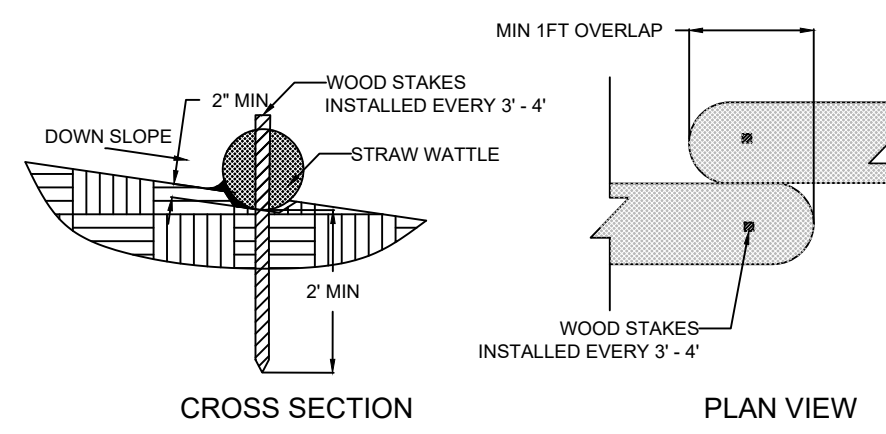
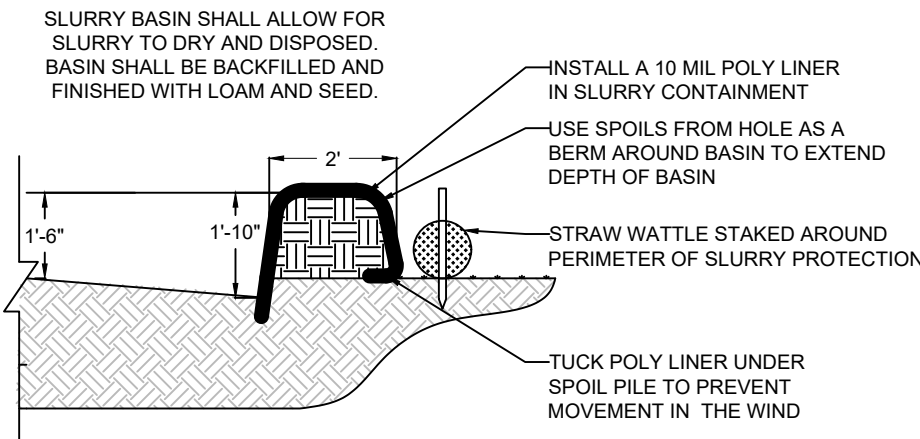
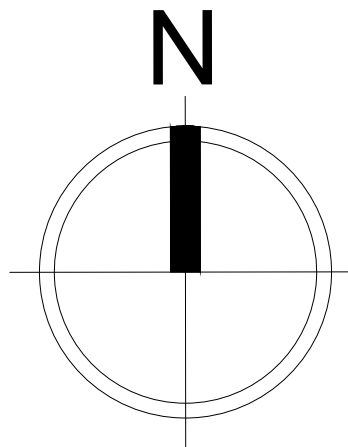


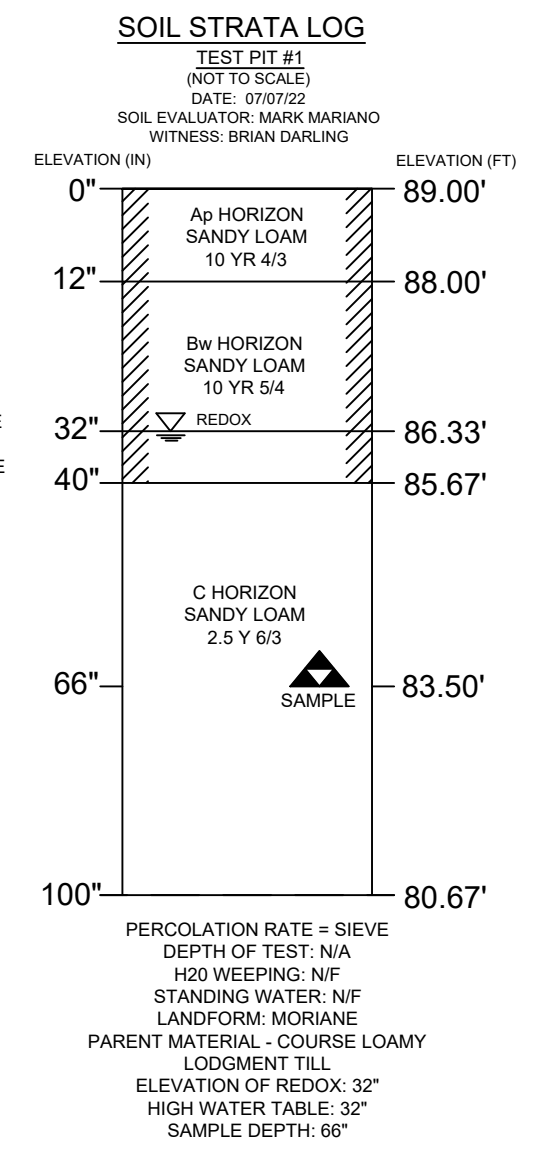
- NOTES:
- EXCAVATE A 2" DEEP BY 3" WIDE TRENCH ALONG THE CONTOUR OF WHERE THE STRAW WATTLE SHALL BE INSTALLED.
  - STAKE THE WATTLE IN EVERY 3 TO 4 LINEAR FEET. USE 2" X 2" X 36" WOODEN STAKES.
  - WATTLE SHALL HAVE A MINIMUM OF A 2 FT OVERLAP BETWEEN EACH UNIT.
  - BACKFILL THE DOWN SLOPE SIDE OF THE WATTLE TRENCH.



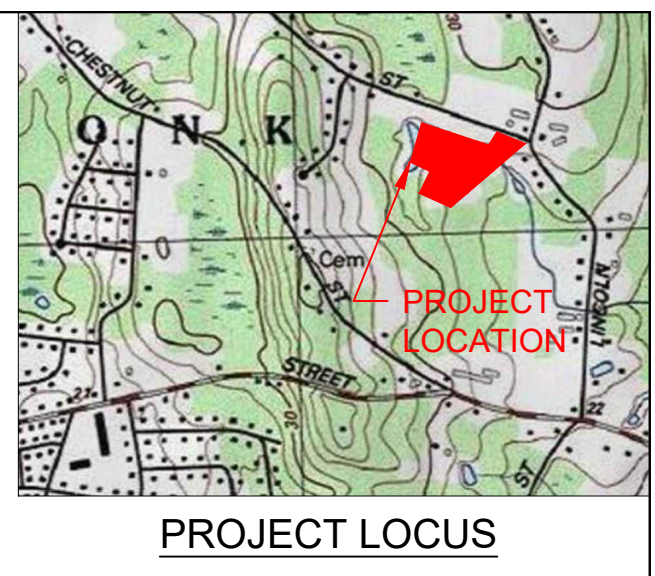
**EROSION CONTROLS**  
NOT TO SCALE



**WELL SLURRY CONTAINMENT**  
NOT TO SCALE



I CERTIFY THAT I AM CURRENTLY APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION IN PURSUANT TO 310 CMR 15.007 TO CONDUCT SOIL EVALUATIONS AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERIENCE AND EXPERIENCE DESCRIBED IN 310 CMR 15.017. I FURTHER CERTIFY THAT THE RESULTS OF MY SOIL EVALUATION AS INDICATED ON THE ATTACHED SOIL EVALUATION FORM, ARE ACCURATE AND IN ACCORDANCE WITH 310 CMR 15.100 THROUGH 15.107.



**DESIGN CALCULATIONS / DESIGN PARAMETERS:**

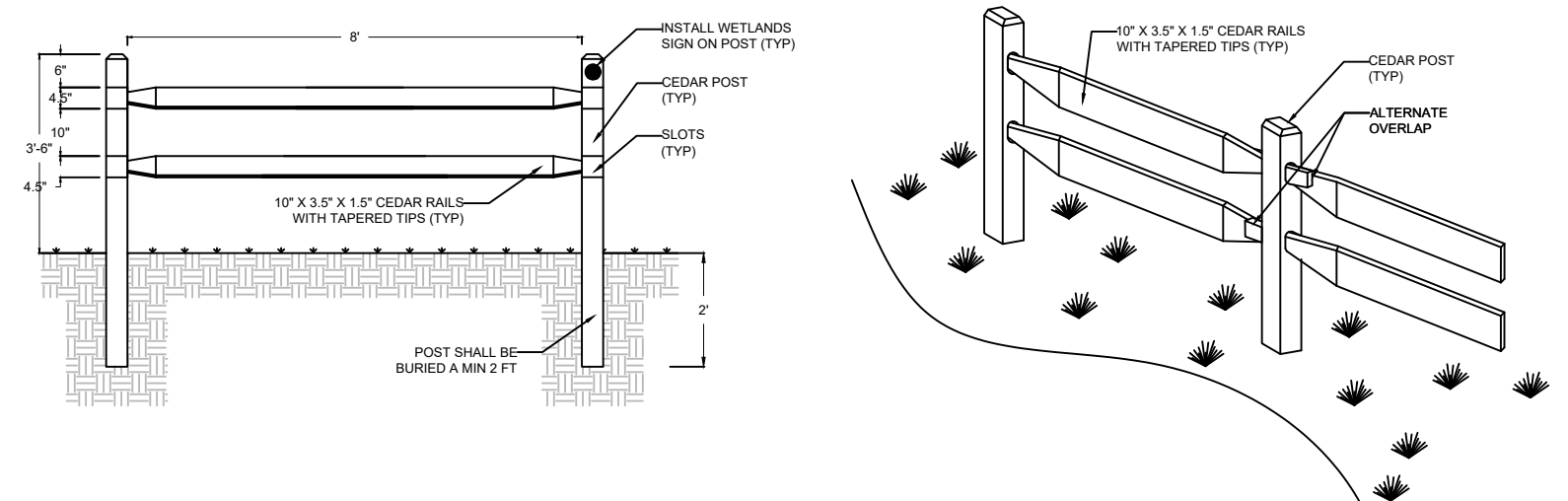
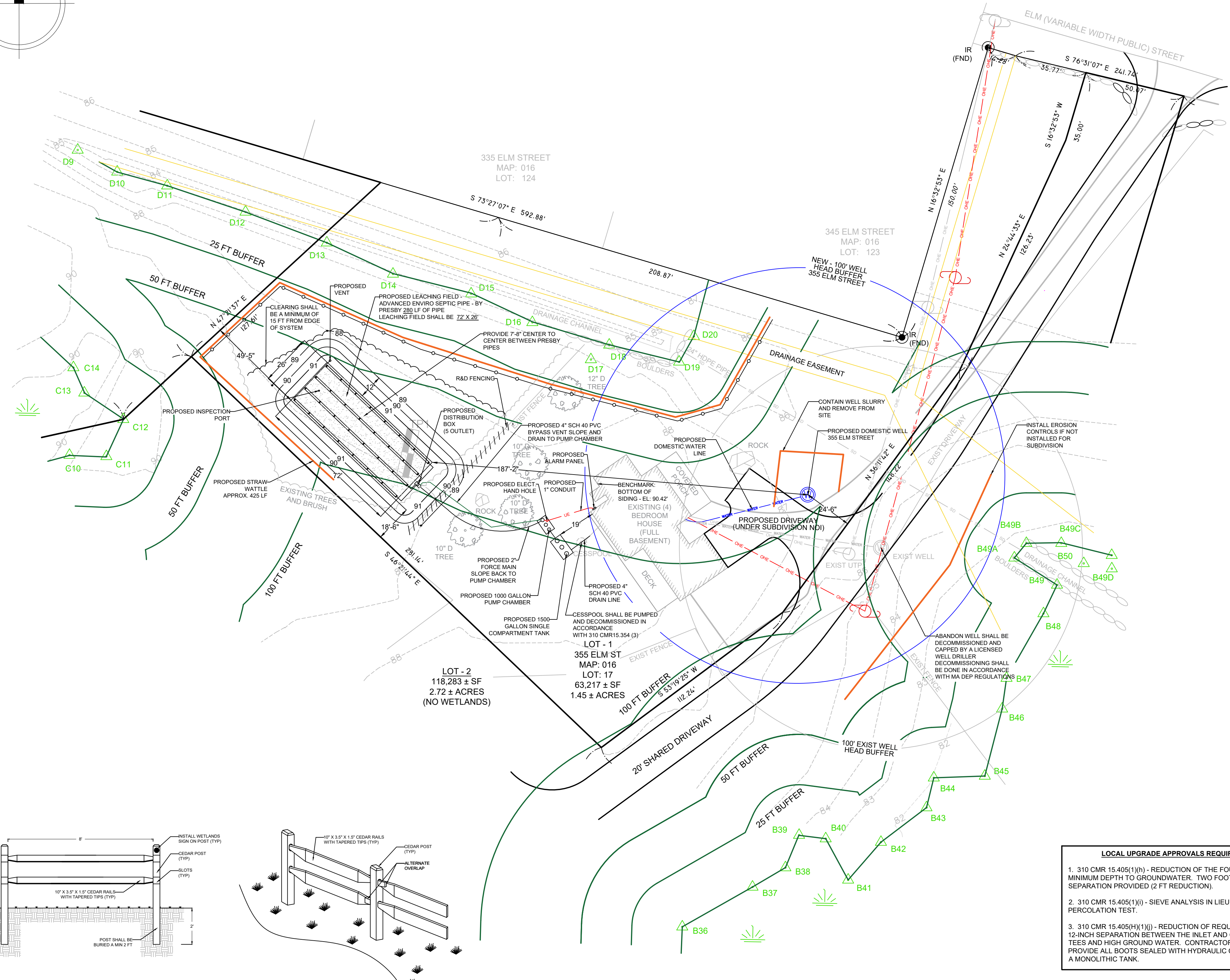
- ESTIMATED DESIGN FLOW:  
4 BEDROOMS X 110 GPD / BEDROOM = 440 GPD
  - SEPTIC TANK REQUIRED CAPACITY = 200 % DAILY FLOW  
440 GPD X 200 % = 880 GPD  
USE 1,600 GALLONS - SINGLE COMPARTMENT (SINGLE FAMILY)  
TANK SHALL BE H-10 LOADING
  - LEACHING AREA REQUIREMENTS: USE 60 M.P.I. - 4 FT SEPARATION REQUIRED  
EFFLUENT LOADING RATING = 0.15 GPD/S.F. (CLASS III)  
WITH A LEACHING FIELD AREA REQUIRED:  
440 GPD / 0.15 GPD / S.F. = 2,934 S.F.
  - LEACHING AREA PROVIDED:  
PIPE PROVIDED:  
ADVANCED ENVIRO SEPTIC PIPE = 70 L.F. / BEDROOM  
ADVANCED ENVIRO SEPTIC PIPE PROVIDED = 70 L.F. X 4 BEDROOMS = 280 L.F.  
ADVANCED ENVIRO SEPTIC PIPE PROVIDED = 4 LANES X 70 L.F. / LANE = 280 L.F.
- SAND BED:  
MINIMUM AREA = 60% AGGREGATE BED SIZE  
MINIMUM BED SIZE = 2,834 SF X 0.60 = 1,701 SF REQUIRED  
BED SIZE PROVIDED: 72 FT X 26 FT = 1,872 SF PROVIDED > 1,761 SF REQUIRED  
DESIGN FLOW CAPACITY = 1,872 SF X 0.25 GPD / SF (FROM MANUAL) = 468 GPD PROVIDED > 440 GPD REQUIRED
- PUMPING CHAMBER:  
CHAMBER CAPACITY: 1000 GALLONS  
USE 20 GAL TOTAL DOSE  
DEPTH OF DOSE = 0.17  
RESERVE VOLUME REQUIRED = 440 GALLONS  
RESERVE PROVIDED = (7.33' X 4.5' X 2.39' X 7.481 FT<sup>3</sup>/GAL) = 589 GALLONS > 440 GALLONS

