. PAYMENT OF COMPENSATION

Invoicing also depends on the type of contract; different provisions are appropriate depending on whether partial payments are authorized. Partial payments of flat fee contracts depend on the creation of a schedule of values or a price list. Payment will be made as set in Exhibit C.

5. PROPERTY DEVELOPED BY CONTRACTOR

The Contractor agrees that it will retain no interest in the information, data, proposals, papers, copyrights, patents, or any other material or property developed, discovered, invented, and/or accumulated by the Contractor in connection with the performance of this agreement. Subject to applicable law, the Contractor shall turn over such information, data, proposals, papers, copyrights, patents, discoveries, inventions, and other material or property to the Yakama Nation upon the expiration or termination of this agreement or upon request.

6. PUBLICATION OF INFORMATION

The dissemination or publication of documents, information material or other property developed or generated by the contractor during the course of this agreement shall require the written approval of the Yakama Nation. This paragraph shall not be construed to prohibit or impair the transfer of information contemplated by paragraphs 4, 5 and 6 above.

7. ACCESS TO RECORDS, PERSONNEL AND FACILITIES

Subject to applicable law, the Yakama Nation will provide the Contractor access to its personnel, facilities, and records necessary to the performance of this agreement.

8. INDEPENDENT CONTRACTORS

At all times during the course of this agreement, the Contractor shall act as an independent contractor, and shall not receive any benefits to which employees of the Yakama Nation are entitled. Unless expressly agreed to herein, the Yakama Nation shall not be responsible for the payment of any taxes, permits, licenses or other expenses incurred by the Contractor during the performance of this agreement.

9. SUBCONTRACTING

The Contractor shall not hire a subcontractor to perform the services contemplated by this agreement without express prior written consent. Award of this contract based on a bid or proposal naming specific subcontractors and identifying the portions of the work to be performed by the subcontractors shall constitute prior written consent to the hiring of the named subcontractor(s). Subcontractor selection and subcontractor employment shall be subject to applicable TERO and Indian Preference requirements.

10. ASSIGNMENT OF INTEREST

The Contractor shall not assign its interest in this contract, or any part thereof, including its right to receive payment for services performed, to another party.

11. INDEMNIFICATION

The Contractor shall hold harmless and indemnify the Yakama Nation and its officers and employees against any and all losses, costs, damages, expenses or other liabilities whatsoever, arising out of or connected with, directly or indirectly, the Contractor's performance of its duties under this agreement, including, but not limited to, accidents or injuries to persons or property.

12. SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK

A. The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to

(l) Conditions bearing upon transportation, disposal, handling, and storage of materials;
(2) The availability of labor, water, electric power, and roads;
(3) Uncertainties of weather, river stages, tides, or similar physical conditions at the site;
(4) The conformation and conditions of the ground; and
(5) The character of equipment and facilities needed preliminary to and during work performance.

The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Yakama Nation and information available to the public from local government agencies, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for properly estimating the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Yakama Nation.

B. The Yakama Nation assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Yakama Nation. Nor does the Yakama Nation assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

13. PHYSICAL DATA

Data and information furnished or referred to below is for the Contractor's information. The Yakama Nation shall not be responsible for any interpretation of or conclusion drawn from the data or information made available to the Contractor. Further, the Yakama Nation specifically does not warrant construction methodology which may be included in such documents.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by _____.(insert a description of investigational methods used, such as surveys, auger borings, core borings, test pits, probings, test tunnels).

(b) _____n/a_____ (insert other pertinent information).

14. SCHEDULE FOR CONSTRUCTION

A. Unless the construction schedule is specifically addressed elsewhere in this agreement, the Contractor shall, within five days after the work commences on the contract or another period of time determined by the Yakama Nation, prepare and submit to the Yakama Nation three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion each week during the contract period. If the Contractor fails

to submit a schedule within the time prescribed, the Yakama Nation may withhold approval of progress payments until the Contractor submits the required schedule. Should the Contractor fall behind its schedule, a revised schedule shall be forwarded with the next Contractor's request for progress payment. Additional schedules shall be furnished to the Yakama Nation as soon as practicable if so requested.

B. With any and each partial payment request, the Contractor shall submit a copy of the last submitted schedule annotated to indicate actual progress made to date. If at any time, in the opinion of the Yakama Nation, the Contractor has fallen behind the schedule to an extent which would jeopardize timely completion, the Contractor shall take the steps necessary to improve its progress, including those that may be required, to enable timely completion without additional cost to the Yakama Nation. Such steps may include, but are not limited to, increasing the number of shifts, the amount of overtime, days of work per week, and/or the amount of construction plant being utilized. The Contractor shall submit any supplementary schedules the Yakama Nation deems necessary to demonstrate how the rate of progress necessary for timely completion will be regained.

