

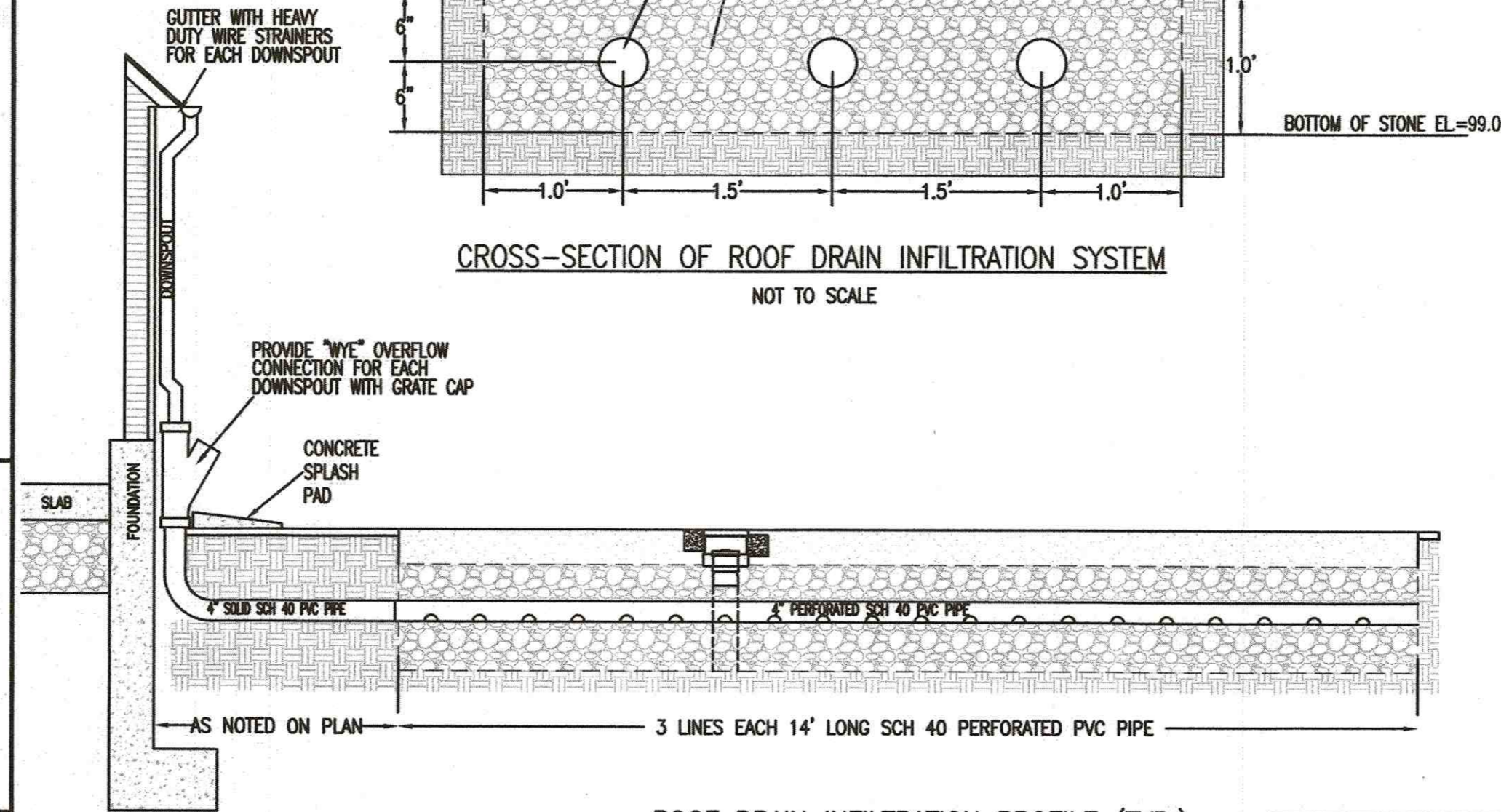
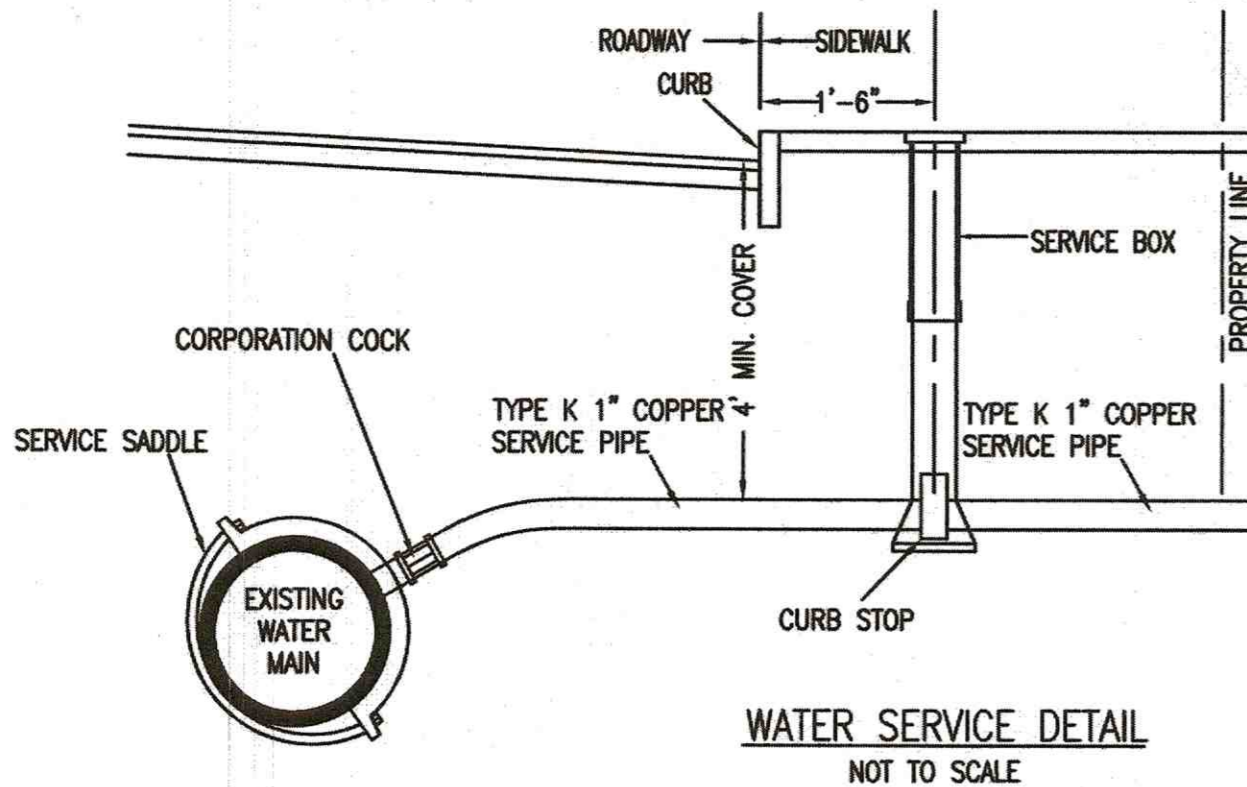
- NOTES:
- THE SUBJECT PROPERTY IS SHOWN AS ASSESSORS MAP 134 PART OF LOTS 43, 377 AND 376 ON THE NEW BEDFORD ASSESSORS' RECORDS.
 - PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY ZENITH LAND SURVEYORS, LLC.
 - REFER TO BOOK 13673 PAGE 176 ON RECORD AT THE BRISTOL COUNTY REGISTRY OF DEEDS FOR TITLE REFERENCE TO THE SUBJECT PROPERTY.
 - REFER TO PLAN BOOK 182 PAGE 30 ON RECORD AT THE BRISTOL COUNTY REGISTRY OF DEEDS.
 - VERTICAL DATUM IS ASSUMED. CONTRACTOR IS TO LOCATE AND VERIFY BOTH BENCHMARKS PRIOR TO CONSTRUCTION AND LET DESIGN ENGINEER KNOW OF ANY DISCREPANCIES PRIOR TO ANY WORK.
 - THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF BRISTOL COUNTY, MASSACHUSETTS, MAP NUMBER 25005C03836, MAP REVISED JULY 16, 2014, AND MAP NUMBER 25005C0379F, MAP REVISED JULY 7, 2009.
 - THE PROPERTY IS NOT LOCATED IN A PRIORITY HABITAT OR ESTIMATED HABITAT AS SHOWN ON THE MASSACHUSETTS NATURAL HERITAGE ATLAS 14TH EDITION EFFECTIVE DATE AUGUST 1, 2017.
 - LOCATION OF UTILITIES ARE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION AND INVERTS OF UTILITIES IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE UNDER MASSACHUSETTS STATE LAW TO NOTIFY DIGSAFE (800.322.4844) TO LOCATE UTILITIES IN THE PROJECT AREA 72 HOURS PRIOR TO THE START OF EXCAVATION.
 - ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED. WETLANDS WERE DELINEATED BY STEPHEN CHMIEL OF HYDRIC SOLUTIONS.
 - ROOF DRAIN INFILTRATION SYSTEM MUST BE INSPECTED BY THE CITY OF NEW BEDFORD D.P.I.
 - ALL WORK WITHIN THE CITY LAYOUT AND ALL UTILITY WORK TO BE INSPECTED BY THE CITY OF NEW BEDFORD D.P.I.
 - ALL WORK TO BE IN ACCORDANCE WITH CITY OF NEW BEDFORD REGULATIONS.

