

**"SOIL LOGS"**

EL.	D.T.H. #1	EL.	D.T.H. #2
EL. 99.50'	12'-0" FILL		
EL. 98.50'			
EL. 97.83'	0-8" A 10YR 3/2 SL		
EL. 97.0'	8"-18" Bw 10 yr 4/4 SL		
EL. 91.5'	18"-84" C1 10 YR 4/4 COURSE SAND & GRAVEL		
EL. 88.5'	84" TO 120" C2 10 YR 4/2 COURSE SAND		

DRY - NO MOTTLES  
ESTIMATED G.W. > 108" FROM FILL

**SOIL EVALUATOR: MICHAEL YERKA (YERKA ENGINEERING)**

I CERTIFY THAT ON JULY 1995 I HAVE PASSED THE EXAMINATION APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERTISE, AND EXPERIENCE DESCRIBED IN 310 CMR 15.018 (2).

OTHER PERSONS ON SITE AT TESTING: HARRY STEWART (backhoe)

PERCOLATION RATE	3 MPI
DATE SOIL EVALUATION	APRIL 18, 2012
DATE PERCOLATION TEST	APRIL 18, 2012
INSPECTOR	JAMES MALLEY
TESTING APPLICANT:	PAUL LORANGE

**"CONSTRUCTION NOTES"**

1. EXCAVATE ALL IMPERVIOUS MATERIAL INCLUDING TOP & SUB SOILS, SILT, CLAY, ETC. TO PERVIOUS MATERIAL IN TRENCH AREA AND IN FIVE FOOT (5') GRAVEL AREA.
2. THE GRAVEL SHALL BE PLACED ACCORDING TO SEC. 15.225 SUB-SECTION 3 TO 6.
3. ELEVATION OF GRAVEL 97.00'
4. TRENCHES TO BE 8.5' OC.
5. BOTTOM OF TRENCHES TO BE LEVEL FOR ENTIRE LENGTH OF SYSTEM 95.67'
6. ALL OUTLET PIPES FROM THE DISTRIBUTION BOX TO BE LEVEL FOR A MINIMUM OF ONE PIPE LENGTH OR 2 FEET.
7. NO SURFACE SUBSURFACE OR OPEN DRAINS THAT INTERCEPT GROUNDWATER WITHIN 25 FEET OF THE SEPTIC TANK OR 50 FEET FROM THE LEACHING SYSTEM.
8. ENGINEER TO INSPECT BOTTOM EXCAVATION OF LEACHING AREA PRIOR TO GRAVEL PLACEMENT
9. HYDRAULIC CEMENT TO BE USED TO SEAL CONNECTIONS AT THE FOUNDATION, SEPTIC TANK, DIST. BOX, & ALL UNUSED OUTLETS.
10. DAM & SEED ALL DISTURBED AREAS, ENVIRONMENTAL MATTING ON SLOPES > 50%.
12. CONSTRUCTION OF SEPTIC TANK, DOSING CHAMBER & DISTRIBUTION BOX SHALL CONFORM WITH 310 CMR 15.221 THROUGH 15.226.

