

I CERTIFY THAT I HAVE CONFORMED WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS IN PREPARING THIS PLAN.

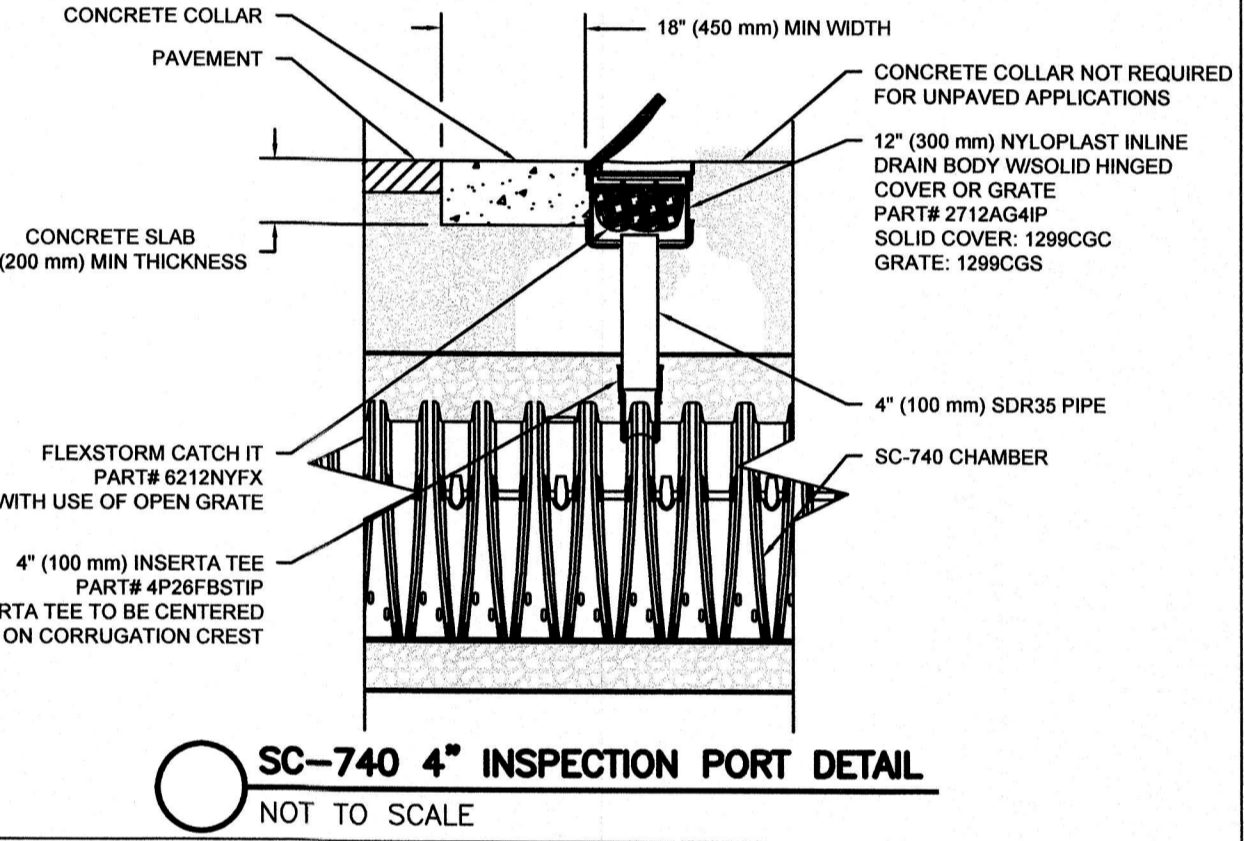
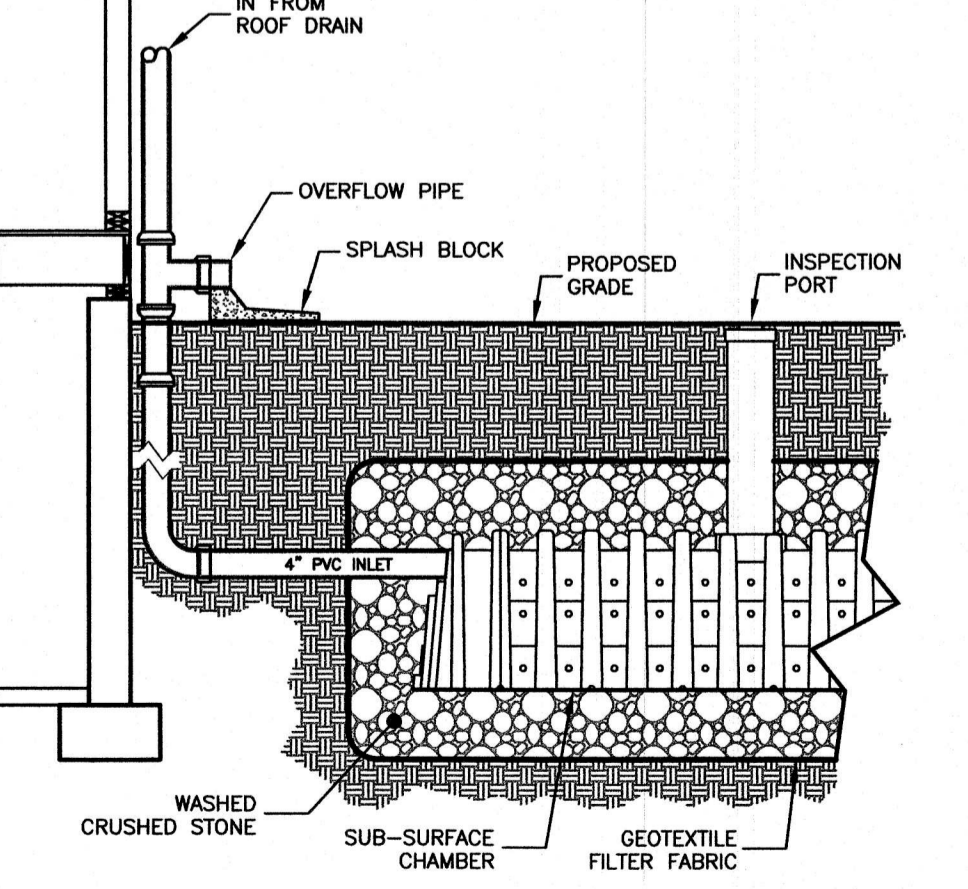
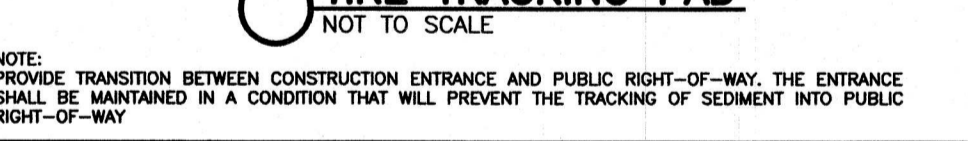
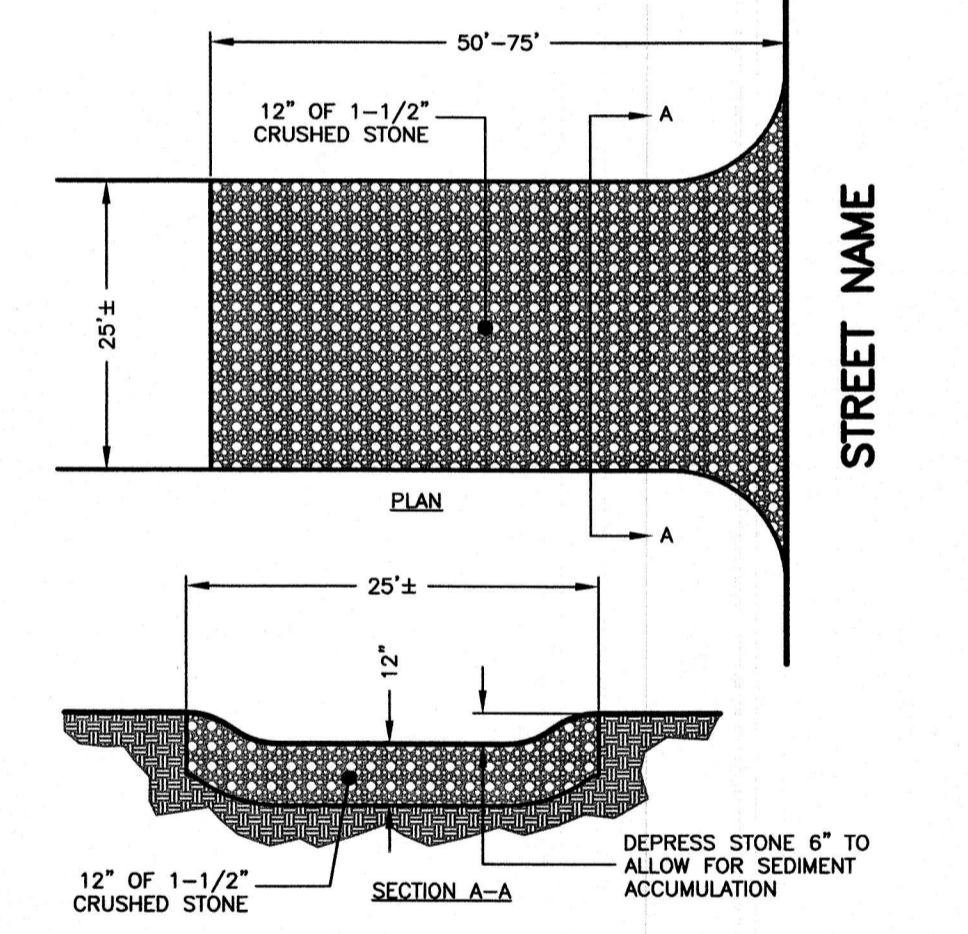
