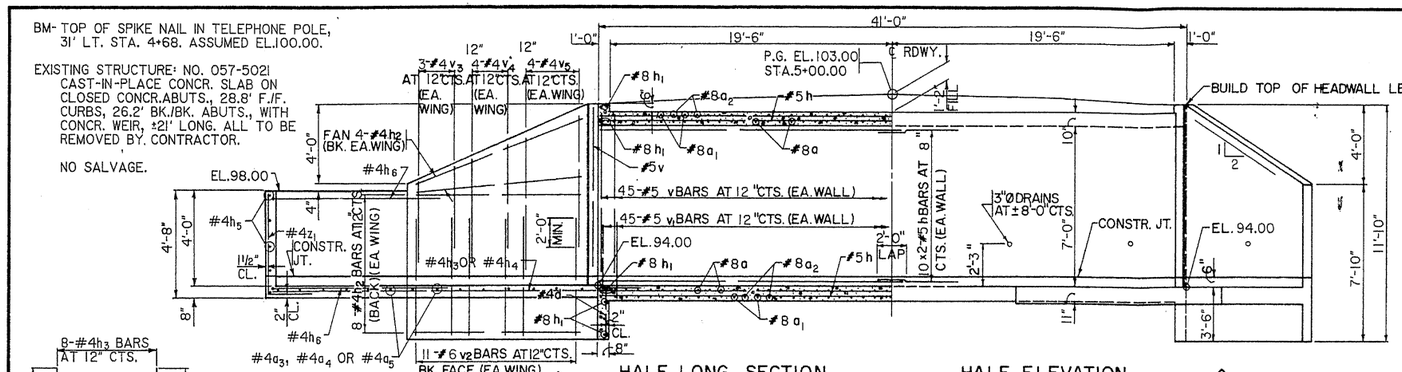
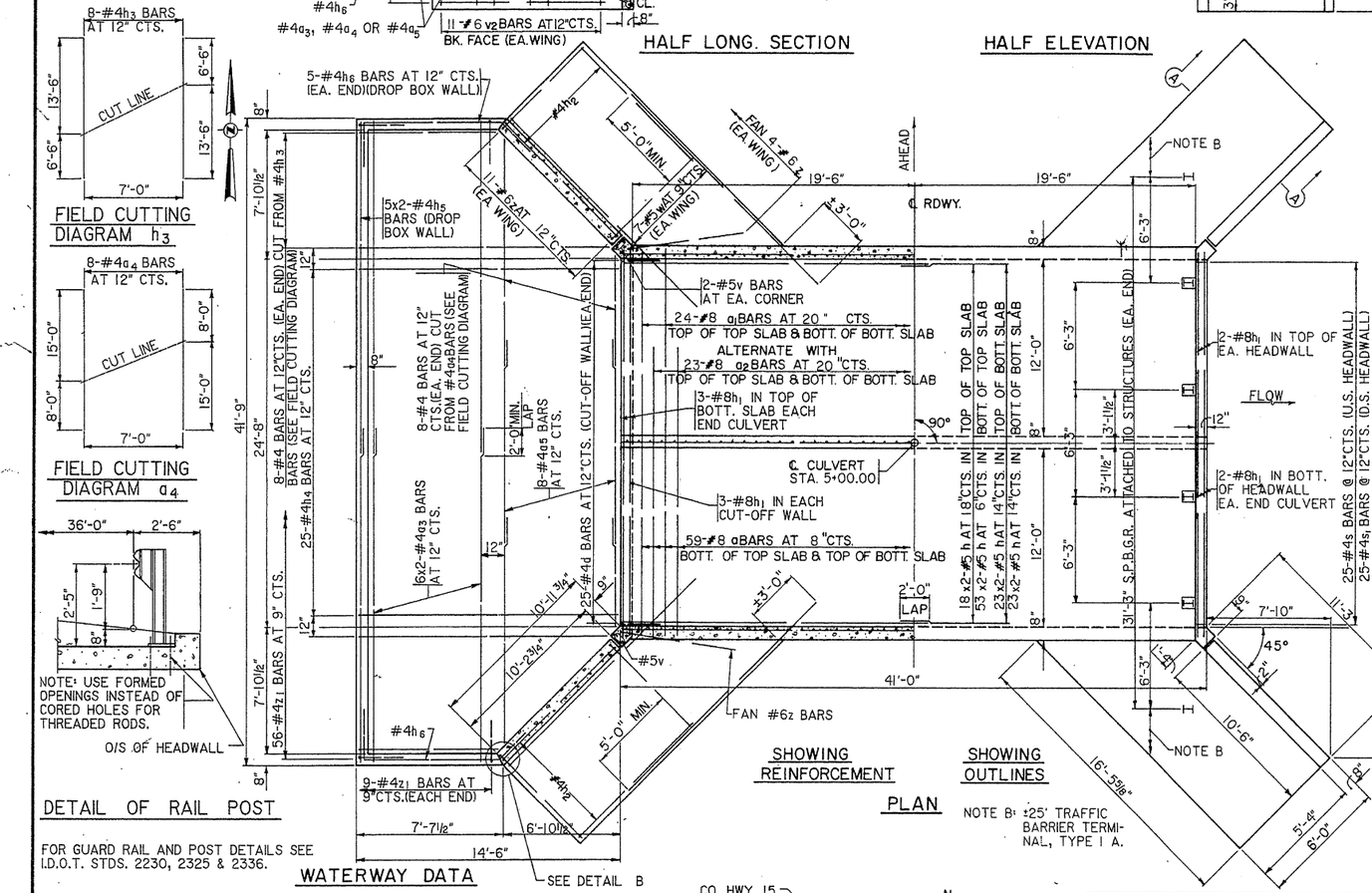
F.A. ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
	1988 NON MFT	MC LEAN		
ILLINOIS PROJECT				

