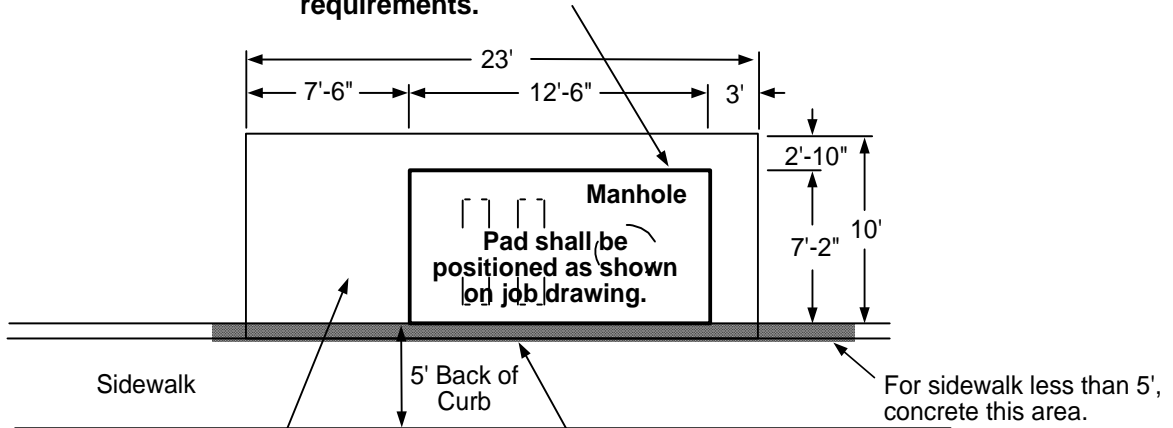


# Vaults and Boxes

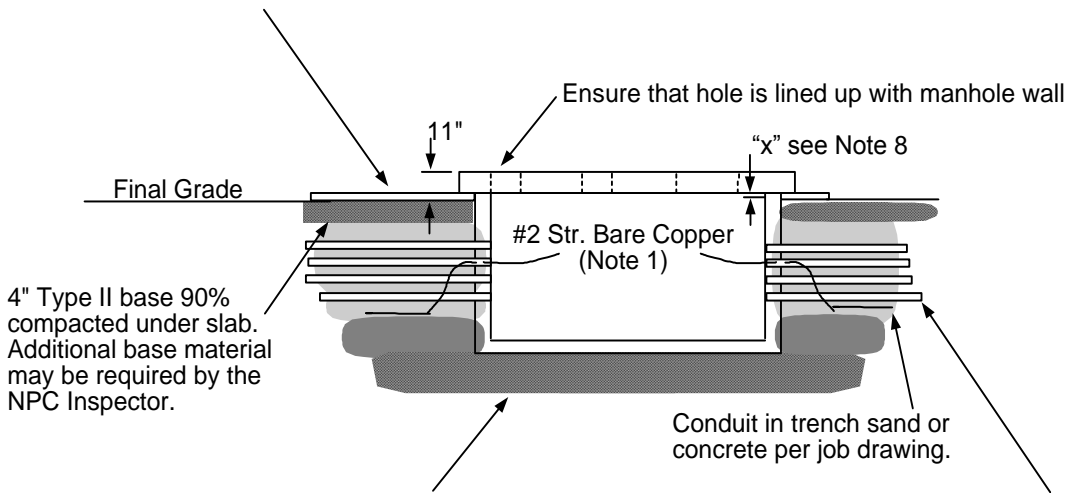
## INSTALLATION REQUIREMENTS

See RS-97 for manhole design, approved manufacturer, and safety requirements.



A 4" thick concrete slab is required when the equipment pad is located in a grassy area, planter, or bare ground. The slab must be finished to final grade and constructed per RS-G6.

Fill this area with concrete if a gap exists between the capacitor pad or manhole pad and the sidewalk. See RS-G6 for additional information.



4" Type II base 90% compacted under slab. Additional base material may be required by the NPC Inspector.

Conduit in trench sand or concrete per job drawing.

12" Type II base 90% compacted under manhole. Compaction testing and results required at the discretion of the NVE Inspector. Additional base material may be required by the NVE Inspector.

Conduits must be installed from the bottom up. The first conduit goes into space 1, the second into space 2, etc. The designer should avoid designs where future cable will be pulled in under existing energized cable. The manhole will be rejected by NVE Inspector if the conduits are not found in the correct locations.

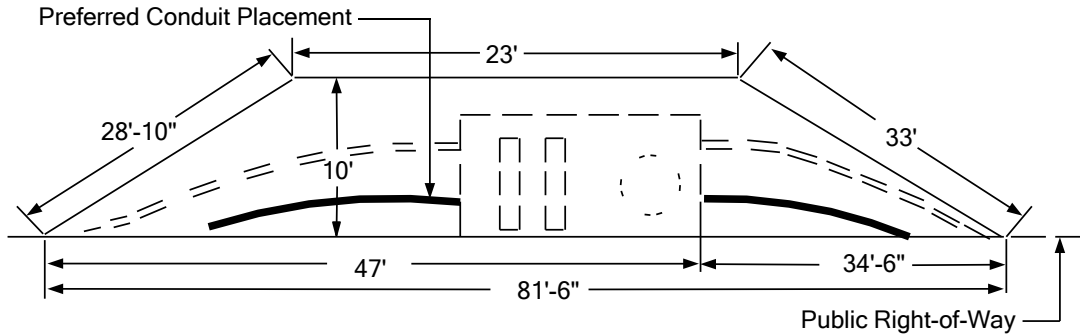
				Electric Service Requirements		RS-98
				<b>12kV Manhole Pad: Adjacent to Public R.O.W.</b>		
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# Vaults and Boxes

**NOTES:**

1. Grounding by customer shall be 2-50' #2-7 stranded bare copper wires laid in the bottom of the conduit trench in opposite directions with 2-5' tails left in the box.
  - A. No exceptions allowed.

**NOTE:** Ground wires shall be installed through a 1" PVC conduit in the structures end walls.
2. For location and clearances to other structures, see RS-5.
3. Retaining wall required when grade from bottom of pad rises or lowers more than 1' in 5' horizontally or when required by developer as perimeter wall.
4. Required easement:




5. If the designer specifies additional conduit openings, the contractor shall core drill the hole as required.
6. The bottom surface of the manhole shall be level.
7. If the ground water level is at least 3' below the bottom of the pull box, the 2" diameter knockout in the sump pump recess shall be removed.
8. If any final grade adjustment "x" is needed, take the actions listed in table 1.

**Table 1. Adjustment Requirements**

Adjustment	Action
0" – 6"	The top of the pad has to clear the final grade 11" to min. 5"
6" – 24"	The NVE contractor shall order one extension from the original manufacturer.
Above 24"	Any extension exceeding 24" shall be subject to T & D Standards approval

9. If bottom of the manhole pad is located 1" to 24" above a final ground level, the NVE contractor shall make a concrete collar that fills the space under the outside dimensions of the pad.
10. If bottom of the manhole pad is located more than 24" above or below ground level, the proposed adjustment shall be subject to T & D Standard's approval.
11. This manhole may be installed next to sidewalks, but never under traffic areas.
 

**NOTE:** For heavy frequency traffic areas, (e.g., streets, roads, etc.) use the RS-94 manhole.

	<b>Electric Service Requirements</b>	<b>RS-98</b>								
	<b>12kV Manhole Pad: Adjacent to Public R.O.W.</b>									
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