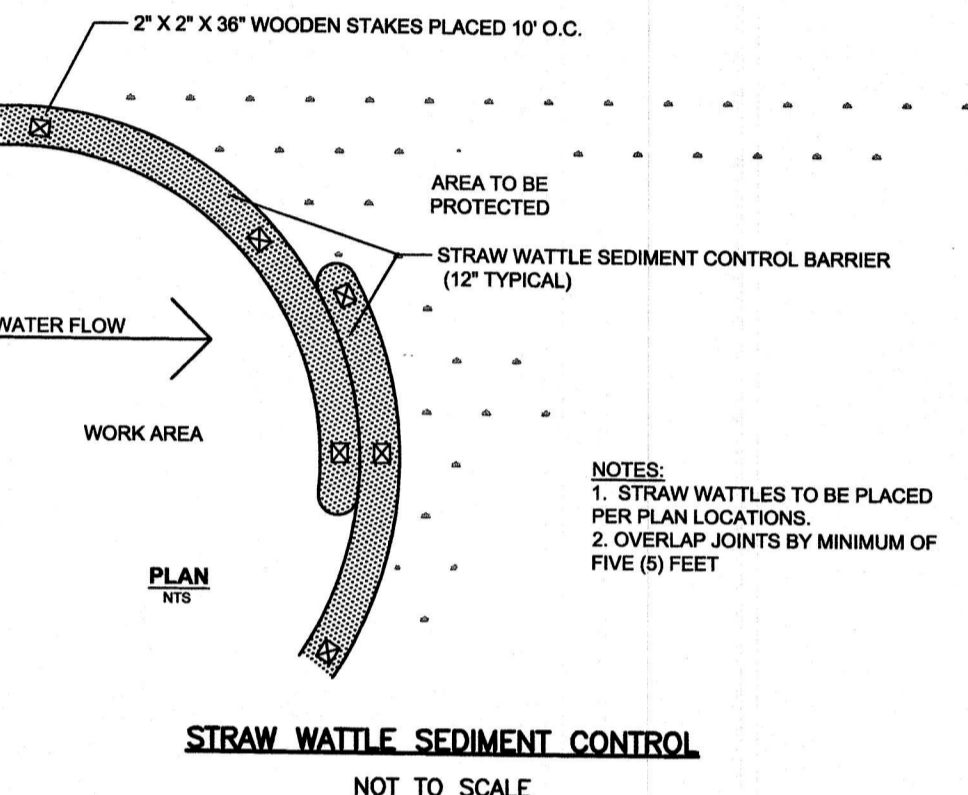
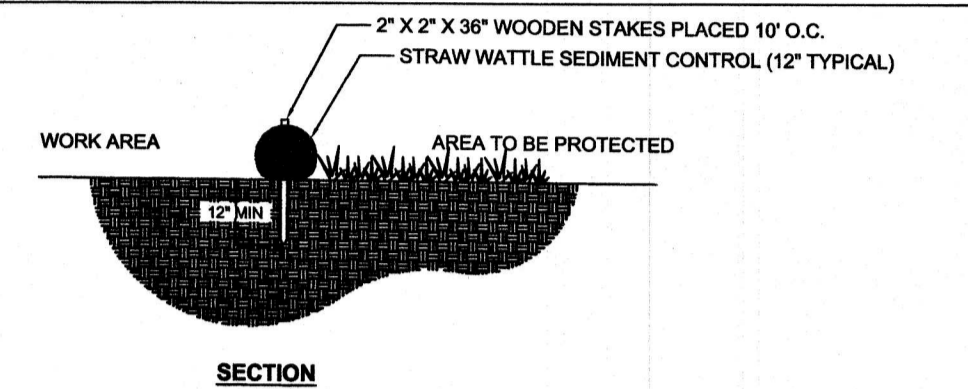
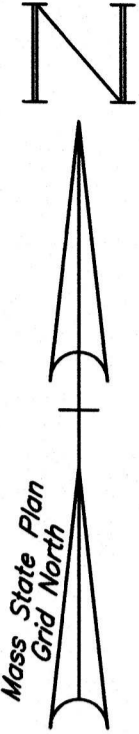
HAYES ENGINEERING, INC.

