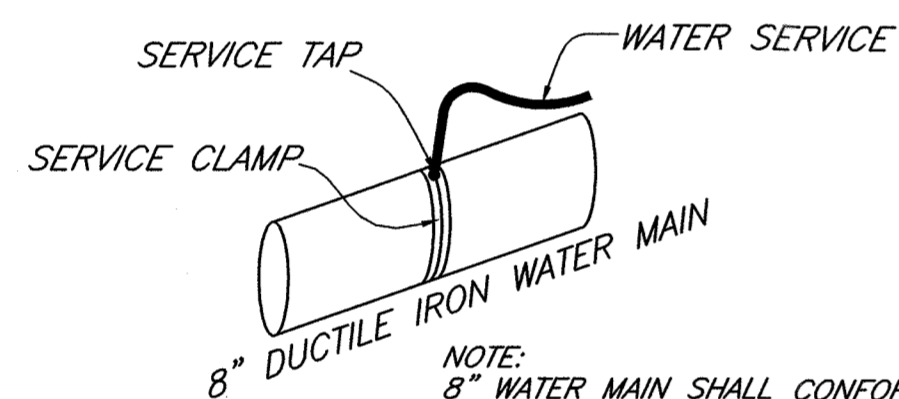


NOTE: ALL GRINDER PUMPS SHALL BE ENVIRONMENT ONE MODEL GP2010 GRINDER PUMPS, 1HP, 1,725 RPM, 120/240V/60Hz, ONE PHASE, AS MANUFACTURED BY ENVIRONMENT ONE CORPORATION OF SCHECTECTADY, NY.  
 PUMP DESIGN AND CURVE SHALL BE SUBMITTED WITH SEWER PERMIT APPLICATION FOR EACH RESIDENCE. PUMPS TO INCLUDE HIGH LEVEL ALARM, OPERATION AND MAINTENANCE MANUAL.

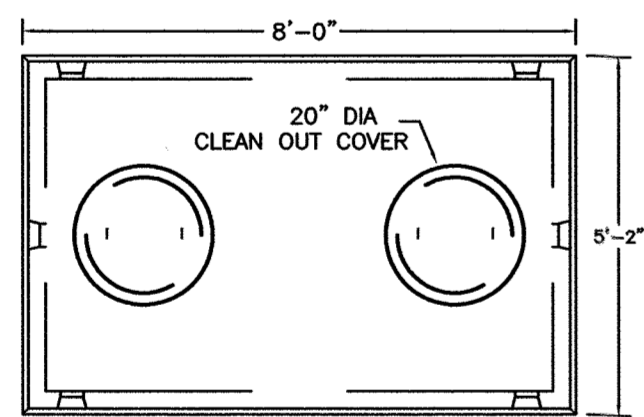
DISCONNECT AND ALARM PANEL SHALL BE RAIN PROOF (NEMA 3R) ENCLOSURE, EQUIPPED WITH CIRCUIT BREAKERS OR DISCONNECT SWITCH. PANEL AND AUDIO/VISUAL ALARM DEVICES SHALL BE LOCATED NEXT TO THE ELECTRIC PANEL OF THAT PARTICULAR DWELLING.

