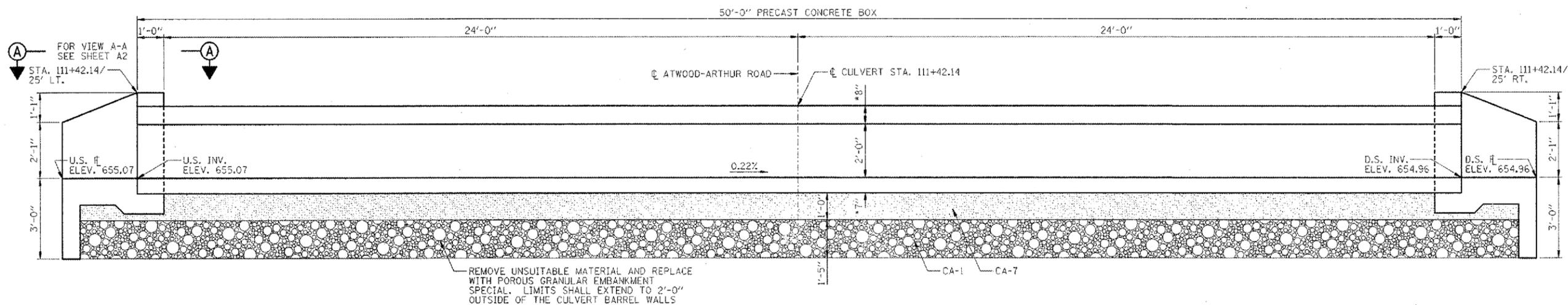


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
816	GRS-1 & (6BR)R	DOUGLAS	176	71
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 90711			SHEET NO. A1	
OF 3 SHEETS				



LONGITUDINAL SECTION

(LOOKING NORTH)
 * CONFIRM SLAB THICKNESS WITH PRECASTER

GENERAL NOTES:

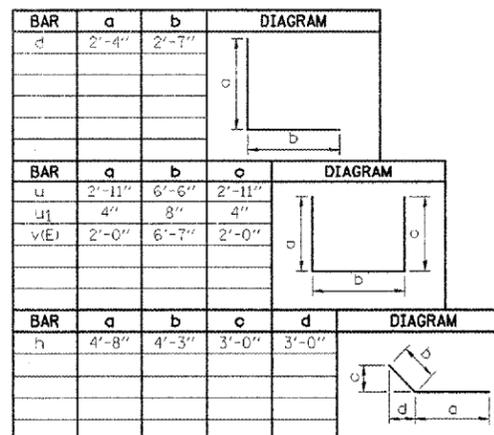
- CAST-IN-PLACE CONCRETE EXPOSED EDGES SHALL BE BEVELED 3/4 IN.
- CLASS SI CONCRETE SHALL BE USED THROUGHOUT (CONCRETE STRENGTH, f'c=3500 psi @ 28 DAYS).
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 Gr 60 (IL MODIFIED). SEE SPECIAL PROVISIONS.
- REINFORCEMENT BARS DENOTED (E) SHALL BE EPOXY COATED.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DIVERT THE STREAM FLOW DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREAS FREE OF WATER. THE METHOD OF WATER DIVERSION SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER AND THE COST SHALL BE INCLUDED WITH THE COST OF "PRECAST CONCRETE BOX CULVERTS, 5'x2' (M273)".
- SEE SHEET A3 FOR BORING DATA.
- STRUCTURAL SEAL IS FOR CAST-IN-PLACE PORTION OF STRUCTURE ONLY.
- THE PRECAST CONCRETE CULVERT SECTIONS SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AASHTO M273 (ASTM C850).
- FOR BACKFILLING AND EMBANKMENT, SEE STANDARD SPECIFICATIONS.
- END OF PRECAST SECTION SHALL NOT HAVE A BELL OR SPIGOT.
- THE APRON END SECTIONS SHOWN SHALL BE CAST-IN-PLACE.
- THE PAY ITEM "REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL" SHALL INCLUDE THE EXCAVATION OF UNSUITABLE MATERIAL FOR A DEPTH TO 2'-5" BELOW THE STRUCTURE FOR A WIDTH OF APPROXIMATELY 10.0' WITHIN THE LIMITS OF THE CUTOFF WALLS AS SHOWN AND WITHIN THE LIMITS OF THE PROPOSED CAST-IN-PLACE APRON AS SHOWN. THE ACTUAL AMOUNT SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- THE PAY ITEM "POROUS GRANULAR EMBANKMENT SPECIAL" SHALL INCLUDE THE PLACEMENT OF THE CA-1 AND CA-7 AS SHOWN IN THE LONGITUDINAL SECTION. THE WIDTH FOR THE "POROUS GRANULAR EMBANKMENT SPECIAL" SHALL BE APPROXIMATELY 10.0' WIDE UNDER THE CULVERT. THE "POROUS GRANULAR EMBANKMENT SPECIAL" SHALL BE WITHIN THE LIMITS OF THE TOE WALL AS SHOWN UNDER THE PROPOSED CAST-IN-PLACE APRON. THE ACTUAL AMOUNT SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- CONTRACTOR TO CONFIRM ALL PRECAST CULVERT DIMENSIONS WITH THE SUPPLIER BEFORE STARTING CONSTRUCTION.
- THE BILL OF MATERIAL SHOWN IS FOR INFORMATION ONLY. END SECTIONS WILL BE PAID FOR AS "BOX CULVERT END SECTIONS" PER EACH, SEE SCHEDULE OF QUANTITY SHEETS.

