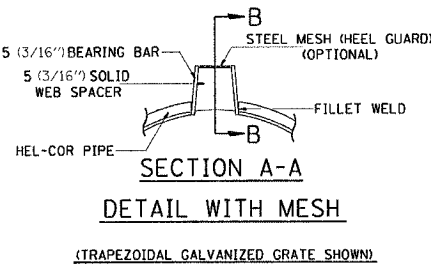
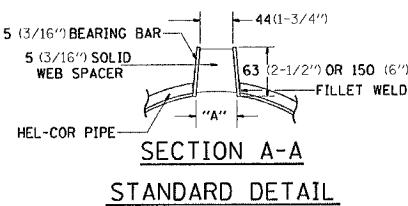
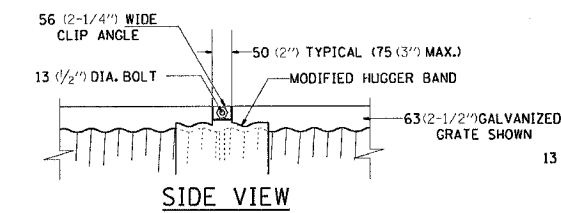
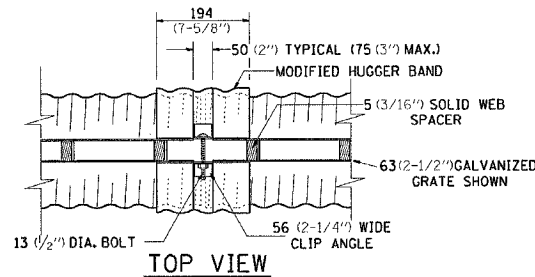


SLOTTED DRAIN PIPE



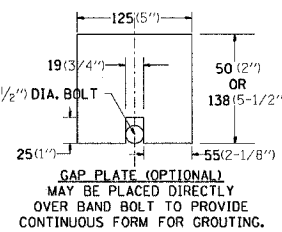
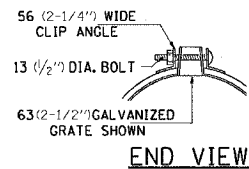
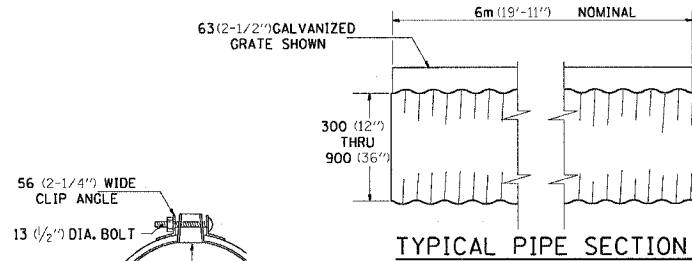
NOTES

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

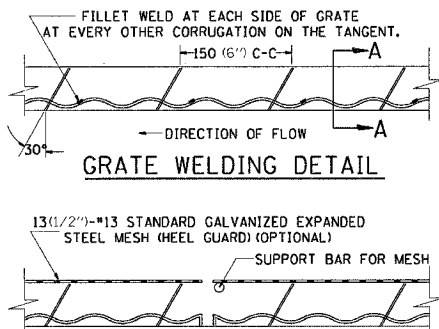
THE SLOTTED DRAIN SHALL BE CORRUGATED PIPE CULVERT WITH INTEGRAL SLOTTED DRAINS. BEFORE PLACING THE CONCRETE ADJACENT TO THE PIPE, THE SLOT SHALL BE COVERED BY EITHER THIN, FLAT METAL SHEETING OR BY A BOARD NOTCHED TO FIT OVER THE GRATE BARS. THIS COVERING MUST FIT CLOSELY IN THE SLOT TO PREVENT ENTRY OF CONCRETE INTO THE PIPE. PAVING OVER THE SLOTTED DRAIN WILL THEN BE ONE CONTINUOUS OPERATION OVER THE PROTECTED DRAIN. THE PROTECTION FOR THE DRAIN SLOT SHALL THEN BE REMOVED. THE PIPE SHALL DRAIN INTO THE SIDE OF THE INLET. THE OPENING WHERE THE SLOT IS REMOVED SHALL BE COVERED TO PREVENT CONCRETE FROM ENTERING THE PIPE.

THE CORRUGATED STEEL PIPE USED IN THE SLOTTED DRAIN SHALL MEET THE REQUIREMENTS OF AASHTO M-36/ASTM A 760. THE CMP SHALL BE GALVANIZED OR ALUMINIZED STEEL TYPE 2. STEEL GRATING SHALL MEET THE GALVANIZING REQUIREMENTS OF AASHTO M-111. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR SLOTTED DRAIN PIPE, AND SHALL INCLUDE ELBOWS, DRILLING HOLES IN GRATING, SUPPLYING AND PLACING AI BARS AND CONCRETE.

