

## DEEP TEST PIT RESULTS

DEEP TEST PITS WERE WITNESSED BY BRITANY OTTO, E.H.S. OF THE NORTHEAST DISTRICT DEPARTMENT OF HEALTH ON 11/9/21.

|      |                           |  |
|------|---------------------------|--|
| TP#1 | 0 - 10"                   | TOPSOIL  |
|      | 10 - 26"                  | RED/BROWN SANDY LOAM                                 |
|      | 26 - 43"                  | TAN SAND W/ SOME GRAVEL, MODERATELY COMPACT          |
|      | 43 - 70"                  | GRAYISH MODERATELY COMPACT SAND W/ LARGE ROCKS       |
|      | 70 - 78"                  | GROUNDWATER  |
|      | NO MOTTLING               |  |
|      | GROUNDWATER @ 70"         |  |
|      | GROUNDWATER SEEPAGE @ 67" |  |
|      | NO LEDGE                  |  |
|      | ROOTS TO 43"              |  |
|      | RESTRICTIVE @ 43"         |  |
| TP#2 | 0 - 12"                   | TOPSOIL  |
|      | 12 - 30"                  | BROWN SANDY LOAM, MOIST                              |
|      | 30 - 45"                  | TAN MOTTLED VERY FINE SANDY LOAM                     |
|      | 45 - 62"                  | GRAYISH MEDIUM SAND, WET                             |
|      | 62 - 72"                  | GROUNDWATER  |
|      | MOTTLING @ 30"            |  |
|      | GROUNDWATER @ 62"         |  |
|      | GROUNDWATER SEEPAGE @ 55" |  |
|      | NO LEDGE                  |  |
|      | ROOTS TO 26"              |  |
|      | RESTRICTIVE @ 30"         |  |
| TP#3 | 0 - 18"                   | TOPSOIL  |
|      | 18 - 30"                  | BROWN SANDY LOAM                                     |
|      | 30 - 40"                  | TAN MOTTLED VERY FINE SANDY LOAM, MODERATELY COMPACT |
|      | 40 - 62"                  | GRAYISH MEDIUM SAND, WET                             |
|      | 62 - 73"                  | GROUNDWATER  |
|      | MOTTLING @ 30"            |  |
|      | GROUNDWATER @ 62"         |  |
|      | GROUNDWATER SEEPAGE @ 50" |  |
|      | NO LEDGE                  |  |
|      | ROOTS TO 29"              |  |
|      | RESTRICTIVE @ 30"         |  |

## PERCOLATION TEST RESULTS

PERCOLATION TEST WAS PERFORMED BY DEMIAN A. SORRENTINO, C.S.S. OF BOUNDARIES, LLC ON 11/9/21.

|                     |                |
|---------------------|----------------|
| PERC-1              |                |
| DEPTH OF PERC = 26" |                |
| PRESOAK: 1 HR       |                |
| <u>TIME</u>         | <u>READING</u> |
| 9:45                | 6-1/2"         |
| 9:50                | 13-1/2"        |
| 9:55                | 17"            |
| 10:00               | 19-1/4"        |
| 10:05               | 21"            |
| 10:10               | 22"            |
| 10:15               | 23"            |
| 10:20               | 24"            |
| 10:25               | 24-3/4"        |

PERCOLATION RATE AT 26"  
DEPTH = 5.0 MINUTES/INCH

## SANITARY DESIGN CRITERIA & MLSS CALCULATIONS

PROPOSED 2-BEDROOM HOUSE & 1-BR ACCESSORY DWELLING UNIT (DESIGN FOR MULTI-FAMILY RESIDENCE, 4-BR MINIMUM PER SECTION VII.F.1 OF THE TECHNICAL STANDARDS, LAST REVISED 1/1/19)  
DESIGN PERCOLATION RATE = LESS THAN 10.1 MINUTES/INCH  
LEACHING AREA REQUIRED = 680 SF EFFECTIVE (485 + 195)  
DESIGN: 1,500 GALLON CONCRETE SEPTIC TANK, 1,000 GALLON CONCRETE PUMP CHAMBER AND 1 ROW OF 60" OF ELJIN MANTIS 536-B LEACHING MEDIA INSTALLED PER MANUFACTURER'S SPECIFICATIONS.  
LEACHING AREA PROVIDED = 680 SF EFFECTIVE (60 LF X 11.0 SF/LF)  
100% RESERVE AREA PROVIDED (1 ROW OF 60" OF ELJIN MANTIS 536-B LEACHING MEDIA)