BM- TOP OF SPIKE NAIL IN TELEPHONE POLE, 31' LT. STA. 4+68. ASSUMED EL.100.00.

EXISTING STRUCTURE: NO. 057-5021 CAST-IN-PLACE CONCR. SLAB ON CLOSED CONCR.ABUTS., 28.8' F./F. CURBS, 26.2' BK./BK. ABUTS., WITH CONCR. WEIR, ±21' LONG. ALL TO BE REMOVED BY CONTRACTOR.

NO SALVAGE.





FIELD CUTTING DIAGRAM h_3

FIELD CUTTING DIAGRAM a_4

DETAIL OF RAIL POST

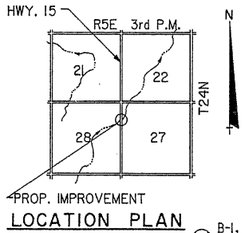
FOR GUARD RAIL AND POST DETAILS SEE I.D.O.T. STDS. 2230, 2325 & 2336.

WATERWAY DATA

DRAINAGE AREA= 2.9 SQ.MI.		LOW GRADE EL.= 100.3		AT STA. 11+00				
FLOOD	FREQ. YR.	Q. C.F.S.	OPENING SQ. FT. EXIST.	OPENING SQ. FT. PROP.	NAT. H.W.E.	HEAD-FT. EXIST.	HEAD-FT. PROP.	HEADWATER EL. EXIST.	HEADWATER EL. PROP.
DESIGN	20	293	121	148	100.2	0.1	0.2	100.3	100.4
BASE	100	409	121	153	100.4	0.3*	0.4	100.7	100.8
OVERTOPPING									
MAX. CALC.									

*DOES NOT OCCUR DUE TO FLOW OVER NORTH APPROACH RDWY., ROAD TO BE RAISED.

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 IN THE UNIT BID PRICE OF "CLASS X CONCRETE BOX CULVERT".



