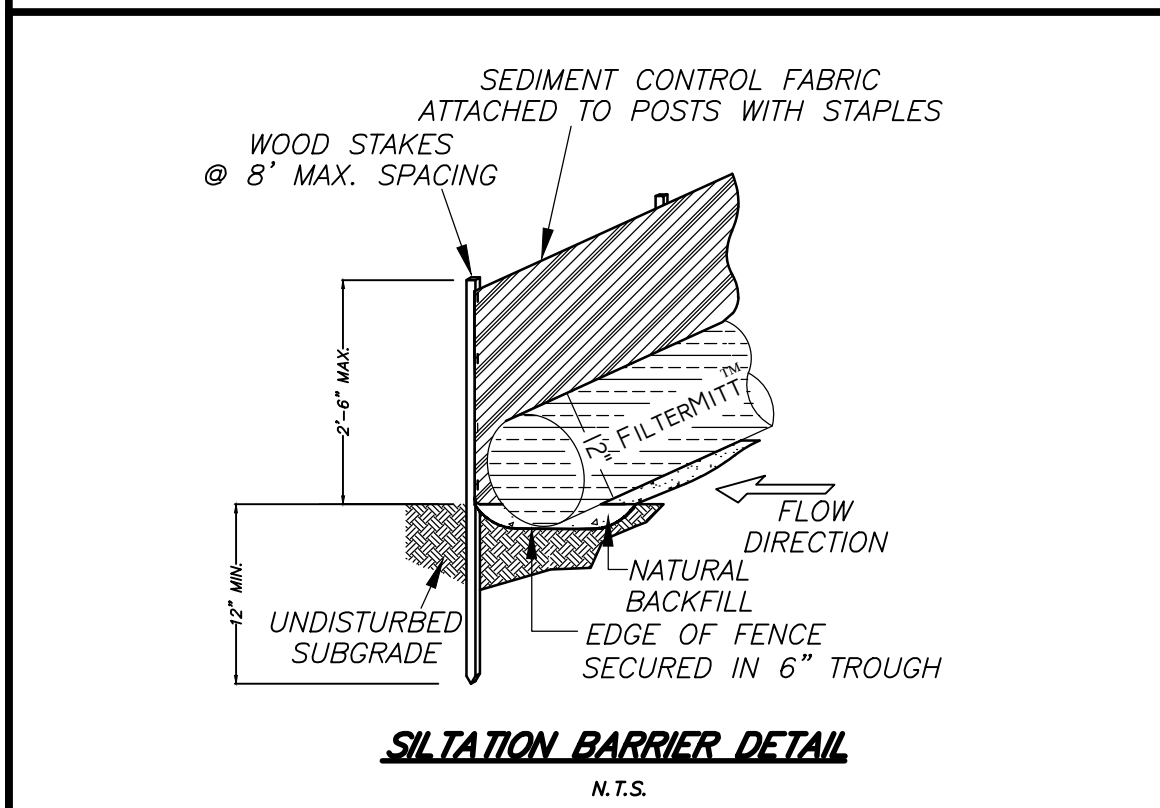


DATE OF TESTING: 9/18/2025
TEST BY: STAMSKI, AND MCNARY, INC.
CERT. SOIL EVAL.: DANIEL CARR, SE 13801

The diagram is a hand-drawn soil profile. On the left, a vertical axis is marked with depths: 0, 3'-2", 3'-8", 4'-2", and 10'-0". On the right, a horizontal axis is marked with a width of 144.3. The profile shows several layers: a top layer labeled 'FILL' from 0 to 3'-2"; a layer from 3'-2" to 3'-8" containing 'SANDY LOAM' and 'MASSIVE/FRIABLE' with a '4a' label; a layer from 3'-8" to 4'-2" containing 'LOAMY SAND' and 'MASSIVE/FRIABLE' with a '4b' label; a layer from 4'-2" to 10'-0" containing 'LOAMY SAND' and 'SINGLE GRAINED, LOOSE' with a 'C' label. A '2.5M SFA' label is also present near the bottom of the profile. To the right of the profile, there is a small square with a cross inside, and a larger square with a cross inside.

TP-1
144.3
0
FILL
3'-2"
4a
SANDY LOAM
10% 3/7
MASSIVE/FRIABLE
3'-8"
4b
LOAMY SAND
10% 4/6
MASSIVE/FRIABLE
4'-2"
C
LOAMY SAND
2.5M SFA
SINGLE GRAINED, LOOSE
10'-0"

NO REFUSAL
MOTTLING @ 5'-8"
G.W. OBS. @ 5'-9"
E.S.W.W.T. @ 5'-8" (138.6)



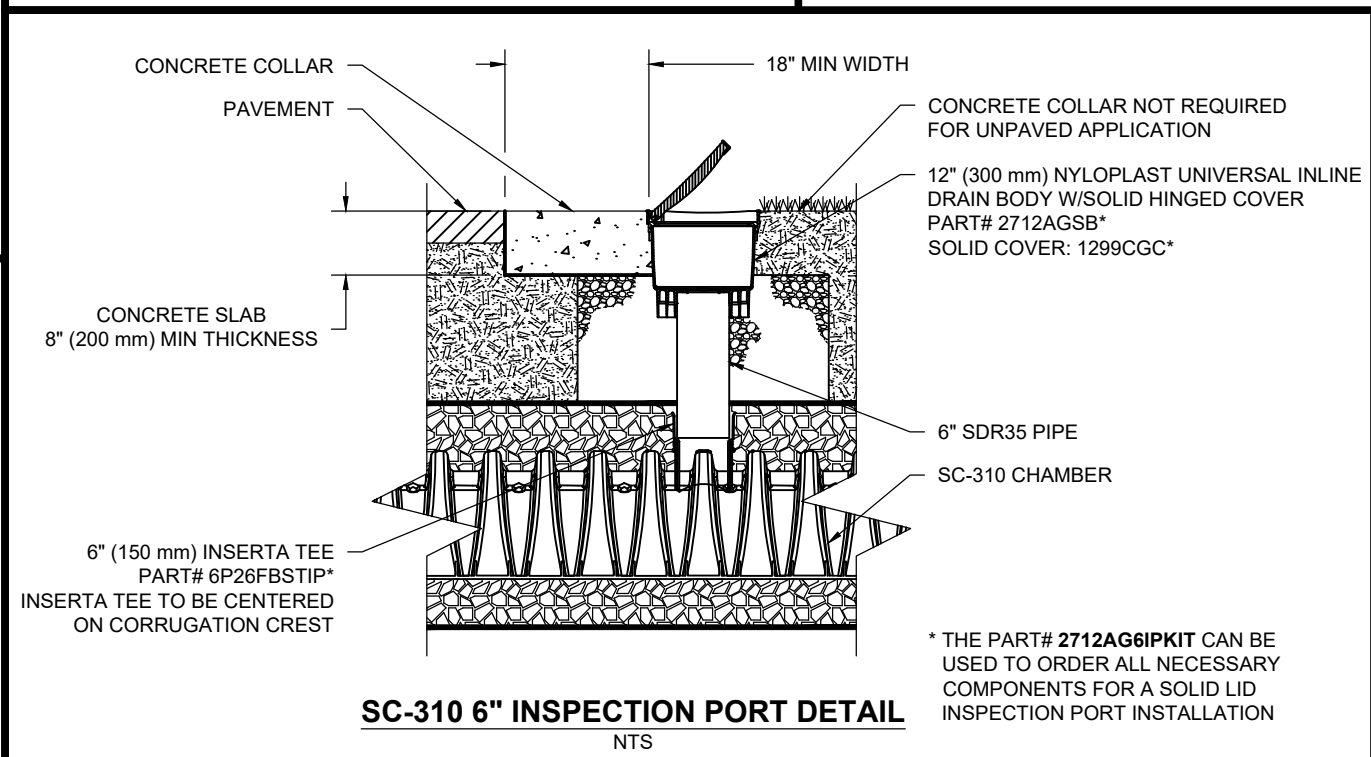
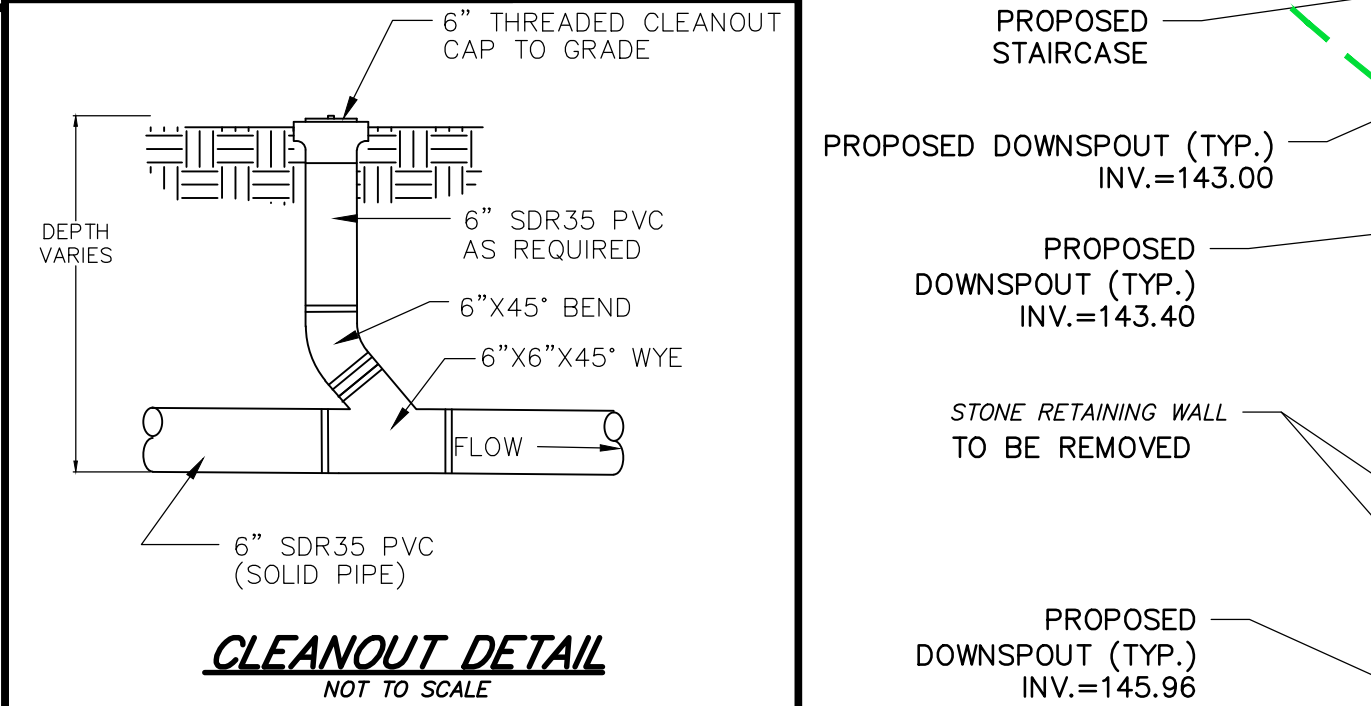
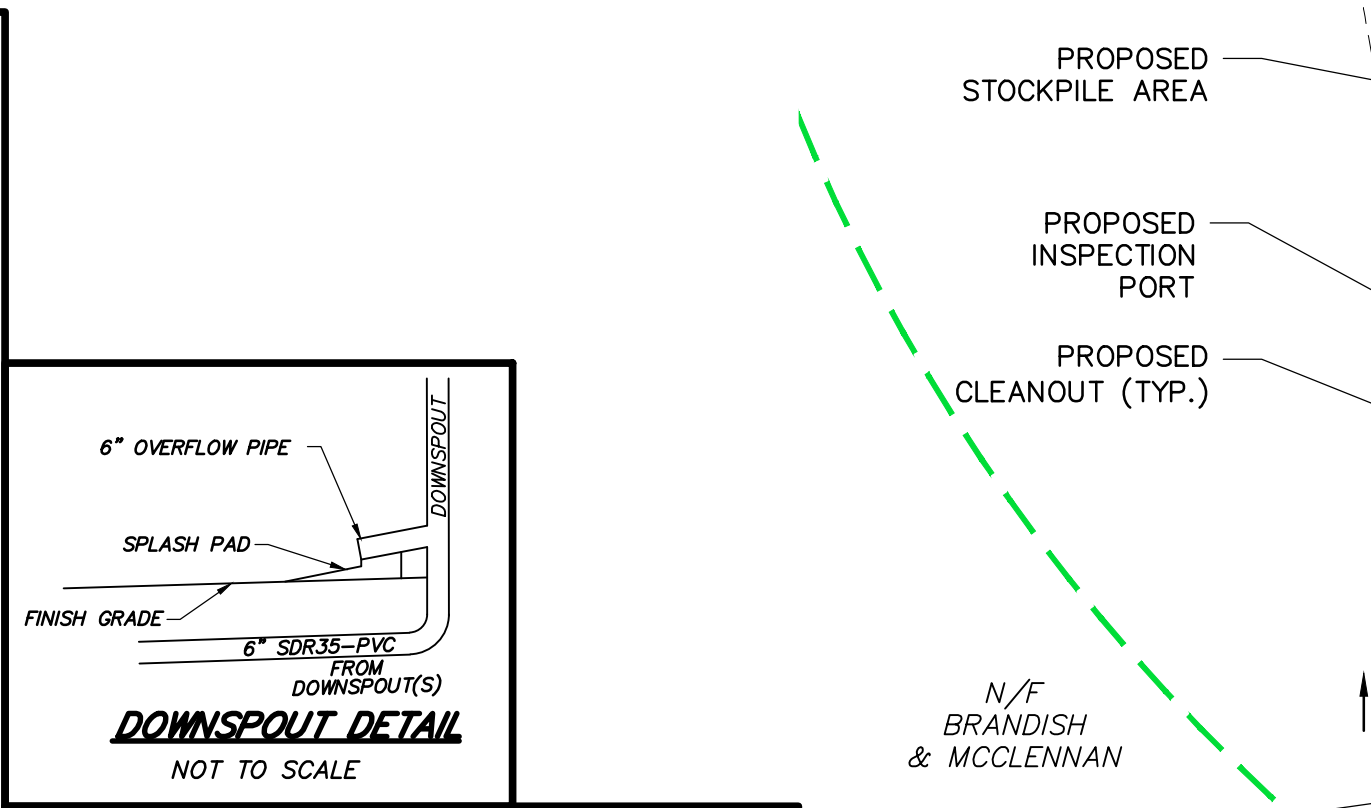
1. ALL UNDERGROUND UTILITIES SHOWN HEREON WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS, RATES, VARIOUS UTILITY COMPANIES, AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REMOVAL. ALL UTILITIES NOT SHOWN ON THESE PLANS, BUT WHICH MAY BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGE INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE WORKS, THE CONTRACTOR SHALL CONSULT THE PUBLIC WORKS DEPARTMENT AND BE CONSULTED, DUG-SAFE TELE. NO. (888) 344-7233. NOTE THAT THE TOWN OF NEEDHAM WATER AND SEWER DIVISION IS NOT A MEMBER OF DUG-SAFE. FOR LOCATION OF WATER MAINS, THE TOWN OF NEEDHAM WATER AND SEWER DIVISION OFFICE SERVICES MAY BE CONSULTED, DUG-SAFE TELE. NO. (888) 344-7233. NOTE THAT THE TOWN OF NEEDHAM WATER AND SEWER DIVISION IS NOT A MEMBER OF DUG-SAFE. FOR LOCATION OF WATER MAINS, THE TOWN OF NEEDHAM WATER AND SEWER DIVISION OFFICE SERVICES MAY BE CONSULTED, DUG-SAFE TELE. NO. (888) 344-7233. NOTE THAT THE TOWN OF NEEDHAM WATER AND SEWER DIVISION IS NOT A MEMBER OF DUG-SAFE. FOR LOCATION OF WATER MAINS, THE TOWN OF NEEDHAM WATER AND SEWER DIVISION OFFICE SERVICES MAY BE CONSULTED, DUG-SAFE TELE. NO. (888) 344-7233.
2. UNLESS OTHERWISE SPECIFIED ON THESE PLANS, ALL CONSTRUCTION METHODS AND MATERIALS SHALL COMPLY WITH SPECIFICATIONS OUTLINED IN NEEDHAM'S STORMWATER MANAGEMENT STANDARDS.
3. ALL STUMPS AND OTHER CONSTRUCTION DEBRIS SHALL BE PROPERLY REMOVED ANY FILL MATERIAL USED SHALL BE FREE OF HAZARDOUS MATERIALS OR WASTE.
