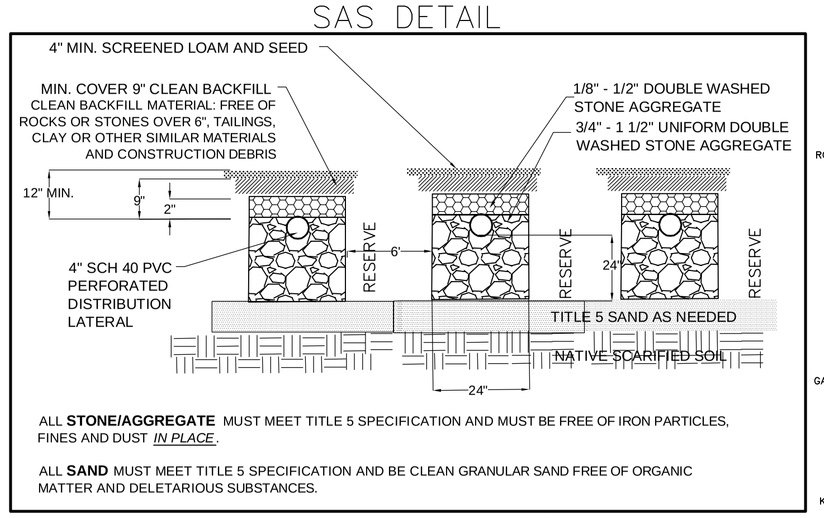
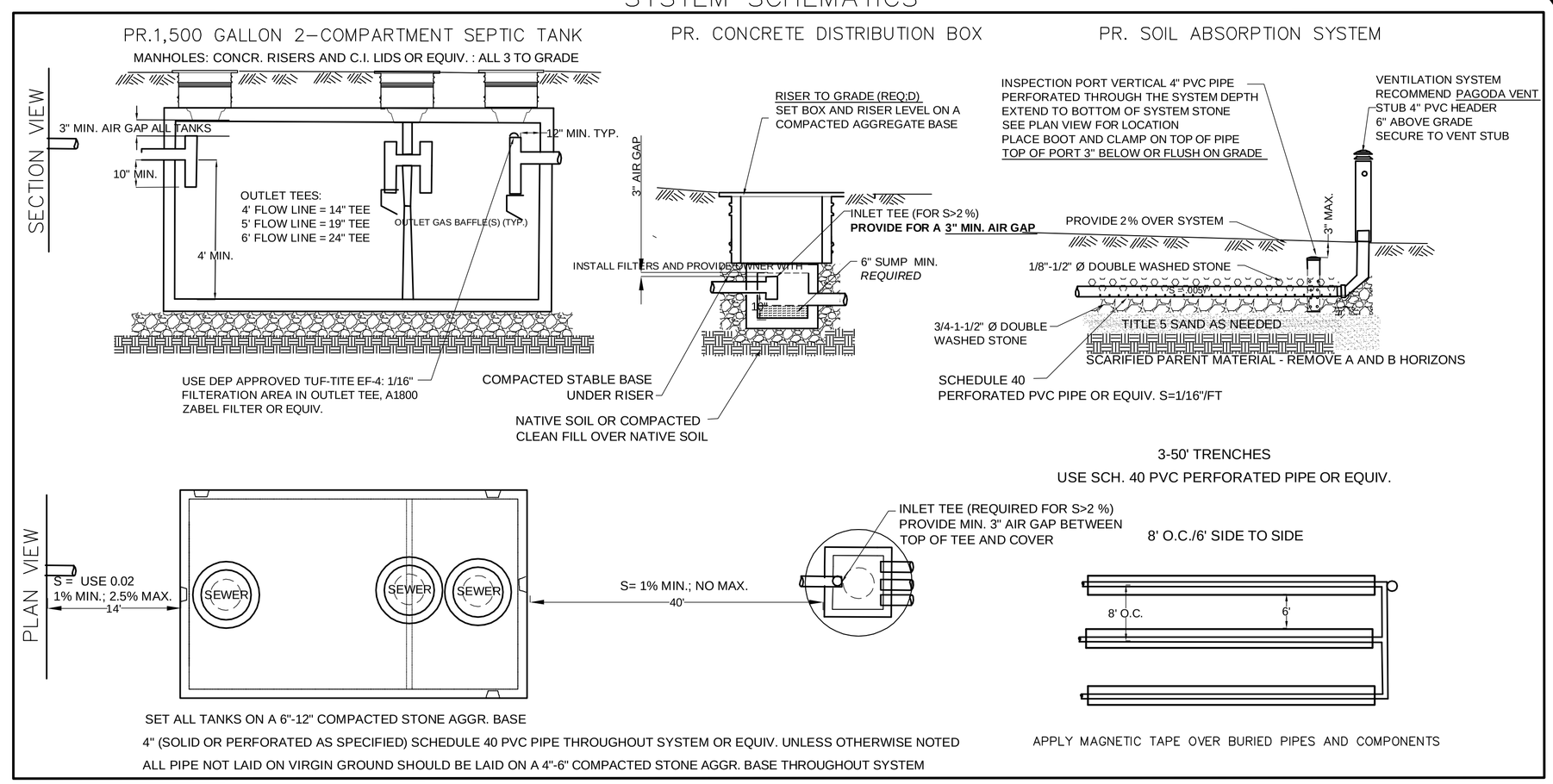
SAS DETAIL

