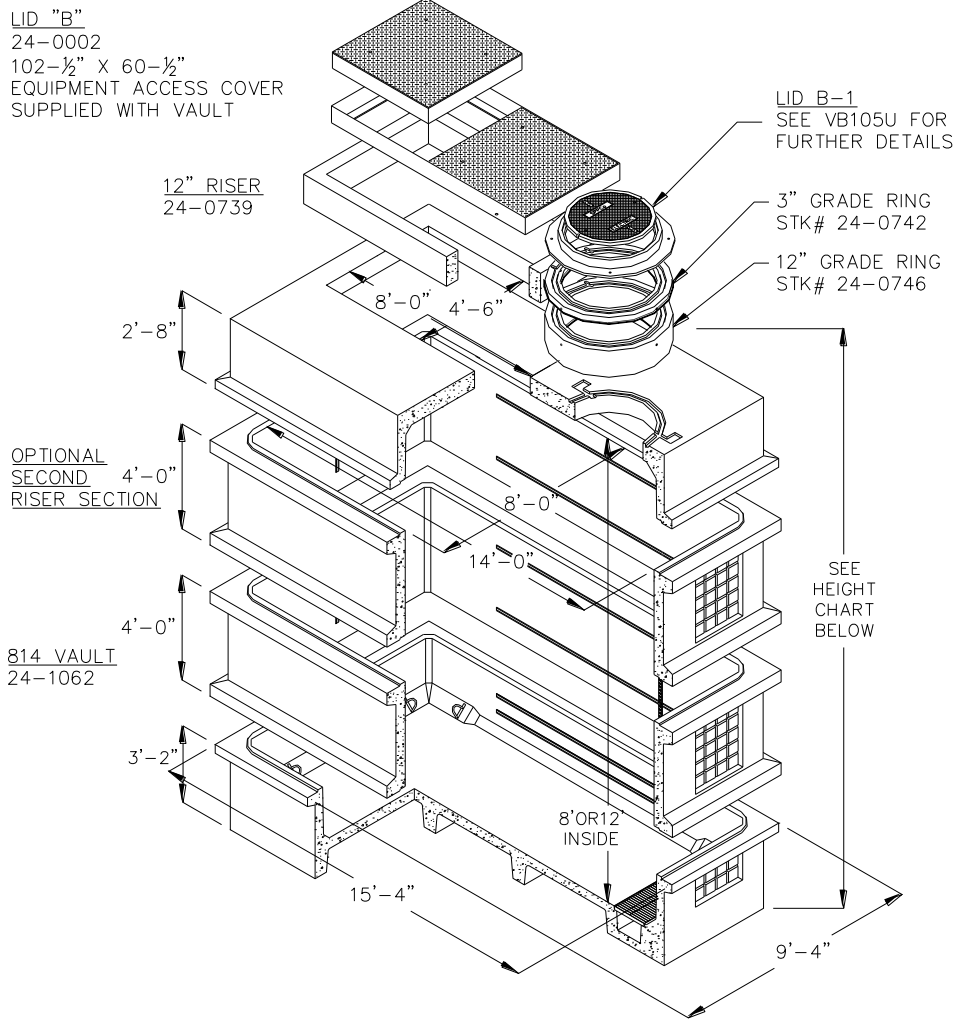


**814 VAULT ISOMETRIC DETAIL**

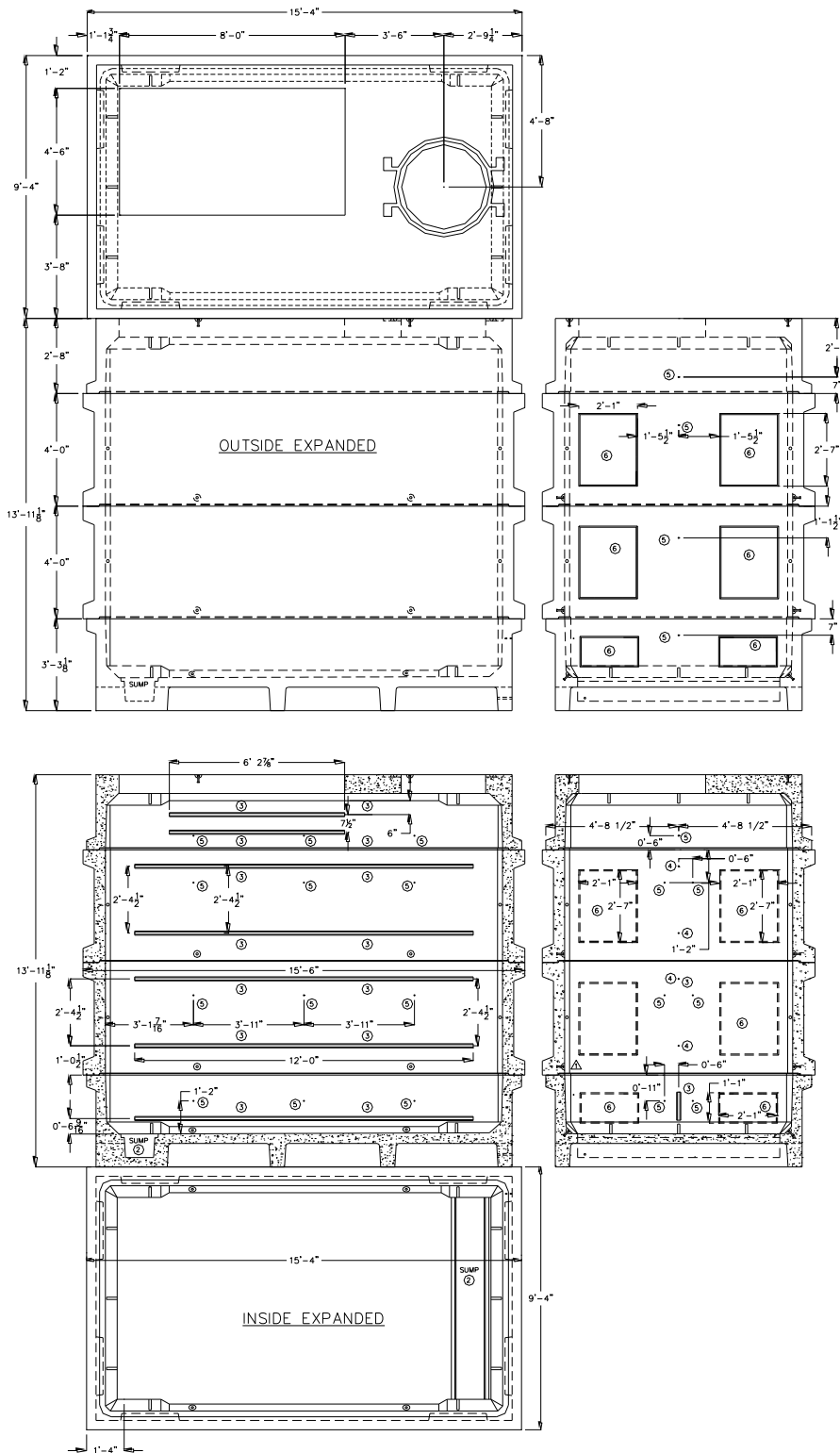


STK#	DESCRIPTION	WEIGHT (LBS)
24-1062	814 VAULT	53,250
24-0739	12" RISER FOR LID B	1,993
24-0002	LID B H-20 EQUIPMENT	5,200
24-1215	LID B-1 H-20 3' MANHOLE	800
24-0746	12" GRADE RING FOR MH	682
24-0744	6" GRADE RING FOR MH	341
24-0742	3" GRADE RING FOR MH	166
24-1340	LID D GRATE MAINT ONLY	700

HEIGHT OF VAULT WITH CORRESPONDING LIDS	LADDER LENGTH
15'-0" W/2 EXT & LIDS B & B-1	13'-6"
11'-0" W/1 EXT & LIDS B & B-1	9'-6"

NOTE: VAULT INCLUDES 12" RISER, LIDS B & B-1, AND 3" AND 12" GRADE RINGS FOR LID B-1

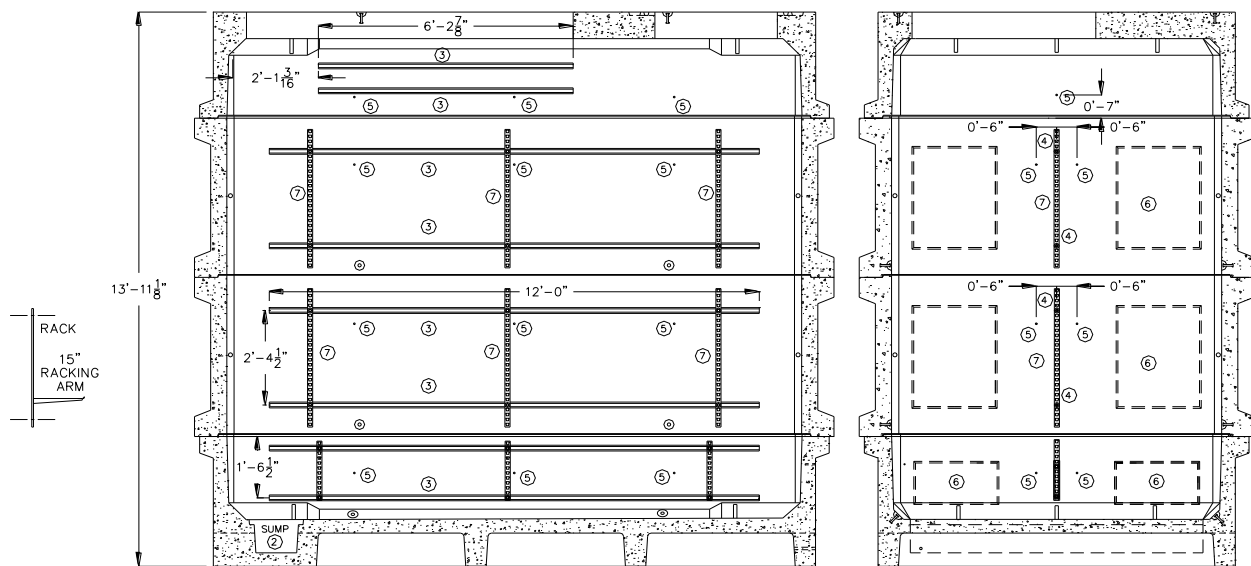
**814 VAULT EXPANDED VIEWS**



				VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD		VB0090U
				<b>814 VAULT CONCRETE PRIMARY 8' X 14' X 12' I.D.</b>		
Drawn:	Eng:	Appr:	Date:			Revision: 4
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**814 VAULT CONSTRUCTION NOTES:**

- Vault to be used for H-20 traffic design loading. All live loads shall be for HS-20-44 (MS-18) as per AASHTO Standard Specification Div 1 Sec.3  
Note: A minimum of 12 inches of vault cover is required.
- Vault excavation and backfill to conform to NVE Specification SUB01X.
- Butyl rubber or neoprene gasket seal required between vault sections and/or extensions.
- Extensions and risers will be installed on all vaults.
- Unistrut (See detail A) or 1/2" inserts will be cast into vault.
- Lids to be marked "NVE Electric"
- All weights to be clearly marked
- 16 -15" steps are supplied with vault.
- Grounding: See expanded view for grounding applications and inserts.
- 2/0 CU (# 17-0910) grounding grid is required in this vault.
- Ladder and ladder-up required, See NVE Construction Standard VB0105U.
- Middle section is optional.
- Delivery of this vault requires coordination with Jensen Precast.



INSIDE EXPANDED SIDE & END WALL  
RACK APPLICATIONS WITH ARMS

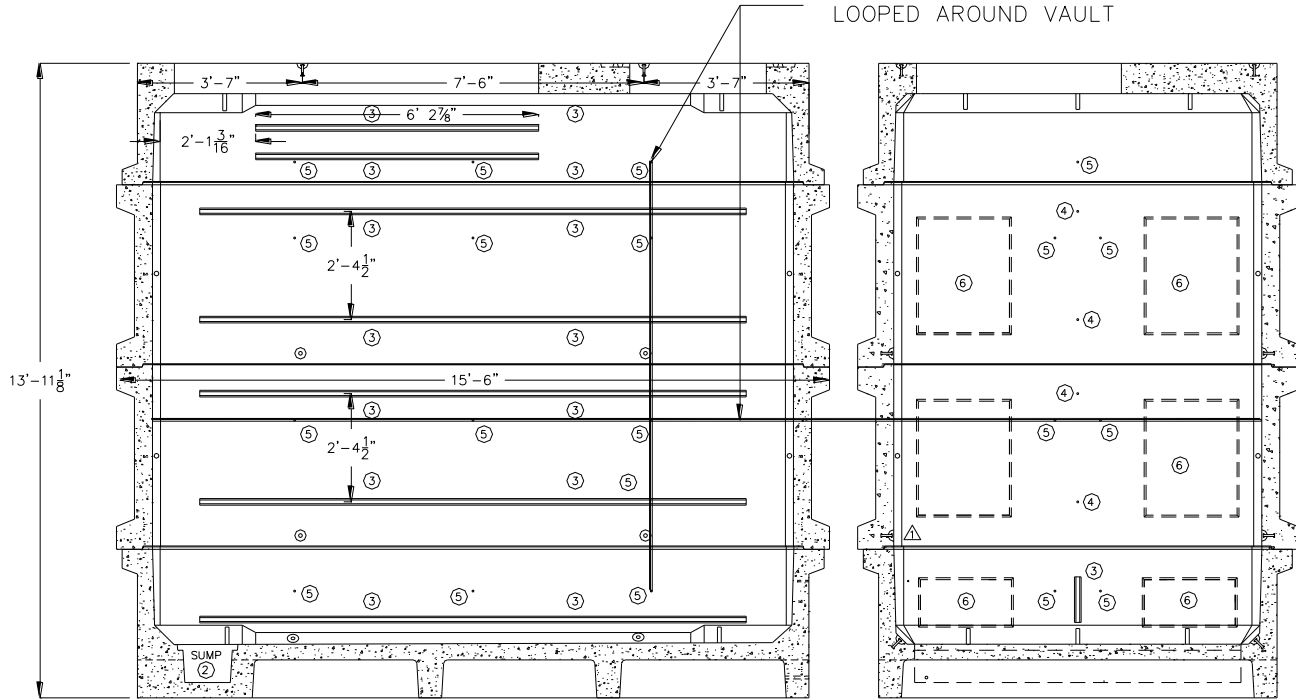
MAXIMUM CONDUCTORS AND J-BARS					
VAULT 814	200 AMP PRIMARY	600 AMP PRIMARY	SECONDARY	EQUIPMENT	J BARS 3, 4 OR 5 WAY
	33 18	0 15	4 RUNS < 750 QX OR TX	1 < 225 KVA 1-6 POS SWITCH	3 TOTAL CHECK WITH OPERATIONS

NOTE: REFER TO CAB09U VOLUME 5 FOR COMPLETE APPLICATION

	VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD			<b>VB0090U</b>								
	<b>814 VAULT CONCRETE PRIMARY 8' X 14' X 12' I.D.</b>											
<table border="1"> <tr> <td>Drawn:</td> <td>Eng:</td> <td>Appr:</td> <td>Date:</td> </tr> <tr> <td>JVV</td> <td>MB</td> <td>DA</td> <td>10/07</td> </tr> </table>	Drawn:	Eng:	Appr:	Date:	JVV	MB	DA	10/07				Revision: 4 Page 3 of 4
Drawn:	Eng:	Appr:	Date:									
JVV	MB	DA	10/07									

**GROUNDING GRID INSTALLATION DETAILS**

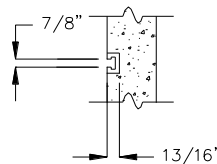
GROUND GRID 2/0 COPPER TIED TO ALL VAULT SECTIONS AND LOOPED AROUND VAULT



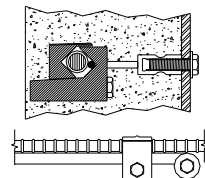
INSIDE EXPANDED SIDE & END WALL  
GROUNDING APPLICATIONS AND INSERTS

MATERIAL LIST supplied by Vault Manufacturer			
INSIDE VAULT HEIGHT		8'	12'
DESCRIPTION		QTY	QTY
1	PULLING IRON 2 PER CORNER	8	8
2	12" X 84" SUMP W/GRATE 2 SECTIONS	1	1
3	6' 2-1/2" UNISTRUT TOP SECTION SIDE WALLS	4	4
	12' LONG UNISTRUT OTHER SECTIONS SIDE WALLS	8	12
3	12' LONG UNISTRUT BOTTOM END SECTION	2	2
4	1/2" RACKING INSERT	8	12
5	1/2" GROUNDING INSERT, 28/40 INSIDE 6/8 OUTSIDE	34	48
6	12" X 24" KNOCKOUT	4	4
	24" X 30" KNOCKOUT	4	8
7	12 HOLE RACK (17 3/4" LONG) BASE	8	8
	28 HOLE RACK (41 3/4" LONG) EXTENSION	8	16
9	SPRING NUT	28	40
10	1/2 X 1 1/2" BOLT	37	49
11	1/2" WASHER	36	48
12	1/2" BRASS GROUND WASHER, 1 TOP OUTSIDE	1	1
13	15" ARM	16	16
14	LADDER UP	1	1
15	LADDER	1	1

EQUIPMENT INSTALLATION GROUNDING GRID: INSTALL 54' OF 2/0 COPPER GROUND GRID. TIE TO ALL SECTIONS AND LOOP THROUGH 12 GROUNDING LUGS ATTACHED TO 1/2" GROUNDING INSERTS AROUND VAULT AND BUS TO TRANSFORMER, SWITCH, CONCENTRIC NEUTRAL, J-BAR OR BRACKET.




UNISTRUT  
DETAIL "A"



COPPER PIGTAIL TO BE SECURED TIGHTLY TO REINFORCING BAR WITH CLAMP BEFORE POURING CONCRETE.

GROUND INSERT  
DETAIL "B"

	VOLUME 17 – ENGINEERING & CONSTRUCTION STANDARD		VB0090U								
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