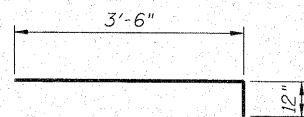
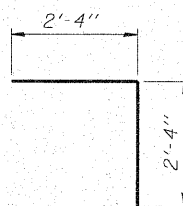


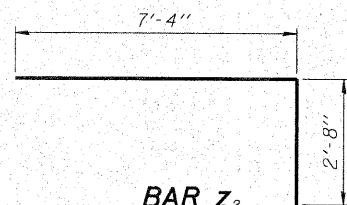
DETAIL A



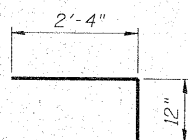
BAR d



BAR c1



BAR z2



BAR c

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specification for Highway Bridges, 17th edition.

DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$
 Allowable Net Soil Bearing Pressure = 2,400 psf Minimum

GENERAL NOTES

Reinforcement bars shall conform to requirements of ASTM A706, Gr 60. See Special Provisions.

Place reinforcing bars to provide 2 inches clear concrete cover except where shown on drawings.

Reinforcement bars designated (E) shall be epoxy coated.

All construction joints shall be bonded.

Provide 1" chamfer on all exposed edges, except where shown on drawings.

Place geotechnical fabric where shown (to be included in the work for FRENCH DRAIN, CA-18).

Additional undercutting beyond that shown on drawings is not anticipated, but if required to achieve the minimum allowable net soil bearing pressure, it will be paid for as REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL. Replacement material shall be paid for as POROUS GRANULAR EMBANKMENT.

Grating shall include pipes, plates, expansion bolts, and all other hardware as shown and shall be included with the contract unit price per Cu. Yd. for CONCRETE STRUCTURES.

Bolts, Nuts, and Washers shall be in accordance with Article 1006.08 of the Standard Specifications and shall be galvanized.

Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.

Steel Pipes shall conform to A.S.T.M. A-53 (Type E or S) Grade B, Schedule 40, and shall be galvanized conforming to A.S.T.M. A-120. Contractor shall verify pipe length.

Design scour elevation at downstream end is 693.15'.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a	24	#5	5'-4"	—	
c	64	#5	3'-4"	└	
c1	32	#5	4'-8"	└	
d	88	#4	4'-6"	└	
h	36	#4	14'-4"	—	
h1	32	#4	5'-6"	—	
h2	12	#4	21'-8"	—	
v	54	#4	6'-6"	—	
v1	34	#4	7'-6"	—	
v2	33	#5	7'-6"	—	
v3 (E)	33	#5	5'-8"	—	
w	17	#4	14'-4"	—	
w1	10	#5	21'-8"	—	
z	18	#4	5'-2"	—	
z1	18	#4	6'-6"	—	
z2	27	#5	10'-0"	└	
Removal and Disposal of Unsuitable Material				Cu Yd.	3
Porous Granular Embankment				Cu Yd.	3
Concrete Structures				Cu Yd.	24.4
Reinforcement Bars				Pound	2520
Reinforcement Bars, Epoxy Coated				Pound	200
French Drain, CA-18				Cu Yd.	5.0



USER NAME =	DESIGNED - BAB	REVISED -
	CHECKED - BLB	REVISED -
PLOT SCALE =	DRAWN - BCD	REVISED -
PLOT DATE =	CHECKED - BLB	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES & BILL OF MATERIALS

SHEET NO. OF SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1566	29 R-N-1	COOK	120	64
CONTRACT NO. 62377			ILLINOIS FED. AID PROJECT	