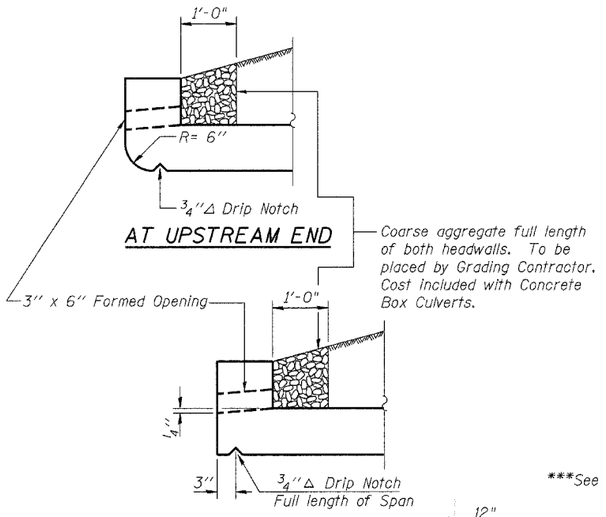
FAP RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
310	81B-1	MORGAN	114	46
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3 OF 5 SHEETS

Contract Number: 72528

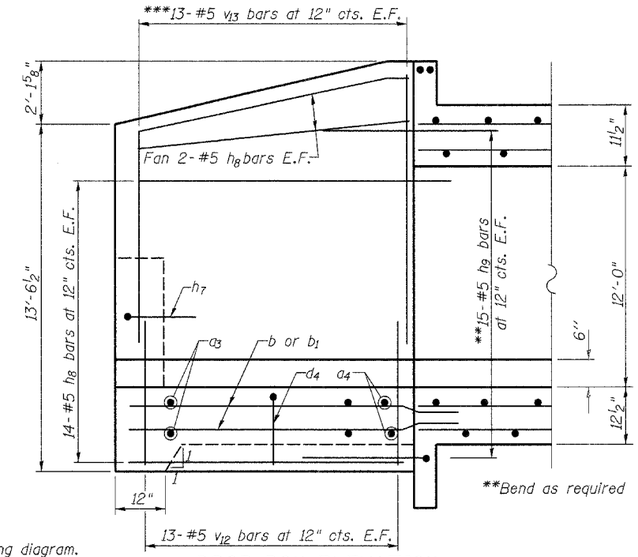


Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.

AT UPSTREAM END

AT DOWNSTREAM END

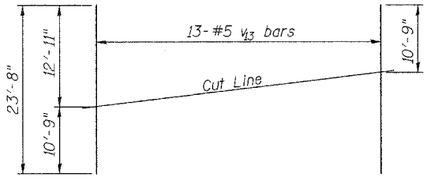
DRAIN DETAIL



***See field cutting diagram.

DROP BOX ELEVATION

(Showing sidewall reinforcement)



FIELD CUTTING DIAGRAM

Order v13 bars full length. Cut as shown and use remainder of bars in opposite face.

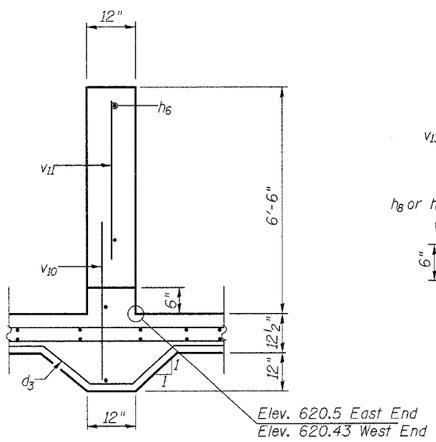
Min. Bar Laps

#4= 1'-4"
#5= 1'-8"
#6= 2'-0"

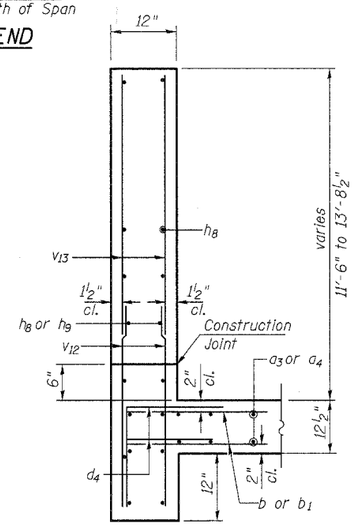
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	190	#7	28'-5"	
a_1	258	#8	10'-0"	
a_2	152	#4	9'-7"	
a_3	24	#5	17'-10"	
a_4	24	#5	16'-5"	
b	52	#5	14'-7"	
b_1	20	#5	15'-4"	
d	38	#4	5'-0"	
d_1	38	#4	6'-6"	
d_2	34	#5	5'-5"	
d_3	12	#5	6'-10"	
d_4	24	#5	3'-5"	
h	306	#5	25'-10"	
h_1	208	#5	19'-10"	
h_2	26	#7	38'-6"	
h_3	10	#6	26'-0"	
h_4	48	#4	17'-8"	
h_5	36	#5	18'-8"	
h_6	9	#6	14'-11"	
h_7	18	#5	3'-4"	
h_8	64	#5	14'-0"	
h_9	60	#5	8'-0"	
n(E)	42	#8	8'-4"	
n_1(E)	42	#7	5'-0"	
t	88	#6	9'-9"	
v	339	#6	12'-2"	
v_1	339	#6	3'-7"	
v_2	78	#5	11'-3"	
v_3	4	#6	12'-11"	
v_4	4	#6	7'-6"	
v_5	42	#6	9'-0"	
v_6	14	#4	9'-0"	
v_7	14	#4	6'-10"	
v_8	14	#4	4'-9"	
v_9	12	#4	16'-8"	
v_{10}	13	#6	4'-7"	
v_{11}	13	#6	5'-8"	
v_{12}	52	#5	4'-3"	
v_{13}	26	#5	23'-8"	
w	32	#5	17'-7"	
Concrete Box Culverts			Cu. Yd.	344.6
Reinforcement Bars, Epoxy Coated			Pound	1,360
Reinforcement Bars			Pound	52,370

