

DESIGN INTENT:
 50% RULE IS BEING UTILIZED
 HIGH CONTOUR: 95
 MIC CONTOUR: 94
 THE BOTTOM OF THE EFFLUENT DISPOSAL SYSTEM SHALL BE CONSTRUCTED AT ELEVATION 95 AND IS APPROXIMATELY AT ORIGINAL GROUND ON THE HIGH CONTOUR OF THE DESIGNED EFFLUENT DISPOSAL SYSTEM.

**** EFFLUENT LINE NOTE****
 EFFLUENT LINE TO BE SLEEVED IN RIGID FOAM BOARD INSULATION WITH AN R10 INSULATING FACTOR, OR EQUIVALENT, TO PREVENT AGAINST FREEZING.

EFFLUENT LINE TO MAINTAIN 1.5% PITCH THROUGHOUT ENTIRE RUN

SEE SHEET 2 FOR SYSTEM PROFILES AND INVERT ELEVATIONS.

LEACH BED REQUIREMENTS
 EXISTING TOWN LIBRARY & VOLUNTEER FIRESTATION
 Estimated Perc Rate: 10min/1"

DAILY FLOW FIGURES:
 LIBRARY: 10GPD/EMPLOYEE & 5GPD/TRANSIENT (Townhall Design Flow)
 The library has 4 full time employees and 1 part time employee. Transient use includes library patrons and programming attendees up to 75 people a day. TOTAL: 425GPD

FIRESTATION: 30GPD/EMPLOYEE (Worker Design Flow w/kitchen, showers and exercise area)
 The Firestation currently has 2 full time employees on 12 hour day shifts; Daily flow figures include adding a proposed 12 hour night shift with up to 3 additional employees each shift. TOTAL: 300GPD

LOT LOADING:
 LIBRARY: 425 GPD
 FIRESTATION: 300 GPD
 TOTAL LOADING: 725 GPD

COMMERCIAL SIZING:
 185 SqFt./100GPD=1341.5 SqFt
 SYSTEM SIZE PROVIDED: 1,350 SqFt
 Bed Size: 30' x 45'

THE TOWN OF DEERFIELD OWNS:
 MAP 210 LOTS: 2, 3 & 5

LEDGE PROBE DEPTHS:

LP1:	17"	8-19"
LP2:	22"	
LP3:	34"	
LP4:	32"	
LP5:	24"	19-26"
LP6:	48"	
LP7:	62"	
LP8:	48"	

AVERAGE DEPTH: 35"

TEST PIT DATA:
 Date of Test Pits:
 January 30, 2024
 Inspected by: Jason Franklin

SITE DATA:
 SOIL TYPE: 140B Chatfield-Hollis-Canton Complex
 SOURCE: <http://websoilsurvey.sc.egov.usda.gov>

TEST PIT 1

0-10"	10YR 4/4 Fine Sandy Loam Granular Very Friable
10-24"	10YR 5/6 Fine Sandy Loam Massive Friable
24-39"	2.5Y 5/6 Fine Sandy Loam Massive Friable

ESHWT @ 39"
 No Obs. Water
 Refusal @ 39"
 Few Roots to 16"

TEST PIT 2

0-8"	10YR 4/4 Fine Sandy Loam Granular Very Friable
8-19"	10YR 4/6 Fine Sandy Loam Massive Friable
19-26"	10YR 5/6 Fine Sandy Loam Massive Friable
26-42"	2.5Y 5/4 Fine Sandy Loam Massive Friable (Compact in Place)
42-54"	2.5Y 5/6 Sandy Loam Friable (Compact in Place)

ESHWT @ 42"
 No Obs. Water
 No Refusal
 Common Roots to 8"

- BENCHMARKS:
1. WOOD HUB SET
ELEV: 96.2
 2. WOOD HUB SET
ELEV: 97.8
 3. MAG NAIL SET IN PAVEMENT
ELEV: 104.4



REVIEWED AND APPROVED
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 WATER DIVISION

Date: 3/12/2024

#eCA2024031226

1" = 20'

UNDERGROUND ELECTRIC LINES EXIST ON THE PROPERTY. THEIR LOCATION IS NOT KNOWN.

