

5. Service line connections shall be made of the same material as the major sewer line to which they are connected. All service line shall be 4" in diameter unless noted otherwise on the plans. Polyvinyl chloride (PVC) service pipe shall be as specified for PVC pipe in Paragraph 1. above.

E. MANHOLES AND CASTINGS - GENERAL:

1. Manholes shall be precast concrete manholes and shall be located as shown on the drawings. All manholes shall be 48" inside diameter unless noted otherwise, and shall be installed level, true and plumbed.
2. Where the difference in the invert elevation of two or more sewers intersecting in one manhole is more than 2'-0", a drop manhole shall be constructed. Drop manholes shall be similar in construction to the standard manhole except that a drop connection of pipe and fittings of the proper size and material shall be constructed outside the manhole as detailed on the drawings. Where a sanitary sewer force main connects to an existing or proposed manhole, an exterior drop connection shall be constructed as detailed in the plans. Inside all manholes, all exposed surfaces (including bottom of top slab) shall be lined with a protective coating manufactured by Spectrashield. These linings shall be applied in strict accordance with the manufacturer's recommendations by a certified installer. All concrete shall be sufficiently cured to prevent gaseous formation behind the liner per the liner manufacturer's specifications. All manholes shall be thoroughly prepared, cleaned, dry and free from all mill-scale, rust, grease, dirt and other foreign matter to assure proper adhesion/installation of the liner. Liners shall be shown, labeled, and dimensioned on the shop drawings submitted for approval to the Engineer.
3. Where the difference in invert elevation of two or more sewers intersecting in one manhole is less than 2', the invert shall be filleted to prevent deposition of solids.
4. Payment for manholes will include excavation, tops, covers, floor, barrel, steps, false sloped floor, invert channels, weirs, orifices, linings and other accessories such as supports to connecting pipes, future connections and their channels, flexible joint-pipe to manhole. Payment shall be made at the unit price bid per each as stated in the Bid Schedule.
5. Pipe to manhole connection shall be made with a mechanically compressed flexible joint system. The joint system shall consist of an internal expanding band which clamps and seals a neoprene boot to opening in wall of manhole and an external band which contracts around