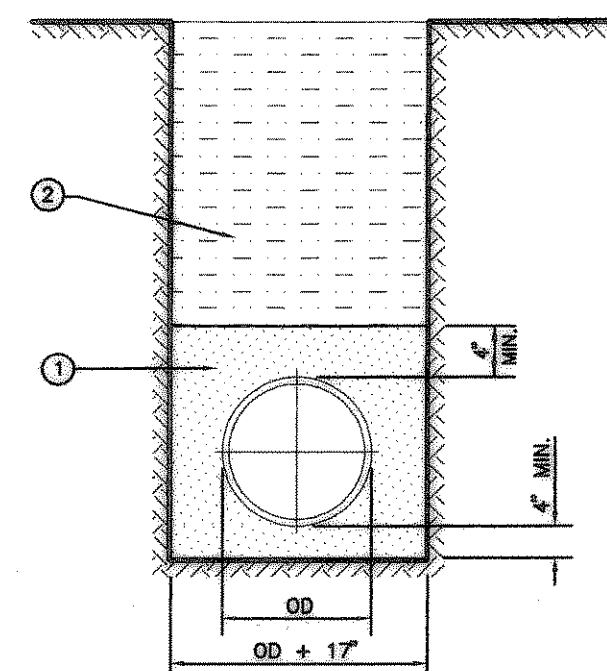


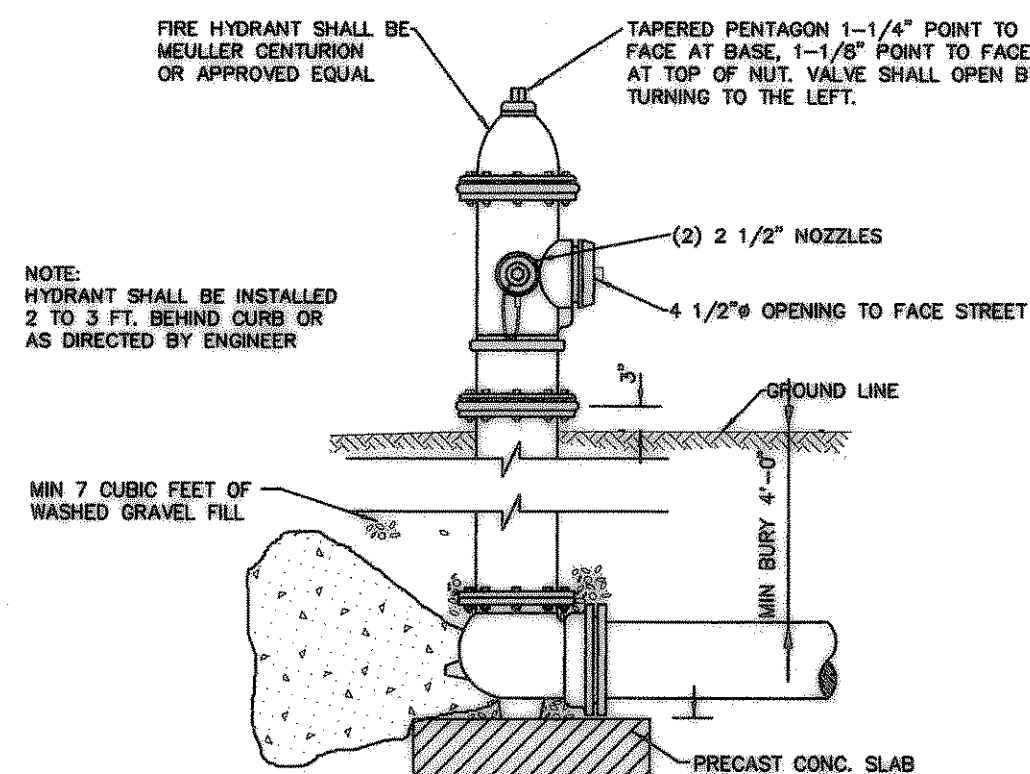
- FINE GRADATION CRUSHED STONE - TOP LAYER IS TO BE PLACED TO GRADE TO PROVIDE UNIFORM SUPPORT OF PIPE BARREL, EXCAVATE BELL HOLES.
- SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS LARGER THAN 6" IN GREATEST DIMENSION, COMPACT TO 90% STANDARD PROCTOR DENSITY, UNDER STRUCTURES, ROADWAYS AND PAVEMENT, USE GRANULAR MATERIAL (SAND) COMPACTED TO 95% STANDARD PROCTOR DENSITY.

**R.C.P. EMBEDMENT**

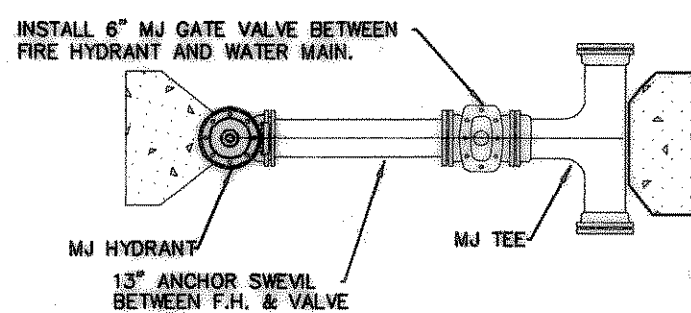


- GRANULAR MATERIAL (SAND) - COMPACT TO 90% STANDARD PROCTOR DENSITY EXCEPT UNDER OR WITHIN FIVE FEET OF STRUCTURES, ROADWAYS, DRIVEWAYS AND PAVEMENT WHERE 95% DENSITY IS REQUIRED.
- SELECT MATERIAL FREE OF ROCKS, CLUMPS OR DEBRIS LARGER THAN 6" IN GREATEST DIMENSION, COMPACT TO 90% STANDARD PROCTOR DENSITY, UNDER STRUCTURES, ROADWAYS AND PAVEMENT, COMPACT TO 95% STANDARD PROCTOR DENSITY.

**CLASS "D+" EMBEDMENT**  
PVC WATER ONLY

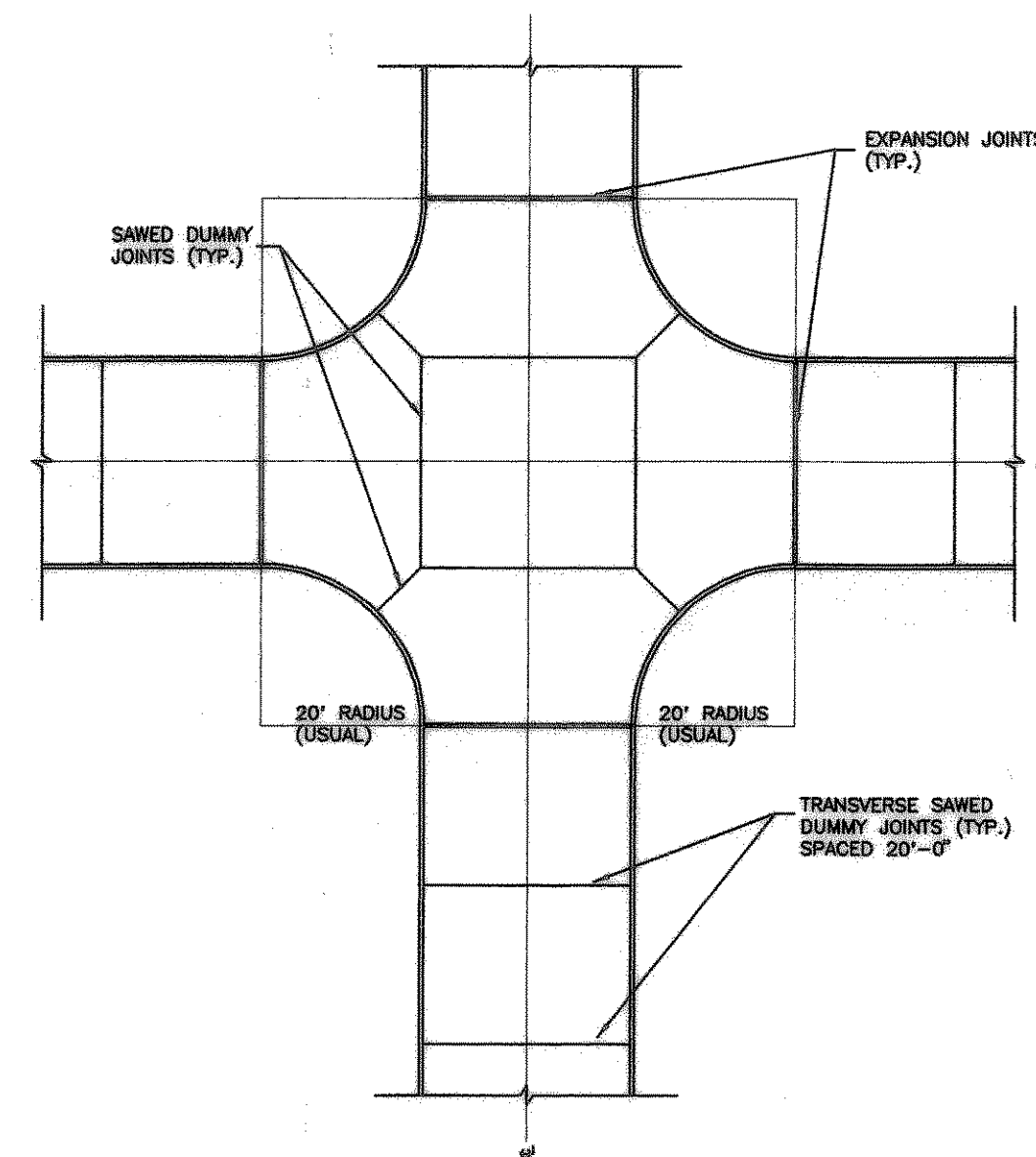


NOTE: HYDRANT SHALL BE INSTALLED 2 TO 3 FT. BEHIND CURB OR AS DIRECTED BY ENGINEER

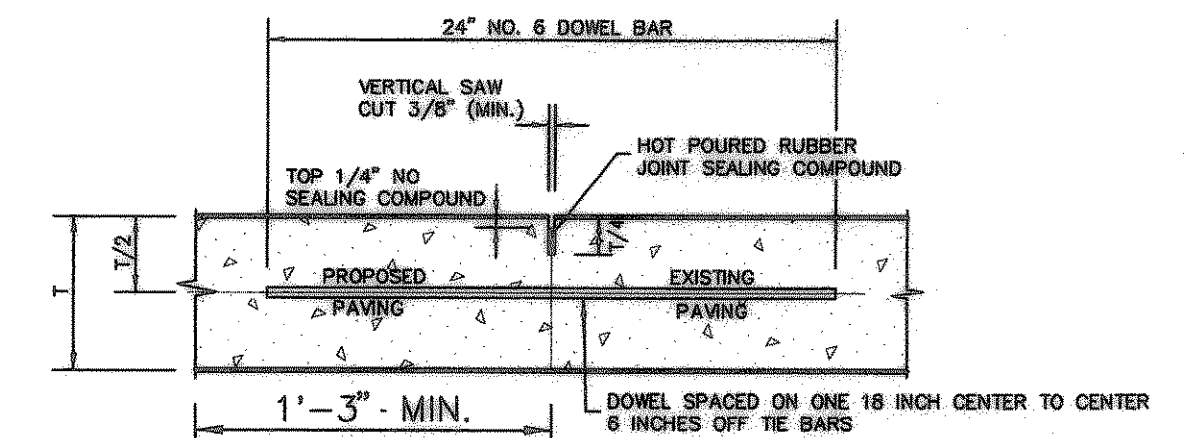


**FIRE HYDRANT ASSEMBLY DETAIL - BLOCKED INSTALLATION**

NOTE: ALL MATERIALS SHOWN ON THIS DETAIL SHALL BE INCLUDED IN THE UNIT PRICE FOR A FIRE HYDRANT ASSEMBLY. NO SEPARATE PAYMENT WILL BE MADE FOR VALVES, PIPE, FITTINGS ETC.

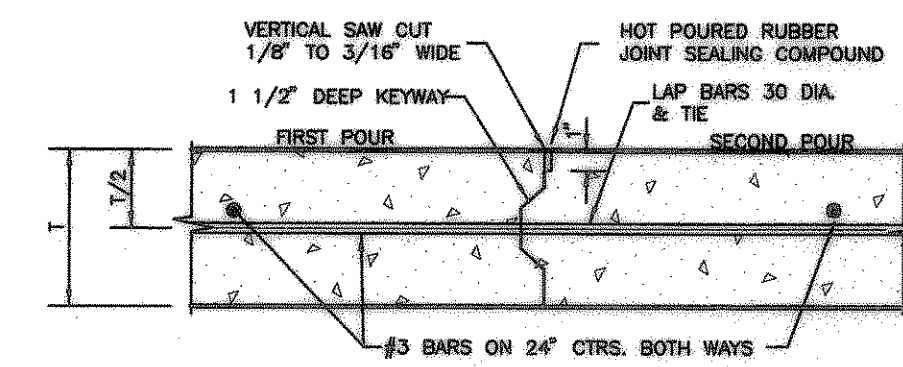


**TYPICAL INTERSECTION JOINTING**  
SCALE: 1"=20'

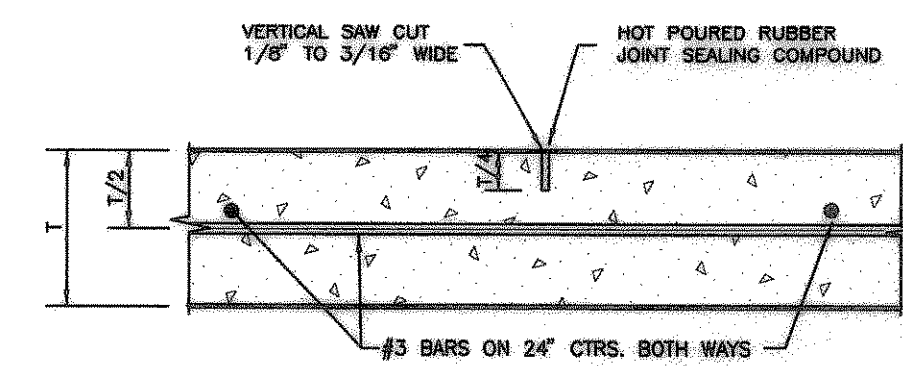


**LONGITUDINAL BUTT JOINT**  
NO SCALE

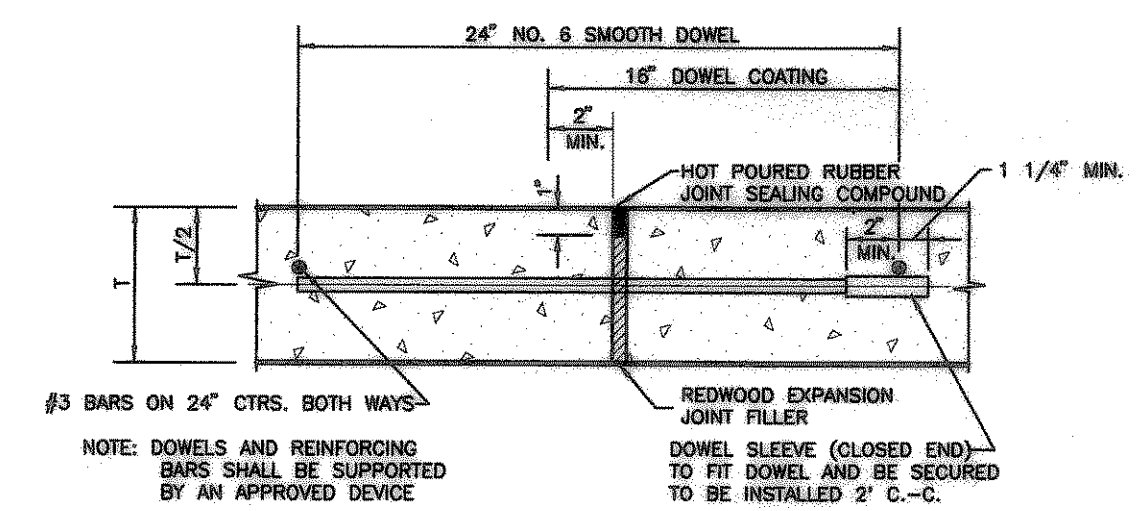
NOTE: DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL DIG.



**CONSTRUCTION JOINT DETAIL**  
NO SCALE

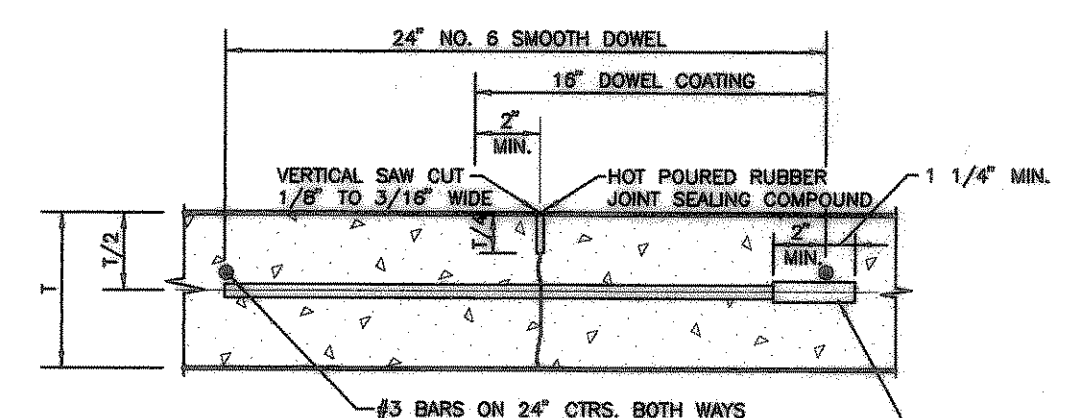


**SAWED DUMMY JOINT DETAIL**  
NO SCALE



**TRANSVERSE EXPANSION JOINT DETAIL**  
NO SCALE

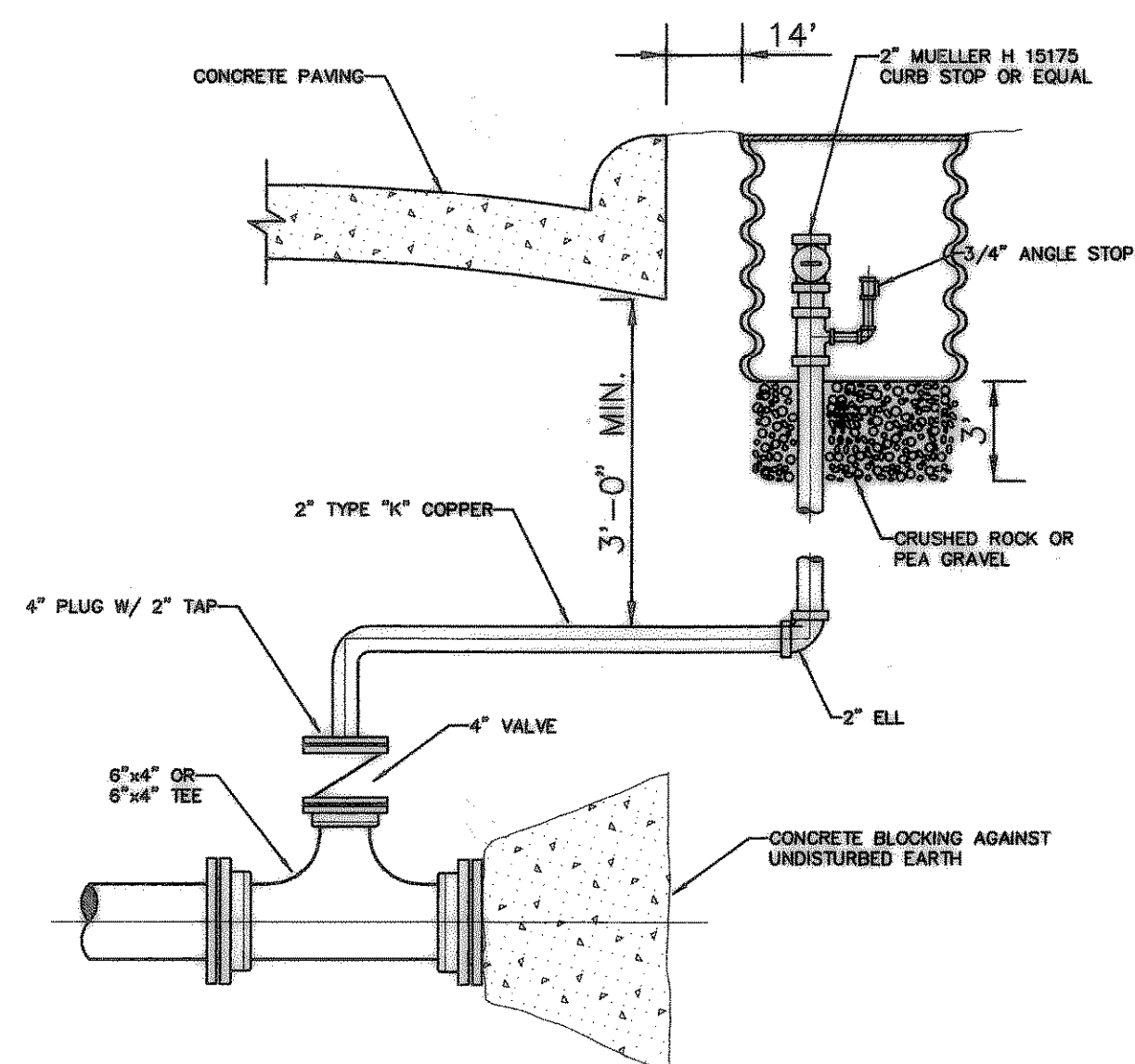
NOTE: SPACE 600' O.C., LOCATE AT INTERSECTIONS



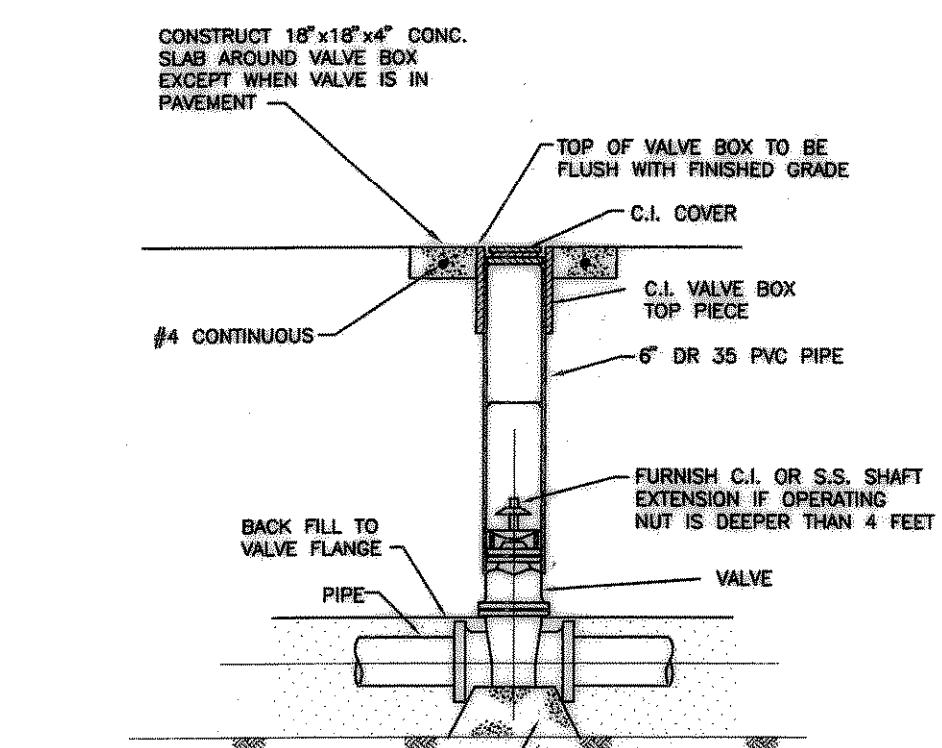
**CONTRACTION JOINT DETAIL**  
NO SCALE

NOTE: DOWELS AND REINFORCING BARS SHALL BE SUPPORTED BY AN APPROVED DEVICE

DOWEL SLEEVE (CLOSED END) TO FIT DOWEL AND BE SECURED TO BE INSTALLED 2' C.-C.

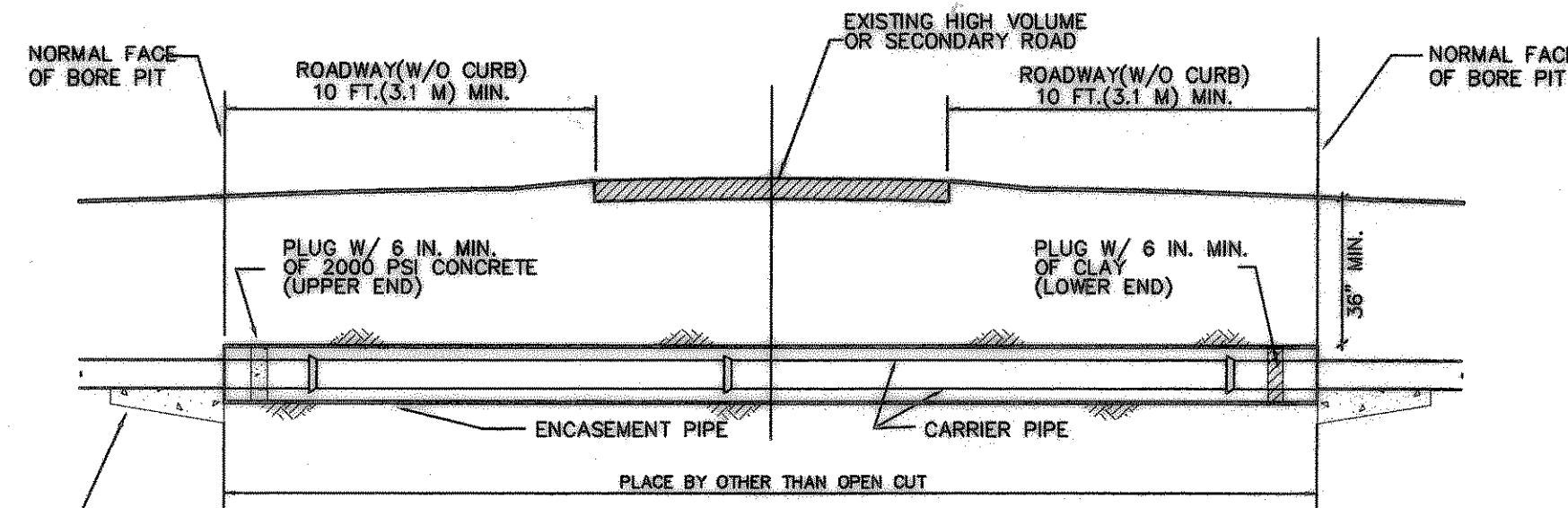


**2" FLUSHING VALVE DETAIL**  
N.T.S.



**VALVE INSTALLATION DETAIL**

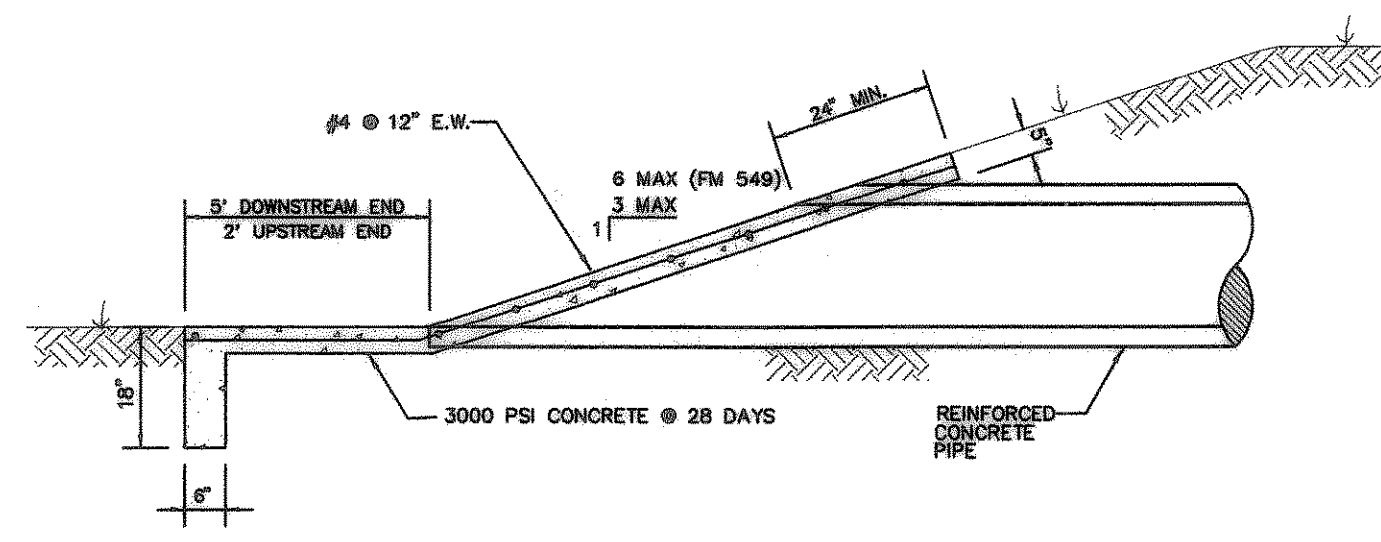
2000 PSI CONCRETE BLOCKING UNDER VALVE & AGAINST TRENCH WALLS DO NOT COVER VALVE BOLTS



**HIGHWAY CROSSING FOR WATER MAINS**  
NO SCALE

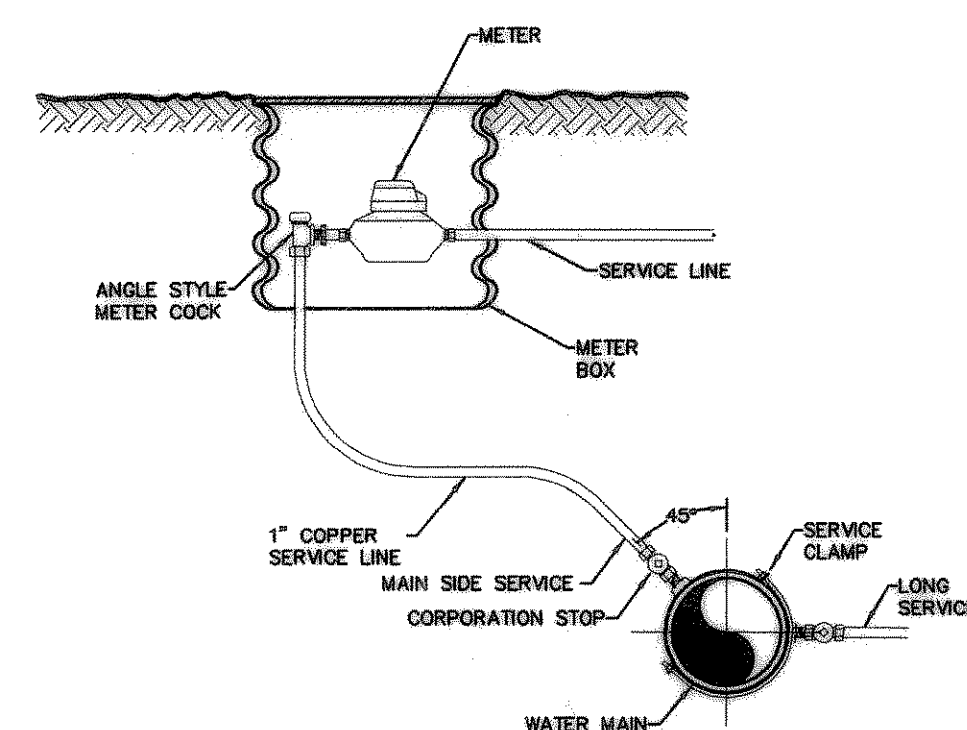
**GENERAL NOTES**

- ENCASEMENT PIPE SPECIFICATION:  
SMOOTH STEEL PIPE, MINIMUM WALL THICKNESS OF 3/8", WITH BITUMINOUS COATING. ALL ENCASEMENT PIPE SHALL BE NEW AND HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI.
- CARRIER PIPE TO BE MADE UP OUTSIDE THE ENCASEMENT PIPE AND PUSHED THROUGH THE BORE WITH THE BELLS OF THE PIPE RESTING ON THE ENCASEMENT PIPE, BORE WALLS OR CONCRETE CUSHION.
- DRY MECHANICAL BORES SHALL BE USED FOR BORES WITH ENCASEMENT PIPE.
- ALL VOIDS BETWEEN BORE WALL AND ENCASEMENT PIPES (CARRIER PIPE IF NO ENCASEMENT IS USED) SHALL BE FILLED WITH GROUT PER ASTM C 476.
- WHERE CIRCUMSTANCES NECESSITATE THE EXCAVATION OF A BORE PIT OR TRENCH CLOSER TO THE EDGE OF PAVEMENT THAN SET FORTH ON THIS SHEET, GUARD FENCE OR OTHER APPROVED PROTECTIVE DEVICES WILL BE INSTALLED FOR THE PROTECTION OF THE TRAVELING PUBLIC.
- CONCRETE TO HAVE A 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI.



**HEADWALL DETAIL**  
SCALE: N.T.S.

- NOTES:
- WIDTH OF HEADWALL IS EQUAL TO PIPE O.D. + 4".
  - SAW CUT BEVEL ON PIPE FOR SLOPE AS INDICATED. HEADWALL ON F.M. S&B SHALL HAVE A MAX. SLOPE OF 6 HORIZ. TO 1 VERT.
  - CONCRETE APRON SHALL BE EXTENDED 5' FROM END OF PIPE AS SHOWN ABOVE TO DOWN STREAM END OF STRUCTURE. APRON SHALL BE PLACED ON DITCH SLOPE FACING STRUCTURE ON INLET SIDE.



**1" WATER SERVICE INSTALLATION**  
NO SCALE