**PUMP STATION  
TYPICAL ELEV. VIEW**  
NOT TO SCALE

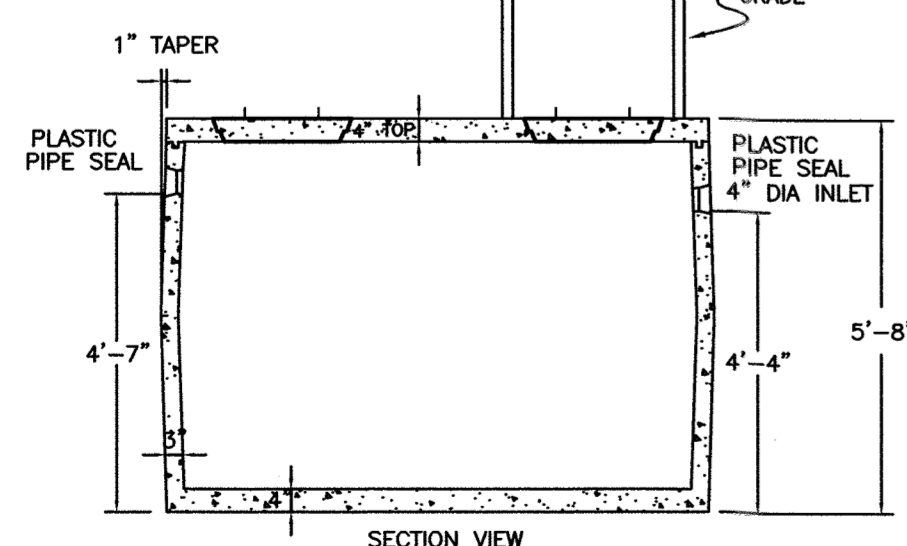


NOTE:  
 8" WATER MAIN SHALL CONFORM TO:  
 AWWA C150 THICKNESS CLASS 52  
 MIN. THICKNESS=0.33", O.D.=9.05"  
 AWWA/ANSI C151/A21.51, C111/A21.11

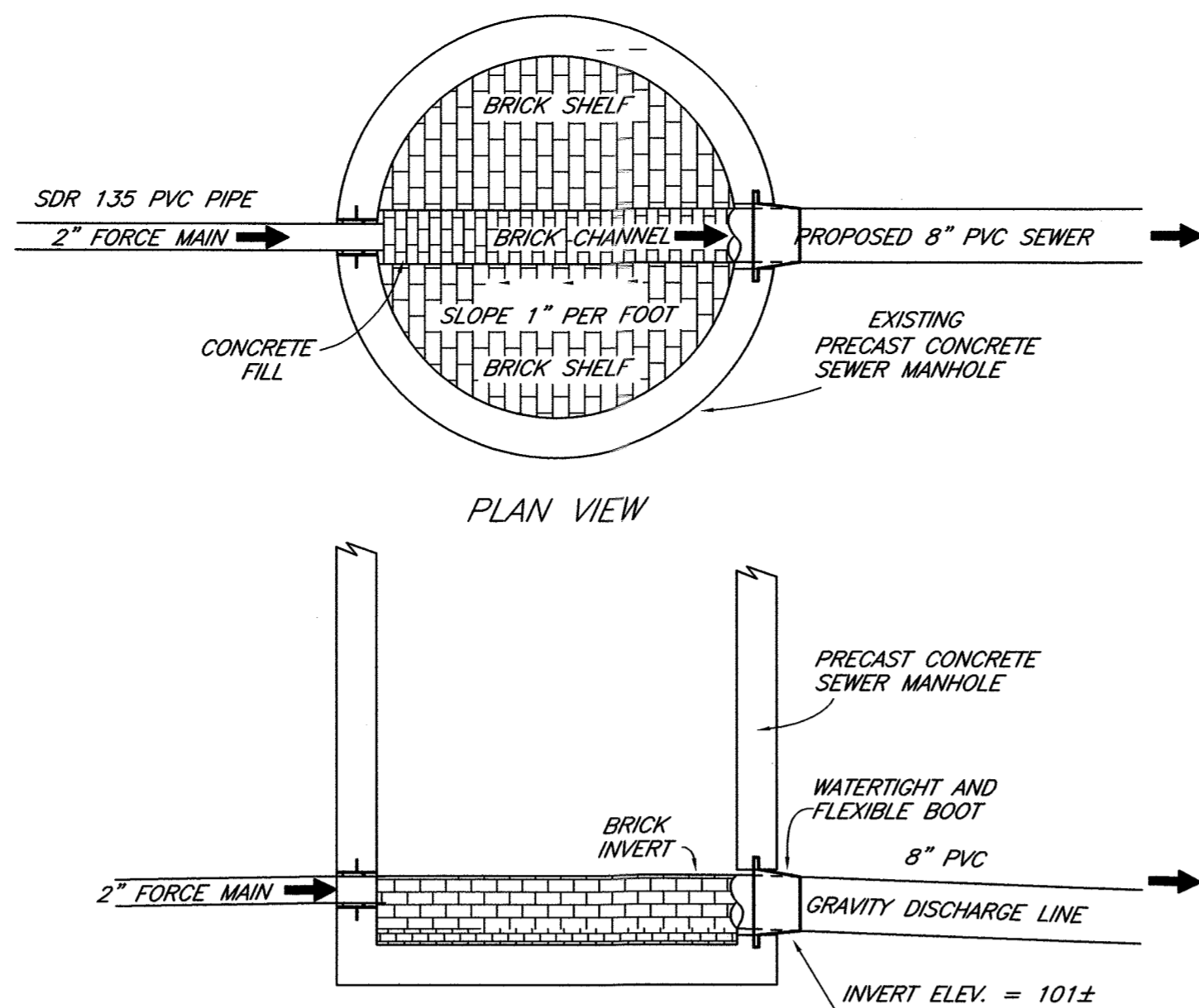
**WATER SERVICE CONNECTION**  
NOT TO SCALE



