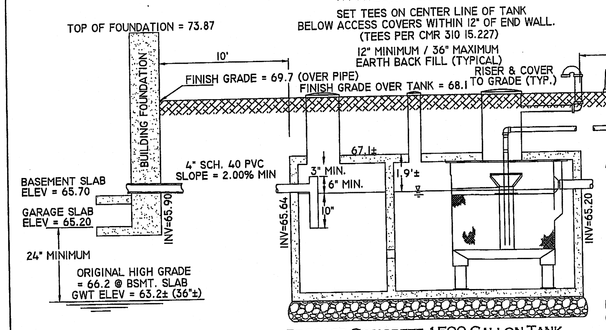
TANK SETBACK NOTE:
MAINTAIN 10' MINIMUM HORIZONTAL SEPARATION DISTANCE FROM THE SEPTIC TANK TO A CELLAR OR CRAWL SPACE WALL OR TO A SLAB AND TO A FOUNDATION DRAIN.

SET TEES ON CENTER LINE OF TANK BELOW ACCESS COVERS WITHIN 12" OF END WALL. (TEES PER CMR 310 15.227)

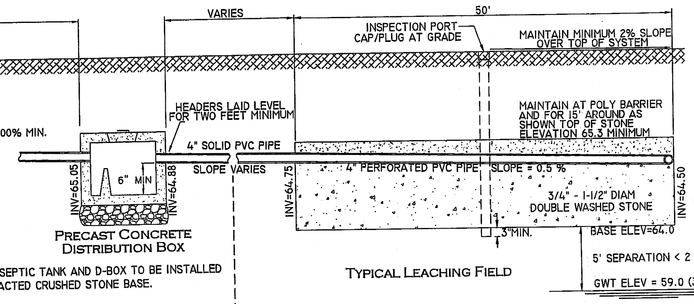


PRECAST CONCRETE 1500 GALLON TANK
FAST SYSTEM SEPTIC TANK
(SEE FAST SYSTEM DETAIL)

CROSS SECTION THROUGH SEPTIC SYSTEM

NOT TO SCALE

ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE PER CMR 310 15.221(12)

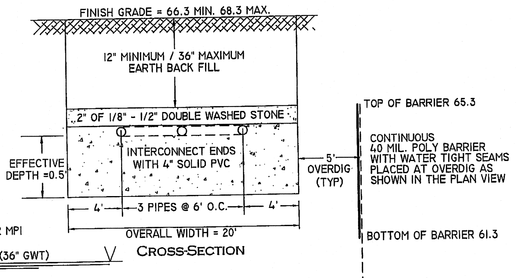


PRECAST CONCRETE DISTRIBUTION BOX

NOTE: FAST SYSTEM SEPTIC TANK AND D-BOX TO BE INSTALLED ON MINIMUM 6" COMPACTED CRUSHED STONE BASE.

TYPICAL LEACHING FIELD

SOIL ABSORPTION SYSTEM (SAS) SETBACK NOTE:
MAINTAIN 20' MINIMUM HORIZONTAL SEPARATION DISTANCE FROM THE LEACH FIELD TO A CELLAR OR CRAWL SPACE WALL OR TO A FOUNDATION DRAIN AND 10' MINIMUM TO A SLAB FOUNDATION.



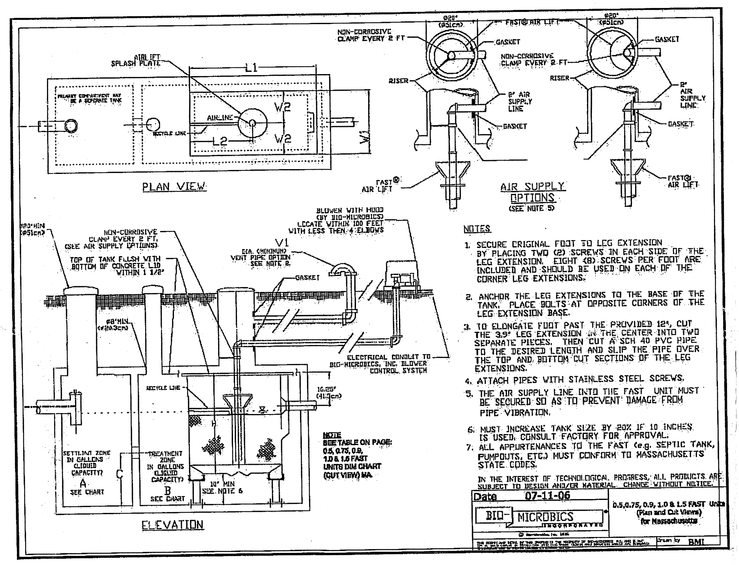
CROSS-SECTION

SCARIFIED EXISTING MATERIAL OR SAND/GRAVEL BACK FILL PLACED IN ACCORDANCE WITH CONSTRUCTION IN FILL NOTE
BOTTOM OF EXCAVATION MINIMUM 60" LEVEL TO ELEV=55.9±

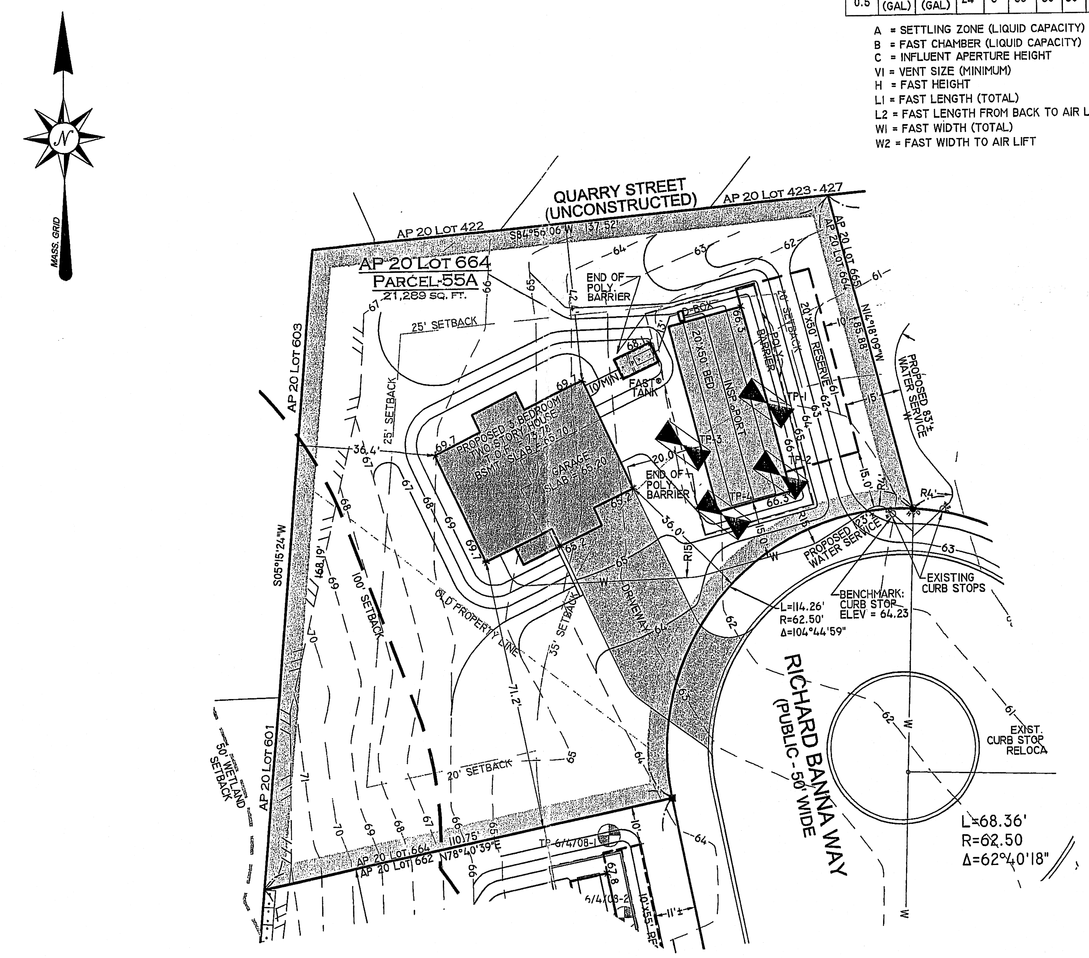
HIGHEST EXISTING GRADE = 62.0 @ SOIL ABSORPTION SYSTEM TO SET BOTTOM OF BED ELEVATION
LOWEST EXISTING GRADE = 60.9 @ SOIL ABSORPTION SYSTEM TO SET MINIMUM EXCAVATION ELEVATION

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

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



FAST SYSTEM DETAIL (FOLLOW MANUFACTURES SPECIFICATIONS)



LEGEND

SOIL TEST PIT — TP-1
EXISTING CONTOUR — 100
PROPOSED CONTOUR — 100
PROPOSED SPOT ELEVATION — x100

GRAPHIC SCALE

20 0 10 20 40 80
1 INCH = 20 FEET

DEEP OBSERVATION HOLE TP 1

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0-6"	A	SL	10 YR 3/1	-	-
6-39"	B	SL	10 YR 5/8	-	-
39-114"	Co	SL	2.5 Y 7/2	10 YR 6/8 COMMON	BASIL

OBSERVED GROUND WATER: NO STANDING, NO WEEPING — DATE: 6-4-08
ESTIMATED HIGH GROUND WATER: 39" — BY: D. MONSEES
PERC. RATE @ 60" = 30 MPI — WITNESS: H. CHENEVERT

DEEP OBSERVATION HOLE TP 2

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0-9"	A	SL	10 YR 3/1	-	-
9-28"	B	SL	10 YR 5/8	-	-
28-110"	C	SL	2.5 Y 6/1	10 YR 6/8 COMMON	BASIL

OBSERVED GROUND WATER: 96" STANDING, 76" WEEPING — DATE: 6-4-08
ESTIMATED HIGH GROUND WATER: 36" — BY: D. MONSEES
NO PERC. TEST PERFORMED — WITNESS: H. CHENEVERT

DEEP OBSERVATION HOLE TP 3

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0-10"	A	SL	10 YR 3/1	-	-
10-24"	B	LS	10 YR 5/8	-	-
24-100"	C	S	2.5 Y 7/2	10 YR 6/8 COMMON	MEDIUM TO COARSE CLEAN SAND

OBSERVED GROUND WATER: NO STANDING, NO WEEPING — DATE: 6-4-08
ESTIMATED HIGH GROUND WATER: 40" — BY: D. MONSEES
PERC. RATE @ 42" = < 2 MPI — WITNESS: H. CHENEVERT

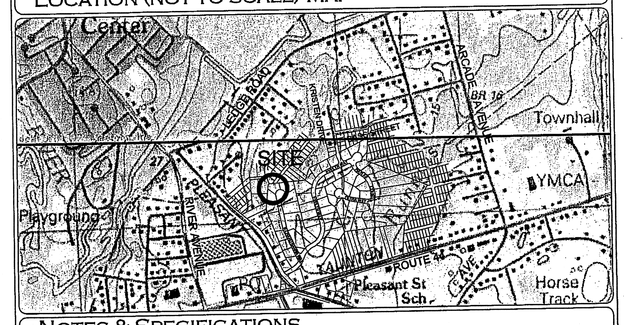
DEEP OBSERVATION HOLE TP 4

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	OTHER
0-17"	A	SL	10 YR 3/1	-	-
17-32"	B	SL	10 YR 5/8	-	-
32-110"	C	SL	2.5 Y 7/2	10 YR 6/8 COMMON	BASIL

OBSERVED GROUND WATER: 96" STANDING, 84" WEEPING — DATE: 6-4-08
ESTIMATED HIGH GROUND WATER: 50" — BY: D. MONSEES
NO PERC. TEST PERFORMED — 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 15 (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 CONCRETE PRODUCTS, INC. OR APPROVED EQUAL.

ALL PIPING SHALL BE 4" DIA. SCHD. 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, SUB AND ANY OTHER SOILS ENCOUNTERED DOWN TO THE BOTTOM OF EXCAVATION (SEE CROSS SECTION) FOR A HORIZONTAL DISTANCE OF 5' ON ALL SIDES OF THE PROPOSED SYSTEM. BACK FILL TO TOP OF STONE ELEVATION 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 15.255(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 CONTINUATION OF CONSTRUCTION.

WATER TABLE FLUCTUATES ANNUALLY, NO WARRANTEE OF A DRY BASEMENT IS EXPRESSED OR IMPLIED. A PERIMETER FOUNDATION DRAIN DISCHARGING TO DAYLIGHT AND/OR A SUMP PUMP IS ALWAYS RECOMMENDED.

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

THE LOT DOES NOT LIE IN AN OVERLAY DISTRICT FOR GROUNDWATER AQUIFER PROTECTION.

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 R-I 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/PLEASANT STREET, SEEKONK, MA. DATED; AUGUST 2, 2007, REVISED; MAY 27, 2008. BY INSITE ENGINEERING SERVICES, LLC.

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

REFERENCE: MODIFICATIONS TO DEFINITIVE SUBDIVISION PLAN FOR FALL RIVER AVENUE DEVELOPMENT PARTNERS, LLC, "BANNA ESTATES" FORMERLY ALBERT CIRCLE, SEEKONK, MA 02771 DATED; DECEMBER 7, 2009, REVISED; FEBRUARY 22, 2010, BY INSITE ENGINEERING SERVICES, LLC.

I CERTIFY THAT THE PROPOSED WATER SERVICE SHOWN ON THIS PLAN IS IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE SEEKONK 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.

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

APPROVED
B. Arlfel
5/7/12

DESIGN CALCULATIONS

AVERAGE DAILY SEWAGE FLOW (GALLONS PER DAY)
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 1500 GALLON TANK (MINIMUM).

DESIGN SOIL TYPE AND PERCOLATION RATE
SOIL CLASS II (SANDY LOAM)
PERC RATE IN TP-1 WAS 30 MPI AND TP-3 WAS < 2 MPI
DESIGN FOR 30 MPI PER TITLE V

REQUIRED MINIMUM LEACHING AREA:
REQUIRED AREA = 330 GPD / 0.33 GPD / SF = 1,000 SF MINIMUM
LEACHING FIELD BED AREA: 20' X 50' = 1,000 SF
RESERVE AREA: 20' X 50' = 1,000 SF

RECEIVED
JUN 04 2012
SEEKONK CONSERVATION

Received
APR 24 2012
Seekonk BOH

SEPTIC SYSTEM DESIGN PLAN

RDA
18 Richard Banna Way

ROBERT L. DAVIS CIVIL NO. 37147 REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS
PROFESSIONAL SEAL

"BANNA ESTATES" (RECORD PARCEL 55A)
#18 RICHARD BANNA WAY
SEEKONK, MA 02771
AP 20 LOT 664

APPLICANT: FALL RIVER AVENUE DEVELOPMENT PARTNERS, LLC
1539 FALL RIVER AVENUE, SEEKONK, MA 02771

JOB #	SCALE:	DESIGNED BY:	DATE:
06-050-55A	1" = 20'	MSF	APRIL 23, 2012

REVISED:

INSITE Engineering Services, LLC
PROFESSIONAL ENGINEERS AND LAND SURVEYORS
INSITE PROFESSIONAL COMPLEX, SUITE 1
1539 FALL RIVER AVENUE
SEEKONK, MA 02771
PHONE: (508) 336-4500
FAX: (508) 336-4599

SHEET 1 OF 1