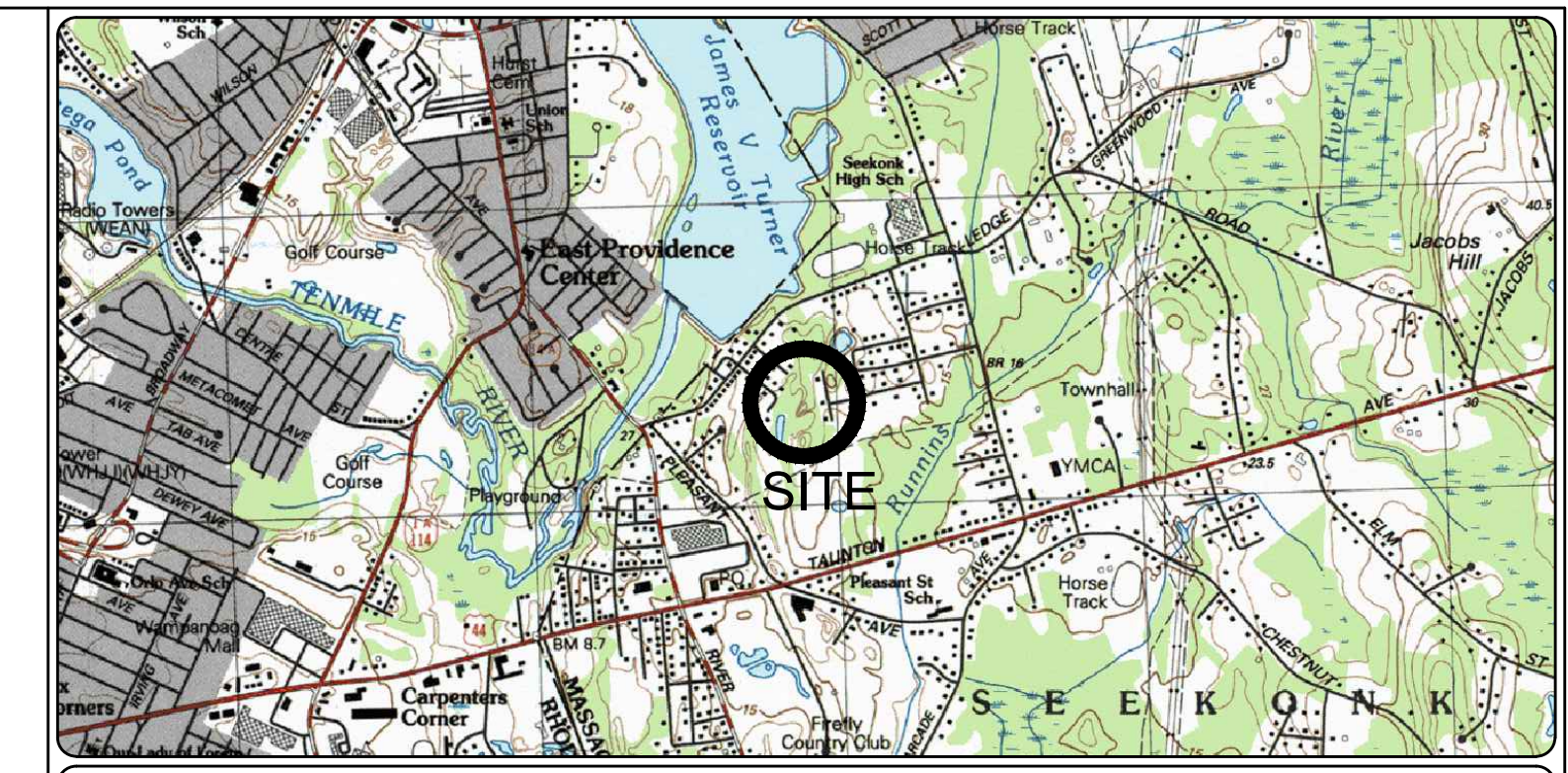
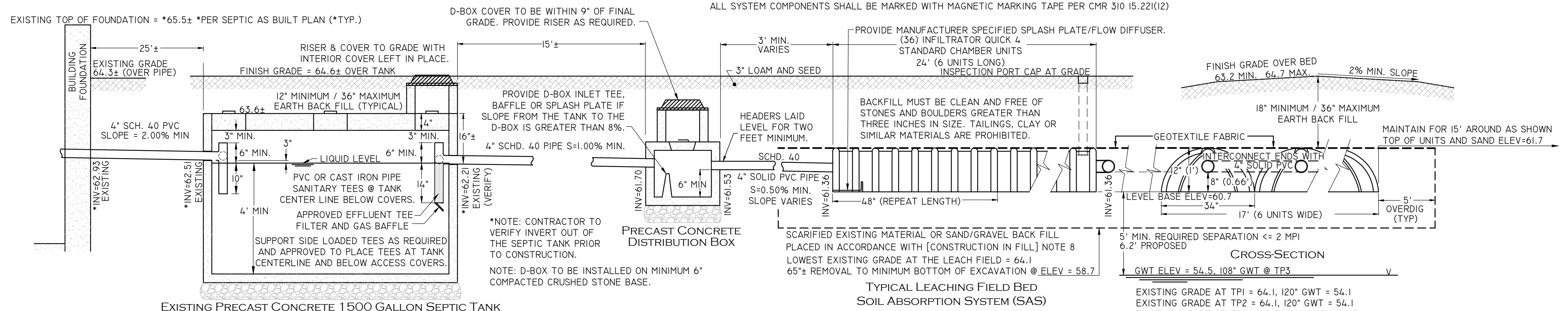


CROSS SECTION THROUGH SEPTIC SYSTEM

NOT TO SCALE
ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE PER CMR 310.15.22(12)



LOCATION MAP (NOT TO SCALE)

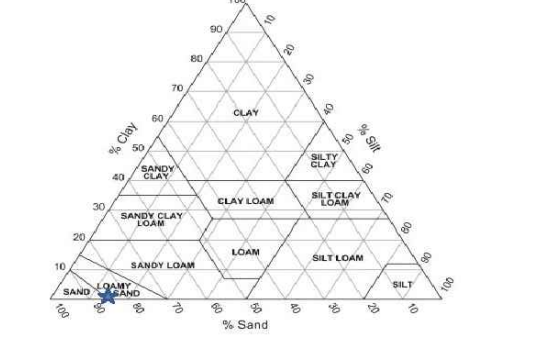
NOTES & SPECIFICATIONS

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF 310 CMR 15 (TITLE V) OF THE COMMONWEALTH OF MASSACHUSETTS AND THOSE OF THE TOWN BOARD OF HEALTH.
- THE REQUIRED INSPECTION SCHEDULE DURING THE PROCESS OF CONSTRUCTION SHALL BE ARRANGED BY THE CONTRACTOR WITH THE BOARD OF HEALTH & DESIGN ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- THE SEPTIC TANK AND DISTRIBUTION BOX SHALL BE STANDARD DUTY (H-10) OR HEAVY DUTY (H-20) IF LOCATED UNDER A DRIVEWAY.
- ALL PIPING SHALL BE 4" DIA. SCHD. 40 NSF PVC, WITH ALL JOINTS SEALED WATERTIGHT.
- ALL STONE SHALL BE DOUBLE WASHED AND FREE OF IRONS, CLAY OR FINES AND SHALL BE SATISFACTORY TO THE TOWN BOARD OF HEALTH.
- THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL OR OTHER HIGH WATER USE UNITS.
- THE PROPOSED SEPTIC SYSTEM IS NOT LOCATED WITHIN THE CONE OF INFLUENCE OF ANY MUNICIPAL WELL NOR ARE THERE ANY PRIVATE WELLS LOCATED WITHIN 100 FEET (RADIAL) AS SHOWN OF THE PROPOSED SYSTEM. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.
- EXCAVATE ALL TOP, SUB AND ANY OTHER SOILS ENCOUNTERED DOWN TO THE BOTTOM OF EXCAVATION (SEE CROSS SECTION) FOR A HORIZONTAL DISTANCE OF 5' ON ALL SIDES OF THE PROPOSED SYSTEM. BACK FILL TO TOP OF SAND ELEVATION WITH SELECT ON SITE OR IMPORTED SOIL MATERIAL CONSISTING OF CLEAN GRANULAR SAND, FREE OF ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES AND MEETING THE SIEVE SIZE REQUIREMENTS OF 310 CMR 15.255(3) & (5) [CONSTRUCTION IN FILL]. (AS REQUIRED)
- ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON NAVD83.
- CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF CONSTRUCTION.
- WATER TABLE FLUCTUATES ANNUALLY, NO WARRANTY OF A DRY BASEMENT IS EXPRESSED OR IMPLIED.
- THE PROPOSED WORK DOES NOT LIE IN A CRITICAL FLOOD HAZARD ZONE.
- THE PROPOSED WORK IS NOT IN AN OVERLAY DISTRICT FOR GROUNDWATER AQUIFER PROTECTION.
- THE CONTRACTOR IS TO VERIFY AND/OR OBTAIN THE BENCHMARK WITHIN 75' OF THE HOUSE AND SEPTIC SYSTEM FROM THE ENGINEER / SURVEYOR PRIOR TO CONSTRUCTION AS REQUIRED.
- MAINTAIN 10' MINIMUM SEPARATION FROM WATER SERVICE TO PROPOSED SEPTIC COMPONENTS.
- HOUSE DIMENSIONS, ELEVATION AND LOCATION ARE APPROXIMATE AND SUBJECT TO CHANGE, CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.
- THE LOT LIES IN A "R-1" ZONING DISTRICT.
FRONT YARD SETBACK: 35'
SIDE YARD SETBACK: 15' + 5'/STORY = 20' (2 STORY)
REAR YARD SETBACK: 25'
- CONTRACTOR TO CONTACT DIG-SAFE AND LOCATE BURIED UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR TO FOLLOW MANUFACTURER'S INSTALLATION SPECIFICATIONS AND AVOID DAMAGING, DEFORMING, SHIFTING AND SETTLING OF SYSTEM COMPONENTS. NO ADDITIONAL LOADS (PEOPLE, VEHICLES, CONSTRUCTION EQUIPMENT, STOCK PILES, ETC...) ALLOWED OVER SYSTEM COMPONENTS OTHER THAN LIGHT WEIGHT LAWN MOWER, LANDSCAPER AND MAINTENANCE INDIVIDUAL.
- I CERTIFY THAT THE PROPOSED WATER SERVICE SHOWN ON THIS PLAN IS IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE SEEKONK WATER DISTRICT. CONTRACTOR TO COORDINATE WATER SERVICE TIE IN WITH WATER AUTHORITY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE GRADING. FINAL GRADING SHALL BE DIRECTED AWAY FROM HOUSES, SEPTIC SYSTEMS AND ADJUTING PROPERTIES TO ELIMINATE PONDING, PUDDLING OR PROPERTY DAMAGE TO THE SITE AND ADJUTERS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL EROSION CONTROL, SILTATION MITIGATION AND/OR SOIL STABILIZATION WHEN WASH OUT IS OBSERVED. ALL EROSION CONTROLS (CONSTRUCTION ENTRANCE, STRAW WATTLE, HAY BALES, ETC...) TO BE INSTALLED PRIOR TO STARTING WORK ON LOT.
- REFERENCE "SEPTIC AS-BUILT PLAN", DATED AUGUST 13, 2001, BY MILLER ENGINEERING.

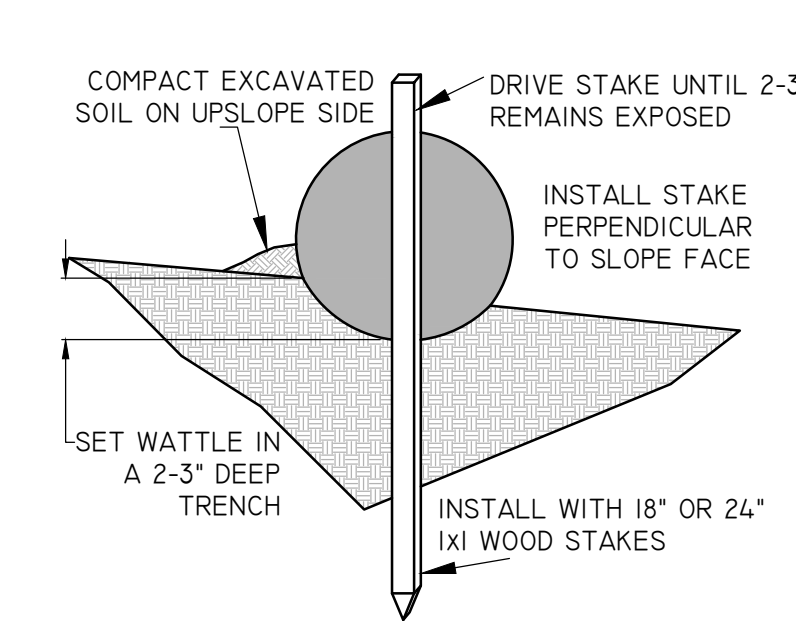
#	Date	Depth (in.)	Horizon	Soil Texture (USDA)	Color	Soil Moisture	Other (Consistency, Structure, etc.)	FILL DEPTH VARIES
TP1	8-5-2021	0 - 84 - 120	FILL	C	LS	10YR6/2	120"	NORTH SIDE HAD DEEPER FILL DEPTH
								PERC RATE: TEST NOT PERFORMED
TP2	8-5-2021	0 - 120	FILL	C	LS	10YR6/2	120"	
								PERC RATE: TEST NOT PERFORMED
TP3	8-5-2021	0 - 72 - 108	FILL/TSS	C	LS	10YR6/2	120"	FILL AND TITLE 5 SAND
								SIEVE SAMPLE TAKEN AT 84"
								PERC RATE: TEST NOT PERFORMED

SOIL EVALUATIONS

Soil	Moisture	Plasticity	Classification	Moisture	Plasticity	Classification
TP1	15.0	15.0	CL	15.0	15.0	CL
TP2	15.0	15.0	CL	15.0	15.0	CL
TP3	15.0	15.0	CL	15.0	15.0	CL



SIEVE ANALYSIS

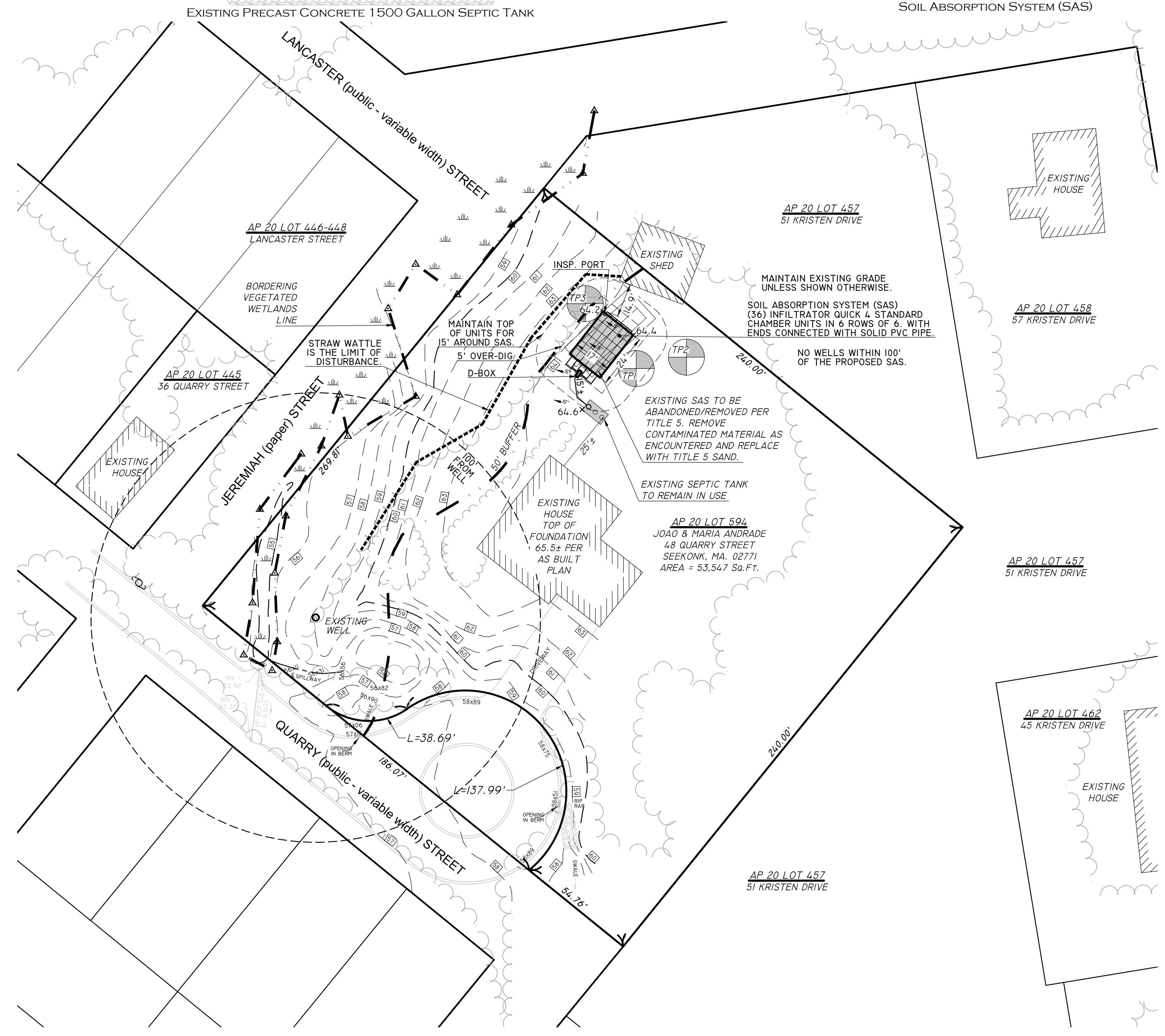


CROSS SECTION NOT TO SCALE

- #### STRAW WATTLE NOTES:
- BEGIN AT THE LOCATION WHERE WATTLE IS TO BE INSTALLED BY EXCAVATING 2-3" DEED X 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP SLOPE FROM THE ANCHOR TRENCH.
 - PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
 - SECURE THE WATTLE WITH 18-24" STAKES EVERY 3-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE OF THE WATTLE LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.
 - CONTRACTOR IS RESPONSIBLE TO MAINTAIN INTEGRITY OF STRAW WATTLE FOR DURATION OF CONSTRUCTION.
 - EROSION CONTROLS TO REMAIN UNTIL SOIL CONDITIONS STABILIZE.
 - LOOSE HAY TO BE SPREAD ON AREAS OF EXPOSED LOAM & SEED UNTIL GERMINATION AND STABILIZATION OCCURS.

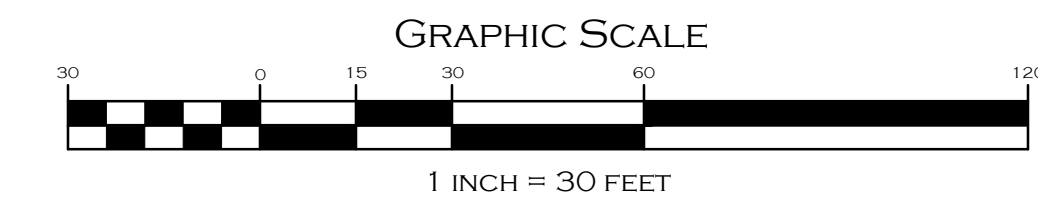
STRAW WATTLE (OR SILT SOCK) DETAIL

NOT TO SCALE



LEGEND

- SOIL TEST PIT
- EXISTING CONTOUR
- PROPOSED CONTOUR
- GRADE TO DRAIN



DESIGN CALCULATIONS

AVERAGE DAILY SEWAGE FLOW (GALLONS PER DAY)
4 BEDROOM @ 110 GPD PER BEDROOM = 440 GPD

SEPTIC TANK SIZING (GALLONS)
200% AVERAGE DAILY FLOW = 2 (440) = 880 GALLONS
REQUIRES 1,500 GALLON TANK (MINIMUM), EXISTING 1,500 GALLON TANK TO REMAIN IN USE.

DESIGN SOIL TYPE AND PERCOLATION RATE
DESIGN SOIL CLASS I (LOAMY SAND)
NO PERC TEST PERFORMED DUE TO SATURATED SOILS
DESIGN FOR 8 MPI PER TITLE V AND

REQUIRED MINIMUM LEACHING AREA
SAS DESIGN DAILY FLOW = 440 GPD
REQUIRED AREA = 440 GPD / 0.66 GPD / SF = 666 SF MINIMUM
INFILTRATOR QUICK & STANDARD CHAMBER UNITS
608 SF / 7.473 SF/FT / 7.4 FT / UNIT = 36 UNITS, 6 UNITS WIDE X 6 UNITS LONG
CHECK DESIGN AND INSTALLATION MANUAL REQUIREMENT OF 400 SF MIN.
BED AREA = 17' x 24' = 408 SF > 400 SF O.K.
CHECK DEP GENERAL PERMIT ALLOWED 40% REDUCTION: 1 - (408 SF / 666 SF) = 39% < 40% O.K.

SEPTIC SYSTEM DESIGN REPAIR AND RDA PLAN

"QUARRY STREET"
48 QUARRY STREET, SEEKONK, MA 02771
AP 20 Lot 594

OWNER'S: JOAO & MARIA ANDRADE
48 QUARRY STREET, SEEKONK, MA 02771

JOB # 09-112 SCALE: 1" = 30' DESIGNED BY: MSF DATE: AUGUST 30, 2021

REVISED:

INSITE Engineering Services, LLC
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Precision. Clarity. Certainty.

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SHEET 1 OF 1