

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	11T	CARROLL	79	62
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

# DETAIL OF PRECAST CONCRETE BOX CULVERTS AND END SECTIONS

## GENERAL NOTES

### PRECAST CONCRETE BOX CULVERTS AND PRECAST CONCRETE BOX CULVERT END SECTIONS

THIS WORK CONSISTS OF FURNISHING AND INSTALLING PRECAST BOX CULVERTS AND BOX CULVERT END SECTIONS AS SHOWN ON THE PLANS AND SPECIFIED HEREIN.

IF THE EARTH COVER IS 600 (2 FT) OR MORE, THE PRECAST CONCRETE BOX CULVERT SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C789 EXCEPT THAT THE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLES 1003.02 AND 1004.02 OF THE STANDARD SPECIFICATIONS, WITH THE EXCEPTION OF A GRADATION.

IF THE EARTH COVER IS LESS THAN 600 (2 FT), THE PRECAST BOX CULVERT BARREL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C850 AND THE END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C789. WITH THE EXCEPTION OF GRADATION, THE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLES 1003.02 AND 1004.02 OF THE STANDARD SPECIFICATIONS.

ALL APPLICABLE REQUIREMENTS OF ARTICLE 540 OF THE STANDARD SPECIFICATIONS.

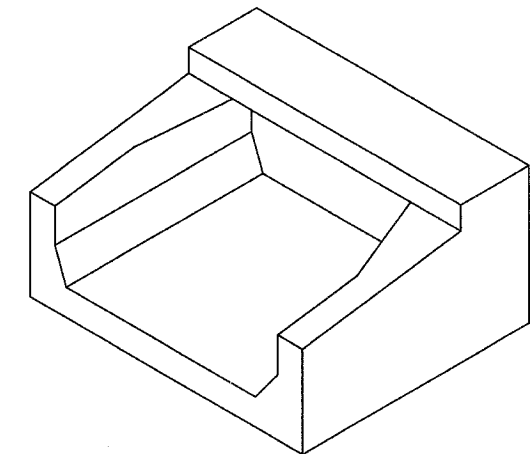
THE EXCAVATION AND BACKFILLING FOR PRECAST CONCRETE BOX CULVERT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 502 OF THE STANDARD SPECIFICATIONS EXCEPT A LAYER OF POROUS GRANULAR BACKFILL, AT LEAST 150 (6") IN THICKNESS, SHALL BE PLACED BELOW THE ELEVATION OF THE BOTTOM OF THE BOX. THE POROUS GRANULAR BACKFILL SHALL BE PLACED TO EXTEND AT LEAST 600 (2 FT) EACH SIDE OF THE BOX. THE PRECAST CONCRETE BOX CULVERT SHALL BE LAID IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ARTICLE 542.04 (d) OF THE STANDARD SPECIFICATIONS

SHOP PLANS FOR THE PRECAST CONCRETE BOX CULVERT SECTIONS AND THE END SECTIONS SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 1042.03 (b) OF THE STANDARD SPECIFICATIONS.

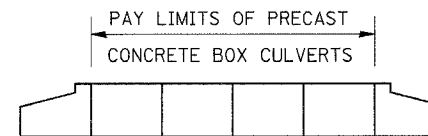
THE PRECAST CONCRETE BOX CULVERT EXCLUDING END SECTIONS WILL BE MEASURED ON A METER (LINEAL FOOT) BASIC. THE PRECAST BOX CULVERT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER (LINEAL FOOT) FOR PRECAST CONCRETE BOX CULVERT, OF THE SIZE SPECIFIED, AND INCLUDES POROUS GRANULAR BACKFILL EXCAVATION EXCEPT EXCAVATION OF ROCK AND/OR UNSTABLE OR UNSUITABLE MATERIAL BELOW BEDDING GRADE

THE PRECAST CONCRETE BOX CULVERT END SECTION WILL BE MEASURED ON AN EACH BASIS. THE END SECTIONS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR BOX CULVERT END SECTIONS, OF THE CULVERT NUMBER SPECIFIED, AND INCLUDE EXCAVATION, TOEWALL AND COLLARS.

