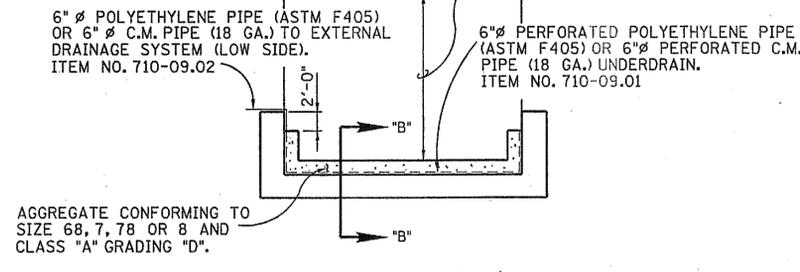


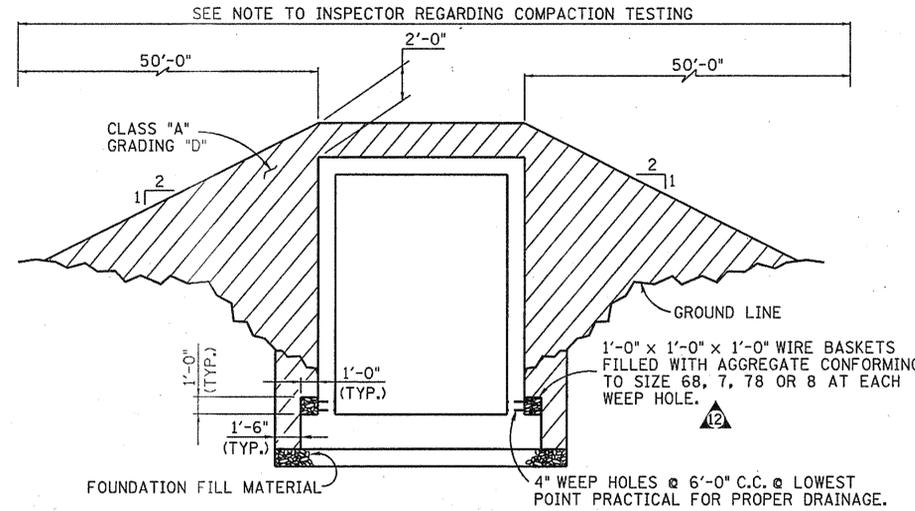
PLAN A

DIMENSION "H" 10'-0" OR LESS



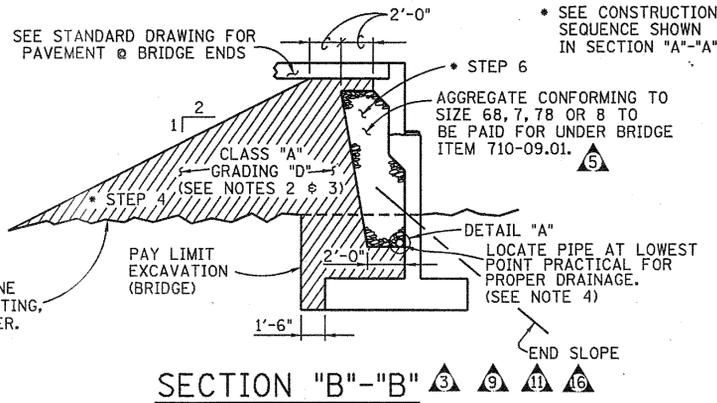
PLAN B

DIMENSION "H" GREATER THAN 10'-0".



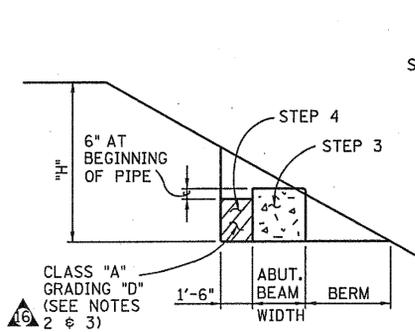
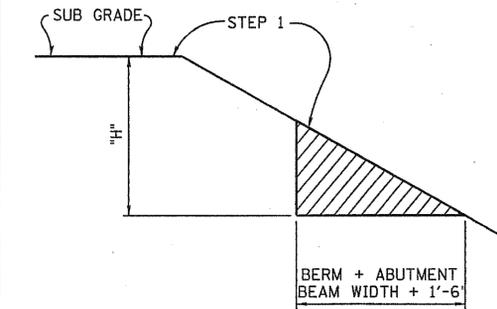
BOX CULVERT OR BRIDGE

NOTE: CLASS "A" GRADING "D" LIMITS ARE TYPICAL FOR BOX CULVERT OR BRIDGE AND WINGWALLS. CLASS "A" GRADING "D" MATERIALS SHALL BE PAID FOR UNDER ROADWAY ITEM NO. 303-01.01. (SEE ROADWAY PLANS.)



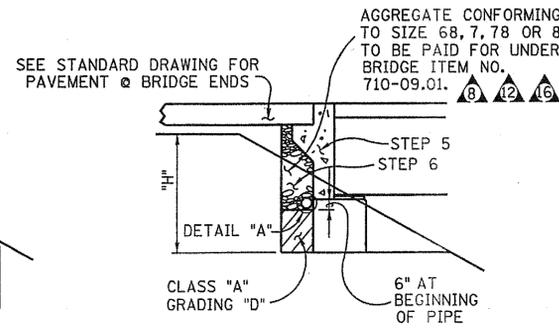
SECTION "B"- "B"

(TYPICAL FOR COUNTERFORT OR CANTILEVER CLOSED ABUTMENTS GREATER THAN 10' IN HEIGHT)



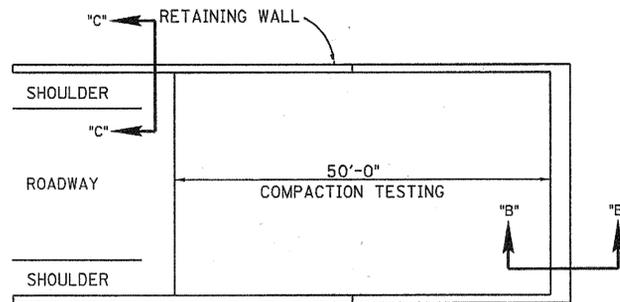
SECTION "A"- "A"

NOTE: THE CONSTRUCTION SEQUENCE SHOWN ABOVE IS APPLICABLE WHERE DIMENSION "H" IS LESS THAN OR EQUAL TO 10'-0".



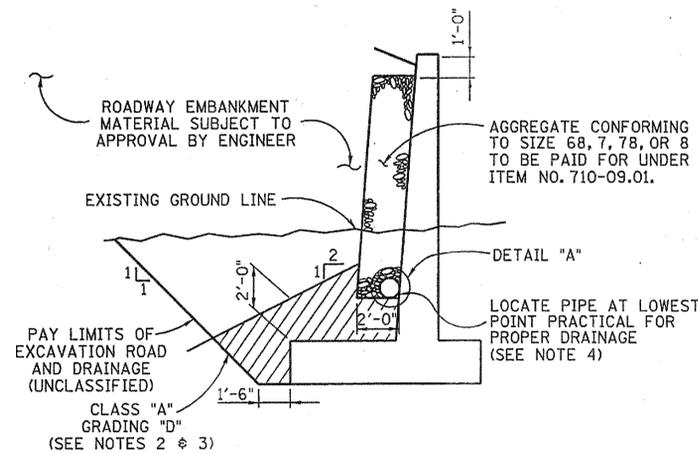
WATERSTOP DETAIL

(FOR LOCATION SEE DESIGN DRAWING)

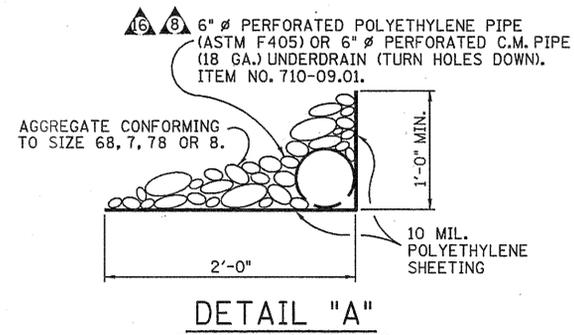


PLAN OF APPROACH ROADWAY AND ABUTMENT

NOTE TO INSPECTOR: SEE MATERIALS AND TESTS SAMPLING AND TESTING SCHEDULE FOR FREQUENCY OF COMPACTION TESTING OF EMBANKMENT AND BACKFILL MATERIAL. ALSO NOTE 1.