NO PRODUCT SUBSTITUTIONS WILL BE PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER AND THE LOCAL APPROVING AGENT. CHANGE IN SYSTEM PRODUCT MAY BE SUBJECT TO REDESIGN.

**CONTRACTOR NOTES / GENERAL NOTES:**

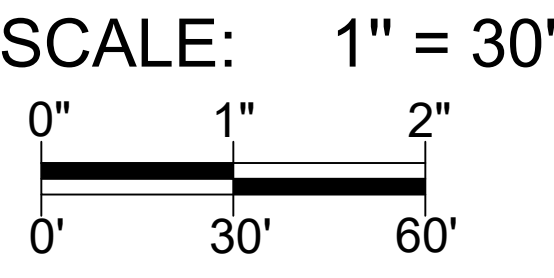
- ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION SANITARY CODE, TITLE 5, AND LOCAL MUNICIPAL BOARD OF HEALTH CODES, AND REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE TO CONTACT THE BOARD OF HEALTH AGENT AND THE DESIGN ENGINEER WITHIN A TIMELY MANNER TO ALLOW FOR INSPECTIONS OF ALL CONSTRUCTION PHASES, INCLUDING BUT NOT LIMITED, TO OBSERVATION OF THE OPEN HOLE PRIOR TO THE PLACEMENT OF FILL MATERIAL AND THE COMPLETION OF THE SYSTEM PRIOR TO FINAL COVER.
- THERE ARE NO KNOWN WELLS WITHIN 100 FEET OF THE PROPOSED LEACHING FIELD.
- SEPTIC TANK SHALL BE H-10 DESIGN WITH A MINIMUM CAPACITY OF 1,600 GALLONS, SINGLE COMPARTMENT TANK, IF VEHICLE TRAFFIC IS PRESENT USE H-20 LOADED CAPACITY TANK.
- USE OF A DOMESTIC GARBAGE GRINDER IS PROHIBITED WITH THIS DESIGN.
- DISTRIBUTION BOX TO BE H-20 DESIGN, IF VEHICLE TRAFFIC IS PRESENT, USE H-20 LOADING CAPACITY TANK.
- ALL DESIGN COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR APPROVED EQUAL PER 310 CMR 15.221 (12).
- PER 310 CMR 15.246(2), FROM THE DATE OF INSTALLATION OF THE SOIL ABSORPTION SYSTEM UNTIL RECEIPT OF A CERTIFICATE OF COMPLIANCE FROM THE APPROVING AUTHORITY IN ACCORDANCE WITH 310 CMR 15.021, THE PERIMETER OF THE SOIL ABSORPTION SYSTEM SHALL BE STAKED AND FLAGGED TO PREVENT THE USE OF SUCH AREA FOR ALL ACTIVITIES WHICH MIGHT DAMAGE THE SOIL ABSORPTION SYSTEM. SUCH FLAGGING IS INTENDED TO PREVENT HEAVY EQUIPMENT FROM COMPROMISING THE SYSTEM.
- LOCATION OF UTILITIES IS APPROXIMATE AND CONTRACTORS SHALL NOTIFY DISGFE, (811) AT LEAST 72 HOURS PRIOR TO THE ONSET OF CONSTRUCTION TO HAVE ALL EXISTING UTILITIES LOCATED AND CLEARLY MARKED.
- UNSATURATED SOIL AS INDICATED ON THE CONTRACT PLANS, SUCH AS TOPSOIL, SUBSOIL, AND OTHER IMPERVIOUS MATERIALS SHALL BE REMOVED AND REPLACED WITH CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES GRADE AS FOLLOWS:
  - NO MATERIAL LARGER THAN 2 INCHES.
  - UP TO 45% BY WEIGHT MAY BE RETAINED ON A #4 SIEVE.
  - OF THE FRACTION PASSING THE #4 SIEVE, THE FOLLOWING CRITERIA APPLY:
 