USE APPROVED END CAP TO PREVENT CONCRETE ENTRY INTO THE PIPE DURING CUTTER CONSTRUCTION ON THE UPSTREAM END OF PIPE.



GAP PLATE (OPTIONAL) MAY BE PLACED DIRECTLY OVER BAND BOLT TO PROVIDE CONTINUOUS FORM FOR GROUTING.



SECTION B-B

CAGE OF PIPE	DIAMETER OF PIPE					
	300 (12")	375 (15")	450 (18")	600 (24")	750 (30")	900 (36")
16	X	X	X	X	X	X
14	X	X	X	X	X	X
12	N.A.	N.A.	N.A.	N.A.	X	X

GRATE TYPE	"A"
VERT 63 (2-1/2")	44 (1-3/4")
VERT 150 (6")	44 (1-3/4")
TRAP 63 (2-1/2")	56 (2-1/4")
TRAP 150 (6")	75 (3")

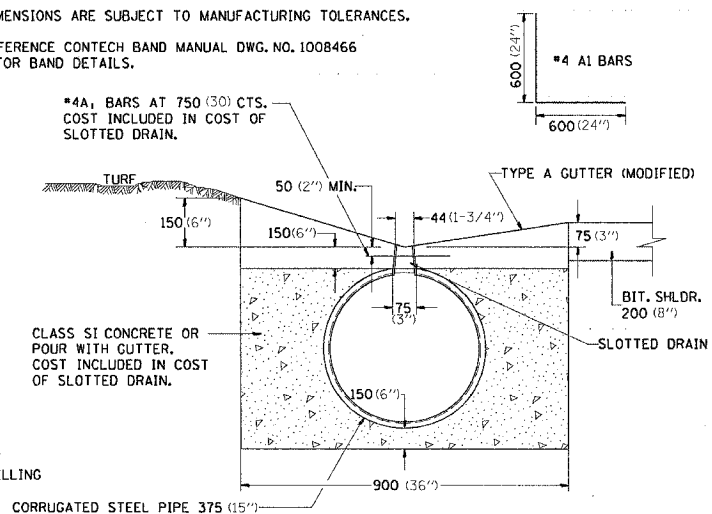
VERT = VERTICAL
TRAP = TRAPEZOIDAL

SLOTTED DRAIN NOTES

- GRATING IS AVAILABLE IN DEPTHS OF 63 (2-1/2") AND 150 (6").
- VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
- FOR 150 (6") VERTICAL & TRAPEZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 100 (4") TECHCO BAND ANGLE.
- DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- REFERENCE CONTECH BAND MANUAL DWG. NO. 1008466 FOR BAND DETAILS.

MANUFACTURING TOLERANCES

- VERTICAL BOW +.10 (3/8")
- HORIZONTAL BOW +.16 (5/8")
- TWIST +.13 (1/2")



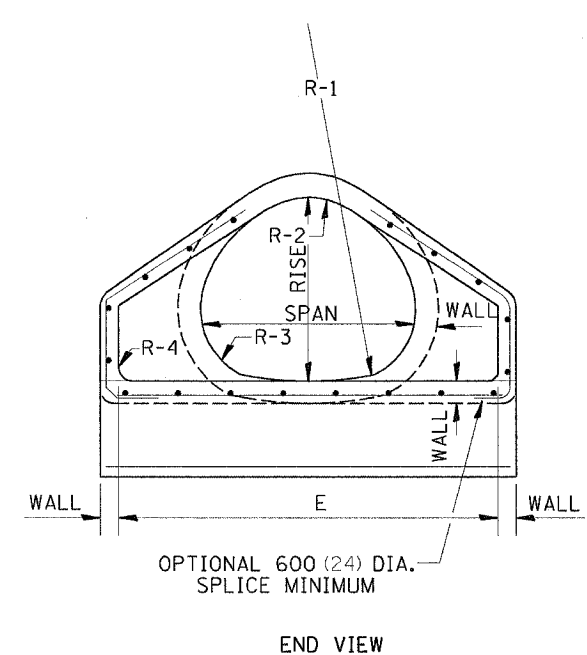
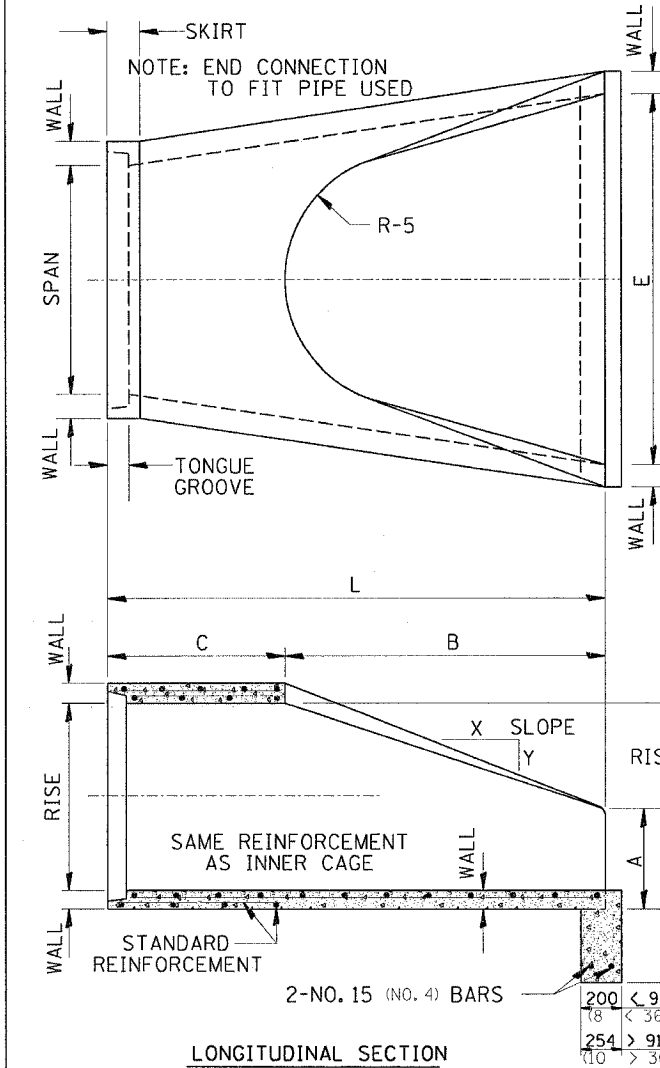
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

