

NOTES:

- ALL ELEVATIONS SHOWN ARE REFERENCED TO NAVD88.
- EXISTING TOPOGRAPHY SHOWN IS THE RESULT OF AN ACTUAL INSTRUMENT SURVEY CONDUCTED BY WILLIAMS & SPARRAGES LLC ON JANUARY 14, 2021 THROUGH JANUARY 12, 2022.
- WETLAND RESOURCE AREA DELINEATED BY PATRICK C. GARNER ON NOVEMBER 11, 2020 AND SEPTEMBER 22, 2021.
- LOCATION OF EXISTING SEPTIC SYSTEM TO BE ABANDONED HAS BEEN LOCATED USING INFORMATION PROVIDED BY THE BOXFORD BOARD OF HEALTH AND SHOULD BE CONSIDERED APPROXIMATE.
- THE EXISTING WELL SHALL BE RE-USED SUBJECT TO MEETING BOARD OF HEALTH CRITERIA.
- THERE ARE NO EXISTING WELLS WITHIN 100' OF THE PROPOSED SEPTIC SYSTEM ACCORDING TO INFORMATION PROVIDED BY THE BOXFORD BOARD OF HEALTH.
- TOTAL PROPOSED IMPERVIOUS AREA = 6,630± (3,300± S.F. INCREASE)  
DRIVEWAY = 3,925± S.F.  
DWELLING & WALKWAY = 2,705±
- TOTAL EXISTING IMPERVIOUS AREA = 3,330± S.F.  
DRIVEWAY = 1,230± S.F.  
DWELLING & WALKWAY = 2,100±
- TOTAL PROPOSED DISTURBANCE = 40,000± S.F. (14,000 EXISTING + 26,000 PROPOSED)  
< 1 ACRE (43,560 S.F.); THEREFORE, STORMWATER PERMIT NOT REQUIRED
- ADDITIONAL TREE PLANTING SPECIES AND LOCATIONS FOR SCREENING FROM LOT OWNED N/F URBAN AS WELL AS THE BUFFER ZONE ENHANCEMENT PLANTINGS PROVIDED BY PATRICK C. GARNER, WETLAND SCIENTIST.

**DISCRETIONARY CUTTING AREA CALCULATIONS:**

EXISTING OVERSTORY WITHIN DISCRETIONARY CUTTING AREA = **22,400± S.F.**  
(POST MAY 19, 1994 EFFECTIVE DATE OF THE REGULATIONS)  
PROPOSED ALTERATIONS WITHIN DISCRETIONARY CUTTING AREA = **7,490± S.F.**  
(POST MAY 19, 1994 EFFECTIVE DATE OF THE REGULATIONS)  
PROPOSED DISCRETIONARY CUTTING AREA (50% MAX.) = **33.4% OKAY**  
(7,490/22400)(100) = 33.4%

**PROPOSED IMPERVIOUS CALCULATIONS**

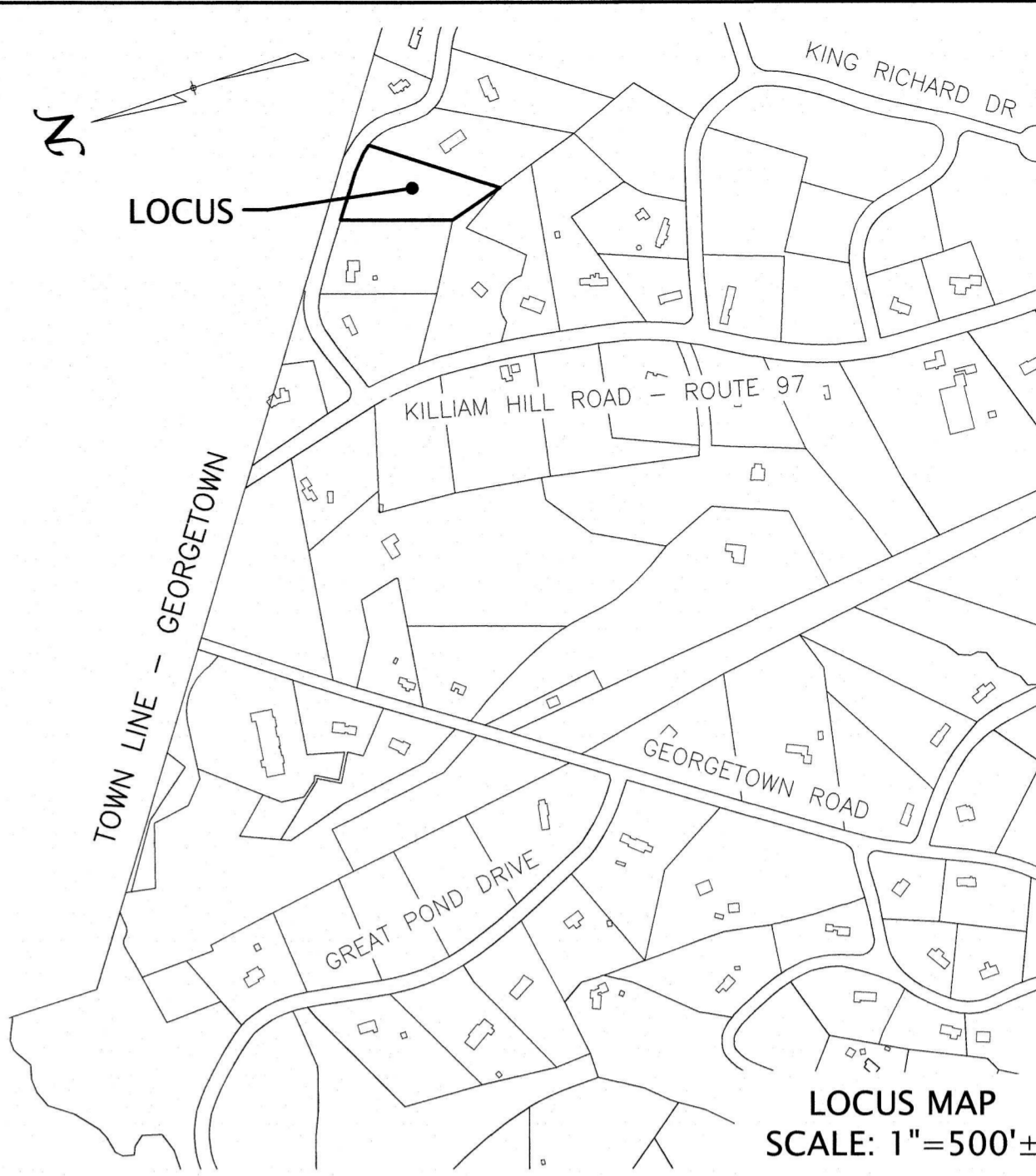
Proposed Increase in Impervious = 3,300± s.f.  
3,300 s.f. x 1.0" Rainfall/12" ft = 275.00 cubic feet

