

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

3430 Court House Drive

Ellicott City, Maryland 21043

410-313-2350

Voice/Relay

Amy Gowan, Director

FAX 410-313-3467

TECHNICAL STAFF REPORT

Planning Board Quasi-Judicial Public Hearing of June 3, 2021

<u>Case No./Petitioner:</u> PB Case No. 452 / Clarksville NL, LLC

Project Name: Clarksville Crossing, SP-20-001

Phase 2, Lots 5-12, Non-Buildable Preservation Parcels A and B

DPZ Planner: Brenda Luber, (410) 313-4343, BLuber@howardcountymd.gov

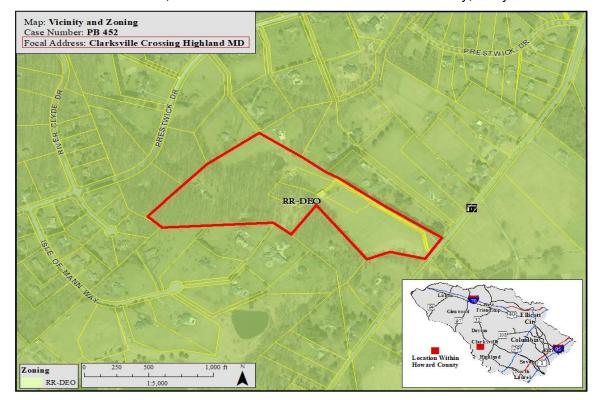
Request: For Planning Board approval of a Preliminary Equivalent Sketch Plan (SP-20-

001) for a 23.85-acre resubdivision that creates eight buildable lots, and two non-buildable preservation parcels and associated site improvements. The property is zoned "RR-DEO" (Rural Residential – Density Exchange Option) and is in the Tier III Growth Area; therefore, it is subject to Maryland Senate Bill 236, The Sustainable Growth and Agricultural Preservation Act of 2012. The sole Planning Board review and approval criterion is based on the "potential environmental issues or a natural resources inventory related to the proposed major residential

subdivision".

Location: The property is located on the west side of Maryland Route 108 and east side of Prestwick Drive. The property may be found on Tax Map 34, Grid 23, Parcel 301,

Lot 3, in the Fifth Election District of Howard County, Maryland.



Vicinal Properties:

Surrounding properties are zoned RR-DEO and designated Tier III.

<u>North</u> – Improved residential parcels – Parcels 319, Lots 10 and 16 of the Greene Fields subdivision.

<u>East</u> – Across existing Maryland Route 108 are improved residential lots – Parcels 218 and Lot 1 of the Swann Property subdivision.

<u>South</u> – Improved residential parcels – Parcels 190, 80 and Lots 4, 6 and 7 of the Koandah Garden Estates subdivision and Lot 71 of the Highland Lake subdivision.

West – Improved residential Lots 16, 18 and 19 of the Greene Fields subdivision.

Legal Notice:

The legal notice was published in The Howard County Times and The Baltimore Sun 30 days prior to the hearing. The property was properly posted and verified by DPZ.

Regulatory Compliance:

The project must comply with the Amended Fifth Edition of the Subdivision and Land Development Regulations, the Zoning Regulations (effective October 6, 2013) and Zoning Map, the Howard County Design Manual, the Adequate Public Facilities Ordinance, the Forest Conservation Manual, and the Landscape Manual.

History:

- ECP-13-077, Environmental Concept Plan Approved on November 15, 2013.
- **F-18-081, Phase 1** Recorded on August 19, 2019 creating 4 residential lots.
- WP-18-099 (Phase 1) Approved on June 13, 2018 for the removal of 12 specimen trees and for environmental disturbances for the proposed shared driveway to serve the lots that access Maryland Route 108.
- WP-20-016 (Phase 2) Approved on September 17, 2020 for the removal of 13 of the 104 specimen trees on-site and on September 15, 2020 to allow Lots 7-12 to share an access easement instead of providing road frontage for Phase 2.