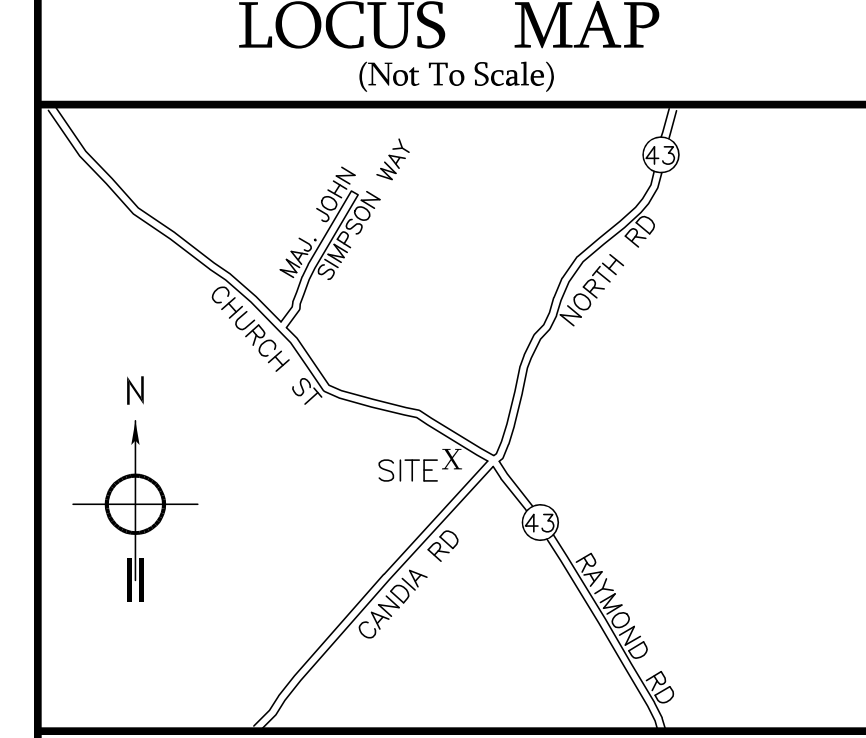
PRIOR TO CONSTRUCTION/EXCAVATION CALL DIGSAFE AT 1-888-344-7233 OR OTHER UNDERGROUND UTILITY MARKING COMPANY

ISDS NOTE:
 THE LIBRARY AND FIRESTATION CURRENTLY SHARE ONE LEACHFIELD WITH INDIVIDUAL SEPTIC TANKS.

This plan is NOT a boundary survey and should not be considered as such. The property lines shown are approximate only and are shown only for the purposes of this septic system design. A licensed land surveyor should be contacted if verification of the boundary lines is needed.

LEGEND

ST	Septic Tank	Test Pit
Tree (typ.)		Benchmark
Pine Tree		Light Pole
90	Existing Elev.	Utility Pole
F90	Finished Elev.	Catch Basin



