DRIP IRRIGATION CALCULATIONS:

PER TABLE 1, HYDRAULIC LOADING RATE CHART USING 90 MPI, THE MAXIMUM LOADING RATE IS 0.49 GPD/SQ. FT.

DAILY DESIGN FLOW/LOADING RATE = 450/0.49 = 918.4 SQ. FT.

NO INCREASE IN AREA REQUIRED DUE TO 8% SLOPE

CONVERT TO DRIP = 918.4 X 3 = 2755.2 SQ. FT.

REQUIRED AREA = 2755 SQ. FT.

PROVIDED AREA = 2911 SQ. FT. (NEW REPAIR AREA)

REQUIRED 100% RESERVE AREA = 2411 SQ. FT.

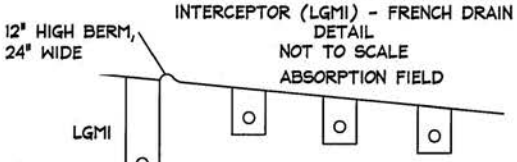
PROVIDED 100% RESERVE AREA = 2945 SQ. FT. (EXISTING RESERVE FROM PREVIOUS PLANS)

NOTES:

1. REPAIR DRAINFIELD LOCATION SHOWN PER PLAT TITLED "SURVEY OF PROPOSED DRAINFIELD ON LOT 14, MASSANUTTEN FARMS WEST RECORDED IN D.B. 271, PG. 457" PREPARED BY HIMELRIGHT & ASSOCIATES, PLLC, DATED JULY 2, 2014. ORIGINAL DRAINFIELD AND WELL TAKEN FROM PLANS PREVIOUSLY PREPARED FOR THIS PROPERTY.

2. SOILS INFORMATION TAKEN FROM SOIL EVALUATION REPORT PREPARED BY PERRY ENVIRONMENTAL CONSULTING, LLC, DATED MAY 23, 2014.

LATERAL GROUNDWATER MOVEMENT INTERCEPTOR (LGMI) - FRENCH DRAIN DETAIL
NOT TO SCALE

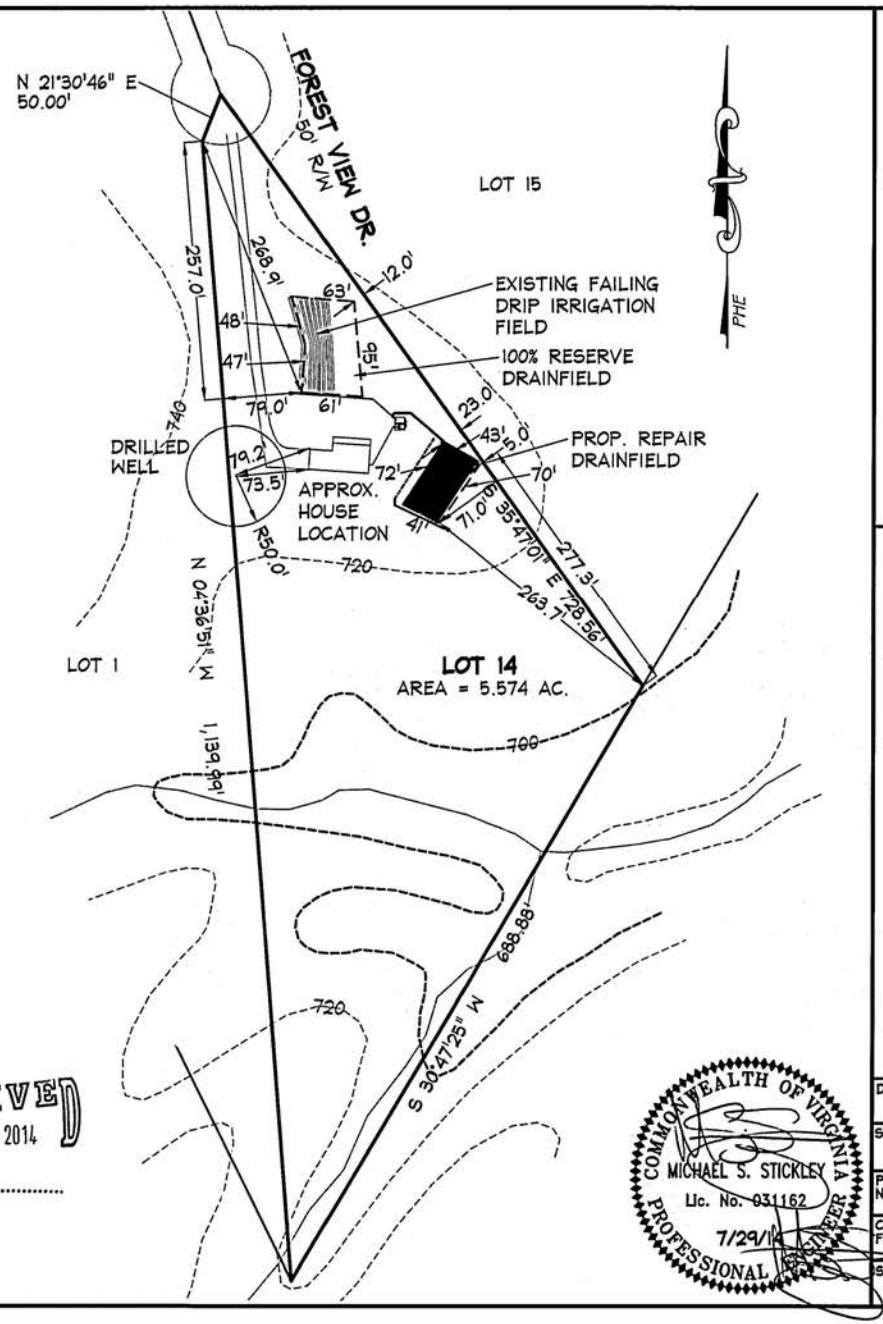


1. LGMI SHALL BE 36" DEEP AND 12" WIDE MIN.

2. INSTALL PLASTIC LINER ON DOWNSLOPE SIDE AND BELOW TRENCH BOTTOM.

3. LGMI SHALL BE PLACED UPSLOPE OF THE ABSORPTION AREA AND CONSTRUCTED TO DISCHARGE INTO A NATURAL OR MANMADE DRAINAGE WAY.

4. LGMI SHALL BE FILLED WITH VDOT #57 OR #4 STONE WITH DRAINPIPE INSTALLED 2" ABOVE BOTTOM OF TRENCH.



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COMMONWEALTH OF VIRGINIA
MICHAEL S. STICKLEY
Lic. No. 031162
7/29/14
PROFESSIONAL ENGINEER

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FRONT ROYAL, VA 22630
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OVERALL PLAN VIEW

MASSANUTTEN FARMS WEST, LOT 14

FORK MAGISTERIAL DISTRICT
WARREN COUNTY, VIRGINIA

DATE	JULY 2014
SCALE	1" = 125'
PROJECT NO.	0833-11
CADD FILE	0833gol
SHEET	1 OF 4