LEGEND OF ABBREVIATIONS

6712/470 - BOOK/PAGE REFERENCE RECORDED AT THE ESSEX SOUTH DISTRICT REGISTRY OF DEEDS

(FD) - FOUND

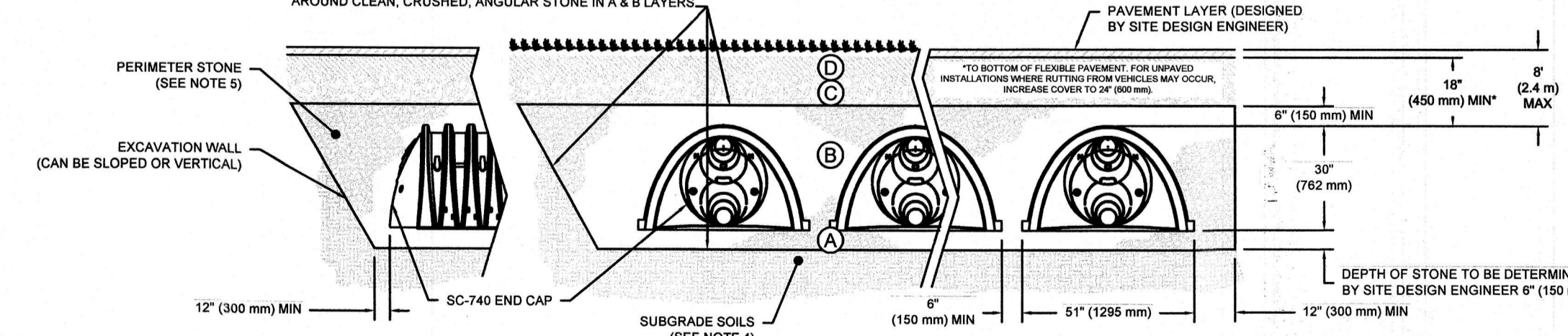
SBDH - STONE BOUND DRILL HOLE



ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEASIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBBASE REQUIREMENTS.	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 98% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 96% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN) DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE.	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE.	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.

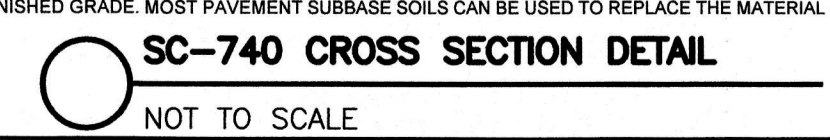
PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 3. ADD GEOSYNTHETICS 6011 NON-MOVING GEOTEXTILE ALL AROUND CLEAN, CRUSHED, ANGULAR STONE IN A & B LAYERS.