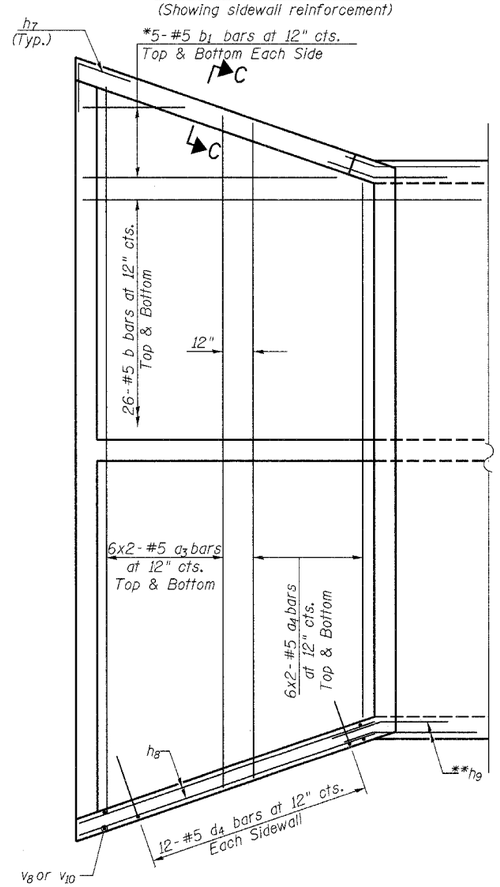
Notes: Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 12x4- #5 etc. indicates 12 lines of bars with 4 lengths per line.



SECTION B-B

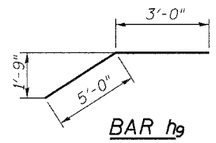


SECTION C-C

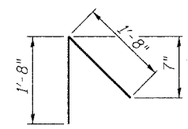


DROP BOX PLAN

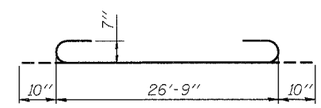
(Showing slab reinforcement)



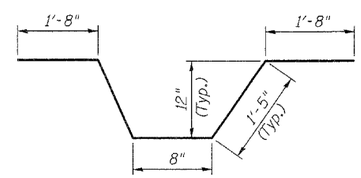
BAR h_9



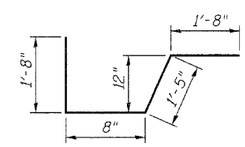
BAR h_7



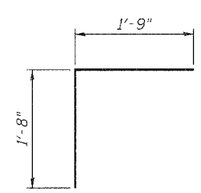
BAR a



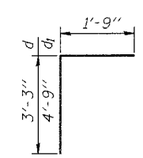
BAR d_3



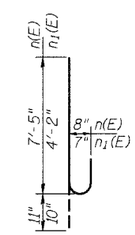
BAR d_2



BAR d_4



BARS d and d_1



BARS n(E) and n_1(E)

*½" Preformed Joint Filler
12"
9"
3/4" Chamfers
4"
1'-0"
2"
12"
*6" Hollow bulb type nonmetallic water seal (6" from top of wall to top of footing)
*Concrete Nails (Flat Hd. C.S.) 1" long at 12" cts. vertical.

SW & NW CORNER DETAIL

*Cost Included in Concrete Box Culverts.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET TITLE: CULVERT DETAILS

PROJECT: US RTE. 67 OVER BRUSHY FORK CREEK
FAP ROUTE 310, SECTION 81B-1
MORGAN COUNTY
STATION 223+51.00
STRUCTURE NUMBER 069-2505

PROJECT NO. 03002
SCALE
DATE 9/30/04
DRAWN BY TFG
CHECKED BY CME/MCB
DRAWING NO. 3 OF 5 SHTS

COOMBE-BLOXDORF P.C.
Engineers / Land Surveyors
Springfield, Illinois
Design Firm License No. 184-002703