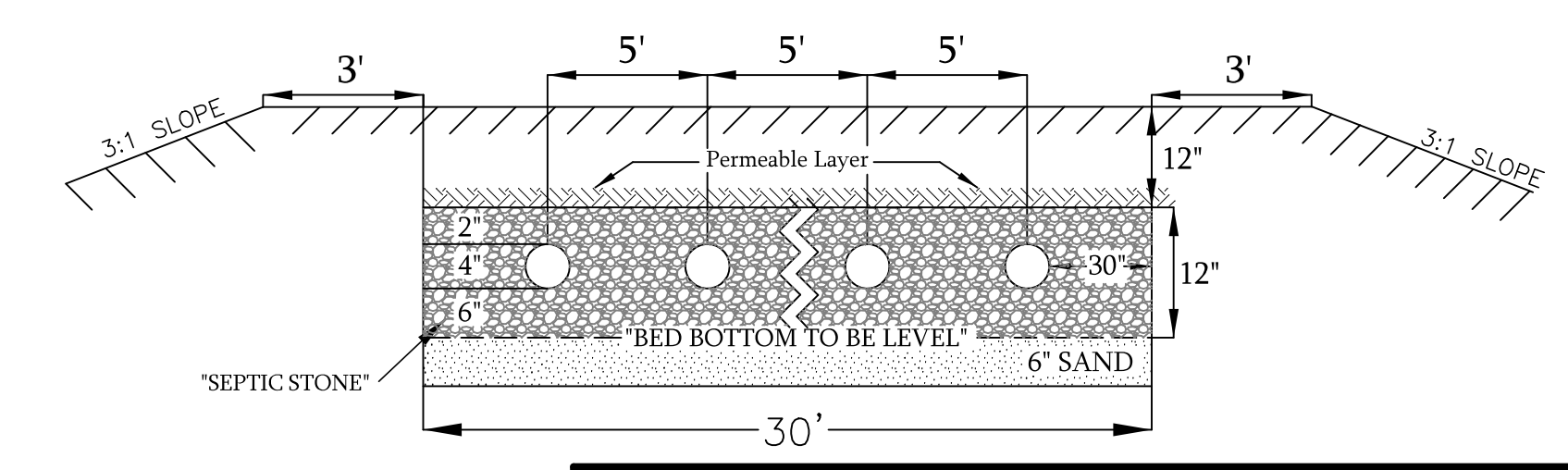
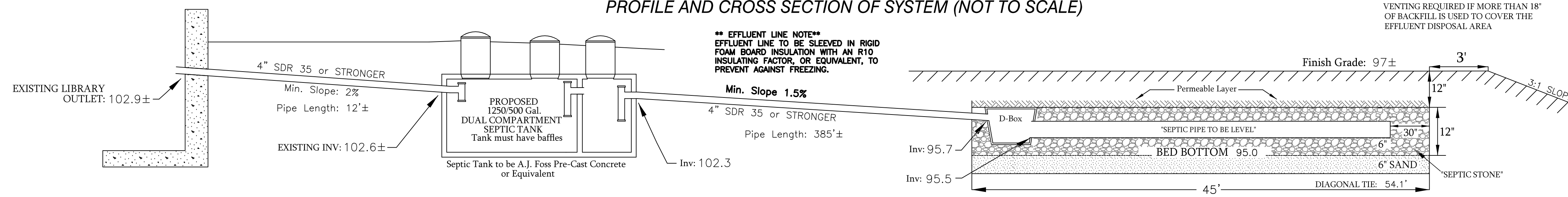
REPLACEMENT STONE & PIPE SEPTIC SYSTEM PLAN
 Tax Map 210 Lots 3 & 2
 4 & 6 Church St
 Deerfield, NH 03037
 Owned By
 Town of Deerfield
 P.O. Box 159
 Deerfield, NH 03037

APPLICANT:
 Franklin Associates, LLC
 143 Raymond Rd, Unit 4, Candia, NH 03034
 DATE: 3-12-24 jefranklin@atlanticbb.net 603-860-0016 SHT 1/2

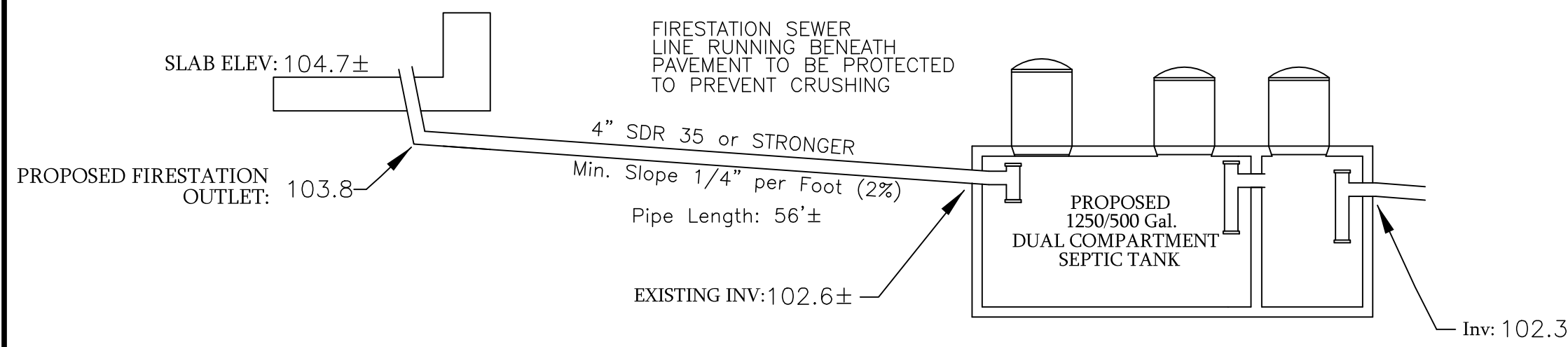
NEW HAMPSHIRE
 Designer
 Subsurface Disposal
 Systems

 Jason E. Franklin
 P.E. 1803C
 Department of Environmental Services

PROFILE AND CROSS SECTION OF SYSTEM (NOT TO SCALE)



FIRESTATION AND LIBRARY TO BE SERVICED BY ONE SEPTIC TANK.