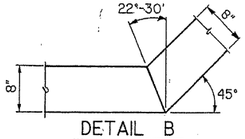
LOCATION PLAN ⊗ B-1, STA.4+47

JACOBS BRIDGE
BUILT 198
COUNTY HWY. 15 MC LEAN COUNTY
SECTION 1988 NON MFT
LOADING HS20 STR. NO. 057-5029

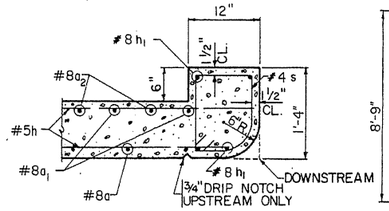
LETTERING FOR NAME PLATE

(SEE STD. 2113)

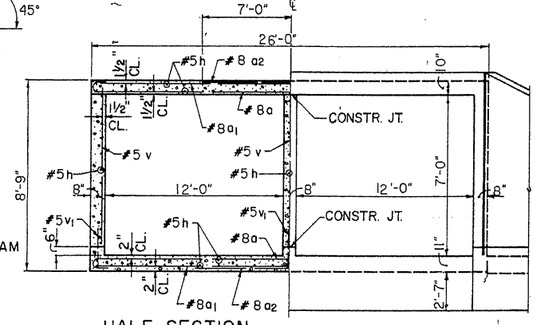
LOCATE AT SOUTHEAST CORNER OF BRIDGE



DETAIL B

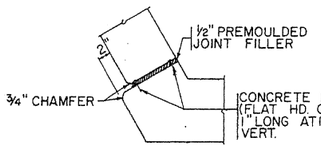


CURB DETAILS (UPSTREAM SHOWN)



HALF SECTION THRU BARREL

HALF END ELEVATION

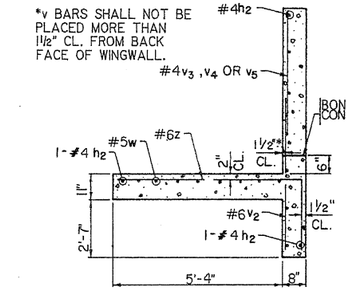


CORNER DETAIL

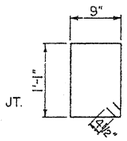
GENERAL NOTES

1. SEE PROPOSAL FOR BORING DATA.
2. CLASS X CONCRETE SHALL BE USED THROUGHOUT.
3. EXPOSED EDGES SHALL BE BEVELED ¾".
4. FOR BACKFILLING & EMBANKMENT, SEE STD. SPECS.
5. TILT HOOK OF a BARS, IF NECESSARY, TO OBTAIN 1½" MINIMUM CLEARANCE AT TOP OF HOOK.
6. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. M-31, M-42 OR M-53, GRADE 60.

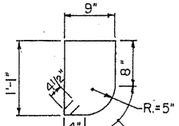
*v BARS SHALL NOT BE PLACED MORE THAN 1½" CL. FROM BACK FACE OF WINGWALL.



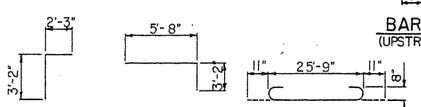
SECTION A-A



BAR s_1 (DOWNSTREAM)

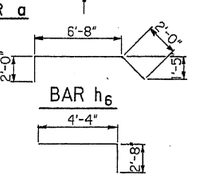


BAR s (UPSTREAM)



BAR d BAR z BAR a

BAR DETAILS



BAR h_6

BAR z_1

DESIGN STRESSES

f_y = 60,000 p.s.i.

f'_c = 3,500 p.s.i.

COMP. MAX. SOIL PRESSURE = 2,650 P.S.F.

LOADING HS 20-44

DESIGN SPECIFICATIONS: A.A.S.H.T.O. 1983 AND 1984, 1985 & 1986 INTERIMS.

STR. NO. 057-5029

R 9-26-88

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a	118	# 8	27'-7"	
a_1	48	# 8	25'-9"	
a_2	46	# 8	14'-0"	
a_3	12	# 4	21'-6"	
a_4	8	# 4	23'-0"	
a_5	8	# 4	14'-0"	
d	50	# 4	5'-5"	
h	294	# 5	21'-6"	
h_1	20	# 8	25'-6"	
h_2	56	# 4	10'-3"	
h_3	8	# 4	20'-0"	
h_4	25	# 4	14'-0"	
h_5	10	# 4	21'-9"	
h_6	10	# 4	10'-8"	
s	25	# 4	4'-3"	
s_1	25	# 4	4'-5"	
v	143	# 5	7'-1"	
v_1	135	# 5	3'-4"	
v_2	44	# 6	7'-0"	
v_3	12	# 4	3'-6"	
v_4	16	# 4	4'-9"	
v_5	16	# 4	6'-3"	
w	28	# 5	14'-3"	
z	60	#6	8'-10"	
z_1	74	4	7'-0"	

