

TYPICAL TRENCH DETAILS

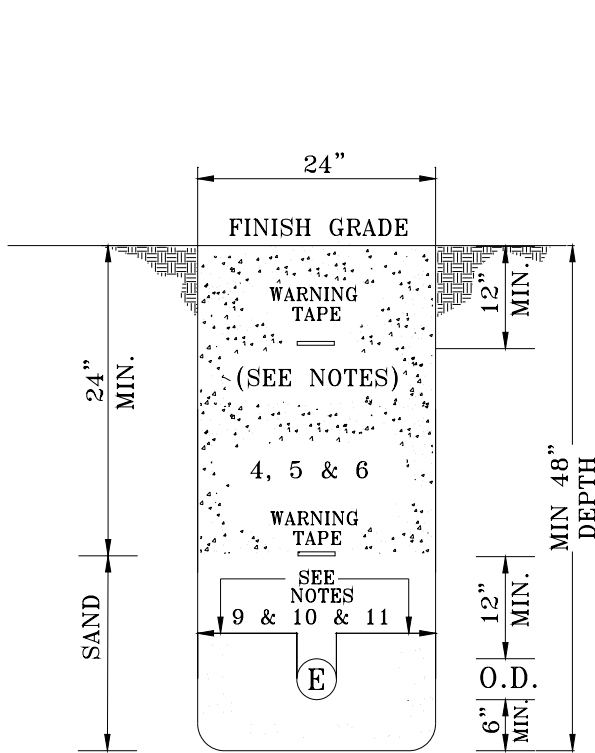
ALL TRENCHES MUST BE APPROVED BY SPPC FIELD REPRESENTATIVE PRIOR TO ANY CONSTRUCTION.

1. ALL TRENCHES MUST CONFORM TO THE LATEST APPLICABLE SPPC, CITY, COUNTY, STATE, FEDERAL, AND OSHA SPECIFICATIONS AND REQUIREMENTS. IN THE CASE OF CONFLICT, THE MORE RIGID SPECIFICATION OR STANDARD SHALL APPLY. Refer to TE0001U, Section 6.0 for environmental requirements.
2. NATIVE MATERIAL requires 80% compaction. Refer to SUB01X, Section 5.4.2.
3. SAND requires 90% compaction.
4. TYPE II aggregate base, 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 TYPE II base.
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. NONMETALLIC RED WARNING TAPE will be 6" wide, marked "SPPC Utilities Buried Below" and shall be placed in ALL TRENCHES at least 18" below finish grade and 12" above SPPC 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 PRIMARY OR ANY JOINT TRENCH SHALL HAVE A MINIMUM TRENCH DEPTH OF 60", and maintain a minimum 12" radial clearance from all other utilities (See Sheets 31 and 32). Exception: DB REFURBISHMENT, AND WATER.

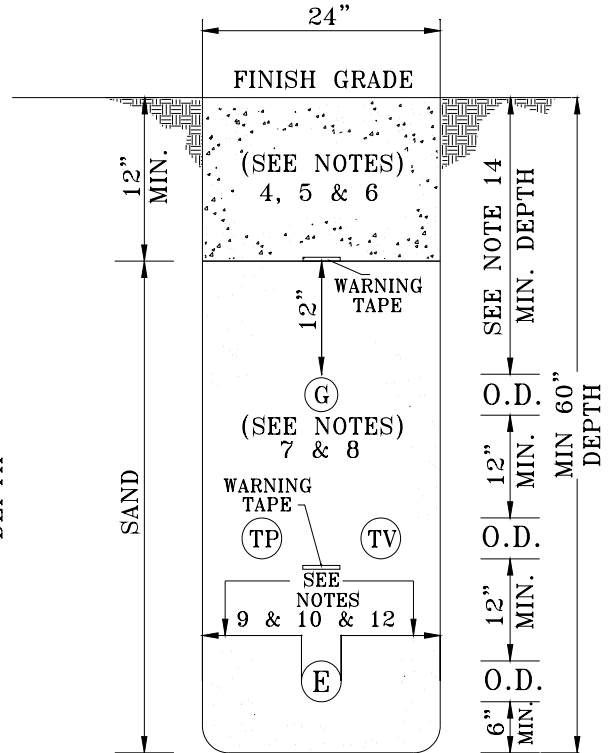
					ENGINEERING & CONSTRUCTION STANDARD	SHEET <u>31</u> OF <u>50</u>
TYPICAL TRENCH DETAILS					VOLUME <u>17</u>	
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12. ELECTRIC ONLY CONDUIT, SERVICE/SECONDARY shall have a minimum trench depth of 48".
 - a. Exceptions/deviations to these trench requirements may be appropriate. Any deviation must be approved by the appropriate local authority if applicable, and the SPPC 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.
15. WET FACILITIES, (SEWER / STORM DRAIN), must maintain a 1' radial clearance from SPPC Gas or Electric facilities. Note: Conflicts of wet service crossings will maintain a 1' clearance or reduced clearances will be handled according to 17 below or 12-a above.
16. SS/SD Sanitary Sewer/Storm Drain shall not occupy the same common trench as gas or electric and will be separated by virgin soil during parallel installations.
17. ELECTRIC MUST MAINTAIN 1' RADIAL CLEARANCE FROM ALL FACILITIES. If 1' radial clearance cannot be obtained, electric conduit must be concrete encased for at least 18" each side of conflicting utility, or electric facilities will be protected by means of rigid galvanized steel conduit. This will be done by using pvc to rigid steel transition fittings with rigid steel extending at least 4' each side of conflict. Note: SPPC's Inspector will provide determination of application to resolve conflict. EXCEPTION: WATER MAINS WILL MAINTAIN 2' RADIAL CLEARANCE FROM ALL ELECTRIC FACILITIES.
18. Whenever possible, locate hydrant on opposite side of street from electric main trench. Refer to TE0045U for details.
19. If field changes are required, all changes must be approved by a SPPC Inspector.

