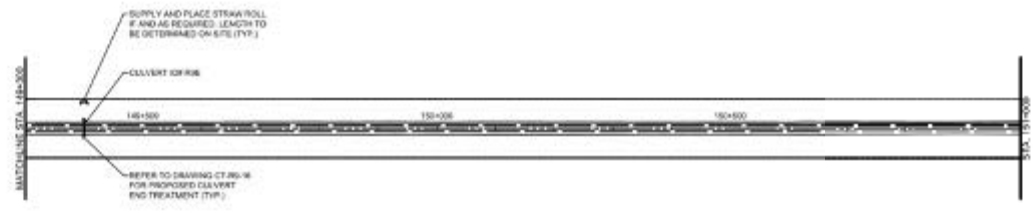
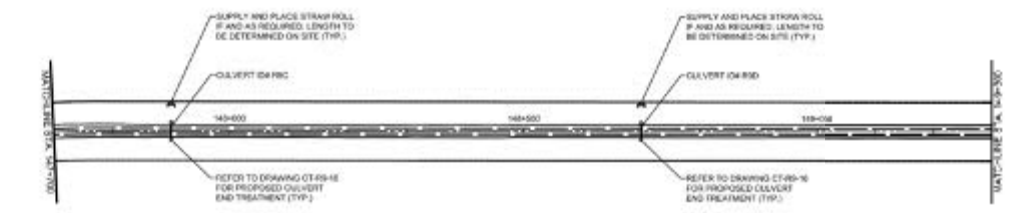
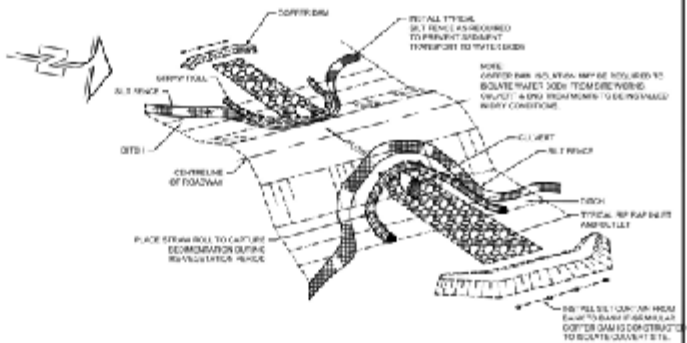
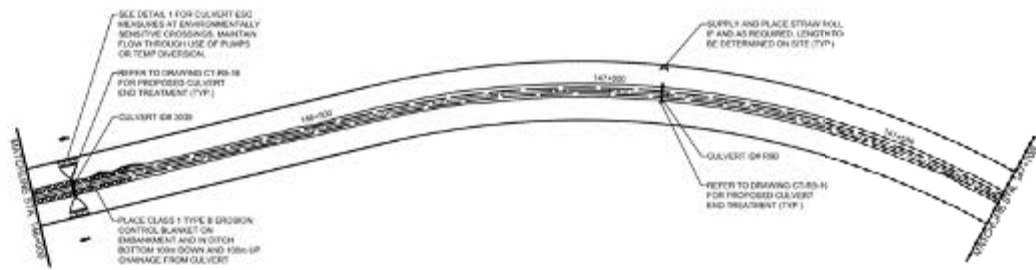


Appendix 3-5: Culvert Installation at Environmentally Sensitive Watercourse Crossings