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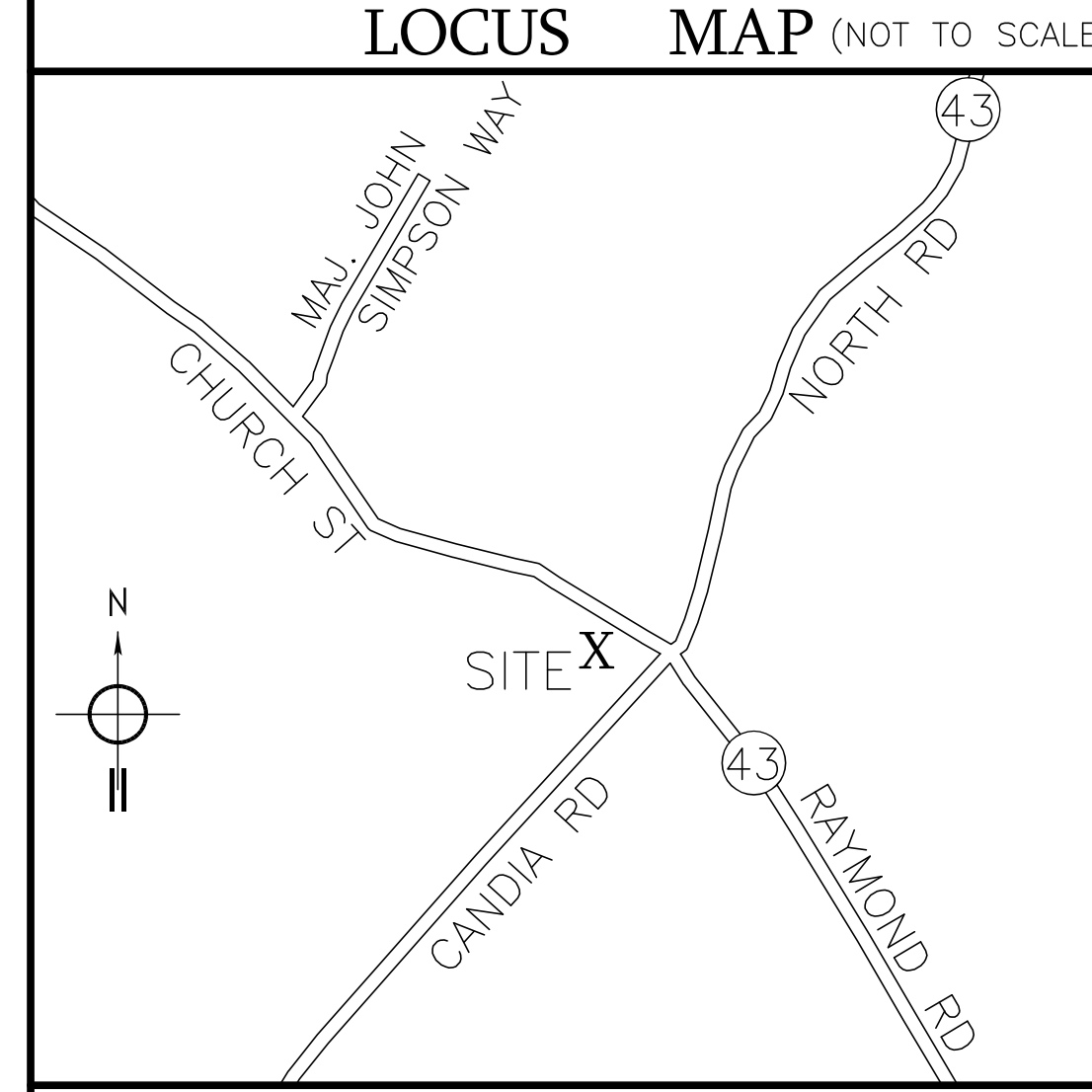
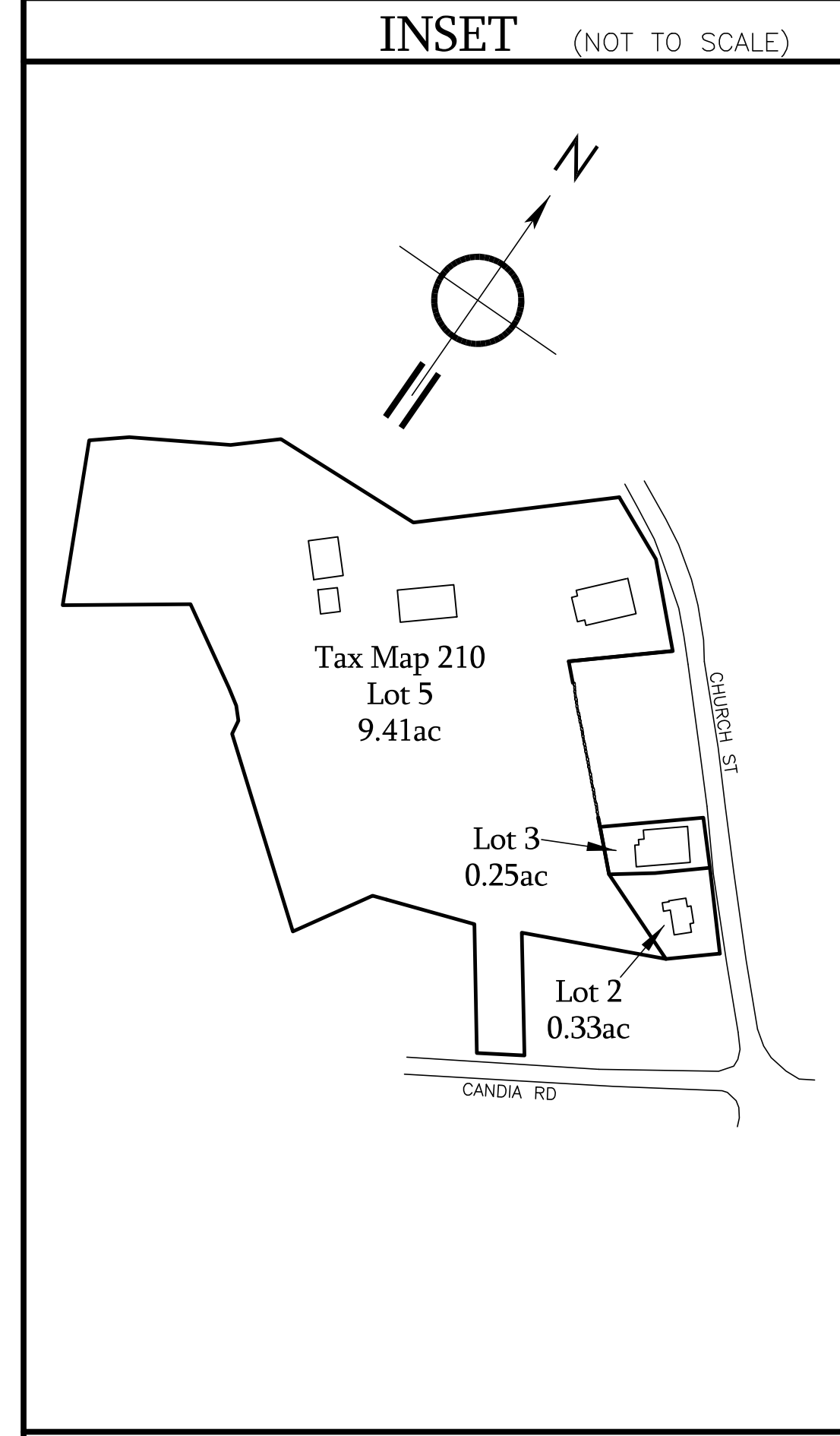
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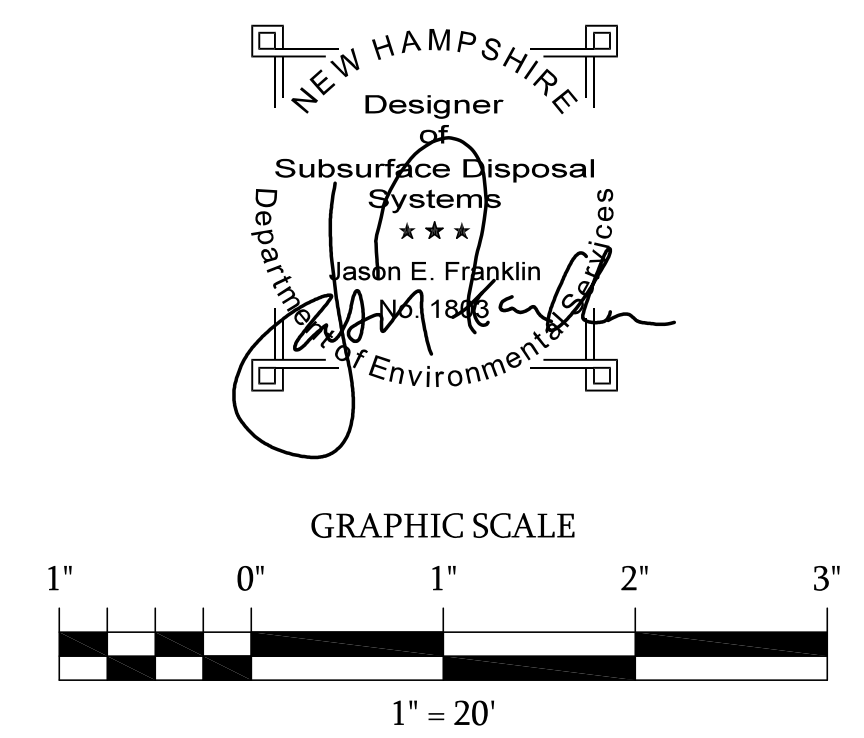
- SYSTEM NOTES:**
- This system must be installed in strict accordance with the approved plan.
 - ANY change to this design must be approved by the designer and may require additional State and Local approvals before any construction is started.
 - ANY discrepancies between the approved plans and/or site conditions must be reported by the installer to the designer prior to construction.
 - This system has not been designed for the use of garbage disposals or water treatment systems. The discharge of any or all into the system may result in premature failure.
 - All trees, bushes, boulders, topsoil and debris must be removed prior to the installation of the system
 - Soil surfaces to be raked prior to placing fill throughout the leachfield area.
 - Septic stone shall be clean, uniformly-sized washed crushed stone, or similar aggregate, 1.5" in size, free of fines, with a range of .75" to 2.5"
 - Before backfilling the EDA, the stone shall be covered with a layer that will allow ventilation, such as untreated building paper, filter fabric or a 2" layer of hay, or their equivalents. Impervious coverings shall not be used.
 - Surrounding back fill material shall meet Env-Wq 1021.03 requirements
 - Septic pipe to be 4" perforated rigid pipe, laid level, with the perforations in the 5 & 7 O'Clock position.
 - D-box to have at least 6 outlets and be manufactured by A.J. Foss or an equivalent manufacturer.
 - All connections in and out of septic tank shall be sealed with a watertight flexible joining connector in accordance with Env-Wq 101.08(A)
 - Access to the interior of the septic tank shall conform to Env-Wq 1010.05
 - The septic tank should be pumped out regularly for proper operation.

