

**REVISED
APPENDIX 2F**



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November 17, 2015

Via Hand-Delivery and Electronic Mail

Pamela G. Monroe, Administrator
New Hampshire Site Evaluation Committee
21 South Fruit Street
Concord, NH 03301

Re: Docket No. 2015-02: Antrim Wind Energy, LLC – First Supplement to Application Appendices

Dear Ms. Monroe:

Please find enclosed for filing with the New Hampshire Site Evaluation Committee in the above-captioned matter, an original and eighteen (18) copies of the Applicant's First Supplement to the Application Appendices. The First Supplement includes an updated septic plan, which reflects a modification to the septic plan included in Appendix 2F of the Application. Appendix 2F contains the Individual Sewage Disposal System ("ISDS") application and the First Supplement modifies page 10 of the ISDS application.

We have provided members of the service list with electronic copies of the First Supplement to the Application Appendices, pending addition of the document to the Committee's website.

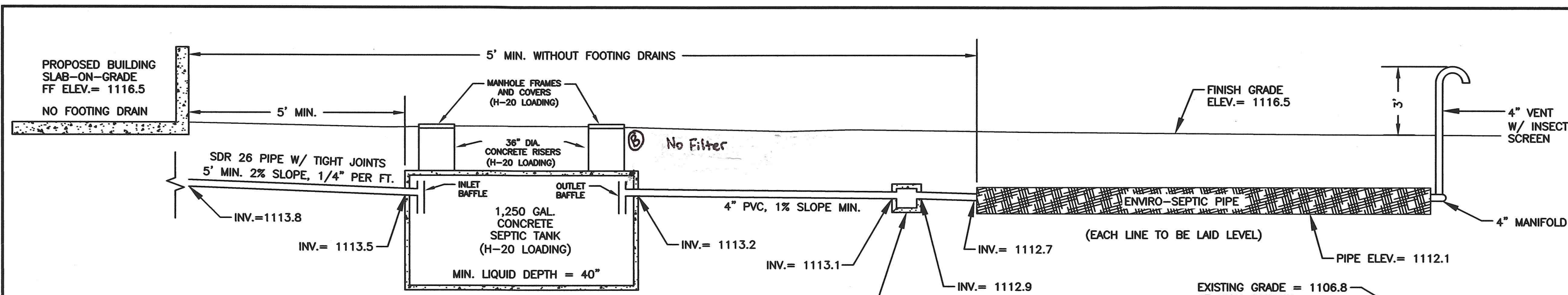
Please feel free to contact me with any questions regarding these materials. Thank you for your assistance.

Very truly yours,

A handwritten signature in cursive script that reads "Rebecca S. Walkley".