4. ALL ROOF LEADERS SHALL BE DIRECTED TO THE SUBSURFACE ROOF DRAIN INFILTRATION BED AND NOT ALLOW TO OVERFLOW. SHALL NOT DRAIN RUNOFF ACROSS ADJACENT PROPERTY LINES.
5. UPON COMPLETION, AN AS-BUILT PLAN OF INFILTRATION STRUCTURES AND IMPERVIOUS AREAS SHOWN HEREON SHALL BE SUBMITTED TO THE TOWN OF NEEDHAM WATER AND SEWER DIVISION. ALL STORMWATER MANAGEMENT SYSTEMS SHALL ACCOMPANY THE AS-BUILT PLAN. A PLAN STAMPED BY A MASSACHUSETTS REGISTERED LAND SURVEY AT COMPLETION OF THE PROJECT.
6. CONNECTION OF ANY PROPOSED OR FUTURE SLUMP PUMP TO THE INFILTRATION STRUCTURES IS PROHIBITED.
7. CONTRACTOR SHALL CONTACT DESIGN ENGINEER AFTER COMPLETION OF INFILTRATION BED AND PLACING STONE AND GRAVEL TO BACKFILL TO GRADE.
8. ROOF RUNOFF FROM ALL DOWNSPUTS FROM THE PROPOSED ADDITION AND DECK SHALL BE DIRECTED TO ROOF DRAIN DRYWELL.