INFILTRATION SYSTEM CONSTRUCTION NOTES:

- TOPSOIL AND SUBSOIL SHALL BE REMOVED BENEATH CHAMBER SYSTEMS AND REPLACED WITH TITLE 5 SAND UP TO THE ELEVATION AT THE BOTTOM OF THE CHAMBERS.
- HEAVY DUTY WIRE STRAINERS ARE TO BE INSTALLED AT ALL DOWN SPOUTS. THIS IS TO PREVENT LEAVES AND OTHER DEBRIS FROM CLOGGING DOWN SPOUT.

OPERATION AND MAINTENANCE FOR ROOF INFILTRATION SYSTEM:

- THE INSPECTION OF THE GUTTER SYSTEM AND HEAVY DUTY WIRE STRAINERS ARE TO BE CONDUCTED A MINIMUM OF 4 TIMES PER YEAR. DURING THAT TIME LEAVES AND DEBRIS SHALL BE CLEANED FROM GUTTERS AND STRAINERS.
- THE INFILTRATION CHAMBERS SHALL BE INSPECTED A MINIMUM OF 1 TIME PER YEAR. THE INSTALLATION OF AN INSPECTION PORT TO GRADE WILL ALLOW EASY ACCESS FOR INSPECTION. AS PART OF THE INSPECTION ALL DEBRIS AND LEAVES ARE TO BE REMOVED FROM THE CHAMBERS.