REMOVAL OF EXISTING STRUCTURES	EA	1
CLASS X CONCRETE BOX CULVERT	CU.YD	134.3
REINFORCEMENT BARS	LB	27,000
NAME PLATES	EACH	1
STEEL PLATE BEAM GUARD RAIL ATTACHED TO STRUCTURE	LIN.FT.	63
TRAFFIC BARRIER TERMINAL TYPE I A	EACH	4

(NOTE: x2 DESIGNATES 2 LENGTHS)

SECTION 1988 NON MFT
COUNTY HIGHWAY 15
MC LEAN COUNTY
STA. 5+00

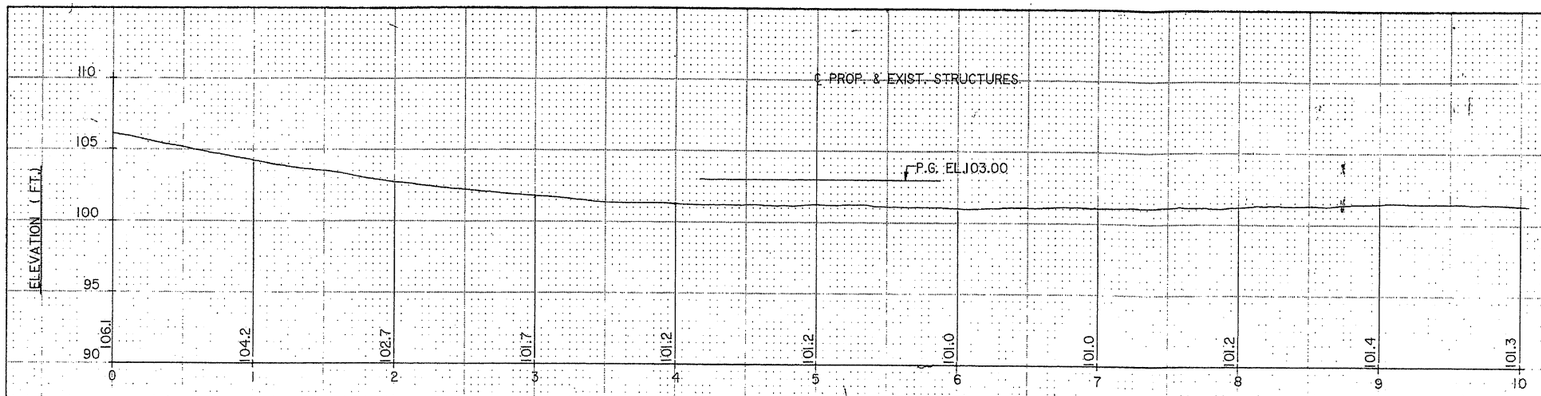
CULVERT

CASSON ENGINEERING COMPANY

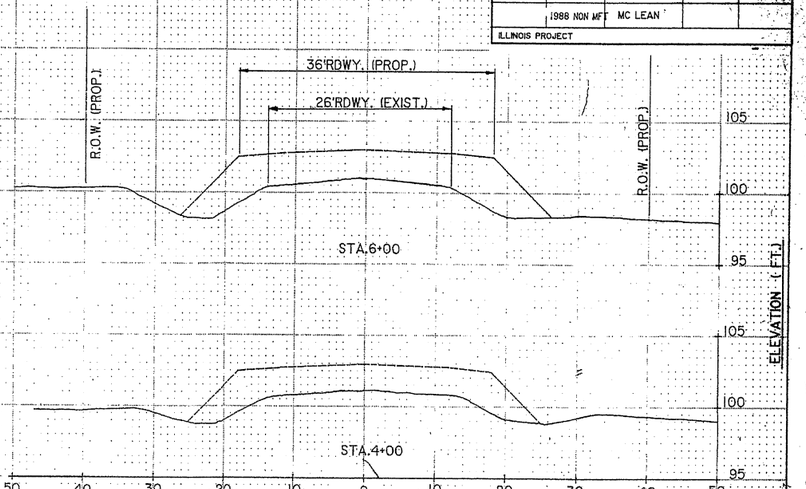
DESIGNED	DRAWN
TRC	JCCJR
CHECKED	QUANTITIES
JCC	JCC
DATE	FILE NO.
SEP 20 1988	8809