### MINIMUM LEACHING SYSTEM SPREAD (MLSS) CALCULATION

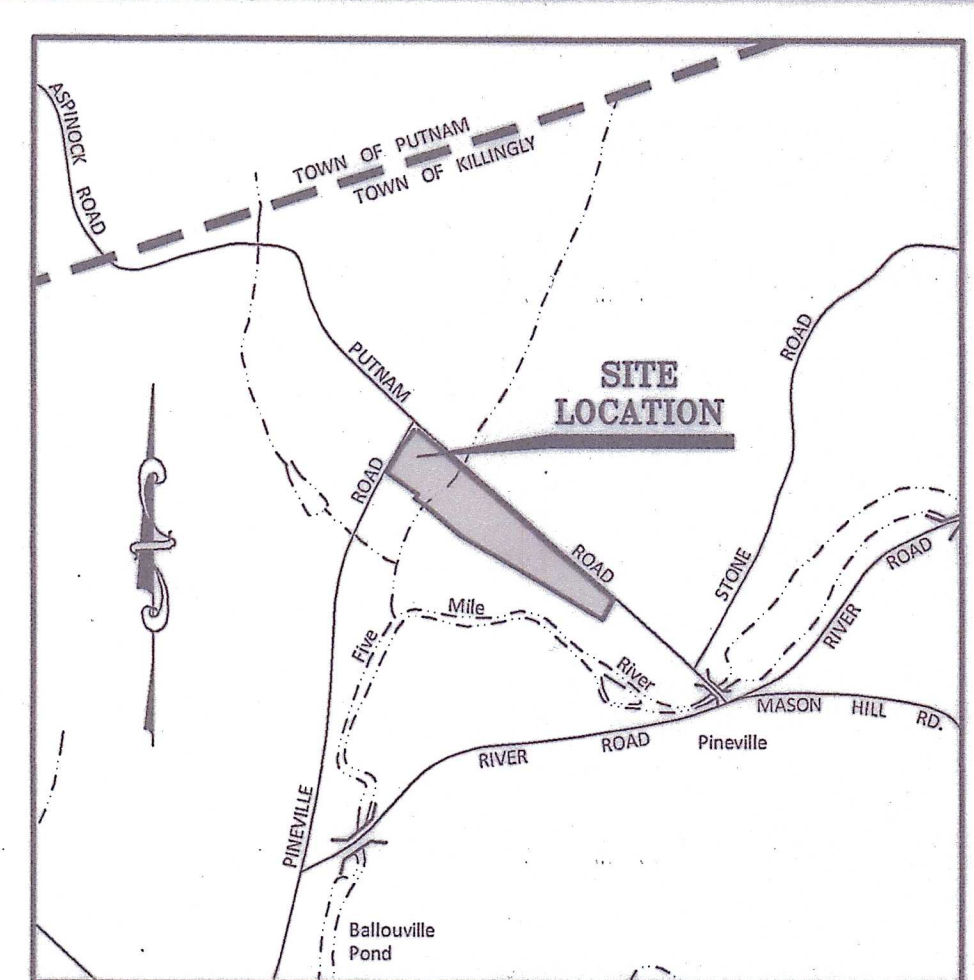
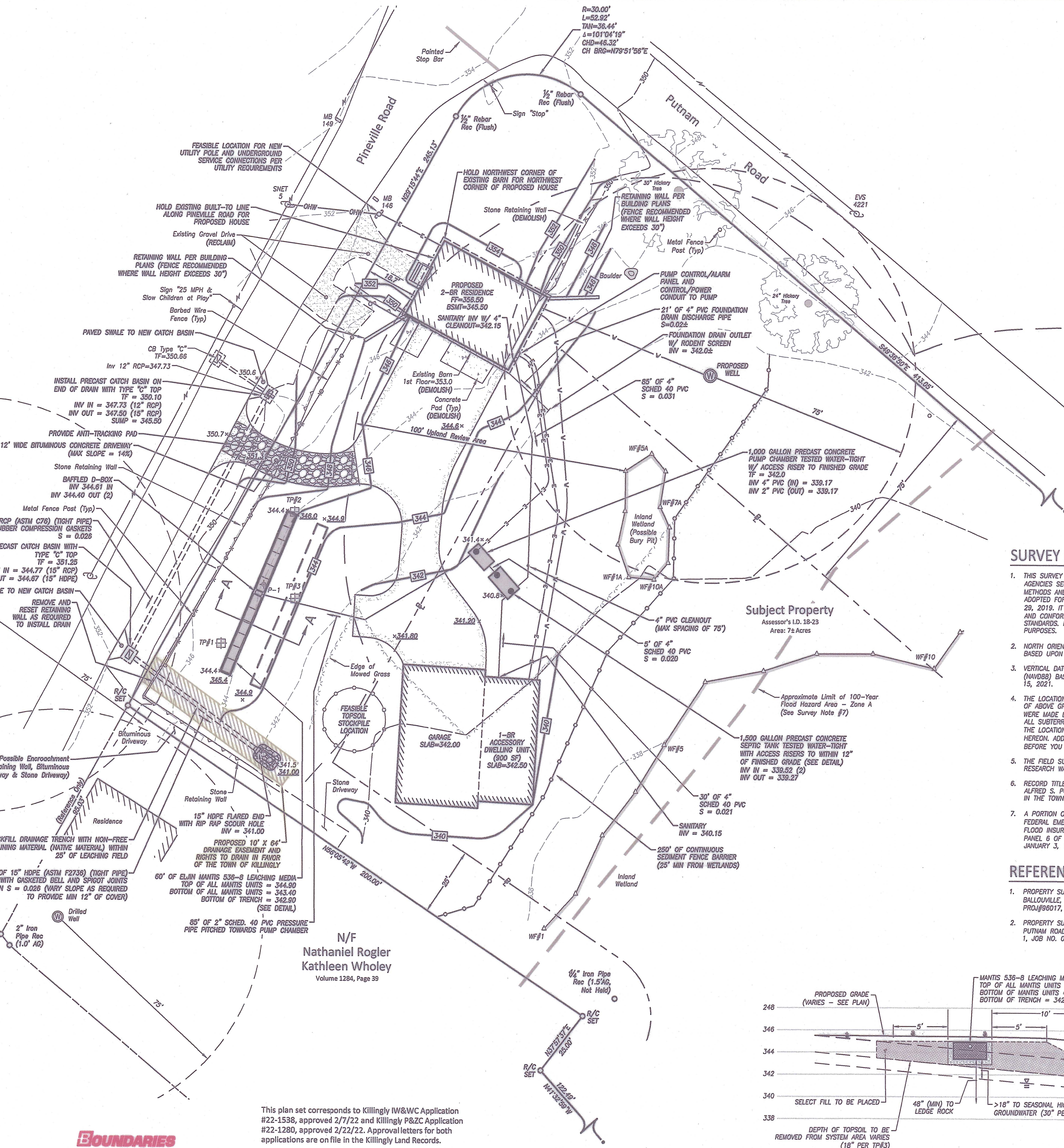
|  |        |
|--|--------|
| HYDRAULIC GRADIENT                         | = 6.0% |
| DEPTH TO RESTRICTIVE LAYER (USE TP#4)      | = 30"  |
| HYDRAULIC FACTOR                           | = 30   |
| FLOW FACTOR FOR 4-BEDROOMS (MULTI-FAMILY)  | = 2.0  |
| PERCOLATION FACTOR FOR UP TO 10.0 MIN/INCH | = 1.0  |
| MLSS REQUIRED                              | = 60"  |
| MLSS PROVIDED                              | = 60"  |