**ADDITIONAL NOTES**

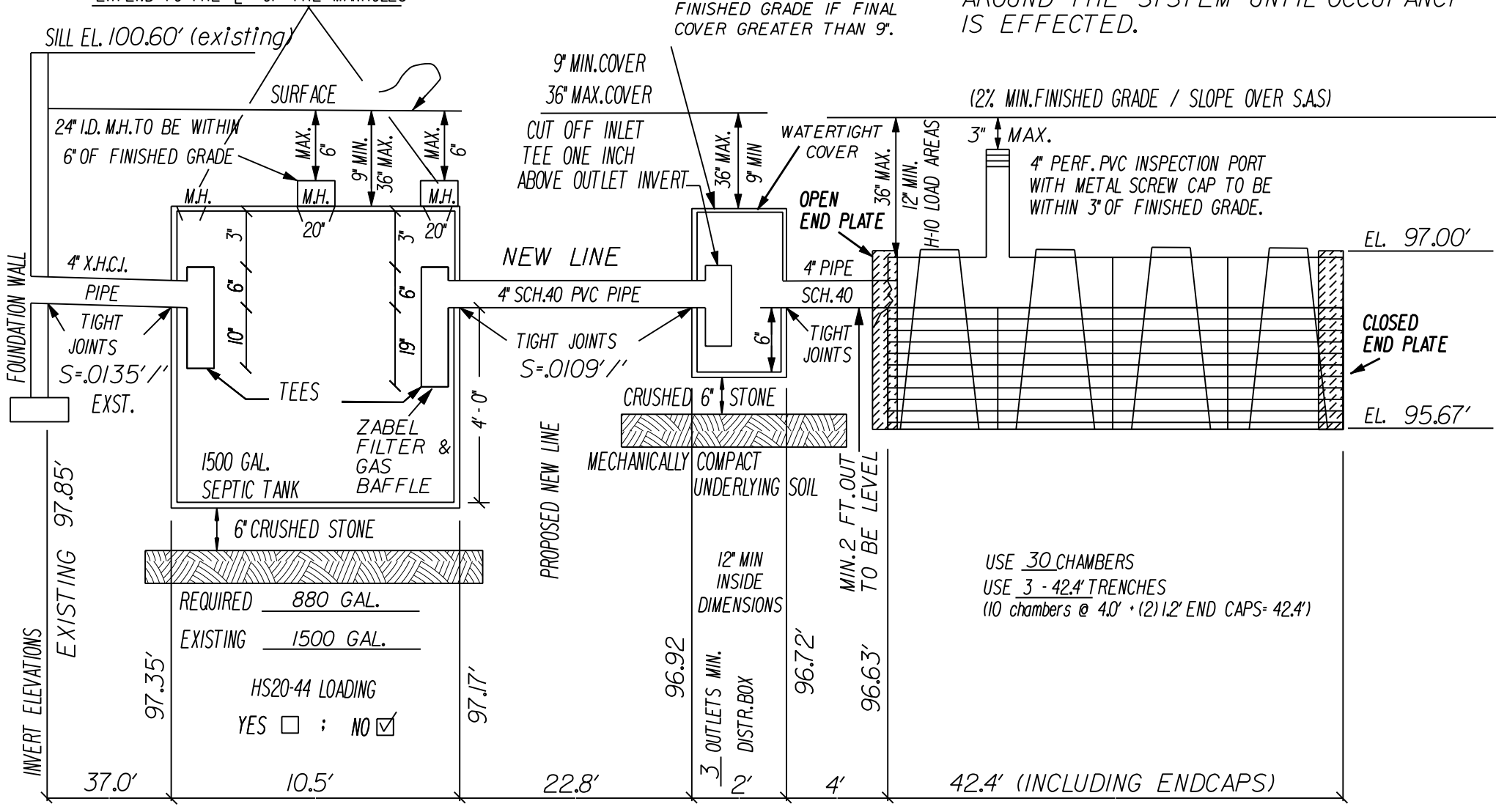
1. TOWN PERMIT \*
2. SEPTIC TANK TO BE PUMPED ANNUALLY
3. WELL TO BE TESTED EVERY TWO YEARS
4. FLOOD HAZARD ZONE: PAVEL #25027C1026E
5. KNOWN EASEMENTS ON LOT: YES  NO
6. SYSTEM LOCATED IN NITROGEN SENSITIVE AREA AS DEFINED BY THE MA DEP OR TITLE V: YES  NO

**DESIGN INFORMATION**

1. DESIGN RATE: 3 MPI
2. SIDEWALL AREA: 60 GPD/SF BOTTOM AREA: 60 GPD/SF
3. 92.44' LINEAL FEET OF CHAMBER REQUIRED
4. USE 127.2' LINEAL FEET 7333333/1793 SF/LF X 4.0 LF / 2312 CHAMBERS REQUIRED.
5. NO GARBAGE DISPOSAL UNIT (USE 30 CHAMBERS - 3/24 11" END CAPS - 605.2 GPD)
6. 4 BEDROOM HOUSE; DAILY FLOW MINIMUM OF 440 GALLONS
7. NO OTHER WELL WITHIN 200 FEET OF THE PROPOSED SYSTEM OTHER THAN SHOWN ON PLAN OR OTHER SYSTEM WITHIN 200 FEET OF THE PROPOSED WELL OTHER THAN SHOWN ON PLAN.
8. WATER SOFTENERS SHALL NOT CONNECT TO SEPTIC TANK.
9. STORMWATER DRAINAGE ON SITE: YES  NO
10. POTABLE WATER SUPPLY (PUBLIC) ON SITE: YES  NO
11. LOT AREA  IS,  IS NOT TRIBUTARY TO A PUBLIC SURFACE WATER SUPPLY AND IS NOT LOCATED IN A ZONE 2 OF PUBLIC WELLS.
12. ALL KNOWN UTILITY LOCATIONS (APPROX.) ON SITE ARE SHOWN.
13. CONTRACTOR SHALL NOTIFY DIG-SAFE AT 1-888-344-7233 PRIOR TO CONSTRUCTION.
14. NO FOUNDATION DRAINS TO BE INSTALLED.

NOTE: ALL SEWER STRUCTURES ARE ABOVE MAXIMUM GROUND WATER.  
YES  NO

INLET & OUTLET TEES SHALL BE SET WITHIN 12" OF THE END WALLS AND EXTEND TO THE 9" OF THE MANHOLES



NOTE: INSPECTIONS TO BE CONDUCTED ACCORDING TO THE REGULATIONS OF THE UXB/BRIDGE BOARD OF HEALTH

**LEGEND**

APPROX. GAS LINE	-G- - - -G-
DEEP TEST HOLE	◐
PERCOLATION TEST HOLE	◑
EXISTING CONTOURS	--- ---
PROPOSED CONTOURS	--- ---
APPROX. TOWN WATER LINE	-W- - - -W-
BENCH MARK	●
SPOT ELEVATIONS (EXIST.)	100.0
SPOT ELEVATIONS (PROPOSED)	100.0

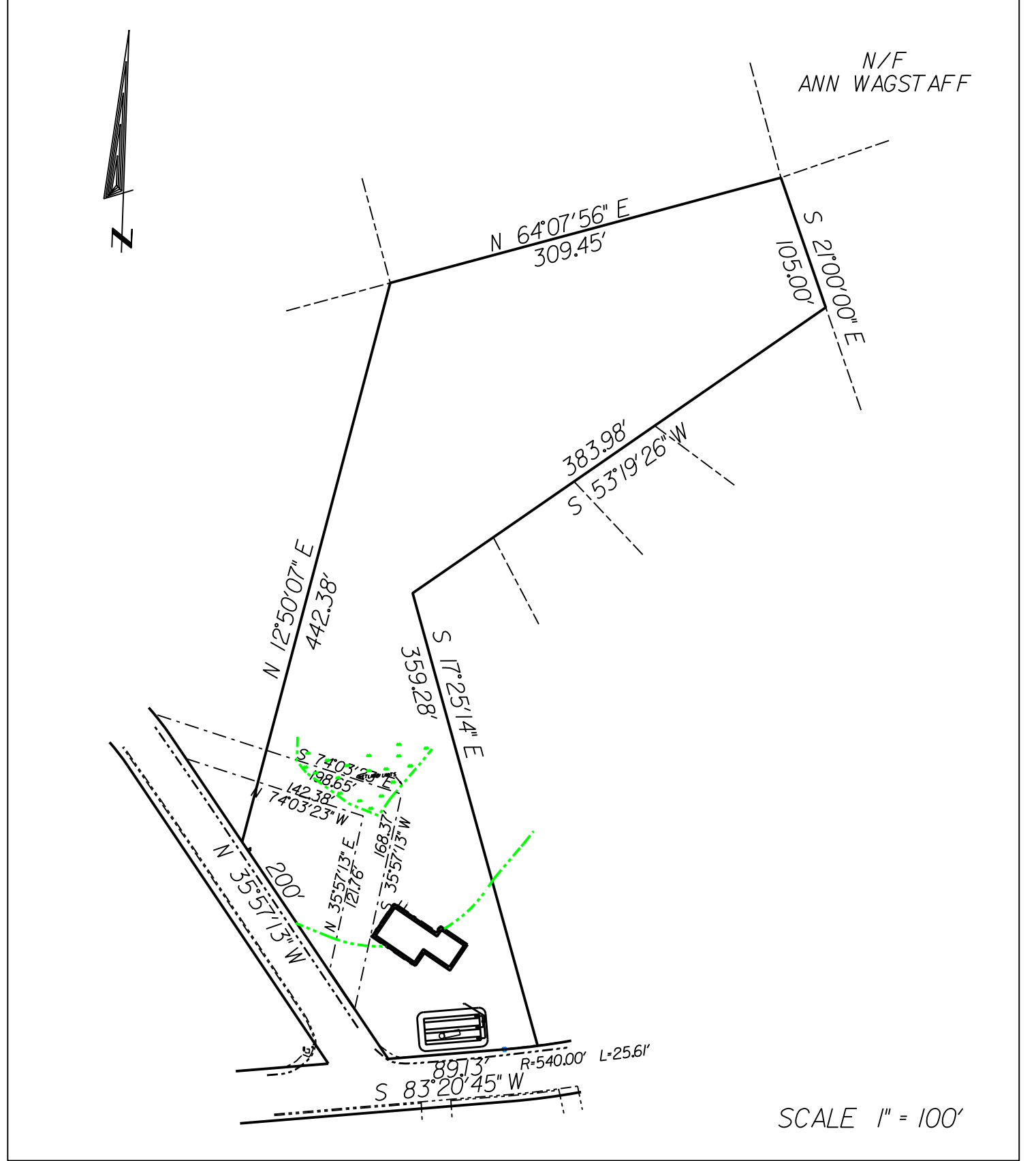
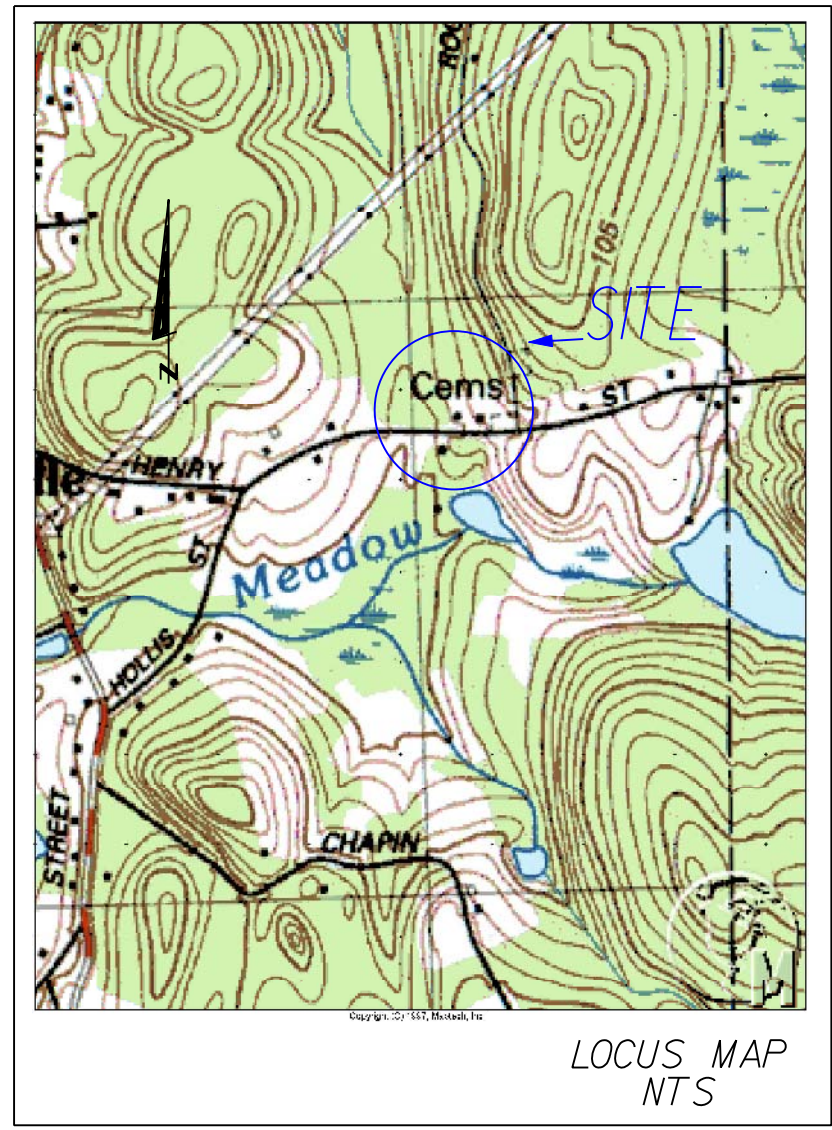
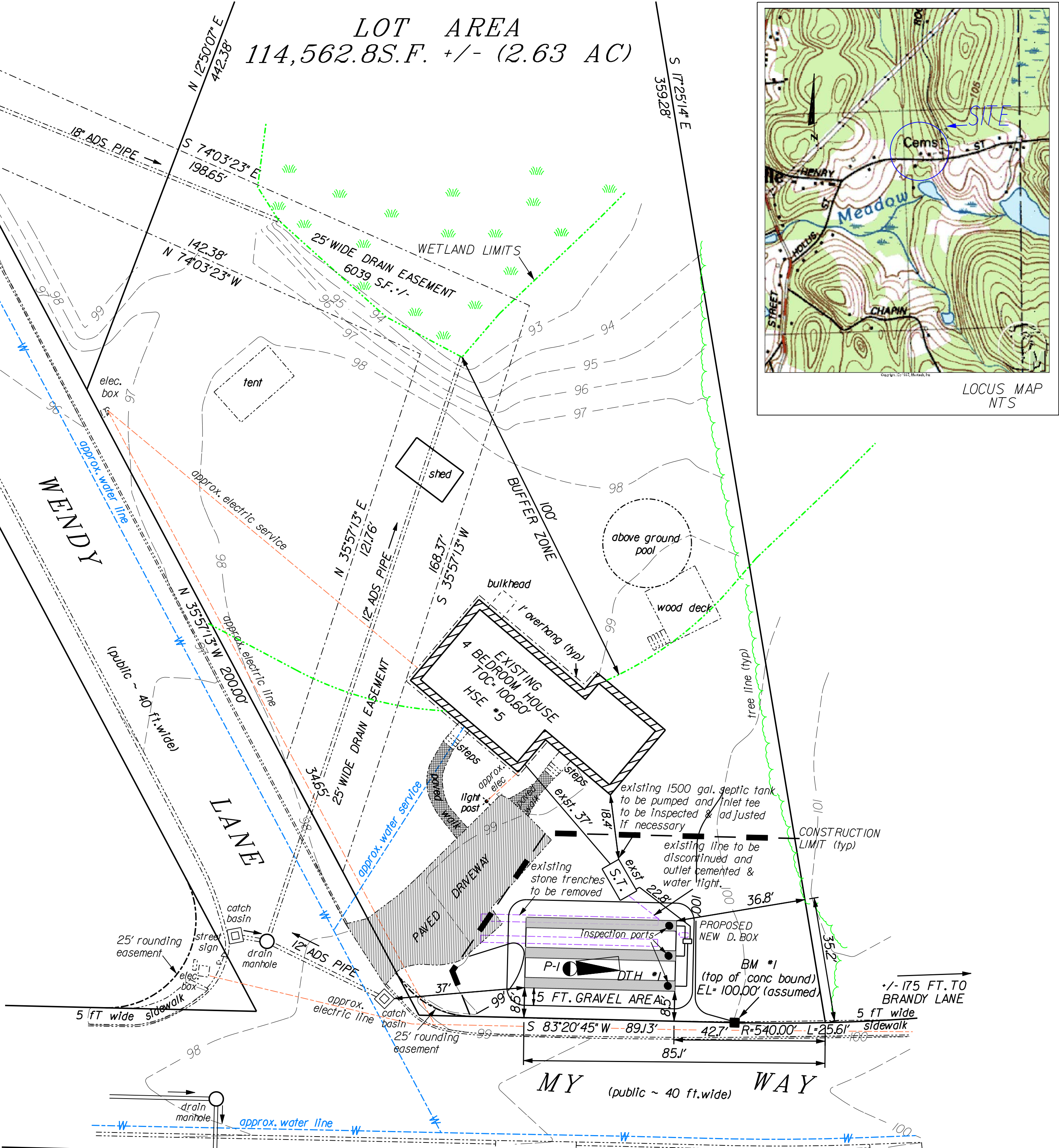
**LOADING CALCULATIONS**

CHAMBER DIM. 34" x 53" x 16"
ELA - EFFECTIVE LEACHING AREA PER CHAMBER (7.93 SF/LF)
E.T.C. - EFFECTIVE TRENCH CAPACITY 7.93 SF/LF X 60 GPD/SF = 475.8 GPD/FT
PER TITLE V USE MIN. OF 400 SF FOR CHAMBER BOTTOM AND SIDEWALL AREA
E.T.C. 7.93 SF/LF X 60 GPD/SF = 475.8 GPD/FT
ELA - 7.93 SF/LF x 4.0 LF = 31.72 SF/CHAMBER
440 GPD / 60 GPD/SF / (31.72 SF/CHAMBER) = 23.11 CHAMBERS REQUIRED
TRENCH LENGTH USE 30 CHAMBERS x 4.0 LF / CHAMBER = 120 LF
120' / 3 TRENCHES = 40' / TRENCH (12.4' for end caps) = 42.4'

**INSPECTION SCHEDULE**

1. BOTTOM OF EXCAVATION PRIOR TO PLACEMENT OF FILL
2. AFTER COMPLETION OF THE SYSTEM PRIOR TO BACKFILLING
3. ROUGH AND/OR FINAL GRADING
4. SLOPE STABILIZATION

NOTE: CAUTION TAPE SHALL BE PLACED AROUND THE SYSTEM UNTIL OCCUPANCY IS EFFECTED.

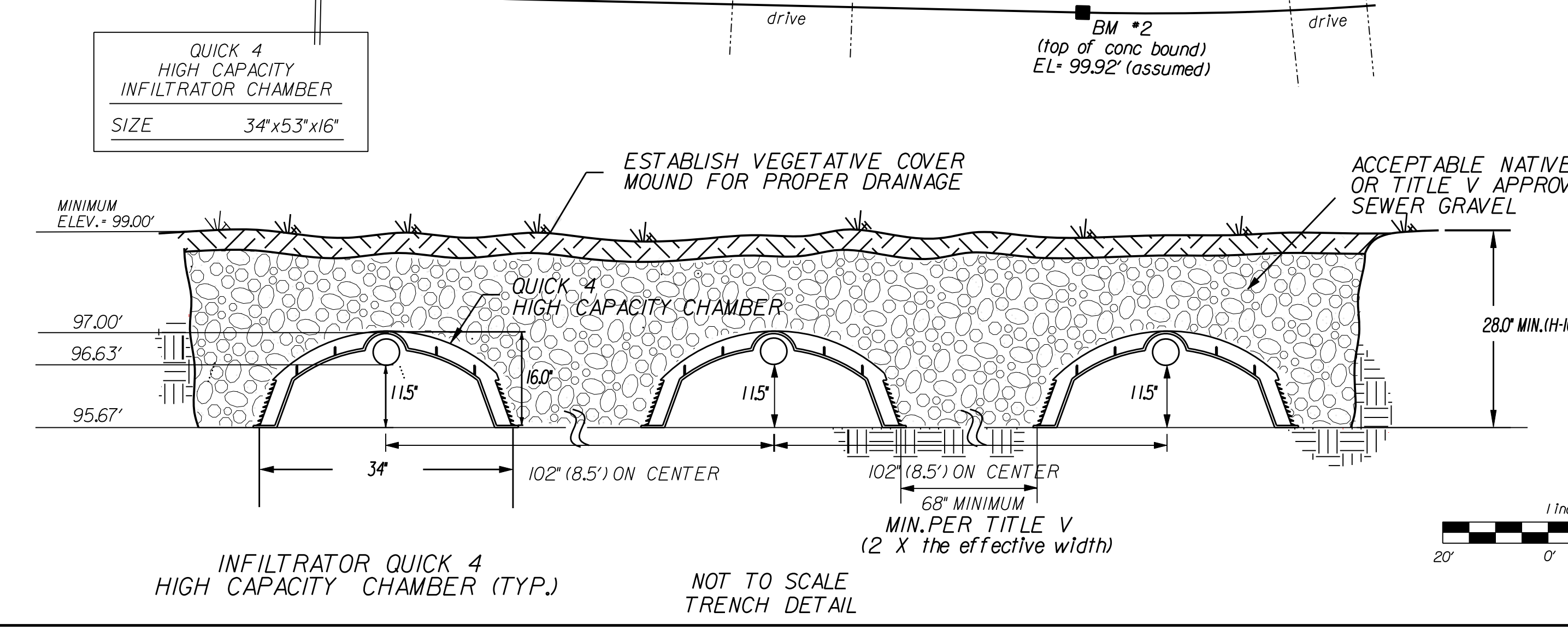


NOTES:

WETLANDS WERE REVIEWED BY MARGARET BACON PWS ON APRIL 12, 2012

ONLY INSTALLERS CERTIFIED IN THE INSTALLATION PROCEDURES OF THE INFILTRATOR SYSTEMS WILL BE ALLOWED TO CONSTRUCT AND INSTALL THIS SYSTEM.

INSTALLER SHALL INSTALL THE SYSTEM IN ACCORDANCE WITH INFILTRATOR SYSTEM INC.'S "DESIGN AND INSTALLATION MANUAL FOR INFILTRATOR CHAMBERS IN MASSACHUSETTS", AND THE CONDITIONS AS SET FORTH IN DEPARTMENT OF ENVIRONMENTAL PROTECTION'S CERTIFICATION FOR THE QUICK 4 SYSTEM ISSUED ON SEPTEMBER 18, 2009.



REVISION #	DESCRIPTION	DATE

**REPAIR**

**SEWAGE DISPOSAL SYSTEM FOR**

JOHN DOE  
37 ENSIGN ST  
NORTHBRIDGE MA

DATE: APRIL 22, 2012 SCALE: 1" = 20'

**CIVIL ENGINEERING**

128 WEST HARTFORD AVE.  
UXBRIDGE MA 01569  
508-278-9091

SITE PLANNING SEPTIC DESIGN WETLANDS