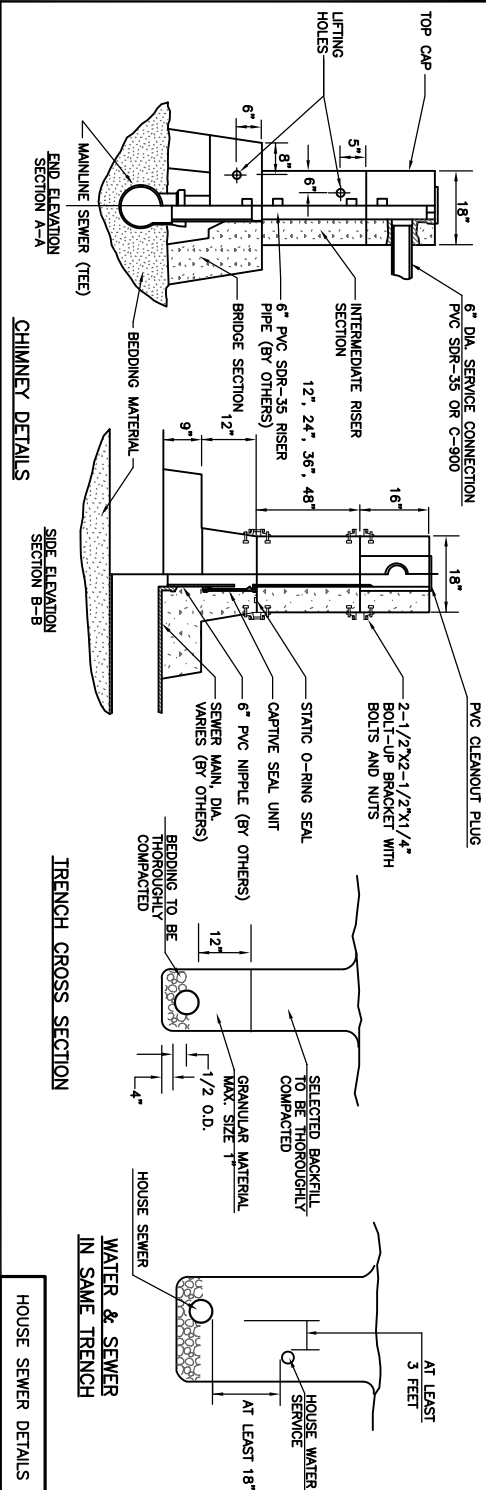
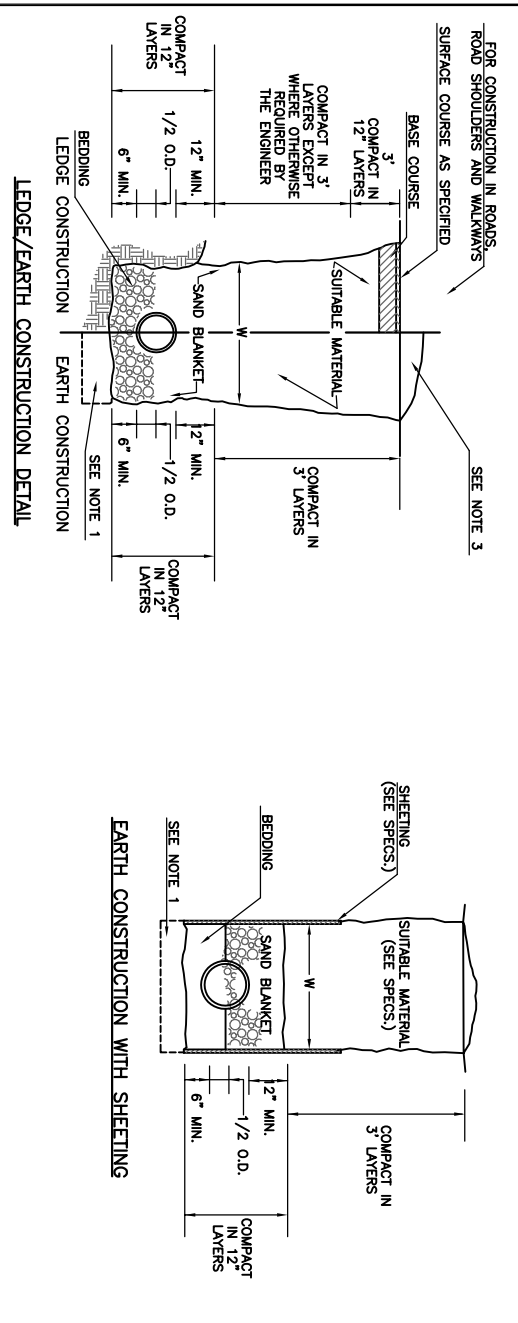


