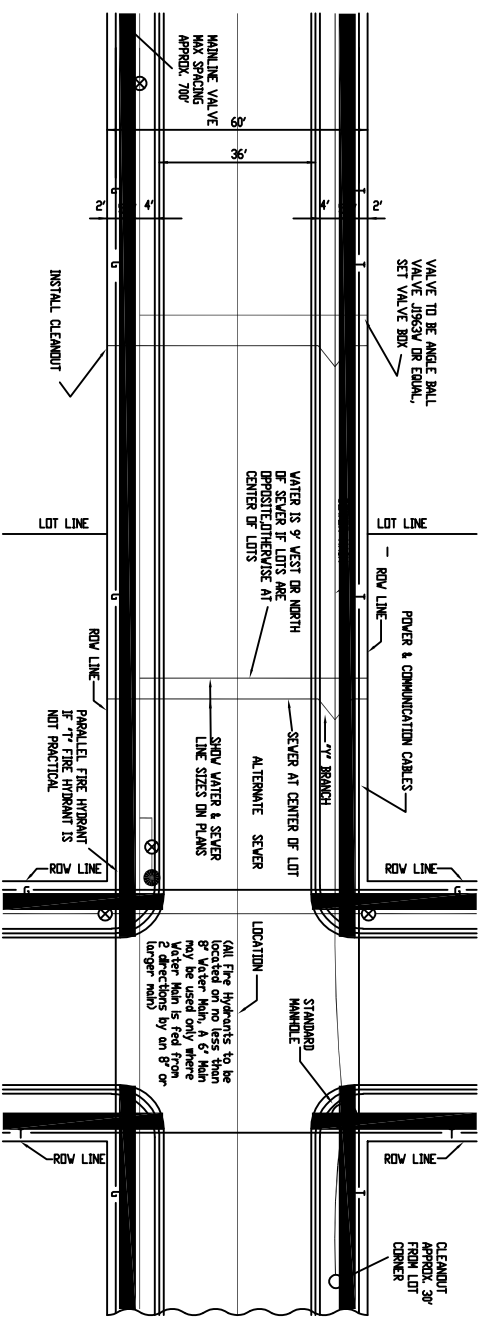
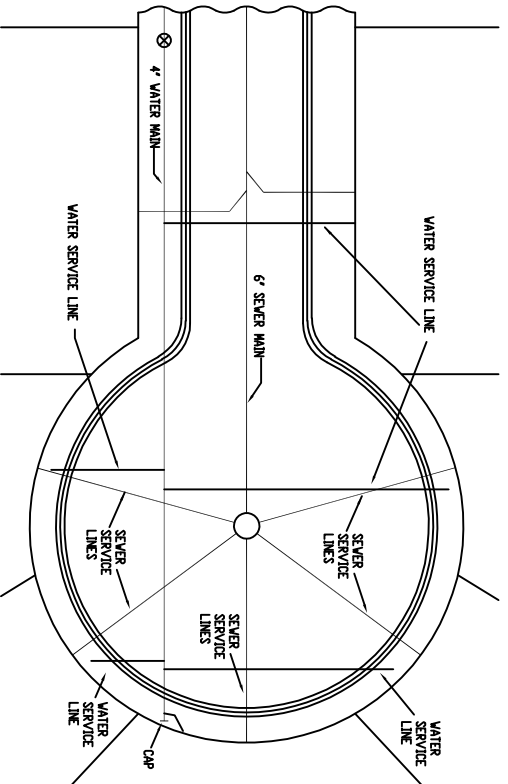


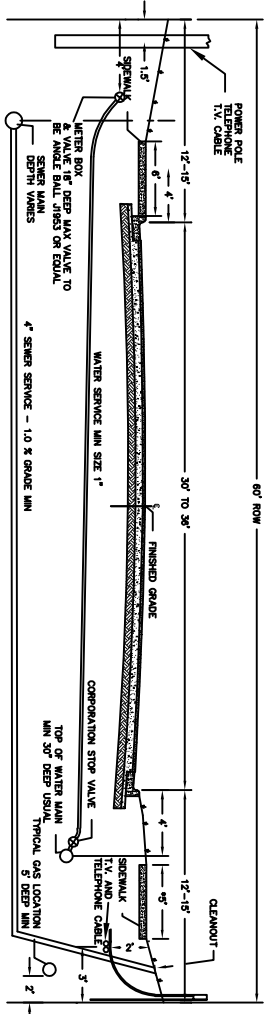
1. TELEPHONE SERVICE LINES WILL BE 24" DEEP WHEN INSTALLED ALONG WITH CABLE. WHEN INSTALLED AFTER CABLE OR GAS MAIN IS IN PLACE IT WILL BE LAID ABOVE GAS AND WATER MAINS.
2. ALL DIMENSIONS ARE REFERENCED TO ALLEY ROW OR CENTERLINE OF ALLEY.
3. LOCATION TOLERANCE WILL BE 6" IN EITHER DIRECTION HORIZONTALLY. ANY DEVIATION IN EXCESS OF ABOVE SHOULD BE AUTHORIZED BY THE CITY ENGINEER.
4. SANITARY SEWER MAINS WILL BE INSTALLED FIRST AND HAVE PRIORITY OVER OTHER UTILITIES BECAUSE OF GRADE REQUIREMENTS.
5. ALLEYS WILL NORMALLY BE EXCAVATED BELOW NATURAL GROUND FOR DRAINAGE PURPOSES.
6. T.V. CABLE MAY BE IN THE SAME DITCH AS TELEPHONE CABLE.
7. UTILITIES COMPANY WILL CHECK WITH CITY ENGINEER FOR ALLEY GRADES.
8. DEPTH DIMENSIONS WILL APPLY TO STREETS AS WELL. FOR LOCATIONS OF UTILITIES SEE STANDARDS FOR STREET IN COMBINATION WITH THIS STANDARD.



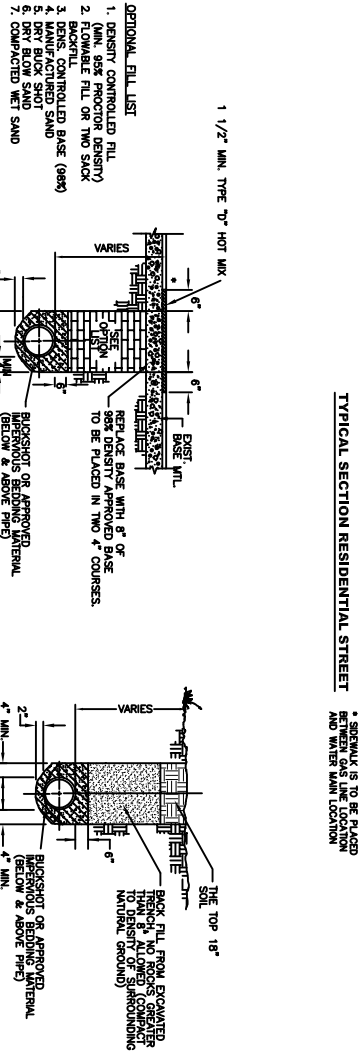
STANDARD LOCATIONS ASSIGNED FOR UTILITIES IN CITY STREETS
PLAN VIEW



TYPICAL UTILITIES PLACEMENT IN CUL DE SAC
PLAN VIEW



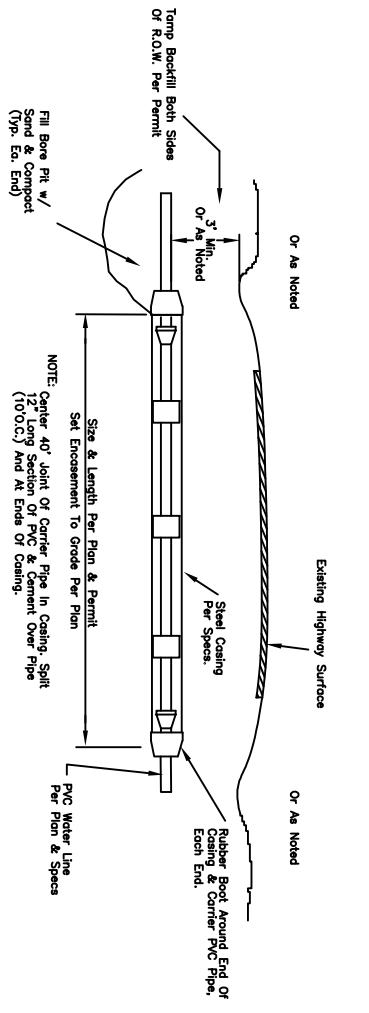
TYPICAL SECTION RESIDENTIAL STREET



CITY OF ABILENE APPROVED DESIGN

ALL PAVEMENT ROADWAYS, ALLEYS, DRIVEWAYS AND ALL AREAS INSIDE THE CITY ROW, OR AS DIRECTED BY THE ENGINEER.