Analysis:

Site Improvements – Lots 1-4 were created as part of Phase 1 (F-18-081) and are existing recorded lots. Because Phase 1 was a minor subdivision, approval by the Planning Board was not required. Under Phase 2, recorded Lot 3 is being resubdivided into a major subdivision to create Lots 5-12 and Non-Buildable Preservation Parcels A and B. Lot 5, Lot 6, and Non-Buildable Preservation Parcel A will be accessed by the shared driveway to MD Route 108 constructed under Phase 1. Lots 7-12 and Non-Buildable Preservation Parcel B will be accessed by a proposed shared driveway from Prestwick Drive. Non-Buildable Preservation B bisects the property and will contain forest conservation easements, stream, wetlands and their buffers. Non-Buildable Preservation Parcel A is located along the frontage of MD Route 108 and will contain forest conservation easements, stream, wetlands, their buffers and 100-year floodplain. To protect these environmental features, two shared driveways are being provided.

Setbacks – The development complies with the "RR" zoning setback requirements.

Storm Water Management – The development complies with the Stormwater Management Act of 2007 by providing Environmental Site Design (ESD) to the maximum extent practicable (MEP). SWM will include non-rooftop disconnects, drywells and micro bio-retention facilities, in accordance with the MDE Stormwater Design Manual.

Environmental Considerations – The forest conservation easements, 100-year floodplain, stream, wetlands and their buffers will be contained within the non-buildable preservation parcels.

Landscaping - Landscaping complies with the Howard County Landscape Manual and Design Criteria.

Forest Conservation - The forest conservation obligation was satisfied under Phase 1 with 3.65 acres of on-site retention, 5.30 acres of on-site planting, and 0.3 acres at a forest mitigation bank. The on-site forest conservation easements will be contained within the Non-Buildable Preservation Parcels.

Adequate Public Facilities – Allocations in the Rural West Allocation Area are currently available but will not be finalized until the project has been approved by the Planning Board and the Decision and Order has been executed. This plan complies with acceptable levels of service established by Adequate Road Facilities requirements. The APFO traffic study for this project was approved as part of SP-20-001.

Development Criteria – This plan complies with the Howard County Subdivision and Land Development Regulations and the October 6, 2013, Howard County Zoning Ordinance.

Planning Board Criteria:

In its review of the residential major subdivision within Growth Tier III, the Planning Board must consider the following:

1. The cost of providing local governmental services to the residential major subdivision unless a local jurisdiction's Adequate Public Facilities Ordinance already requires a review of government services.

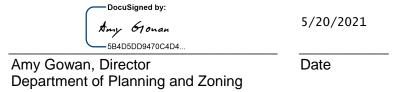
Howard County has an Adequate Public Facilities ordinance; therefore, this requirement has been met.

2. The potential environmental issues or a natural resources inventory related to the proposed residential major subdivision.

There does not appear to be potential environmental issues or impacts to the on-site intermittent stream, stream bank buffer, wetlands, wetland buffer, and floodplain (collectively, the environmental features), since they are contained within Non-Buildable Preservation Parcels A and B. The proposed residential major subdivision does not encroach into or modify these identified natural resources.

Forest Conservation for this major subdivision was satisfied under the Phase I which included 3.65 acres of on-site retention, 5.30 acres of on-site planting, and 0.3 acres at a forest mitigation bank. The Forest Conservation easements are located to include the stream bank and wetland buffers, floodplain and steep slopes which are identified as priority forest retention areas in the regulations. Of the 104 specimen trees on this site,

22 specimen trees were requested for removal in order to accommodate this major subdivision. Alternative compliance to the regulations was granted to approve removal of 13 specimen trees by the Director of Planning and Zoning, Director of Recreation and Parks, and Administrator of the Office of Community Sustainability after requiring the design be modified to minimize tree removal. Approval was based upon the Director's finding that there would be an unwarranted hardship if those trees were to remain. As mitigation, the development will plant 26 trees, each with a 3-inch DBH as mitigation to specifically replace those trees lost.



GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- 2. SUBJECT PROPERTY ZONED RR-DEO PER THE 10-6-2013 COMPREHENSIVE ZONING PLAN
- 3. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT
- 5. TRACT BOUNDARY IS BASED ON FIELD RUN BOUNDARY SURVEY PERFORMED ON OR ABOUT SEPTEMBER 25, 2016
 BY RENICHMARK ENCONFERING, INC.
- 6. TOPOGRAPHY SHOWN IS BASED ON FIELD-RUN SURVEY PERFORMED ON OR ABOUT AUGUST, 2017 BY RENCHMARK ENGINEERING, INC.
- 9. THE GEOTECHNICAL REPORTS WERE PREPARED BY HILLUS-CARNES ENGINEERING ASSOCIATES, INC. IN APRIL, 2007 AND BY GEOLAB GEOTECHNICAL LABORATORIES, INC. IN OCTOBER, 2013.

- 12. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THIS SITE.
- 13. THIS SITE IS NOT LOCATED WITHIN THE METROPOLITIAN DISTRICT, WATER AND SEWER WILL BE PRIVATE ON-SITE
 FACILITIES AND IN ACCORDANCE WITH THE PERCOLATION CERTIFICATION PLAN APPROVED AS PART OF SP-07-013
 AND AS PROVED.
- 15. A TRAFFIC STUDY IS REQUIRED FOR THIS SUBDIMISION, IT IS PROVIDED BY MARS GROUP, INC., DATED JUNE. 2018.

- 19. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIMISION AT (410)-313-1880 AT LEAST FIVE (5) WORKING DAYS PROOF TO THE START OF WORK.

- 23. THIS AREA DESIGNATES A PRIVATE SEMAND DEPOSAL AREA OF AT LEAST 10,000 SQUARE FEET AS RECORDED BY THE MARTHAND DEPARTMENT OF THE EMMONAUDIT FOR RESTRICTED. THIS SEMAND SEMAND SOURCES LIMPROPERTIES OF ANY NUTURE IN THIS AREA ARE DESIGNED. THE SEMAND SEMAND SEMAND SOURCES LIMPROPERTIES OF ANY NUTURE IN THIS AREA ARE DEPOSAL AREA COUNTY HEALTH OFFICER SHALL HAVE AUTHORIST TO GRAVIT ADJUSTMENTS TO THE PRIVATE SEMAND EDROSAL AREA RECORDANION OF A REVISED SEMAND EDROSAL AREA SHALL HOT BE RESESSARY.
- 24. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARTLAND DEPARTMENT OF THE EMPRONMENT.
- 25. ALL WELLS AND SEPTIC FIELDS WITHIN 100 FEET OF THE PROPERTY HAVE BEEN SHOWN.
- 26. AL WILLS AND TO BE OFFILID FROM TO SUBJECT OF THE RECORD PLAT FOR SHOWLUSE. I IS THE DESCRIPTION OF THE PROPOSEDULT TO SCHOULD THE WELL DISTLUSE FROM TO THE FINAL THAT DISSISSION, IT WILL SHOWLD FOR THE PROPOSED TO SCHOOL THE WELL DISTLUSE FROM THE FINAL THAT DISTRIBUTES OF THE WILL DISTLUSE FROM THE FINAL THE SCHOOL PLAT.
- 27. WANER PETITION WP-13-075. A REQUEST TO WAYE SUBSECTIONS 18.144(K)(3)(I) OF THE HOWARD COUNTY SUBDINISON AND LAND DEVELOPMENT RECULATIONS WAS APPROVED ON DECEMBER 20, 2012 SUBJECT TO THE FOLLOWING COMPONES: i conditions: He environmental concept plan was submitted 30—days prior to the submission of the final

- DEFARIZATION.

