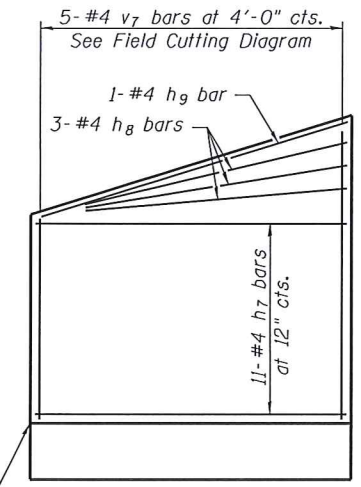
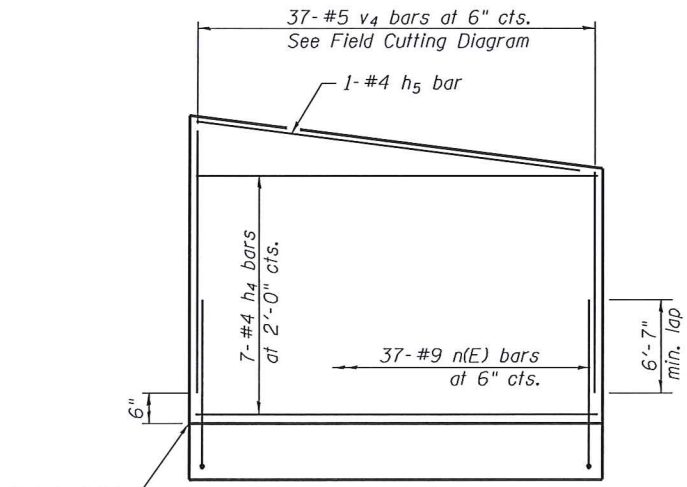


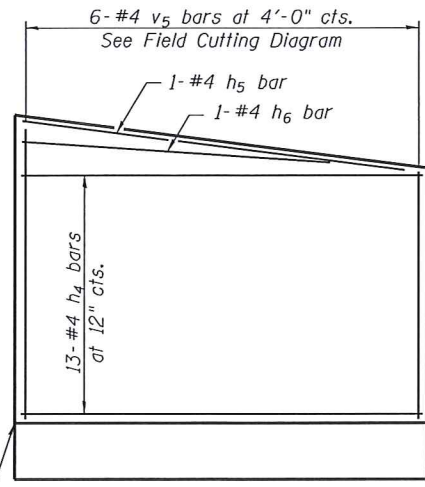
**VIEW E-E**  
Showing Back Face Reinforcement



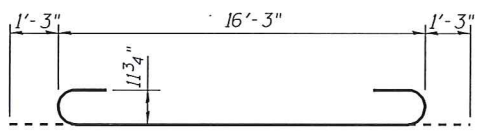
**VIEW E-E**  
Showing Front Face Reinforcement



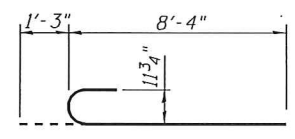
**VIEW F-F**  
Showing Back Face Reinforcement



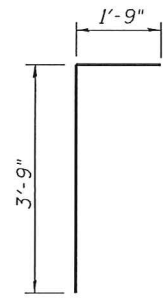
**VIEW F-F**  
Showing Front Face Reinforcement



