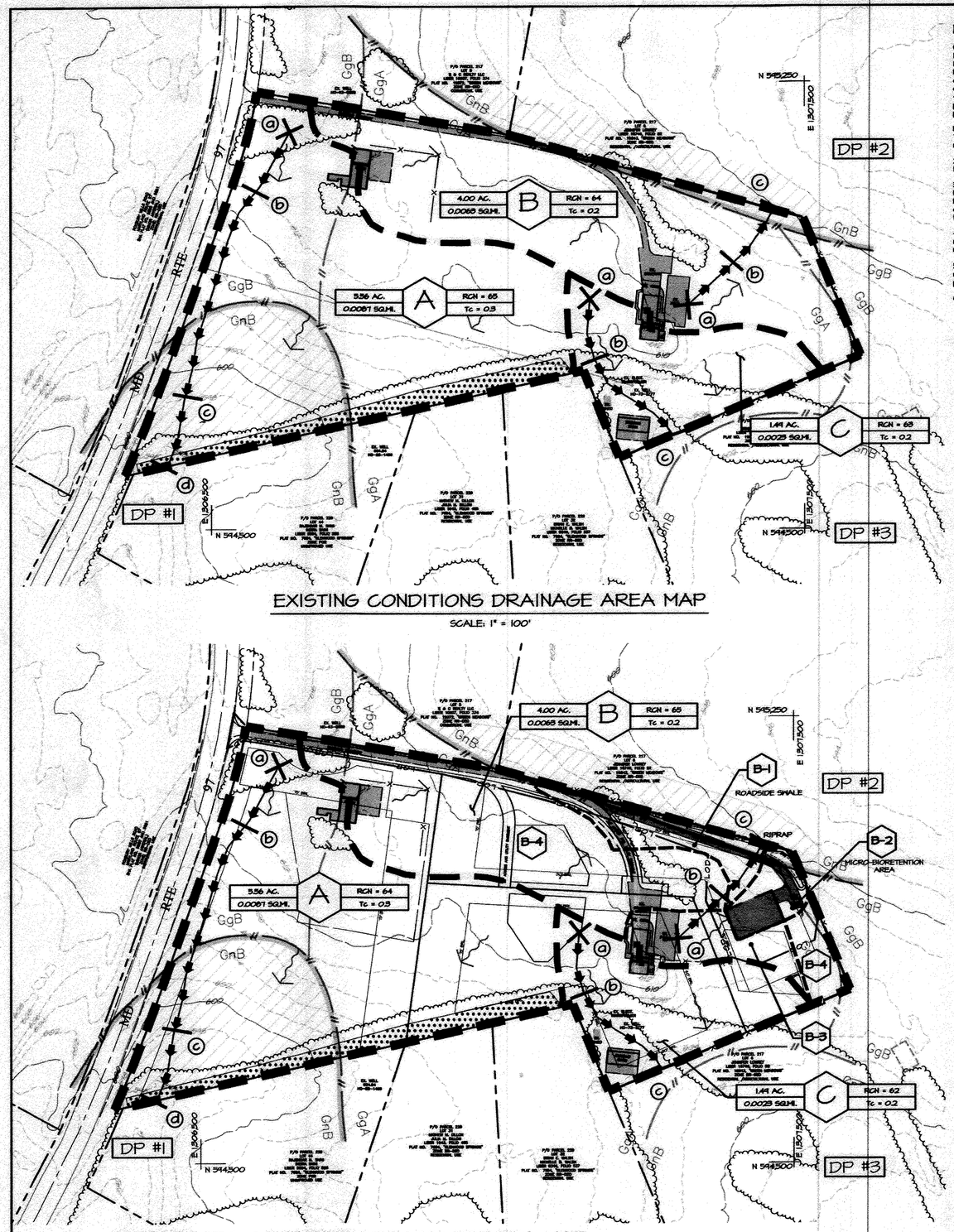


EXISTING CONDITIONS DRAINAGE AREA MAP

SCALE: 1" = 100'

PROPOSED CONDITIONS DRAINAGE AREA MAP

SCALE: 1" = 100'

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Land Development Division	Date 10-3-17
Chief, Engineering Division	Date 10-4-17

MIDDLE PATUXENT RIVER WATERSHED
BRIGHTON DAM WATERSHED

DESIGN NARRATIVE:

GENERAL SITE CONDITIONS:

Lot 1 of 2605 Route 97 is an 11.1 +/- acre site, which is located in the subdivision of Green Meadows in Glenwood, Maryland. Hydrologically, this property is located within the Middle Patuxent River watershed and Brighton Dam watersheds, Use IV-P and Use III-P Waters respectively. The property is currently improved with an existing single family detached dwelling, associated outbuildings, an in-ground swimming pool, walkways, and a driveway. Portions of the land are used for row crops, a tree nursery, and a strawfield. The property is zoned RR-DEO and POR. The site will be subdivided into two 3 +/- acre residential lots and one 4.7 +/- acre commercial parcel, which will be reserved for future development. The existing residence will remain on one of the proposed lots and both will be accessed by the existing driveway which will be widened from 12 to 16 feet. A portion of the property will be placed within Forest Conservation Easements.

1. NATURAL RESOURCE PROTECTION: Disturbance will be limited to what will be required to construct a single family residence. The existing driveway will be widened to provide shared access to the new lot. Forest conservation areas will be created which will provide new wooded regions.

2. MAINTENANCE OF FLOW PATTERNS: The disconnection of rooftop and nonrooftop runoff will direct dispersed discharge along the existing flow patterns to three points of discharge from the site.

3. REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN, ALTERNATIVE SURFACES, AND NONSTRUCTURAL PRACTICES: In order to minimize the amount of new impervious area created by the proposed second residential lot, the existing driveway will be used and widened to allow shared access to the site and new lot. The drainage to the Middle Patuxent watershed is directed over shallow slopes ranging from 2-4.9% on average which is suitable for the incorporation of nonstructural treatment practices for the proposed residential lots.

4. INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO STORMWATER STRATEGY: Erosion and sediment control measures will be located along the perimeter of disturbance in order to maintain the existing shallow slopes for the nonstructural stormwater management practices.

5. IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE (MEP): The required ESD volume is being provided through disconnection of rooftop and nonrooftop runoff, except for the area reserved for proposed future commercial development. ESD will be provided for that area at the time of development.

6. REQUEST FOR A DESIGN MANUAL WAIVER: No waivers are required.

GENERAL NOTES:

1. APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN DOES NOT CONSTITUTE ANY APPROVALS OF SUBSEQUENT SUBDIVISION PLANS, SITE DEVELOPMENT PLANS, FOREST CONSERVATION PLANS AND GRADING OR BUILDING PERMITS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS THAT MAY ALTER THE SITE DESIGN, HOUSE OR STRUCTURE LOCATION, DRIVEWAY LOCATION, GRADING, TREE CLEARING AND/OR OTHER REQUIREMENTS AS THE DEVELOPMENT PLAN PROGRESSES THROUGH THE PLAN REVIEW AND/OR PERMIT APPLICATION PROCESS IN ACCORDANCE WITH THE SUBDIVISION, LAND DEVELOPMENT AND ZONING REGULATIONS.
2. THE SUBJECT PROPERTY IS ZONED POR (PLANNED OFFICE RESEARCH) AND RR-DEO (RURAL RESIDENTIAL).
3. DRIVEWAYS SHALL BE PROVIDED PRIOR TO THE ISSUANCE OF A A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
   - WIDTH: 16' FOR DRIVE SERVING MORE THAN ONE RESIDENCE. 12' FOR DRIVE SERVING ONE RESIDENCE.
   - SURFACE: 6" COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1" - 1 1/2" MIN.)
   - GEOMETRY: MAX. 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS
   - MAINTENANCE: SUFFICIENT TO INSURE ALL WEATHER USE.
4. A FIELD INVESTIGATION FOR THE PRESENCE OR ABSENCE OF NON-TIDAL WETLAND PERFORMED BY KEVIN GARVEY, RLA ON FEBRUARY 4, 2015 DID NOT FIND THE THREE INDICATORS OF HYDROLOGY, SOILS OR VEGETATION REQUIRED BY THE ARMY CORPS OF ENGINEERS.
5. THE EXISTING DWELLING LOCATED ON LOT 8 HILL REMAIN. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLING ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATION REQUIREMENTS.
6. THE CLOSEST DWELLING TO A MAJOR COLLECTOR ROAD IS "100".
7. NOTE: L/F FOR PROTECTIVE COVENANTS, MAINTENANCE OF USE-IN-COMMON DRIVEWAYS, RESERVATIONS OF FOREST CONSERVATION AREAS, ACCESS/PRIVATE UTILITY EASEMENT.
8. CROSS-HATCHED AREA IS PRIVATE SEWAGE EASEMENT AREA. THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 S.F. PER LOT AS REQUIRED BY MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL (COMAR 26.04.03). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
9. TOPOGRAPHY SHOWN IS FROM HOWARD COUNTY GIS DATA 2' CONTOUR INTERVAL AND IS FIELD VERIFIED.
10. BOUNDARY OUTLINE BASED ON FIELD RUN BOUNDARY SURVEY BY D.S. THALER & ASSOCIATES, LLC.
11. FEMA FLOOD INSURANCE RATE MAP 24027C0040D DATED NOVEMBER 6, 2013 SHOWS NO FLOODPLAIN ON THE PROPERTY.
12. A FOREST STAND DELINEATION WAS PERFORMED BY KEVIN GARVEY, RLA, ON FEBRUARY 4, 2015 AND UPDATED APRIL 4, 2017. NO FOREST WAS FOUND ON THIS PROPERTY. THERE IS A MATURE FOREST SOUTH OF THE SOUTHERN PROPERTY LINE.
13. THERE ARE SEVEN (7) SPECIMEN TREES LOCATED ON THE PROPERTY, SEE EXISTING CONDITIONS SHEET 2. NO REMOVAL OF SPECIMEN TREES IS PROPOSED.
14. NO SLOPES STEEPER THAN 15% ARE FOUND ON THIS PROPERTY.
15. THE MARYLAND RESOURCE INVENTORY NOR THE NATIONAL HERITAGE PROGRAM IDENTIFIED CRITICAL HABITATS WITHIN OR ADJACENT TO THE SUBJECT PROPERTY. A LETTER FROM MARYLAND DEPARTMENT OF NATURAL RESOURCES DATED FEBRUARY 23, 2016 CONFIRMS THAT NO RARE, THREATENED OR ENDANGERED SPECIES HAVE BEEN IDENTIFIED ON THIS SITE.
16. NO PERENNIAL OR INTERMITTENT STREAMS ARE FOUND ON THIS PROPERTY.
17. THERE ARE NO HISTORIC SITES LISTED ON THE FEDERAL HISTORIC REGISTER OF HISTORIC PLACES, MARYLAND INVENTORY OF HISTORIC PROPERTIES OR HOWARD COUNTY HISTORIC SITES ON THE SUBJECT PROPERTY.
18. THIS PROPERTY IS LOCATED ON A RIDGE WITH THE NORTHEAST PORTION IN THE MIDDLE PATUXENT WATERSHED AND SOUTH WESTERN PORTION IN THE BRIGHTON DAM WATERSHED.

PROPOSED DRAINAGE AREA SUMMARY TABLE

	PRACTICE	DRAINAGE AREA TOTAL (sf)	IMPERVIOUS AREA (sf)	ESDv PROVIDED (cf)	Pe PROVIDED
DRAINAGE AREA A	**	242,321	1880	**	**
DRAINAGE AREA B-1	GRASS SWALE	20,847	5,587	436	1.14"
DRAINAGE AREA B-2	DISCONNECTION	21,882	5,617	523	1.0"
DRAINAGE AREA B-3	MICRO-BIORETENTION AREA	12,388	6,786	1,411	2.1"
DRAINAGE AREA B-4	DISCONNECTION	109,185	9,852	1,220	1.0"
DRAINAGE AREA C	DISCONNECTION	64,917	3,720	566	1.0"

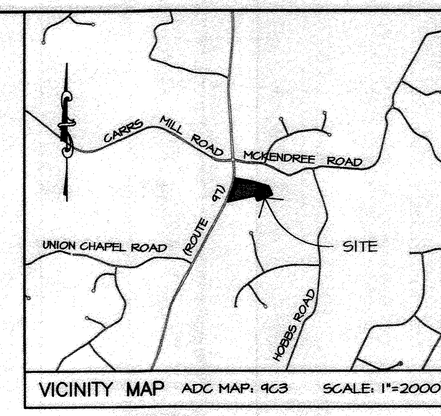
** ESD TO BE PROVIDED AT THE TIME OF DEVELOPMENT.

ALTERNATIVE COMPLIANCE REQUEST:

ALTERNATIVE COMPLIANCE FROM SECTION 16.120.a(2) NONRESIDENTIAL LOTS SHALL NOT DERIVE DIRECT ACCESS FROM ARTERIAL HIGHWAYS AND SECTION 16.120.c(2)1 SINGLE FAMILY DETACHED LOTS SHALL HAVE A MINIMUM OF 20 FEET OF PUBLIC ROAD FRONTAGE (WP-17-127 GREEN MEADOWS - LOT 1) WAS APPROVED ON JUNE 29, 2017 SUBJECT TO THE FOLLOWING CONDITIONS:

1. A NOTE SHALL BE PLACED ON THE FUTURE SUBDIVISION PLAT STATING THAT ACCESS IS RESTRICTED ALONG ROUTE 97 FRONTAGE EXCEPT FOR THE APPROVED USE-IN-COMMON DRIVEWAY ENTRANCE FOR THE TWO RESIDENTIAL LOTS AND THAT ACCESS POINTS WILL BE DETERMINED AND APPROVED FOR THE COMMERCIAL PARCEL UPON SUBMISSION OF A DEVELOPMENT PLAN FOR PARCEL "A".
2. A 24' WIDE USE IN COMMON ACCESS EASEMENT FOR THE PROPOSED LOT 7 SHALL BE RECORDED ON THE FUTURE SUBDIVISION PLAT AND A USE-IN-COMMON MAINTENANCE AGREEMENT SHALL BE RECORDED IN LAND RECORDS SUBSEQUENTLY WITH THE RECORDATION OF THE SUBDIVISION PLAT.
3. THE SUBMISSION OF A FINAL SUBDIVISION PLAN IS REQUIRED TO RESUBDIVIDE LOT 1 INTO LOTS 6 & 7 AND PARCEL "A".
4. COMPLIANCE WITH THE ATTACHED STATE HIGHWAY ADMINISTRATION COMMENTS.

ALTERNATE COMPLIANCE FROM SECTION 16.120(b)(4)(iii)(b) WHICH STATES THAT FOREST CONSERVATION EASEMENTS ARE NOT PERMITTED ON RESIDENTIAL LOTS LESS THAN 10 ACRES IN SIZE WAS DENIED ON JUNE 29, 2017.



VICINITY MAP ADC MAP: 9C3 SCALE: 1"=2000'

LEGEND

- BOUNDARY LINE
- LOT LINE
- EASEMENT
- B.R.L. — BUILDING RESTRICTION LINE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- 10 — PROPOSED CONTOUR MAJOR
- 11 — PROPOSED CONTOUR MINOR
- EXISTING TREE LINE
- PROPOSED TREE LINE
- FB — FOREST BUFFER
- STREAM
- FP — FLOODPLAIN
- W — WETLAND
- WETLAND BUFFER — WETLAND BUFFER
- GnD — SOILS
- M-3 — ZONING DISTRICT LINE
- LOD — LIMIT OF DISTURBANCE
- EXISTING WATER LINE
- EXISTING SANITARY LINE
- PROPOSED CURB AND GUTTER
- CONCRETE PAVING
- SEPTIC RESERVE AREA
- SPECIMEN TREE
- W — EXISTING WELL
- LIMIT OF STUDY
- DRAINAGE AREA LIMITS
- A — DRAINAGE AREA DESIGNATION
- e — TIME OF CONCENTRATION PATH DESIGNATION
- TIME OF CONCENTRATION PATH
- 'B' SOIL
- 'C' SOIL
- EX. IMPERVIOUS
- PROP. IMPERVIOUS
- WOODS
- OPEN SPACE

STATE OF MARYLAND — MARGELESTE MILLER — No. 41409 — PROFESSIONAL ENGINEER
9/18/17

SHEET INDEX

SHEET NO.	DRAWING
1	COVER SHEET/DRAINAGE AREA MAPS
2	EXISTING CONDITIONS
3	CONCEPT PLAN

0' 50' 100' 200'
SCALE: 1"=100'

NORTH

Professional Certification:

"I hereby certify these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No.: 41409, Expiration Date: 1/08/2018

STATE OF MARYLAND — MARGELESTE MILLER — No. 41409 — PROFESSIONAL ENGINEER

Signature — Date 9/18/17

JOB NUMBER:	4177
DRAWN BY:	KG
DESIGNED BY:	MM
CHECKED BY:	MM

DS Thaler & ASSOCIATES, INC.
CIVIL AND ENVIRONMENTAL ENGINEERS, SURVEYORS
LANDSCAPE ARCHITECTS & LAND PLANNERS
7115 AMBASSADOR ROAD
P.O. BOX 47428
BALTIMORE, MARYLAND 21244-7428
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REVISIONS

Date	Description

OWNER/DEVELOPER
KEVIN & MARIA GARVEY
2605 ROUTE 97
GLENWOOD, MD 21738

ENVIRONMENTAL CONCEPT PLAN
COVER SHEET/
DRAINAGE AREA MAPS
GREEN MEADOWS
2605 ROUTE 97
GLENWOOD, MD 21738
LOT 7 AND 8, AND PARCEL A — ZONING: POR AND RR-DEO
TAX MAP: 14 GRID: 11 — PARCEL: 217
ELECTION DISTRICT: 4 — HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
DATE: SEPT. 18, 2017
SHEET: 1 OF 3

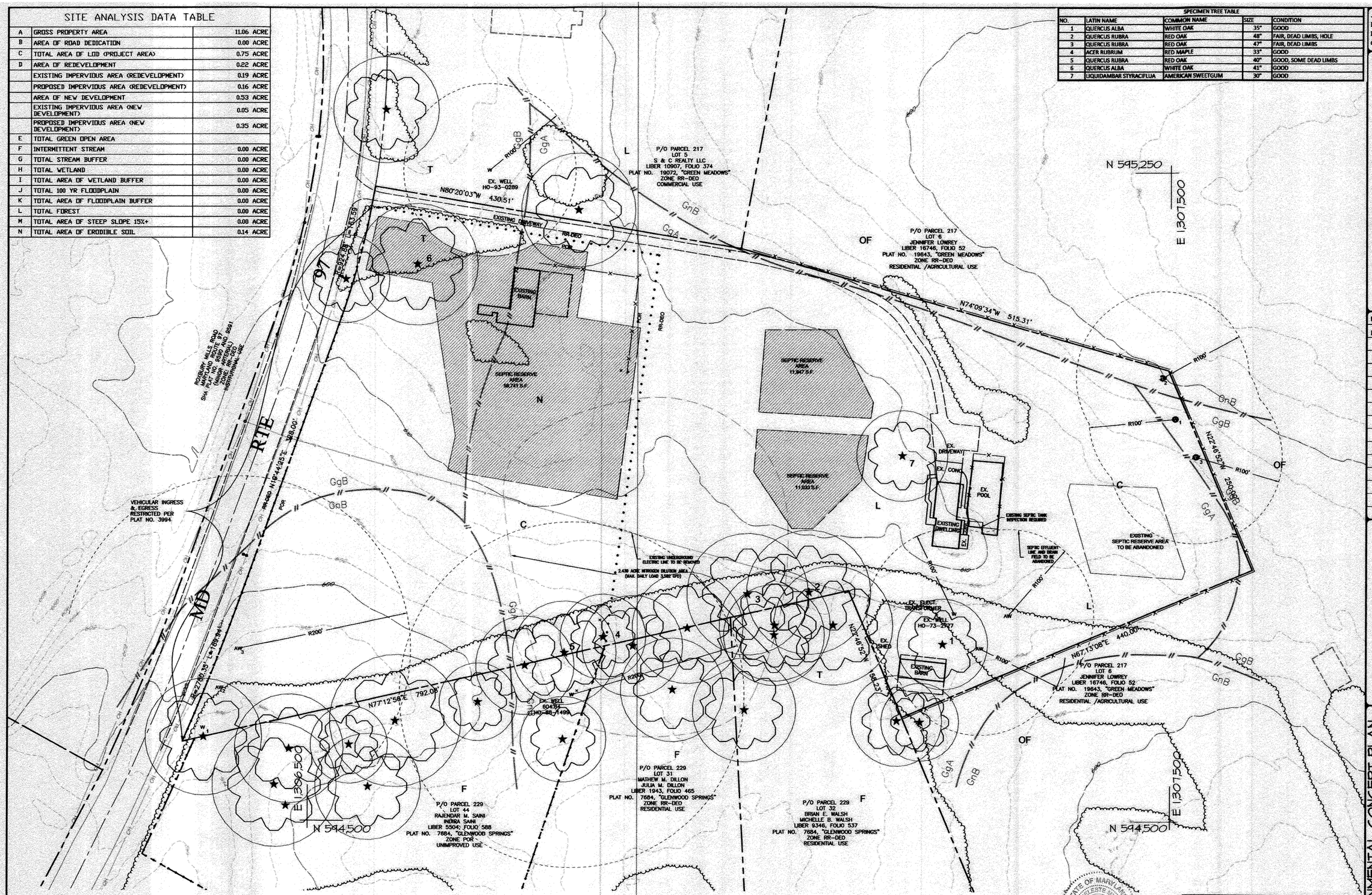
ECP-17-054

SITE ANALYSIS DATA TABLE

A	GROSS PROPERTY AREA	11.06 ACRE
B	AREA OF ROAD DEDICATION	0.00 ACRE
C	TOTAL AREA OF LOD (PROJECT AREA)	0.75 ACRE
D	AREA OF REDEVELOPMENT	0.22 ACRE
	EXISTING IMPERVIOUS AREA (REDEVELOPMENT)	0.19 ACRE
	PROPOSED IMPERVIOUS AREA (REDEVELOPMENT)	0.16 ACRE
	AREA OF NEW DEVELOPMENT	0.53 ACRE
	EXISTING IMPERVIOUS AREA (NEW DEVELOPMENT)	0.05 ACRE
	PROPOSED IMPERVIOUS AREA (NEW DEVELOPMENT)	0.35 ACRE
E	TOTAL GREEN OPEN AREA	
F	INTERMITTENT STREAM	0.00 ACRE
G	TOTAL STREAM BUFFER	0.00 ACRE
H	TOTAL WETLAND	0.00 ACRE
I	TOTAL AREA OF WETLAND BUFFER	0.00 ACRE
J	TOTAL 100 YR FLOODPLAIN	0.00 ACRE
K	TOTAL AREA OF FLOODPLAIN BUFFER	0.00 ACRE
L	TOTAL FOREST	0.00 ACRE
M	TOTAL AREA OF STEEP SLOPE 15%+	0.00 ACRE
N	TOTAL AREA OF ERODIBLE SOIL	0.14 ACRE

SPECIMEN TREE TABLE

NO.	LATIN NAME	COMMON NAME	SIZE	CONDITION
1	QUERCUS ALBA	WHITE OAK	35"	GOOD
2	QUERCUS RUBRA	RED OAK	48"	FAIR, DEAD LIMBS, HOLE
3	QUERCUS RUBRA	RED OAK	47"	FAIR, DEAD LIMBS
4	ACER RUBRUM	RED MAPLE	33"	GOOD
5	QUERCUS RUBRA	RED OAK	40"	GOOD, SOME DEAD LIMBS
6	QUERCUS ALBA	WHITE OAK	41"	GOOD
7	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEETGUM	30"	GOOD



SOILS TABLE

SYMBOL	SOIL NAME	CLASS	K FACTOR	HIGHLY ERODABLE
GgA	GLENELG LOAM, 0 TO 3% SLOPES	B	.28	NO
GgB	GLENELG LOAM, 3-8% SLOPES	B	.24	NO
GnB	GLENVILLE-BAILE SILT LOAM 0-8% SLOPES	C	.43	YES

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Land Development Division — Date 10/3/17

Chief, Engineering Division — Date 10.4.17

STATE OF MARYLAND — MANCILESTE MILLER — No. 41409 — PROFESSIONAL ENGINEER

9/28/17

0' 25' 50' 100'

SCALE: 1"=50'

NORTH

Professional Certification:

"I hereby certify these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No.: 41409 Expiration Date: 01/08/2018

STATE OF MARYLAND — MANCILESTE MILLER — No. 41409 — PROFESSIONAL ENGINEER

9/18/2017

JOB NUMBER:	4177
DRAWN BY:	KG
DESIGNED BY:	MM
CHECKED BY:	MM

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REVISIONS

Date	Description

OWNER/DEVELOPER

KEVIN & MARIA GARVEY
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GLENWOOD, MD 21738

ENVIRONMENTAL CONCEPT PLAN
EXISTING CONDITIONS
GREEN MEADOWS

2605 ROUTE 97
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LOT 7 AND 8, AND PARCEL A — ZONING: POR AND RR-DEO
TAX MAP: 14 GRID: 11 — PARCEL: 217
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SCALE:	AS SHOWN
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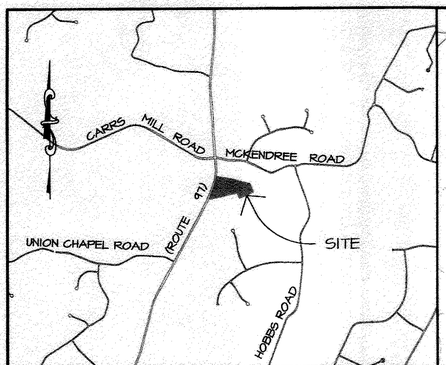
SHEET:	2 OF 3

Name: U:\Kte 97, 2603\dwg\Planning\Final\ECP\KG7_ECP-Sht01.dwg Layout:ECP-02 Sep 18, 2017-11:34am KTG