1. THE LIMITS OF WORK SHALL BE MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING. THE SILTATION BARRIER SHALL SERVE AT THE LIMIT OF WORK LINE.
2. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO AND DURING CONSTRUCTION ON THE SITE. THE SILTATION BARRIER SHALL BE PLACED IN ALL AREAS AS SHOWN ON ALL THE PLANS AND IN ANY OTHER AREAS AS DETERMINED NECESSARY DURING CONSTRUCTION.
3. ALL SOIL STOCKPILES SHALL BE COVERED WITH EROSION CONTROL MEASURES AROUND THEIR EDGES AT ALL TIMES. SOIL STOCKPILES SHALL BE COVERED WITH TEMPORARY VEGETATION OR FASTENED TAUPALPUM SHEETS.
4. ALL CUT AND FILL SLOPES SHALL BE IMMEDIATELY COVERED WITH 6" OF LOAM AND SEED DURING THE GROWING SEASON (FROM NOVEMBER 1ST OF ONE YEAR TO NOVEMBER 1ST OF THE FOLLOWING YEAR) AND NON-GROWING SEASON (FROM NOVEMBER 1ST TO APRIL 1). IN AREAS SUBJECT TO THE WETLANDS PROTECTION ACT, THE HAYMULCH AND/OR REQUIRED MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATION IS ESTABLISHED. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL REMAIN AT LEAST 6" OF LOAM AND SEED.
5. THE SILTATION BARRIER SHALL BE MAINTAINED UNTIL VEGETATIVE COVER HAS BEEN SUSTAINABLY ESTABLISHED AND GRADED SLOPES ARE STABLE.
6. THE SITE CONTRACTOR IS RESPONSIBLE TO CLEAN UP ANY SEDIMENT WHICH ERODES FROM THE SITE INTO THE STREET OR ADJUTING PROPERTY IMMEDIATELY UPON DISCOVERY.
7. THE CONTRACTOR SHALL FOLLOW STANDARD PRACTICE AND LOAM AND SEED ALL DISTURBED AREAS FOLLOWING CONSTRUCTION.
8. ALL PERSONNEL MUST WEAR DUST MASKS DURING CONSTRUCTION SITE AT LEAST EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5 INCHES OR MORE. DISTURBED AREAS THAT HAVE BEEN STABILIZED MUST BE INSPECTED AT LEAST EVERY MONTH.
9. DURING CONSTRUCTION, THE CONTRACTOR SHALL SPRAY DOWN THE SITE WITH WATER AS NEEDED FOR DUST CONTROL.
10. DURING CONSTRUCTION THE CONTRACTOR SHALL INSPECT THE ROAD AND SWEEP AS NECESSARY.
11. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL STRUCTURES AND DEVICES THROUGHOUT CONSTRUCTION. ANY EROSION CONTROL DEVICES FOUND TO BE UNDESIRABLE OR INOPERABLE SHALL BE REMOVED AND REPLACED. ACCUMULATED SEDIMENTS MUST BE REMOVED WHEN DEPOSITS REACH NO MORE THAN ONE HALF THE HEIGHT OF THE SILTATION BARRIER.
12. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN UNTREATED AREAS UNTIL AFTER CONSTRUCTION FOR A MINIMUM OF 30 DAYS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING (7 DAYS IF WITH 100 FEET OF A STREAM, POND OR WETLAND) AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL.
13. SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT THE SITE FROM SPRING RUNOFF PROBLEMS. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, THE MULCH AND SEED SHALL BE APPLIED BY THE ENGINEER. SEED SHALL BE EMPLOYED TO PROTECT THE SITE.