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
#4	4.75 mm	95% - 100%
#50	0.30 mm	5% - 30%
#100	0.15 mm	0% - 10%
#200	0.075 mm	0% - 2%
- A SIEVE ANALYSIS OF THE MATERIAL SHALL BE PERFORMED TO DETERMINE THAT IT MEETS THE GRADATION REQUIREMENTS NOTED ABOVE. THE INSTALLER SHALL PROVIDE A COPY OF THE SIEVE ANALYSIS RESULTS TO THE DESIGN ENGINEER.
- ALL PIPING COMPONENTS IN THIS PROPOSED SYSTEM SHALL BE SOLID SCHEDULE 40 PVC, PIPE SIZE INSTALLED IN ACCORDANCE WITH PLANS. PIPING SHALL BE SOLVENT WELDED WITH APPROPRIATE GLUE.
- SEPTIC SYSTEM OWNER SHALL HAVE THE SEPTIC TANK AND OUTLET FILTER INSPECTED ANNUALLY AND CLEANED AND PUMPED AS NECESSARY.
- DESIGN ENGINEER SHALL BE HELD HARMLESS AND ASSUMES NO LIABILITY FOR DAMAGES AS A RESULT OF UNDISCLOSED NON COMPLIANCE, FAULTY CONSTRUCTION OR ANY DEVIATION OF ALIGNMENT AND GRADE SPECIFIED HEREIN WITHOUT PRIOR WRITTEN NOTIFICATION AND WRITTEN APPROVAL FROM THE DESIGN ENGINEER.
- SEPTIC TANK SHALL HAVE A ZABEL A1800 FILTER OR APPROVED EQUIVALENT INSTALLED IN OUTLET TEE.
- TOPOGRAPHIC INFORMATION TAKEN FROM FIELD SURVEY BY OAKHILL ENGINEERING IN APRIL, 2022. THIS DOES NOT CONSTITUTE A PROPERTY BOUNDS SURVEY.
- WETLANDS ARE FOUND WITHIN 100 FT OF THE PROPOSED SITE WORK. PLEASE REFER TO THE WETLANDS PLAN.
- CONTRACTOR TO PERFORM DUE DILIGENCE ON LOCATING BURIED UTILITIES, BURIED STRUCTURES, OVERHEAD WIRES, AND OBSTRUCTIONS. CONTRACTOR SHALL FOLLOW ALL OSHA, LOCAL, AND STATE REGULATIONS.
- NO CONSTRUCTION EQUIPMENT SHALL PASS OVER THE SYSTEM.
- CONTRACTOR SHALL FINISH GRADE SURFACE RUNOFF AWAY FROM THE SYSTEM, STRUCTURES AND PROPERTY LINES.



**SPLIT RAIL FENCE**  
NOT TO SCALE

- LOCAL UPGRADE APPROVALS REQUIRED**
- 310 CMR 15.405(1)(b) - REDUCTION OF THE FOUR FOOT MINIMUM DEPTH TO GROUNDWATER. TWO FOOT SEPARATION PROVIDED (2 FT REDUCTION).
  - 310 CMR 15.405(1)(i) - SIEVE ANALYSIS IN LIEU OF PERCOLATION TEST.
  - 310 CMR 15.405(1)(j) - REDUCTION OF REQUIREMENT OF 12-INCH SEPARATION BETWEEN THE INLET AND OUTLET TEES AND HIGH GROUND WATER. CONTRACTOR SHALL PROVIDE ALL BOOTS SEALED WITH HYDRAULIC CEMENT AND A MONOLITHIC TANK.



**PROPOSED SEPTIC SYSTEM SITE PLAN**  
SCALE: 1" = 30'

**LEGEND**

	ADJUSTED WATER TABLE
	OBSERVED WATER TABLE
	TEST PIT
	EXISTING GRADE
	PROPOSED GRADE
	GAS LINE
	WATER LINE
	FENCE LINE
	UNDERGROUND ELECTRIC
	UNDERGROUND TELECOM
	OVERHEAD ELECTRICAL
	UTILITY POLE
	HYDRANT
	BURIED VALVE
	DELINEATION FLAG

**APPLICANT:**  
ALFREDO DOS ANJOS  
355 ELM STREET  
SEEKONK MA 02771

**OWNER:**  
ALFREDO DOS ANJOS  
355 ELM STREET  
SEEKONK MA 02771

**REPAIR SANITARY SUBSURFACE SEWERAGE DISPOSAL SYSTEM**

355 ELM STREET  
SEEKONK, MA 02771  
MAP: 016  
LOT: 011

OAKHILL ENGINEERING LLC  
75 OAK HILL AVE; 2ND FL  
SEEKONK, MA 02771

401-574-0871  
MARK4026@GMAIL.COM

SHEET NUMBER: W-1  
SCALE = 1" = 30'  
DATE: 08/26/22

DRAWN BY: MPM  
CHECKED BY: MPM

ENGINEER STAMP:

