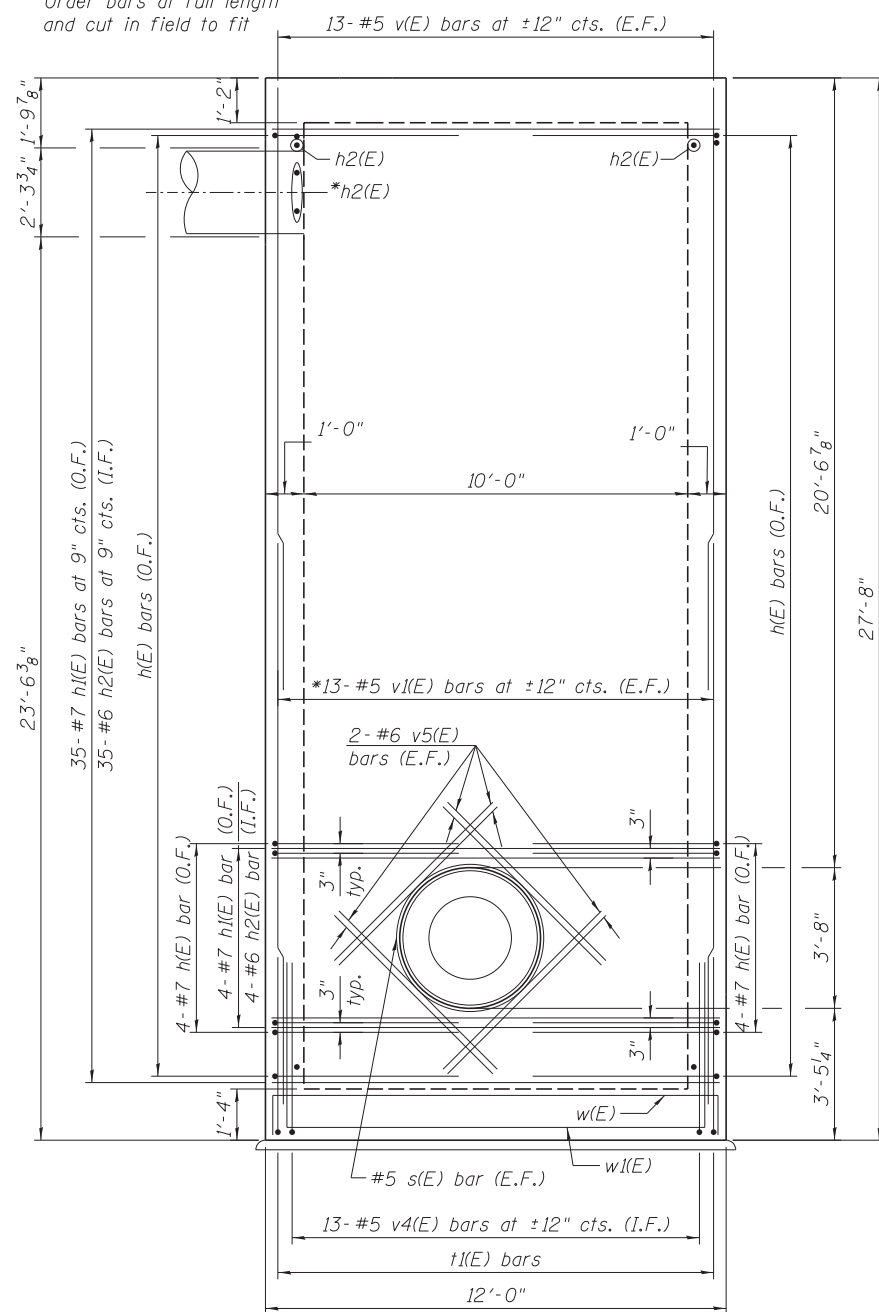