ZONING DISTRICT: SRB
SCALE: 1"=10'

LEGEND:

N/F	NOW OR FORMERLY
	TREE
	PROPOSED PLANTINGS
	PROPOSED WATER SERVICE
	PROPOSED SEWER SERVICE
	PROPOSED DRAINAGE PIPE
	PROPOSED SILTATION BARRIER
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED AREA DRAIN
	PROPOSED DRAIN BASIN
	PROPOSED ROOF DRAIN LEADER
TBR	TO BE REMOVED



1. THERE SHALL BE NO ILLEGAL DISCHARGES TO ANY PART OF THE STORM DRAIN SYSTEM. THE IMPLEMENTATION, INSPECTION, AND REPAIR OF THE EROSION CONTROLS IS THE RESPONSIBILITY OF THE SITE CONTRACTOR DURING CONSTRUCTION.

THE INSPECTION AND OPERATION OF THE STORM WATER MANAGEMENT SYSTEM UPON COMPLETION OF CONSTRUCTION IS THE RESPONSIBILITY OF:

PARTIES RESPONSIBLE FOR LONG TERM OPERATION/MAINTENANCE:

HOMEOWNER

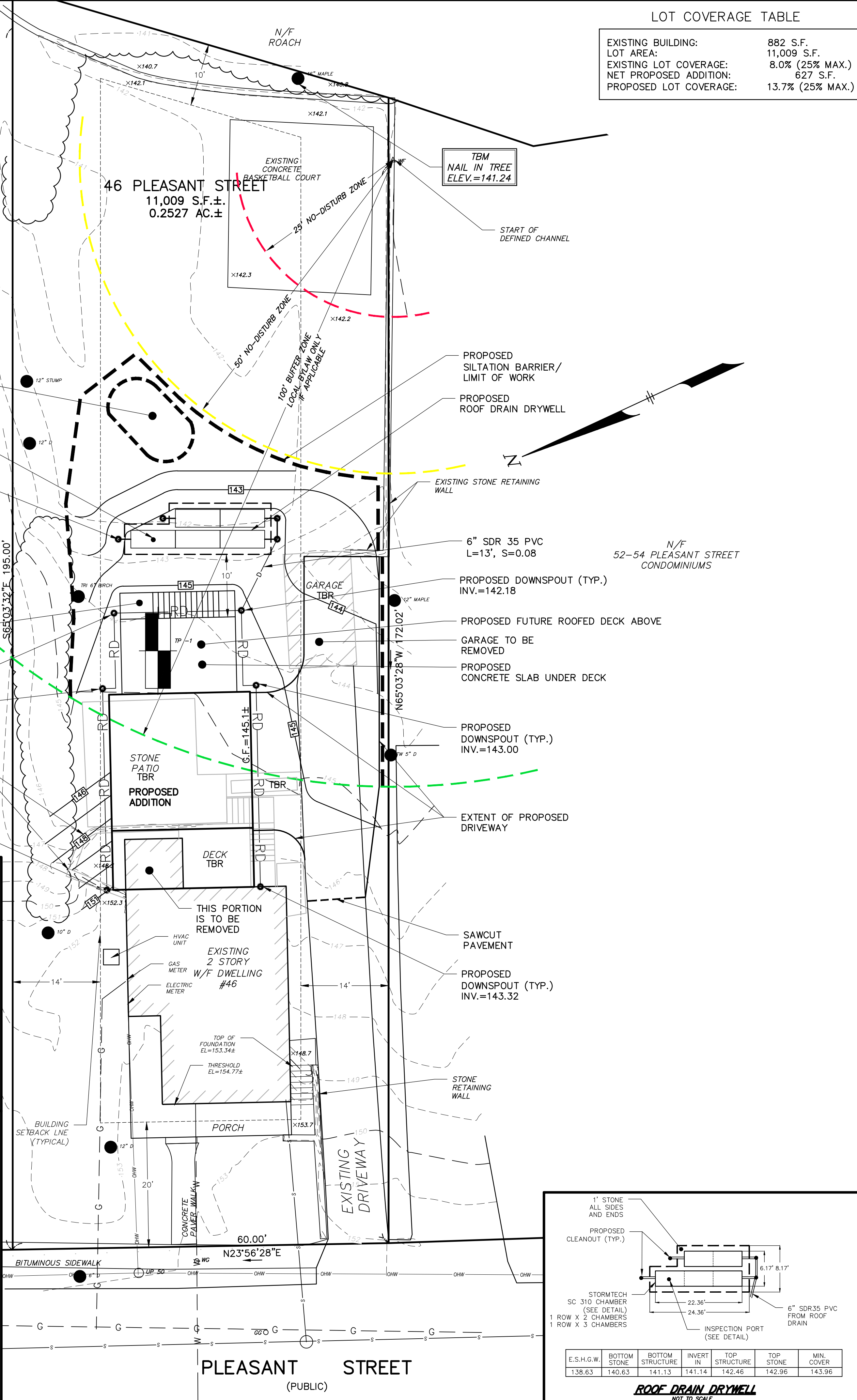
SCHEDULE FOR INSPECTION AND MAINTENANCE:

ROOF DRYWELL:

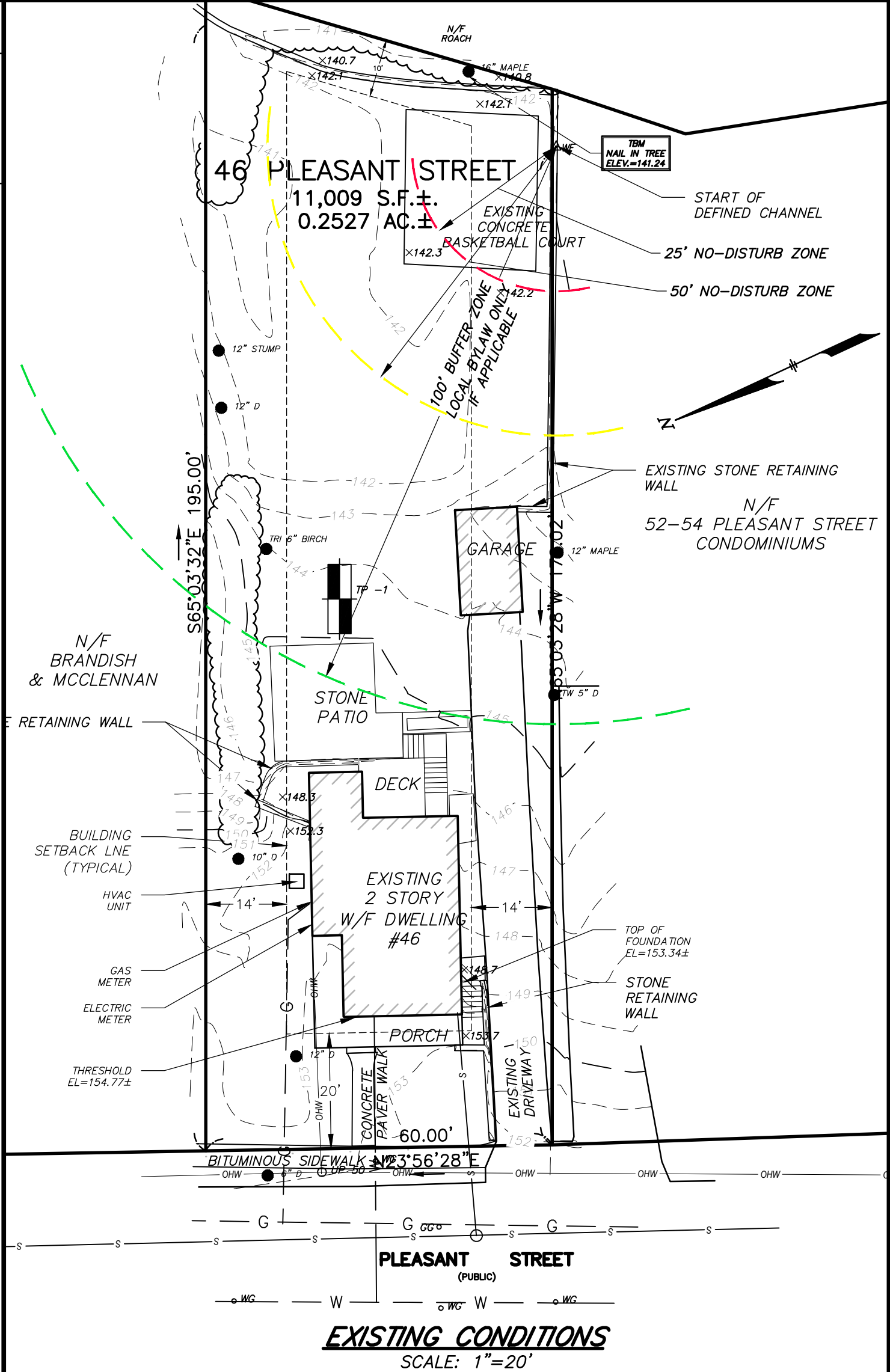
INSPECT THE ROOF DRYWELL AFTER EVERY MAJOR STORM FOR THE FIRST FIVE MONTHS TO ENSURE PROPER STABILIZATION AND FUNCTION. THEREAFTER, INSPECT AND CLEAN IT AT LEAST TWICE PER YEAR. WATER LEVELS SHOULD BE RECORDED OVER SEVERAL DAYS TO CHECK TO STRUCTURE'S DRAINAGE. ALSO, MOSQUITO CONTROLS MAY BE NECESSARY. ROOF GUTTERS SHOULD BE CLEANED AT LEAST TWICE PER YEAR TO ENSURE THAT FLOW TO THE SUBSURFACE CHAMBER IS NOT OBSTRUCTED. GUTTERS AND DOWNSPOUTS SHALL BE INSPECTED AT LEAST TWICE PER YEAR TO ENSURE THAT THERE ARE NO LEAKS OR OBSTRUCTIONS THAT IMPAIR THE ABILITY OF THESE STRUCTURES TO EFFECTIVELY CONVEY ROOF RUNOFF. IF DAMAGE TO GUTTERS OR DOWNSPOUTS IS OBSERVED, THEY SHALL BE REPAIRED OR REPLACED. IF WATER IS PRESENT IN THE SYSTEM MORE THAN 72 HOURS AFTER A RAIN EVENT, THE SYSTEM IS CONSIDERED CLOGGED AND MUST BE SERVED, REPAIRED, OR REPLACED.

EMERGENCY CONTACTS:

IN THE EVENT OF A HAZARDOUS MATERIALS SPILL ON THE SITE THE FOLLOWING PARTIES SHALL BE CONTACTED: PRC DEPARTMENT, PH. (781) 444-3142.



LOT COVERAGE TABLE	
EXISTING BUILDING:	882 S.F.
LOT AREA:	11,009 S.F.
EXISTING LOT COVERAGE:	8.0% (25% MAX.)
NET PROPOSED ADDITION:	627 S.F.
PROPOSED LOT COVERAGE:	13.7% (25% MAX.)



NOTE: FILTER FABRIC SHALL BE PLACED ON SIDES AND TOP ONLY.

CHAMBERS SHALL MEET ASTM F2922
 "STANDARD SPECIFICATION FOR
 POLYETHYLENE (PE) CORRUGATED WALL
 STORMWATER COLLECTION CHAMBERS".

NOMINAL 3/4" - 2"
 DOUBLE WASHED, CRUSHED,
 ANGULAR STONE
 (AASHTO M43 THROUGH #67
 STONE SIZES ALLOWED)

ADS 601
 NON-WOVEN
 GEOTEXTILE (OR
 EQUAL) ON SIDES
 AND TOP

SC-310 END CAP

USE SCARIFY SUBGRADE

REMOVE TOP AND SUB SOILS
 REPLACE WITH TITLE 5 SAND

CHAMBERS SHALL BE DESIGNED IN
 ACCORDANCE WITH ASTM F2787
 "STANDARD PRACTICE FOR STRUCTURAL
 DESIGN OF THERMOPLASTIC CORRUGATED
 WALL STORMWATER COLLECTION
 CHAMBERS".

GRANULAR WELL GRADED SOIL/AGGREGATE
 MIXTURES, <35% FINES, COMPACT IN 6" LIFTS
 TO 95% STANDARD PROCTOR DENSITY.

6"
 16"
 6"
 24" MIN
 TO ESHW

6" 34" 12"

THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE

SC-310 TYPICAL CROSS-SECTION

NOT TO SCALE

SITE PLAN FOR 46 PLEASANT STREET IN NEEDHAM, MA		
GRADING AND DRAINAGE PLAN		
FOR:	KANTOR	
SCALE: 1"=10'	OCTOBER 9, 2025	
STAMSKI AND McNARY, INC. 1000 MAIN STREET ACTON, MASS. ENGINEERING - PLANNING - SURVEYING		
0 5 10 20 30 40 FT		
SM-6696 (6696.DRAINAGE.L.dwg)		