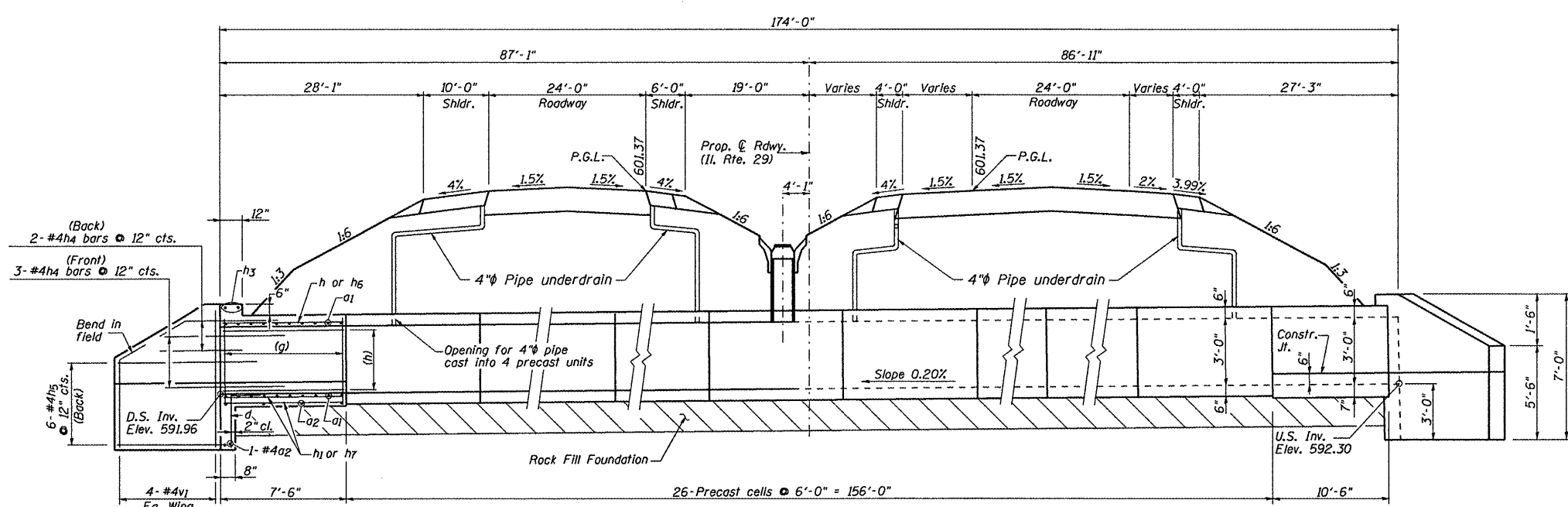


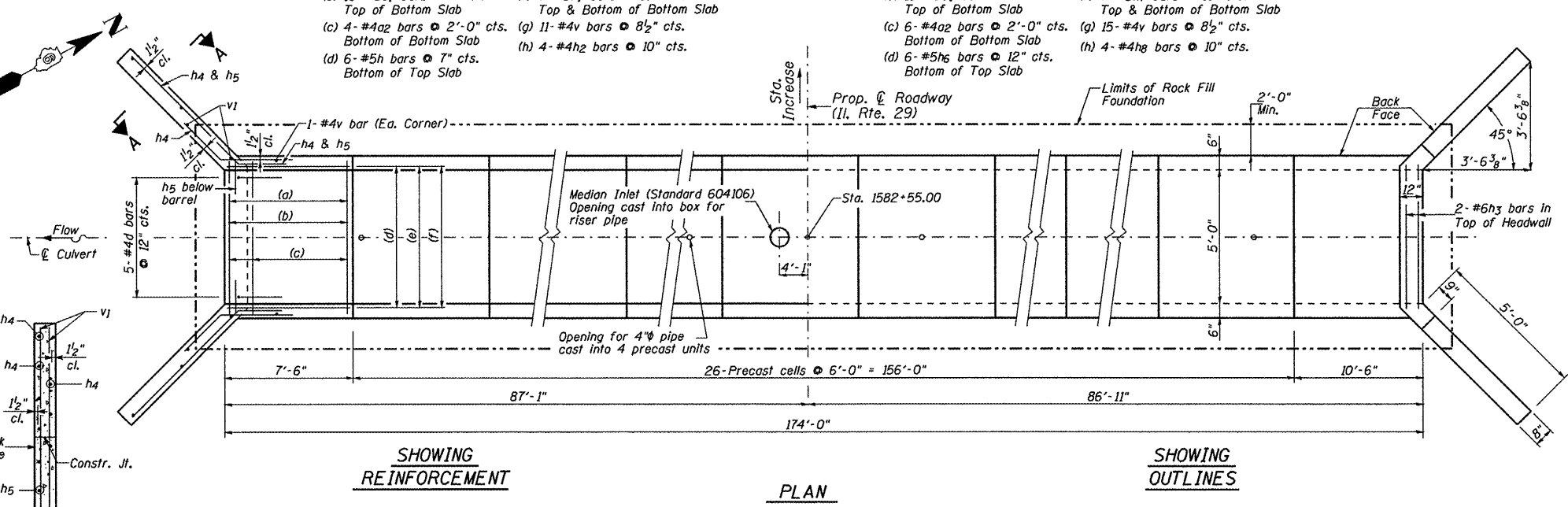
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	84-12; 11-3		729	464
STA.		TO STA.		
FED. ROAD DIST. NO. 5 ILLINOIS FED. AID PROJECT				
• SANGAMON AND CHRISTIAN				