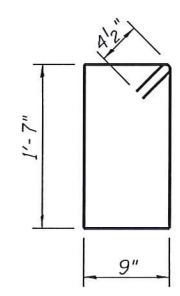
**BAR a**



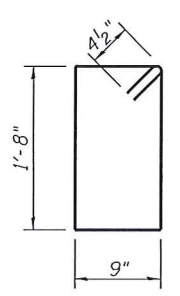
**BAR n(E)**



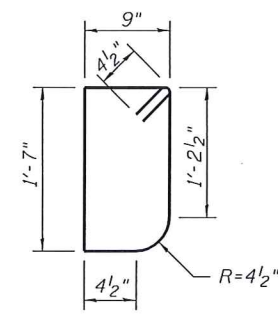
**BAR d**



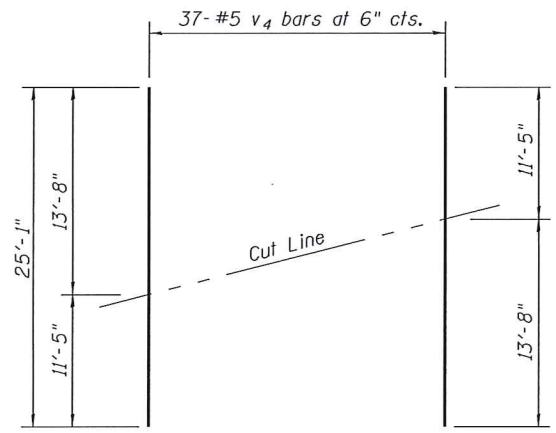
**BAR s**



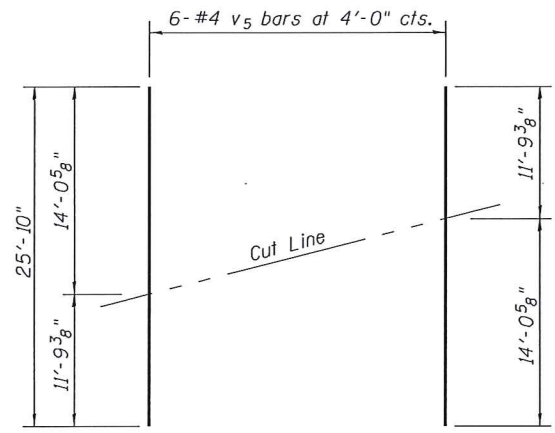
**BAR s1**



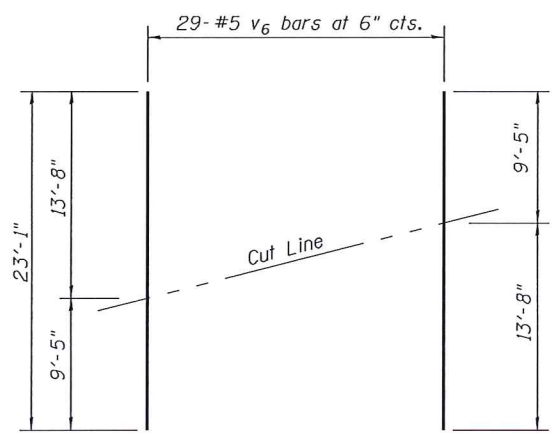
**BAR s2**



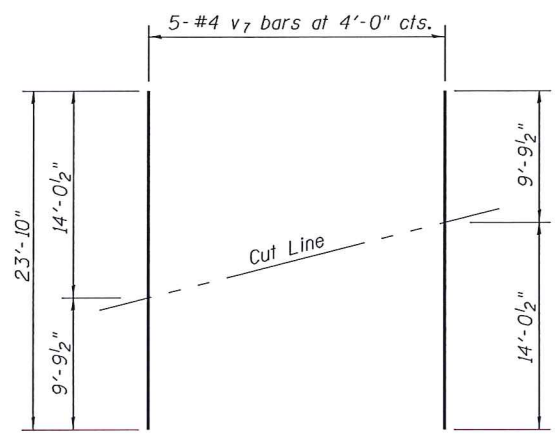
**FIELD CUTTING DIAGRAM**  
(v4 bars)



**FIELD CUTTING DIAGRAM**  
(v5 bars)



**FIELD CUTTING DIAGRAM**  
(v6 bars)



**FIELD CUTTING DIAGRAM**  
(v7 bars)

**TOTAL BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a	56	#9	18'-9"	U
a1	38	#4	16'-3"	—
d	70	#4	5'-6"	L
h	60	#5	7'-2"	—
h1	60	#5	13'-2"	—
h2	4	#8	15'-7"	—
h3	24	#8	16'-2"	—
h4	40	#4	17'-9"	—
h5	4	#4	17'-1"	—
h6	2	#4	15'-0"	—
h7	34	#4	13'-9"	—
h8	8	#4	11'-7"	—
h9	4	#4	14'-1"	—
h10	22	#6	7'-2"	—
h11	22	#6	13'-2"	—
n(E)	132	#9	9'-7"	U
s	51	#4	5'-5"	—
s1	34	#4	5'-7"	—
s2	17	#4	5'-3"	—
t	132	#6	10'-2"	—
t1	68	#5	10'-2"	—
v	76	#8	10'-4"	—
v1	76	#8	5'-4"	—
v2	8	#8	11'-1"	—
v3	8	#8	8'-2"	—
v4	37	#5	25'-1"	—
v5	6	#4	25'-10"	—
v6	29	#5	23'-1"	—
v7	5	#4	23'-10"	—
w	32	#5	17'-8"	—
w1	32	#5	13'-8"	—
Reinforcement Bars			Pound	17,940
Reinforcement Bars, Epoxy Coated			Pound	4,310
Expansion Bolts 3/4 Inch			Each	68
Concrete Box Culverts			Cu. Yd.	111.5
Concrete Removal			Cu. Yd.	29.0
Rock Excavation for Structures			Cu. Yd.	162.2
Structural Repair of Concrete (Depth less than or equal to 5 inches)			Sq. Ft.	53

Notes:  
Order v4 thru v7 bars full length. Cut as shown.  
Use remainder of bar in opposite Wingwall.

FILE NAME = 405-67.37-76789-004.dgn



USER NAME = jdirkelmann	DESIGNED - JD	REVISED -
Illinois Design Firm Number 184.001670	CHECKED - BB	REVISED -
PLOT SCALE =	DRAWN - WS	REVISED -
PLOT DATE = 8/8/2014	CHECKED - CJF	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BOX CULVERT EXTENSION DETAILS  
STRUCTURE NUMBER 042-2475

SHEET NO. 4 OF 5 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	101-2RS-1	JERSEY	438	272
CONTRACT NO. 76789			ILLINOIS FED. AID PROJECT	