RETAINING WALL SECTION "C"- "C"



DETAIL "A"

PROJECT NO.	YEAR	SHEET NO.	
	1971		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-24-71	R.G.	
2	3-18-71	E.R.G.	ADDED NOTE NO.3
3	10-8-71	R.M.D.	EXCAVATION SECTION "B"- "B" CLARIFIED
4	10-10-72	R.M.D.	
5	11-27-72	R.M.D.	
6	9-9-72	C.L.L.	CHANGE NOTE
7	1-9-75	R.M.D.	NOTE CHANGED
8	7-17-86	R.M.D.	ADDED POLYETHYLENE PIPE
9	2-9-87	D.W.F.	GENERAL REVISIONS
10	6-25-87	R.M.D.	REV. PAY LIMIT BOX CULVERT, REMOVED INSERT & ADDED ITEM NO. FOR CLASS "A" GRADING "D"
11	1-7-91	R.M.D.	REV. ITEM NO. 710-09.02 TO 710-09.01 AND REV. ITEM NO. 303-01.01 TO 303-01.02
12	2-8-91	R.M.D.	REV. NOTE 2 TO INCLUDE RETAINING WALLS AND REV. ITEM NO. 710-09.02 TO 710-09.01
13	6-24-91	M.A.H.	ADDED SECTION SHOWING GEOCOMPOSITE DRAINAGE SYSTEM AND NOTE NO.4
14	9-1-91	M.A.H.	CHANGED DWG. NO. FROM K-85-150
15	9-18-91	M.A.H.	REMOVED WATERPROOFING
16	5-11-92	M.A.H.	DELETED ALTERNATE "B" AND NOTES
17	4-8-05	JHW	DELETED ITEM NUMBER

NOTES

- BACKFILLING: UNLESS OTHERWISE SPECIFIED OR DIRECTED, THE CONTRACTOR SHALL BACKFILL BEHIND ABUTMENTS, RETAINING WALLS OF BOX TYPE BRIDGES AND CULVERTS AS SOON AS THE FOLLOWING CONDITIONS ARE MET:
 - CONCRETE SURFACES AGAINST WHICH BACKFILL WILL BE PLACED HAVE BEEN GIVEN A CLASS 1 FINISH AS SPECIFIED IN SUBSECTION 604.22.
 - REPRESENTATIVE SPECIMENS OF THE CONCRETE IN THE STRUCTURE, SECTION OR UNIT, CURED BY THE METHODS AND IN THE MANNER THAT THE CONCRETE WHICH THE TEST SPECIMENS REPRESENT IS CURED, ATTAIN A COMPRESSIVE STRENGTH OF 3,000 POUNDS PER SQUARE INCH.
 - THE CONCRETE SHALL HAVE BEEN PLACED A MINIMUM OF 7 DAYS, NOT COUNTING THE DAYS OF TWENTY-FOUR HOURS EACH IN WHICH THE TEMPERATURE FALLS BELOW FORTY DEGREES FAHRENHEIT, OR 21 CALENDAR DAYS WHICHEVER OCCURS FIRST.
- CLASS "A" GRADING "D" MATERIAL SHALL BE PAID FOR UNDER ITEM NO. 303-01.02, GRANULAR BACKFILL (BRIDGES) OR ITEM 303-01.03, GRANULAR BACKFILL (RETAINING WALLS).
- IN LIEU OF THE CLASS "A" GRADING "D" MATERIAL SHOWN, CLASS "B" GRADING "C" OR "D" MAY BE USED.
- LOCATE PIPE AT LOWEST POINT PRACTICAL FOR PROPER DRAINAGE WITH SLOPE PARALLEL TO ABUTMENT BEAM OR RETAINING WALL (1/8" PER FOOT MINIMUM). INSTALL PIPE AND 1'-0" OF COVER AS SOON AS POSSIBLE AFTER FORMING WALL.

MINOR REVISION - FHWA APPROVAL NOT REQUIRED

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS
1971

CORRECT *Edward P. Wasserman*
ENGINEER OF STRUCTURES

DESIGNED BY R. DISHNER DATE _____
DRAWN BY KEITH DOUGLAS DATE 1-91
SUPERVISED BY DATE _____
CHECKED BY R. DISHNER DATE 1-91