**DRAINAGE CALCULATIONS**

INFILTRATION TRENCH STORAGE VOLUME PROVIDED = 288 C.F. (2'W x 2'D x 180'L x 0.4)  
ASSUME 40% VOID SPACE IN TRENCH (SEE DETAIL)

**ZONE: (RA) RESIDENCE -- AGRICULTURAL DISTRICT**

FRONT SETBACK = 50 FEET  
(NO BUILDING NEED BE SET BACK FURTHER THAN AVERAGE OF BUILDINGS ON EITHER SIDE)  
SIDE SETBACK = 25 FEET  
(BUILDINGS SHALL NOT BE WITHIN 50 FEET OF ANY OTHER BUILDING)  
REAR SETBACK = 25 FEET  
MINIMUM LOT AREA = 2 ACRES  
MAXIMUM LOT BUILDING COVERAGE = 25%  
MINIMUM FRONTAGE = 250 FEET  
MINIMUM LOT WIDTH = 200' DIAMETER  
MINIMUM DEPTH = 50 FEET  
B.F.A. = BUILDING FOOTPRINT AREA



**WILLIAMS & SPARRAGES**  
REGISTERED PROFESSIONAL ENGINEERS  
101 MAIN STREET  
MIDDLETON, MA 01949  
PHONE: 978-329-8200  
FAX: 978-329-8200  
WWW.WSENGINEERS.COM

Owner/Applicant:  
**PAMELA A. MASSAD**  
MANAGER  
104 KING GEORGE DRIVE, LLC

Designed By: PMB  
Drawn By: PMB  
Reviewed By: PMB  
Project Manager: PMB  
Job File Number: BOXF-0095  
Drawing File Folder: BOXF95

Drawing issued for Review Only  
 Drawing issued for Permit  
 Drawing issued for Construction

SEAL

Professional Engineer  
PATRICK C. GARNER  
MASSACHUSETTS  
LICENSE NO. 41815  
EXPIRES 12/31/2025

4-25-22

**SANITARY DISPOSAL SYSTEM PLAN**  
#104 KING GEORGE DRIVE, BOXFORD, MA

0' 10' 20' 40'  
SCALE: 1"=20'

**DRAWING: S-1**

**SHEET 1 OF 3**

JANUARY 19, 2022

6	40'	Buffer Zone Enhancement Area Planting Plan	4/21/2022
4	20'	Discretionary Cutting Area Calculations	4/1/2022
3	10'	Proposed Septic System Reserve Sizing	3/2/2022
2	5'	Runoff Colics, Trench Design, Tree Plantings	2/14/2022

**PROPERTY ADDRESS:**  
104 KING GEORGE DRIVE  
BOXFORD, MA  
PROPERTY ID: 16-01-13

**OWNER:**  
104 KING GEORGE DRIVE, LLC  
370 MAIN STREET, SUITE 1100  
WORCESTER, MA 01608

**DEED REFERENCE:**  
BOOK 35000 PAGE 191  
ESSEX SOUTH REGISTRY OF DEEDS  
LAND COURT CERTIFICATE NO. 86588

**PLAN REFERENCES:**  
PLAN BOOK 94, PLAN 84  
LAND COURT PLAN 29795B  
ESSEX SOUTH REGISTRY OF DEEDS