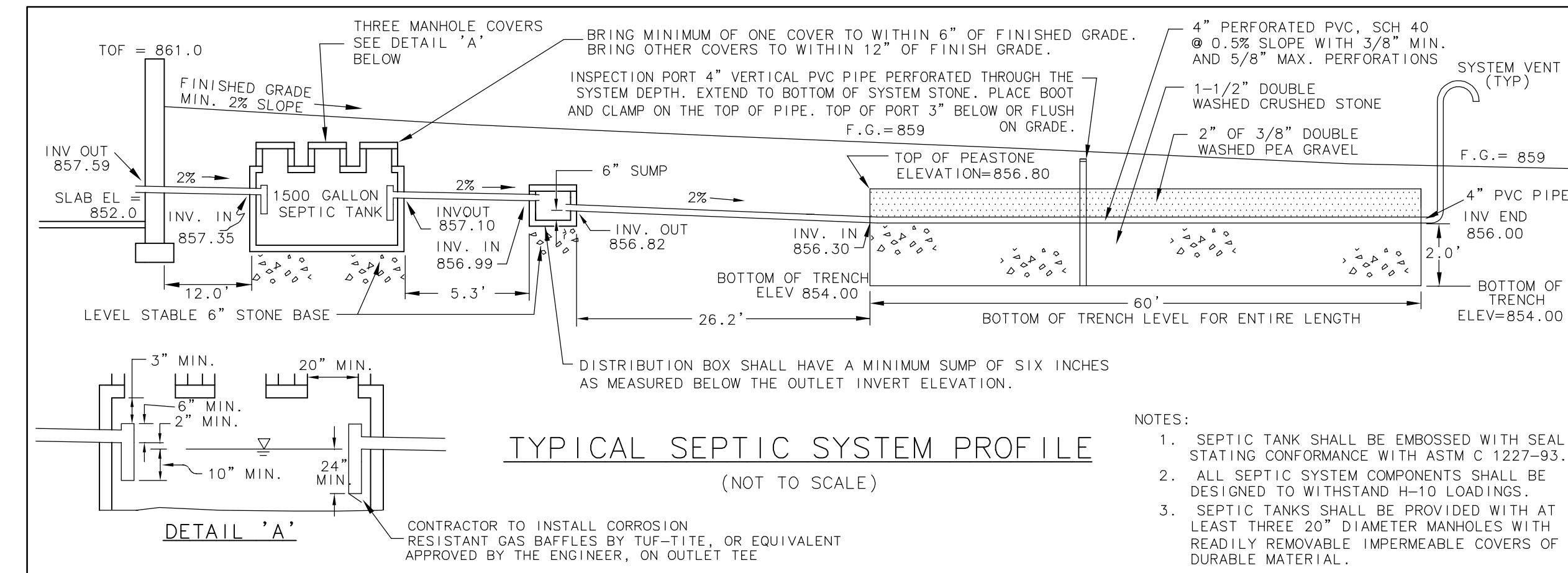
