



BILL OF MATERIAL

BAR	No.	SIZE	LENGTH	SHAPE
b(E)	24	#4	15'-9"	—
d(E)	40	#4	6'-8"	U
h1(E)	2	#4	14'-5"	∩
h2(E)	2	#4	22'-2"	∩
h3(E)	10	#4	6'-9"	—
h4(E)	10	#4	15'-0"	—
s(E)	8	#4	21'-9"	U
v1(E)	42	#4	8'-6"	J
CONCRETE BOX CULVERTS			CU. YD.	29.3
REINFORCEMENT BARS EPOXY COATED			POUND	980

DESIGN STRESSES
 fy = 60,000 psi
 f'c = 3,500 psi

MINIMUM BAR LAP
 #4 = 1'-8"
 • CUT OR BEND TO FIT IN FIELD
 •• LAP BARS WHERE NECESSARY

NOTE: BILL OF MATERIAL SCHEDULE IS TOTAL FOR BOTH ENDS

WORK THIS SHEET WITH SHEET X OF XX
 REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
 REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GRADE 60.
 EXPOSED EDGES SHALL BE BEVELED 3/4".

CONCRETE WINGWALL AND APRON REINFORCEMENT DETAILS

(TYPICAL EACH END)

FILE NAME =	USER NAME = halsteadtw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONCRETE WINGWALL & APRON REINFORCEMENT DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	12/5/2013	DRAWN -	REVISED -					778	3B-3	POPE	25	13
		CHECKED -	REVISED -		CONTRACT NO. 78315							
		DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT