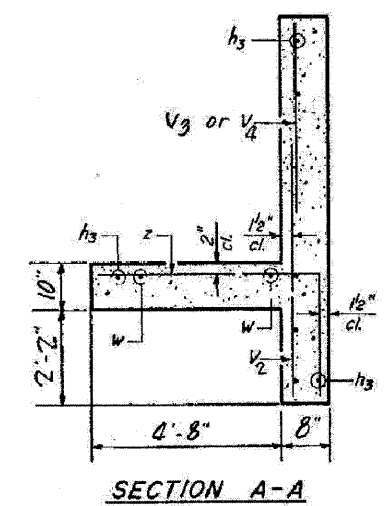
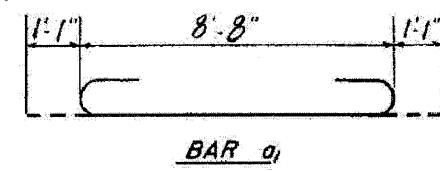
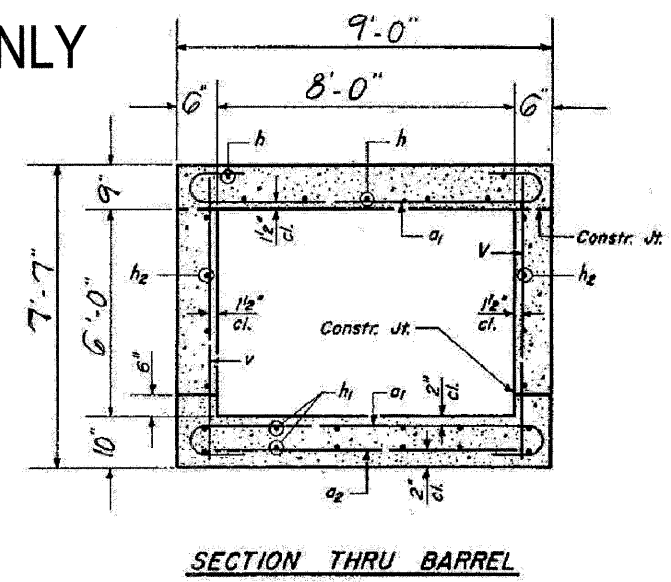
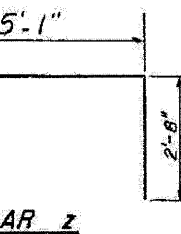
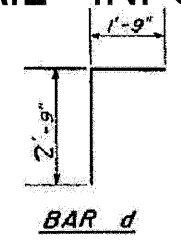