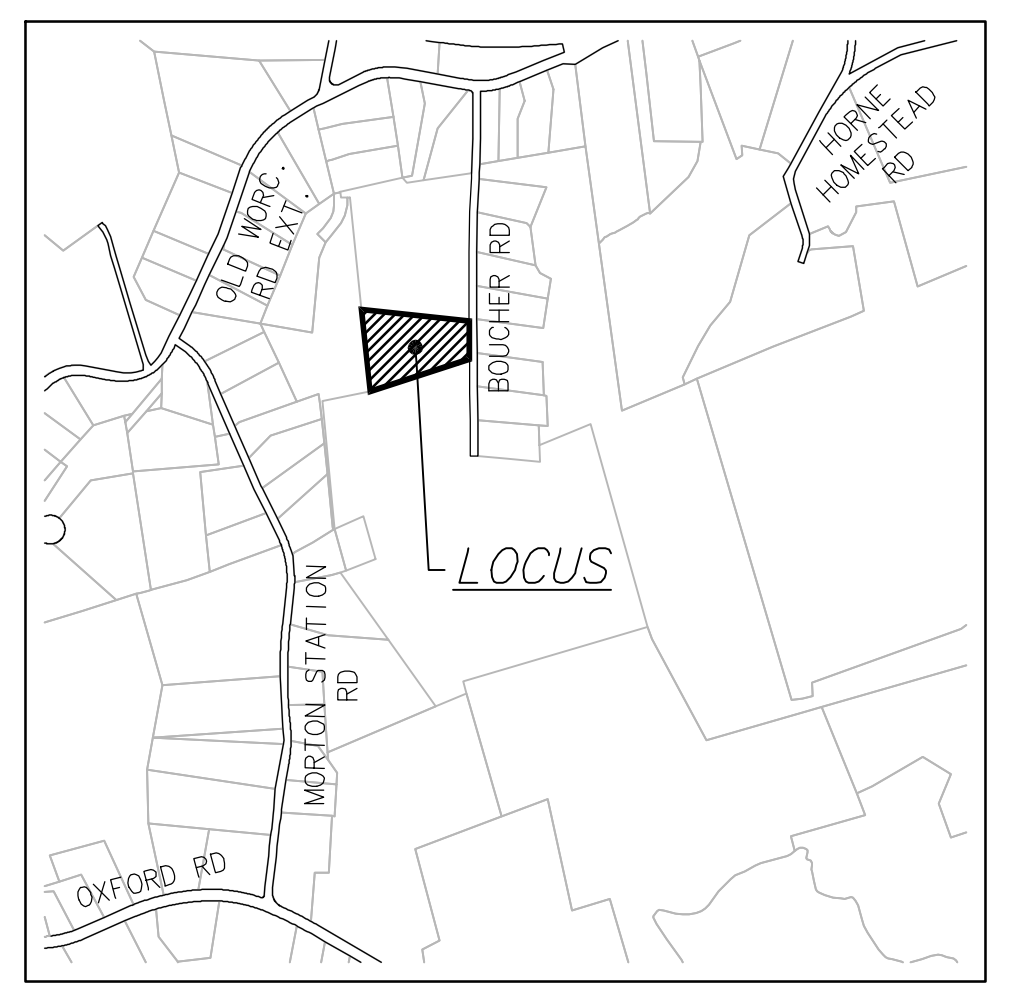
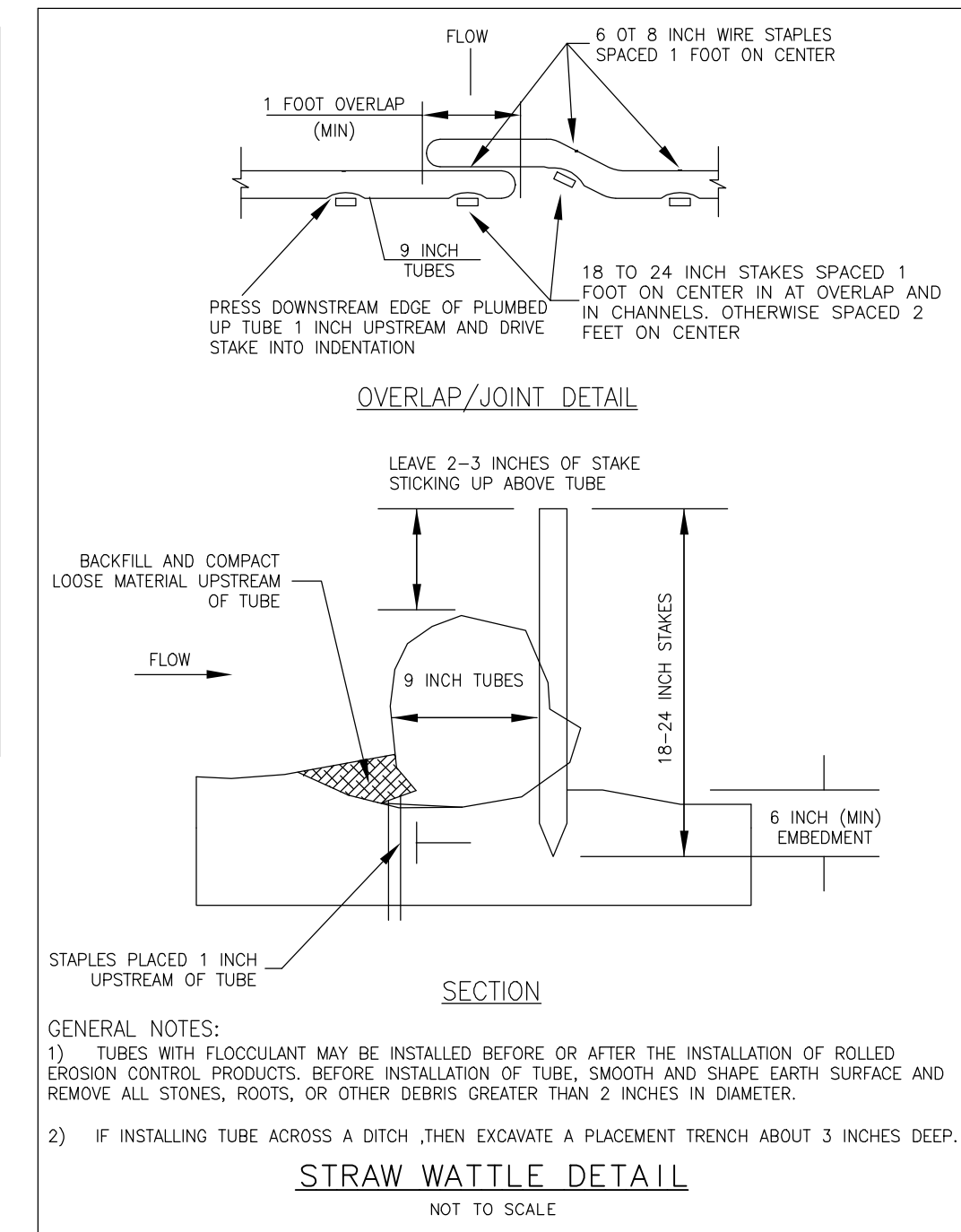
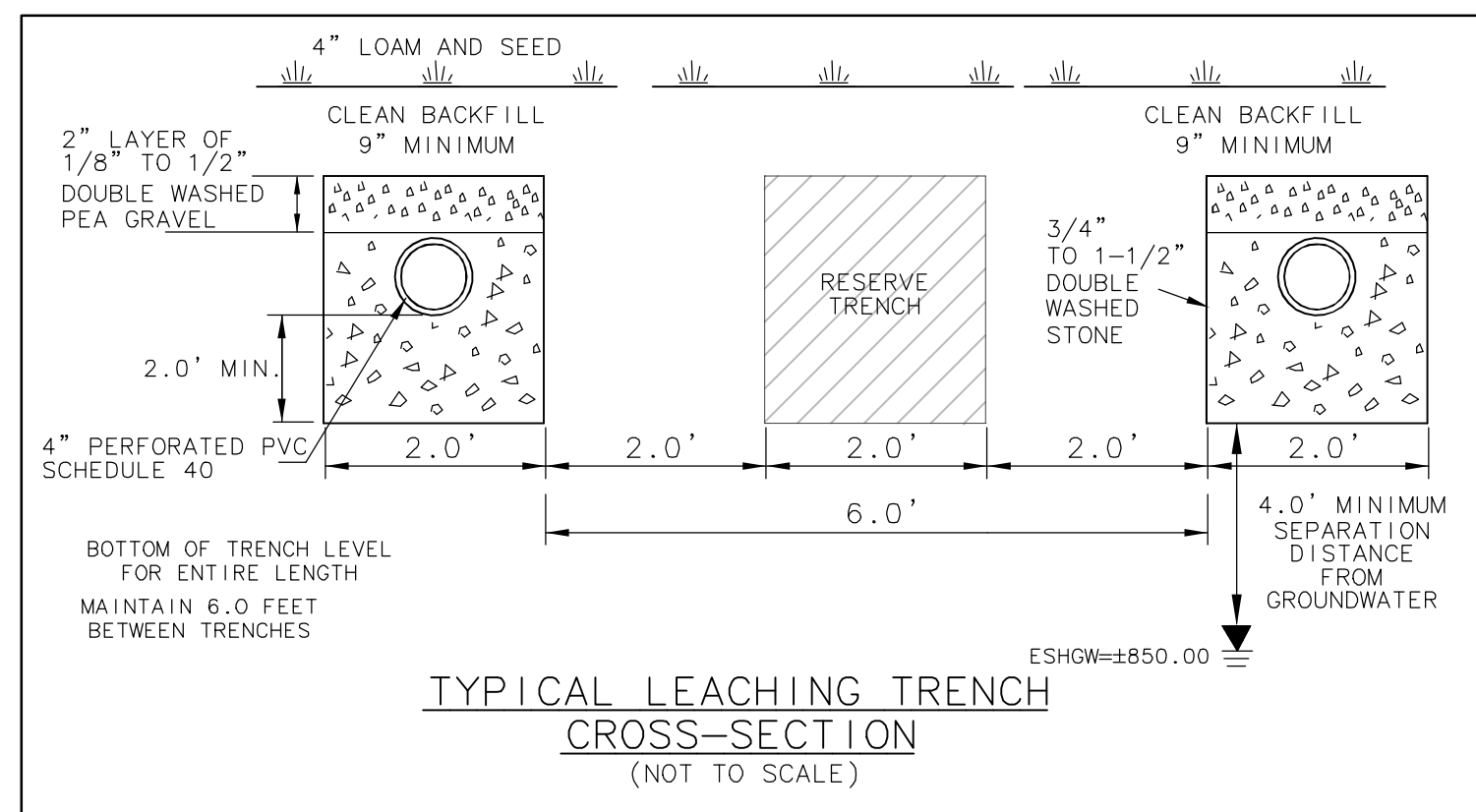


SOIL LOG TEST HOLE 5 - ELEV.=854.00'						
DEPTH FROM SURFACE (INCHES)	ELEVATION (FEET)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER (STRUCTURE, STONES, BOULDERS, CONSISTENCY, % GRAVEL)
0"-12"	853.00	Ap	SANDY LOAM	10YR 3/4	NONE	FIRM
12"-24"	852.00	Bw	SANDY LOAM	10YR 4/4	NONE	FIRM
24"-120"	844.00	C	SANDY LOAM	2.5YR 5/4	48"	FIRM (MASSIVE)
				ESHOW	EL=850.00	

SOIL LOG TEST HOLE 6 - ELEV.= 856.90'						
DEPTH FROM SURFACE (INCHES)	ELEVATION (FEET)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER (STRUCTURE, STONES, BOULDERS, CONSISTENCY, % GRAVEL)
0"-12"	855.90	Ap	SANDY LOAM	10YR 3/4	NONE	FIRM
12"-24"	854.90	Bw	SANDY LOAM	10YR 4/4	NONE	FIRM
24"-120"	846.90	C	SANDY LOAM	2.5YR 5/4	42"	FIRM (MASSIVE)
				ESHOW	EL=853.40	

PERCOLATION TEST BY: MICHAEL F. LOIN #1393  
 WITNESSED BY: CHARLTON BOH AGENT JAMES MALLEY  
 DATE: DECEMBER 10, 2015 (HOLE 5) / OCTOBER 8, 2015 (HOLE 6)  
 PERC RATE: 16.7 MPI IN C LAYER @ 30" (OBS. HOLE 5)  
 PERC RATE: 40.0 MPI IN C LAYER @ 30" (OBS. HOLE 6) - USED FOR DESIGN (CONSERVATIVE)  
 EFFLUENT LOADING RATE: 0.25 GPD/SF - 40 MPI IN CLASS III SOILS (310 CMR 15.242)  
 ESTIMATED HIGH GROUND WATER 48" EL=850.00' (OBS. HOLE 5)

DESIGN FORMULA:		
SYSTEM	REQUIRED	PROVIDED
DAILY FLOW: 5 BEDROOMS @ 110 GPD/BEDROOM	550 GPD	
SEPTIC TANK: 550 GPD x 200%	1,100 GAL	1,500 GAL
LEACHING AREAS: 6 TRENCHES @ 60' LONG X 2' DEEP SIDEWALLS: ((60'X2') X 2) X 6 BOTTOM: (60'X2') X 6 END WALLS: ((2'X2') X 2) X 6 TOTAL LEACHING AREA:		1440.0 SF 720.0 SF 48.0 SF 2208.0 SF
LEACHING CAPACITY: FIELD: 2208.0 SF x 0.25 GAL/SF		552.0 GAL
TOTAL:	550 GAL	552.0 GAL

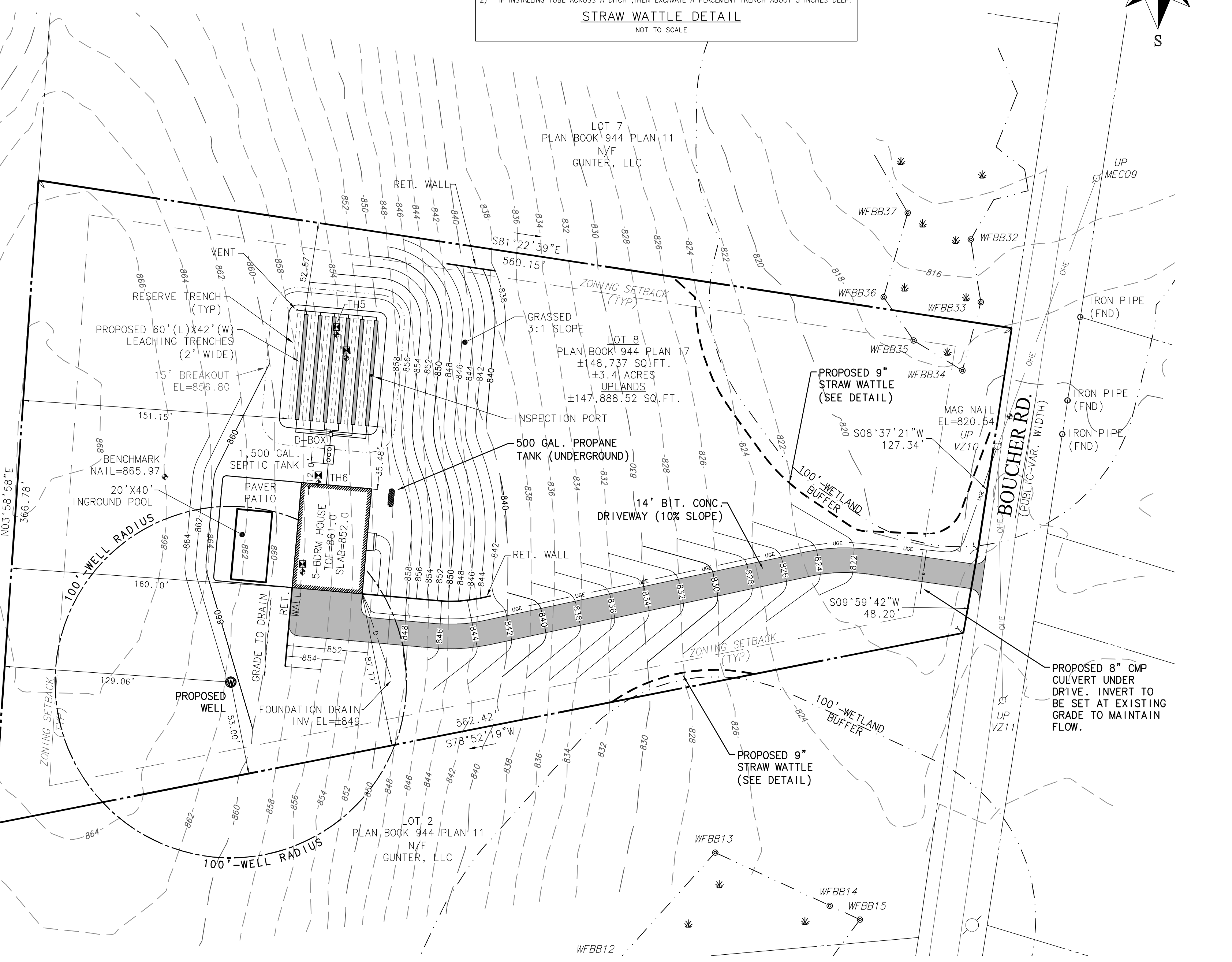


- GENERAL NOTES**
- RECORD OWNER: GUNTER, LLC, 580 CALLE PRINCIPAL SUITE 2, MONTEREY, CALIFORNIA 93940, PLAN BOOK 944 PLAN 17 - LOT 8
  - PROPERTY IS SHOWN AS A PORTION OF PARCEL A-3 ON ASSESSORS MAP 40 AND APPEARS TO LIE WITHIN THE AGRICULTURAL (A) ZONING DISTRICT PER THE TOWN OF CHARLTON ZONING MAP AND ASSESSORS INFORMATION.
  - PROPERTY LINES SHOWN WERE DERIVED FROM AN ON THE GROUND SURVEY CONDUCTED IN JANUARY OF 2019 BY EXISTING GRADE, INC., LINES OF OCCUPATION, AND FOUND MONUMENTATION.
  - PARCEL APPEARS TO LIE WITHIN FLOOD ZONE X PER FIRM MAP 25027C0789E PANEL 787 OF 1075 AND MAP 25027C0793E PANEL 793 OF 1075 LAST REVISED JULY 04, 2011, AS SHOWN ON THE FEMA WEBSITE.
  - EXISTING CONDITIONS SHOWN HEREON WERE COMPILED FROM AN ON THE GROUND SURVEY CONDUCTED IN JANUARY OF 2019 BY EXISTING GRADE, INC., AERIAL IMAGERY PROVIDED BY THE STATE OF MASSACHUSETTS, AND FROM PLANS OF RECORD.
  - ORIGIN OF BEARING FROM PLAN BOOK 944 PAGE 17, AS RECORDED AT THE WORCESTER COUNTY REGISTRY OF DEEDS.
