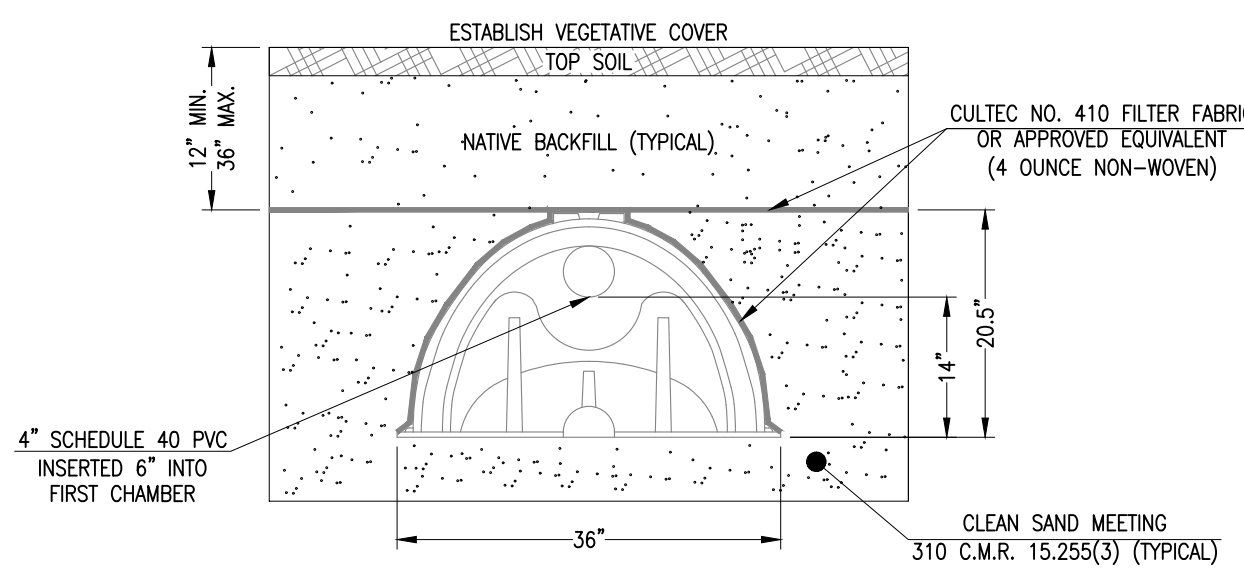
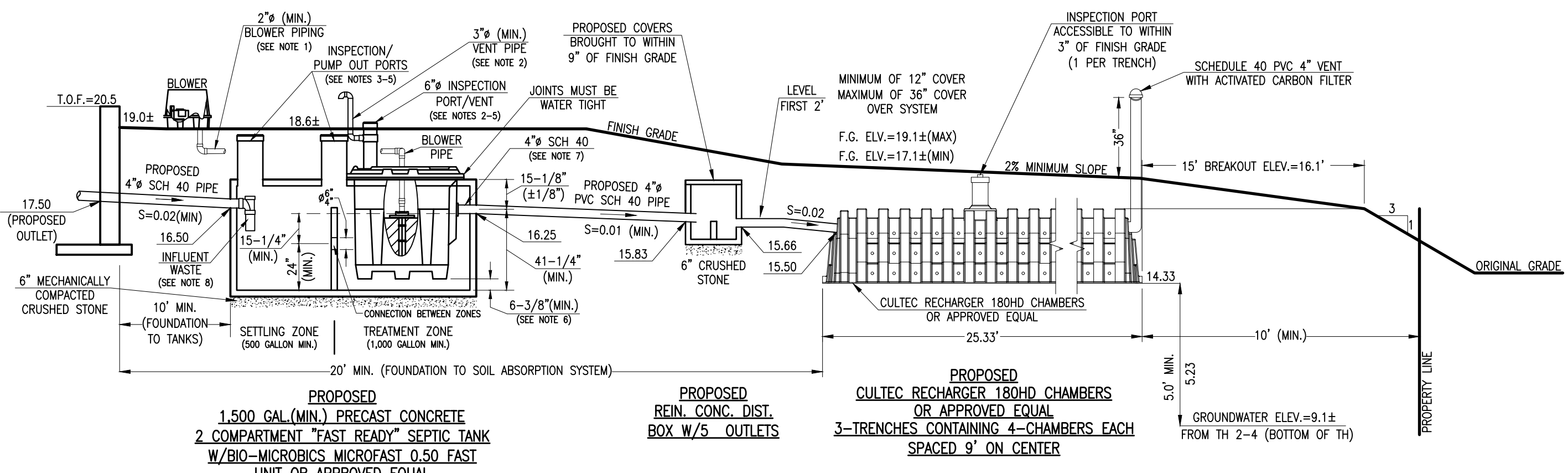