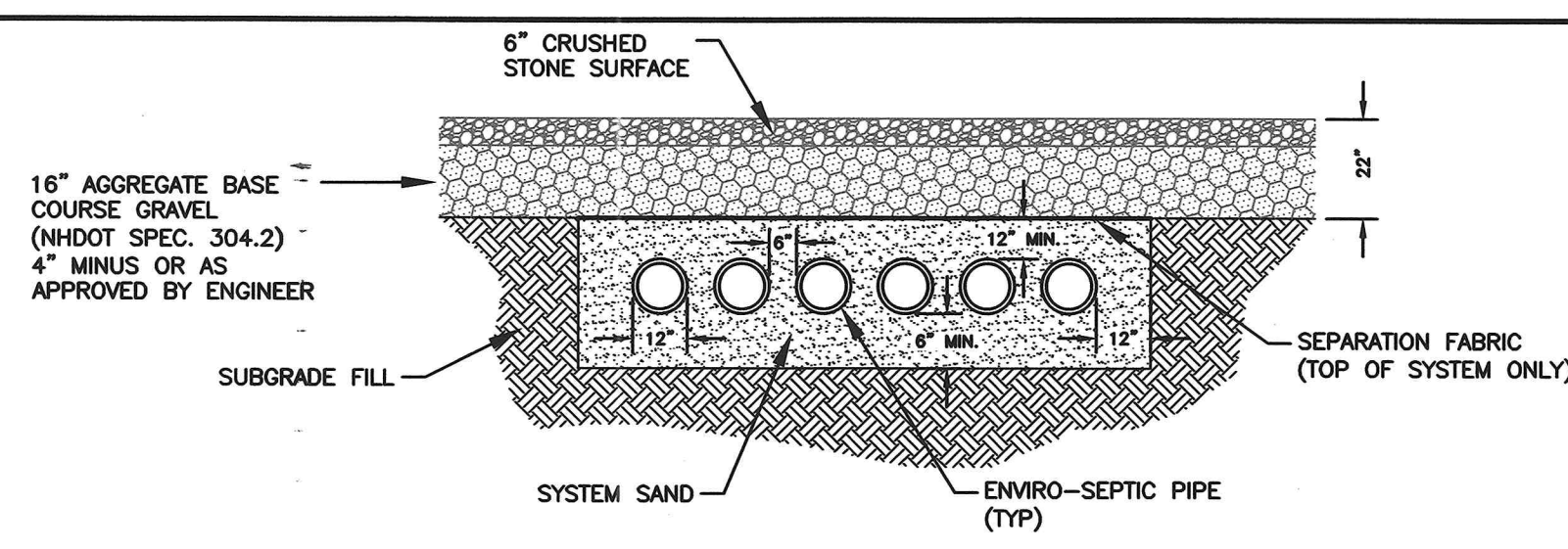
Rebecca S. Walkley

RS3:
Enclosure



- NOTES:
1. INLET AND OUTLET TO SEPTIC TANK ARE TO BE SEALED WITH A NON-SHRINK MORTAR.
 2. ALL INVERT ELEVATIONS AND GRADES ARE FROM ASSUMED DATUM.
 3. SEPTIC TANK AND DISTRIBUTION BOX ARE TO BE SUPPLIED BY LAMARRE CONCRETE CORP., GREENVILLE, NH OR EQUAL.
 4. SEPTIC TANK SIZE DOES NOT ANTICIPATE USE OF A GARBAGE GRINDER. IF A GARBAGE GRINDER IS INSTALLED, THE SEPTIC TANK SIZE SHALL BE INCREASED BY 50%.
 5. ACCESS TO THE INTERIOR OF THE SEPTIC TANK SHALL CONFORM TO Env-Wq 1010.05.
 6. INLET AND OUTLET BAFFLE ARE TO BE PLASTIC VENTED TEES THAT EXTEND ABOVE THE LIQUID LINE TO NOT LESS THAN 1 INCH FROM THE INTERIOR OF THE TOP OF THE SEPTIC TANK.
 7. THE INLET BAFFLE SHALL DIVERT SEWAGE DOWNWARD AND EXTEND 8 INCHES BELOW THE LIQUID LEVEL. THE OUTLET BAFFLE SHALL EXTEND BELOW THE LIQUID LEVEL BY 40% OF THE LIQUID DEPTH.
 8. SEPTIC TANK IS TO BE PUMPED AND CLEANED A MINIMUM OF EVERY THREE YEARS.
 9. ENVIRO-SEPTIC PRODUCTS ARE TO BE SUPPLIED BY PRESBY ENVIRONMENTAL: 1-800-473-5298, WWW.PRESBYECO.COM
 10. ALL TREES, TOPSOIL, ROOTS, AND ORGANIC MATTER SHALL BE REMOVED FROM THE SYSTEM AREA.
 11. THIS SYSTEM IS NOT DESIGNED FOR DISCHARGES FROM WATER PURIFICATION SYSTEMS OR FLOOR DRAINS.
 12. NO KNOWN BURIAL SITES OR CEMETERIES EXIST WITHIN 100 FEET OF ANY COMPONENT OF THE SYSTEM.

