

STATIONING, DISTANCES, AND LENGTHS SHOWN ON THE DRAWINGS ARE BASED ON HORIZONTAL MEASUREMENTS ALONG THE STREAM CENTERLINE. CROSS SECTIONS, CROSSING DETAILS, AND REFERENCES TO LEFT (L) AND RIGHT (R) ON THE DRAWINGS ASSUME LOOKING IN THE DIRECTION OF INCREASING STATION ALONG STREAM CENTERLINE ALIGNMENT (FACING DOWNSTREAM).

ALL DIMENSIONS, INCLUDING, BUT NOT LIMITED TO, ELEVATIONS, STATIONS, AND DISTANCES ARE IN STANDARD ENGLISH UNITS. COORDINATES AND ELEVATIONS ARE BASED ON LOCAL COORDINATE SYSTEM

ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS; OR ANY INCONSISTENCIES OR AMBIGUITIES BETWEEN THE DRAWINGS AND OTHER COMPONENTS OF THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY REPORTED IN WRITING TO THE ENGINEER. THE ENGINEER WILL PROMPTLY CORRECT INCONSISTENCIES OR AMBIGUITIES IN WRITING, WORK DONE BY THE CONTRACTOR INVOLVING SUCH DISCREPANCIES WITHOUT A WRITTEN REPORT AND RESPONSE FROM THE ENGINEER SHALL BE DONE AT THE CONTRACTOR'S SOLE RISK AND EXPENSE.

CONTRACTOR SHALL NOT DISTURB OR DESTROY ANY EXISTING SURVEY MONUMENTS OR BENCHMARKS. ANY BENCHMARKS DISTURBED OR DESTROYED BY THE CONTRACTOR SHALL BE REPLACED TO THE ENGINEER'S SATISFACTION AT THE CONTRACTOR'S SOLE EXPENSE.

EXISTING UTILITIES ARE NOT SHOWN ON THE DRAWINGS. UTILITY LOCATION AND PROTECTION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT TYPE, OWNER, LOCATION. AND ELEVATION OF ALL BURIED AND OVERHEAD UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE WORK IN A SAFE MANNER AND IN ACCORDANCE WITH ANY REQUIREMENTS SET FORTH BY THE UTILITY OWNER AND APPLICABLE LAWS AND REGULATIONS.

7. CONTRACTOR IS ADVISED THAT NORTH ARROWS AND ORIENTATION OF PLAN VIEW SHEETS VARY TO ALLOW FOR LEFT-TO-RIGHT STATIONING AND STATIONING IN THE DIRECTION OF STREAM FLOW.

CONTRACTOR SHALL NOTIFY UTILITY OWNERS WITHIN THE LIMITS OF CONSTRUCTION A MINIMUM OF TWO WEEKS PRIOR TO EXCAVATION, OR OTHER CONSTRUCTION ACTIVITY THAT MAY IMPACT THE UTILITY. CONTRACTOR SHALL ALSO CONTACT CCNRD PRIOR TO ANY CONSTRUCTION ACTIVITY IN THE AREA. CONTRACTOR SHALL PROVIDE ACCESS TO UTILITY OWNERS FOR MAINTENANCE AND WORK ON THEIR UTILITIES DURING THE COURSE OF THE WORK.

CONTRACTOR SHALL ENSURE THAT OPERATION OF EXISTING IRRIGATION, SEWER, DRAINAGE, DOMESTIC WATER, AND OTHER UTILITY SYSTEMS ARE CONTINUOUS DURING CONSTRUCTION.

10. RELOCATIONS AND/OR REPLACEMENTS OF EXISTING UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UTILITY OWNER. CONTRACTOR SHALL CONTACT, SCHEDULE, AND ESTABLISH UTILITY SHUT DOWN TIMES AND DETERMINE THE RELOCATION AND/OR REPLACEMENT REQUIREMENTS OF EXISTING UTILITIES PRIOR TO THE START OF ANY WORK. THE UTILITY SHALL BE RELOCATED OR REPLACED TO THE SATISFACTION OF THE UTILITY OWNER.

11. IF APPLICABLE, CONSTRUCTION EASEMENTS SHALL NOT BE USED IN ANY MANNER THAT WILL CAUSE PERMANENT DAMAGE TO THE PROPERTY. DESCRIPTIONS OF THE EASEMENTS ACQUIRED FOR THE WORK WILL BE ON FILE AT THE OFFICE OF THE OWNER. CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE EASEMENT AGREEMENTS.