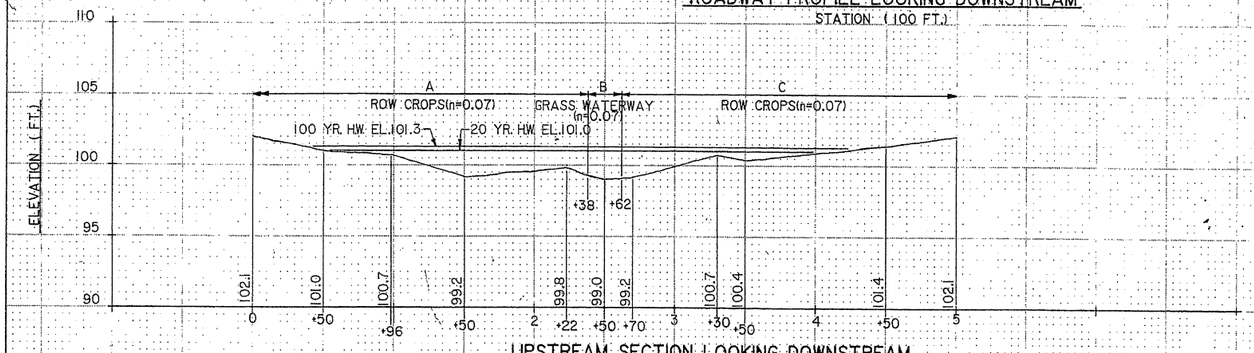
052-5029

ROUTE NO.	SECTION	COUNTY	TOT. SH.	SH. NO.
	1988 NON MFT	MC LEAN		
ILLINOIS PROJECT				

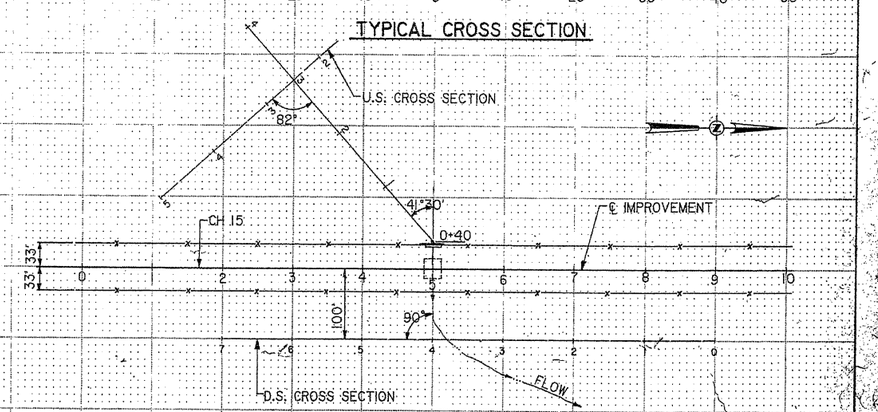


ROADWAY PROFILE LOOKING DOWNSTREAM
STATION (100 FT.)

