

TYPICAL TRENCH DETAILS

ALL TRENCHES MUST BE APPROVED BY A SPPCO. FIELD REPRESENTATIVE PRIOR TO ANY CONSTRUCTION.

1. ALL TRENCHES MUST CONFORM TO THE LATEST APPLICABLE SPPCO, CITY, COUNTY, STATE, FEDERAL, AND OSHA SPECIFICATIONS AND REQUIREMENTS. IN THE CASE OF CONFLICT, THE MORE RIGID SPECIFICATION OR STANDARD SHALL APPLY.
2. NATIVE MATERIAL requires 80% compaction. Refer to SUB01X, Section 5.4.2.
3. SAND requires 90% compaction.
4. CRUSHED GRAVEL (or Type II subbase), requires 95% compaction.
5. THE TOP 18" of all trenches in ESTABLISHED HIGHWAYS, STREETS, and other PAVED AREAS subject to traffic, shall be backfilled with CRUSHED GRAVEL.
6. THE TOP 18" of all trenches on PRIVATE PROPERTY, (not subject to traffic) may be backfilled with NATIVE MATERIAL. Refer to SUB01X, Section 5.4.2.
7. NO CONDUITS SHALL BE INSTALLED ABOVE OR PARALLEL TO GAS LINES.
8. NON-METALLIC WARNING TAPE shall be placed in ALL TRENCHES at least 18" below finish grade and 12" above SPPCO pipe, or conduit.
9. ELECTRIC PRIMARY CONDUIT must be 6" minimum from side of trench. If more than one conduit is installed, maintain a 1-1/2" separation from each electric conduit.
10. ELECTRIC SECONDARY/SERVICE CONDUIT must be 2" minimum from side of trench. If more than one conduit is installed, maintain a 1-1/2" separation from each electric conduit.
11. ELECTRIC SERVICE CONDUIT OR SECONDARY ONLY CONDUIT shall have a minimum trench depth of 48".
12. ELECTRIC PRIMARY AND SECONDARY CONDUIT (if installed in same trench) SHALL



ENGINEERING & CONSTRUCTION STANDARD

SECTION 3 STAKING AND TRENCHING

**TYPICAL TRENCH
DETAIL**

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TE0003

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GD	JF	KT	5/98	7/06

HAVE MINIMUM TRENCH DEPTH OF 60", and maintain a minimum 12" radial clearance from all other utilities (see Drawings, Sheets 3 and 4). **Exception: DB REFURBISHMENT, WATER MAIN, SEWER AND STORM DRAIN**

a. Exceptions/deviations to these trench requirements may be appropriate to areas outside the Truckee Meadows service area. Any deviation must be approved by the appropriate local SPPCO Inspector.

- 13. GAS shall be 12" minimum from side of trench.
- 14. GAS SHALL HAVE MINIMUM DEPTH TO TOP OF PIPE OF: 36" in State Highways; 30" in streets or roadways; 24" in private property; and maintain a minimum 12" radial clearance from all other utilities. **Exceptions: SEWER AND STORM DRAIN**
- 15. SEWER (SS) and/or STORM DRAIN (SD) MUST MAINTAIN 2' RADIAL CLEARANCE FROM SPPCO. ELECTRIC/GAS. If 2' radial clearance cannot be obtained from electric, the electric conduit must be concrete encased at least 18" each side of conflicting utility. Refer to TE0004U for details. Gas must NOT be concrete encased.
- 16. ELECTRIC (E) MUST MAINTAIN 2' RADIAL CLEARANCE FROM WATER MAIN. If 2' radial clearance cannot be obtained, electric conduit must be concrete encased at least 18" each side of conflicting utility
- 17. Whenever possible, locate hydrant on opposite side of street from electric main trench. Refer to TE0045U for details.
- 18. If field changes are required, all changes must be approved by a SPPCO Inspector.



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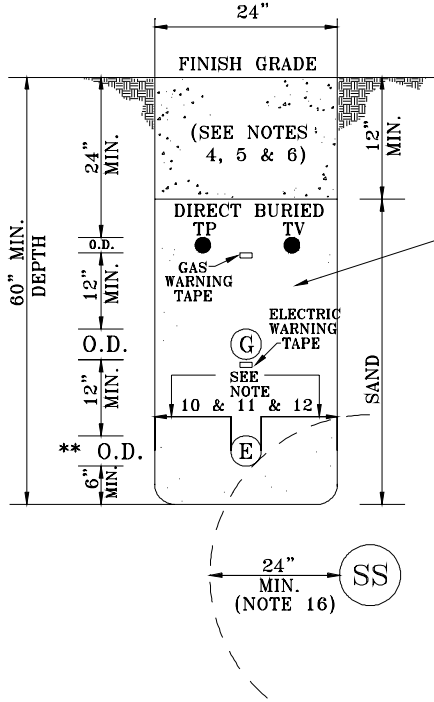
SECTION 3 STAKING AND TRENCHING
**TYPICAL TRENCH
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SHEET 27 OF 37

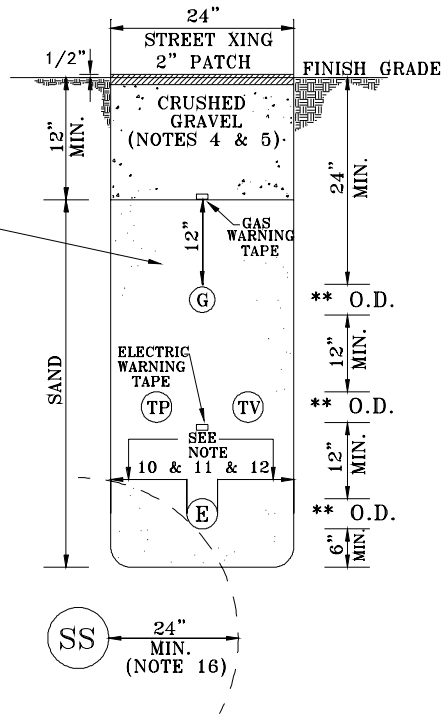
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TYPICAL TRENCH DETAIL SERVICE