12. CONTRACTOR SHALL KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE CONSTRUCTION LIMITS AND ANY TEMPORARY CONTRACTOR SHALL KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE CUNSTRUCTION LIMITS AND ANY TEMPURARY CONSTRUCTION OR PERMANENT EASEMENTS OBTAINED FOR THIS PROJECT, IF APPLICABLE. THIS INCLUDES, BUT IS NOT LIMITED TO, VEHICLES AND EQUIPMENT, LIMITS OF EXCAVATION, STOCKPILED EXCAVATED AND IMPORTED MATERIAL, BACKFILL MATERIAL, STREAMBED MATERIAL, AND BRIDGE MATERIAL. IF THE CONTRACTOR REQUIRES ADDITIONAL CONSTRUCTION EASEMENTS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SUCH EASEMENTS FROM INDIVIDUAL PROPERTY OWNERS AND BEAR ALL ASSOCIATED COSTS.

13. UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR SPECIFICATIONS, ALL EXISTING ITEMS INCLUDING, BUT NOT LIMITED TO, STRUCTURES, IMPROVEMENTS, GROUNDWATER WELLS, SIGNS, FENCES, GATES, CURBS, PAVEMENT, BRIDGES, UTILITIES, IRRIGATION PIPELINES AND DITCHES, ETC. SHALL BE PROTECTED BY THE CONTRACTOR. IF SUCH ITEMS ARE DAMAGED OR MUST BE REMOVED OR MODIFIED TO FACILITATE CONSTRUCTION, CONTRACTOR SHALL FIRST NOTIFY THE OWNER AND THEN REPLACE THE ITEMS TO A LIKE OR BETTER CONDITION AT CONTRACTOR'S EXPENSE TO SATISFACTION OF OWNER OF EACH LITES TO SATISFACTION OF OWNER OF FACILITIES.

CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING THE TRENCH LIMITS NEEDED TO COMPLETE THE WORK IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL CODES GOVERNING SHORING, SHEETING, BRACING OF EXCAVATIONS AND TRENCHES, AND FOR PROTECTION AND SAFETY OF THE WORKERS AND OTHER CONSTRUCTION RELATED

15. EXCAVATION SHALL MEET THE REQUIREMENTS OF OSHA 29 CFR PART 1926, SUBPART P, EXCAVATIONS. ACTUAL SLOPES SHALL NOT EXCEED THE MAXIMUM ALLOWABLE SLOPES (SUBPART P. APPENDIX B).

16. ELEVATIONS GIVEN ARE TO FINISH GRADE UNLESS OTHERWISE INDICATED.

17. SLOPE UNIFORMLY BETWEEN CONTOURS AND SPOT ELEVATIONS SHOWN.

18. THE CONTRACTOR IS RESPONSIBLE FOR PRODUCING, IMPLEMENTING, ADHERING TO, AND MAINTAINING A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE REGULATIONS AND GUIDELINES SET FORTH AND SUBJECT TO APPROVAL BY THE STATE OF WASHINGTON, DEPARTMENT OF ECCOLOGY, WATER QUALITY PROGRAM, CONTRACTOR SHALL IMPLEMENT AND DOCUMENT ANY ADDITIONAL MEASURES NECESSARY TO PREVENT ANY EROSION OR HAZARDOUS MATERIALS FROM LEAVING THE SITE, DISCHARGING, BEING ENTRAINED, ABSORBED OR OTHERWISE ENTERING SURFACE WATERS, GROUND WATER OR SOILS.

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES AT ALL TIMES. MAINTENANCE OF TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE

20. THE CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR ANY NPDES OR OTHER APPLICABLE ENVIRONMENTAL PERMIT VIOLATIONS AND FINES.

21. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING AND LAYOUT, UNLESS OTHERWISE SPECIFIED IN THE PLANS. CONTRACTOR SHALL STAKE LOCATIONS OF CORNERS OF CULVERT AND OBTAIN APPROVAL FROM ENGINEER PRIOR TO EXCAVATION.

QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNITS
	SITE PREPERATION		
1	MOBILIZATION	1.00	L.S.
2	REMOVAL OF STRUCTURE AND OBSTRUCTION	1.00	EA.
3	TEMPORARY DAMS AND DEWATERING	1.00	EA.
4	SURVEYING	1.00	L.S.
	EARTHWORK		
5	SPCC PLAN	1	E.A.
6	STRUCTURE EXCAVATION CLASS B INCLUDING HAUL	250	C.Y.
7	FURNISH AND INSTALL CMP PIPE ARCH	40.00	L.F.
8	CULVERT BEDDING	96	TON
9	GRAVEL BACKFILL CLASS A	275	TON
10	CONSTRUCTION GEOTEXTILE FOR SEPARATION	250	S.Y.
11	HAUL AND PLACE ENGINEERED STREAMBED MATERIAL	60	C.Y.
12	FURNISH AND PLACE STREAMBED BOULDERS	10	C.Y.
13	CRUSHED SURFACING TOP COURSE	110	TON
	OTHER		
14	PROJECT TEMPORARY TRAFFIC CONTROL	1.00	E.A.
15	EROSION CONTROL & WATER POLLUTION CONTROL	1.00	L.S.
16	EROSION CONTROL BLANKET	70	S.Y.