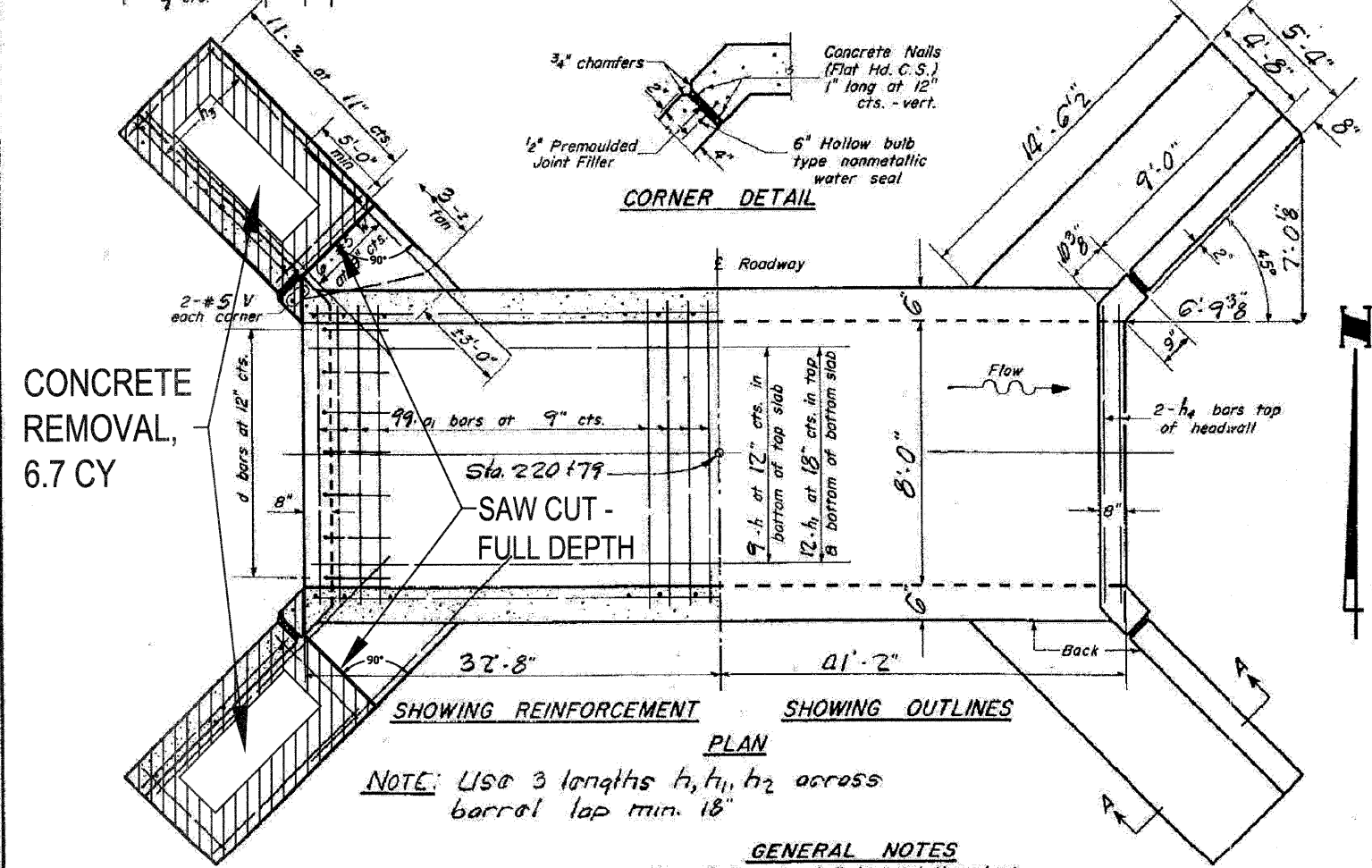
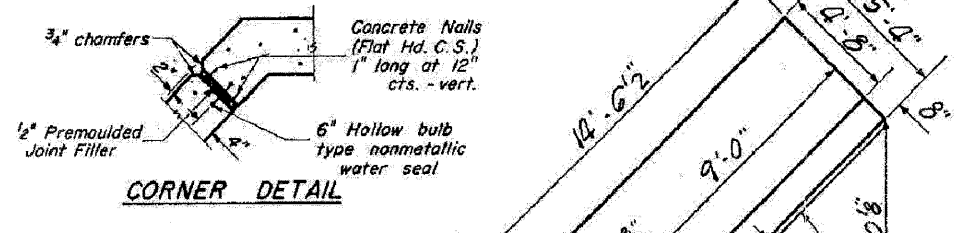
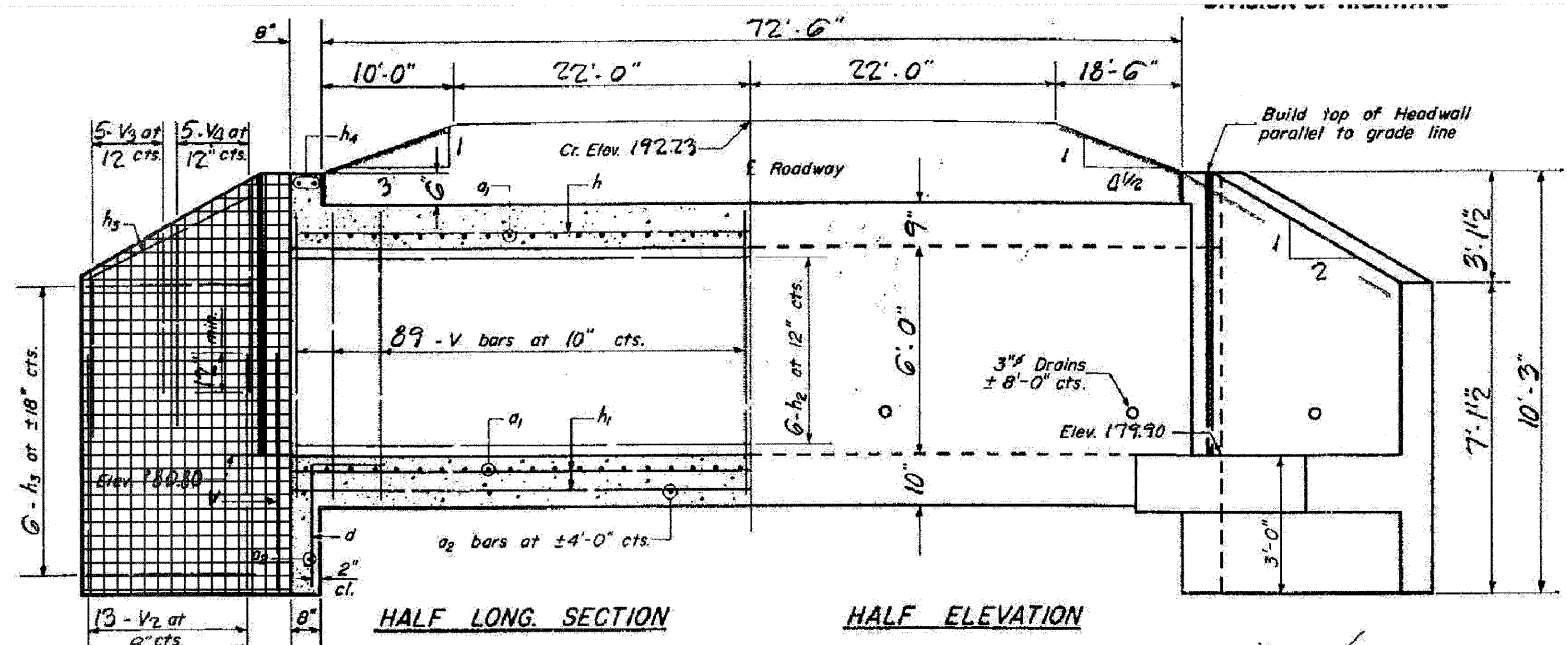
CONTRACT: 85513

EXISTING CULVERT
 DETAIL - INFO. ONLY



BILL OF MATERIAL

Bar	No.	Size	Length
a1	198	#8	10'-10"
a2	21	#4	8'-0"
d	18	#4	6'-0"
h	33	#6	5'-9"
h1	36	#5	25'-9"
h2	6	#5	25'-9"
h3	3	#4	8'-9"
h4	4	#4	8'-3"
v	186	#5	7'-4"
v2	52	#4	5'-9"
v3	20	#4	4'-0"
v4	2	#4	5'-6"
w	24	#5	3'-6"
z	56	#5	9"
Class X Concrete	Cu. Yds.		7.1
Reinforcement Bars	Lbs.		11910



GENERAL NOTES
 Class X Concrete shall be used throughout.
 Exposed edges shall be beveled 3/4".
 For backfilling and embankment see Std. Spec's.
 All bars shall be lapped 20 diameters unless otherwise specified.
 The top of the culvert, the backs of the sidewalls above the lower construction joint and backs of the wings above the tops of the footings shall be waterproofed in accordance with Art. 51.21 of the Std. Spec's.
 Nonmetallic water seal used in the wingwall joints shall extend from the top of the footing to within 6" of the top of the headwall.
 Tilt hook of 'a1' bars, if necessary, to obtain 1/2" minimum clearance at top of hook.

fs = 20,000 psi.
 fc = 1400 psi. barrel
 fc = 1000 psi. wings
 v = 90 psi. barrel
 v = 75 psi. footing
 n = 10
 LOADING HS-20

STA. 220+79
 MERIDIAN ROAD - C.H. NO. 24
 SEC. 113-2B-MFT
 WINNEBAGO, COUNTY

DESIGNED	19
CHECKED	EXAMINED
DRAWN	PASSED
CHECKED	APPROVED