ELECTRIC, GAS AND DIRECT BURIED T.V. & CABLE SERVICE TRENCH



ELECTRIC, GAS, T.V. AND CABLE SERVICE TRENCH

ENGINEERING NOTES:

- A. IF UTILITIES SHOWN ON THIS SHEET ARE NOT IN A JOINT TRENCH AS SHOWN, RAISE TRENCH DEPTHS AND COMPLY WITH MINIMUM DEPTHS AND CLEARANCES AS SHOWN.
- B. ALL TRENCHES MUST BE APPROVED BY SPPCO. PRIOR TO ANY CONSTRUCTION.
- C. IN SOME CASES, GAS SERVICES MAY BE RUN WITH ELECTRIC PRIMARY. IN THESE CASES, A 2'-0" SEPARATION SHALL BE MAINTAINED BETWEEN ELECTRIC AND GAS. ALSO, A SPECIAL LINE TYPE SHALL BE USED ON THE DESIGN DRAWING AS WELL AS ON THE DISTRIBUTION MAP INDICATING THAT "ELECTRIC PRIMARY IS BENEATH THE GAS SERVICE LINE".

UTILITY DESIGNATION AND LEGEND

- | | |
|-------------------------|---------------------------|
| (TP) TELEPHONE | (W) WATER |
| (TV) TELEVISION CABLE | (E) ELECTRIC |
| (G) GAS | (SS) SEWER OR STORM DRAIN |
| ** IN CONDUIT | ● DIRECT TP |
| (O.D.) OUTSIDE DIAMETER | ● DIRECT TV |



ENGINEERING & CONSTRUCTION STANDARD

SECTION 3 STAKING AND TRENCHING

**TYPICAL TRENCH
DETAIL**

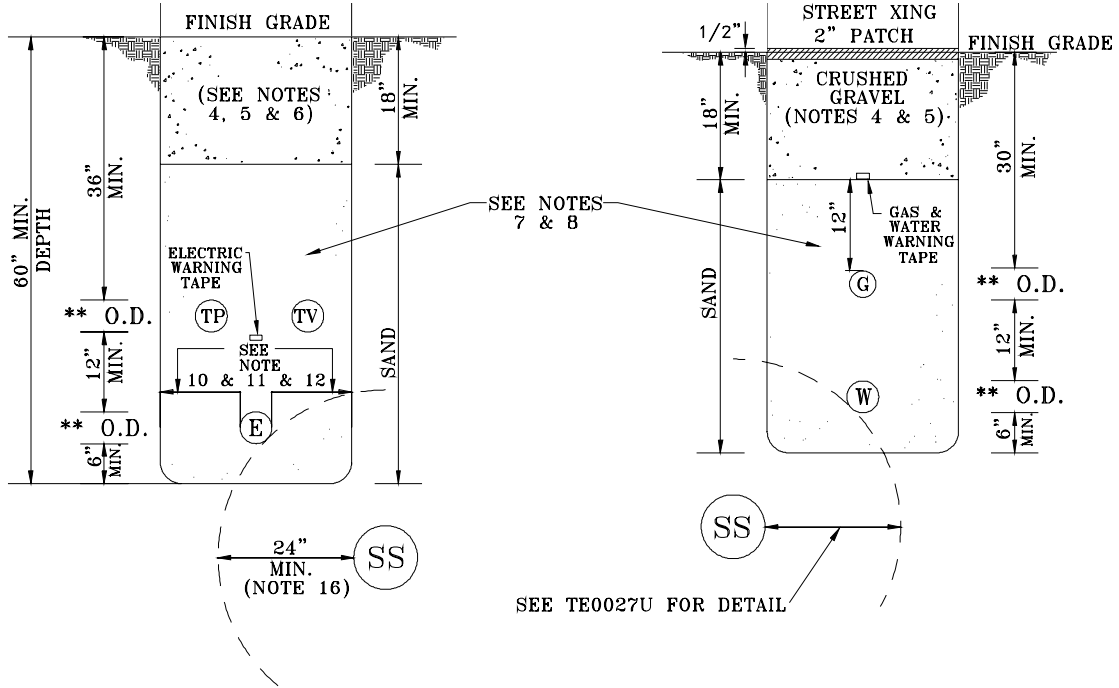
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TYPICAL TRENCH DETAIL MAIN



ELECTRIC PRIMARY OR
SECONDARY TRENCH

GAS & WATER MAIN TRENCH

ENGINEERING NOTES:

- A. IF UTILITIES SHOWN ON THIS SHEET ARE NOT IN A JOINT TRENCH AS SHOWN, RAISE TRENCH DEPTHS AND COMPLY WITH MINIMUM DEPTHS SHOWN.
- B. ALL TRENCHES MUST BE APPROVED BY SPPCO. PRIOR TO ANY CONSTRUCTION.

UTILITY DESIGNATION AND LEGEND

- | | |
|-------------------------|---------------------------|
| (TP) TELEPHONE | (W) WATER |
| (TV) TELEVISION CABLE | (E) ELECTRIC |
| (G) GAS | (SS) SEWER OR STORM DRAIN |
| ** IN CONDUIT | ● DIRECT TP |
| (O.D.) OUTSIDE DIAMETER | ● DIRECT TV |



ENGINEERING & CONSTRUCTION STANDARD

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SECTION 3 STAKING AND TRENCHING

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