BILL OF MATERIAL

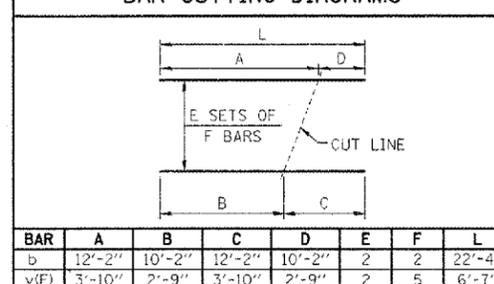
(NOTE: FOR 2 END SECTIONS)

BAR	NO.	SIZE	LENGTH	SHAPE
a	26	#5	2'-5"	—
b	4	#5	22'-4"	—
b1	6	#5	13'-3"	—
b2	6	#5	8'-10"	—
d	26	#5	4'-11"	—
h	4	#5	8'-11"	—
h1	12	#5	4'-3"	—
u	8	#5	12'-4"	—
u1	14	#5	1'-4"	—
v(E)	10	#5	10'-7"	L J
ITEM	UNIT	QUANTITY		
CONCRETE BOX CULVERTS	CU YD	6.0		
REINFORCEMENT BARS	POUND	640		
REINFORCEMENT BARS, EPOXY COATED	POUND	110		

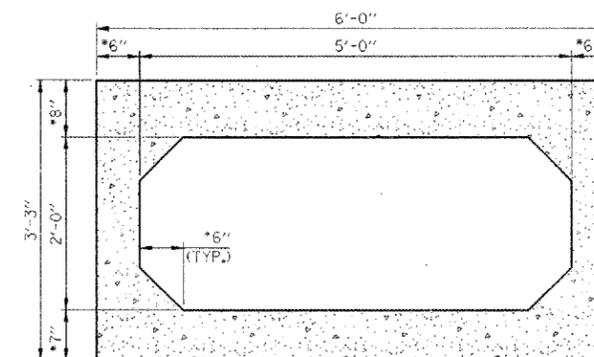
BAR BENDING DIAGRAMS



BAR CUTTING DIAGRAMS



* CUT LENGTH OF v(E) BARS DOES NOT INCLUDE THE 2'-0" BENT LEGS.



SECTION THRU BARREL

* CONFIRM SLAB & WALL THICKNESS WITH PRECASTER



Mark S. Wylie Date 8/15/08

MARK S. WYLIE
 ILLINOIS STRUCTURAL ENGINEER
 NO. 081-005002
 Exp. Date 11/30/08

NOTE:

WORK THIS SHEET WITH SHEET A2.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CULVERT #1 REPLACEMENT
 (STA. 111+42.14)
 FAP ROUTE 816
 ATWOOD-ARTHUR RD
 SECTION 6RS-1 & (6BR)R
 DOUGLAS COUNTY

DATE: 11/24/03

DRAWN BY: DJM
 CHECKED BY: MSW