EX. 72" CMP CULVERT CONSTRUCTION BOUNDARY
INSTALL SLOPE STABILIZATION MEASURES ON CHANNEL BANKS
INSTALL SALVAGED SOD IN CHANNEL AREA
USFS PROPERTY BOUNDARY
EXISTING GROUND
EXISTING DIRT ROAD
INSTALL BOULDER GRADE CONTROL 1' 8" UPSTREAM OF CULVERT INLET
INSTALL NATIVE STREAM BED MATERIAL, SEE DETAIL SHEET
INSTALL SLOPE STABILIZATION MEASURES ON CHANNEL BANKS
PROPOSED HEADWALL, SEE SHEET C-5
EX. BOULDERS (TYP.)
EX. 72" CMP CULVERT CONSTRUCTION BOUNDARY
APPROXIMATE EXTENT OF FLOODPLAIN AREA

NOTES:
1. FIGURES SHOWN IN CHANNEL CROSS SECTION A-A ARE ONLY FOR VISUAL REPRESENTATION AND ARE NOT TO SCALE
2. EXACT LOCATION OF COIR LOGS ARE TO BE DETERMINED IN FIELD BY ENGINEER. SEE DETAIL SHEET FOR PROPER SLOPE SPACING.

FILE: R:\Reno Projects\E316001900 - Incline Creek CMP Culvert Rehab\AutoCAD\Upstream Channel Resto\Master\IVGID_UpstreamDP_design.dwg
TAB: P-1
PLOT STAMP: 5/14/2018 2:37 PM - Brandon Wong
P-1
**SALVAGED SOD DETAIL**

**NOTES:**
1. PLACEMENT OF COIR LOGS IS SUBJECT TO EXISTING CHANNEL CONDITIONS.
2. PLACE COIR LOGS ALONG TOE OF CHANNEL AS SHOWN ON PLAN SHEET.
3. COIR LOGS SHALL BE COMPLETELY MADE OF BIO-DEGRADABLE MATERIAL.
4. COIR LOG SPACING BASED ON SLOPE INCLINATION (H:V):
   - 4:1 OR FLATTER: COIR LOGS SHALL BE PLACED ON SLOPES 20 FT. APART
   - 4:1 TO 2:1: COIR LOGS SHALL BE PLACED ON SLOPES 15 FT. APART
   - 2:1 OR GREATER: COIR LOGS SHALL BE PLACED ON SLOPES 10 FT. APART
5. INSTALLATION OF COIR LOGS SHALL BE IN ACCORDANCE WITH NEVADA
   DEPARTMENT OF TRANSPORTATION'S (NDOT) CONSTRUCTION SITE BMPs FIELD
   MANUAL, SC-5.

**SLOPE STABILIZATION MEASURE**

**NOTES:**
1. SPREAD COMSTOCK SEED MIX PER
   COMSTOCK SPECIFICATIONS RATE.
2. CONTRACTOR SHALL RAKE IN
   COMSTOCK SEED MIX TO IMPROVE SOIL
   CONTACT.
3. HYDROMULCH SHALL BE APPLIED
   EVENLY THROUGHOUT DISTURBED
   AREAS.
1. The elevation of the large boulders (20"-24" avg Ø) shall increase at ± 2% going away from the channel centerline and into the embankment to form a "V" in the grade control structure. The bottom of the rock in the channel centerline shall be approximately 0.25' lower than the last rock placed (furthest into embankment).

2. Spread streambed material on top of grade controls to fill voids on the surface of the structure.

3. Streambed mix to match existing streambed gradation, approximately:
   - 20% 1" to 3" (by weight) gravel
   - 30% 3" to 8" (by weight) cobble
   - 40% 8" to 12" (by weight) cobble
   - 10% 12" to 18" (by weight) boulders

4. Key boulders into embankment ± 10' from stream bank toe.

5. Place cobble (8"-12" Ø) on channel embankment at 2:1 slope.

6. Place boulders below existing grade (min of 28") and small cobble (3"-6" Ø) to prevent scour.

7. Use larger (20"-24" avg Ø) rock to form "V" fill voids with chinking rock.

8. Place existing cobble ± 6' upstream of grade control from centerline.

9. Fill internal voids with class 150 rip rap angular chinking rock ± 16'.

10. Streambank toe ± 12'.

11. Proposed bed height to be 6"-10" above existing ground.

12. Key rock into bank ± 10' backfill with class 150 chinking rock and smaller rock and compact to match existing slope/grade in the area (typ.) into the bank of 1:1.5H (typ.)

13. Meet existing top of bank (typ.).

14. Proposed bed height to be between 6" & 10" above existing ground.

15. Place weir rocks to allow for low flow channel.

16. Place boulders below existing grade (min of 28').

17. Place existing streambed material/cobble or supplement with 3"-8" Ø cobble over grade control surface to fill in void space.

18. Place existing cobble ± 6' downstream of grade control from centerline.

19. Place Weir Rocks to allow for Low Flow Channel.