D-1 TYPICAL PROFILE OF PROPOSED SYSTEM
TRC NOT TO SCALE 1/11/2012



- NOTES:
1. THE DESIGN PROPOSES 6 ROWS OF ENVIRO-SEPTIC PIPES.
 2. EACH LINE IS TO BE LAID LEVEL.
 3. CENTER-TO-CENTER SPACING FOR ALL PIPES SHALL BE 18 INCHES.
 4. A MINIMUM OF 6 INCHES OF SYSTEM SAND SHALL BE PLACED BELOW THE BOTTOM OF THE ENVIRO-SEPTIC PIPES.
 5. SYSTEM SAND SHALL CONSIST OF MEDIUM TO COARSE SAND MEETING THE REQUIREMENTS OF THE ASTM C-33 SPECIFICATION, OR MATERIALS WITH AN EFFECTIVE SIZE OF 0.25 TO 2 MM, WITH NO GREATER THAN 2% PASSING THE NO. 200 SIEVE, AND NO PARTICLES LARGER THAN 3/4-INCH.
 6. A TRACKED VEHICLE MAY BE USED TO SPREAD MATERIAL ON TOP OF THE SYSTEM AS LONG IT MAINTAINS 12 INCHES OF COVER OVER THE PIPES. FINAL COVER THICKNESS SHALL EXCEED 18 INCHES.
 7. SEPARATION FABRIC SHALL BE PLACED ON THE TOP OF THE BED ONLY.
 8. SOIL COMPACTION SHALL BE MINIMIZED BELOW THE BED.

D-2 TYPICAL CROSS SECTION
TRC NOT TO SCALE 1/11/2012

TEST PIT DATA

TP-3	1/16/12
1-0"	ORGANIC MATTER
0-14"	10YR 3/2 VERY DK. GRAYISH BROWN FINE SANDY LOAM GRANULAR, FRIABLE
14-24"	2.5Y 6/8 OLIVE YELLOW SANDY LOAM GRANULAR, FRIABLE
LEGE: 24" (BOULDERS)	PERC. TEST: 12 MIN./IN. AT 12" (1/16/12)
S.H.W.T.: 14"	HARDPAN: NONE

TEST PIT DATA

TP-4	1/16/12
1-0"	ORGANIC MATTER
0-10"	10YR 3/2 VERY DK. GRAYISH BROWN FINE SANDY LOAM GRANULAR, FRIABLE
10-21"	10YR 4/4 DK. YELLOWISH BROWN SANDY LOAM GRANULAR, FRIABLE
21-28"	2.5Y 6/8 OLIVE YELLOW SANDY LOAM GRANULAR, FRIABLE
LEGE: 28" (BOULDERS)	10YR 4/6 D. YELLOWISH BROWN COMMON, MEDIUM, & DISTINCT (REDOXIMPORPHIC FEATURES)
S.H.W.T.: 21"	HARDPAN: NONE

SOIL DATA: 160B, TUNBRIDGE-LYMAN MONADNOCK COMPLEX, STONY, 3-8% SLOPES

DESIGN DATA

DESIGN INTENT: THE PROPOSED BUILDING WILL BE USED TO STORE OPERATION AND MAINTENANCE EQUIPMENT FOR THE ANTRIM WIND PARK SUBSTATION. IN ACCORDANCE WITH Env-Wq 1008.03, TABLE 1008-1, THE OCCUPATION AND USE QUALIFIES AS FACTORY WAREHOUSE EXCLUSIVE OF INDUSTRIAL WASTE. UP TO TWO FULL-TIME OCCUPANTS WILL UTILIZE THE BUILDING DURING NORMAL WORKING HOURS ON A WEEKLY BASIS.

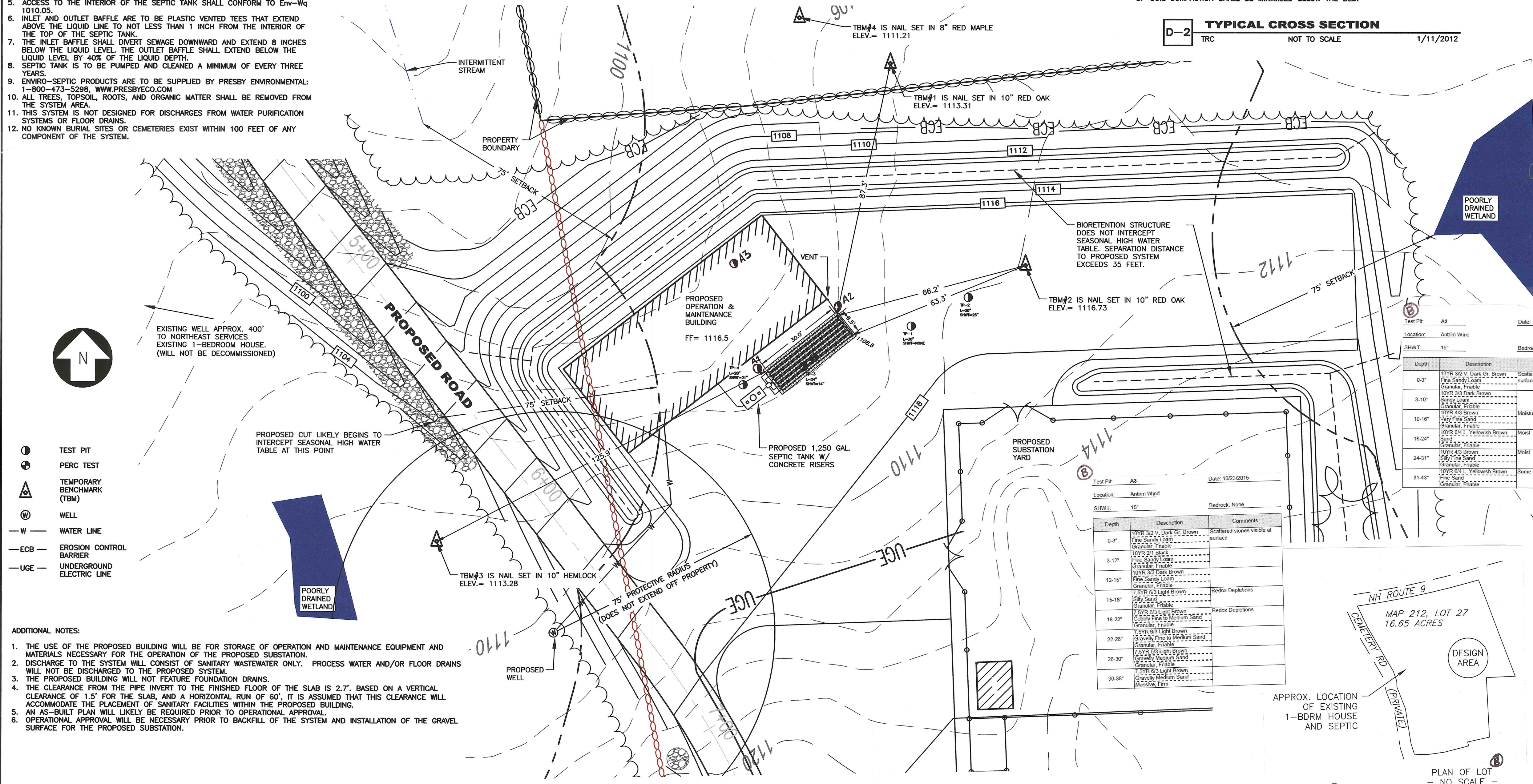
20 GPD/PERSON x 2 PERSONS = 40 GALLONS PER DAY

IN ACCORDANCE WITH Env-Wq 1008.02(c), THE SYSTEM IS DESIGNED TO ACCOMMODATE A MINIMUM SEWAGE FLOW OF 300 GALLONS PER DAY.

PROPOSED ARE 6 ROWS OF 30 LINEAR FEET, PROVIDING A TOTAL OF 180 LINEAR FEET OF ENVIRO-SEPTIC PIPES.

DUE TO SHWT AT 14 INCHES, THE BOTTOM OF THE EFFLUENT DISPOSAL SYSTEM SHALL BE CONSTRUCTED AT 1112.1 FEET ELEVATION. THIS IS APPROXIMATELY 5.3 FEET ABOVE ORIGINAL GROUND ON THE HIGH CONTOUR OF THE EFFLUENT DISPOSAL AREA.