PRECAST REINFORCED CONCRETE ARCH DIAMETER FLARED END SECTION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
742	37R-2	OGLE	389	150
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT #64157

SIZE	WALL	SPAN	RISE	L	B	C	E	A	SLOPE	R-1	R-2	R-3	R-4	R-5
450 (18)	64 (2 1/2)	559 (22)	343 (13 1/2)	1829 (72)	686 (27)	1143 (45)	914 (36)	178 (7)	1:2.16	699 (27 1/2)	349 (13 3/4)	133 (5 1/4)	51 (2)	305 (12)
600 (24)	76 (3)	724 (28 1/2)	457 (18)	1829 (72)	991 (39)	838 (33)	1219 (48)	203 (8)	1:2.29	1033 (40 1/2)	370 (14 5/8)	117 (4 5/8)	76 (3)	356 (14)
750 (30)	89 (3 1/2)	921 (36 1/4)	572 (22 1/2)	1829 (72)	1219 (48)	610 (24)	1524 (60)	254 (10)	1:2.34	1295 (51)	476 (18 3/4)	156 (6 1/8)	76 (3)	381 (15)
900 (36)	102 (4)	1111 (43 3/4)	676 (26 5/8)	2438 (96)	1524 (60)	914 (36)	1828 (72)	270 (10 5/8)	1:2.4	1575 (62)	572 (22 1/2)	165 (6 1/2)	152 (6)	508 (20)
1050 (42)	114 (4 1/2)	1308 (51 1/8)	795 (31 1/8)	2438 (96)	1524 (60)	914 (36)	1981 (78)	402 (15 3/8)	1:2.35	1854 (73)	667 (26 1/4)	197 (7 3/4)	152 (6)	559 (22)
1200 (48)	127 (5)	1485 (58 1/2)	914 (36)	2438 (96)	1524 (60)	914 (36)	2134 (84)	533 (21)	1:2.31	2134 (84)	762 (30)	225 (8 3/8)	152 (6)	559 (22)
1350 (54)	140 (5 1/2)	1651 (65)	1016 (40)	2438 (96)	1524 (60)	914 (36)	2286 (90)	648 (25 1/2)	1:2.26	2350 (92 1/2)	848 (33 3/8)	254 (10)	152 (6)	610 (24)
1500 (60)	152 (6)	1854 (73)	1143 (45)	2438 (96)	1905 (75)	533 (21)	2438 (96)	660 (26)	1:2.34	2667 (105)	953 (37 1/2)	281 (11 1/8)	152 (6)	533 (21)
1800 (72)	178 (7)	2235 (88)	1371 (54)	2540 (100)	1981 (78)	559 (22)	3048 (120)	889 (35)	1:2.29	3200 (126)	1143 (45)	338 (13 3/8)	152 (6)	610 (24)



- NOTES:
- PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENT OF AASHTO M-206.
 - PRECAST CONCRETE FLARED END SECTION FOR PIPE ARCH DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.
 - THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE FLARED END SECTION. THE END BLOCK SHALL BE BACKFILLED IN ACCORDANCE WITH ART. 502.10 (502.11) OF THE STANDARD SPECIFICATIONS, COST INCIDENTAL TO END SECTION.
 - ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.