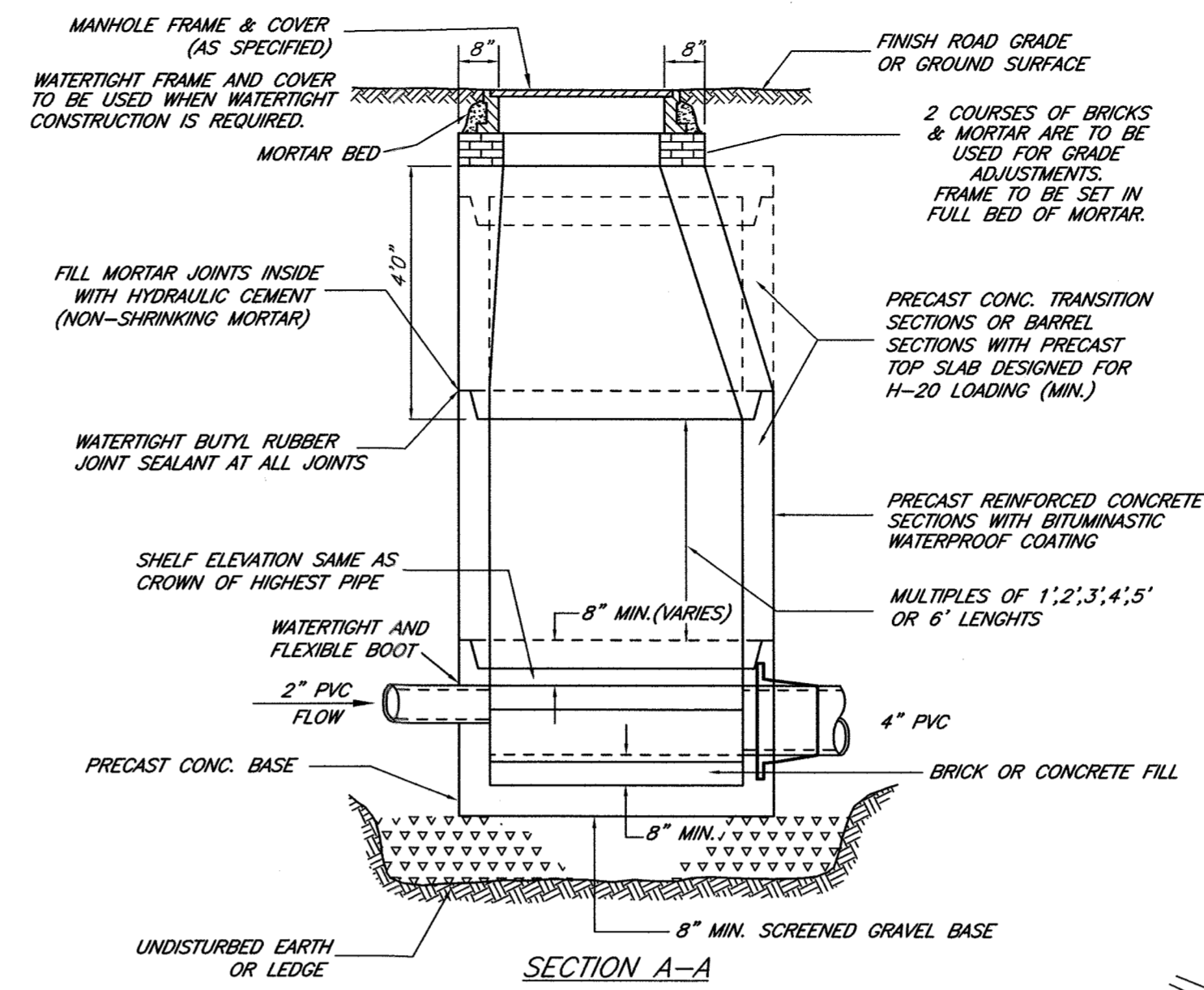
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGN CONFORMS WITH 310 CMR 15.000, DEP TITLE 5 RECS, FOR PUMP CHAMBERS.
3. ALL REINFORCEMENT PER ASTM C1227-93.
5. JOINT SEALED WITH BUTYL RESIN.