ROOF DRAIN INFILTRATION PROFILE (TYP.)
NOT TO SCALE

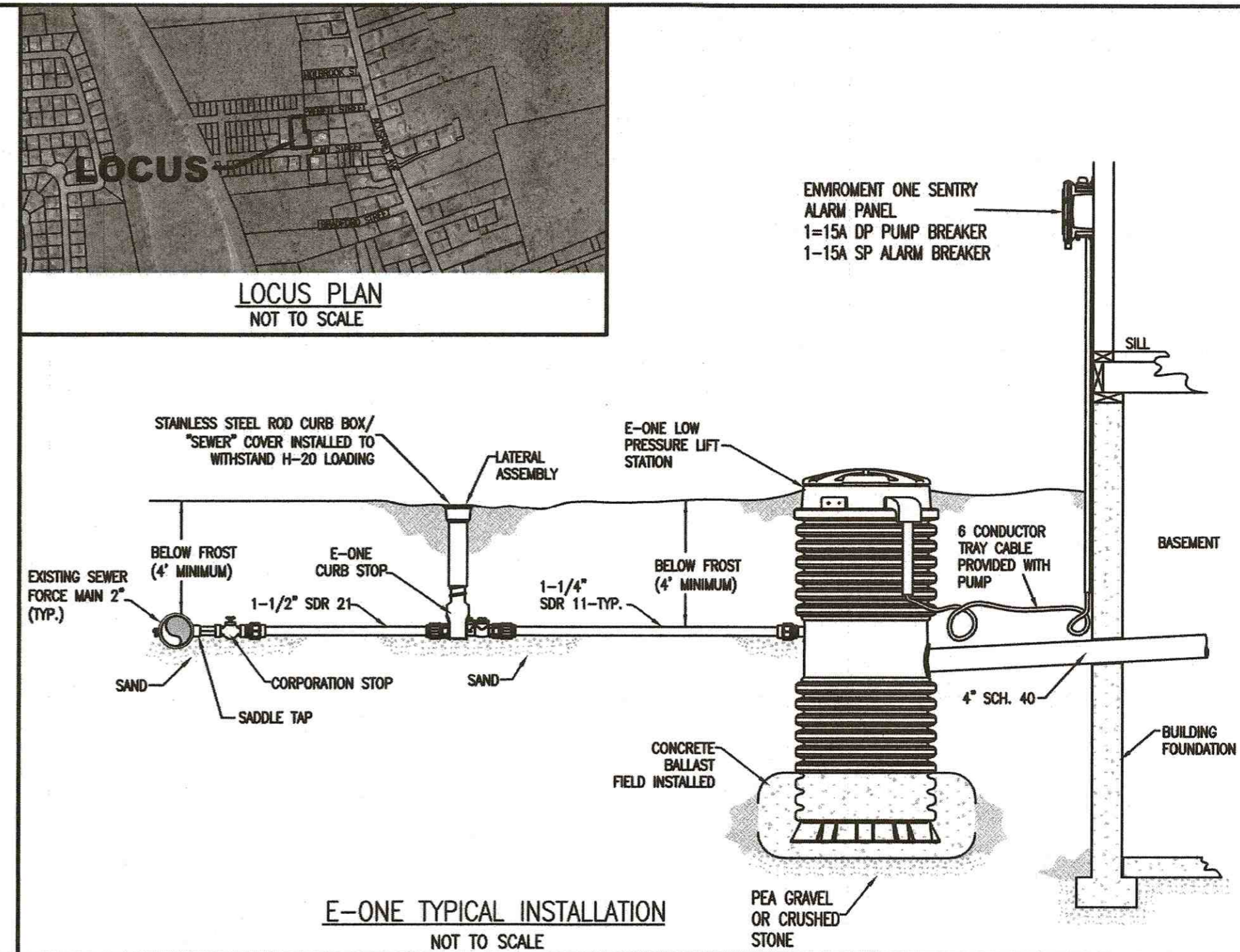