- GENERAL NOTES:**
- Franklin Associates/ Jason Franklin assumes no liability in the preparation of this plan with respect to the installation and operation of the system unless contracted to inspect and approve the materials and procedures used to install this system.
 - The contractor is responsible for verifying and observing all State and Local regulations, restrictions and setbacks prior to and during construction.
 - No vehicle traffic shall pass over this system or any of its components unless otherwise noted.
 - No VPD soils within 75' feet of the proposed system.
 - The Town of Deerfield requires a 75' septic setback from all wetlands
 - No wells within 100' of proposed system
 - No permanent structures shall be built upon the leachfield area.
 - In the case of leachfield failure, the replacement system is to be constructed in the same place, after proper removal and disposal of any sludge or solids from beneath the failed system.
 - There was no observed burial site or cemetery within 100 ft. of any component of the ISDS.
 - Lot is greater than 5AC
 - See Lot Line Adjustment plan by David Sidmore, dated 9/2000 on file at the RCRD as plan D-28476
 - The wetlands were identified and delineated in accordance with ENV-Wq 1014.06 by John P. Hayes, CWS and Jason Franklin in January 2024



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 Date: 3/12/2024



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APPLICANT: FRANKLIN ASSOCIATES, LLC
 143 Raymond Rd, Unit 4, Candia, NH 03034
 DATE: 3-12-24 jefranklin@atlanticbb.net 603-483-3096