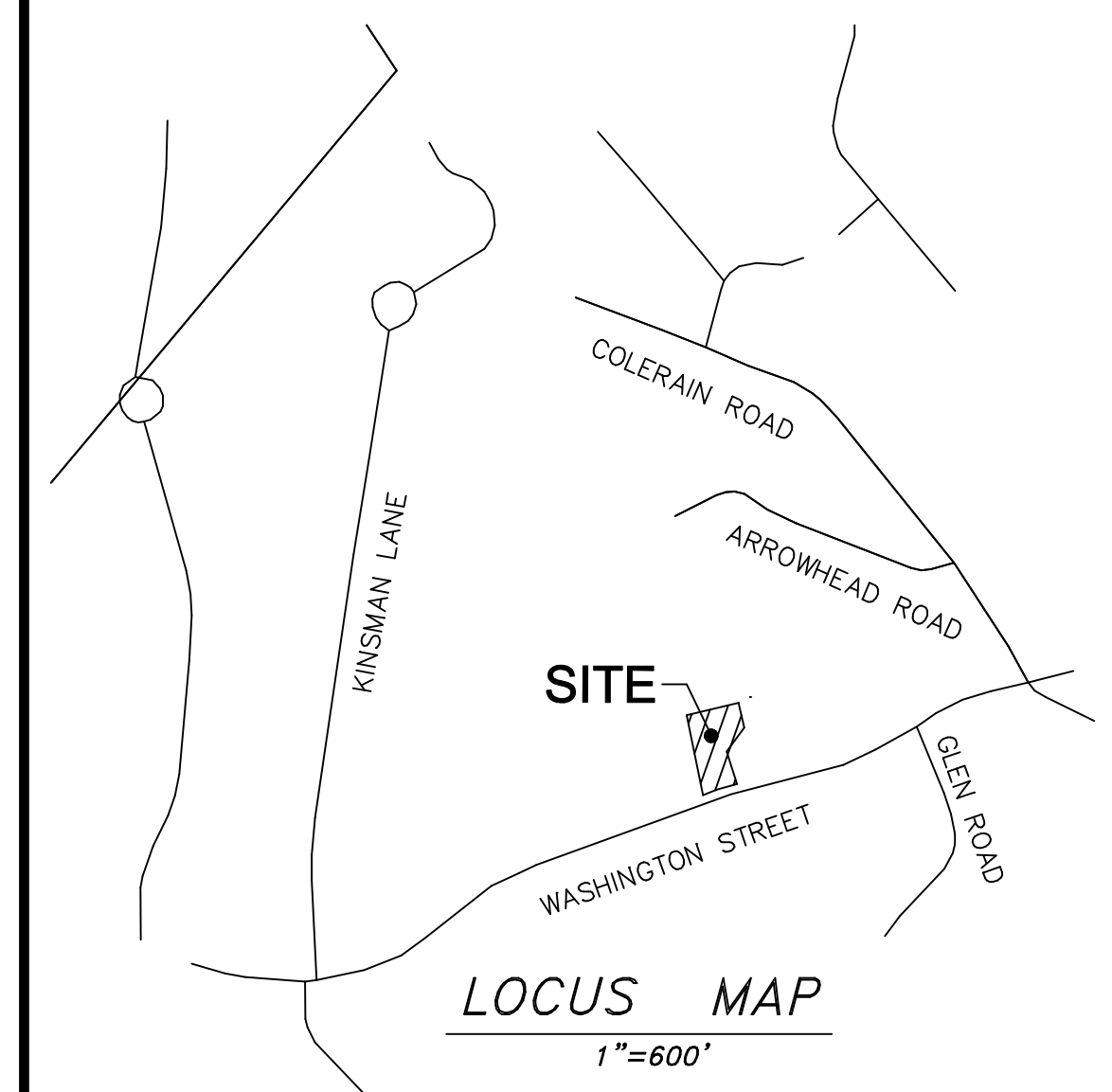


SILTATION CONTROL FENCE DETAIL  
N.T.S.

**DEEP TEST RESULTS**

T-1			T-3			T-5		
EL. = 117.58			EL. = 115.78			EL. = 115.5		
S.L. 10YR 3/3	7"	A	S.L. 10YR 3/3	10"	A	S.L. 10YR 3/3	9"	A
S.L. 10YR 5/8	15"	B	S.L. 10YR 5/8	22"	B	S.L. 10YR 5/8	16"	B
S.L. 10YR 4/6		C	S.L. 10YR 4/6		C	S.L. 10YR 4/6		C
116.3			113.9			114.1		
108.0	115"		105.9	118"		106.1	112"	
O.W.T. ● 57"			O.W.T. ● 57"			O.W.T. ● 69"		
E.S.W.T. ● 58"			E.S.W.T. ● 55"			E.S.W.T. ● 57"		
EL. = 112.9			EL. = 111.2			EL. = 111.1		
TEST DATE: 3-2-10			TEST DATE: 3-2-10			TEST DATE: 3-2-10		
EVALUATOR: ALEX PARKER			EVALUATOR: ALEX PARKER			EVALUATOR: ALEX PARKER		
INSPECTOR: JOHN COULON			INSPECTOR: JOHN COULON			INSPECTOR: JOHN COULON		



**PERC TEST RESULTS**

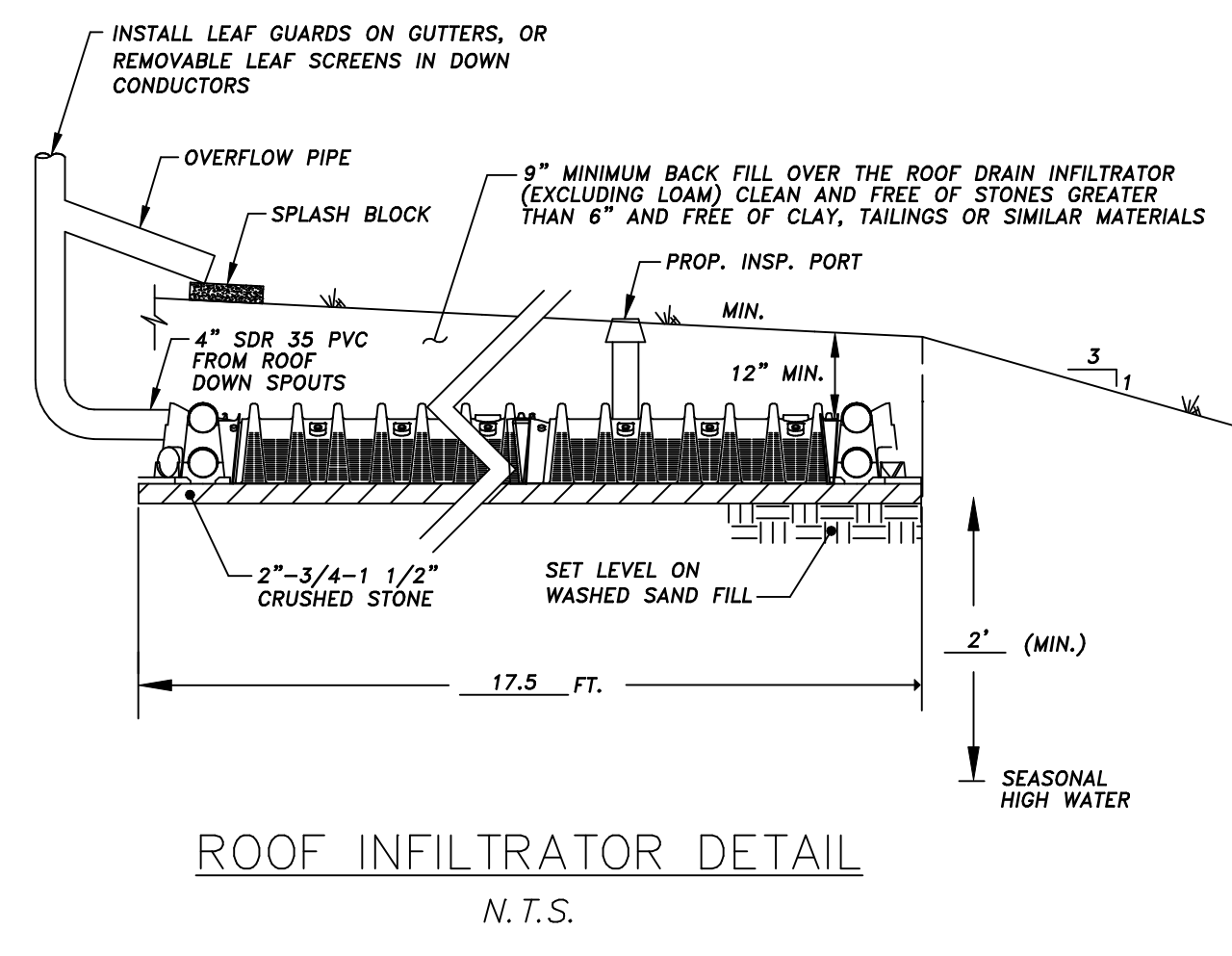
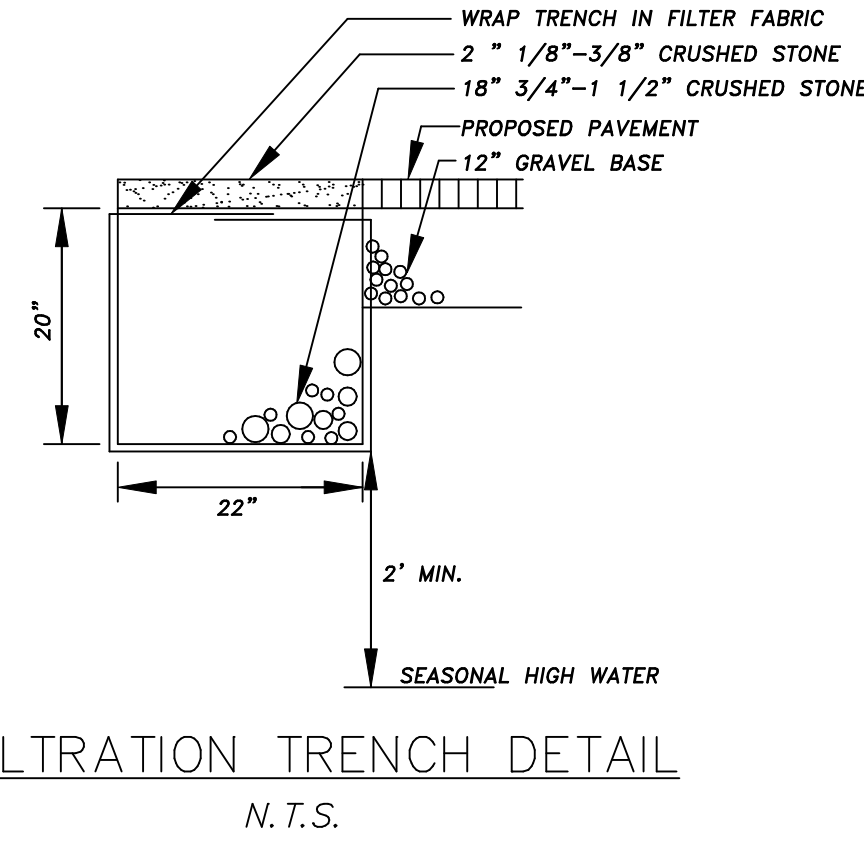
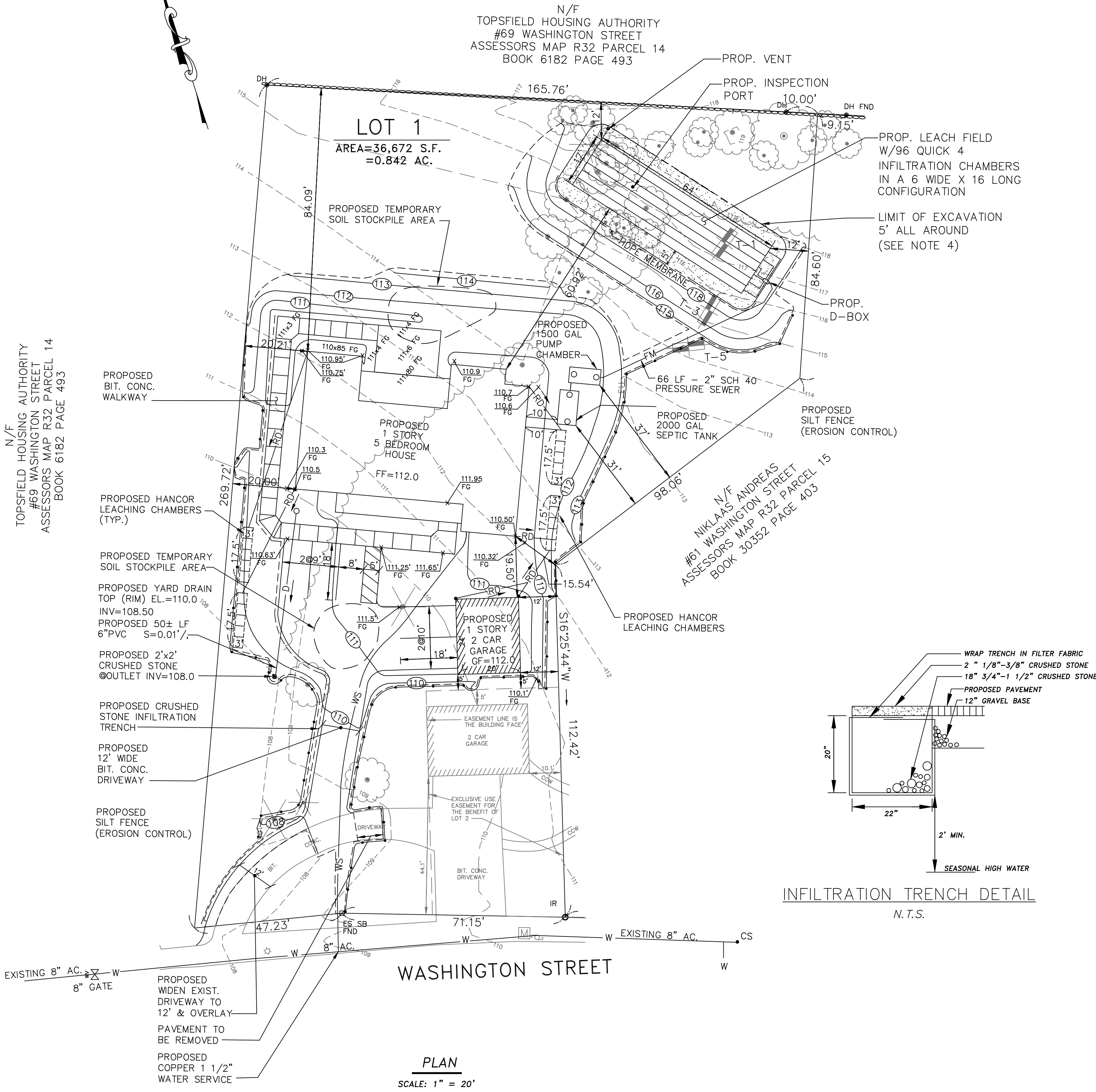
P-1		P-3	
DEPTH	38"	DEPTH	47"
SOAK TIME	15	SOAK TIME	15
12"-9" DROP	23	12"-9" DROP	12
7"-6" DROP	13	7"-6" DROP	10
PERC RATE	13 M.P.I.	PERC RATE	10 M.P.I.
TEST DATE: 3-2-10		TEST DATE: 3-2-10	
ENGINEER: ALEX PARKER		ENGINEER: ALEX PARKER	
INSPECTOR: JOHN COULON		INSPECTOR: JOHN COULON	

**NOTES**

- ALL FILL BENEATH THE SOIL ABSORPTION SYSTEM SHALL BE IN CONFORMANCE WITH 310 CMR 15.255 (3) AND SHALL BE WASHED SAND OR ASTM C33 CONCRETE SAND.
- THIS SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE GRINDER.
- REMOVE ALL TOPSOIL, ROOTS AND SUBSOIL AND REPLACE WITH SPECIFIED FILL WITHIN 5 FEET OF SYSTEM. FILL SHALL BE IN CONFORMANCE WITH CMR 15.255 (3).
- COVER MATERIAL OVER THE SYSTEM SHALL BE FREE OF CLAY, STONES, MASONRY, STUMPS, OR WASTE CONSTRUCTION MATERIAL. THE TOP 3" SHALL BE LOAMED AND SURFACE SEED. MACHINERY WHICH MAY CRUSH OR DISTURB THE ALIGNMENT OF THE PIPES IN THE DISPOSAL AREA SHALL NOT BE ALLOWED.
- FOUNDATION DRAINS ARE NOT TO BE INSTALLED WITHIN 10 FT. OF THE SEPTIC TANK NOR WITHIN 20 FT. OF THE SOIL ABSORPTION SYSTEM.
- ALL PIPING SHALL BE LAID STRAIGHT ON CONTINUOUS GRADE AND SHALL HAVE WATERTIGHT JOINTS
- PROPERTY LINES SHOWN WERE TAKEN FROM EXISTING PLANS AND RECORDS.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES WAS TAKEN FROM EXISTING PLANS AND RECORDS OR FROM FIELD OBSERVATIONS AND ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE CONSTRUCTION BEGINS. THE DESIGN ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES SO THAT REMEDIAL ACTION CAN BE TAKEN.
- THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER 48 HRS. IN ADVANCE OF BED EXCAVATION AND COMPLETION SO THAT REQUIRED INSPECTIONS CAN OCCUR.
- THE CONTRACTOR SHALL BE FINANCIALLY RESPONSIBLE FOR THE AS-BUILT INSPECTIONS AND PLAN. THIS SERVICE SHALL BE INCLUDED AS PART OF THE CONSTRUCTION CONTRACT.
- NO PRIVATE WELLS EXIST. WITHIN 100 FT. NOR ANY PUBLIC WELLS OR DRINKING WATER SUPPLIES WITHIN 400 FT. OF THE SYSTEM.
- NO WETLANDS EXIST WITHIN 100 FT. OF THE PROPOSED SYSTEM.
- THIS SYSTEM DESIGN, ALL MATERIALS AND COMPONENTS AND ALL INSTALLATION PROCEDURES SHALL BE AND ARE INTENDED TO BE IN FULL CONFORMANCE WITH TITLE 5, MINIMUM REQUIREMENTS FOR THE SUBSURFACE DISPOSAL OF SANITARY SEWAGE, 310 CMR 15.001 THROUGH 15.505. UNLESS OTHERWISE NOTED.
- ALL NON PAVED DISTURBED AREAS TO BE LOAM AND SEED.
- AREA OF SITE DISTURBANCE = 18,551 S.F.
- SEE TOWN OF TOPSFIELD ASSESSORS MAP 32 LOT 136 FOR SITE.
- ZONE (CR) CENTRAL RESIDENCE

**LEGEND**

- DH DRILL HOLE
- IR IRON ROD
- CS CURB STOP
- W WATER GATE
- UP UTILITY POLE
- T-5 TEST PIT
- X 110.12 SPOT ELEVATION
- 110.12 ELEVATION CONTOUR
- W WATER PIPELINE
- WS WATER SERVICE
- SILT FENCE
- FM FORCEMAIN
- RD ROOF DRAIN
- 110 PROPOSED CONTOUR
- TREELINE
- AC ASBESTOS CLAY
- D-BOX DISTRIBUTION BOX
- FF FINISH FLOOR
- FG FINISH GRADE
- GF GARAGE FLOOR
- BIT. CONC. BITUMINOUS CONCRETE



**DESIGN CALCULATIONS**

DESIGN FLOW = 5 BEDROOMS x 200 GAL./DAY = 1000 GPD

DESIGN PERC RATE: 13 M.P.I.

SOIL CLASS: II

LEACHING FIELD REQUIRED = 1000 GAL. x 1/.56 GPD/S.F. = 1786 S.F.

USE QUICK 4 STD. LP INFILTRATOR CHAMBER 4.72 S.F./L.F.

1786 S.F. / 4.72 S.F./L.F. = 378 L.F. (95 CHAMBERS)

USE 96 INFILTRATOR CHAMBERS IN A 6 x 16 CONFIGURATION = 384 L.F.

EFFECTIVE AREA PROVIDED: 4.72 S.F./L.F. x 384 L.F. = 1812 S.F.

SEPTIC TANK REQUIRED: 2000 x 1000 GAL. = 2000 GAL.

SEPTIC TANK PROVIDED: = 2000 GAL.

**PROPOSED SITE PLAN**  
IN  
TOPSFIELD, MA  
AS PREPARED FOR  
MILK STREET PROPERTIES  
66 PARK STREET  
ANDOVER, MA 01810  
TEL. (978) 618-1933

SCALE: AS SHOWN DATE: 6-27-12  
ASSESSORS MAP # 32 LOT 15 SUBDIVISION LOT # 1

**MERRIMACK ENGINEERING SERVICES**  
66 PARK STREET  
ANDOVER, MASSACHUSETTS 01810 SHT. 1 OF 1

NO.	DATE	BY	REVISIONS:
1	10-12-12	WRD	HOUSE FOOTPRINT
2	10-22-12	SES	ROOF DRAINS

Y:\R14\DWG\59975\SP\9875SP03.DWG 10/22/12