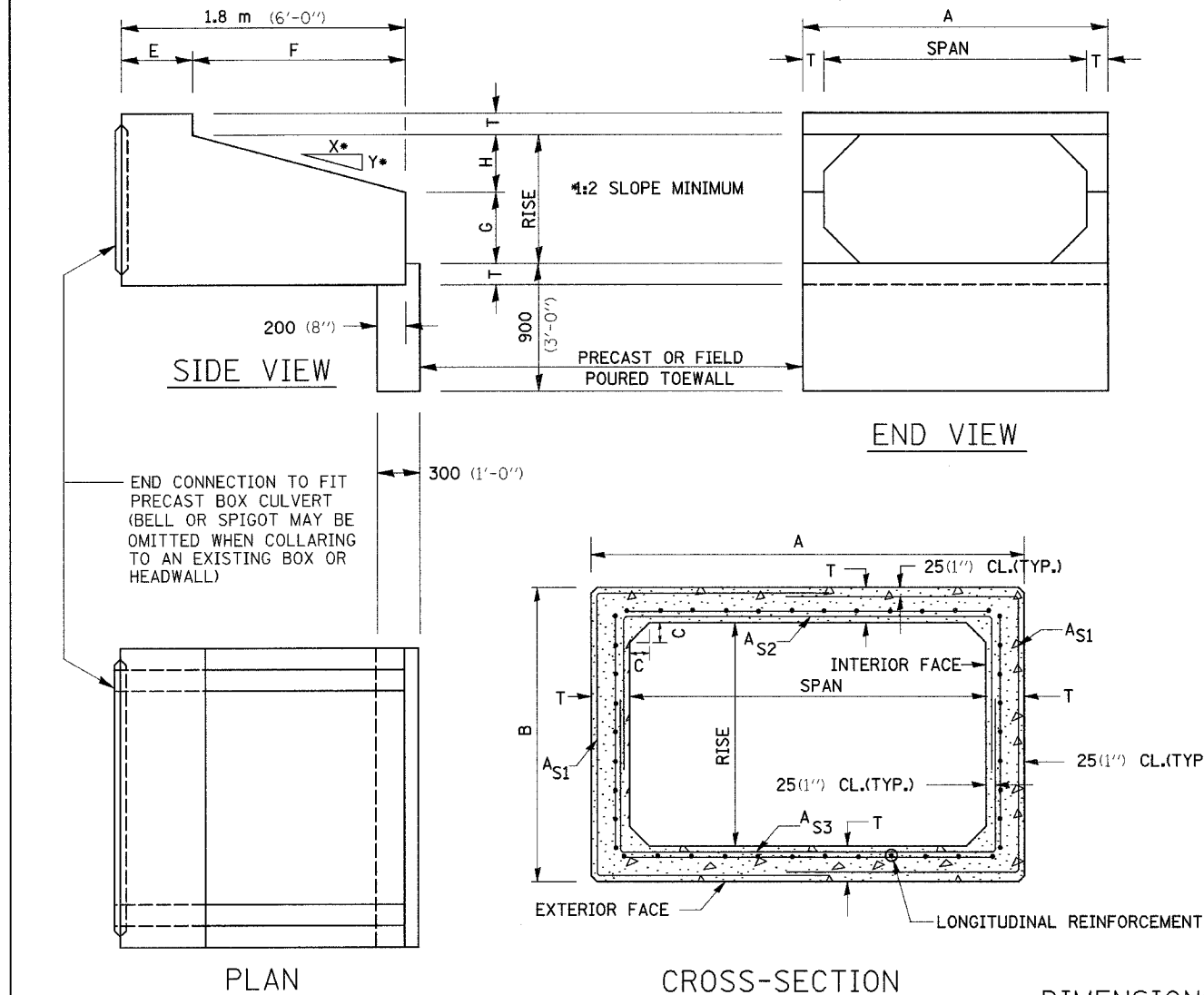
\* ALL DIMENSIONS SHOULD BE VERIFIED WITH SUPPLIER.



ISOMETRIC VIEW



PAY LIMITS OF PRECAST CONCRETE BOX CULVERTS



DIMENSIONS (FOR ASTM C789) \*

SPAN X RISE	T	A	B	C	E	F	G	H	SLOPE
(ft) meter	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(X : Y)
0.6 x 0.6	100	800	800	100	900	900	300	300	1:3
0.9 x 0.6	100	1100	800	100	900	900	300	300	1:3
0.9 x 0.75	100	1100	950	100	900	900	375	375	1:3
0.9 x 0.9	100	1100	1100	100	600	1200	500	400	1:3
1.2 x 0.6	125	1450	850	125	900	900	300	300	1:3
1.2 x 0.9	125	1450	1150	125	600	1200	500	400	1:3
1.2 x 1.2	125	1450	1450	125	600	1200	600	600	1:2
1.5 x 0.6	150	1800	900	150	900	900	300	300	1:3
1.5 x 0.9	150	1800	1200	150	600	1200	500	400	1:3
1.5 x 1.2	150	1800	1500	150	600	1200	600	600	1:2
1.5 x 1.5	150	1800	1800	150	600	1200	900	600	1:3
1.8 x 0.6	175	2150	950	175	900	900	300	300	1:3
1.8 x 0.9	175	2150	1250	175	600	1200	500	400	1:3
1.8 x 1.2	175	2150	1550	175	600	1200	600	600	1:2
1.8 x 1.5	175	2150	1850	175	600	1200	900	600	1:2
1.8 x 1.8	175	2150	2150	175	600	1200	1200	600	1:2