NOTES:

- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

NOTE: BED AND INSTALLATION IS TO BE INSPECTED BY TOWN ENGINEER



GENERAL NOTES:

- PROPERTY LINE INFORMATION TAKEN FROM "LOTING PLAN OF LAND IN LYNNFIELD, MA" BY HANCOCK ASSOCIATES DATED APRIL 5, 2018 REVISED TO JULY 1, 2018 AND RECORDED BY THE SOUTHERN ESSEX REGISTRY OF DEEDS AS PLAN BOOK 467 PLAN 33
- EXISTING TREES TAKEN FROM "DEFINITIVE SUBDIVISION PLAN" "EXISTING CONDITIONS PLAN OF LAND IN LYNNFIELD, MA" BY HANCOCK ASSOCIATES DATED APRIL 5, 2018 REVISED TO JULY 3, 2018
- ALL CLEARING, EXCAVATING, AND FILLING WILL BE PERFORMED IN ACCORDANCE WITH SECTION 8.2.1 OF THE RULES & REGULATIONS OF THE PLANNING BOARD GOVERNING THE SUBDIVISION OF LAND IN LYNNFIELD, MASSACHUSETTS (R&R) SECTION 7.5
- EXISTING ABUTTING HOMES TAKEN FROM THE TOWN OF LYNNFIELD TOPOGRAPHIC MAPS.

Coordinate System

N 925,790,972 m
E 249,188,185 m

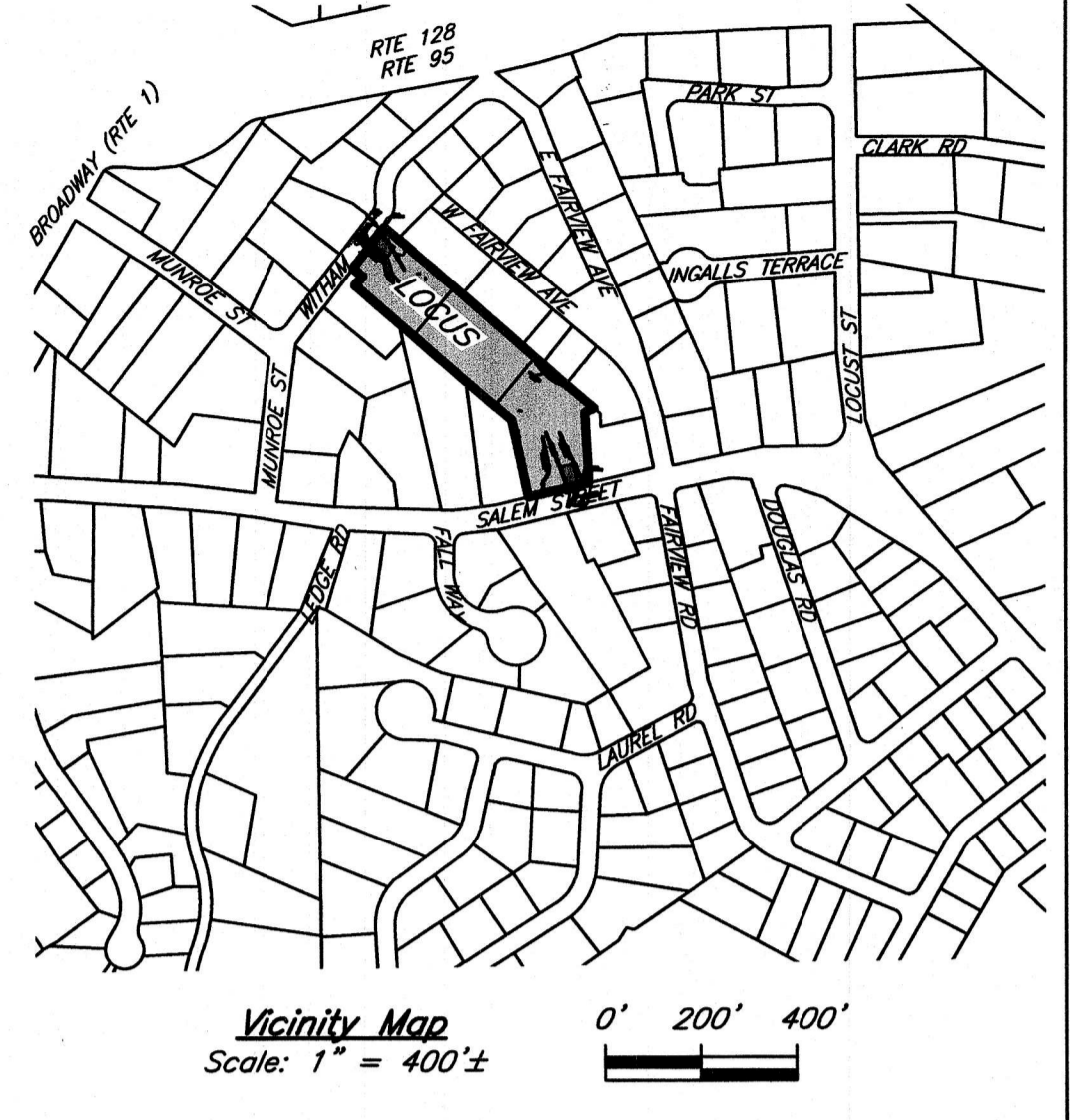
Massachusetts Mainland State Plane Coordinates in meters based upon Beverly Airport Primary Control Station designation BVD D (PID - A15565) NAD 83(2011) position.