LOCUS MAP SCALE: 1"=2,000'±



TRENCH CROSS SECTION (NOT TO SCALE)



SUBSURFACE SEWAGE DISPOSAL SYSTEM (NOT TO SCALE)

BIO-MICROBICS MICROFAST 0.5 FAST UNIT NOTES:

1. AIRLINE PIPING TO FAST SYSTEM MAY NOT EXCEED 100 FT TOTAL LENGTH AND HAVE A MAXIMUM OF 4 ELBOWS IN THE PIPING SYSTEM. FOR DISTANCES GREATER THAN 100 FT CONSULT FACTORY. BLOWER MUST BE LOCATED ABOVE FLOOD LEVELS ON A CONCRETE BASE 26" X 20" X 2" MIN.
2. VENT TO DESIRED LOCATION AND COVER OPENING WITH A VENT GRATE WITH AT LEAST 7 SQ. IN. OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS. VENT PIPING MUST NOT ALLOW CONDENSATE BUILD UP OR CREATE BACK PRESSURE. VENT MUST BE ABOVE FINISHED GRADE OR HIGHER.
3. ALL APPURTENANCES TO FAST SYSTEM (E.G. TANKS, ACCESS PORTS, ELECTRICAL, ETC.) MUST CONFORM TO ALL APPLICABLE COUNTY, STATE, PROVINCE, AND LOCAL PLUMBING AND ELECTRICAL CODES. PUMP OUT ACCESS SHALL BE ADEQUATE TO THOROUGHLY CLEAN OUT BOTH ZONES.
4. ALL INSPECTION, VIEWING AND PUMP OUT PORTS MUST BE SECURED TO PREVENT ACCIDENTAL OR UNAUTHORIZED ACCESS.
5. TANK, PIPING, CONDUIT, ETC. ARE PROVIDED BY OTHERS. BLOWER CONTROL SYSTEM BY BIO-MICROBICS, INC. SEE INSTALLATION MANUAL.
6. IF LESS THAN THE SPECIFIED MINIMUMS ARE CONSIDERED NECESSARY, CONSULT FACTORY FOR GUIDANCE.
7. ALL PIPING AND ANCILLARY EQUIPMENT INSTALLED AFTER FAST SYSTEM MUST NOT IMPEDE OR RESTRICT FREE FLOW OF EFFLUENT.
8. THE TANK(S) SHALL BE DESIGNED TO PREVENT AIR PASSAGE BETWEEN THE SETTLING ZONE/TANK AND THE TREATMENT ZONE AND PREVENTING AN AIR LOCK. EXAMPLES INCLUDE A Baffle WALL SEALED TO THE LID OR TREATMENT ZONE INLET LINE WITH A PIPE CAP. CONSULT FACTORY FOR GUIDANCE.
9. INSTALLATIONS USING A FAST SYSTEM LID ARE CAPABLE OF WITHSTANDING AASHTO H-10 EQUIVALENT LOADS.

SEPTIC DESIGN: (NOT DESIGNED FOR GARBAGE GRINDER)

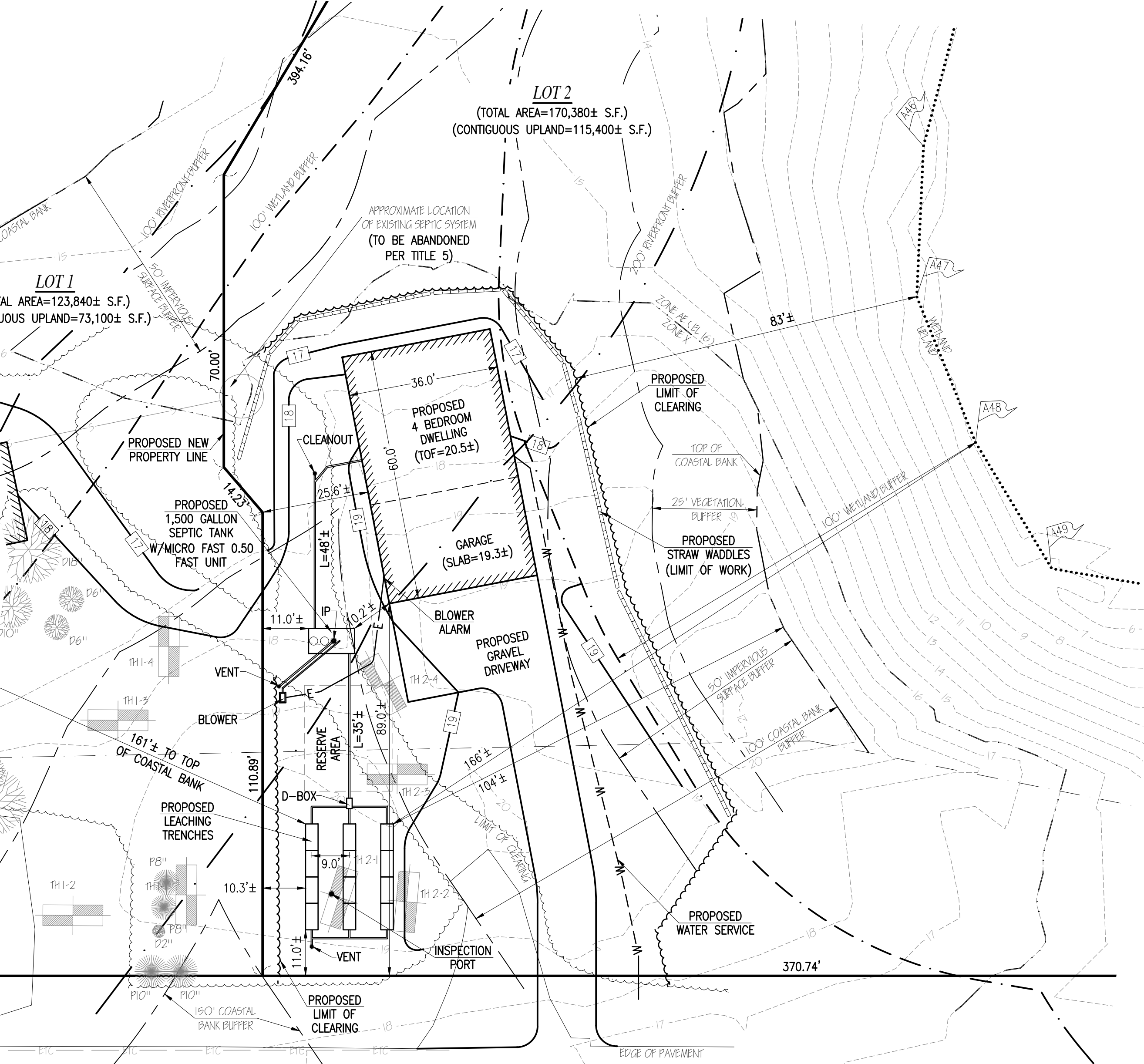
1. DESIGN DAILY FLOW: 4 BR. x 110 GPD = 440 GPD (MIN)
2. SEPTIC TANK: 440 GPD x 2 = 880 GAL. USE: 1,500 GALLON TANK
3. DESIGN PERCOLATION RATE: P.R. = LESS THAN 2 MIN/IN, CLASS 1, ELR = 0.74 GPD/SF
4. LEACHING TRENCHES:
REQUIRED AREA: 440 GPD / (0.74 GPD/SF) = 595 SF (MIN)
PROPOSED AREA:
3 TRENCH x 25.33' LF x 8.9 SF/LF = 676 SF
CAPACITY: 676 SF x 0.74 GPD/S.F. = 500 GPD > 440 GPD
USE: 12 CULTEC RECHARGER 180HD CHAMBERS

SEPTIC NOTES:

1. T.H. 1.1 THROUGH 1.4 PERFORMED BY CHRIS GILBERT OF FARLAND CORP., INC. AND WITNESSED THE TOWN OF BOURNE BOARD OF HEALTH ON APRIL 19, 2017.
2. ENGINEER SHALL SET BENCHMARK WITHIN 50' OF SYSTEM PRIOR TO START OF CONSTRUCTION.
3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL STANDARDS AND REGULATIONS.
4. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
5. SOIL TESTING PERFORMED IN ACCORDANCE WITH THE INSTRUCTIONS OF MASSACHUSETTS ENVIRONMENTAL CODE, TITLE 5.
6. EXISTING SOIL ABSORPTION SYSTEM TO BE ABANDONED OR REMOVED IN ACCORDANCE WITH 310 CMR 15.354.
7. THERE ARE NO KNOWN SURFACE WATER SUPPLIES OR WETLANDS BORDERING SURFACE WATER SUPPLIES OR PUBLIC WELLS WITHIN 200' OF SITE.
8. THERE ARE NO KNOWN PRIVATE WELLS WITHIN 200' OF SITE.
9. THERE ARE NO KNOWN BORDERING VEGETATED WETLANDS, INLAND BANKS, OR SURFACE WATERS WITHIN 150' OF LEACHING AREA.
10. THERE ARE NO KNOWN SURFACE OR SUBSURFACE DRAINS WHICH ARE USED TO LOWER THE GROUND WATER ON THE SITE.
11. THERE ARE NO KNOWN VERNAL POOLS WITHIN 100' OF SITE.
12. SITE IS NOT WITHIN 100 YEAR FLOOD PLAIN OR A NITROGEN SENSITIVE AREA.
13. EFFLUENT BEING DISCHARGED TO THE SYSTEM CAN BE ASSOCIATED WITH NORMAL STRENGTH DOMESTIC USE ONLY.
14. FOR PROPER PERFORMANCE, THE SEPTIC TANK SHOULD BE PUMPED ANNUALLY.
15. ANY ALTERATIONS MUST BE APPROVED IN WRITING BY THE DESIGN ENGINEER. ANY CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFERING FROM THOSE SHOWN HEREON OR REPORTED HEREIN SHALL BE REPORTED TO THE DESIGN ENGINEER BEFORE CONSTRUCTION CONTINUES.
16. TEST HOLE INFORMATION SHOWN HEREON IS LIMITED TO SOIL CONDITIONS FOUND AT THAT PARTICULAR TEST HOLE LOCATION AND IS NOT TO BE CONSIDERED AN IMPLIED OR EXPRESSED WARRANTY OF SOIL CONDITIONS BEYOND THE LIMITS OF SUCH TEST HOLES.
17. SYSTEM CAN NOT BE BACKFILLED OR CONCEALED UNTIL DESIGN FIRM AND BOARD OF HEALTH HAVE INSPECTED THE SYSTEM AND PERMISSION TO BACKFILL HAS BEEN GIVEN.
18. DESIGN FIRM MUST PREPARE AND SUBMIT "AS BUILT" PLAN TO BOARD OF HEALTH. THIS PLAN MUST CERTIFY THAT THE SYSTEM WAS INSTALLED IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS AND THAT IT COMPLIES WITH PROPOSED PLAN. THEREFORE, THE CONTRACTOR MUST NOTIFY THOMPSON FARLAND, INC. IN ADVANCE FOR PERIODIC INSPECTIONS OF THE CONSTRUCTION AT THE FOLLOWING MINIMUM POINTS:
A. SEPTIC TANK EXCAVATION WITH STONE PRIOR TO SEPTIC TANK PLACEMENT.
B. LEACHING FIELD EXCAVATION PRIOR TO BACK FILLING WITH "SEWER SAND".
C. "SEWER SAND" BACKFILL - MUST PASS SIEVE TEST.
D. ALL PIPING AND CHAMBER ELEVATIONS PRIOR TO BACKFILL.
E. FINAL GRADING OVER ENTIRE SYSTEM.

GENERAL NOTES:

1. SURVEY LOCATIONS PERFORMED BY FARLAND CORP., INC. BETWEEN JUNE 2017 AND FEBRUARY 2018.
2. EXISTING SITE FEATURES AREAS ARE SHOWN PER PLAN ENTITLED "EXISTING CONDITIONS PLAN, FOR 819 HEAD OF THE BAY ROAD, BOURNE, MASSACHUSETTS", DATED MARCH 9, 2007, PREPARED FOR JLD, LLC, BY ATLANTIC DESIGN ENGINEERS, LLC.
3. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
4. WETLAND DELINEATED BY ECOSYSTEM SOLUTIONS IN FEBRUARY 2018.
5. THE LOCATION OF UNDERGROUND UTILITIES WAS TAKEN FROM THE BEST AVAILABLE INFORMATION AND IS NOT WARRANTED TO BE CORRECT, NOR THAT ALL UNDERGROUND UTILITIES ARE SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES AND AGENCIES PRIOR TO CONSTRUCTION FOR THE LOCATION OF UNDERGROUND UTILITIES.
6. PROPOSED AREA OF DISTURBANCE WITH THE 200' RIVERFRONT BUFFER IS 4,850± S.F.
7. ORDER OF CONDITIONS ISSUED BY THE BOURNE CONSERVATION COMMISSION JUNE 25, 2018.



HEAD OF THE BAY ROAD ~VARIABLE WIDTH - 1947 COUNTY LAYOUT~

BENCHMARK
DESCRIPTION: SPK IN POLE 3-49
ELEV. = 20.08 (NAVD '88)

BENCHMARK
DESCRIPTION: MAG IN POLE 3-50
ELEV. = 28.84 (NAVD '88)

SOIL LOGS

T.H. #2-1 ELEV.=19.2± 4/19/17	T.H. #2-2 ELEV.=19.2± 4/19/17	T.H. #2-3 ELEV.=19.7± 4/19/17	T.H. #2-4 ELEV.=19.1± 4/19/17
0'-6" A HORIZON LOAMY SAND 10YR 3/2	0'-4" A HORIZON LOAMY SAND 10YR 3/2	0'-5" A HORIZON LOAMY SAND 10YR 3/2	0'-7" A HORIZON LOAMY SAND 10YR 3/2
6'-24" B HORIZON SAND 10YR 5/6	4'-24" B HORIZON SAND 10YR 5/6	5'-28" B HORIZON SAND 10YR 5/6	7'-28" B HORIZON SAND 10YR 5/6
24'-120" C HORIZON SAND 2.5Y 6/6	24'-108" C HORIZON SAND 2.5Y 6/4	28'-108" C HORIZON SAND 2.5Y 6/6	28'-120" C HORIZON SAND 2.5Y 6/6
NO REDOX OBSERVED	NO REDOX OBSERVED	NO REDOX OBSERVED	NO REDOX OBSERVED

LEGEND

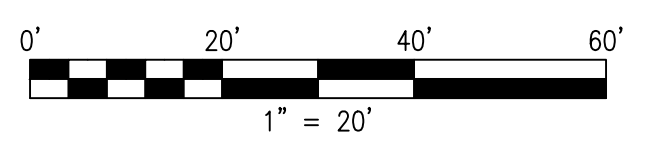
	PROPERTY LINE
	PROPOSED PROPERTY LINE
	CONTOUR LINE
	PROPOSED CONTOUR LINE
	EDGE OF PAVEMENT
	WATER LINE
	GAS LINE
	ELECTRIC, TELEPHONE & CABLE
	PROPOSED STRAW WADDLES (LIMIT OF WORK)
	STONE WALL
	WETLAND LINE
	FEMA LINE
	PROPOSED SPOT ELEVATION
	SEWER MANHOLE
	TEST HOLE
	WETLAND FLAG

- ZONING DATA -

DESCRIPTION	REQUIRED
DISTRICT: RESIDENCE 80 "R-80"	
LOT AREA	80,000 S.F.
UPLAND AREA	72,000 S.F.
LOT FRONTAGE	150 FT
FRONT SETBACK	40 FT
SIDE SETBACK	25 FT
REAR SETBACK	25 FT

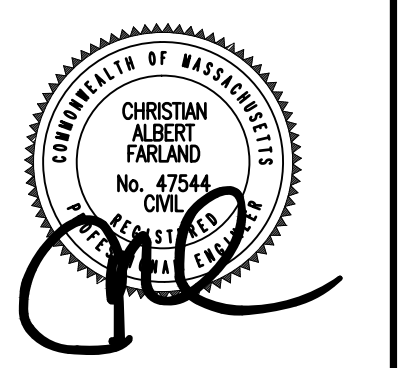
RECORD OWNER:

ASSESSORS MAP 14 LOT 51
819 BOURNE REALTY TRUST
7 TURNPIKE STREET
SOUTH EASTON, MA 02375
DEED BOOK 25283 PAGE 110
DEED BOOK 28848 PAGE 319
PLAN BOOK 558 PAGE 69
PLAN BOOK 657 PAGE 73



REVISIONS

1	5/7/18	CONSERVATION COMMISSION COMMENTS
2	8/21/18	HEALTH AGENT COMMENTS
3	9/19/18	MICRO FAST SYSTEM



www.FarlandCorp.com

401 COUNTY STREET
NEW BEDFORD, MA 02740
P.508.717.3479
OFFICES IN:
• TAUNTON
• MARLBOROUGH
• WARWICK, RI

DRAWN BY: CKG/SP
DESIGNED BY: CKG/SP
CHECKED BY: CAF

SUBSURFACE SEWAGE DISPOSAL SYSTEM
— LOT 2 HEAD OF THE BAY ROAD —
ASSESSORS MAP 14 LOT 51
BOURNE, MASSACHUSETTS
PREPARED BY: JOSEPH BOTTI COMPANY
FOR: 7 TURNPIKE STREET
SOUTH EASTON, MA 02375

MARCH 20, 2018
SCALE: 1"=20'
JOB NO. 14-086
LATEST REVISION:
SEPTEMBER 19, 2018