**1000 GALLON (MONOLITHIC W/4\"/>
 PUMP CHAMBER**



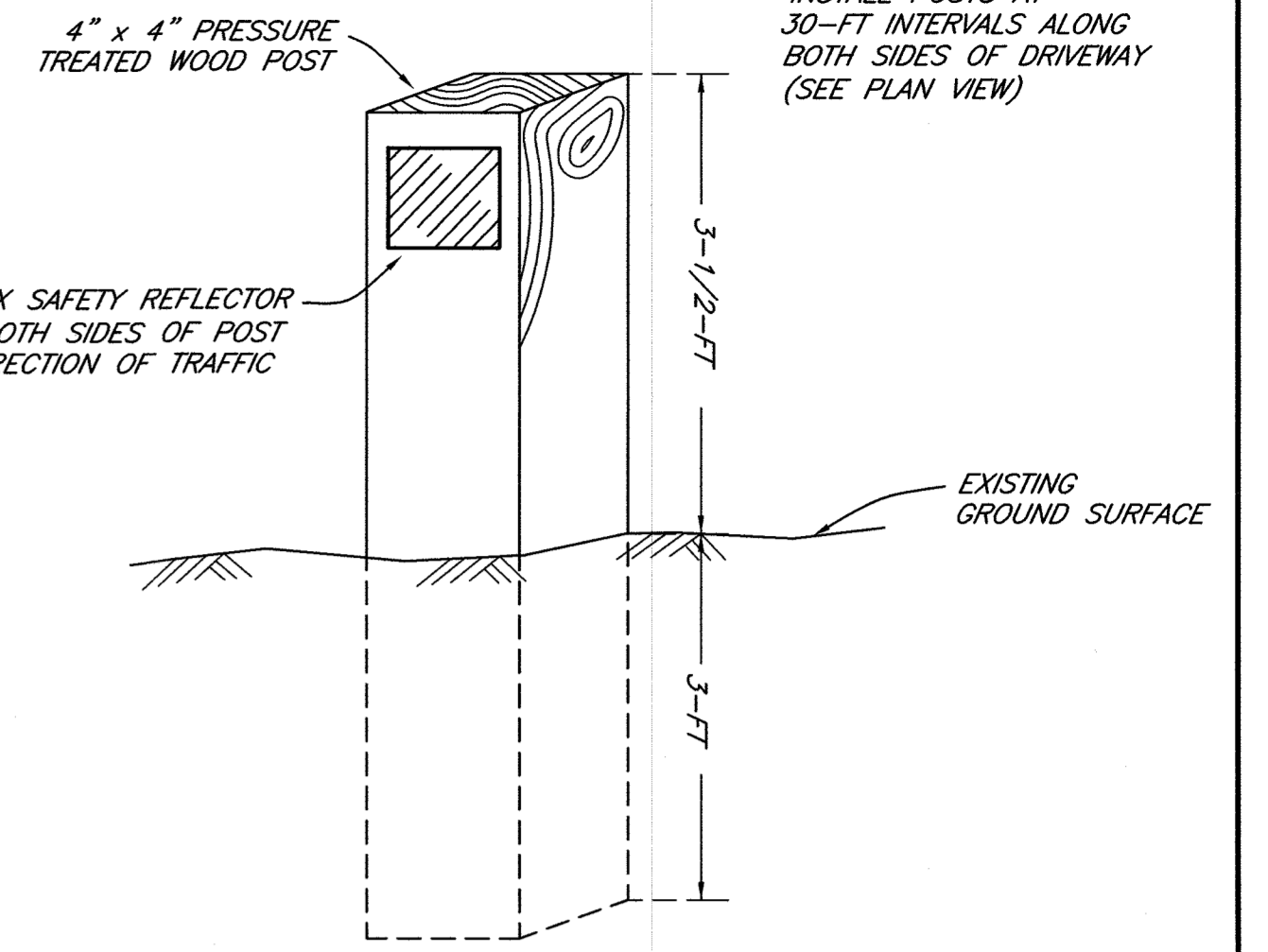
**SECTION VIEW  
PROPOSED SMH ON LOT 2 RIM = 107.5±  
FORCEMAIN DETAIL AT DISCHARGE  
MANHOLE ON LOT 2**  
NOT TO SCALE



