

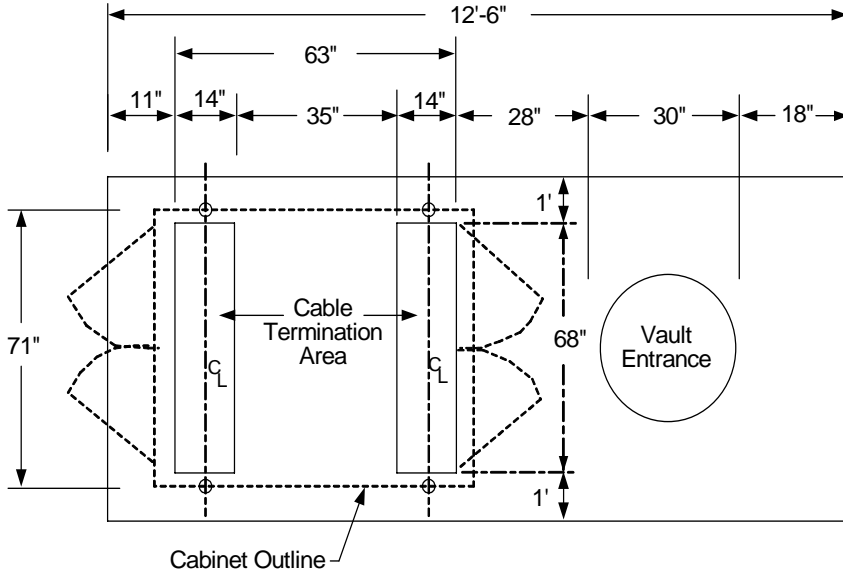
RS-97: MANHOLE FOR S&C CABINET, 15 OR 25KV

DESIGN REQUIREMENTS

TOLERANCES:

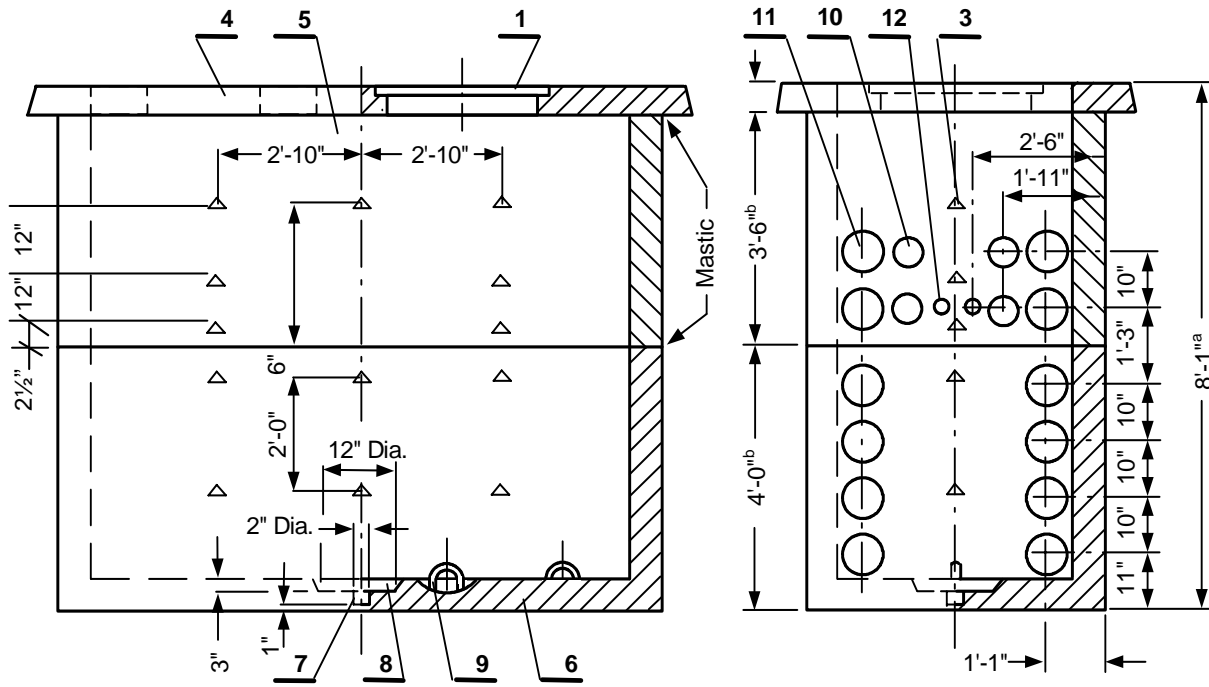
- a = +1", -1"
- b = +1/2", -1/2"
- c = +0", -1 1/2"

APPROVED STRUCTURE	
MANUFACTURER	MANHOLE
Jensen Precast	J-RS-97
Rockway Precast	R-RS-97



LEGEND:

1. Traffic lid & ring
2. Cable slot
3. 1/2"-13 UNC grounding inserts
4. Top section
5. Middle section
6. Bottom section
7. Molded knockout
8. Sump pump recess
9. Pulling eye
10. 4" conduit terminator
11. 6" conduit terminator
12. 1" PVC ground wire conduit



RS-97 MANHOLE
ALL RS-98 TO RS-116

REV	REVISION RECORD	ENGR BY:	APPD BY:	DATE
5				
4	Revised Grounding Requirements	ME	DA	5/22/08
3	Added Racks and inserts, notes changed on page 2	DB	KL	11/07
2	Changed Manhole Lid (Dimensions)	TA	DA	9/07
1	New Format	DH	DA	9/06

T&D STANDARDS
NEVADA POWER COMPANY
ELECTRIC SERVICE REQUIREMENTS

RS-97
Manhole for S&C Cabinet, 15 or 25kV

DI: ESRNPC-RS097-REV04	SHEET	1 OF 4
SCALE: NONE	INITIAL ISSUE DATE: 09/27/2006	

1. RING AND LID

1. Shall be made in USA, according to D & L Supply, A-1106 drawing and meet AASHTO-H20.44 specification (traffic ring and lids not made in US require NPC T & D Standards approval).
2. Lid shall have a 1" diameter lifting hole (through the thickness of the lid), located 9" to 12" from the center of the lid.
3. Lid shall have the word "ELECTRIC" in 1" letters, embossed in the top.
4. Lid shall be safely fastened to the ring with four ½"-13 UNC pentahead bolts.
5. Lid shall have a brass I.D. plate with dimensions of 2.5" diameter x .025" thick (level with the top of the lid) fastened to the lid. For location see RS-97.

2. TOP PAD SECTION

1. Two 14" x 68" cable slots.
2. One ½"-13 UNC insert.
3. 30" diameter cast iron traffic frame mounted in the concrete.

3. MIDDLE SECTION:

1. Nine 1/2" grounding insert nuts in each side wall and three steel insert nut in each end wall, located on the same level.
2. A 1" diameter PVC conduit through the end walls.
3. Four 6" and four 4" diameter PVC conduit terminators through each end wall.
4. 60" (W) x (L) x 42" (H) inside dimensions with tolerances of ±1".
5. Three 18" steel racks installed on each side wall and one on each end wall.



