

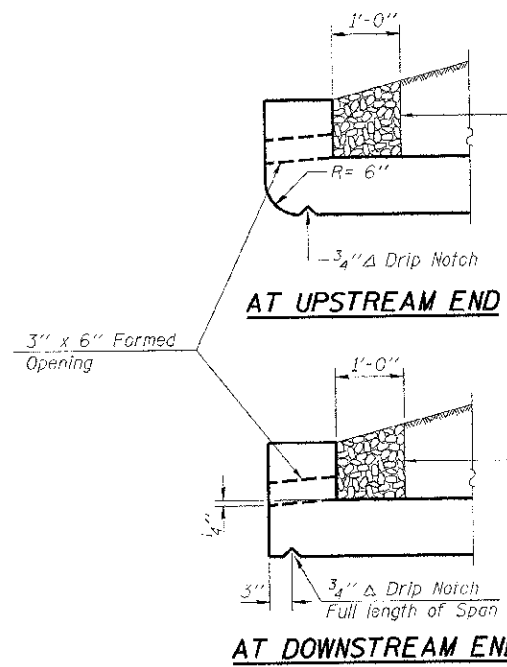
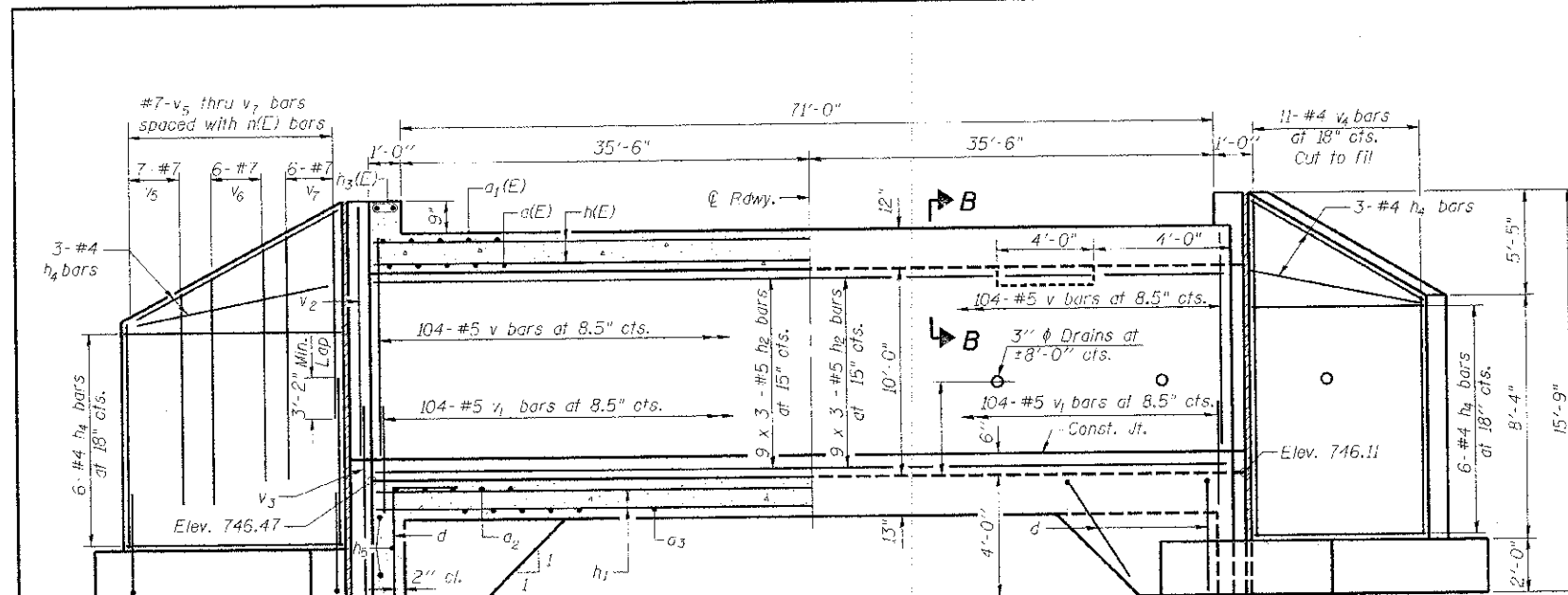
PILE DATA

Type: Metal Shell - 14 in. dia. x 0.25 in wall
 Nominal Required Bearing: 151 k
 Factor of Resistance Available: 83 k
 Estimated Pile Length: 30 ft
 Number of Production Piles: 18
 Number of Test Piles: 2