THE LEACHFIELD WILL MAINTAIN 3 FEET OR GREATER TO THE SEASONAL HIGH WATER TABLE. THE LEACHFIELD IS TO BE REBUILT IN PLACE IF REPLACEMENT BECOMES NECESSARY.



- ⊙ TEST PIT
- ⊕ PERC TEST
- ⚠ TEMPORARY BENCHMARK (TBM)
- ⊕ WELL
- W — WATER LINE
- ECB — EROSION CONTROL BARRIER
- UGE — UNDERGROUND ELECTRIC LINE

- ADDITIONAL NOTES:
1. THE USE OF THE PROPOSED BUILDING WILL BE FOR STORAGE OF OPERATION AND MAINTENANCE EQUIPMENT AND MATERIALS NECESSARY FOR THE OPERATION OF THE PROPOSED SUBSTATION.
 2. DISCHARGE TO THE SYSTEM WILL CONSIST OF SANITARY WASTEWATER ONLY. PROCESS WATER AND/OR FLOOR DRAINS WILL NOT BE DISCHARGED TO THE PROPOSED SYSTEM.
 3. THE PROPOSED BUILDING WILL NOT FEATURE FOUNDATION DRAINS.
 4. THE CLEARANCE FROM THE PIPE INVERT TO THE FINISHED FLOOR OF THE SLAB IS 2.7'. BASED ON A VERTICAL CLEARANCE OF 1.5' FOR THE SLAB, AND A HORIZONTAL RUN OF 60', IT IS ASSUMED THAT THIS CLEARANCE WILL ACCOMMODATE THE PLACEMENT OF SANITARY FACILITIES WITHIN THE PROPOSED BUILDING.
 5. AN AS-BUILT PLAN WILL LIKELY BE REQUIRED PRIOR TO OPERATIONAL APPROVAL.
 6. OPERATIONAL APPROVAL WILL BE NECESSARY PRIOR TO BACKFILL OF THE SYSTEM AND INSTALLATION OF THE GRAVEL SURFACE FOR THE PROPOSED SUBSTATION.

WETLAND CERTIFICATION

WETLANDS WERE DELINEATED IN AUGUST AND SEPTEMBER, 2011 IN ACCORDANCE WITH Env-Wq 1014.03 BY ALEXANDER FINAMORE, NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST, OF TRC ENVIRONMENTAL CORPORATION.

ARTICLE XI OF THE ANTRIM ZONING ORDINANCE STATES: "NO SEPTIC TANK OR LEACH FIELD MAY BE CONSTRUCTED, REPAIRED, OR ENLARGED CLOSER THAN SEVENTY-FIVE (75) FEET TO ANY WETLAND."