OUTSIDE ROADWAYS, RURAL AREAS AND UNDEVELOPED AREAS (NON ROADWAY AREAS)



TYPICAL HIGHWAY CROSSING ENCASEMENT FOR PVC PIPE

NOTE: Short side water service to be located and tapped by Water Department Personnel. Contractor shall install short side sewer tap, sewer service line and water service line during initial construction phase prior to installation of base course

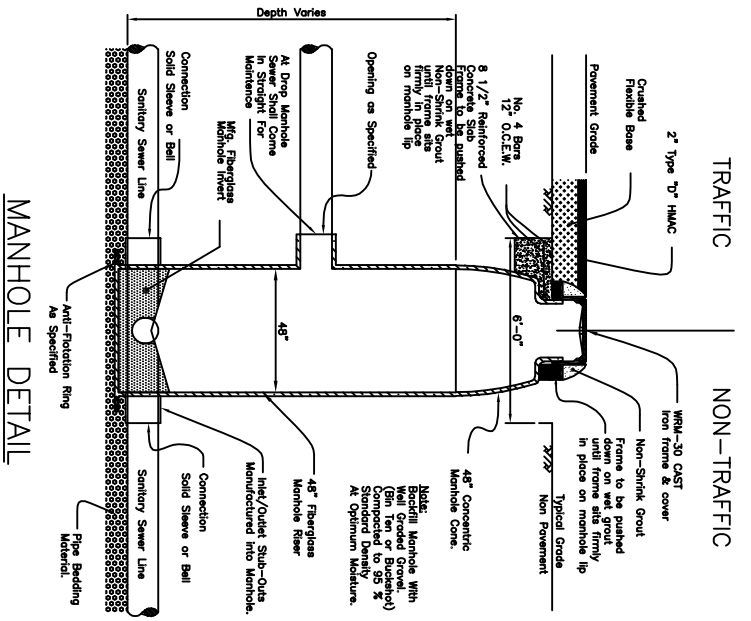
(A) GENERAL NOTES

- (1) Construction Plans: All sewer Plans or any changes in Plans shall be approved by the Director of water Utilities or designated representatives before any construction begins on a project.
- (2) Sequence of work: The Contractor shall not move any equipment or materials on to the job site until the streets are rough cut and fill operations are completed, unless prior approval is obtained from the Engineer.
- (3) Trenching: All pipe trenches shall have a minimum width of 4 inches from the outside diameter of the pipe. Trench shall have a width adequate for proper bedding.
- (4) Pipe Deflection: No pipe shall be curved or deflected greater than the maximum specified by the pipe manufacturer.
- (5) Backfilling and Jetting: After pipe has been inspected and approved by the Inspector, backfilling operations may begin. The Contractor shall provide adequate cover over the pipe before the trench is wheel loaded. Any trench less than three feet wide shall require Class I embankment above the pipe. Class I backfill is required for all traffic areas to subgrade. When jetting is required, jetting may be begun as soon as water is available, and the Contractor will be billed for the water used at the prevailing rates.
- (6) Inspection and Repairs: The Contractor shall notify the Inspector at least one day in advance before starting any new project, and any time a project is temporarily suspended, the Contractor shall give the Inspector reasonable notice when the construction is resumed. Failure to properly notify the Inspector may result in the City not accepting the work, whereupon the Contractor may be required to expose portions of the improvements to verify grade and/or compaction.
- (7) Field Changes to be authorized by Designated Water Dept. Personnel.

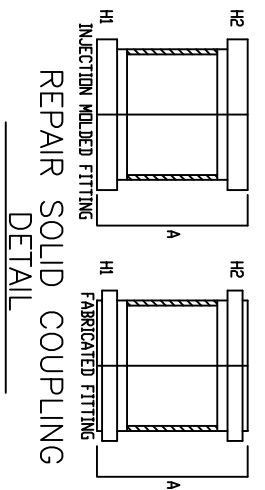
SEWER LINES

Material: All PVC gravity flow pipe 4 inches - 18 inches and fittings shall conform to the latest revisions of A.S.T.M. 3034, A.S.T.M. F789, A.S.T.M. F794. All pipe shall be properly marked for field identification.

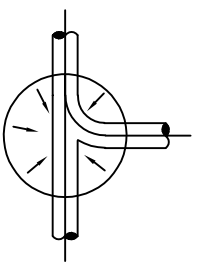
Manholes: All manholes to be installed according to City of Abilene specifications. (See detail)



MANHOLE DETAIL



REPAIR SOLID COUPLING
DETAIL



MANHOLE INVERT
DETAIL


TYPICAL SEWER SERVICE

4" SIR-35 sewer service on 12" minimum grade

8' or 6' x 4' sanitary tee

Low end of service to be a minimum of 3 inches and a maximum of 5 inches above flow line of main

Ends of all sewer services to be wrapped with green tracer tape and backfilled with 2 feet of tape on top of ground.



CITY OF ABILENE, TEXAS
WATER DEPARTMENT
SEWER STANDARDS & UTILITIES PLACEMENT

DATE: Dec. 2013
NO. 1

DATE REVISIONS: SHEET NO. 1