HALF LONG SECTION

HALF ELEVATION

- DOWNSTREAM END**
- (a) 13-#5a1 bars @ 7" cts. Bottom of Top Slab
 - (b) 13-#5a1 bars @ 7" cts. Top of Bottom Slab
 - (c) 4-#4a2 bars @ 2'-0" cts. Bottom of Bottom Slab
 - (d) 6-#5h bars @ 7" cts. Bottom of Top Slab
- UPSTREAM END**
- (e) 2-#5h6 bars Top of Top Slab Place as shown in Cross Section
 - (f) 7-#5h1 bars @ 10" cts. Top & Bottom of Bottom Slab
 - (g) 11-#4v bars @ 8 1/2" cts. Bottom of Bottom Slab
 - (h) 4-#4h2 bars @ 10" cts. Bottom of Top Slab

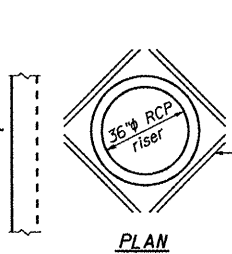


SHOWING REINFORCEMENT

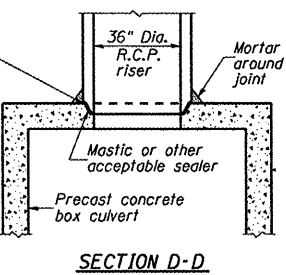
PLAN

SHOWING OUTLINES

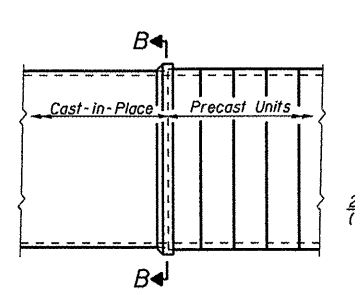
SECTION A-A



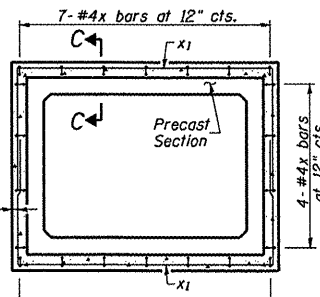
RISER PIPE CONNECTION TO PRECAST BOX CULVERT



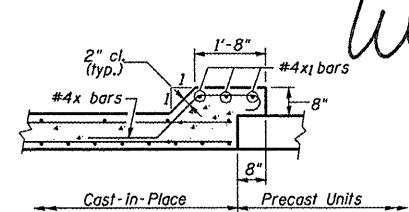
SECTION D-D



PRECAST TO CAST-IN-PLACE CONNECTION COLLAR

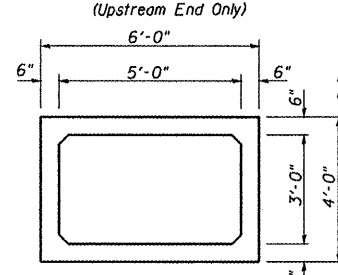


SECTION B-B

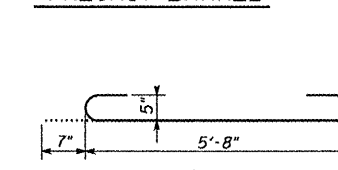


SECTION C-C

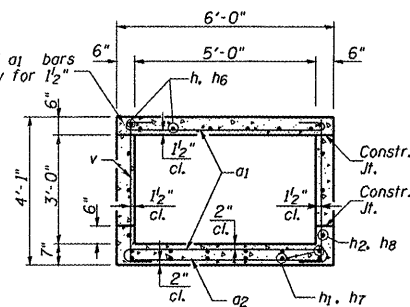
SECTION THRU HEADWALL



SECTION THRU PRECAST BARREL



SECTION THRU BARREL



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	62	#5	6'-10"	
a2	12	#4	5'-8"	
d	10	#4	4'-6"	
h	8	#5	7'-2"	
h1	14	#5	7'-2"	
h2	8	#4	7'-2"	
h3	4	#6	5'-8"	
h4	20	#4	8'-0"	
h5	24	#4	8'-0"	
h6	8	#5	10'-2"	
h7	14	#5	10'-2"	
h8	8	#4	10'-2"	
v	56	#4	3'-9"	
v1	16	#4	6'-8"	
x	44	#4	4'-6"	
x1	12	#4	13'-4"	
Porous Granular Embankment			Cu. Yd.	98
Filter Fabric			Sq. Yd.	511
Precast Concrete Box Culverts 5'x3'			Foot	156
Concrete Box Culverts			Cu. Yd.	12.5
Reinforcement Bars			Pound	1,730
Rock Fill Foundation			Ton	201
Granular Culvert Backfill			Cu. Yd.	245

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interim Revisions

LOADING HL-93

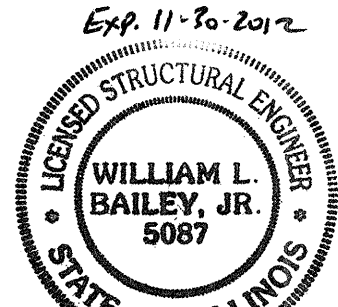
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS: f'c = 3,500 psi, fy = 60,000 psi
 PRECAST UNITS: f'c = 5,000 psi, fy = 65,000 psi (W.W.F.)

NOTES:

- The Precast Culvert shall be designed in accordance with ASTM C1577.
- Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60.
- It shall be the responsibility of the contractor to divert the stream flow in order to keep the construction area free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included in the Item "Precast Concrete Box Culverts 5' x 3'".
- Precast end sections will not be allowed.
- All construction joints shall be bonded.
- Limits of Removal and Replacement of weak soils with Rock Fill Foundation will be determined by the Engineer.



03-23-2012

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED BOX CULVERT
 PLAN - ELEVATION - DETAILS
 STA. 1582+55.00

SCALE: NONE
 DATE: 03/06/2012

DRAWN BY: WLB
 CHECKED BY: WLB