C. Failure of the Contractor to comply with the requirements of the Yakama Nation under this clause shall be grounds for a determination by the Yakama Nation that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Yakama Nation may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

15. DIFFERING SITE CONDITIONS

The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Yakama Nation of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent to the type of work provided for in the contract. Unless specifically identified in the contract, discoveries of archaeological or historical remains such as graves, fossils, skeletal materials and artifacts protected by the Archaeological Resources Protection Act (36 CFR 1214) are considered type 2 conditions.

16. LAYOUT OF WORK

The Contractor shall lay out its work from the Yakama Nation-established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for the execution of the work to the lines and grades that may be established or indicated by the Yakama Nation. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Yakama Nation until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Yakama Nation may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

17. SPECIFICATIONS, DRAWINGS AND MATERIAL SUBMITTALS

A. Omissions from the drawings and specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or mis-described details of the work. They shall be performed as if fully and correctly set forth and described in the drawings and specifications.

B The Contractor shall check all drawings furnished by the Yakama Nation prior to starting work and shall promptly notify the Yakama Nation of any discrepancies. Figures marked on drawings shall in general be followed in preference to scale measurements. Large scale drawings shall in general govern small scale drawings. The Contractor shall compare all drawings and verify the figures before laying out the work, and will be responsible for any errors which might have been avoided thereby.

18. MATERIAL AND WORKMANSHIP

A. All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. Use of recycled materials for the manufacture of such products is encouraged. Equipment, material, or articles specified by trade name, make, or catalog number, shall be provided. Equivalent items are not acceptable unless specifically authorized in the specification.

B. All work under this contract shall be performed in a skillful and workmanlike manner. The Yakama Nation may require, in writing, that the Contractor remove from the work any employee the Yakama Nation deems incompetent, unsafe, or otherwise objectionable.

19. SUPERINTENDENCE BY THE CONTRACTOR

At all times during performance of this contract, and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Yakama Nation and has authority to act for the Contractor.

20. PERMITS AND RESPONSIBILITIES

Unless otherwise provided in this contract, the Contractor shall, without additional expense to the Yakama Nation, be responsible for obtaining any necessary licenses and permits, and for complying with any Yakama Nation, federal, state, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence, and shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

21. OTHER CONTRACTS

The Yakama Nation may undertake or award other contracts for additional work, or may utilize in-house construction forces, at or near the site of the work. The Contractor shall fully cooperate

with such other contractors and the Yakama Nation employees, and carefully adapt scheduling and performance of the work under this contract to accommodate simultaneous performance, heeding any direction that may be provided by the Yakama Nation. The Contractor shall not commit or permit any act which will interfere with the performance of work by any other contractors or by the Yakama Nation employees.

22. USE AND POSSESSION PRIOR TO COMPLETION

The Yakama Nation shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Yakama Nation shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Yakama Nation intends to take possession of or use. However, failure of the Yakama Nation to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Yakama Nation's possession or use shall not be deemed an acceptance of any work under the contract.

23. CLEANING UP

A. The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the owner of the underlying real property. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Yakama Nation.

B. Unless specifically set forth in the contract, the Contractor shall not burn any material on site, on the right-of-way or on the access roads to the sites. All material and debris shall be hauled to an appropriate disposal site.

24. ROAD MAINTENANCE

The Contractor shall maintain all roads used by it, and upon completion of the job shall leave them in as good a condition as when first used. A road grading machine - not a bulldozer - shall be used for maintenance and final grading. In no event shall the Contractor interfere with the property owner's use of roads existing prior to the Contractor's entry.

25. STOP WORK ORDER

A. The Yakama Nation may order the Contractor to suspend all or any part of the work of this contract for the period of time that the Yakama Nation determines appropriate for the convenience of the Yakama Nation.

B. The contractor shall immediately comply with the Yakama Nation's order and take all reasonable steps to minimize the incurring of costs allocable to the work covered by the order.

26. PROTECTION OF EXISTING VEGETATION, STRUCTURES, AND IMPROVEMENTS

A. The Contractor shall preserve and protect all structures, equipment, utilities, other improvements, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required

under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workers, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Yakama Nation's representative.

B. If the Contractor fails or refuses to repair the damage promptly, the Yakama Nation may have the necessary work performed and charge the cost to the Contractor.

27. INSURANCE

A. The following minimum kinds and amounts of insurance are applicable in the performance of the work under this contract.

(1) *Workers' compensation and employer's liability*. Contractor is required to comply with applicable Federal and State workers compensation and occupational disease statutes. Employer's liability coverage of at least $100,000 shall be required.

(2) *General liability*. Contractor shall provide general liability insurance of at least $1,000,000 per occurrence. Any policy aggregate limits which apply, shall be modified to apply to each location and project. The policy shall name the Yakama Nation, its officials, officers, employees and agents, as insureds with respect to the contractor's performance of services.