 SERVICES RETITION, WP-14-006, A REDUEST TO WAVE SUBSECTIONS 16.144(K)(3)(I) OF THE HOWARD COUNTY SUBDIVISION AND LAND, DEVELOPMENT REGULATIONS WAS APPROVED ON AUGUST 22, 2013 SUBJECT TO THE FOLLOWING THE PROPERTY OF THE SUBSECTION OF THE THE CURRENT ENVIRONMENTAL SITE DESIGN (ESD) REQUESTED HEN OF THE FOLLOWING THE WAY 4, 2013 MCE CURRENT ENVIRONMENTAL SITE DESIGN (ESD) REQUESTED HEND PRODUCT'S DELOMBERSON TO MEET THE COUNTY OF THE PROPERTY OF THE WAY 4, 2013 MCE CURRENT ENTRE ON DECIDING HEND AUGUST OF THE FRAIL PLAN SUBMISSION WAS SUBMITTED TO DOT OF FRAIL PLAN BURNASION WAS SUBMITTED TO DOT OF FRAIL PLAN SUBMISSION WAS SUBMITTED TO THE PROPERTY SUBMISSION OF THE PROPERTY SUBMISSION WAS SUBMITTED TO THE PLAN SUBMISSION WAS SUBMITTED TO THE PROPERTY SUBMISSION WAS SUBMISS

SITE DATA TABLILATION

- SITE DATA TABULATION

 1) GENERAL SITE DATA

 0. PRESENT ZONING: RR-DEO

 1. LOCATION: TAX MAP 34 GRID 23 PARCEL 301

 1. APPLICABLE DPZ FILE REFERENCES: ECP-13-077,

 SP-07-013, F-14-048, WP-13-075, WP-14-006,

 WP-14-053, WP-18-099, F-18-081, WP-20-016

 1. DEED REFERENCE: L 18416 F. 0195

 1. PROPOSED USE OF SITE: 8 SPD LOTS;

 2. NON-BULDBUE PRESENTATION PARCELS

 1. PROPOSED WATER AND SEWER:

 PRIVATE WATER AND SEWER:

 PRIVATE WATER AND PRIVATE SEWER, SYSTEMS
- PRIVATE WATER AND PRIVATE SEVER. SYSTEMS

 2) AREA TABULATION

 0. TOTAL AREA OF OVERALL SITE

 1. AREA OF 100 YEAR FLOODPLAIN (APPROX.)

 2.10 Ac.±

 AREA OF STEEP SLOPES (25% OR GREATER)

 1.16 Ac.±

 AREA OF STEEP SLOPES (25% OR GREATER)

 1.16 Ac.±

 AREA OF STEEP SLOPES LESS THAN 10 VEXT. FEET

 1.16 AC.±

 1.17 AC.±

 1.18 TABLE OF STEEP SLOPES (25% OR GREATER)

 1.18 TABLE OF THIS FLAN SUBMISSION

 1.18 TABLE OF THIS FLAN SUBMISSION

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 1.18 TABLE OF PROPOSED BUILDREE LOTS

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PLANNING DIRECTOR

- 3) DENSITY TABULATION

 0. NET AREA OF OVERALL SITE.

 1. TOTAL NUMBER OF LOTS ALLOWED PER ZONING

 1. UNIT PER 4.25 GROSS ACRES ALLOWED BY RIGHT.

 2. TOTAL NUMBER OF LOWAY PER DEO PROVISION.

 1. UNIT PER 2. DEL ACRES (AUX) PER DEO PROVISION.

 1. TOTAL NUMBER OF LOWAY PER DEO PROVISION.

 1. TOTAL NUMBER OF SUBJISSION AND F-18-081

 1. TOTAL NUMBER OF NON-BUILDABLE PRESERVATION

 2. TOTAL NUMBER OF BUILDABLE PRESERVATION

 2. TOTAL NUMBER OF BUILDABLE PRESERVATION PARCELS PROPOSED ON THIS SUBBUSSION.

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 - TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