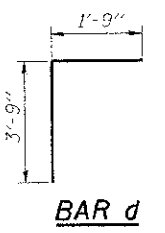
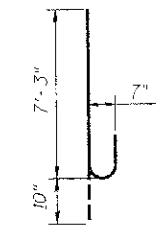
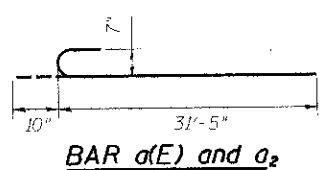
Notes:
 Reinforcement bars designated (E) shall be epoxy coated.
 Cost of Preformed Joint Filler, Hollow Bulb Type Nonmetallic Water Seal & Concrete Nails Included with Concrete Box Culverts.
 Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	208	#7	32'-3"	C
a ₁ (E)	208	#7	31'-5"	C
a ₂	208	#7	32'-3"	C
a ₃	208	#7	31'-5"	C
d	154	#4	5'-6"	J
h(E)	294	#4	25'-3"	—
h ₁	294	#4	25'-3"	—
h ₂	162	#4	25'-3"	—
h ₃ (E)	8	#6	31'-1"	—
h ₄	72	#4	14'-10"	—
h ₅	12	#6	31'-1"	—
n(E)	76	#7	8'-1"	U
t	76	#6	7'-8"	—
l ₁	76	#5	7'-8"	—
v	624	#5	10'-4"	—
v ₁	624	#5	3'-5"	—
v ₂	8	#6	11'-1"	—
v ₃	8	#6	6'-9"	—
v ₄	44	#4	13'-5"	—
v ₅	28	#7	8'-0"	—
v ₆	24	#7	10'-1"	—
v ₇	24	#7	11'-10"	—
w	88	#5	14'-10"	—
Concrete Box Culverts	Cu. Yd.		548.8	
Reinforcement Bars, Epoxy Coated	Pound		33,660	
Reinforcement Bars	Pound		50,530	

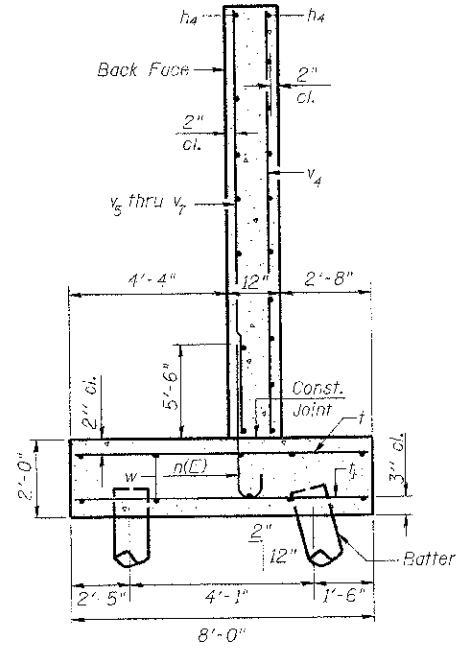
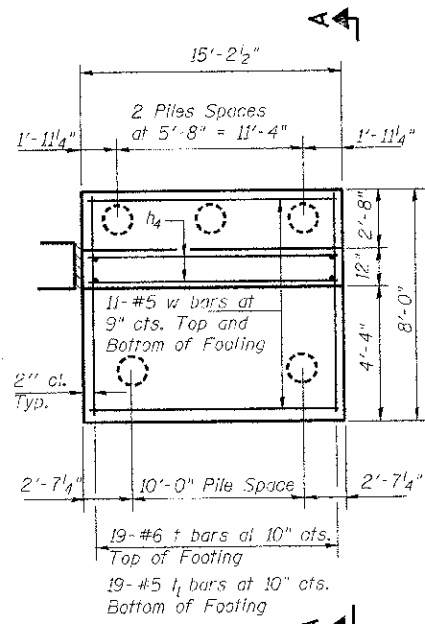
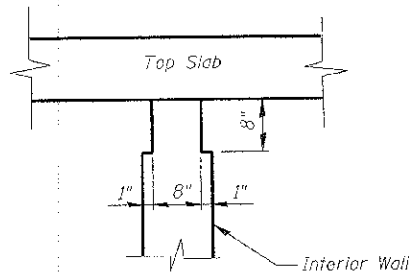
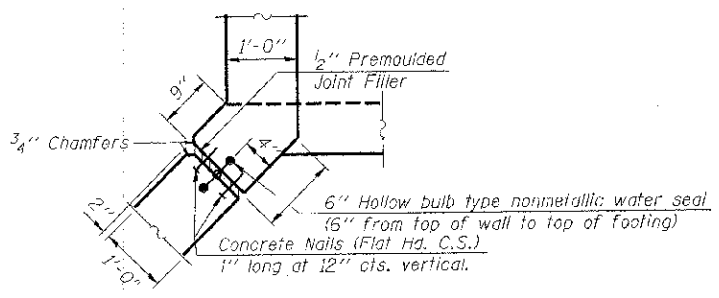


REINFORCEMENT BACK FACE



BAR LAPS

Size	Lap
#4	1'-7"
#5	2'-0"
#6	2'-5"
#7	3'-2"



DB-T-0

7-1-10

FILE NAME =	USER NAME =	DESIGNED MHM/MAM	REVISIONS
		CHECKED JBF	REVISIONS
PLOT SCALE =		DRAWN	REVISIONS
PLOT DATE =		DATE	REVISIONS

PH(309)788-7644 **Missman, Inc.** Professional Engineers & Land Surveyors ROCK ISLAND, ILLINOIS FAX(309)788-7691

CULVERT DETAILS
 STRUCTURE NO. 101-5158
 SHEET NO. 2 OF 7 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9878	12-00356-01-BR	WINNEBAGO	16	9
	SN. 101-5158			CONTRACT NO. 85577
ILLINOIS FED. AID PROJECT				