ECP-17-054



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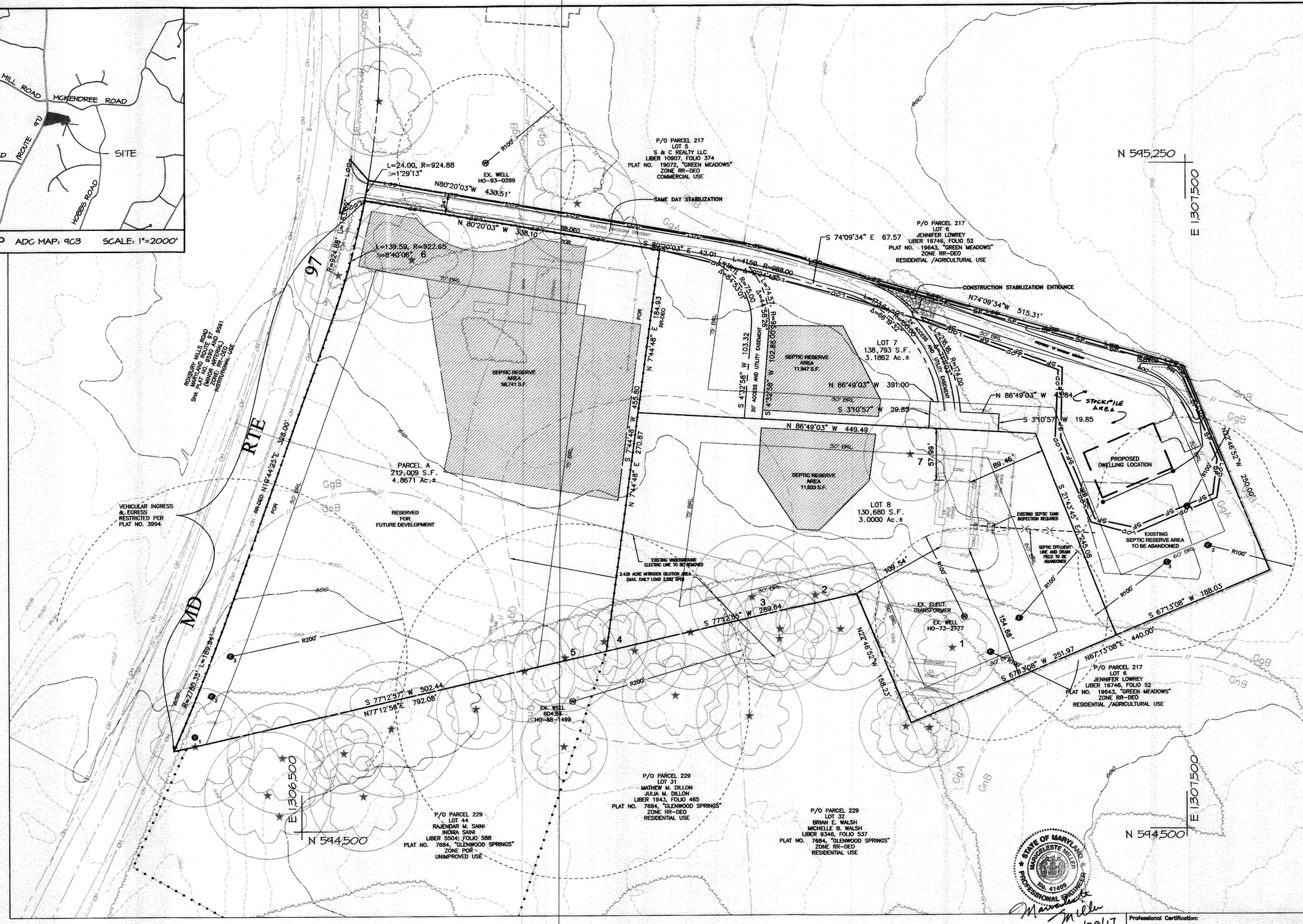

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GLENWOOD, MD 21738

ENVIRONMENTAL CONCEPT PLAN
CONCEPT SITE & SEDIMENT CONTROL PLAN
GREEN MEADOWS

2605 ROUTE 97
GLENWOOD, MD 21738

LOT 7 AND 8, AND PARCEL A
TAX MAP: 14 GRID: 11
ELECTION DISTRICT: 4

ZONING: RCR AND RR-DEO
PARCEL: 217
HOWARD COUNTY, MARYLAND

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Kent Sheubrooks — 10/3/17
Chief, Land Development Division — Date

10.4.17
Chief, Engineering Division — Date

STATE OF MARYLAND
MARICELESTE MILLER
No. 41409
PROFESSIONAL ENGINEER

9/20/17

Professional Certification:

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