* Quantities are neat line only, shrink and swell factors have not been determined.

SEED MIX:

SPECIES NAME	COMMON NAME	LBS/ACRE
ACHNATHERUM HYMENOIDES AGROPYRON SPICATUM ELYMUS TRACHYCAULUS FESTUCA IDAHOENSIS TRITICUM AESTIVUM X SECALE CEREAL POA SECUNDA	INDIAN RICEGRASS BLUEBUNCH WHEATGRASS SLENDER WHEATGRASS IDAHO FESCUE E STERILE TRITICALE SANDBERG BLUEGRASS	12 12 8 6 60 4

ROCK NOTES:

- ENGINEERED STREAMBED MATERIAL (ESM) SHALL BE OBTAINED FROM EXISITNG STOCKPILE LOCATED ADJACENT TO LEAVENWORTH FISH HATCHERY AS DIRECTED BY CONTRACTING OFFICER.
- 2. CONTRACTOR IS RESPONSIBLE FOR LOADING AND TRANSPORTING ALL ESM.
- 3. STREAMBED BOULDERS SHALL CONFORM TO WSDOT STANDARD SPECIFICATION 9-03.11(3) STREAMBED BOULDERS ONE MAN ROCK SIZE.
- ESM AND STREAMBED BOULDERS ARE TO BE STOCKPILED AND HANDLED SEPARATELY. STREAMBED BOULDERS SHALL BE PLACED AS DIRECTED BY CONTRACTING OFFICER. STREAMBED BOULDERS WILL BE PLACED CONCURRENTLY WITH ESM AND GENERALLY PLACED PREFERENTIALLY ALONG EDGES OF
- 5. COARSE BANDS TO BE CONSTRUCTED WITH WELL-GRADED MATERIAL WITH D100=24".

ROAD NOTES:

- CONTRACTING OFFICER SHALL APPROVE ROAD SUBGRADE PRIOR TO PLACEMENT OF GEOTEXTILE AND SURFACING.
- GEOTEXTILE FABRIC SHALL BE PLACED BETWEEN APPROVED SUBGRADE AND ROAD SURFACING AT ALL NEW CONSTRUCTION, APPROXIMATELY STATION 1+40 AND 2+00. GEOTEXTILE FABRIC SHALL CONFORM TO WSDOT STANDARD SPECIFICATION 9-33. CONSTRUCTION GEOTEXTILE FOR SEPARATION.
- SOIL EXCAVATED FOR CULVERT INSTALLATION MAY BE USED AS BACKFILL IF IT MEETS THE REQUIREMENTS OF WSDOT STANDARD SPECIFICATION 9-3.12(2) OR AS APPROVED BY CONTRACTING
- ROAD SHALL BE GRADED BETWEEN POINTS SHOWN SUCH THAT THERE ARE SMOOTH VERTICAL TRANSITIONS FROM THE EXISTING ROAD.
- CONTRACTOR SHALL AVOID DAMAGE TO EXISING WOODY VEGETATION, INCLUDING TREES AND SHRUBS, UNLESS APPROVED BY CONTRACTING OFFICER.
- SIDE SLOPES OF ALL FILL MATERIAL SHALL NOT EXCEED 1.5:1.
- CRUSHED ROCK SURFACING SHALL BE APPLIED TO A COMPACTED DEPTH OF 6 INCHES AT THE STATIONING SHOWN BELOW. CRUSHED ROCK SURFACING SHALL BE APPLIED TO A COMPACTED DEPTH OF 6 INCHES TO THE TURNOUT AS SHOWN ON SHEET 3. PRIOR TO APPLICATION OF CRUSHED ROCK SURFACING, THE EXISTING ROAD AND TURNOUT SHALL BE GRADED WITH A CROWN FROM CENTERLINE AT A SLOPE OF 3%. GRADING SHALL BE DONE TO THE EXTENT THAT POTHOLES ARE CUT OUT AND NOT SIMPLY FILLED IN. PRIOR TO APPLICATION OF CRUSHED SURFACING THE ROAD SHALL BE PROOF ROLLED WITH A LOADED DUMP TRUCK AND APPROVED BY THE CONTRACTING OFFICER

