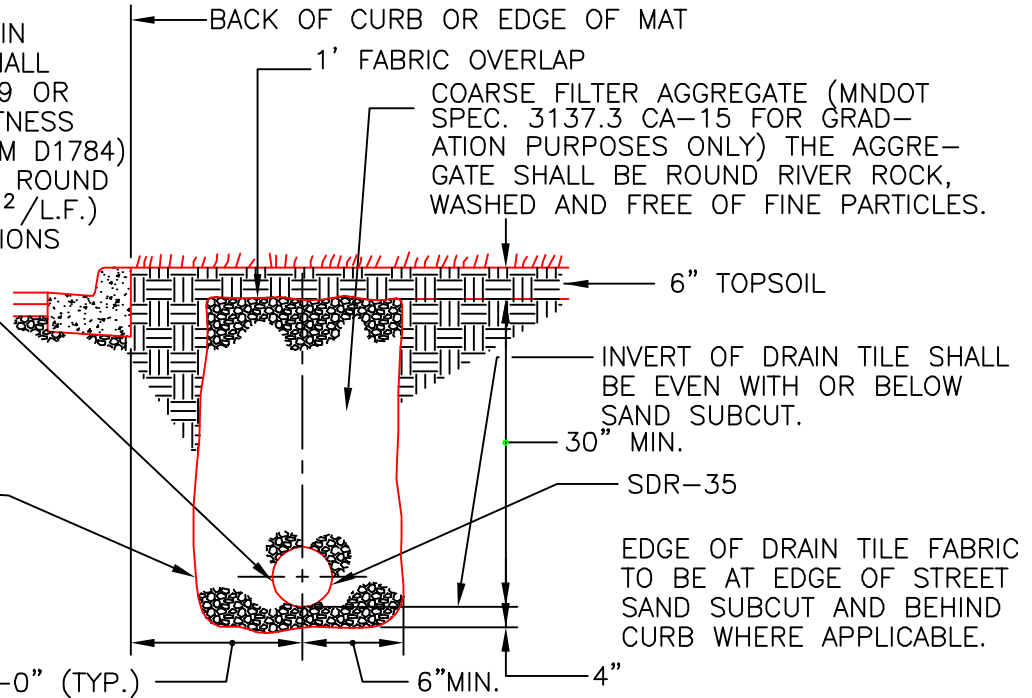


NOTE: SEE STANDARD PLATE LV-ST-13 FOR MnOPS REQUIREMENTS RELATED TO FUTURE LOCATING.

PVC PERFORATED UNDERDRAIN PIPE (PIPE AND FITTINGS SHALL BE PVC, MEETING ASTM F949 OR D3034 WITH MIN. PIPE STIFFNESS 46 P.S.I., RESIN 12454B (ASTM D1784) GASKETED JOINTS, SLOT, OR ROUND HOLE PERFORATIONS (1.9 IN<sup>2</sup>/L.F.) AT 5 AND 7 O'CLOCK POSITIONS OR APPROVED EQUAL.

6" DIA. FOR MAINLINE  
4" DIA. FOR SERVICE LINE

FILTER FABRIC WRAP

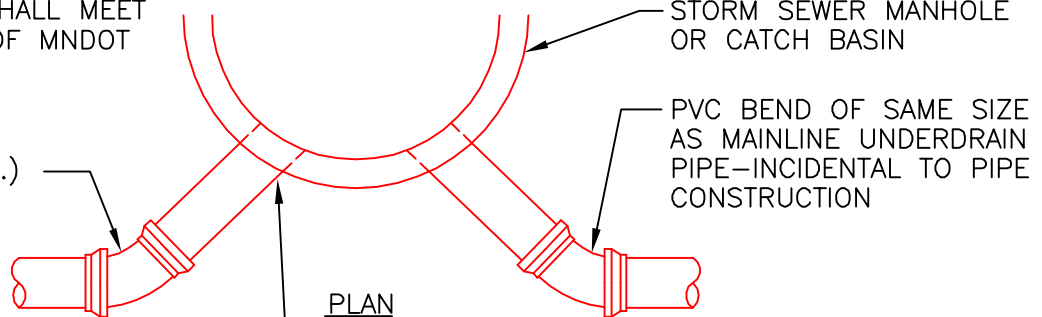


SECTIONAL VIEW

IN UNSTABLE SOILS FILTER FABRIC WRAP TYPE SHALL BE SELECTED BY THE SOILS ENGINEER FROM THE FOLLOWING.

GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MNDOT 3733, TYPE 1

45° BEND (TYP.)



PLAN

CONNECTION TO STORM SEWER STRUCTURE SHALL BE AT SPRING LINE OR 6" MIN. ABOVE INVERT ALL GROUTING MUST BE AN APPROVED NON-SHRINKABLE GROUT.

INVERT OF DRAIN TILE TO BE DETERMINE INFIELD BY DEPTH OF SAND SUBCUT OR EXISTING GROUND WATER CONDITIONS.

NOTE: ALL DRAINTILE MUST HAVE TRACER WIRE INSTALLED WITHIN THE TRENCH. TRACER WIRE WILL BE 8 GAUGE AND SHALL BE TAPED TO THE TOP OF PIPE AND WILL BE BROUGHT TO THE SURFACE AT EACH STRUCTURE OR CLEAN OUT. FOLLOW U.S.E. GUIDELINES FOR UNDERGROUND BURY. FOLLOWING COMPLETION CONTRACTOR WILL BE REQUIRED TO PERFORM A LOW VOLTAGE CONDUCTIVITY TEST.



STORM SEWER

UNDERDRAIN DETAIL

PLATE NO. LV-STM-9

DATE 5/5/14