## LEGEND & ABBREVIATIONS

|              |             |                     |
|--------------|-------------|---------------------|
| UTILITY POLE | Δ WF#1      | WETLAND FLAG        |
| GUY WIRE     | --- 160 --- | EXISTING CONTOUR    |
| AT&T         | --- 160 --- | PROPOSED CONTOUR    |
| ±            | ± 174.2     | WELL                |
| N/F          | ± 163.0     | PROPOSED SPOT GRADE |
| BR           | S           | EXISTING SPOT GRADE |
| FF           | SAN         | SLOPE               |
| BSMT         | INV         | SANITARY            |
| MB           | MIN         | INVERT              |
| TYP          | ELEV        | ELEVATION           |
| ○            | PVC         | POLYVINYL CHLORIDE  |
| ○            | SCHED       | SCHEDULE            |
| ○            | MIN         | MINIMUM             |
| REC          | MIN         | MINIMUM             |
| AG           | MIN         | MINIMUM             |
| W/           | MIN         | MINIMUM             |
| R/C          | MIN         | MINIMUM             |

|                     |             |
|---------------------|-------------|
| WETLAND FLAG        | Δ WF#1      |
| EXISTING CONTOUR    | --- 160 --- |
| PROPOSED CONTOUR    | --- 160 --- |
| WELL                | ± 174.2     |
| PROPOSED SPOT GRADE | ± 163.0     |
| EXISTING SPOT GRADE | S           |
| SLOPE               | SAN         |
| SANITARY            | INV         |
| INVERT              | MIN         |
| ELEVATION           | ELEV        |
| POLYVINYL CHLORIDE  | PVC         |
| SCHEDULE            | SCHED       |
| MINIMUM             | MIN         |
| MINIMUM             | MIN         |
| MINIMUM             | MIN         |



LOCATION MAP  
SCALE: 1"=100'

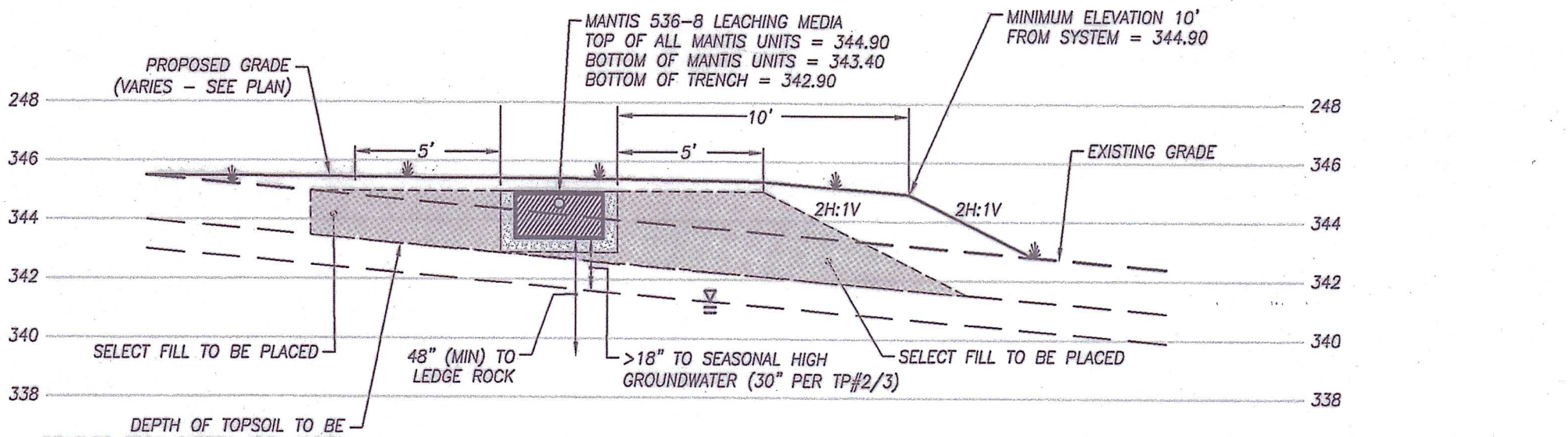
Rec # 100708 03/14/2022 02:23:54 PM  
1 Pages  
MAP # 7312  
TOWN OF KILLINGLY  
Elizabeth M. Wilson, Town Clerk