22. WAVER PETITION, WP-14-953, WAS APPROVED ON JANUARY 8, 2014 TO SECTION 18.118(c)(1) MOI 18.118(c)(2)(1) WHICH STREETS GRAUNG, ERIOVAL OF VECTATING COURT AND BEES, PHANG AND DES STRUCTURES SHALL NOT SEP FERRITED WITHIN 25 OF A WITHINFITT STRUCTURES, SECTION 18.128(c)(4)(d)) WHICH PROVIDED STORM BUFFERS ON RESIDENTIAL LOTS LESS THAN 10 ACRES. AND SECTION 18.128(c)(4)(d)) WHICH PROVIDED STREAM BUFFERS ON RESIDENTIAL LOTS LESS THAN 10 ACRES. AND SECTION 18.129(c)(4)(d)) WHICH PROVIDED STRUCTURE APPROVAL OF THE STRUCTURE SECTION SECTION 19.128 STRUCTURE STRUCTURES OF THE STRUCTURE SECTION OF THE WAVER FOR SECREMIN TERM EMOVIAL, IS AN EXCELSION THE STRUCTURE SECTION SECTION OF WAVER FOR SECREMIN TERM EMOVIAL SAME REQUIRED SECTION SEP FRACET WOULD BE CONSIDERED GRAWN-FATHERD.

1. THE APPLICANT MUST CONTACT MOE FOR ANY MECESSARY FERMITS FOR DISTURBANCES TO THE DYNORMHERITAL TO THE TRANSPORT HOLD TRANSPORT HOUSE MUST BE ADDED TO ALL PLAN SUBMESSED UNDER 14-4-048 AND CET 13-075. WE ARE AND THE DEVLOPMENT DISDESSING DYNORM SECTION OF WAVER PETITION WP-14-053, XA A GENERAL NOTE TO INCLUDE REQUIRES SECTIONS OF THE REQULATIONS OF ASSOCIATED WITH THE WAVER OF ASSOCIATED WITH THE WAVER OF THE SECTION OF THE MUST BE ADDED TO A SECTION OF THE REQULATIONS OF THE REQULATIONS OF THE SECTION OF THE REQULATIONS AND DATE. ASSOCIATED WITH THE WAVER OF THE PROVIDED CONTROL OF WAVER PETITION WP-14-053, XA A GENERAL NOTE TO INCLUDE REQUIRES SECTIONS OF THE REQULATIONS AND DATE. ASSOCIATED WITH THE WAVER OF THE PROVIDED CONTROL OF WAVER PETITION WP-14-053, XD -14-068, AND WP-14-053 HAVE DICKEDED THE MUST DATE.

1. DRIVEWAYS SHALL BE PROMBED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERIUT FOR ANY NEW MELLINGS FOR FIRE AND DELERGING VEHICLES FER THE FOLLOWING MINIMUM REQUIREMENTS:
WIGHT - 12" AND (16" SERVING WOME THAN ONE RESIDENCE).
SURFACE - 6" OF COMPACT CRUZHER RUR BASE WITH TAR AND CHIP CONTAIN.
SURFACE - 6" OF COMPACT CRUZHER RUR BASE WITH TAR AND CHIP CONTAIN RUBUS.
SURFACE - 6" OF COMPACT CRUZHER RUR BASE WITH TAR AND CHIP CONTAIN RUBUS.
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DELAVAGE ELEMENTS CAPACILE OF SUPECT PLOSS TO 10" TO THE PLOOD FURN WITH NO MORE THAN 1 FOOT EPITH OFFER DEVELOPMENT.
STRUCTURE CLEARANCES - MINIMUM 12 FEET. C) MINITERANCE - SUFFICIENT TO RISURE ALL WEATHER USE.

32. PREVIOUS HOWARD COUNTY FILE NUMBERS: ECP-13-077, SP-07-013, F-14-048, WP-13-075, WP-14-006, WP-14-053, WP-18-099, F-18-081, WP-20-016

APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

PROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

THE ALTERNATIVE COMPUNING PETITION HUMBER (NP-114-199) AND ITS CONDITIONS OF APPROVAL MUST BE CODE TO ALL SUBDIVISION PLANS AND FINE (PX). [7-19] AND ITS CONDITIONS OF APPROVAL MUST BE CODED TO ALL SUBDIVISION PLANS AND FINE (PX). [7-19] INHIBITION CONDITIONS OF A PROPOSED THESE WILL BEE DOUNGED WITH THE COURTED ANGEOGRAPH OF THE PROLE, SUBDIVISION PLANS.