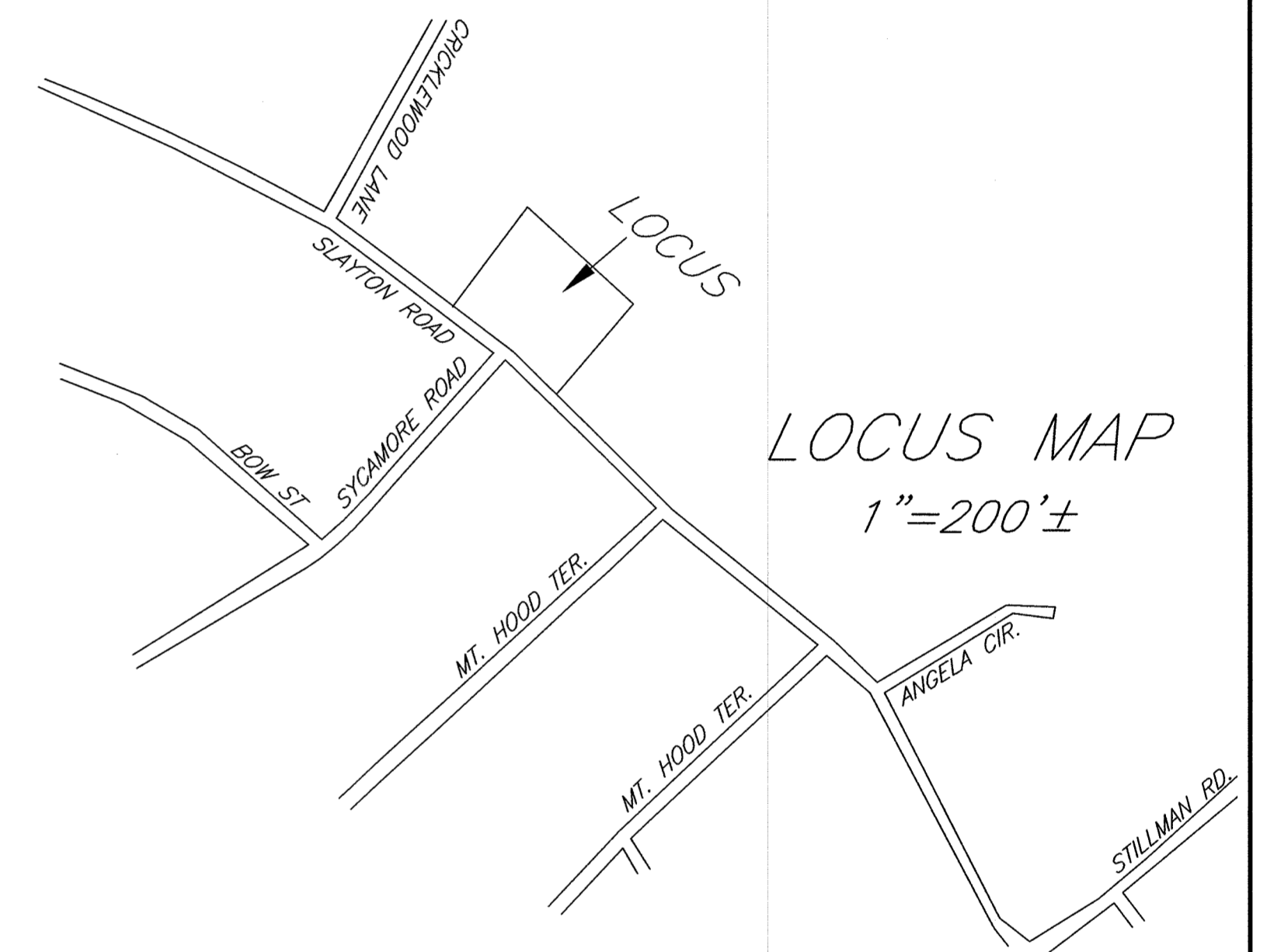
**TYPICAL PRECAST SEWER MANHOLE**  
NOT TO SCALE