THERE ARE NO POORLY OR VERY POORLY DRAINED WETLANDS WITHIN 75 FEET OF THE SEPTIC TANK OR LEACHFIELD

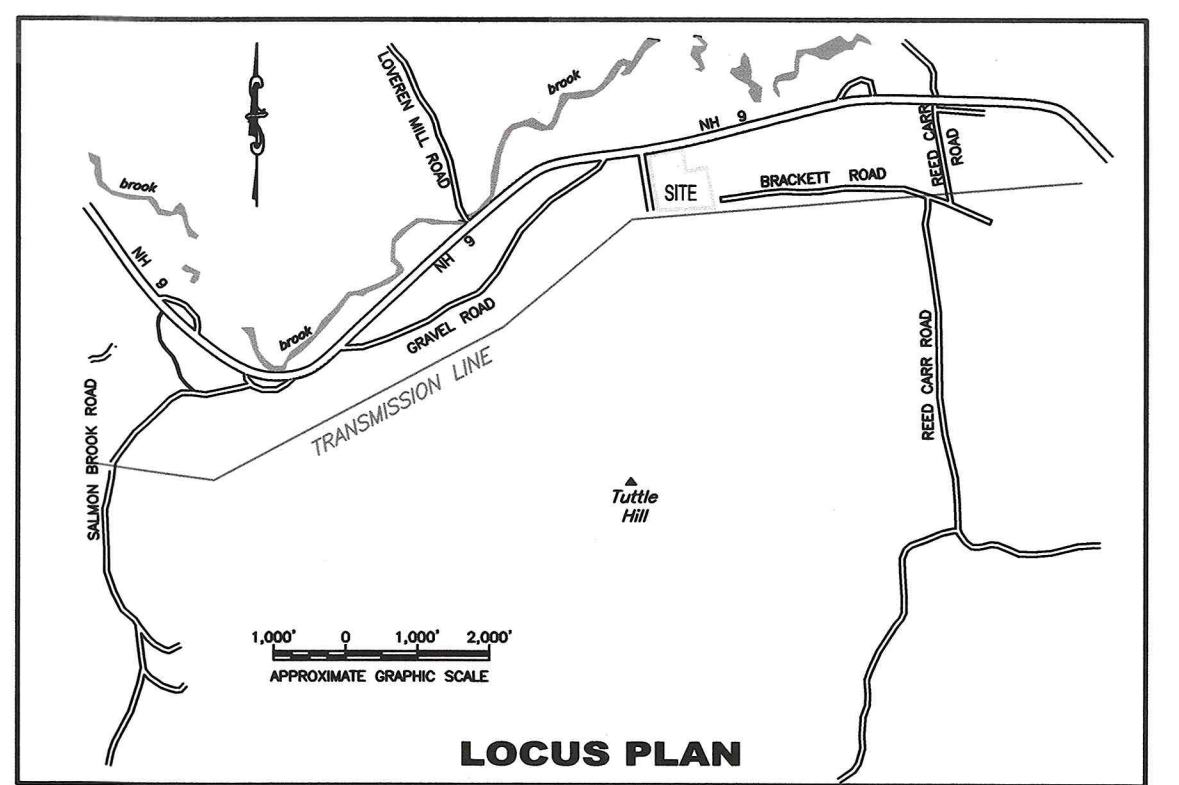
NO PORTION OF MAP 212 LOT 27 IS WITHIN THE PROTECTED SHORELAND.

WETLAND SCIENTIST STAMP: ALEXANDER FINAMORE, No. 267, CERTIFIED WETLAND SCIENTIST

DESIGNER STAMP: NEW HAMPSHIRE Designer of Subsurface Disposal Systems, David M. Pettit, No. 1650, Department of Environmental Services

NO.	REVISION	DATE	BY	CK	P.E. STAMPED BY	P.E. No.
A	INITIAL SUBMISSION	1/18/12				
B	Add Test Pits, Update Lot Size, etc.	10/30/15	DMP			

Depth	Description	Comments
0-3"	10YR 3/2 V. Dark Gr. Brown Fine Sandy Loam Granular, Friable	Scattered stones visible at surface
3-10"	10YR 3/2 Dark Brown Sandy Loam Granular, Friable	
10-16"	10YR 4/3 Brown Very Fine Sandy Loam Granular, Friable	Moisture at 14"
16-24"	10YR 6/4 L. Yellowish Brown Clayey Fine to Medium Sand Granular, Friable	Moist
24-31"	10YR 4/2 Brown Very Fine Sand Granular, Friable	Moist
31-43"	10YR 6/4 L. Yellowish Brown Fine Sand Granular, Friable	Some Redox Depletions



LOCUS PLAN
MAP 212, LOT 27
ANTRIM, NEW HAMPSHIRE

PROPERTY OWNER: MICHAEL OTT, BK 7685 PG 0864 HCRD
STATE SUBDIVISION APPROVAL NO.: 25 ACRES
PREVIOUS CONSTRUCTION APPROVAL NO.: N/A

PROPOSED SEPTIC SYSTEM

ANTRIM WIND ENERGY, LLC

ANTRIM WINDPARK

ANTRIM NEW HAMPSHIRE

TRC 249 WESTERN AVENUE, AUGUSTA, ME 04330, PROJECT NO: 186317, SCALE: 1" = 20', DATE: 1-18-12

REV. B