<u>STATION</u>	FINISHED SURFACE WIDTH
0+00 TO 1+30	12 FEET
1+30 TO 1+40	12 FEET TO 16 FEET TRANSITION
1+40 TO 2+00	16 FEET
2+00 TO 2+10	16 FEET TO 12 FEET TRANSITION
2+10 TO 2+40	12 FEET

SEEDING NOTES:

- 1. FOLLOWING CONSTRUCTION, ALL AREAS ABOVE SURFACE WATER DISTURBED DUE TO EARTHWORK, CLEARING, ACCESS, STAGING, OR OTHER CONSTRUCTION ACTIVITIES SHALL BE SEEDED ACCORDING TO THE SEED MIX AND APPLICATION RATES SHOWN ON THIS SHEET.
- 2. ALL SEEDING AREAS SHALL BE PREPARED IN ACCORDANCE WITH SECTION 8-01.3 OF THE STANDARD SPECIFICATIONS. SEEDING AREAS NEED NOT BE CULTIVATED, BUT SHALL BE RAKED OR CHAINED TO ENSURE A FRIABLE SURFACE FREE OF SOIL CLUMPS LARGER THAN 2 INCHES IN DIAMETER.
- 3. APPLICATION OF SEED SHALL BE FOLLOWED BY THE APPLICATION OF STRAW MULCH APPLIED AT A RATE OF 2 TONS/ACRE

STRUCTURE NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A CULVERT MEETING THE FOLLOWING
- DIMENSIONS AND REQUIREMENTS: 1. LENGTH: 40 FEET MADE UP OF NO MORE THAN 2 SECTIONS CONNECTED WITH THE APPROPRIATE
- BAND AS SUPPLIED BY MANUFACTURER SPAN: 117 INCHES
- RISF: 79 INCHES
- 2 FOOT MINIMUM COVER
- 2. GALVANIZATION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M 218 OR ASTM A 929. ANY DAMAGE TO GALVANIZED FINISH SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A 780.
- HANDLING AND ASSEMBLY SHALL BE IN ACCORDANCE WITH NCSPA'S (NATIONAL CORRUGATED STEEL PIPE ASSOCIATION) RECOMMENDATIONS.
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING AND LAYOUT, UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS. CONTRACTOR SHALL STAKE LOCATIONS OF CULVERT INVERTS AND OBTAIN APPROVAL FROM CONTRACTING OFFICER PRIOR TO EXCAVATION.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING DELIVERY OF THE CULVERT AND ALL ASSOCIATED COMPONENTS TO THE PROJECT SITE. DISTURBANCE TO NORMAL TRAFFIC FLOW SHALL BE MINIMIZED; ANY TRAFFIC CONTROL MEASURES REQUIRED FOR DELIVERY OF ANY PROJECT RELATED MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ARRREVIATIONS

<u> ABE</u>	BREVIATIONS
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND
40000V	TRANSPORTATION OFFICIALS
APPRÓX ASTM	APPROXIMATE
	AMERICAN SOCIETY OF TESTING & MATERIALS
₽M	BENCHMARK
C	CENTERLINE
CCNRD	CHELAN COUNTY NATURAL RESOURCE DEPARTMENT
CDF	CONTROLLED DENSITY FILL
CMP	CORRUGATED METAL PIPE
<i>CO</i>	CONTRACTING OFFICER
CP	CONTROL POINT
CSBC	CRUSHED SURFACING BASE COURSE
CSTC	CRUSHED SURFACING TOP COURSE
CY	CUBIC YARD
EA	EACH
EL	ELEVATION
FG	FINAL GRADE
L	LENGTH
LF	LINEAR FOOT
LS	LUMP SUM
MAX	MAXIMUM
MIN	MINIMUM
N NTC	NORTH
NTS	NOT TO SCALE
OG.	ORIGINAL GROUND
OHW	ORDINARY HIGH WATER
Q ROW	FLOW
SF	RIGHT-OF-WAY SOUARF FOOT
SPEC	
STA	SPECIFICATION
	STATION
SY TYP	SQUARE YARD
	TYPICAL
W WSDOT	WEST
WSDO1 WSE	WASHINGTON STATE DEPARTMENT OF TRANSPORTATION WATER SURFACE FLEVATION
WSE USFWS	
USFWS	UNITED STATES FISH AND WILDLIFE SERVICE

RECLAMATION

LACEMENT I SUBBASIN
REPLACEMENT
AND QUANTITIE WENATCHEE

R CREEK BARRIER

GENERAL NOTES A

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GENERAL NOTES AND QUANTITIES

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SHEET 2 OF 5