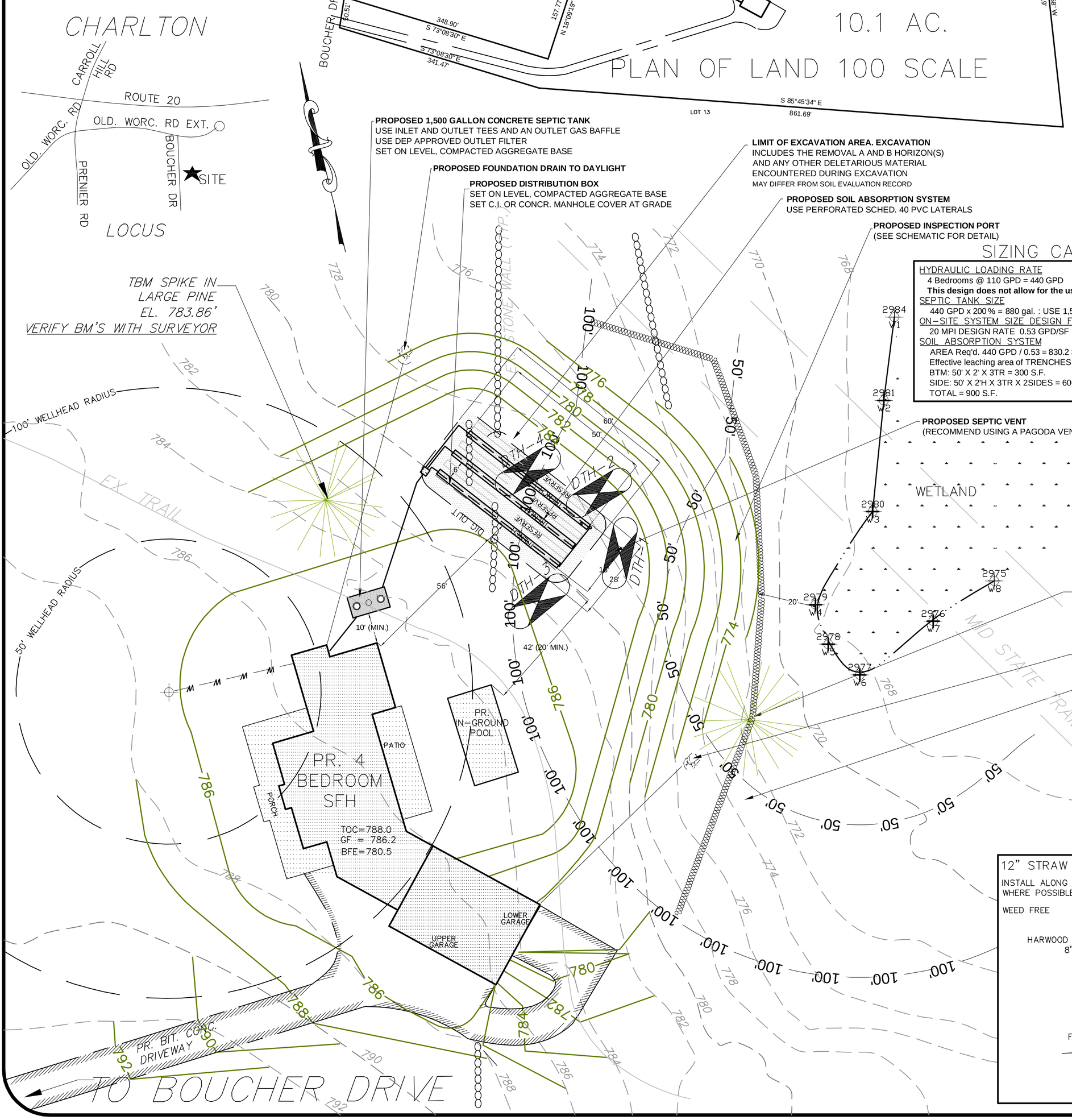


ALL **STONE/AGGREGATE** MUST MEET TITLE 5 SPECIFICATION AND MUST BE FREE OF IRON PARTICLES, FINES AND DUST *IN PLACE*.

