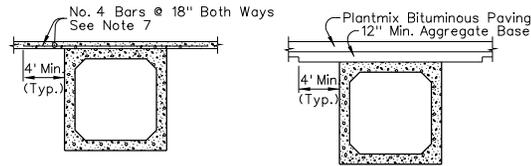
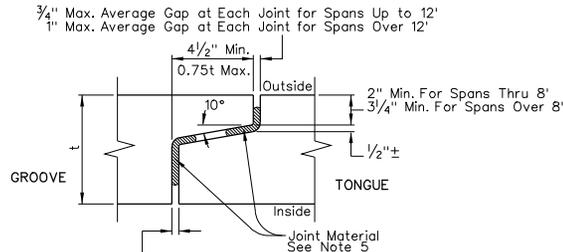


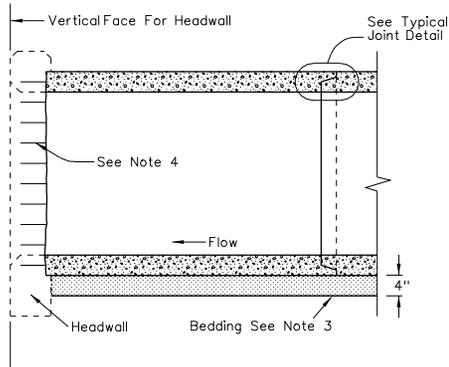
LIFTING



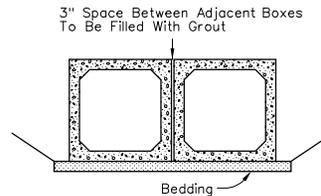
CONCRETE PAVING BITUMINOUS PAVING
MINIMUM COVER CONDITIONS



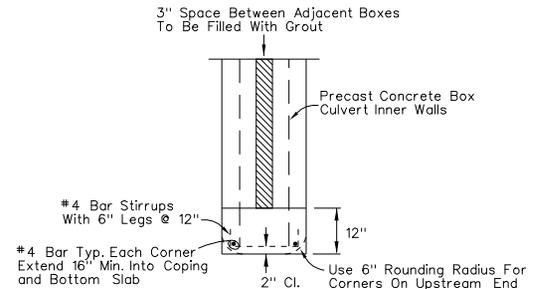
TYPICAL JOINT



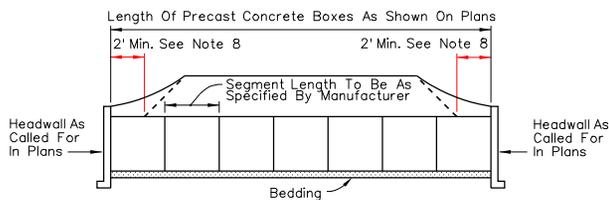
CULVERT END



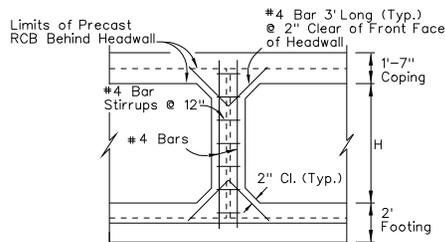
MULTIPLE CULVERT INSTALLATION



MULTIPLE CULVERT INNER WALL END PLAN



TYPICAL CULVERT INSTALLATION



MULTIPLE SPAN INNER WALL END ELEVATION

NOTES:

- CONCRETE SHALL BE AS SPECIFIED IN AASHTO M259 OR M273 (ASTM C1433), AS MODIFIED IN SUBSECTION 502.03.24.
- REINFORCING STEEL SHALL BE AASHTO M31 (ASTM A615) GRADE 60. WELDED WIRE FABRIC SHALL BE AASHTO M55 (ASTM A185) (SMOOTH WIRE), OR AASHTO M22 (ASTM A497) (DEFORMED WIRE). REINFORCING STEEL IN THE TOP SLAB SHALL HAVE AN EPOXY COATING CONFORMING TO AASHTO M284 (ASTM D3963) WHEN THERE IS 6" OR LESS OF COVER ON THE RCB (CLARK COUNTY EXCLUDED).
- BEDDING MATERIAL SHALL BE GRANULAR BACKFILL OR TYPE 2 CLASS B AGGREGATE MEETING THE RESISTIVITY REQUIREMENTS FOR GRANULAR BACKFILL. BEDDING MATERIAL WILL BE PAID FOR AS GRANULAR BACKFILL.
- HEADWALL DETAILS SHALL BE AS SHOWN IN THE STANDARD PLANS. EXPOSED REINFORCEMENTS TO TIE CAST-IN-PLACE HEADWALL TO PRECAST BOX SHALL CONSIST OF EITHER NO. 4 BARS AT 12" SPACINGS OR EXPOSURE OF THE PRECAST BOX WELDED WIRE FABRIC. THE NO. 4 BARS SHALL BE CAST A MINIMUM OF 18" INTO THE PRECAST BOX SEGMENT. BOTH THE NO. 4 BAR OR WELDED WIRE FABRIC SHALL EXTEND INTO HEADWALL TO 2" CLEAR OF THE HEADWALL FACE.
- JOINT MATERIAL SHALL BE A PREFORMED JOINT MATERIAL MEETING AASHTO M198 TYPE B. THE MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. A DOUBLE APPLICATION OF JOINT MATERIAL SHALL BE USED. APPLY ONE APPLICATION TO THE TONGUE AND THE OTHER TO THE GROOVE. THE MINIMUM SIZE OF JOINT MATERIAL SHALL BE 1/4". ANY JOINT MATERIAL EXTRUDING FROM THE INTERIOR OF THE JOINT SHALL BE REMOVED FLUSH WITH THE BOX WALL.
- IN ADDITION TO THE MARKINGS REQUIRED BY THE AASHTO AND ASTM SPECIFICATIONS, MARK EACH BOX SECTION WITH THE APPROPRIATE NDOT CONTRACT NUMBER.
- REINFORCING STEEL SHALL EXTEND FULL WIDTH OF CONCRETE PAVEMENT AND SHALL HAVE A MINIMUM CLEARANCE OF 3" ON THE BOTTOM. IN AREAS OF THE STATE WHERE ROAD SALTS ARE USED, THE REINFORCING SHALL BE EPOXY COATED. REINFORCING IS TO BE PLACED PARALLEL TO THE CENTERLINE OF ROAD FOR LONGITUDINAL REINFORCEMENT AND PARALLEL TO THE PRECAST BOX FOR TRANSVERSE REINFORCEMENT.
- LENGTH OF CULVERT SHALL BE INCREASED AS FOLLOWS: ADD 2' TO EACH END WHEN COVER AT SHOULDER IS 0' TO 5', ADD AN ADDITIONAL 1' TO EACH END FOR EACH SUCCEEDING 5' OF COVER OR PORTION THEREOF.
- FILL CYLINDRICAL LIFTING HOLES (LOCATED BY MANUFACTURER) WITH AN APPROVED EPOXY NON-SHRINK GROUT. HOLE WITH AN APPROVED CONICAL SHAPE FOR THE BOTTOM 3" MAY BE FILLED WITH A CONCRETE GROUT COMPOSED OF ONE PART BY VOLUME OF CEMENT TO TWO PARTS BY VOLUME OF SAND WITH ONLY ENOUGH WATER TO PERMIT PLACING AND TAMPING. AN APPROVED CUSTOM PLUG MAY BE USED. AN OPTIONAL METHOD OF LIFTING MAY BE USED WITH APPROVAL.

Designer To Investigate The Availability Of The Required Box Size.

NEVADA DEPARTMENT OF TRANSPORTATION

PRECAST CONCRETE BOX CULVERT

Signed Original On File B-20.1.8 (502)
CHIEF BRIDGE ENGINEER ADOPTED 4/85 REVISION 9/09