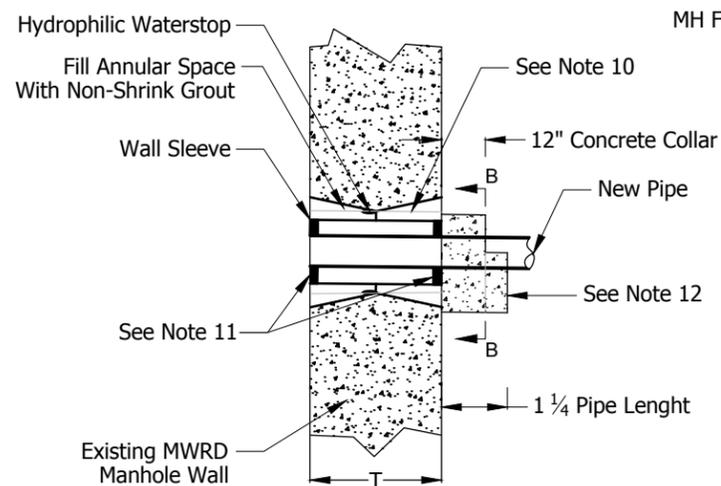
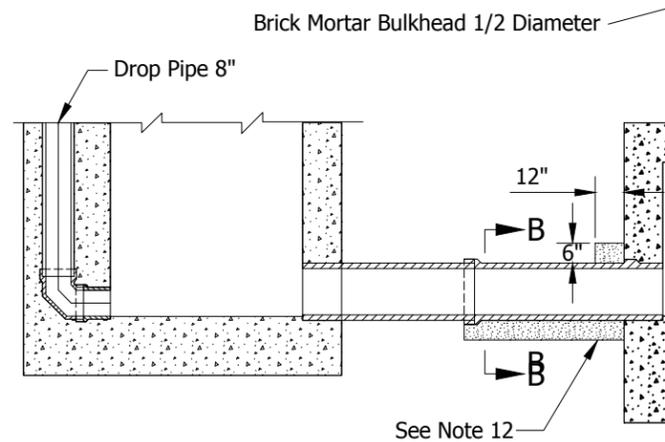


Detailed plans drawn to scale with appropriate notes, must be included with the permit application.

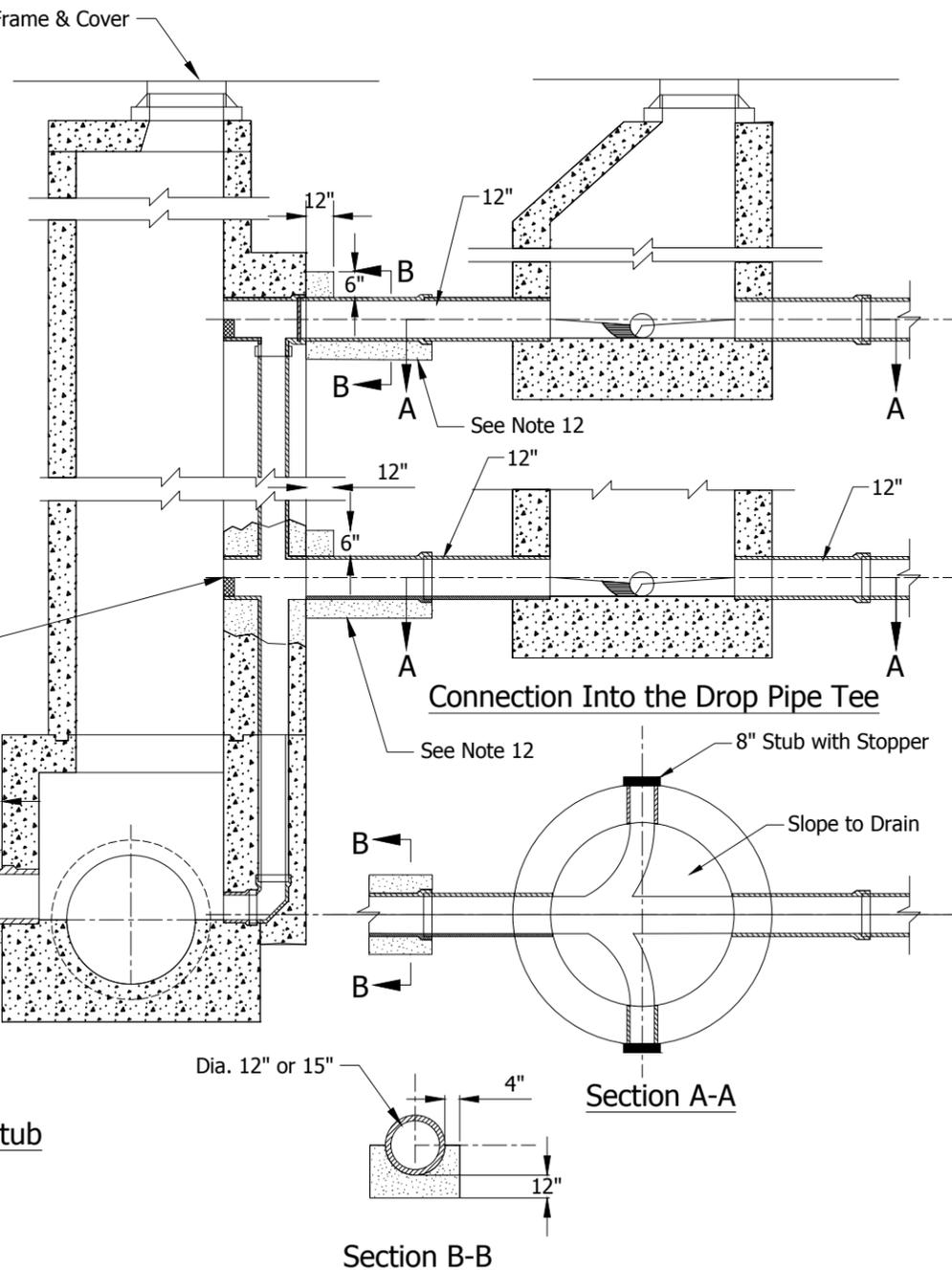


**Connection Directly to Manhole without Stub**



**Connection to Manhole with Stub**

**Connection Into the Drop Pipe Tee**



**NOTES:**

1. A MANHOLE SHALL BE PROVIDED ON THE LOCAL SEWER ADJACENT TO THE DISTRICT MANHOLE AND WITHIN THE ROW PARALLEL TO THE DISTRICT INTERCEPTOR. CLEAR SPACE BETWEEN MANHOLES SHALL NOT BE LESS THAN 3 FEET AND MORE THAN 10 FEET. CONNECTIONS WILL NOT BE PERMITTED AT LOCATIONS WHERE EXISTING DISTRICT MANHOLES ARE NOT PROVIDED. MANHOLE SHALL HAVE A MINIMUM DIAMETER OF 48 INCH. DROP MANHOLES SHALL BE PROVIDED WHERE NEEDED. TWO BULKHEADED STUBS OF MINIMUM 8-INCH DIAMETER SHALL BE PROVIDED.
2. CONNECTION SEWER SHALL BE EXTRA STRENGTH VITRIFIED CLAY PIPE OF THE SAME SIZE AS EXISTING TEE OR STUB. CONNECTION PIPE SHALL BE PROVIDED WITH CONCRETE COLLAR AT THE DISTRICT MANHOLE, AND A CONCRETE CRADLE FOR AT LEAST 1 1/4 PIPE LENGTH, AS SHOWN. STRUCTURAL GRADE CONCRETE WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI SHALL BE USED.
3. WHEN MAKING A CONNECTION TO A DISTRICT MANHOLE WHERE A STUB IS NOT PROVIDED, A HOLE SHALL BE CORE-DRILLED AT THE SPRINGLINE. HOLE DIAMETER SHALL BE NO MORE THAN ONE INCH LARGER THAN THE OUTSIDE DIAMETER OF CONNECTING PIPE. NON-SHRINK GROUT SHALL BE USED TO FILL ANNULAR SPACE BETWEEN PIPE AND HOLE.
4. FOR CONNECTIONS TO A DISTRICT DROP PIPE BELOW THE STUB, A VITRIFIED CLAY PIPE CROSS SHALL BE USED AND JOINED WITH EXISTING DROP PIPE, WITH PIPE STUBS AND COLLARS TO FORM A WATERTIGHT JOINT. CONNECTION RUN OF ACROSS SHALL BE NO MORE THAN TWO NOMINAL PIPE SIZES LARGER THAN DROP PIPE.
5. ANY DEBRIS ENTERING MANHOLE DURING CONSTRUCTION SHALL BE REMOVED IMMEDIATELY. ANY MANHOLE STEPS THAT ARE DAMAGED SHALL BE REPLACED.
6. ALL ELEVATIONS SHALL BE CLEARLY MARKED. "RECORD" ELEVATIONS OF DISTRICT FACILITIES MAY BE USED BUT FIELD SURVEY IS RECOMMENDED FOR CRITICAL ELEVATIONS.
7. DURING CONSTRUCTION OF PROPOSED CONNECTION, MANHOLE SHALL BE SUPPORTED ACCORDING TO DETAILS PREPARED, SIGNED, AND SEALED BY A LICENSED STRUCTURAL ENGINEER.
8. DOWELS SHALL BE USED TO CONNECT CONCRETE COLLAR AND CRADLE TO THE MANHOLE.
9. THESE CONNECTION DETAILS SHALL BE USED FOR SEWERS UP TO A 15-INCH DIAMETER. CONNECTION DETAILS FOR LARGER SEWERS SHALL BE PREPARED BASED ON SITE CONDITIONS AND CONFIGURATION OF EXISTING MANHOLE/STRUCTURE.
10. CORE FOR WALL SLEEVE, THEN CHIP BACK AT BOTH FACES TO FORM A NATURAL KEY. LEAVE REBAR STUBS INTACT IF POSSIBLE.
11. WHERE  $T \geq 10"$ , INSTALL TWO SETS OF MODULAR CASING SEALS BETWEEN NEW PIPE AND WALL SLEEVE, AS SHOWN. WHERE  $T < 10"$ , INSTALL ONE MODULAR CASING SEAL, AT THE CENTER OF THE WALL.
12. SEE STANDARD DRAWING NO. 30 FOR ADDITIONAL DETAIL ON CONCRETE CRADLE.

**INSTRUCTIONS FOR USE:**

1. SELECT THE METHOD OF CONNECTION.
2. PROVIDE ALL CRITICAL INVERTS ELEVATIONS.
3. CROSS OUT ALL CONNECTION TYPES THAT ARE NOT APPLICABLE AND CLEARLY HIGHLIGHT STRUCTURE ON PLANS THAT REFER TO THIS DETAIL.

NOT TO SCALE