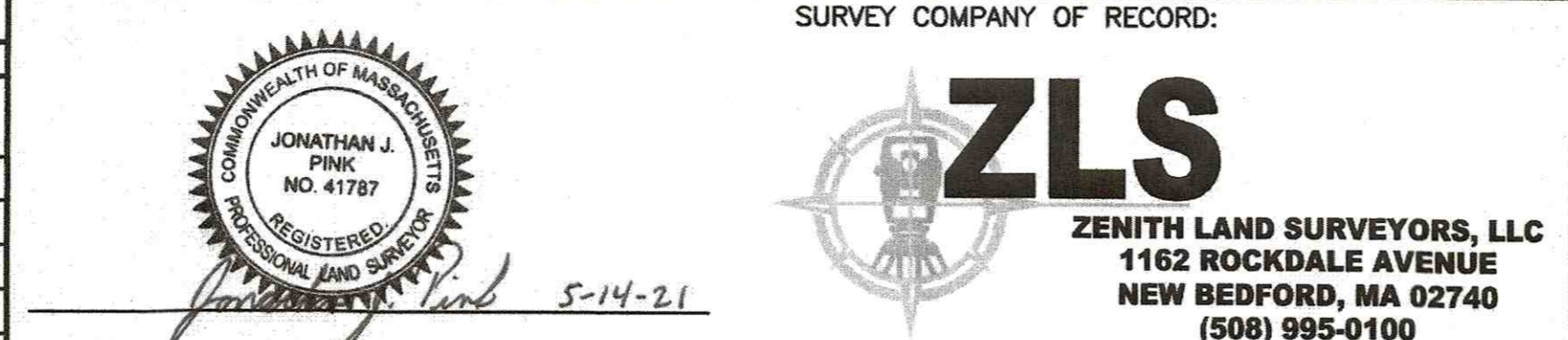
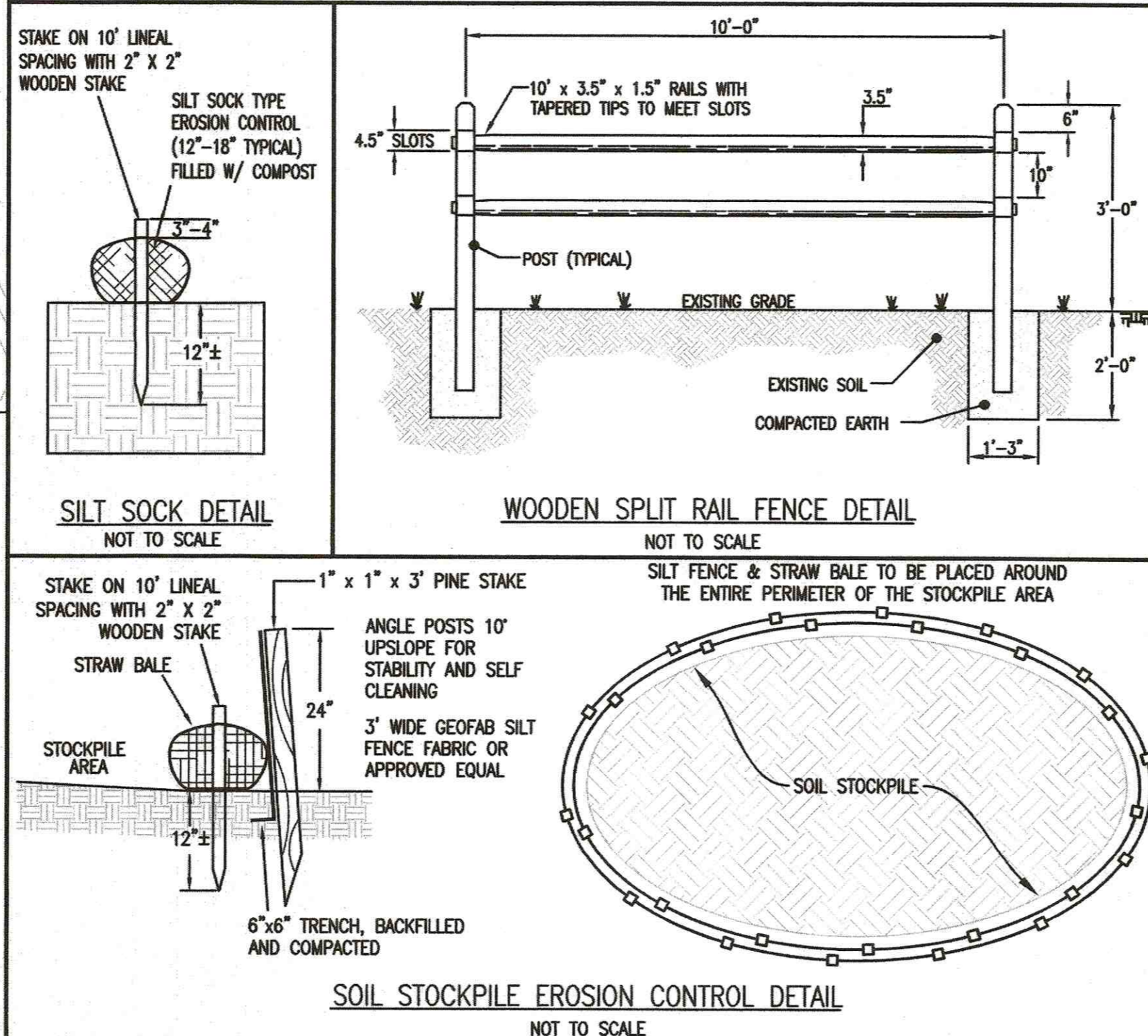
INFILTRATION CALCULATIONS:

PROPOSED ROOF AREA = 1,380 SF
DESIGN FOR A 1" STORM EVENT
TRY 4" PERFORATED PIPE IN A STONE BED
 $1,380 \text{ SF} \times (1/12" \text{ PER FOOT}) = 115 \text{ CF (VOLUME REQUIRED)}$

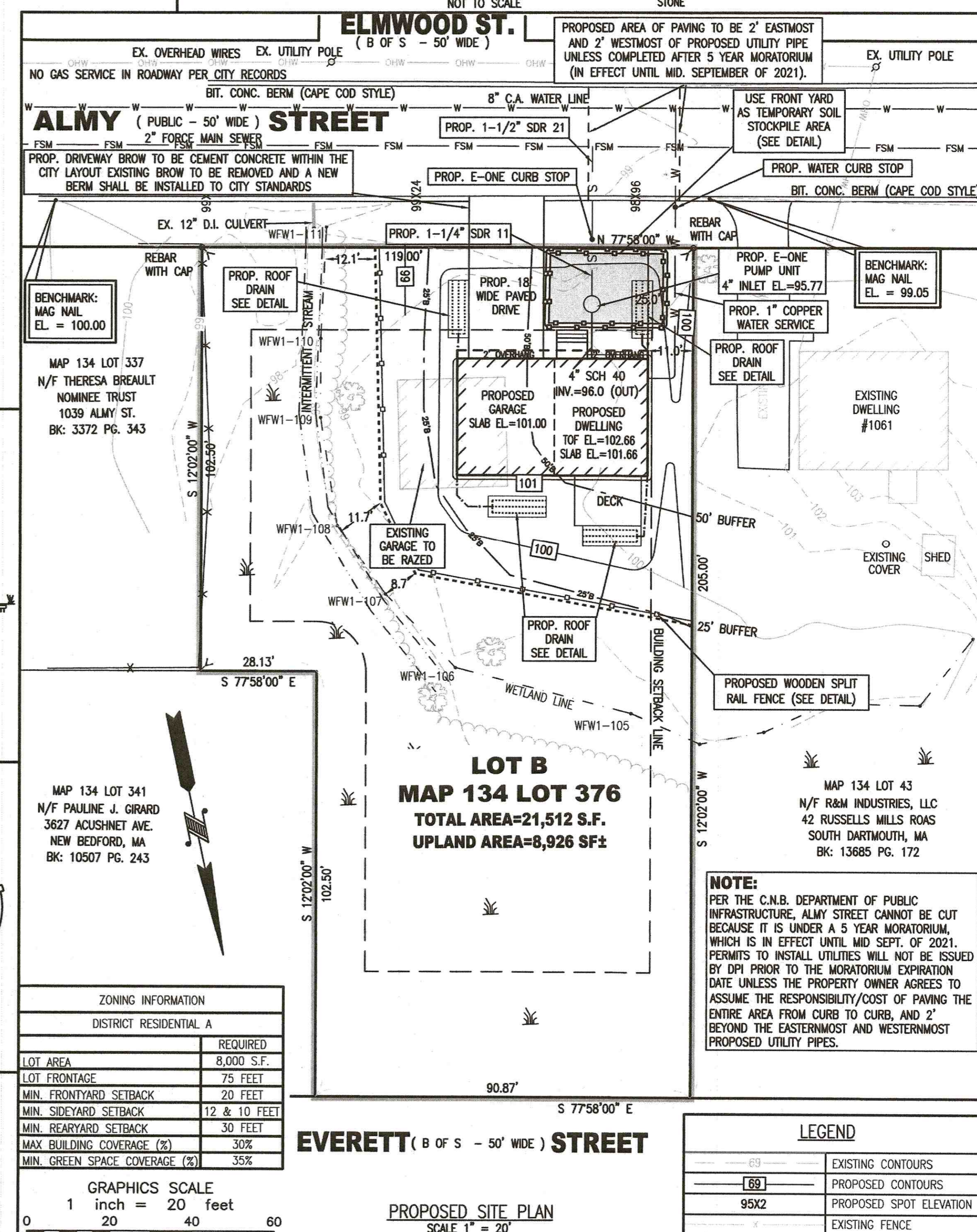
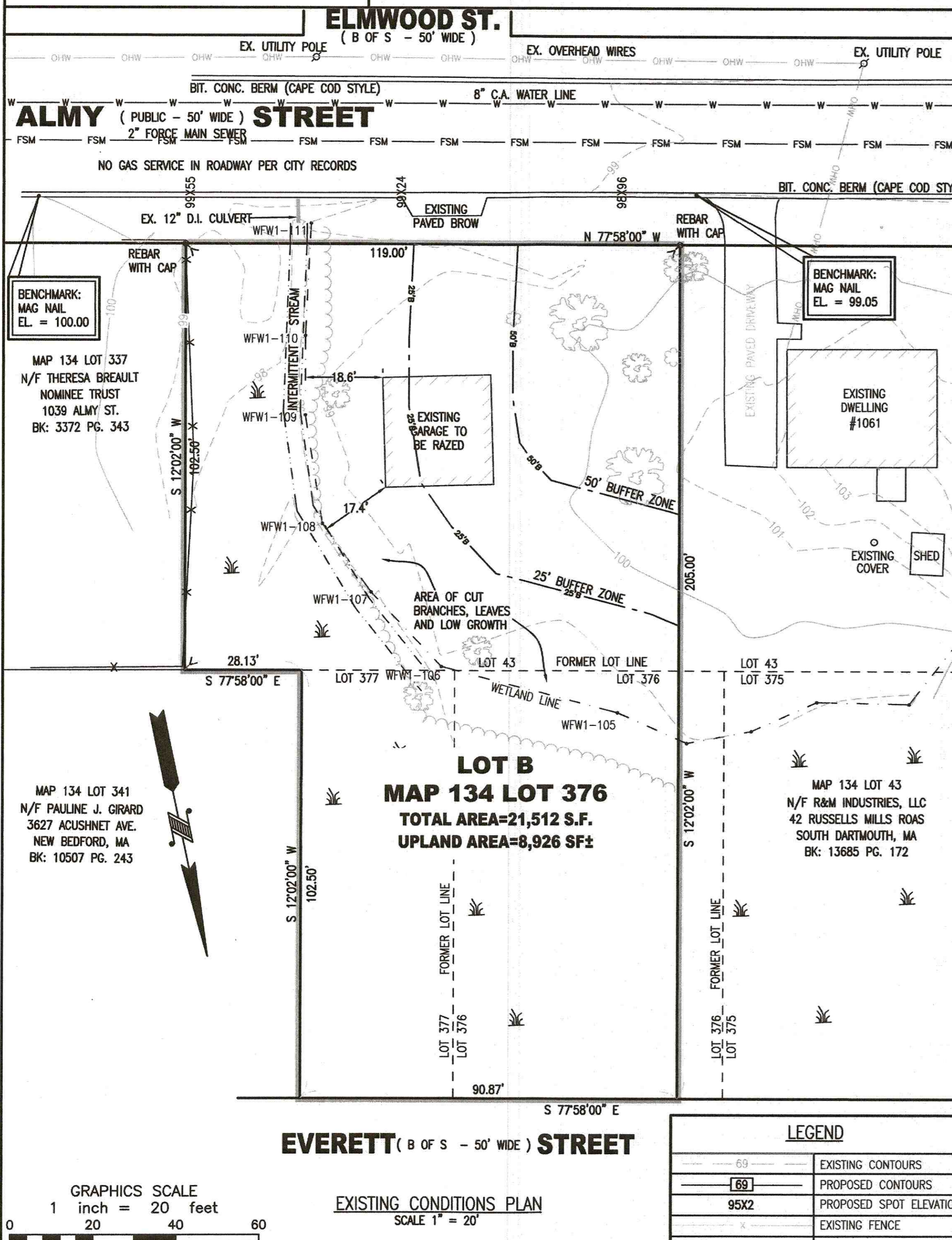
TRY 4 STONE BEDS
TRY 3 PIPES 4" DIAMETER AT 14' LONG
PIPE VOLUME = $3.14 \times 0.167^2 \times 14' \times (3 \text{ LINES}) = 3.68 \text{ CF}$
STONE BED = $14' \times 5' \times 1' = 70 \text{ CF}$
TOTAL VOLUME OF STONE IN BED = STONE BED - PIPE VOLUME
VOLUME = $70 \text{ CF} - 3.68 \text{ CF} = 66.32 \text{ CF}$

USING A 40% VOID RATIO IN CRUSHED STONE
 $66.32 \text{ CF} \times 0.4 = 26.52 \text{ CF}$

TOTAL STORAGE VOLUME PROVIDED =
 $3.68 \text{ CF} + 26.52 \text{ CF} = 30.2 \text{ CF (VOLUME PROVIDED)}$
4 BEDS TOTAL $30.2 \text{ CF} \times 4 = 120.8 \text{ CF}$



E-ONE TYPICAL INSTALLATION
NOT TO SCALE



ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET LAKEVILLE, MA 02347

BUILDING PERMIT PLAN
ASSESSORS MAP 134 PART OF LOT 376
ALMY STREET
NEW BEDFORD, MASSACHUSETTS

JORGE VERISSIMO

REV.	DATE	DESCRIPTION	BY	APP.
1	3/29/2021	DPI COMMENTS	JLB	JLB
2	5/14/21	CON COMMENTS	JLB	JLB

PROJECT SITE: ALMY STREET
SHEET NAME: BUILDING PERMIT PLAN
PROJECT INFO: ASSESSORS MAP 134 PART OF LOT 376
CLIENT INFO: JORGE VERISSIMO