SPAN X RISE	T	A	B	C	E	F	G	H	SLOPE
(ft) meter	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(X : Y)
2.1 x 0.9	200	2500	1300	200	600	1200	300	600	1:2
2.1 x 1.2	200	2500	1600	200	600	1200	600	600	1:2
2.1 x 1.5	200	2500	1900	200	600	1200	900	600	1:2
2.1 x 1.8	200	2500	2200	200	600	1200	1200	600	1:2
2.1 x 2.1	200	2500	2500	200	600	1200	1500	600	1:2
2.4 x 0.9	200	2800	1300	200	600	1200	300	600	1:2
2.4 x 1.2	200	2800	1600	200	600	1200	600	600	1:2
2.4 x 1.5	200	2800	1900	200	600	1200	900	600	1:2
2.4 x 1.8	200	2800	2200	200	600	1200	1200	600	1:2
2.4 x 2.1	200	2800	2500	200	600	1200	1500	600	1:2
2.4 x 2.4	200	2800	2800	200	600	1200	1800	600	1:2
2.7 x 0.9	225	3150	1350	225	600	1200	300	600	1:2
2.7 x 1.2	225	3150	1650	225	600	1200	600	600	1:2
2.7 x 1.5	225	3150	1950	225	600	1200	900	600	1:2
2.7 x 1.8	225	3150	2250	225	600	1200	1200	600	1:2
2.7 x 2.1	225	3150	2600	225	600	1200	1500	600	1:2

SPAN X RISE	T	A	B	C	E	F	G	H	SLOPE
(ft) meter	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(X : Y)
2.7 x 2.4	225	3150	2900	225	600	1200	1800	600	1:2
2.7 x 2.7	225	3150	3150	225	600	1200	2100	600	1:2
3.0 x 0.9	255	3550	1425	250	600	1200	500	400	1:3
3.0 x 1.2	255	3550	1725	250	600	1200	300	600	1:2
3.0 x 1.5	255	3550	2025	250	600	1200	600	600	1:2
3.0 x 1.8	255	3550	2350	250	600	1200	900	600	1:2
3.0 x 2.1	255	3550	2650	250	600	1200	1500	600	1:2
3.0 x 2.4	255	3550	2950	250	600	1200	1800	600	1:2
3.0 x 2.7	255	3550	3250	250	600	1200	2100	600	1:2
3.0 x 3.0	255	3550	3550	250	600	1200	2400	600	1:2
3.3 x 0.9	280	3900	1475	275	600	1200	300	600	1:2
3.3 x 1.2	280	3900	1775	275	600	1200	600	600	1:2
3.3 x 1.5	280	3900	2075	275	600	1200	900	600	1:2
3.3 x 1.8	280	3900	2400	275	600	1200	1200	600	1:2
3.3 x 2.1	280	3900	2700	275	600	1200	1500	600	1:2
3.3 x 2.4	280	3900	3000	275	600	1200	1800	600	1:2

SPAN X RISE	T	A	B	C	E	F	G	H	SLOPE
(ft) meter	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(X : Y)
3.3 x 2.7	280	3900	3300	275	600	1200	2100	600	1:2
3.3 x 3.0	280	3900	3600	275	600	1200	2400	600	1:2
3.3 x 3.3	280	3900	3900	275	600	1200	2700	600	1:2
3.6 x 0.9	300	4250	1525	300	600	1200	300	600	1:2
3.6 x 1.2	300	4250	1825	300	600	1200	600	600	1:2
3.6 x 1.5	300	4250	2125	300	600	1200	900	600	1:2
3.6 x 1.8	300	4250	2425	300	600	1200	1200	600	1:2
3.6 x 2.1	300	4250	2725	300	600	1200	1500	600	1:2
3.6 x 2.4	300	4250	3025	300	600	1200	1800	600	1:2

PLT DATE = Wed Oct 18 15:25:33 2007  
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