NOTE: WHEREVER FEASIBLE, SEWERS WILL BE LAID AT A MINIMUM OF 10 FEET, HORIZONTALLY, FROM ANY EXISTING OR PROPOSED WATER MAIN. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN THE SEWER MAIN WILL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER PLACED AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN. WHENEVER SEWERS MUST CROSS UNDER WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN. WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL OR VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER MAIN AND SEWER SHOULD BE ENCASED IN CONCRETE FOR 10 FEET EITHER SIDE OF THE CROSSING.

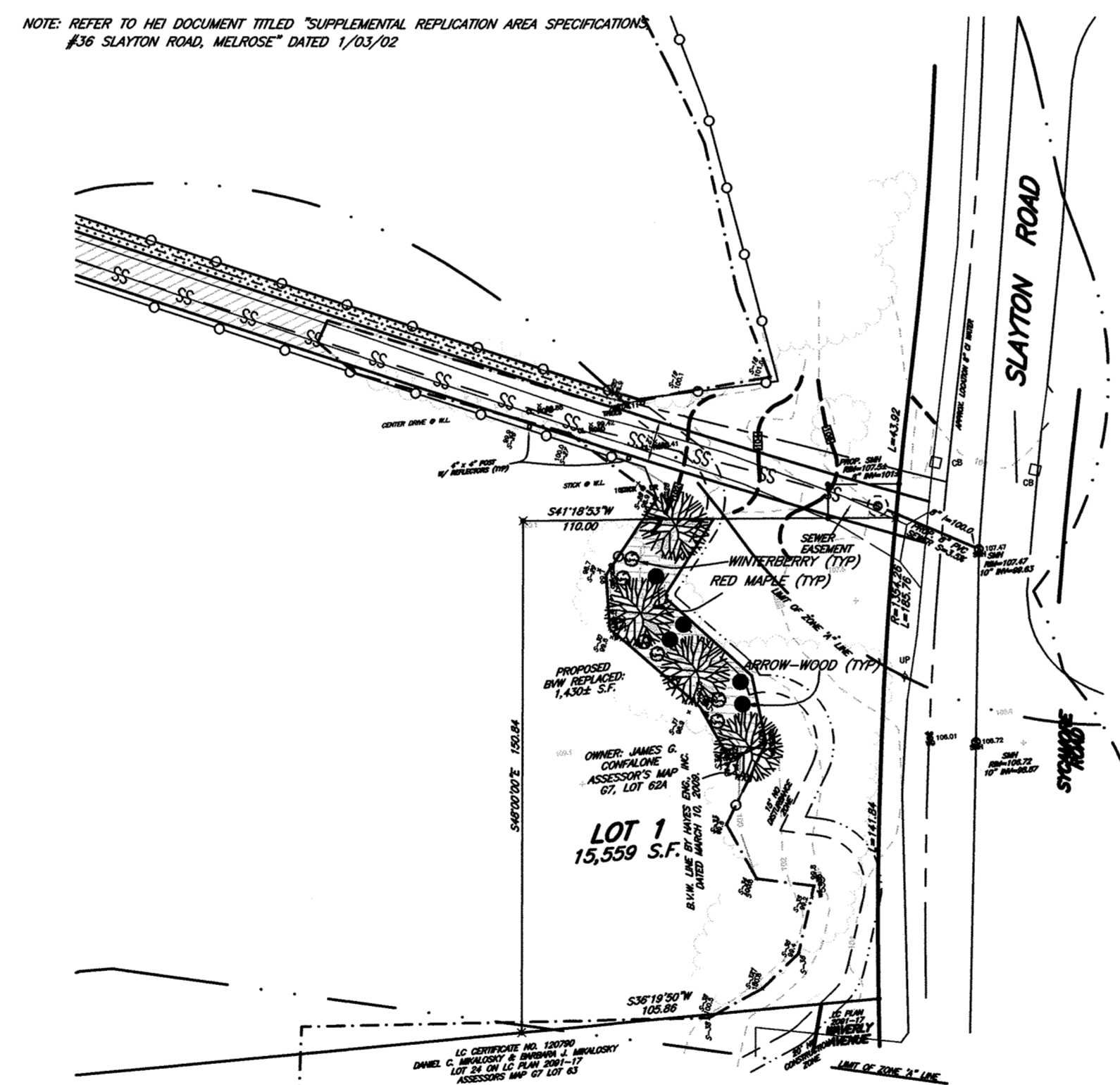
IN LOCATIONS WHERE THE SEWER MAIN DOES NOT HAVE 48" OF COVER THE MAIN WILL BE INSULATED.