BENCHMARKS (NAVD 88):

- TOP TACK ELEVATION = 135.74
- TOP PK NAIL ELEVATION = 128.49

TREE LEGEND

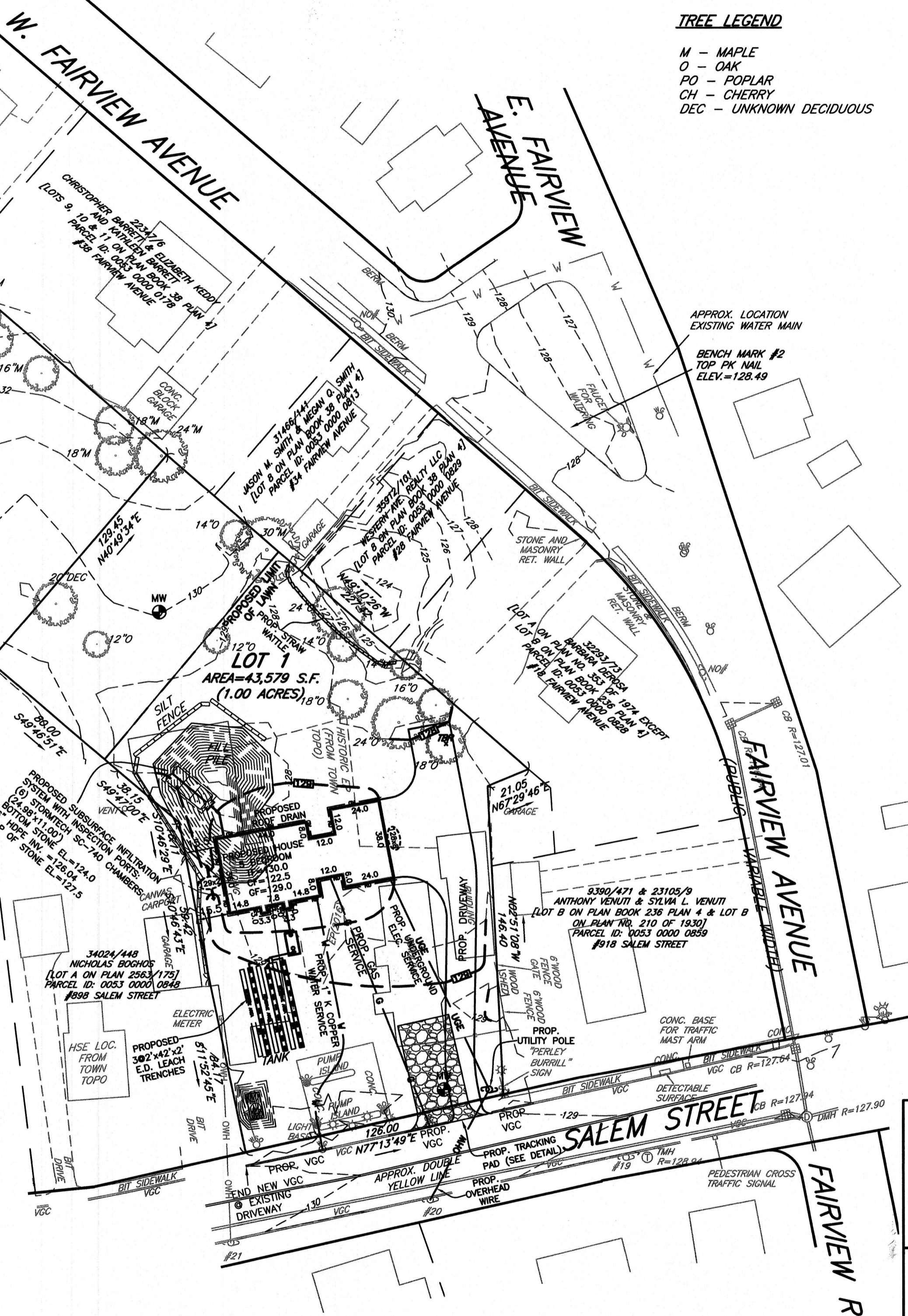
- M - MAPLE
- O - OAK
- PO - POPLAR
- CH - CHERRY
- DEC - UNKNOWN DECIDUOUS



Vicinity Map
Scale: 1" = 400'±

LEGEND

- VERTICAL GRANITE CURB - VGC
- BIT BERM - BERM
- EDGE OF PAVEMENT - EP
- CHAIN LINK FENCE - 4" SLIC
- STOCKADE FENCE - 4" STOCKADE
- WOOD FENCE - 6" WOOD FENCE
- STONE WALL - SW
- PAINTED WATER LINE - WL
- OVERHEAD WIRES - OWH
- EXISTING 1' CONTOUR - 131
- EXISTING 5' CONTOUR - 130
- DRAIN MANHOLE - DM
- CATCH BASIN - CB
- FIRE HYDRANT - FH
- WATER GATE - WG
- WATER SHUTOFF - WS
- GAS GATE - GG
- UTILITY POLE - UP
- BOLLARD - BOLL
- LIGHT POLE - LP
- MISC. MANHOLE - MM
- TELEPHONE MANHOLE - TM
- EXISTING SPOT GRADE - SG
- EXISTING MONITORING WELL - MW
- EXISTING MONITORING WELL - MWH
- PROPOSED SLOPED GRANITE CURB - SGC
- PROPOSED CAPE COD BERM - CCB
- PROPOSED CONTOUR - CON
- PROPOSED CATCH BASIN - PCB
- PROPOSED DRAIN MANHOLE - PDM
- PROPOSED SPOT GRADE - PSG
- EXISTING TREE - ET
- PROPOSED DRAINAGE FLOW PATH - PDP
- TBR - TO BE REMOVED