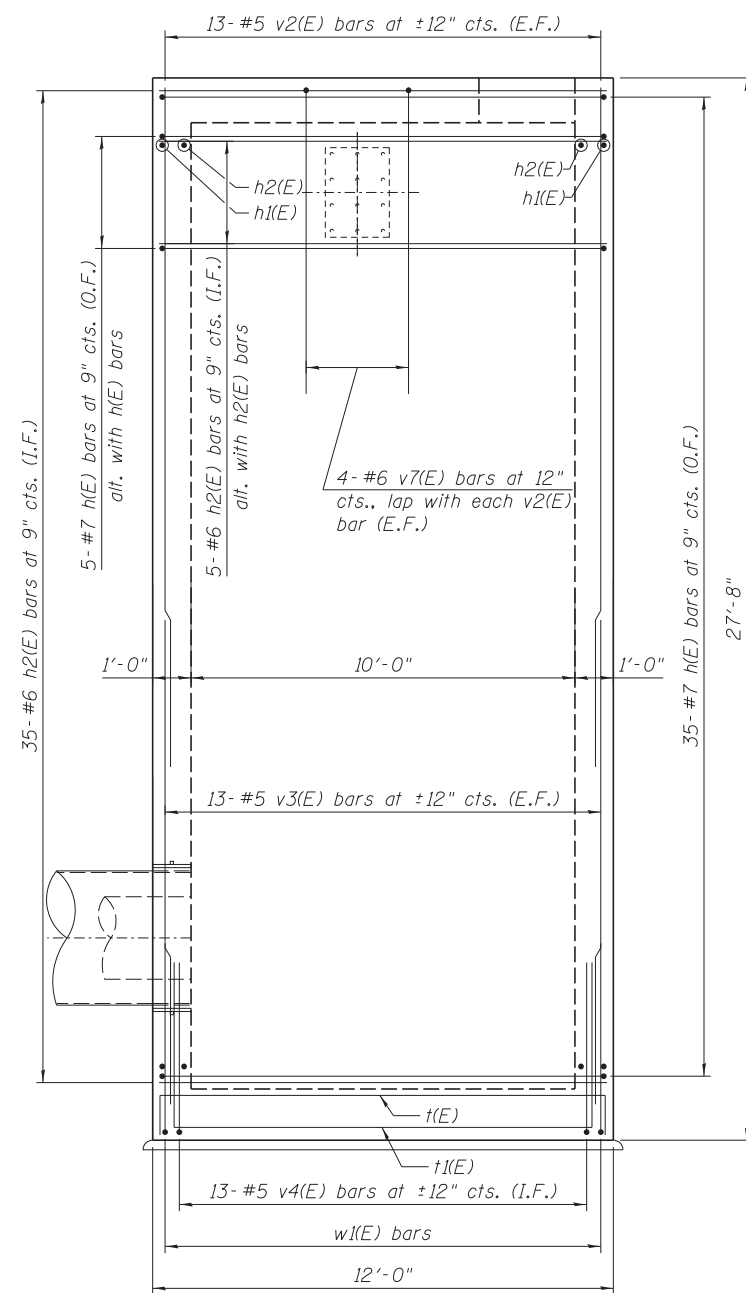


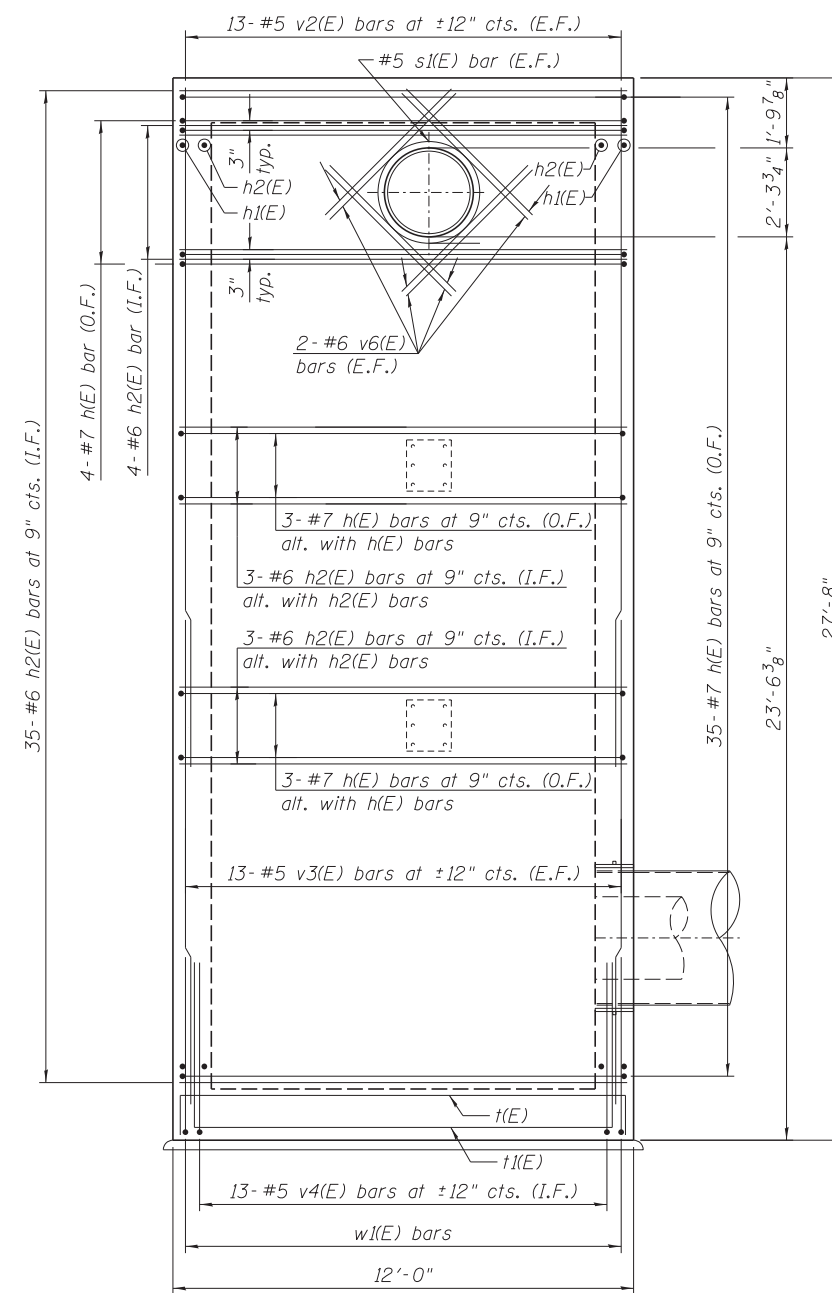
\*Order bars at full length and cut in field to fit