ALL **SAND** MUST MEET TITLE 5 SPECIFICATION AND BE CLEAN GRANULAR SAND FREE OF ORGANIC MATTER AND DELETARIOUS SUBSTANCES.

SYSTEM SCHEMATICS





SIZING CALC'S

HYDRAULIC LOADING RATE
4 Bedrooms @ 110 GPD = 440 GPD
This design does not allow for the use of a garbage grinder.
SEPTIC TANK SIZE
440 GPD x 200 % = 880 gal. : USE 1,500 GAL. MIN. T5
ON-SITE SYSTEM SIZE DESIGN FACTOR
20 MPI DESIGN RATE 0.53 GPD/SF EFFLUENT LOADING RATE
SOIL ABSORPTION SYSTEM
AREA Req'd. 440 GPD / 0.53 = 830.2 SF MIN.
Effective leaching area of TRENCHES
BTM: 50' X 2' X 3TR = 300 S.F.
SIDE: 50' X 2'H X 3TR X 2SIDES = 600 S.F.
TOTAL = 900 S.F.

SCHEDULE OF ELEVATIONS

LOCATION	ELEVATION	FIN. GRADE
HOUSE TOC / BF / GF	788.0 / 780.5 / 786.2	
FOUNDATION INVERT OUT	784.89	
SEPTIC TANK INVERT IN	784.6	786.4 MIN.; 788.6 MAX.
SEPTIC TANK INVERT OUT	784.4	
DISTRIBUTION BOX INVERT IN	783.8	785.4 MIN.; 787.6 MAX.
DISTRIBUTION BOX INVERT OUT	783.6	
HIGHEST/LOWEST CONTOURS AT SAS	780/778	
DISTRIBUTION LINE INVERT BEG.	783.25	784.5 MIN.; 786.7 MAX.
DISTRIBUTION LINE INVERT END	783.0	
BOTTOM OF STONE	781.0	
EST. SEASONAL HIGH WATER	777.0	
BREAKOUT ELEVATION @ 15'	783.75	

SOIL EVALUATION DATA

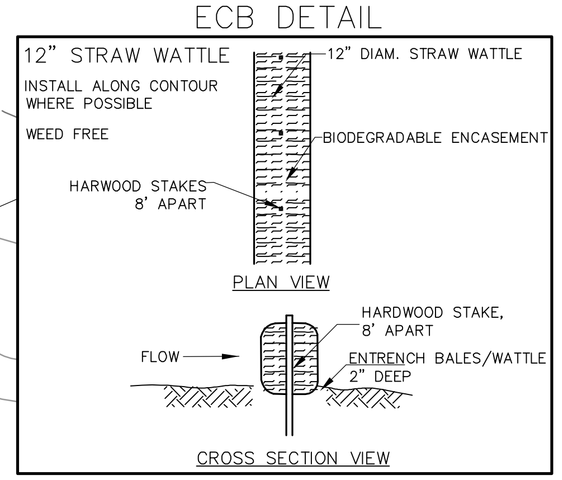
DATE: *11-27-19*
SOIL EVALUATOR: *PETER ENGLE SE#14009*
INSPECTOR: *THOMAS PURCELL*
SOIL CLASS II
PERCOLATION TEST DATA

TP DH2	*TP DH2*	*TP DH3*	*TP DH4*
A SL 0-8 10YR 3/2 MA-FR	A SL 0-8 10YR 3/2 MA-FR	A SL 0-8 10YR 3/2 MA-FR	A SL 0-8 10YR 3/2 MA-FR
Bw SL 8-24 10YR 4/4 MA-FR	Bw SL 8-24 10YR 4/4 MA-FR	Bw SL 8-28 10YR 4/4 MA-FR	Bw SL 8-28 10YR 4/4 MA-FR
C GR. SL 28-72 2.5Y 5/4 MA-FR	C GR. SL 28-72 2.5Y 5/4 MA-FR	C GR. SL 28-78 2.5Y 5/4 MA-FR	C GR. SL 28-78 2.5Y 5/4 MA-FR
WEEPING -- STANDING --	WEEPING -- STANDING --	WEEPING -- STANDING --	WEEPING -- STANDING --
MOTTLES@36" 10YR 5/8	MOTTLES@36" 10YR 5/8	MOTTLES@36" 10YR 5/8	MOTTLES@36" 10YR 5/8