NOTE: MINIMUM SIZE PIPE FOR HOUSE/BUILDING SERVICES SHALL BE SIX (6) INCHES



HOUSE SEWER DETAILS



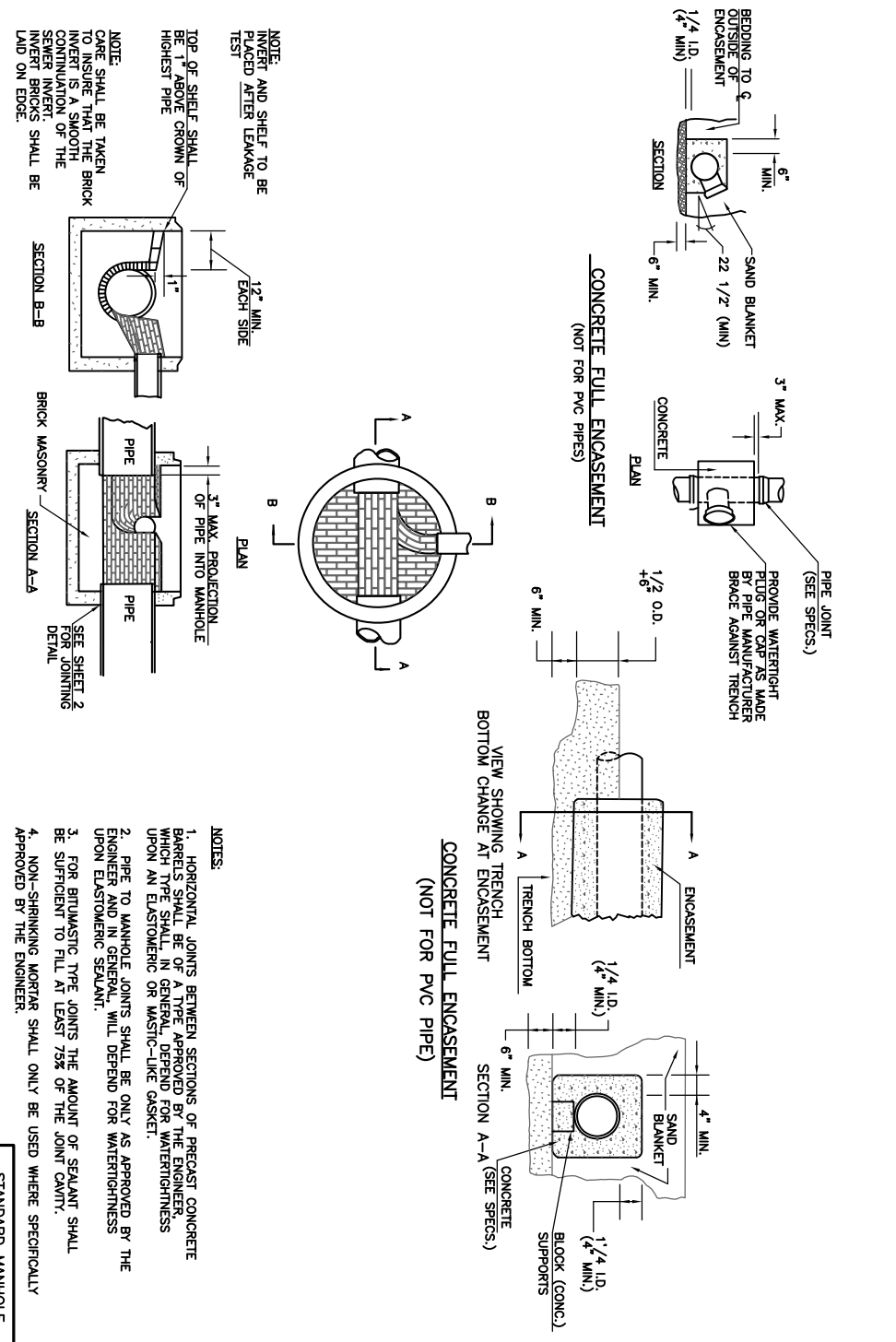
STANDARD TRENCH DETAILS

**RECORD DRAWING!**

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, RECORDS PROVIDED BY THE RESIDENT, ENGINEER AND THE CONTRACTOR, ALL WORK SHOWN ON THIS DRAWING HAS BEEN COMPLETED AS SHOWN.  
 HOYLE, TANNER & ASSOCIATES, INC.

**NOTE:**

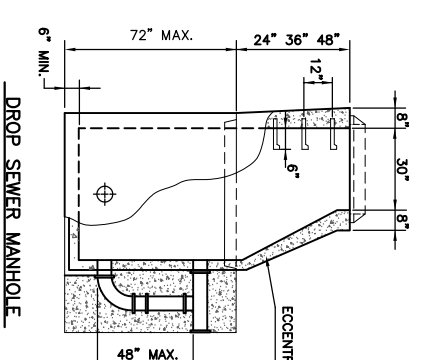
ALL PROJECT REQUIREMENTS AS SET FORTH ON THIS SHEET HAVE BEEN REVIEWED AND FOUND TO BE IN ACCORDANCE WITH THE NOTE WORDING CONTAINED HEREON IS UNDERSTOOD TO BE PAST TENSE.



STANDARD MANHOLE DETAILS

**NOTES:**

- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARS SHALL BE OF A TYPE APPROVED BY THE ENGINEER.
- PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON ELASTOMERIC SEALANT.
- FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
- NON-SHRINKING MORTAR SHALL ONLY BE USED WHERE SPECIFICALLY APPROVED BY THE ENGINEER.



**DROP SEWER MANHOLE**

**NOTES:**

- JOINT SEALANT SHALL BE PREFORMED BUTYL RUBBER MASTIC TYPE SEANT THAT COMPLETS WITH MANHOLE SECTION 1188 SYNTHETIC RUBBER GASKET THAT COMPLETS WITH ASTM C443 OR C361.
- DROP SECTION OF MANHOLE IS CAST MONOLITHICALLY WITH BASE & MINIMUM ACCOMMODATES UP TO 8" PVC SDR-35.