**TYPICAL WOOD REFLECTOR POST**  
NOT TO SCALE



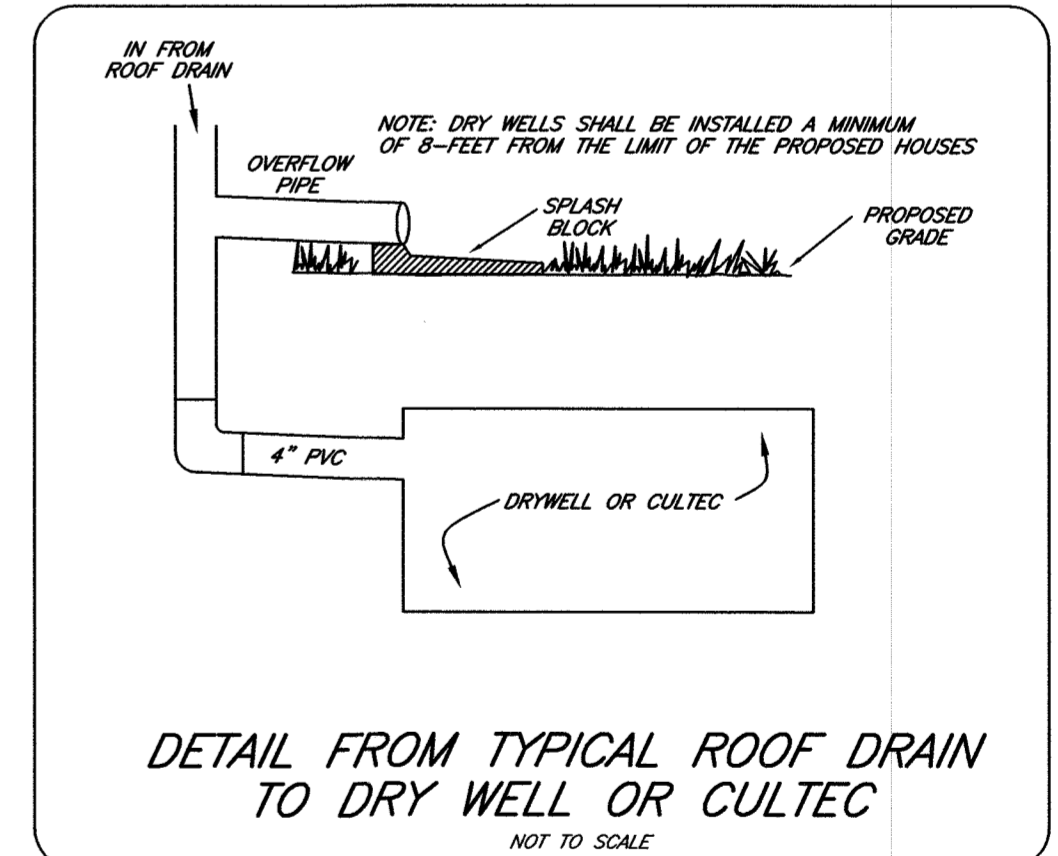
**LOCUS MAP**  
1"=200'±



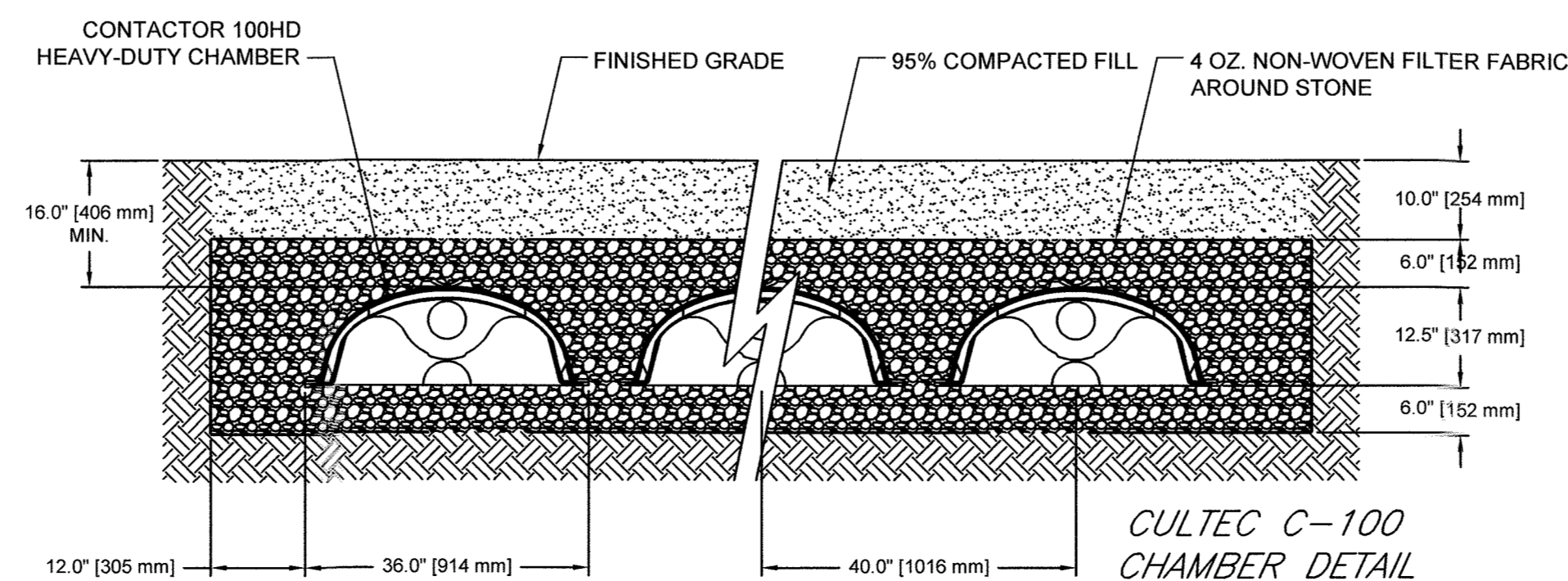
**BWV REPLACEMENT / PLANTING DETAIL**  
1" = 20'

**PROPOSED PLANTINGS**

SPECIES	QUANTITY
RED MAPLE (ACER RUBRUM)	4
ARROW-WOOD (VIBURNUM DENTATUM)	15
WINTERBERRY (LLEX VERTICILLATA)	15 (ALL SHRUBS TO BE 2-3' C.G.)
RED TOP GRASS (AGROSTIS ALBA)	1 LB. SEED



**DETAIL FROM TYPICAL ROOF DRAIN  
TO DRY WELL OR CULTEC**  
NOT TO SCALE

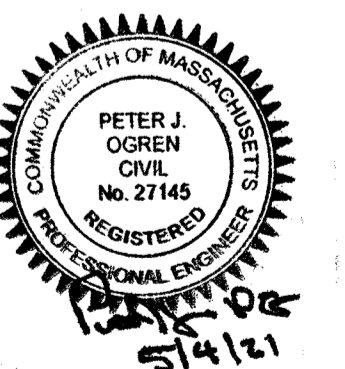


**CULTEC C-100  
CHAMBER DETAIL**

**MELROSE, MASS.**

SCALE: 1"=40'  
 (EXCEPT WHERE NOTED)

HAYES ENGINEERING, INC.  
 CIVIL ENGINEERS &  
 LAND SURVEYORS



**MASS.**

DECEMBER 3, 2001  
 REV. JAN. 3, 2002  
 REV. JAN. 25, 2010  
 REV. APRIL 28, 2021  
 603 SALEM STREET  
 WAKEFIELD, MASS. 01880  
 TEL. (781) 246-2800