## **GENERAL NOTES:**

- MATERIAL STAGING AREAS TO BE LOCATED AS SHOWN ON THE SITE PLAN. MATERIAL SHALL NOT BE STORED OUTSIDE OF IDENTIFIED STAGING AREAS, UNLESS APPROVED BY OWNER OR SITE ENGINEER.
- 2. ALL EQUIPMENT OPERATING IN AREAS OTHER THAN EXISTING UNIMPROVED ACCESS ROADS SHALL USE ONLY BIODEGRADABLE HYDRAULIC FLUIDS.
- CONTRACTOR SHALL LIMIT MACHINERY MOVEMENT TO PROJECT LIMITS DEFINED ON SITE PLAN OR IDENTIFIED AS ACCEPTABLE BY ON-SITE ENGINEER.
- ENGINEER WILL ESTABLISH EXISTING GROUND ELEVATION CONTROL POINTS FOR EACH STRUCTURE. CONTRACTOR WILL USE THIS STRUCTURE SPECIFIC DATUM FOR TARGET
- 5. ENGINEER WILL STAKE OUT THE RIVERWARD EXTENTS (CONTROL POINTS) OF EACH STRUCTURE BEFORE EXCAVATION TAKES PLACE.
- CONTRACTOR IS RESPONSIBLE FOR SETTING OFFSETS FOR ALL CONTROL POINTS AND IS RESPONSIBLE FOR COSTS RELATED FOR ENGINEER TO REESTABLISH THEM.
- CLEARING LIMITS FOR TEMPORARY ACCESS ROAD AND PROPOSED STRUCTURES SHALL BE LIMITED TO THE AREA REQUIRED FOR SAFE EQUIPMENT OPERATION. CLEARING LIMITS SHALL BE STAKED BY CONTRACTOR AND APPROVED BY ENGINEER AT LEAST 3 DAYS PRIOR TO CLEARING ACTIVITIES. CLEARING LIMITS SHALL BE STAKED TO MINIMIZE THE AREA OF DISTURBANCE.
- 8. CONTRACTOR SHALL PROVIDE 24 HOURS ADVANCE NOTICE TO THE ENGINEER PRIOR TO ANY REQUIRED INSPECTION. GENERAL CONTRACTOR SHALL SUBMIT FOR APPROVAL A CONSTRUCTION SEQUENCE PLAN 5 DAYS PRIOR TO SITE WORK INCLUDING DRIVING/EXCAVATION/LOG PLACEMENT AND BACKFILL
- APPROVED CONSTRUCTION SEQUENCE PLAN SHALL NOT BE ALTERED UNLESS APPROVED BY ENGINEER.
- 10. FIELD VERIFY WITH ENGINEER ALL STRUCTURE LOCATIONS, LENGTHS, WIDTHS, AND ELEVATIONS PRIOR TO EXCAVATION, ASSEMBLY, AND INSTALLATION OF EACH
- 11. EQUIPMENT USED FOR THIS PROJECT SHALL BE FREE OF EXTERNAL PETROLEUM-BASED PRODUCTS WHILE WORKING NEAR ANY SURFACE WATER OR WETLANDS. ACCUMULATION OF SOILS OR DEBRIS SHALL BE REMOVED FROM THE DRIVE MECHANISMS (WHEELS, TRACKS, TIRES, ETC.) AND UNDERCARRIAGE OF EQUIPMENT PRIOR TO ITS WORKING BELOW THE BANKFULL WATER ELEVATION.
- 12. EQUIPMENT SHALL BE CHECKED DAILY FOR LEAKS, AND ANY NECESSARY REPAIRS SHALL BE COMPLETED PRIOR TO COMMENCING WORK ACTIVITIES.
- 13. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO PETROLEUM PRODUCTS, HYDRAULIC FLUID, SEDIMENTS, SEDIMENT-LADEN WATER, CHEMICALS, OR ANY OTHER TOXIC OR DELETERIOUS MATERIALS ARE ALLOWED TO ENTER OR LEACH INTO THE RIVER, GROUNDWATER, OR WETLANDS.
- 14. IF AT ANY TIME, AS A RESULT OF PROJECT ACTIVITIES, FISH ARE OBSERVED IN DISTRESS, A FISH KILL OCCURS, OR WATER QUALITY PROBLEMS DEVELOP (INCLUDING EQUIPMENT LEAKS OR SPILLS), OPERATIONS SHALL CEASE AND THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. WASHINGTON DEPARTMENT OF FISH AND WILDLIFE AND WASHINGTON DEPARTMENT OF ECOLOGY SHALL BE CONTACTED IMMEDIATELY BY THE ENGINEER OR BY HIS/HER DESIGNEE. WORK SHALL NOT RESUME UNTIL FURTHER APPROVAL BY OWNERS REPRESENTATIVE.
- 15. EROSION CONTROL METHODS SHALL BE USED TO PREVENT SILT-LADEN WATER FROM ENTERING THE RIVER.
- 16. ALTERATION OR DISTURBANCE OF THE BANK AND BANK VEGETATION SHALL BE MINIMIZED TO THAT NECESSARY TO CONSTRUCT THE PROJECT. CONTRACTOR SHALL KEEP DISTURBED AREAS WITHIN LIMITS SHOWN ON PLANS.
- 17. IF HIGH FLOW CONDITIONS THAT MAY CAUSE SILTATION OR EROSION ARE ENCOUNTERED DURING CONSTRUCTION, WORK SHALL STOP UNTIL THE FLOW
- 18. CONTRACTOR SHALL SALVAGE ALL TREES WITH DIAMETER BREAST HEIGHT (DBH) GREATER THAN 10 IN. FOR USE IN STRUCTURES. IF POSSIBLE, SHRUBS AND SMALLER TRESS SHALL BE SCOOPED UP AT ROOTWAD AND SET ASIDE. PLANT ON STRUCTURE AFTER STRUCTURE IS BUILT.
- 19. DECKED LOGS SHALL BE ACCESSIBLE FOR INSPECTION.

## **GENERAL NOTES (CONTINUED):**

- 17. LOG TYPE IDENTIFICATION SHALL BE PAINTED ON ALL LOGS IN A PLACE VISIBLE FOR INSPECTION PRIOR TO PLACEMENT WITH LEAD-FREE, BLAZE-ORANGE SURVEY
- 18. EXCAVATIONS THAT HAVE POTENTIAL TO IMPACT THE WETTED CHANNEL OF THE CREEK OR SIDE CHANNEL SHALL BE ISOLATED. ISOLATION MEANS SHALL CONSIST OF SILT BOOMS, BULK BAGS, BLADDER DAMS OR APPROVED EQUAL AS NECESSARY TO PREVENT IMPACTS TO WATER QUALITY.
- 19. CONTRACTOR SHALL LIMIT TEMPORARY ACCESS ROAD TO 20' WIDE.

## SURVEY NOTES:

- 1. BASIS OF BEARINGS IS WASHINGTON STATE PLANE COORDINATE SYSTEM.
- 2. ELEVATIONS ARE BASED ON NAD83
- 3. ELEVATIONS ARE APPROXIMATE AND MAY VARY.
- 4. HORIZONTAL SURVEY DATA ASSUMED TO BE ±5' HORIZONTAL ACCURACY.

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# GENERAL NOTES

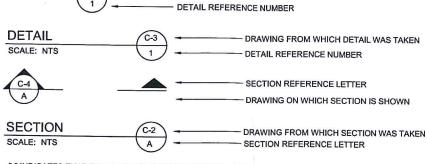
SWAUK CREEK RIVER RESTORATION PROJECT RIVER MILE 6.5 TO 7.3 YAKAMA NATION

CONSTRUCTION AND

DATE: 12/2010 T. NAGLE DRAWN BY T. ABBE CHECKED BY: SCALE: AS NOTED ENTRIX JOB NO. 42294003

G1

FIGURE NO.