**SOUTH WALL ELEVATION**  
(Looking North)



**EAST WALL ELEVATION**  
(Looking West)



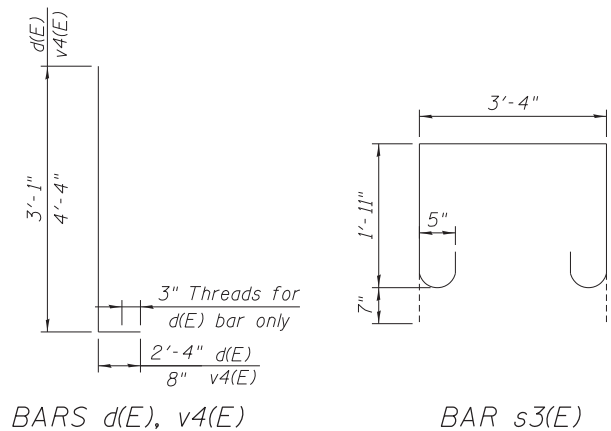
**WEST WALL ELEVATION**  
(Looking East)

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	20	#5	12'-10"	□
a1(E)	20	#6	11'-6"	—
a2(E)	4	#6	4'-10"	—
a3(E)	8	#6	3'-10"	—
a4(E)	4	#6	2'-10"	—
b(E)	20	#5	13'-0"	□
b1(E)	20	#6	11'-6"	—
d(E)	10	#5	5'-5"	□
h(E)	93	#7	21'-10"	□
h1(E)	74	#7	11'-6"	—
h2(E)	159	#6	11'-6"	—
n(E)	10	#5	4'-8"	—
n1(E)	25	#5	2'-10"	—
n2(E)	5	#5	6'-8"	—
s(E)	2	#5	16'-5"	○
s1(E)	4	#5	12'-2"	○
s2(E)	6	#5	15'-0"	□
s3(E)	8	#5	8'-4"	□
t(E)	25	#6	13'-0"	□
t1(E)	25	#6	21'-10"	□
v(E)	52	#5	15'-9"	—
v1(E)	52	#5	14'-7"	—
v2(E)	52	#5	17'-9"	—
v3(E)	52	#5	12'-7"	—
v4(E)	52	#5	5'-0"	—
v5(E)	16	#6	6'-2"	—
v6(E)	16	#6	4'-8"	—
v7(E)	8	#6	11'-10"	—
w(E)	25	#6	13'-2"	□
w1(E)	25	#6	21'-10"	□

Concrete Structures Cu Yd 61.5  
Reinforcement Bars, Epoxy Coated Pound 16,970  
Bars designated (E) shall be epoxy coated

Minimum Bar Laps	
Bar	Lap
#4	2'-7"
#5	3'-3"
#6	3'-10"
#7	5'-2"
#8	6'-9"

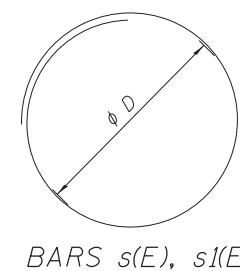


**BARS d(E), v4(E)**

**BAR s3(E)**

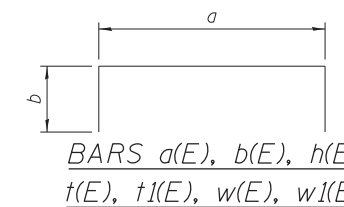
**BAR s2(E)**

**BAR v7(E)**



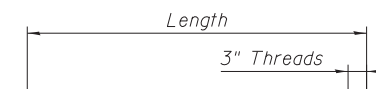
**BARS s(E), s1(E)**

Bar	phi D
s(E)	4'-2"
s1(E)	2'-10"



**BARS a(E), b(E), h(E), t(E), t1(E), w(E), w1(E)**

Bar	a	b
a(E)	11'-6"	8"
b(E)	11'-6"	9"
h(E)	11'-6"	5'-2"
t(E)	11'-6"	9"
t1(E)	11'-6"	5'-2"
w(E)	11'-6"	10"
w1(E)	11'-6"	5'-2"



**BARS n(E), n1(E), n2(E)**

**LEGEND:**

E.F. - Each Face  
I.F. - Inside Face  
O.F. - Outside Face

FILE PATH = C:\Users\will.mardous\Desktop\Project\_Sheet\0160W25-Sht-RS04-Details3.dgn

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DESIGNED - MI, WM	REVISED -
DRAWN - WM	REVISED -
CHECKED - MAI, MI, JJS	REVISED -
DATE - 6/17/2013	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**RISER SHAFT SECTIONS AND DETAILS (SHEET 3 OF 3)**  
**RISER SHAFT AND BRACED EXCAVATION**

SCALE: SHEET S4-04 OF 8 SHEETS STA. TO STA.

F.A.I. R.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94/290	2013-007R	COOK	317	228
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60W25	