- REINFORCING ASTM A193 AREA 0.12 SQ. IN./VERT. FT. REINFORCING IN BOTH BELL & SPIGOT.
- CONCRETE COMPRESSIVE STRENGTH 4000 PSI. TYPE II CEMENT.
- ALUMINUM OR COPOLYMER POLYPROPYLENE PLASTIC MANHOLE STEPS COMPLIANT WITH OSHA REGULATION 29 CFR 1910.27 AND SECTION 11 ASTM SPECIFICATION C478.
- THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS OF PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE, WITH OR WITHOUT REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (14-20 TONS) WITHOUT FAILURE AND COMPLETELY UNDEFORMED. THE MANHOLE SHALL BE INSTALLED ON A FIRM, UNSETTLING, AND UNCOMPRESSIBLE FOUNDATION. THE MANHOLE SHALL BE INSTALLED ON A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
- INVERTS AND SHELTERS. MANHOLES SHALL HAVE A BRICK PAVED SHELF AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES. THE JOINTS SHALL BE OF A TYPE APPROVED BY THE ENGINEER. THE JOINTS SHALL BE OF A TYPE APPROVED BY THE ENGINEER. THE JOINTS SHALL BE OF A TYPE APPROVED BY THE ENGINEER. THE JOINTS SHALL BE OF A TYPE APPROVED BY THE ENGINEER.
- STANDARD MANHOLE. IN LIEU OF A CONE SECTION, WHEN MANHOLE SHALL BE USED, WHERE INDICATED, MANHOLE SHALL BE INSTALLED ON A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.