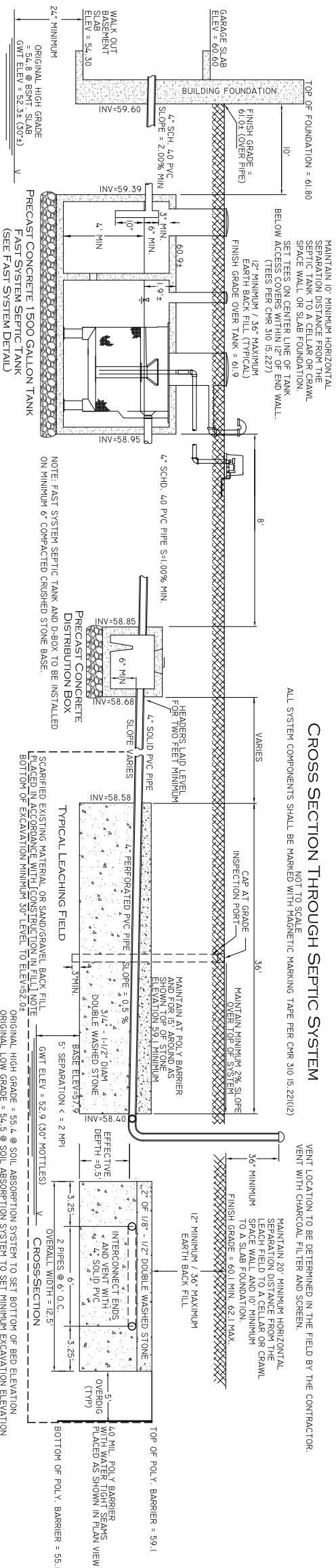
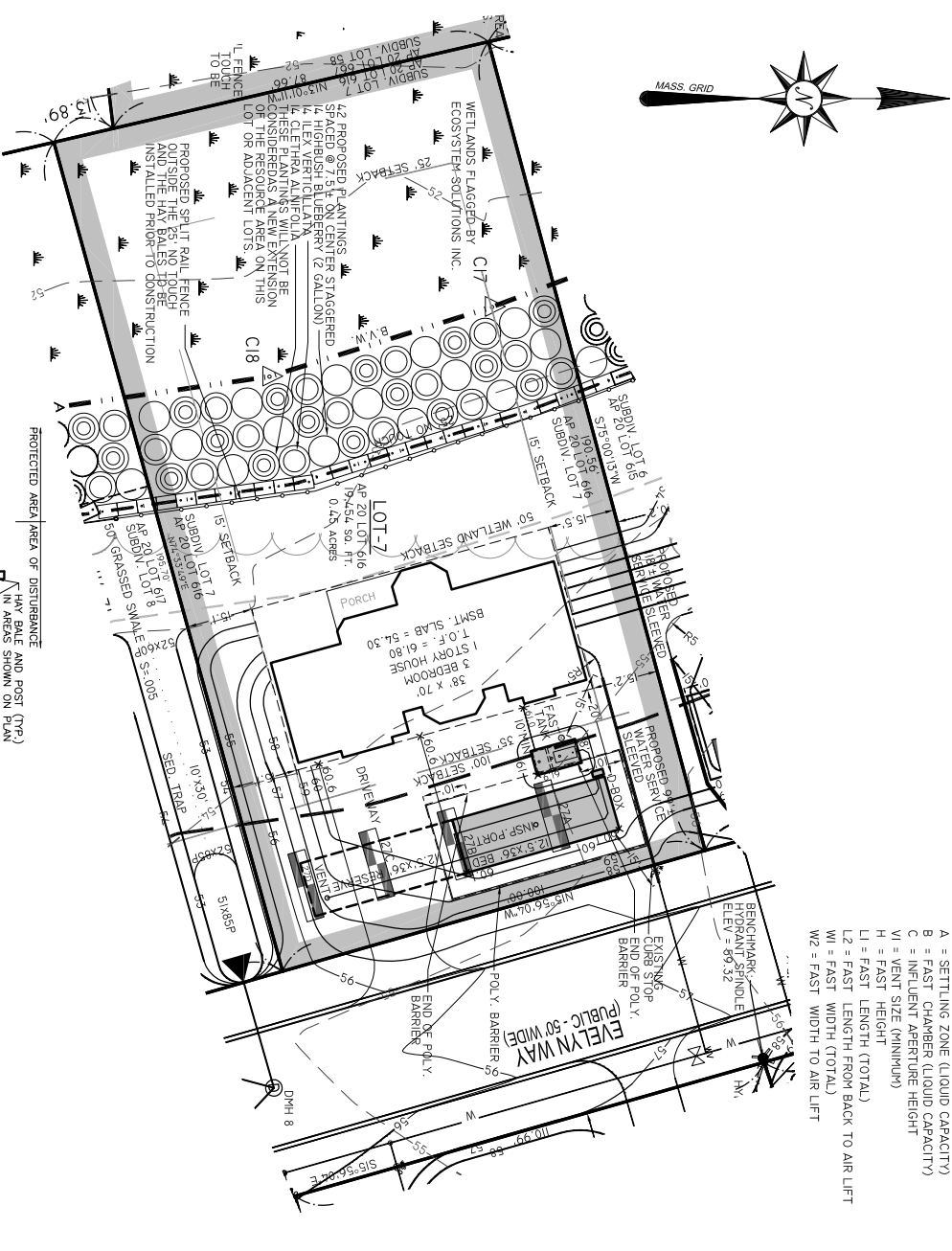


CROSS SECTION THROUGH SEPTIC SYSTEM



SIZE (GAL.)	A	B	C	VI	H	LI	WI	L2	W2
0.5	500	1000	24"	3"	50"	60"	30"	26"	15.5"

- A = SETTING ZONE (LIQUID CAPACITY)
- B = FAST CHAMBER (LIQUID CAPACITY)
- C = INTERMEDIATE HEIGHT
- VI = VENT SIZE (MINIMUM)
- H = FAST HEIGHT (TOTAL)
- LI = FAST LENGTH (TOTAL)
- WI = FAST WIDTH (TOTAL)
- L2 = FAST LENGTH FROM BACK TO AIR LIFT
- W2 = FAST WIDTH TO AIR LIFT



LEGEND

21.0

55

60

61.0

COLOR LEGEND

WETLANDS LINE

25' WETLAND BUFFER ZONE

50' WETLAND BUFFER ZONE

100' WETLAND BUFFER ZONE

NOTES:

- HAY BALES ARE TO BE PLACED WITHIN A 6" MINIMUM TRENCH PRIOR TO CONSTRUCTION.
- THOROUGHLY COMPACT EXCAVATED SOILS BACK INTO THE PROPOSED CONTOUR.
- BALE STRING SHALL BE LAD PARALLEL TO THE GROUND SURFACE.
- EACH BALE TO BE SECURELY STAKED INTO THE GROUND WITH (2) 1"x1"x3" OAK BEAM POLE.
- CONTRACTOR IS RESPONSIBLE TO MAINTAIN INTEGRITY OF HAY BALE LINE FOR DURATION OF CONSTRUCTION.
- EROSION CONTROLS TO REMAIN UNTIL SOIL CONDITIONS STABILIZE.
- LOOSE HAY TO BE SPREAD ON AREAS OF EXPOSED LOAM & SEED UNTIL GERMINATION AND STABILIZATION OCCURS.

HAY BALE DETAIL
(NOT TO SCALE)

6" MINIMUM

6"-0" MIN. UNLESS NOTED OTHERWISE

TOE OF SLOPE

HAY BALE AND POST (TYP) IN AREAS SHOWN ON PLAN

BALE STRING

DESIGN CALCULATIONS

AVERAGE DAILY SEWAGE FLOW (GALLONS PER DAY)

PROPOSED 3 BEDROOM DWELLING @ 110 GPD PER BEDROOM = 330 GPD

SEPTIC TANK SIZING (GALLONS)

200% AVERAGE DAILY FLOW = 2 (330) = 660 GALLONS

3 BEDROOM HOME REQUIRES 650 GALLON TANK (MINIMUM)

DESIGN SOIL PROPERTIES

SOIL CLASS I (SAND)

PERC RATE IN 27A & 27C WAS < 2 MPH

REQUIRED MINIMUM LEACHING AREA (SQUARE FEET)

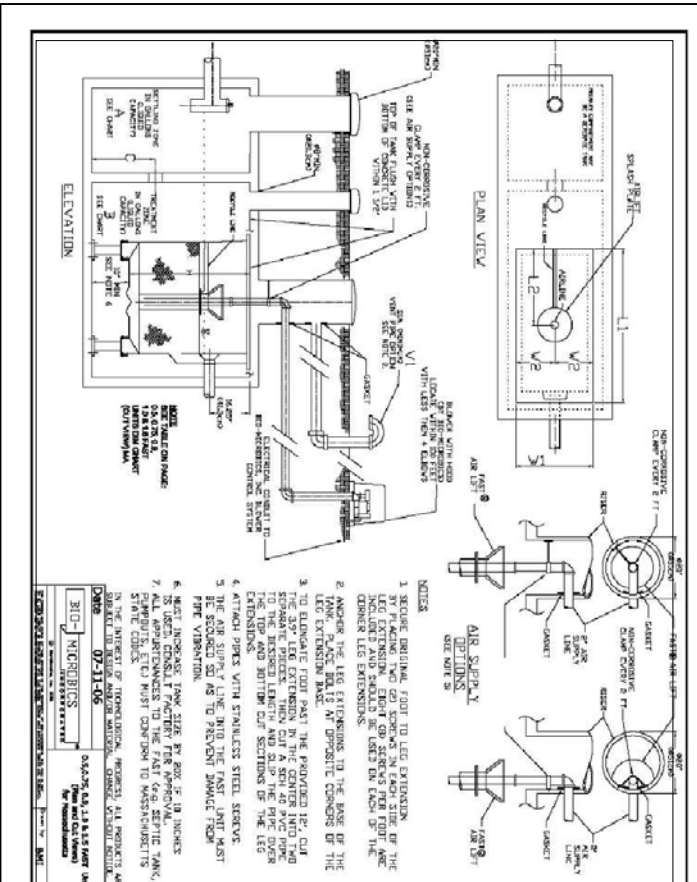
REQUIRED AREA = 330 GPD / 0.74 GPD / SF = 446 SF MINIMUM

LEACHING FIELD BED: 12.5' x 36' = 450 SF

RESERVE AREA: 12.5' x 36' = 450 SF

GRAPHIC SCALE

1 INCH = 20 FEET



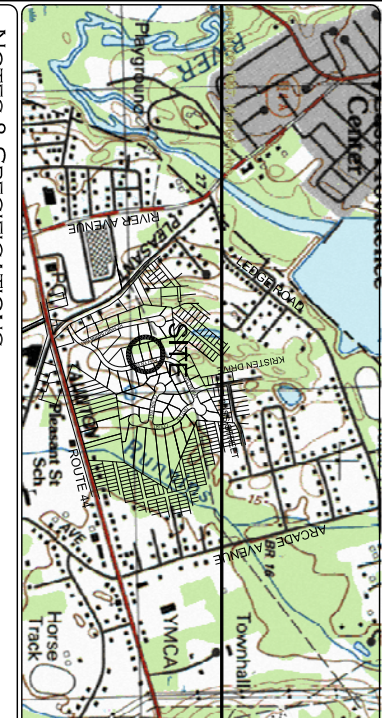
FAST SYSTEM DETAIL (FOLLOW MANUFACTURER'S SPECIFICATIONS)

FAST SYSTEM DETAIL (FOLLOW MANUFACTURER'S SPECIFICATIONS)

DEPTH	HORIZON	TEXTURE	COLOR	MOTTILING	OTHER
0-12"	A	SL	10 YR 3/2	-	-
12-24"	B	LS	10 YR 5/4	-	-
24-72"	C1	S	2.5 Y 6/384	30" 7.5 YR 5/8	STR-CS
72-120"	C2	S	2.5 Y 6/384	-	STR-CS
OBSERVED GROUND WATER: 32" STANDING; NO WEeping					
ESTIMATED HIGH GROUND WATER: 30"					
PERC. RATE @ 36" < 2 MPH					
BY: M. FARIA					
DATE: 1-30-07					
WITNESS: H. CHENEVERT					
DEEP OBSERVATION HOLE 27B					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTILING	OTHER
0-12"	A	SL	10 YR 3/2	-	-
12-18"	B	LS	10 YR 5/4	-	-
18-72"	C1	S	2.5 Y 6/384	30" 7.5 YR 5/8	STR-CS
72-120"	C2	S	2.5 Y 6/384	-	STR-CS
OBSERVED GROUND WATER: 36" STANDING; NO WEeping					
ESTIMATED HIGH GROUND WATER: 30"					
NO PERC. TEST PERFORMED					
BY: M. FARIA					
DATE: 1-30-07					
WITNESS: H. CHENEVERT					
DEEP OBSERVATION HOLE 27C					
DEPTH	HORIZON	TEXTURE	COLOR	MOTTILING	OTHER
0-12"	A	SL	10 YR 3/2	-	-
12-18"	B	LS	10 YR 5/4	-	-
18-72"	C1	S	2.5 Y 6/384	30" 7.5 YR 5/8	STR-CS & SL
72-130"	C2	S	2.5 Y 6/384	-	STR-CS & SOME SILT
OBSERVED GROUND WATER: 36" STANDING; NO WEeping					
ESTIMATED HIGH GROUND WATER: 30"					
NO PERC. TEST PERFORMED					
BY: M. FARIA					
DATE: 1-30-07					
WITNESS: H. CHENEVERT					

SOIL EVALUATION & PERC RESULTS

LOCATION (NOT TO SCALE) MAP



NOTES & SPECIFICATIONS

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF 310 CMR IS (TITLE V) OF THE COMMONWEALTH OF MASSACHUSETTS AND THOSE OF THE TOWN BOARD OF HEALTH.

THE REQUIRED INSPECTION SCHEDULE DURING THE PROCESS OF CONSTRUCTION SHALL BE ARRANGED BY THE CONTRACTOR WITH THE BOARD OF HEALTH & DESIGN ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

1500 GALLON FAST SYSTEM SEPTIC TANK AND DISTRIBUTION BOX SHALL BE STANDARD DUTY DESIGN AS MANUFACTURED BY ROTONDO & SONS, INC. OR APPROVED EQUAL.

ALL PIPING SHALL BE 4" DIA. SCH. 40 NSF PVC WITH ALL JOINTS SEALED WATERTIGHT.

ALL STONE SHALL BE DOUBLE WASHED AND FREE OF IRONS, CLAY OR FINES AND SHALL BE SATISFACTORY TO THE TOWN BOARD OF HEALTH.

THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL OR OTHER HIGH WATER USE UNITS.

THE PROPOSED SEPTIC SYSTEM IS NOT LOCATED WITHIN THE CONE OF INFLUENCE OF ANY MUNICIPAL WELL NOR ARE THERE ANY PRIVATE WELLS LOCATED WITHIN 100 FEET (RADIAL) OF THE PROPOSED SYSTEM.

EXCAVATE ALL TOP SOIL AND ANY OTHER SOILS ENCOUNTERED DOWN TO THE BOTTOM OF EACH PROPOSED SEPTIC TANK AND TOP OF STRONG FLOOR WITH SELECT ON SITE OR IMPORTED SOIL MATERIAL CONSISTING OF CLEAN GRANULAR SAND FREE OF ORGANIC MATTER OR OTHER DELETERIOUS SUBSTANCES AND MEETING THE SIEVE SIZE REQUIREMENTS OF 310 CMR IS 255(3) & (5) [CONSTRUCTION IN FILL].

ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON NGVD 29.

CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

WATER TABLE FLUCTUATES ANNUALLY. NO WARRANTY OF A DRY BASEMENT IS EXPRESSED OR IMPLIED.

THE PROPOSED WORK DOES NOT LIE IN A CRITICAL FLOOD HAZARD ZONE.

THE LOT DOES NOT LIE IN AN OVERLAY DISTRICT FOR GROUNDWATER ACQUFER PROTECTION. THE SITE IS UNDER CONSTRUCTION. DUE TO THE POSSIBILITY OF THE BENCHMARK CHANGING DURING CONSTRUCTION, THE CONTRACTOR IS TO VERIFY THE BENCHMARK WITH THE SURVEYOR PRIOR TO CONSTRUCTION.

MAINTAIN 15" MINIMUM SEPARATION FROM WATER SERVICE TO PROPOSED SEPTIC COMPONENTS. HOUSE DIMENSIONS, ELEVATION AND LOCATION ARE APPROXIMATE AND SUBJECT TO CHANGE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION.

THE LOT LIES IN A P.4 ZONING DISTRICT.

FRONT YARD SETBACK: 35'

SIDE YARD SETBACK: 15' + 5' STORY

REAR YARD SETBACK: 25'

REFERENCE: DEFINITIVE SUBDIVISION PLAN FOR FALL RIVER AVENUE DEVELOPMENT PARTNERS, LLC "BANNA ESTATES" TAUNTON AVENUE/EAST STREET, SEENOK, MA. DATED: AUGUST 2, 2007. REVISED: MAY 27, 2008. BY: INSITE ENGINEERING SERVICES, LLC.

AND NOTICE OF INTENT PLAN OF BANNA ESTATES REVISED: MAY 12, 2008.

THE INTO PROPOSED CONTOURS AND ELEVATIONS AS SHOWN IN THE ABOVE REFERENCE.

1. CERTIFY THAT THE PROPOSED WATER SERVICE SHOWN ON THIS PLAN IS IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE SEENOK WATER DISTRICT. THE CONTRACTOR IS TO COORDINATE THE WATER SERVICE TIE IN WITH THE WATER AUTHORITY AND INSTALL THE WATER SERVICE WITH MAGNETIC MARKING TAPE ABOVE THE ENTIRE LENGTH OF THE WATER SERVICE. REFER TO CONSERVATION PLANS FOR WORK WITHIN WETLAND BUFFER.

OWNER OF RECORD: FALL RIVER AVENUE DEVELOPMENT PARTNERS, LLC

SUITE 1, 839 FALL RIVER AVENUE

SEENOK, MA 02771

WETLAND LINES ESTABLISHED AND APPROVED UNDER THE ORDER OF RESOURCE AREA DELINEATION SE 69-613.

THE SPLIT RAIL FENCE WILL SERVE AS THE LIMIT OF LAWN AND FUTURE YARD ACTIVITIES AND SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION.

PROPOSED SEPTIC TANK TO BE INSTALLED IS A MICROFAST 0.5 DENITRIFICATION SYSTEM BY BIO-MICROBICS INC.

THE 25-FOOT BUFFER ZONE DELINEATES THE LIMITS OF DISTURBANCE AND ALL FUTURE ACTIVITIES THE 50-FOOT WETLAND BUFFER DELINEATES THE LIMITS OF ALL STRUCTURES AS STATED WITHIN THE TOWN OF SEENOK CONSERVATION COMMISSION REGULATIONS ADOPTED MARCH, 2003.

SEPTIC SYSTEM DESIGN AND NOI PLAN

"BANNA ESTATES"

#12 EVELYN WAY, SEENOK, MA 02771

AP 20 LOT 616 (SUBDIVISION LOT 7)

NEW WATER SERVICE FOR CONSTRUCTION

7-19-2011

Professional Seal

Revised:

06/05/07

06/05/07

1"=20'

Design By: MSF

Date: JUNE 30, 2011

Professional Engineers and Land Surveyors

INSITE ENGINEERING SERVICES, LLC

1539 FALL RIVER AVENUE

SEENOK, MA 02771

PHONE: (508) 336-4500

FAX: (508) 336-4599

SHEET 1 OF 1