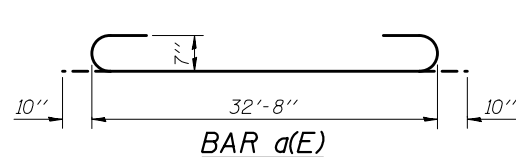
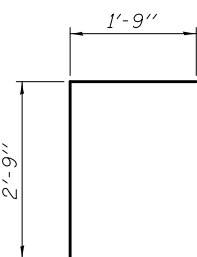


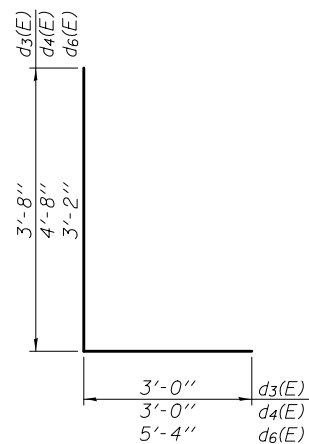
ELEVATION
Wingwall elevation showing reinforcement. (Southeast and Northwest wingwalls shown, Southwest wingwall similar)



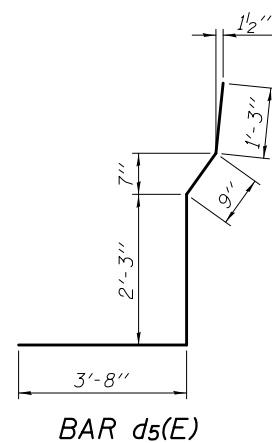
BAR d(E)



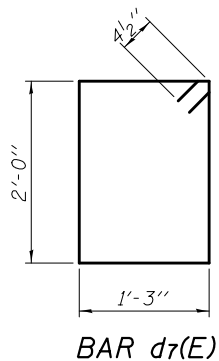
BAR d(E)



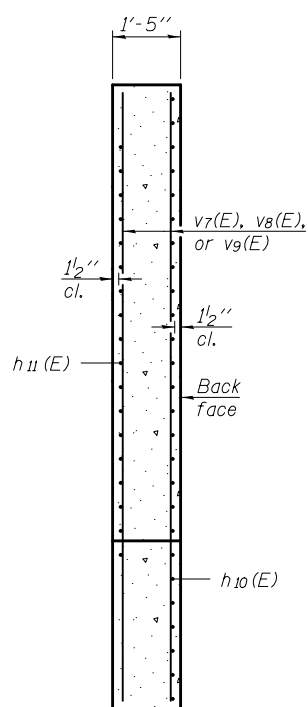
BARS d3(E), d4(E), & d6(E)



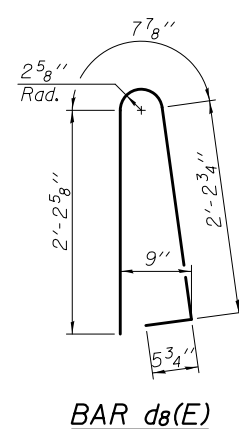
BAR d5(E)



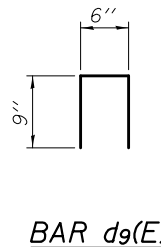
BAR d7(E)



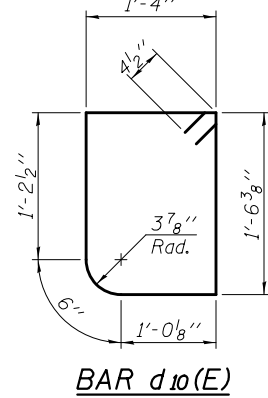
SECTION K-K



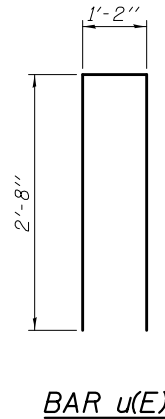
BAR d8(E)



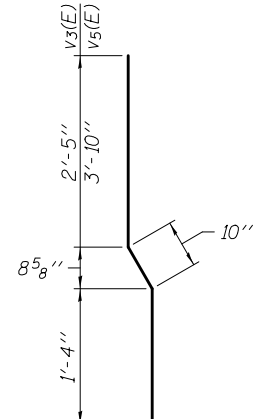
BAR d9(E)



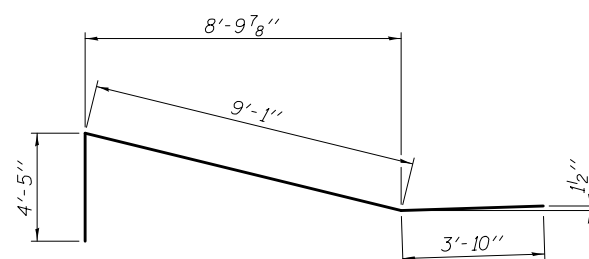
BAR d10(E)



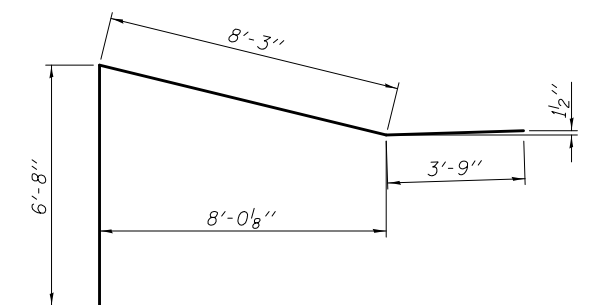
BAR u(E)



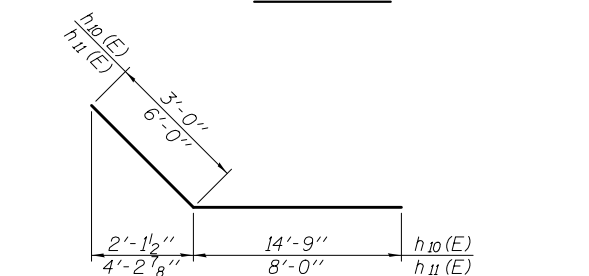
BARS v3(E) & v5(E)



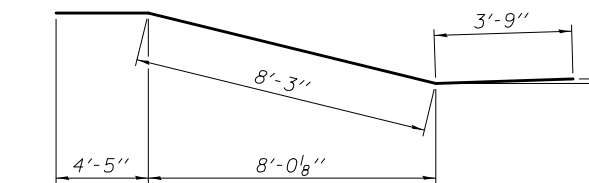
BAR h8(E)



BAR h9(E)



BARS h10(E) & h11(E)



BAR h12(E)

Notes:
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
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)	124	#7	34'-4"	U
a1(E)	112	#6	20'-0"	U
a2(E)	112	#4	8'-10"	U
d(E)	66	#4	4'-6"	U
d1(E)	70	#5	2'-0"	U
d2(E)	6	#5	3'-1"	U
d3(E)	38	#5	6'-8"	U
d4(E)	38	#5	7'-8"	U
d5(E)	38	#5	7'-11"	U
d6(E)	38	#5	8'-6"	U
d7(E)	64	#4	7'-3"	U
d8(E)	38	#5	5'-7"	U
d9(E)	20	#4	2'-0"	U
d10(E)	63	#4	6'-4"	U
h(E)	312	#5	24'-5"	U
h1(E)	4	#4	3'-8"	U
h2(E)	104	#5	24'-2"	U
h3(E)	6	#7	31'-2"	U
h4(E)	16	#4	16'-9"	U
h5(E)	2	#4	1'-8"	U
h6(E)	12	#8	33'-8"	U
h7(E)	14	#4	16'-11"	U
h8(E)	17	#9	17'-4"	U
h9(E)	17	#9	18'-8"	U
h10(E)	57	#7	17'-9"	U
h11(E)	39	#7	14'-0"	U
h12(E)	13	#9	16'-5"	U
h13(E)	1	#8	34'-0"	U
h14(E)	1	#4	34'-0"	U
u(E)	32	#4	6'-6"	U
v(E)	336	#5	11'-2"	U
v1(E)	26	#4	13'-6"	U
v2(E)	8	#4	3'-9"	U
v3(E)	8	#4	4'-4"	U
v4(E)	5	#4	5'-4"	U
v5(E)	5	#4	5'-9"	U
v6(E)	4	#4	14'-4"	U
v7(E)	4	#4	13'-3"	U
v8(E)	4	#4	13'-11"	U
v9(E)	4	#4	15'-0"	U
Concrete Superstructure			Cu. Yd.	7.8
Reinforcement Bars			Pound	38,140
Concrete Box Culverts			Cu. Yd.	238.2

DESIGNED - SEAN CHAU	EXAMINED - <i>Jaime F. Joffe</i>	DATE - FEBRUARY 1, 2013
CHECKED - PAUL GURKLYS	ACTING ENGINEER OF BRIDGE DESIGN	
DRAWN - MICHAEL B. MOSSMAN	PASSED - <i>Carl Perry</i>	REVISED
CHECKED - S.C. / P.G.	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS - WINGWALL DETAILS
STRUCTURE NO. 060 - 2051

SHEET NO. 10 OF 12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
785	136-BR	MADISON	58	43
				CONTRACT NO. 76D49
ILLINOIS FED. AID PROJECT				