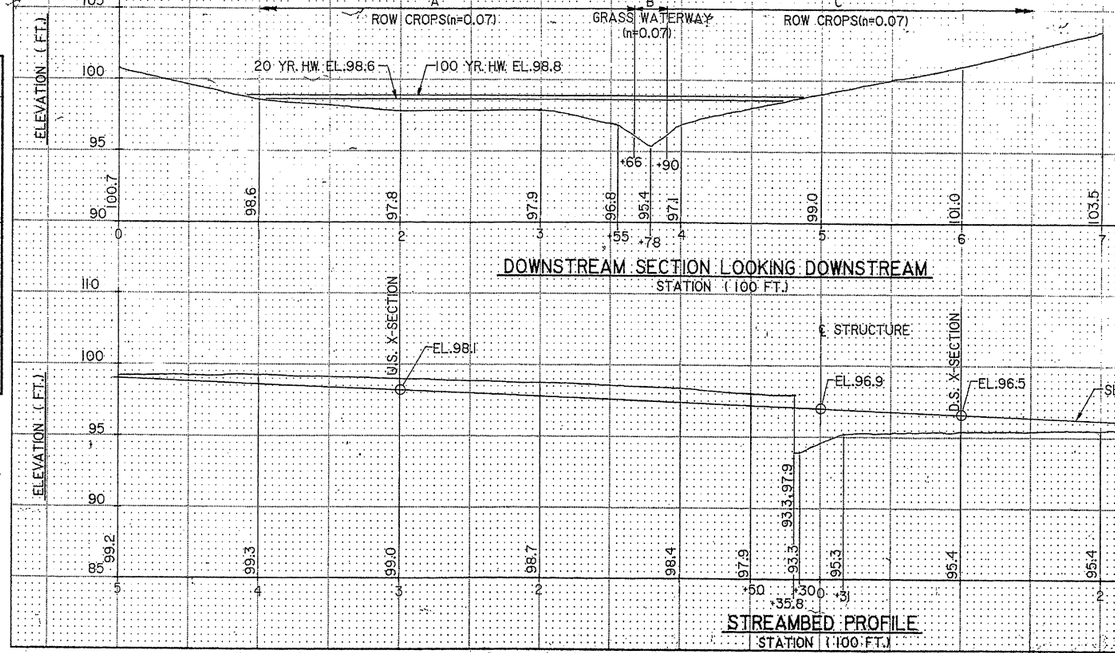




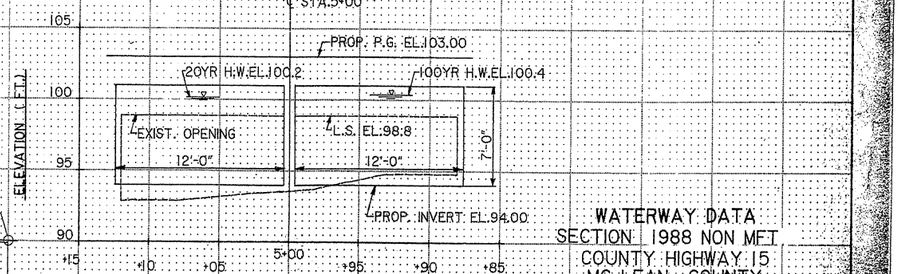
UPSTREAM SECTION LOOKING DOWNSTREAM
STATION (100 FT.)



TYPICAL CROSS SECTION



DOWNSTREAM SECTION LOOKING DOWNSTREAM
STATION (100 FT.)



BRIDGE OPENING LOOKING DOWNSTREAM

STREAMBED PROFILE
STATION (100 FT.)

BRIDGE OPENINGS (SQ. FT.)				
	FREQ.	A GROSS	APIER	A NET
EXISTING	20 YR.	121	-0-	121
	100 YR.	121	-0-	121
PROPOSED	20 YR.	153	5	148
	100 YR.	158	5	153

WATERWAY DATA
SECTION 1988 NON MFT
COUNTY HIGHWAY 15
MC LEAN COUNTY

CASSON ENGINEERING COMPANY
503 E. ST. JOSEPH ST.
SPRINGFIELD, IL. 62703
(217) 529-8447

DESIGN	CHECKED	DRAWN	CHECKED	DATE	FILE NO.
TRC	JCC	JCCJR	JCC	8-5-88	88001

R 8-25-88 SEP 2 01988

PLATE 3-FULL CROSS SECTION-FULL DOT
HIGHWAY FEDERAL AID SHEET
STERLING
PRINTED IN U.S.A.

052-5029

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, NOTE BOOK, NO., BY, DATE, AREAS CHECKED

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, NOTE BOOK, NO., BY, DATE, AREAS CHECKED