4. BOTTOM SECTION:

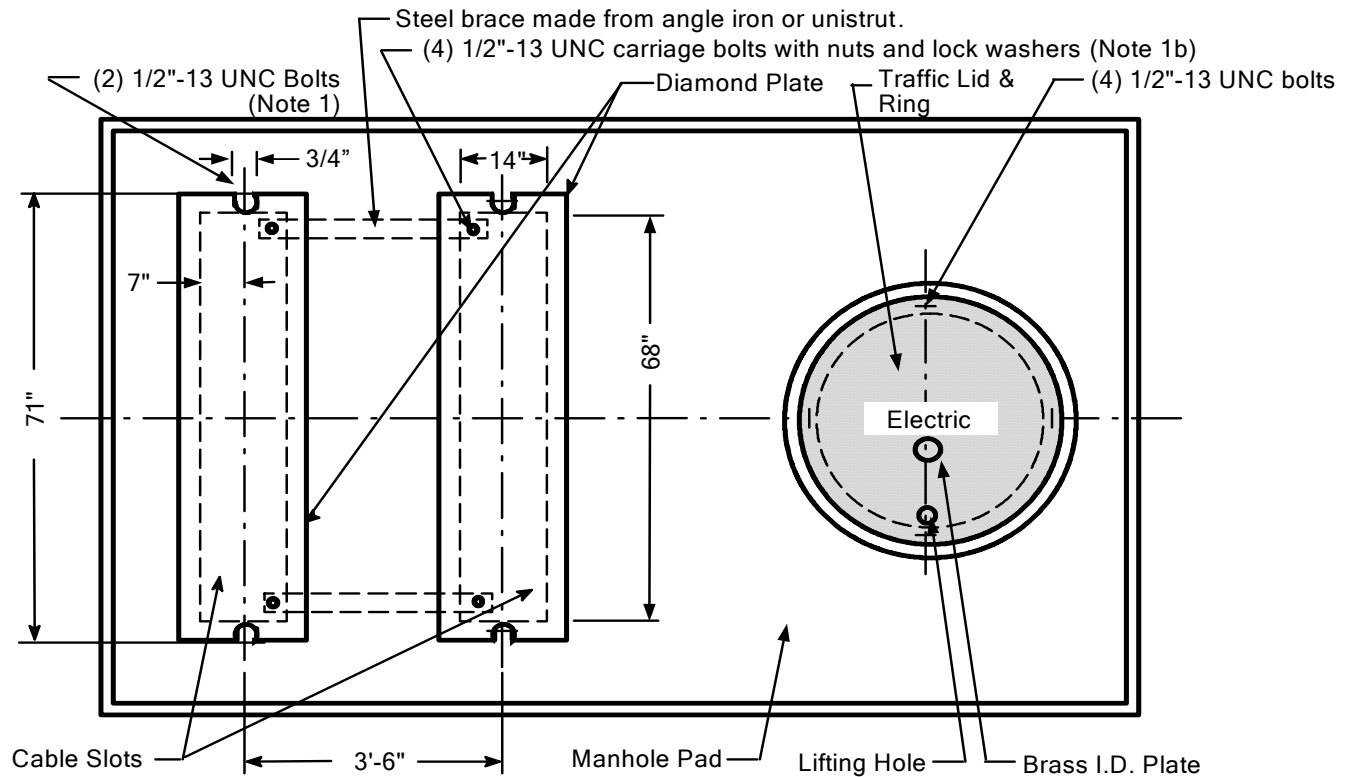
1. Six 1/2" grounding insert nuts in each side wall and two steel insert nuts in each end wall, located on two levels per drawing on page 1.
2. Six steel pulling eyes in the floor (hot dip galvanized).
3. A 12" diameter x 3" deep sump pump recess with a 2" diameter knockout in the middle of the floor.
4. Eight 6" diameter PVC conduit terminators through each end wall.
5. 60" (W) x 126" (L) x 42" (H) inside dimensions with tolerances of ±1".
6. Three 40" steel racks installed on each side wall and one on each end wall.

5. ENTIRE STRUCTURE:

1. Shall meet RS-G2 and RS-G4.

NOTE: In the case of road expansion, this structure shall not be adapted for placement under the road without NPC T & D Standards approval.

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RS-97 MANHOLE
 ALL RSI-98 to RSI-116
 SAFETY REQUIREMENTS

6. DIAMOND PLATES



1. Every Top Pad shall have both cable slots covered with ¼" x 17" x 74" steel diamond plates per above drawing. Each plate shall be fastened to the pad with two ½" – 13UNC hex head bolts on opposite sides per above drawing.
2. Removal of the Steel Diamond Plate without immediate installation of the Cabinet is prohibited.

7. GROUNDING

Manholes shall have grounding inserts on all walls around the inside perimeter as shown on Page 1. The inserts shall be spaced in accordance with this specification drawing. Inserts to be attached to the internal manhole rebar by spot welding or approved connector. The insert shall accept 1/2" American Standard thread. Continuity between all inserts installed in manhole sections shall be checked and verified prior to shipping by manufacturer/supplier.

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