(3) *Automobile liability*. The contractor shall provide automobile liability insurance covering the operation of all automobiles used in performing the contract. Policies shall provide limits of at least $1,000,000 per accident and include coverage for all owned, non-owned and hired automobiles. The contractor's policy shall be primary to any insurance of the Yakama Nation.

(4) *Environmental impairment liability*. The contractor shall provide environmental impairment liability insurance of at least $1,000,000 per occurrence. Such insurance will include coverage for the clean up, removal, storage, disposal, transportation and/or use of pollutants. The insurance policy shall name the Yakama Nation, its officials, officers, employees and agents as insured. The contractor's policy shall be primary to any insurance of the Yakama Nation.

B. The Contractor may, with the approval of the Yakama Nation, maintain a self-insurance program; provided that, with respect to workers' compensation, the Contractor is qualified pursuant to statutory authority.

C. Before commencing work under this contract, the Contractor shall provide to the Yakama Nation certificates of insurance from the insurance company stating the insurance required has been obtained and is in force. The certificate(s) shall identify the contractor and the contract(s) for which coverage is provided, and shall contain a statement that the insurer will give notice of cancellation or any material change to the Yakama Nation at least 30 days before the effective date. In addition, the contractor shall provide certificates as the policies are renewed throughout

the period of the contract. If the contractor's insurance does not cover the subcontractors involved in the work, the contractor shall provide certificates stating that the required insurance has been obtained by the subcontractors.

28. INSPECTION - SERVICES AND CONSTRUCTION

A. The Yakama Nation may inspect the work called for by the contract at any time and place. The Yakama Nation will perform inspections in a manner that will not unduly delay the work.

B. If any of the services do not conform with contract requirements, the Yakama Nation may require the Contractor to perform the services again in conformity with the contract at no cost to the Yakama Nation. When the defects in services cannot be corrected by re-performance, the Yakama Nation may deduct from the contract payments an amount which reflects the reduced value of the services performed.

C. Neither inspection, lack of inspection, acceptance, nor payment shall relieve the Contractor of any of its obligations under this contract.

D. If the Contractor does not promptly replace or correct rejected work, the Yakama Nation may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor, and may (2) terminate for default the Contractor's right to proceed.

Unless otherwise specified in the contract, acceptance by the Yakama Nation will be in writing and shall be made as promptly as practicable after completion and inspection of all work required by the contract or that portion of the work the Yakama Nation determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Yakama Nation's rights under any warranty or guarantee.

29. WARRANTY - CONSTRUCTION

A. In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

B. This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Yakama Nation takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Yakama Nation takes possession.

C. The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Yakama Nation-owned or controlled real or personal property, when that damage is the result of

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished by the Contractor.

D. The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

E. The Yakama Nation shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

F. If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Yakama Nation shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

G. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the Yakama Nation, if directed by the Yakama Nation; and

(3) Enforce all warranties for the benefit of the Yakama Nation, if directed by the Yakama Nation.

H. Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Yakama Nation nor for the repair of any damage that results from any defect in Yakama Nation-furnished material or design.

(i) This warranty shall not limit the Yakama Nation's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

30. FEDERAL, STATE AND LOCAL TAXES

The contract price shall include all applicable Federal, State, and local taxes and duties.

31. TERMINATION FOR THE CONVENIENCE OF THE YAKAMA NATION

A. The Yakama Nation may terminate all or any part of this contract, at any time, upon written notice to the contractor. Upon receipt or the termination notice, the contractor shall stop work on the terminated portion of the contract.

B. The contract amount shall be revised as a result of termination under this clause. [On fixed-price contracts the revised amount shall not exceed the pre-termination contract price plus reasonable termination expenses. On cost-reimbursement contracts it will not exceed the total of allowable and allocable costs of performance prior to termination plus termination expenses plus an adjustment of the fee on the terminated portion of the contract.] No payment will be made for

anticipated profits on the terminated portion, or consequential damages, of the contract. The contractor shall submit a settlement proposal within 30 days of the notice of termination.

32. TERMINATION OF AGREEMENT

The Yakama Nation may terminate this agreement, without cause, upon 30 days written notice or sooner. Upon such termination, the liability of the parties for the further performance of this agreement shall cease, but the parties shall not be relieved of the duty to perform their obligations up to the date of termination.

The Yakama Nation may terminate this agreement at any time in the event of a breach or violation of any of the terms and provisions of this agreement. Upon such breach, violation, or termination of this agreement, the Yakama Nation, to the extent permitted by applicable law, shall be entitled to enforce its rights under this Agreement, and recover its court costs and reasonable attorney's fees, as determined by the court. The foregoing shall not in any way limit or restrict any right or remedy at law or equity which would otherwise be available to the Yakama Nation, including, but not limited to, the right to contract with other qualified persons to complete the performance of services identified in or contemplated by this agreement.

33. FORCE MAJEURE

This agreement is subject to force majeure, and is contingent on strikes, accidents, acts of God, weather conditions, fire regulations, the actions of any government, including funding and/or budgetary decisions, and other circumstances which are beyond the control of the parties. If the terms and conditions of this agreement are unable to be performed as a result of any cause of force majeure, then this agreement shall be void, without penalty to any party for such non-performance.

34. SEVERABILITY

If any term or provision of this agreement is held invalid, the remaining provisions shall not be affected and shall remain in full force and effect.

35. NOTICE

Notice to the Contractor shall consist of a letter, delivered postage prepaid, addressed to:

Contractor
Address
City, State zip

Notice to the Yakama Nation shall consist of a letter, delivered postage prepaid, addressed to:

JoDe Goudy, Chairman
Yakama Tribal Council
PO Box 151
Toppenish, WA 98948

and a copy to the Yakama Nation's designated representative.

36. SUPERVISION OF CONTRACT/DESIGNATED REPRESENTATIVE

The Contractor shall act under the supervision of the following designated representative (s) of the Yakama Nation in performing services under this agreement: Brandon Rogers and Chris Butler.

37. COMPLIANCE PROVISIONS

A. Discrimination

The Contractor will not discriminate against any employee or applicant for employment because of handicap, race, age, religion, or sex. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their handicap, race, age, religion, or sex.

B. Indian Preference

Notwithstanding the provisions of paragraph 39 (A) above, for all work performed under this agreement, the Contractor shall give preference in employment, including subcontracts there under, to qualified Indians regardless of their handicap, age, religion or sex. To the extent feasible and consistent with the efficient performance of this agreement, the Contractor shall provide employment and training opportunities to Indians that are not fully qualified to perform under this agreement, regardless of their handicap, age religion or sex. Further, The Contractor shall comply with any Indian preference requirements established by the Yakama Nation to the extent that such requirements are consistent with the purpose and intent of this paragraph.

38. APPLICABLE LAW

The Contractor shall comply with the laws of the Yakama Nation and all applicable Federal laws and regulations, including the Davis Bacon Act and related federal labor law requirements associated with federally funded construction projects.

39. DISPUTE RESOLUTION

In the event a dispute arises between the Contractor and the Yakama Nation relating to the performance or interpretation of this agreement, the aggrieved party shall submit the matter, in writing, to the Chairman of the Yakama Tribal Council within ten (10) days of its occurrence. A copy of the aggrieved party's submission shall be served upon the other party. The Chairman shall immediately convene a meeting of the parties, which shall be held in Toppenish, Washington, to resolve the matter. The decision of the Chairman shall be final and binding upon both parties.

Nothing herein this paragraph shall operate to prohibit the Yakama Nation from enforcing its rights under this agreement in a court of appropriate jurisdiction. The Yakama Nation may at its own election seek recovery of monetary damages from the Contractor's breach of any terms in this agreement in a federal and state court of competent jurisdiction.

40. SOVEREIGN IMMUNITY

The Yakama Nation, by entering into this agreement, does not waive its sovereign immunity from suit. This agreement shall be governed by the laws of the Yakama Nation except as otherwise expressly provided herein, and shall become effective on the first day written above.

41. ADDITIONAL SERVICES

Except as otherwise provided in this contract, no payment for additional services shall be made unless such services and the price therefore have been requested and authorized in advance in writing by the Yakama Nation.

42. CHANGES TO THE CONTRACT

This agreement may be modified or amended only by mutual agreement of the parties in writing and signed by each of the parties hereto.

43. ENTIRE AGREEMENT

This agreement incorporates all the agreements, covenants and understandings between the parties. No agreement or understanding, verbal or otherwise, of the parties regarding their responsibilities under this contract shall be valid or enforceable unless embodied in this agreement.

Compensation under this contract is dependent upon availability of funds to the Yakama Nation under Intergovernmental Contract 56662 – Release XXX ("IG-MA 56662, Rel XXX") between the Bonneville Power Administration and the Yakama Nation, the contract clauses of which are attached hereto and incorporated by reference herein. In addition to compliance with the other terms of this contract, Contractor shall comply with all requirements set forth in the contract clauses that are applicable to subcontractors by IG-MA 56662, Rel. XXX's terms. The contract agreement between Yakama Nation and Bonneville Power Administration shall be attached when fully executed.

CONFEDERATED TRIBES AND BANDS OF THE YAKAMA NATION		**CONTRACTOR:**	
_____		_____	
JoDe Goudy, Chairman	**Date**	**Contractor**	**Date**
Yakama Tribal Council		**EIN**	