TYPICAL SERVICE TRENCH DETAILS



TYPICAL SECONDARY / SERVICE TRENCH ELECTRIC ONLY



TYPICAL SERVICE TRENCH JOINT TRENCH APPLICATION

ENGINEERING NOTES:

- A. If utilities on this sheet are not in a joint trench as shown, raise trench depths and comply with minimum depths and clearances referenced in Typical Trench Details 1-19.
- B. All trenches must be approved by SPPC prior to any construction.
- C. In some cases, Gas Services may be run with electric primary. A special line type shall be used on the design drawings as well as on the distribution map indicating that electric primary is below the gas service line.

UTILITY DESIGNATION AND LEGEND

- (TP)** TELEPHONE **(W)** WATER
- (TV)** CABLE TV **(E)** ELECTRIC
- (G)** GAS

(O.D.) OUTSIDE DIAMETER

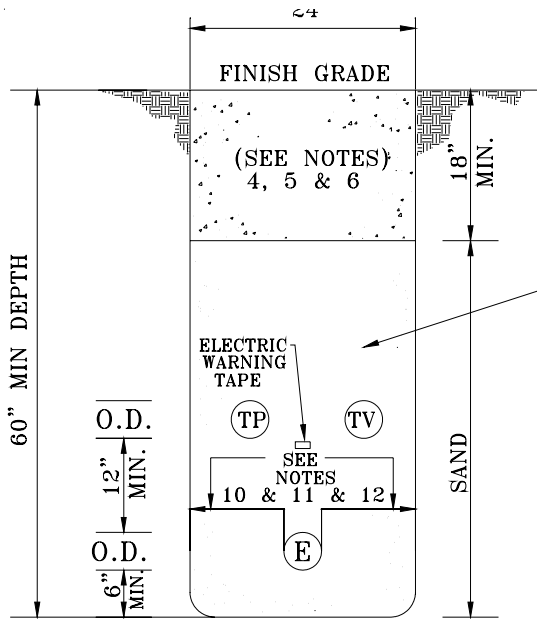
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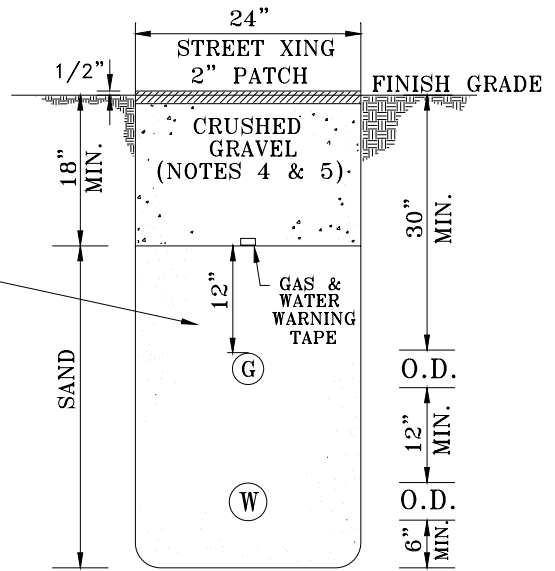
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TYPICAL MAIN TRENCH DETAILS



TYPICAL PRIMARY OR SECONDARY TRENCH



TYPICAL GAS AND WATER MAIN TRENCH

ENGINEERING NOTES:

- A. If utilities on this sheet are not in a joint trench as shown, raise trench depths and comply with minimum depths and clearances referenced in Typical Trench Details 1-19.
- B. All trenches must be approved by SPPC prior to any construction.

UTILITY DESIGNATION AND LEGEND

- (TP) TELEPHONE (W) WATER
- (TV) CABLE TV (E) ELECTRIC
- (G) GAS

(O.D.) OUTSIDE DIAMETER



ENGINEERING & CONSTRUCTION STANDARD

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VOLUME 17

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