  - ORIGIN OF ELEVATIONS IS NORTH AMERICAN VERTICAL DATUM (NAVD) 88, DETERMINED FROM A GPS SURVEY CONDUCTED BY EXISTING GRADE, INC. IN JANUARY OF 2019.
  - SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
  - WETLANDS SHOWN COMPILED FROM PLAN BOOK 944 PLAN 17, PREPARED BY H&K GROUP, INC., 75 HAMMOND STREET, WORCESTER MA, DATED JULY 30, 2019, AS RECORDED AT THE WORCESTER COUNTY REGISTRY OF DEEDS. NO WETLAND SURVEY WAS CONDUCTED BY EXISTING GRADE, INC. FOR THE PREPARATION OF THIS PLAN.
  - ALL PROPOSED WORK TO BE DONE IN ACCORDANCE WITH LOCAL AND STATE BUILDING CODES.
  - SELF-CLOSING/LATCHING GATE AROUND POOL TO BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES.
- \*\*\*DIG SAFE NOTE\*\*\* IN ACCORDANCE WITH MCL CH82, SEC. 40 INCLUDING AMENDMENTS, ALL CONTRACTORS SHALL NOTIFY UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING, OF THE EXTENT TO EXCAVATE NO LESS THAN 72 HOURS PRIOR TO SUCH EXCAVATION (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS). OR CALL "DIG-SAFE" AT 1-888-DIG-SAFE.