DRAWING ON WHICH DETAIL IS SHOWN

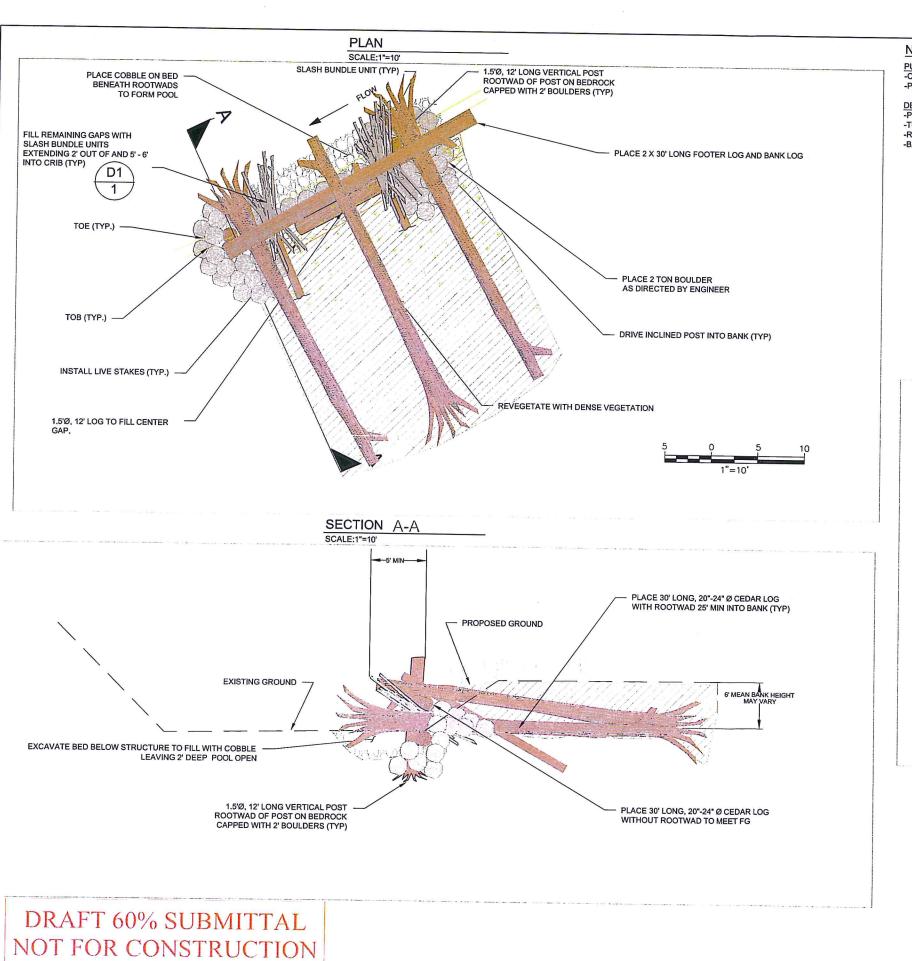
"-" INDICATES THAT THE DETAIL/SECTION IS SHOWN ON THE SAME SHEET

"TYP" INDICATES THAT THE DETAIL/SECTION IS UNIFORMLY TYPICAL THROUGHOUT PROJECT EXCEPT WHERE OTHERWISE NOTED

"VAR" SPECIFIES THAT DETAIL/SECTION WAS TAKEN FROM SEVERAL DRAWINGS

NOTE AND DETAIL/SECTION REFERENCING

DRAFT 60% SUBMITTAL NOT FOR CONSTRUCTION



## NOTES:

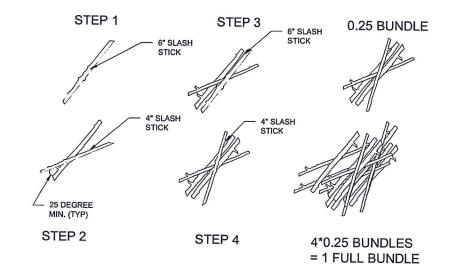
PURPOSE:
-CREATES POOL AND SHADING WHICH PROVIDES AQUATIC HABITAT. -PREVENTS LATERAL MIGRATION AND BANK EROSION OF THE CHANNEL

DESIGN SPECIFICS:
-POSITION ROOTWADS TO INTERCEPT FLOW AS CLOSE TO NORMAL AS POSSIBLE.
-TOP OF ROOTWAD (ROOTS) SHOULD NOT EXTEND MORE THAN 1/2-FT ABOVE TOB
-RELATIVELY LARGE "KEY MEMBERS" SECURED INTO BANKS WITH BACKFILL.
-BACKFILL W/LOCAL BANK MATERIAL, COMPACT TO MINIMUM OF 80%, AND PLANT AS PER LENGTH OF DISTURBANCE.



PHOTO OF BANK HABITAT STRUCTURE

# SLASH BUNDLE UNIT DETAIL (1)



SLASH BUNDLE UNIT									
QUANTITY	DIAMETER	LENGTH							
	INCH	FEET							
4	4	8							
4	6	8							
**PRESERVE	SMALLER	BRANCHES **							
		l l							

Cardno ENTRIX

200 First Avenue West, Suite 500 Seattle, WA 98116



BANK HABITAT: PLAN, SECTION AND DETAILS

EK RIVER RESTORATION PROJECT RIVER MILE 6.5 TO 7.3 YAKAMA NATION

DATE: DESIGNED BY: DRAWN BY: CHECKED BY: SCALE: AS NOTED ENTRIX JOB NO. 42294003

**D1** 

AT FULL SIZE

ONE INCH