1 CULVERT END MEASURES AT ENVIRONMENTALLY SENSITIVE CROSSINGS

- CONSTRUCTION NOTES**
1. THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENTATION CONTROL PLAN (E/S/CM) FOR APPROVAL BY THE DESIGNER AND LOCAL AGENCIES IN ACCORDANCE WITH SPECIFICATIONS.
 2. SET STAKEOUT STIPES FOR EROSION CONTROL DETAILS.
 3. INSTALL SILT FENCES AT ENDS OF ALL CULVERTS AS INDICATED ON DRAWINGS AND IN ACCORDANCE WITH THE SPECIFICATIONS.
 4. EROSION CONTROL BLANKETS SHALL NOT BE PLACED IN DITCH BOTTOMS IF DITCHES THROUGH ROCK CUT ARE.
 5. THE CONTRACTOR SHALL MAINTAIN PROPER MAINTENANCE CHANNELS THROUGHOUT THE PROJECT TO MAINTAIN THE DESIGNER'S INTENT. TOTAL PERFORMANCE HAS BEEN CERTIFIED.
 6. COVER DAMS TO BE USED TO ISOLATE SITES FOR ALL REWORK. AS APPLICABLE, SEE COVER DAM SPECIFICATION SECTION AND DRAWINGS FOR DETAILS.
 7. SLOPE PROTECTION SHALL BE INSTALLED AS REQUIRED BY THE DESIGNER AND SHALL BE MAINTAINED THROUGHOUT THE PROJECT. TOTAL PERFORMANCE HAS BEEN CERTIFIED.
 8. STRAW ROLL END CHECKS SHALL BE PLACED AT 100' DOWNSTREAM OF CULVERTS WHERE FEEDING DITCHES ARE APPLICABLE WITHIN 500' OF E.O.M. LIMIT.
 9. MAINTENANCE CHANNELS SHALL BE INSTALLED AS REQUIRED BY THE DESIGNER AND SHALL BE MAINTAINED THROUGHOUT THE PROJECT. TOTAL PERFORMANCE HAS BEEN CERTIFIED.
 10. THE CONTRACTOR SHALL PREVENT ALL SEDIMENT FROM ENTERING THE WATERWAY. THE CONTRACTOR SHALL ENSURE THAT NO SEDIMENT, ANTI-CORROSION OR OTHER POLLUTANTS SHALL ENTER THE WATERWAY AS A RESULT OF THIS OPERATION.
 11. SURFACE WATER DISCHARGE TO BE PLUMPED ONTO APPROVED VEGETATION BURNER OR ENERGY DENSIFYING PLANT.
 12. NO STORAGE OF MATERIAL SHALL BE PERMITTED EXCEPT AS INDICATED ON DRAWINGS.
 13. STORM SHALL BE INSTALLED FOR ALL CONSTRUCTION OPERATIONS IN ACCORDANCE WITH THE SPECIFICATIONS.
 14. EROSION CONTROL BLANKETS SHALL BE PLACED AT THE LOCATION SHOWN ON THE DRAWINGS.



PLAN LEGEND

PROPOSED	FISH BEARING STREAM
EXISTING	CULVERT END RELATION
PROPOSED	WOOD SLASH FIBRE BANKLINE
EXISTING	WOOD SLASH FIBRE BANKLINE
PROPOSED	STRAW ROLL DITCH CHECK
EXISTING	SILT CURTAIN
PROPOSED	SILT FENCE

PLAN LEGEND

PROPOSED	CENTRE LINE OF ROADWAY
EXISTING	RIGHT OF WAY
PROPOSED	EDGE OF GRAVEL LINES
EXISTING	HYDRIC POLE
PROPOSED	CULVERTS
EXISTING	FLOW DIRECTION
PROPOSED	BONE HOLES
EXISTING	FISH BEARING STREAM



NO.	DATE	DESCRIPTION	BY	CHKD	APP'D
0	21/02/14	ISSUED FOR TENDER	AJP	JED	JOHN
1	27/02/14	ISSUED FOR REVIEW	AJP	JED	JOHN
2	28/02/14	ISSUED FOR REVIEW	CLP	JED	AJP
3	NO	ISSUED FOR REVIEW	JED	CLP	AJP

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RELEASED FOR CONSTRUCTION

VP, DESIGN REVIEW AND CONSTRUCTION

DATE: 04/20/14

BY: [Signature]

TITLE TENDER NO. 29 - ROADWORKS RM 141.50 TO RM 151.0

PROJECT EROSION AND SEDIMENT CONTROL, PLAN STATION 146+00 TO STATION 151+00

DATE 04/20/14

SCALE 25

CLIENT East Side Road Authority

PROJECT PR 29 TO BERENS RIVER ALL SEASON ROAD PROJECT

DATE ISSUED FOR TENDER

SCALE 1:5

NO. 16

REV. 0