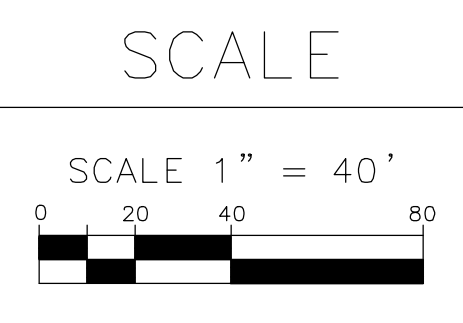
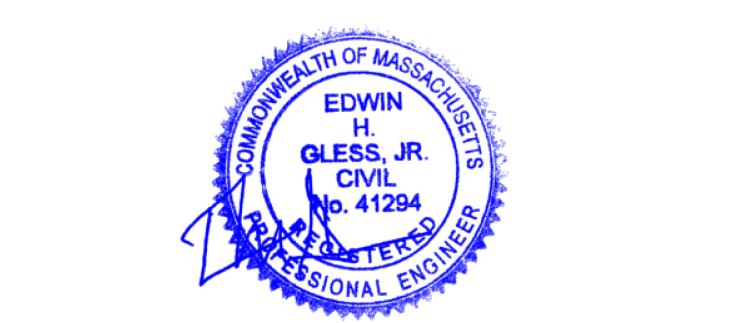
- SEPTIC NOTES:**
- ALL SYSTEM COMPONENTS SHALL BE INSTALLED IN COMPLIANCE WITH THE STATE SANITARY CODE TITLE V AND THE TOWN OF CHARLTON BOARD OF HEALTH REQUIREMENTS.
  - ANY CHANGE TO THIS PLAN MUST BE APPROVED BY THE BOARD OF HEALTH AND DESIGN ENGINEER.
  - HEAVY EQUIPMENT SHALL NOT TRAVEL OVER DISPOSAL SYSTEM DURING OR AFTER CONSTRUCTION.
  - TIGHT JOINT (T.J.) PIPING SHALL CONSIST OF POLYVINYL CHLORIDE (PVC) PIPE, SCHEDULE 40. ALL PIPES TO BE LAID ON FIRM BASE AND TO BE WATERTIGHT. ALL CONNECTIONS AND JOINTS SHALL BE MECHANICALLY SOUND AND TIGHT.
  - DISTRIBUTION BOX SHALL BE WATER TESTED FOR LEVELNESS.
  - NO GARBAGE GRINDER IS ALLOWED.
  - DISTRIBUTION BOX SHALL HAVE AN INLET TEE EXTENDING TO ONE INCH ABOVE THE OUTLET INVERT ELEVATION.
  - SEPTIC TANK SHALL BE EMBOSSED WITH SEAL CONFORMANCE WITH ASTM C 1227-94.
  - ALL SEPTIC SYSTEM COMPONENTS SHALL BE DESIGNED TO WITHSTAND H-10 LOADINGS AND TO BE SECURED WITH HYDRAULIC CEMENT.
  - SEPTIC TANKS SHALL BE PROVIDED WITH AT LEAST THREE 20" DIAMETER MANHOLES WITH READILY REMOVABLE IMPERMEABLE COVERS OF DURABLE MATERIAL.
  - BEFORE BACKFILLING THE SYSTEM THE CONTRACTOR SHALL NOTIFY THE BOARD OF HEALTH TO INSPECT.
  - CONTRACTOR SHALL COORDINATE WITH THE BOARD OF HEALTH TO OBSERVE THE EXCAVATION OF UNSUITABLE SOILS UNDER THE AREA OF THE PROPOSED LEACHING SYSTEM.
  - CONTRACTOR SHALL OVER EXCAVATE LEACHING PIT BOTTOM TO A DEPTH OF FIVE FEET TO VERIFY THAT NO GROUNDWATER WILL BE ENCOUNTERED. (NOT APPLICABLE)
  - ALL UNSUITABLE SOIL MATERIAL IN AREA OF AND BELOW PROPOSED SOIL ABSORPTION SYSTEM (S.A.S.) SHALL BE REMOVED AND REPLACED WITH CLEAN, COARSE SAND WITH A PERCOLATION RATE OF 2 MIN/INCH.
  - AREA 5 FEET BEYOND LIMIT OF SOIL ABSORPTION SYSTEM (S.A.S.) SHALL BE EXCAVATED OF UNSUITABLE MATERIAL TO TOP OF C-LAYER.
  - ALL COMPONENTS OF SYSTEM TO BE MARKED WITH MAGNETIC TAPE IN ORDER TO LOCATE ONCE BURIED.

**ZONE AGRICULTURAL (A)**

LOT AREA (REQ'D)	60,000 S.F.
FRONTAGE (REQ'D)	175'
FRONT YARD (REQ'D)	30'
SIDE YARD (REQ'D)	15'
REAR YARD (REQ'D)	30'
BLDG. COVERAGE (MAX)	25%
CONT. UPLANDS (MIN)	40,000 S.F.



**Existing Grade Inc.**  
 Surveyors & Civil Engineers  
 62 Riedell Road  
 Douglas, MA. 01516  
 508-694-6501 Ph/Fax



NO.	DATE	BY	REVISIONS
1	12/16/20	ZG	WETLAND FLAG NUMBERS/DRIVEWAY CULVERT

**CLIENT**  
 JOHN SHI  
 LOT 8 - BOUCHER ROAD  
 CHARLTON, MASSACHUSETTS 01507

**PROPOSED SITE/SEPTIC PLAN**  
 CHARLTON BOH FILE# \_\_\_\_\_  
 FOR  
 PARCEL 8 - PLAN BOOK 944 PLAN 17  
 CHARLTON, MASSACHUSETTS 01507

PROJECT NO. 1923
DATE: 08/11/20
SHEET NO. 1 of 1