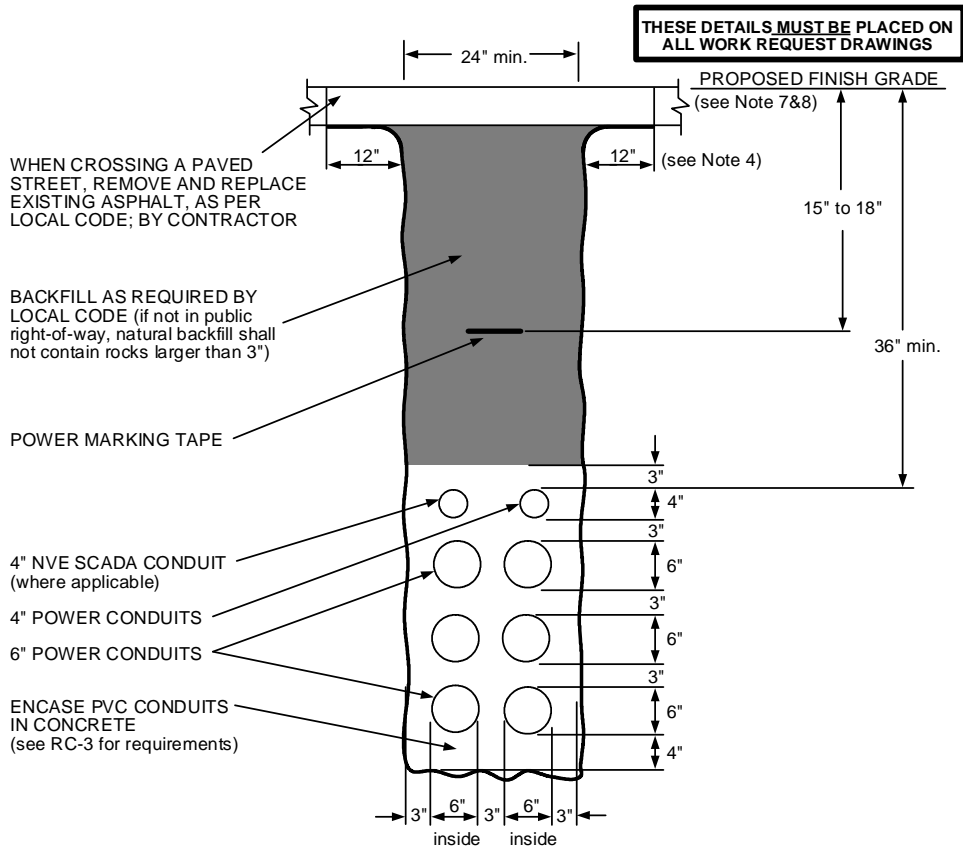



# Trenching



## NOTES:

1. See RT-G for general trenching requirements.
2. All Electric facilities will maintain 36" horizontal separation from Water, and Gas.
3. All clearances/separations from Sewer shall comply with the Clark County Water Reclamation Design and Construction Standards for Wastewater Collection Systems as last revised.
4. All non-NV Energy utility crossings shall maintain a minimum of 12" clearance from edge to edge. When running parallel with other Non-NV Energy utilities a minimum of 12" of horizontal separation from edge of conduit to edge of conduit shall be maintained.
5. Vinyl marking tape is provided as supplemental protection because NVE cannot control the final grade elevation due to possible future surface grade changes by the developer or owner.
6. Excavated material shall be placed a minimum of two feet from both edges of the trench to prevent material from falling into an open trench.
7. Proposed finish grade is to be measured from the top of the pavement/sidewalk.
8. Where the finish grade cannot be determined, the trench depth in an undeveloped area shall be determined by the NVE Inspector with a minimum trench depth of 5'.
9. Prior to installing conduit in trench, place one of the following:
  - A. A #2 stranded bare copper wire (made electrode) 100 feet in length in bottom of trench along with a 5' tail inside pad or vault.

OR

				Electric Service Requirements		<b>RT-5</b>
				<b>Main Trench Detail: Residential or Commercial</b>		
Drawn:	Eng:	Appr:	Date:			Revision: 8A
TT	RD	DA	11/14			Page 1 of 2

# Trenching

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- B. If trench is too short, place 2-50' #2 stranded bare copper wires in the incoming and outgoing trenches along with 2-5' tails in the pad or vault.

**NOTE:** Backfill #2 stranded bare copper wire with natural soil to a depth of 3" prior to placing sand backfill.

## 1. Criteria for Concrete Encasement of All Conduit Duct Banks


1. Encase with 300 psi concrete (per RC-3) all conduits installed:
  - A. Under roads
  - B. In railroad easements
  - C. In areas with potential erosion
  - D. In areas with poor compaction
  - E. In trenches with 3 or more 6-inch conduits
  - F. In locations that at the discretion of the NVE Underground Inspector(s) are required for reasons of public safety and/or NVE System reliability.
2. Encase with 3000 psi concrete (per RC-3) all conduits installed:
  - A. Within 10' of a high pressure gas line
  - B. Beneath natural or concrete lined washes and drainages
  - C. In locations that at the discretion of the NVE Underground Inspector(s) are required for reasons of safety and/or NVE reliability.
3. Encase with 300 or 3000 psi concrete (per RC-3 and 1.2.2 above) all conduit(s) steel case bores deeper than 60" and extend concrete encasement from final bore depth to standard conduit depths at each end of bore.

## 2. Criteria for Emergency Only 6" Conduit(s) Installations

1. A minimum of one (1) additional 6" emergency conduit per circuit/feeder installation is required.
2. Any additional emergency conduits are solely at the discretion of NVE designer(s).

## 3. Criteria for Future Load 6" Conduit(s) Installations

Install a 6" conduit(s) in location that at the discretion of NVE Distribution Planning are required for future load service or for reasons of system reliability.

				Electric Service Requirements		RT-5
				Main Trench Detail: Residential or Commercial		
Drawn:	Eng:	Appr:	Date:	Revision: 8A		
TT	RD	DA	11/14	Page 2 of 2		