## SURVEY NOTES

- THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED FOR USE BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019. IT IS AN "IMPROVEMENT LOCATION & TOPOGRAPHIC SURVEY" BASED ON RESURVEY AND CONFORMS TO HORIZONTAL CLASS "A-2" AND TOPOGRAPHIC CLASS "1-2" ACCURACY STANDARDS. IT IS INTENDED TO BE USED FOR MUNICIPAL PERMITTING AND SITE DEVELOPMENT PURPOSES.
- NORTH ORIENTATION DEPICTED HEREON IS APPROXIMATE NORTH AMERICAN DATUM 1983 (NAD83) BASED UPON GLOBAL POSITIONING SYSTEM OBSERVATIONS, OBSERVED ON NOVEMBER 15, 2021.
- VERTICAL DATUM DEPICTED HEREON IS APPROXIMATE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) BASED UPON GLOBAL POSITIONING SYSTEM OBSERVATIONS USING GEODETIC ON NOVEMBER 15, 2021.
- THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON THE LOCATION OF ABOVE GROUND STRUCTURES AND RECORD DRAWINGS PROVIDED BY OTHERS. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES. ALL SUBTERRANEAN FEATURES AND IMPROVEMENTS MAY NOT BE DEPICTED OR NOTED HEREON. THE LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. CONTACT "CALL BEFORE YOU DIG" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OPERATIONS.
- THE FIELD SURVEY WAS COMPLETED ON NOVEMBER 15, 2021. LAND RECORD AND RELATED RESEARCH WAS COMPLETED ON OCTOBER 18, 2021.
- RECORD TITLE TO THE SUBJECT PROPERTY MAY BE REFERENCED TO A WARRANTY DEED FROM ALFRED S. POLANO AND JUDITH M. POLANO TO TANNY RAINVILLE RECORDED AUGUST 10, 2021 IN THE TOWN OF KILLINGLY LAND RECORDS VOLUME 1388 PAGE 555.
- A PORTION OF THE SUBJECT PROPERTY RESIDES IN FLOOD ZONE "A" AS DEPICTED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) NATIONAL FLOOD INSURANCE PROGRAM (NFIP), FLOOD INSURANCE RATE MAP (FIRM), TOWN OF KILLINGLY, CONNECTICUT, WINDHAM COUNTY, PANEL 6 OF 30, COMMUNITY PANEL NUMBER 0901360006B, SCALE: 1"=400', EFFECTIVE DATE JANUARY 3, 1985.

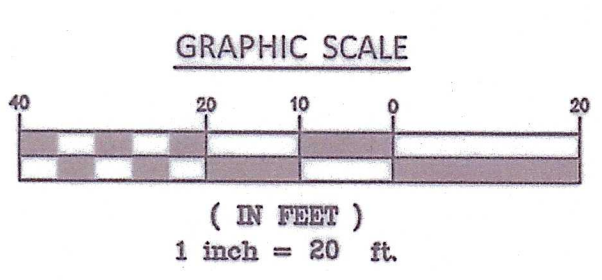
## REFERENCE MAPS

- PROPERTY SURVEY PREPARED FOR FRANK P. STANTON & KIM M. STANTON, PINEVILLE ROAD, BALLOUVILLE, CONNECTICUT, SCALE 1"=40', DATED: JANUARY 14, 1989, SHEET 1 OF 1, PROJ#96017, PREPARED BY: KWP ASSOCIATES.
- PROPERTY SURVEY PREPARED FOR ALFRED S. & JUDITH M. POLANO, PINEVILLE ROAD & PUTNAM ROAD, KILLINGLY, CONNECTICUT, SCALE 1"=50', DATED: FEBRUARY 2007, SHEET 1 OF 1, JOB NO. 07003, PREPARED BY: PC SURVEY ASSOCIATES, LLC.



LEACHING SYSTEM CROSS SECTION A-A  
SCALE: 1"=5' (HORIZONTAL & VERTICAL)

This plan set corresponds to Killingly IW&WC Application #22-1538, approved 2/7/22 and Killingly P&ZC Application #22-1280, approved 2/22/22. Approval letters for both applications are on file in the Killingly Land Records.



I HAVE CONDUCTED AN ON-SITE SOIL INVESTIGATION OF THE PARCEL OF LAND DEPICTED HEREON. THE INLAND WETLAND BOUNDARIES AS DEPICTED HEREON ARE AN ACCURATE REPRESENTATION OF THE DELINEATION PERFORMED IN THE FIELD.

DEMIAN A. SORRENTINO, C.S.S.  
DATE 3/14/22

DAVID C. MCKAY, P.E.  
DATE 3-14-22

"TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON."  
JOHN U. FAULSE JR. L.S.  
LICENSE NO. 29102  
DATE 3-14-22  
70016  
DATE 3-14-22

APPROVED: 2/22/2022  
ENDORSED BY THE DIRECTOR OF PLANNING & DEVELOPMENT FOR THE TOWN OF KILLINGLY, CONNECTICUT.  
ANN-MARIE L. AUBREY, DIRECTOR OF PLANNING & DEVELOPMENT  
DATE 3/14/2022

BOUNDARIES  
ORIGINAL INK DRAWING

P:\CIVIL 3D PROJECTS\2021\21-3089 LABONTE\DWG\DESIGN\21-3089 LABONTE SSDS PLAN\_REV.B.DWG