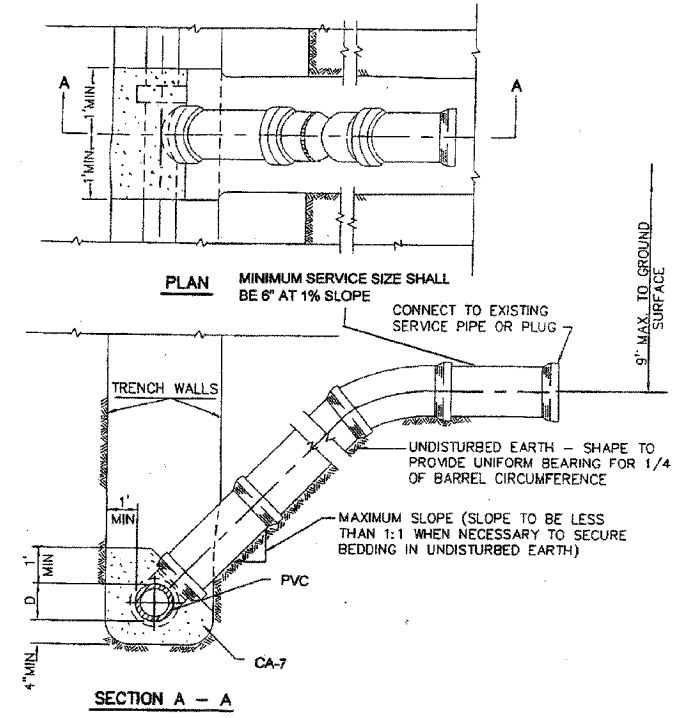
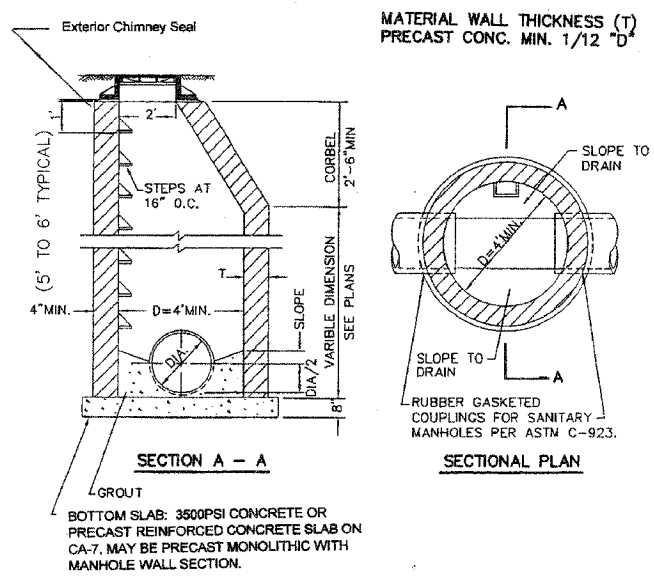


RISER FOR SERVICE LATERAL LESS THAN 20' DEEP



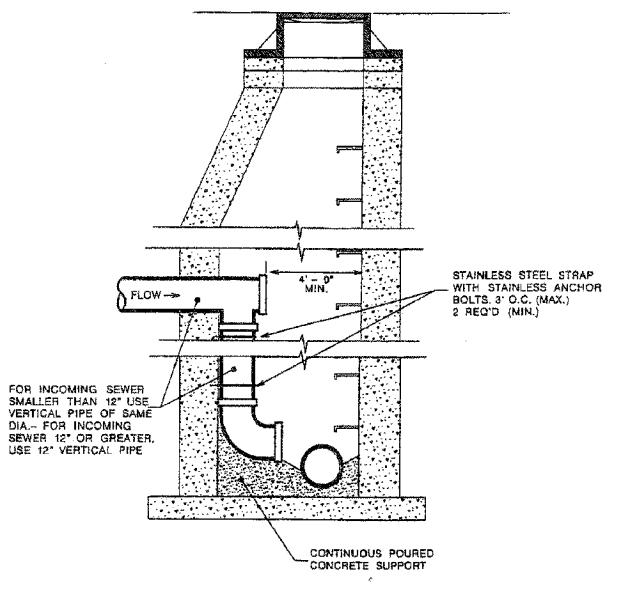
NOTE: RISERS TO BE CONSTRUCTED IN LIEU OF WYES WHERE SEWER DEPTH EXCEEDS 12'-0\"/>

SANITARY MANHOLE TYPE A



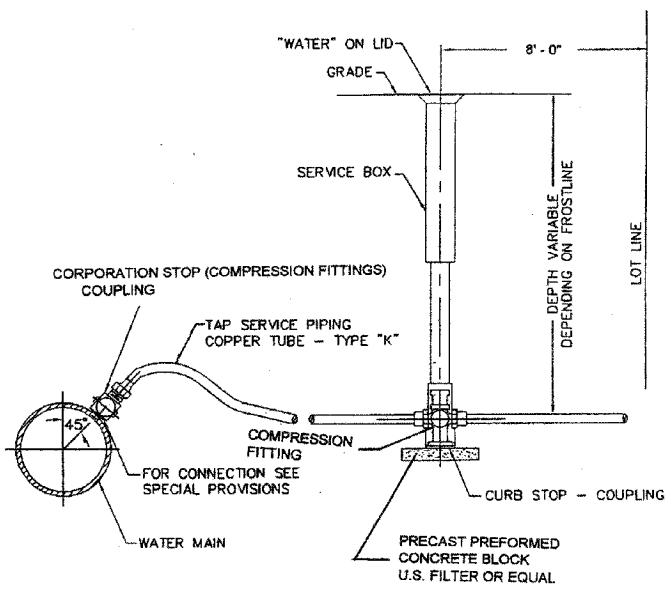
BOTTOM SLAB: 3500PSI CONCRETE OR PRECAST REINFORCED CONCRETE SLAB ON CA-7, MAY BE PRECAST MONOLITHIC WITH MANHOLE WALL SECTION.

INTERNAL DROP CONNECTION

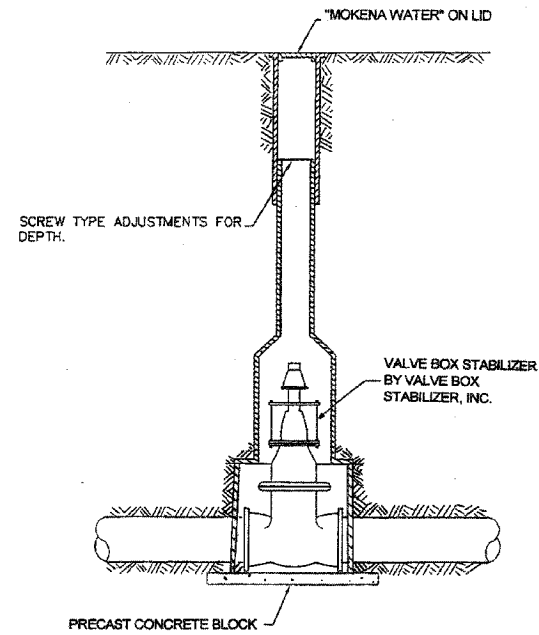


NOTE: TO BE USED IN CONJUNCTION WITH TYPE \"A\" MANHOLES WHERE SEWER ENTERS 2'-0\"/>

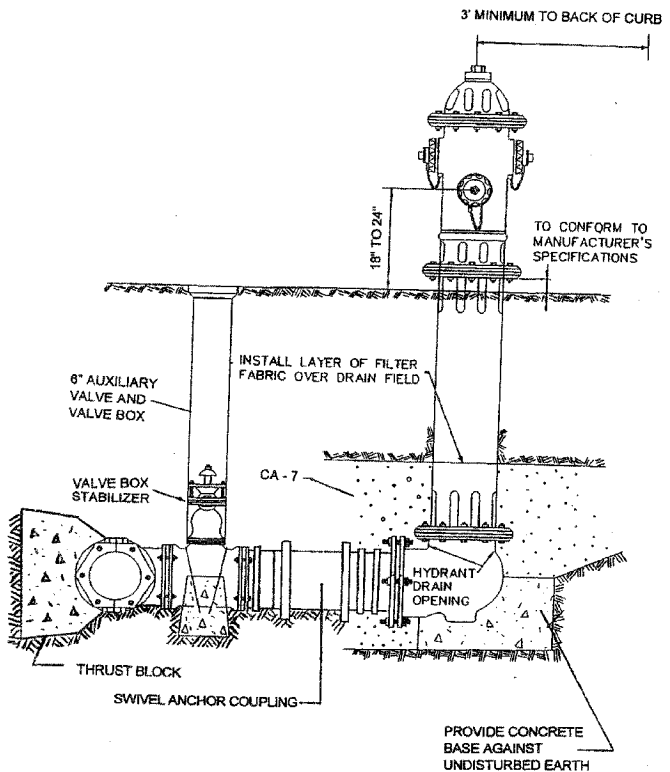
SERVICE TAP 2\"/>



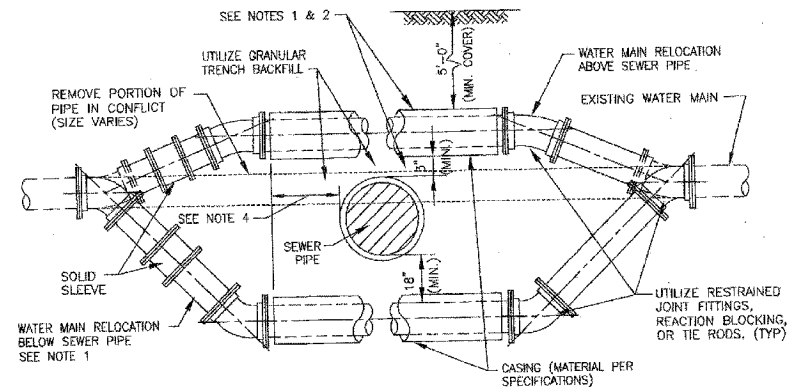
VALVE BOX INSTALLATION



TYPICAL HYDRANT INSTALLATION



NOTE: CONCRETE BASE AND BLOCKING MATERIAL SHALL NOT BLOCK NOR OBSTRUCT HYDRANT DRAIN AS SHOWN IN AWWA MANUAL M 17



1. ONLY TO BE USED IF WATER MAIN CANNOT CROSS ABOVE PROPOSED SEWER AND MAINTAIN THE REQUIRED 18\"/>
2. WHEN WATER MAIN CROSSES ABOVE SEWER AND MAINTAINS THE REQUIRED 18\"/>
3. WATER MAIN RELOCATIONS ARE SUBJECT TO INSPECTION AT NORMAL SYSTEM PRESSURE BEFORE BURIAL.
4. USE ONLY 45 DEGREE BENDS UNLESS OTHERWISE PERMITTED BY THE ENGINEER.
5. CASING MUST EXTEND A MINIMUM OF 10 FEET BEYOND OUTSIDE EDGE OF SEWER PIPE - ON BOTH SIDES OF SEWER.

WATER MAIN RELOCATION - DUCTILE IRON
NO SCALE

PLOT DATE: Dec. 22, 2005 - 9:07 AM
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