DEPTH: FIELD RATE:
#1 36" 15 MPI
#2 36" 20 MPI
DESIGN 20 MPI

ADDITIONAL NOTES:
WATER SOFTNER DISCHARGE MAY NOT BE CONNECTED TO THE SYSTEM

ECB DETAIL



GENERAL NOTES

1. REGULATIONS
A. This design is in accordance with the latest edition of Commonwealth of Massachusetts regulations 310 CMR 15.000 Title 5, of the State Environmental Code and the requirements of the local Board of Health, unless noted, and is intended specifically for BOH review.
B. The contractor is responsible to comply with all inspections and material requirements of Title 5 and have a valid installer's license.
2. CHANGES
A. Variation from this plan shall be made only with the direction from the Engineer and approval of the local BOH.
B. The Design Engineer is to be notified of any discrepancies.
3. EXCAVATION & BACKFILLING
A. In excavation of the disposal system distribution area care must be taken to not compact or smear the bottom or sides of the excavation.
B. All work should be done in favorable weather conditions, but in NO case shall fill or stone be placed on wet, smeared or frozen soils.
C. It is the responsibility of the contractor to contact DIG SAFE before operating machinery on this property.
4.GENERAL NOTES
A. All known wells and wetlands and water courses within 200' of the septic system are shown or noted.
5. CERTIFICATE OF COMPLIANCE
A. The Contractor shall notify the Engineer and the local Board of Health to coordinate the following inspections (unless otherwise notified):
1) At completion of SAS excavation for bottom inspection; **2)** At completion of the SAS and component installation. All distribution pipes must be backfilled to the crown of the pipe, magnetic tape in place and fill the distribution box with water or have 5 gallons of water readily available to complete the flow test; **3)** After backfilling system and components for final grade, loam and stabilization.
6. MAINTENANCE *OWNER NOTES*
A. Septic tanks should be inspected yearly and cleaned when solids level is more than one (1) foot in depth, but as a minimum once every 2 years unless use of an alternative technology or other system requires additional maintenance.
B. The use of toxic, hazardous or harse cleaners and chemicals are not permitted to be disposed of into this system. Disposal of sanitary waste only is permitted. Disposal of grease, garbage and other non-sanitary and insoluable products to the septic system is not allowed. Backwash from water softening or filtering devices and hot tubs are prohibitted to discharge into this system. This system has NOT been designed for in-home businesses or activities that produce flows in excess of DESIGN FLOWS or wastewater not characterisitc of typical single family home sanitary discharge.
WARRANTY
A. The Design Engineers warranty is that the system is designed according to Title 5 and Local Board of Health regulations unless otherwise noted, which would require a variance or local upgrade approval. The intent of this plan is for the septic system design proposal only (which may or may not include the siting of a well). No certification is made with regard to zoning, property line certification or structure placement.
Owner is responsible for all permit aquisitions and variance requests.

REFERENCE
EXISTING CONDITIONS PLANS PROVIDED BY HS&T WORCESTER, MA.
WETLAND DELINATION BY THREE OAKS ENVIRONMENTAL, HUBBARDSTON, MA
CONSERVATION/DEP APPLICATION MADE SEPARATELY

APPLICANT
KELSEY & JASON FOSKETT
52 GILLESPIE ROAD
CHARLTON, MA 01507

CONTACT
JASON OR KELSEY FOSKETT
508-735-8753

RESIDENTIAL 4 BEDROOM DWELLING
BUILDERS LOT 14
BOUCHER DRIVE
CHARLTON, MASSACHUSETTS
PERMIT #2019-58
PROPOSED SEPTIC SYSTEM DESIGN

CLEAR WATER ENVIRONMENTAL
SEPTIC SYSTEM DESIGN | LAND PLANNING

COMMONWEALTH OF MASSACHUSETTS
ELIZABETH DUPRE NO. 1210
REGISTERED SANITARIAN

ELIZABETH DUPRE, RS#1210

MAIL TO:
87 Bartlett Road
Kittery Point
Maine 03905

O (888) 439-0032
M (508) 868-0838
info@clearwater-env.com

0 10 20 40 60
SCALE 1"=20'
UNLESS OTHERWISE NOTED

DATE: JUNE 23, 2020

DRAWN BY:	CHECKED BY:	APPROVED BY:
ED-SDD	SDD-ED	ED

DATE	REVISION
7-17-20	MOVED SAS FURTHER FROM WETLAND PER CC COMMENT

SHEET:
BLDR LOT 14 BOUCHER DRIVE 1 OF 1