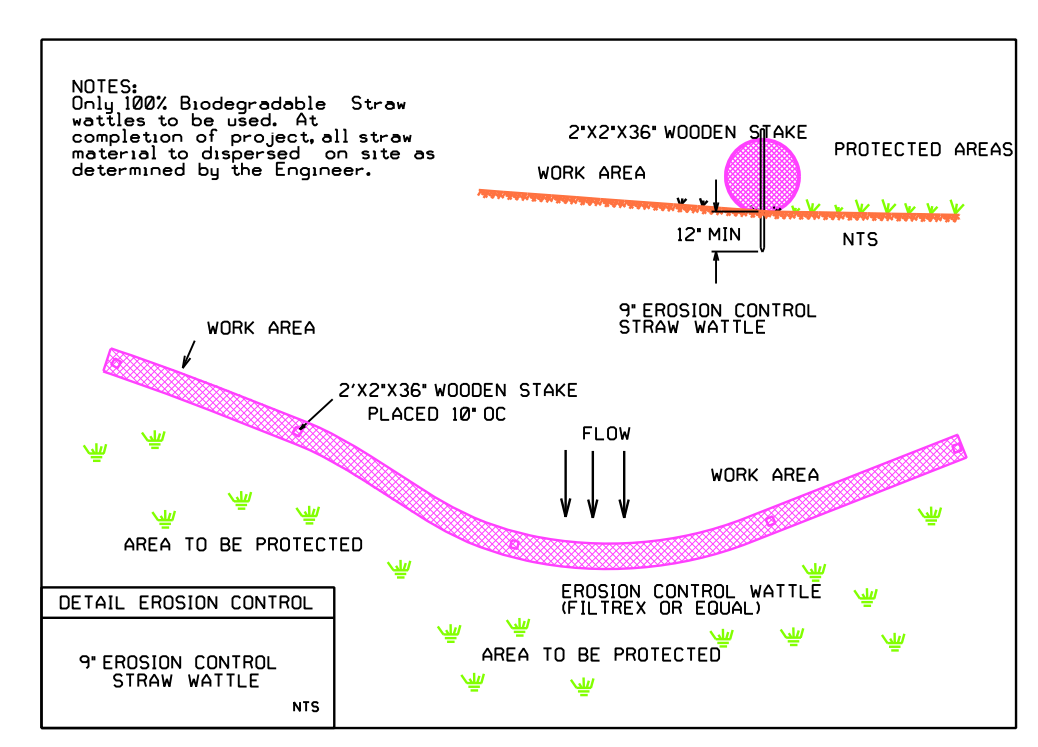


**"SOIL LOGS"**

|             |                               |
|-------------|-------------------------------|
| EL. 409.00' | D.T.H #1                      |
| EL. 408.66' | 0-4" Ap<br>10 YR 3/2          |
| EL. 407.00' | 4"-24" FILL/GRAVEL            |
| EL. 406.50' | 24"-30" Ab<br>Block Muck      |
| EL. 404.00' | 30"-78" C<br>2.5 Y 5/3<br>FSL |

WATER WEeping 24"  
WATER STANDING @ 48"  
ESTIMATED GROUNDWATER 24"



**SOIL EVALUATOR: MARGARET BACON, CIVIL SITE ENGINEERING LLC**

I CERTIFY THAT I HAVE PASSED THE EXAMINATION APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERIENCE, AND EXPERIENCE DESCRIBED IN 310 CMR 15.08 12.

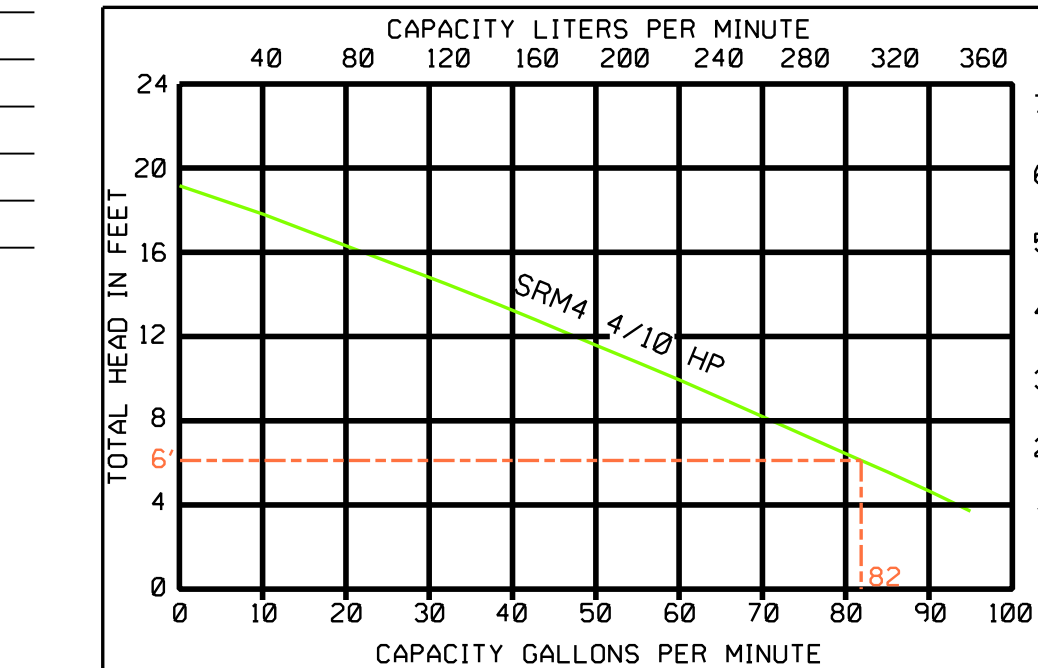
OTHER PERSONS ON SITE AT TESTING: ADC SEPTIC (Backhoe)

|                       |                  |
|-----------------------|------------------|
| PERCOLATION RATE      | SEE LAB. RESULTS |
| DATE SOIL EVALUATION  | 3/5/2020         |
| DATE PERCOLATION TEST | 3/5/2020         |
| INSPECTOR             | LEONARD IZZO     |
| TESTING APPLICANT:    | ALFRED DAPRATO   |

\* TERRA FILTER (4/10/20) LABORATORY RESULTS, USDA SOIL TEXT CLASS: SANDY LOAM MA SECTION 15.243 CLASS: CLASS II UN-COMPACTED SOIL: 0.33 GPD / SF

**"CONSTRUCTION NOTES"**

- EXCAVATE ALL IMPERVIOUS MATERIAL INCLUDING TOP & SUB SOIL, SILT, CLAY, ETC. TO PERVIOUS MATERIAL IN TRENCH AREA AND IN FIVE FOOT (5') GRAVEL AREA.
- THE GRAVEL SHALL BE PLACED ACCORDING TO SEC. 15.255 SUB-SECTION 3 TO 6.
- ELEVATION OF TITLE V CONCRETE SAND TOP OF SAND 412.00'
- PRESBY ENVIRO LINES TO BE 2.0' OC.
- BOTTOM OF ENVIRO-PIPES TO BE LEVEL 410.50'
- ALL OUTLET PIPES FROM THE DISTRIBUTION BOX TO HAVE A MIN. DROP OF 0.1" TO INLET OF ENVIRO PIPE
- NO SURFACE, SUBSURFACE OR OPEN DRAINS THAT INTERCEPT GROUNDWATER WITHIN 25' FEET OF THE SEPTIC TANK OR 50' FEET FROM THE LEACHING SYSTEM.
- ENGINEER TO INSPECT BOTTOM EXCAVATION OF LEACHING AREA PRIOR TO GRAVEL PLACEMENT
- HYDRAULIC CEMENT TO BE USED TO SEAL CONNECTIONS AT THE FOUNDATION, SEPTIC TANK, DIST. BOX & ALL UNUSED OUTLETS.
- LOAM & SEED ALL DISTURBED AREAS (ENVIRONMENTAL MAPPING ON SLOPES > 50%)
- CONSTRUCTION OF SEPTIC TANK, DOSING CHAMBER & DISTRIBUTION BOX SHALL CONFORM WITH 310 CMR 15.221 THROUGH 15.226



**ADDITIONAL NOTES**

- TOWN PERMIT \*
- SEPTIC TANK TO BE PUMPED ANNUALLY
- WELL TO BE TESTED EVERY TWO YEARS
- PLAN □ IS, □ IS NOT LOCATED WITHIN A FLOOD HAZARD ZONE, FEMA MAP 25027C1031E
- KNOWN EASEMENTS ON LOT, YES □; NO □
- SYSTEM LOCATED IN NITROGEN SENSITIVE AREA AS DEFINED BY THE MA DEP OR TITLE V, YES □; NO □

**EJECTOR PUMP DATA**

|   |
|---|
| 1. USE MYERS MODEL SRM4 0.4 HP 1/2" SOLIDS OR EQUAL   |
| 2. FLOOR OF PUMP CHAMBER ELEV. 404.35'  |
| 3. PUMP OFF 1/2" ABOVE FLOOR ELEV. 405.35'  |
| 4. PUMP ON 1/2" ABOVE FLOOR ELEV. 405.60'   |
| 5. HIGH WATER ALARM ON 126" ABOVE FLOOR ELEV. 406.52'   |
| 6. DOSE SET AT 35 GAL (2 GALLON FLOWS BACK TO PCJ)  |
| 7. 1-5 MIN. RUNNING TIME @ 82 GPM (TOD @ 6')  |
| 8. ALARM SHALL BE POWERED BY A CIRCUIT SEPARATE FROM THE PUMP CIRCUIT                         |
| 9. FORCE MAIN TO DRAIN BACK INTO PUMP CHAMBER   |
| 10. DOSE SET APPROX. SIX TIMES DAILY  |
| 11. PUMP SHALL BE EQUIPPED WITH A TRANSFER SWITCH TO ALLOW CONNECTION TO A PORTABLE GENERATOR |
| 12. WEEP HOLE REQUIRED BETWEEN PUMP CHECKVALVE AND OUTLET                                     |

**DESIGN INFORMATION**

- DESIGN RATE 30 MFL
- SLOPE OF SYSTEM TO BE LEVEL
- 140 LINEAL FEET OF ENVIRO PIPE REQUIRED
- USE 180 LINEAL FEET Minimum of 400 SF required, 416 SF provided
- NO GARBAGE DISPOSAL UNIT
- 1 BEDROOM HOUSE; DAILY FLOW DESIGNING FOR 220 gpd
- NO OTHER WELL WITHIN 200 FEET OF THE PROPOSED SYSTEM
- OTHER THAN SHOWN ON PLAN, NO OTHER SYSTEM WITHIN 100 FEET OF THE PROPOSED WELL OTHER THAN SHOWN ON PLAN.
- WATER SOFTENERS SHALL NOT CONNECT TO SEPTIC TANK.
- STORMWATER DRAINAGE ON SITE, YES □; NO □
- POTABLE WATER SUPPLY (PUBUCION SITE), YES □; NO □
- LOT AREA □ IS, □ IS NOT TRIBUTARY TO A PUBLIC SURFACE WATER SUPPLY AND IS NOT LOCATED IN A ZONE 2 OF PUBLIC WELLS.
- ALL KNOWN UTILITY LOCATIONS (APPROX) ON SITE ARE SHOWN.
- CONTRACTOR SHALL NOTIFY DIGSAFE AT 1-888-344-7233 PRIOR TO CONSTRUCTION
- NO FOUNDATION DRAINS TO BE INSTALLED.

NOTE: ALL SEWER STRUCTURES ARE ABOVE MAXIMUM GROUND WATER.  
YES □; NO □ SEE BOUANCY CALCS

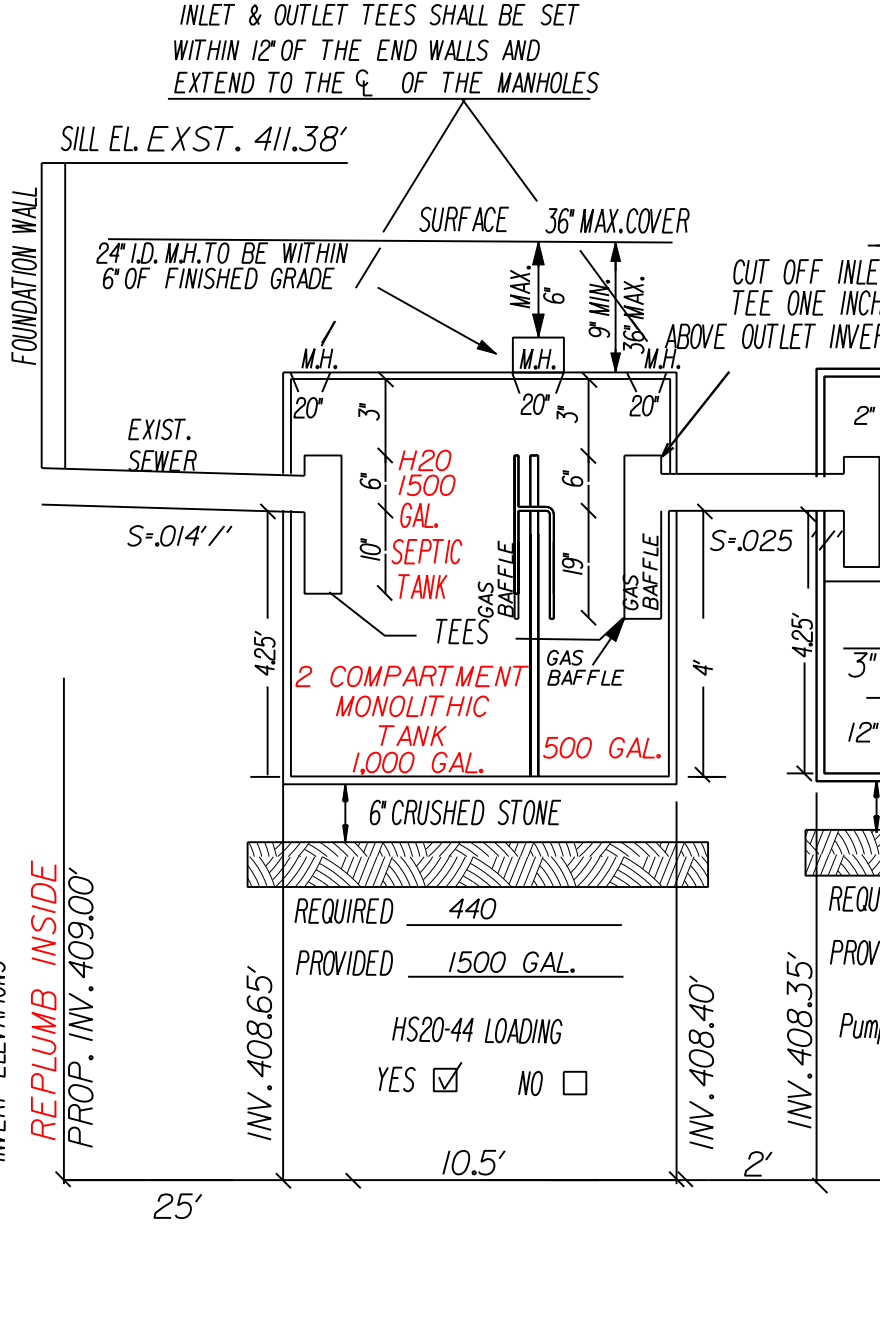
**PRESBY ADVANCED ENVIRO-SEPTIC LOADING CALCULATIONS**

ENVIRO-SEPTIC PIPE DIAMETER 12"

PER TITLE V, MIN. OF 400 SF FOR LEACHING AREA FOR 2 BDRM DESIGN WITH A PERC RATE OF 30 MPH.

LENGTH OF PIPE 140 LF OF ENVIRO SEPTIC PIPES REQ.

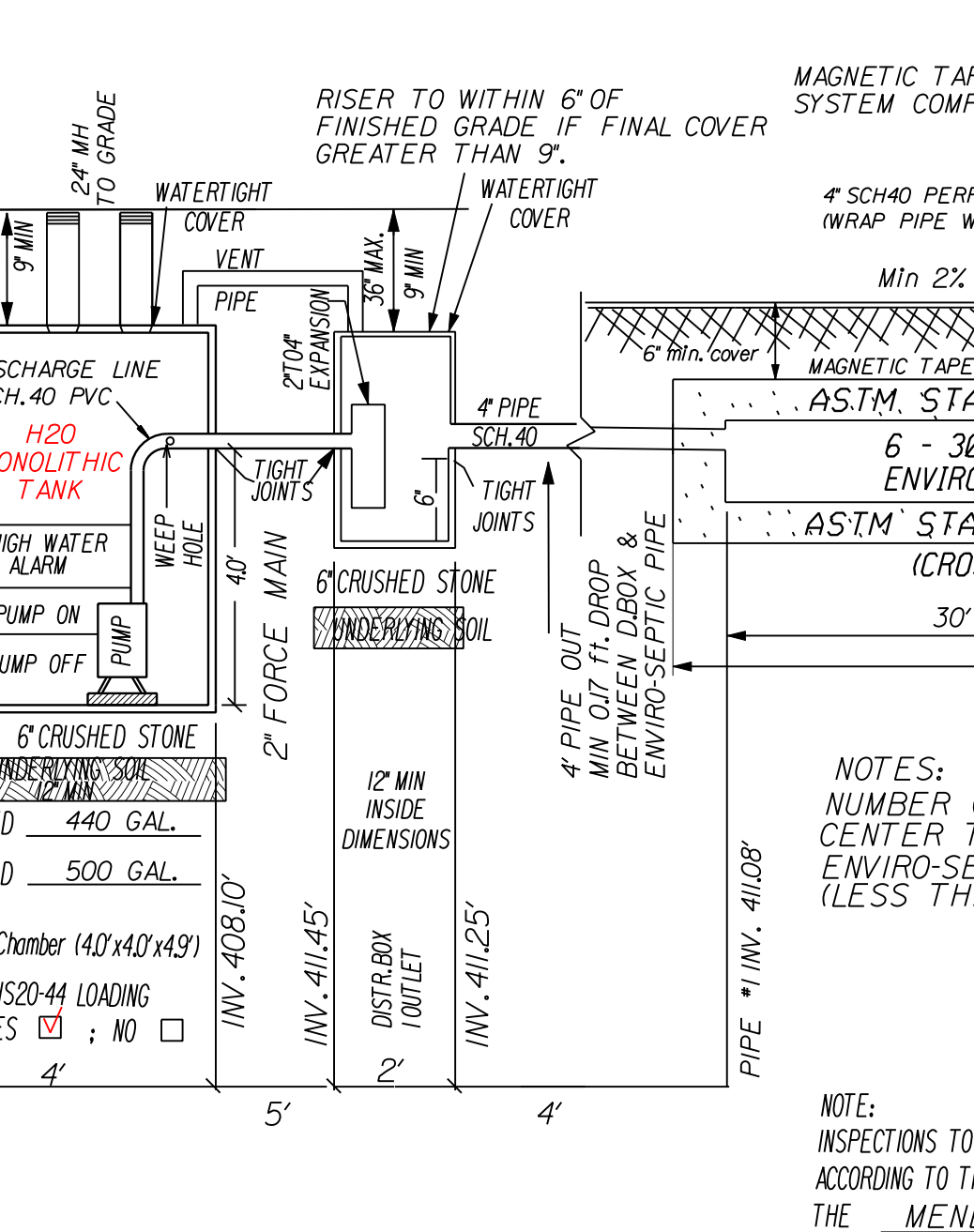
| BED AREA  | PER DEP MINIMUM EFFECTIVE LEACHING AREA 400 SF |
|---|--|
| LAYOUT 6 LINES AT 30' LONG, SPACED 2.0' ON CENTER, 180 LF > 140 LF OK |  |
| 13.0' WIDE X 32' LONG = 416 SF  | 416 SF > 400 SF OK                             |



**INSPECTION SCHEDULE**

- BOTTOM OF EXCAVATION PRIOR TO PLACEMENT OF FILL
- AFTER COMPLETION OF THE SYSTEM PRIOR TO BACKFILLING
- ROUGH AND/OR FINAL GRADING.
- SLOPE STABILIZATION.

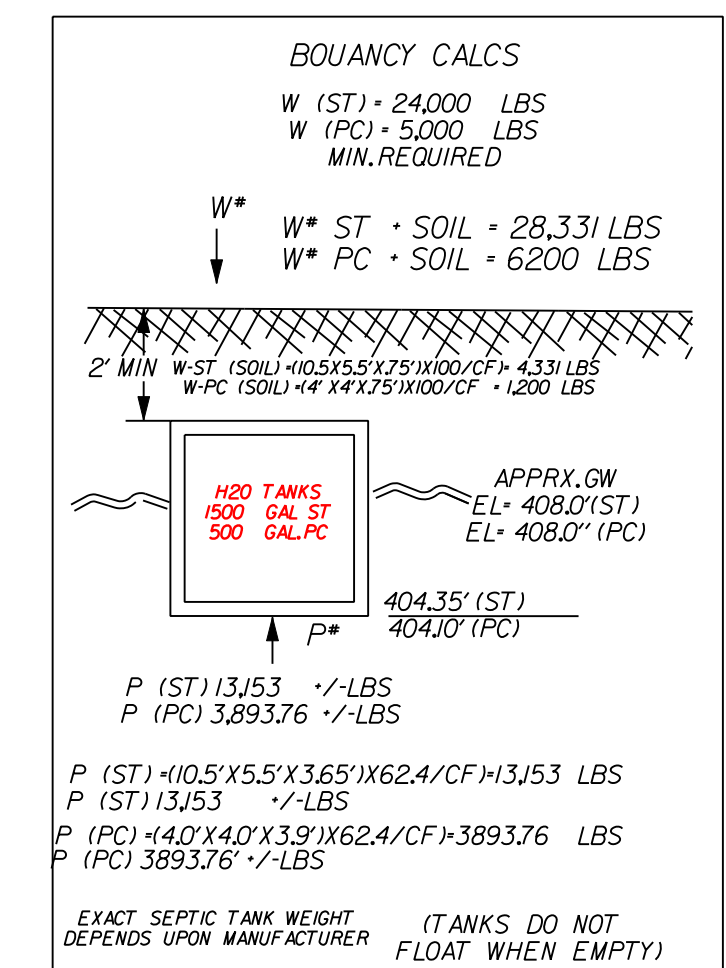
INVERT ELEVATIONS RE-PLUMB INSIDE PROP. INV. 409.00'



NOTES:  
NUMBER OF ENVIRO-SEPTIC LINES: 6  
CENTER TO CENTER SPACING 2.0'  
ENVIRO-SEPTIC LINES ARE LEVEL (LESS THAN 0.5" TOLERANCE UP OR DOWN)

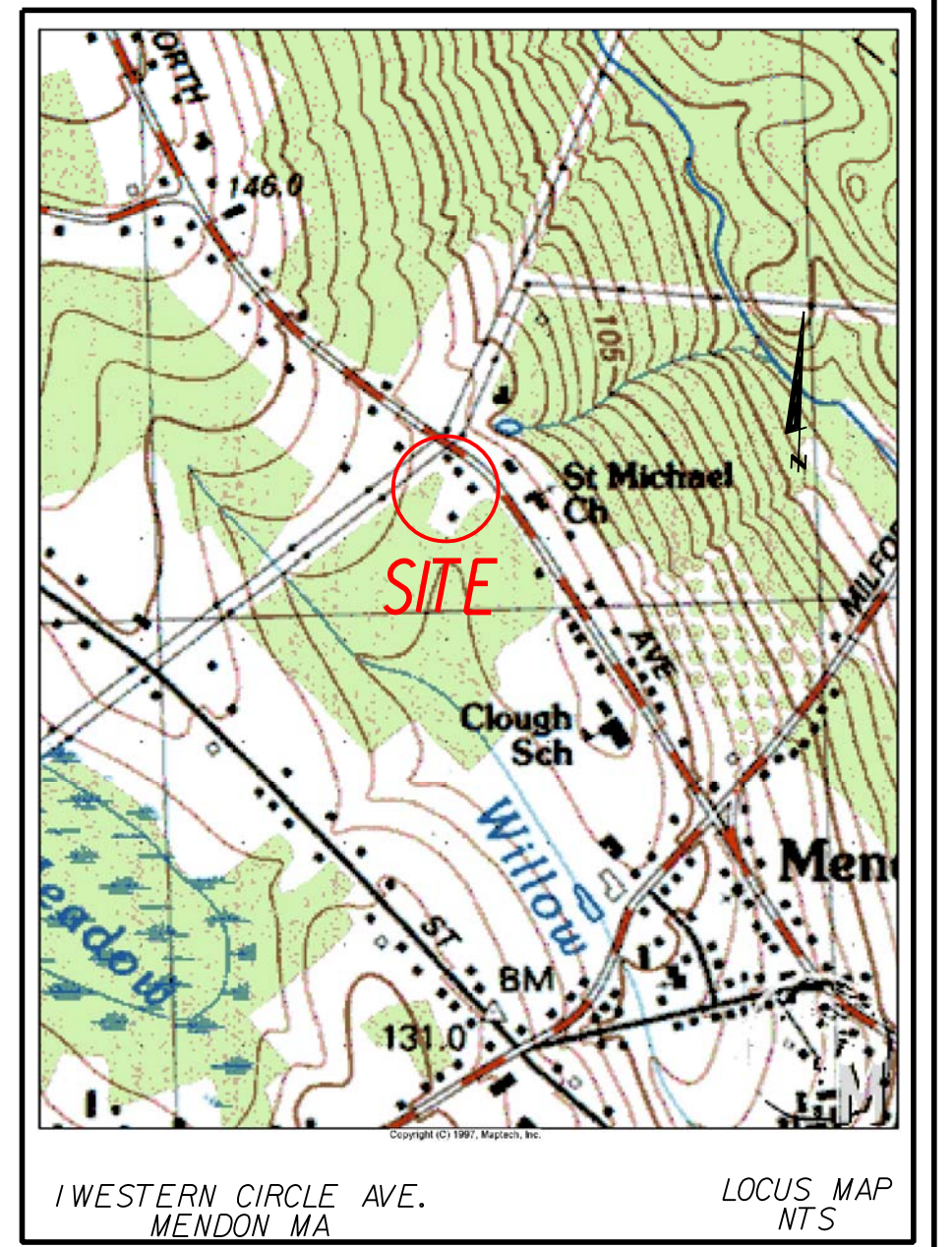
NOTE:  
INSPECTIONS TO BE CONDUCTED ACCORDING TO THE REGULATIONS OF THE MENDON BOARD OF HEALTH

RAISED CONNECTION DETAIL (NOT TO SCALE)



**LEGEND**

- OVERHEAD WIRE
- DEEP TEST HOLE
- PERCOLATION TEST HOLE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- WELL
- BENCH MARK
- SPOT ELEVATIONS (EXIST)
- SPOT ELEVATIONS (PROPOSED)
- 100' BUFFER ZONE
- WETLANDS



**LOCAL UPGRADE**

PER 310 CMR 15.405

A LOCAL UPGRADE IS REQUIRED TO REDUCE THE ESTIMATED GROUNDWATER OFFSET FROM THE BOTTOM OF THE SOIL ABSORPTION SYSTEM FROM 4 TO 3'.

REQUEST THAT THE 100' WELL OFFSET BE REDUCED TO 50'.

**NOTES**

INSTALLER SHALL INSTALL THE SYSTEM IN ACCORDANCE WITH THE PRESBY WASTEWATER TREATMENT SYSTEM'S MA ENVIRO-SEPTIC DESIGN AND INSTALLATION MANUAL AND THE CONDITIONS AS SET FORTH IN DEPARTMENT OF ENVIRONMENTAL PROTECTION'S CERTIFICATION FOR THE PRESBY ADVANCE ENVIRO-SEPTIC SYSTEM.

ALL EXST. SUBSURFACE UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. THE ENGINEER DOES NOT CERTIFY LOCATIONS OR ELEVATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM LOCATION AND ELEVATION OF EXISTING SEWER.

TOPOGRAPHIC SURVEY WAS CONDUCTED IN MARCH 2020

WETLANDS WERE DELINEATED BY MARGARET BACON PWS ON MARCH 5, 2020.

PROPERTY LINES ON THIS PLAN WERE COMPILED FROM RECORD DEEDS AND PLANS. THIS PLAN NOT TO BE USED TO ESTABLISH PROPERTY LINES

NO GARBAGE DISPOSAL UNITS ALLOWED.

NEITHER THE ENGINEER OR BOARD OF HEALTH CAN OFFER A GUARANTEE OF LONGEVITY OF THE SEWAGE DISPOSAL SYSTEM. SYSTEM WAS DESIGNED IN ACCORDANCE WITH TITLE V AND STANDARD ENGINEERING PRACTICES. PROPER USE AND MAINTENANCE ARE KEY IN ENSURING THE LIFE AND FUNCTIONALITY OF THIS SYSTEM.

PLAN BK 880 PLAN 105  
PLAN BOOK PLAN BK 116 PLAN 2  
DEED BOOK 61837 PAGE 161  
OWNER ON THE FLIP SIDE LLC

ASSESSORS MAP # 8-244-1-0  
LOT # WESTERN CIRCLE AVE.  
ZONE ZONE 1

| REVISION # | DESCRIPTION | DATE |
|------------|-------------|------|
|            |             |      |
|            |             |      |

**REPAIR**

**SEWAGE DISPOSAL SYSTEM FOR**

ALFRED DAPRATO  
1 WESTERN CIRCLE AVE.  
MENDON MA 01756

DATE: JULY 1, 2020 SCALE: 1" = 20'

**CIVIL SITE ENGINEERING**

PO BOX 248  
80 MAPLE ST.  
DOUGLAS MA 01916

SITE PLANNING SEPTIC DESIGN WETLANDS

PROJ. # S20106P.DGN

**811 DigSafe**

CONTRACTOR WILL NOTIFY DIG SAFE PRIOR TO CONSTRUCTION