ZONE: SINGLE RESIDENCE (RA)

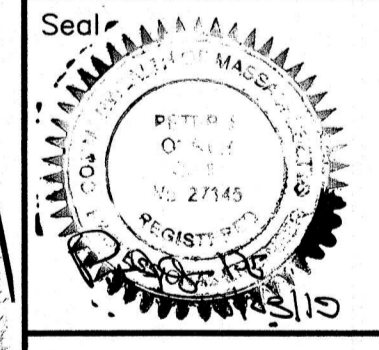
MINIMUM LOT AREA = 15,000 S.F.
 MINIMUM LOT FRONTAGE (CORNER TO CORNER) = 110 FEET
 MINIMUM LOT FRONTAGE ON CURVE = 146.67 FEET
 MINIMUM LOT WIDTH = 88 FEET

MINIMUM YARD SETBACKS
 FRONT = 30 FEET
 SIDE = 15 FEET
 REAR = 20 FEET

PERMITTED LOT COVERAGE = 35%

PROPERTY IS NOT LOCATED IN THE GROUNDWATER PROTECTION DISTRICT.
 PROPERTY IS NOT LOCATED IN A FLOOD PLAIN DISTRICT.

No.	Revision	Date
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		



Hayes
 Scale: 1" = 40'

DEFINITIVE PLAN TOPOGRAPHIC PLAN LYNNFIELD, MASS.

ASSESSORS MAP 52 LOT 783 & MAP 53 & 843

OWNER & APPLICANT
 914 Salem Street, LLC
 17 Wing Road
 Lynnfield, MA 01940

Engineer
 Hayes Engineering, Inc.
 603 Salem Street
 Wakefield, Mass. 01880
 www.hayeseng.com

LYNNFIELD PLANNING BOARD		Application Filed: _____	
_____	_____	Final Plan Filed: _____	_____
_____	_____	Hearing Date: _____	_____
_____	_____	Plan Approved: _____	_____
_____	_____	Plan Signed: _____	_____
		TOPOGRAPHIC SHEET 1 OF 1	
		SHEET 3 OF 3	

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