FOR COURTES ANGERSON UNDER THE FINE, SUBDIVISION PLANS.

FOR COURTES ANGEOGRAPH OF THE FINE, SUBDIVISION PLANS.

FINE ALTERNATIVE COMPLANCE, APPROVAL APPLIES ON THE PROTECTION MESSARES ON THE FINAL FILM.

THE ALTERNATIVE COMPLANCE, APPROVAL APPLIES ONLY TO THE MESSARES ON THE FINAL FILM.

SHOWN ON THE WAVER PLAN EXHIBIT. THE REMOVAL OF ANY OTHER SPECIARY TREES ON THE PROPERTY IS

NO PSTREAMENT SHALL BE PROTECTED FOR COMMON TRANSLATION FOR THE PROPERTY IS

NO PSTREAMENT SHALL BE PROTECTED FOR THE USE-IN-COMMON DRIVING COURT AND THE ASSESSMENT AS SHOWN ON FINAL LINE.

34. THE PREVIOUSLY EXISTING WELL HO-81-1246, WAS SEALED AND THE WELL ABANDONMENT REPORT SUBMITTED TO THE HEALTH DEPARTMENT PRIOR TO HEALTH DEPARTMENT SIGNATURE OF THE RECORD PLAT FOR F-18-081. 35. ALL WELLS ESTABLISHED IN THIS SUBDIMISION MUST BE SAMPLED AT YIELD TEST AND SAMPLES ANALYZED FOR RADIUM AND/OR DEGRADATION PRODUCTS GROSS ALPHA AND GROSS BETA.

36. THE DEVELOPER REQUESTED A WAMER TO DESIGN MANUAL, YOULIME II, SECTION 2.6.8, THAT REQUIRES A SHARED DROKWAY THAT CROSSES A 100-YEAR PLOODPLAN TO BE A PUBLIC ACCESS PLACE AND THE GRANAGE ELEMENT WHICH THE TOP-CHAP FLOODPLAN TO OVERTOR THAT I', SACED ON THE MANUAL SHARED THAT I', SACED ON THE APPROVED THE REQUEST IN A LETTER DATE JUNE 20, 2016.

38. THE STORMWATER MANAGEMENT SYSTEMS SHOWN ON THIS PLAN ARE CONCEPTUAL IN SIZE, SHAPE AND LOCATION.
THE ACTUAL DESIGN MAY CHANGE WITH BUILDING PERMIT PLAN,

39. A PLANNING BOARD HEARING AND APPROVAL IS REQUIRED FOR THIS SUBDIMSION. THIS PREJIMINARY EQUIVALENT SKETCH PLAN WAS APPROVED BY THE THE PLANNING BOARD ON __________ PB CASE \sharp 40. COMMUNITY MEETING WAS HELD ON FEBRUARY 11, 2019 AT THE 5TH DISTRICT VOLUNTEER FIRE DEPARTMENT

41. PER SECTION 105.0.C.1.d. NON-BUILDABLE PRESERVATION PARCEL 'A' IS 10 BE DEDICATED TO THE HOMEOWNER: ASSOCIATION, AN EASEMENT WILL BE HELD BY HOWARD COUNTY, MARTLAND, THE INTENDED USE OF THE PARCEL IS 42. PER SECTION 105.0.0.1.d, NON-BUILDABLE PRESERVATION PARCEL "B" IS TO BE DEDICATED TO THE HOMEOWNERS ASSOCIATION, AN EASEMENT WILL BE HELD BY HOMARD COUNTY, MARYLAND, THE INTENDED USE OF THE PARCEL IS ENVIRONMENTAL USE.

43. THE DEVELOPER WILL ENTER INTO AN AGREEMENT TO PAY A FEE-IN-LIEU OF THE CONSTRUCTION FOR THE

44. THIS PROPERTY IS DESIGNATED A THER III PROPERTY PER THE SUSTAINABLE GROWTH AND AGRICULTURAL PRESERVATION ACT OF 2012, MAP 34, AS APPROVED BY THE HOWARD COUNTY COUNCE, AS PART OF PLAN HOWARD

47. THE PRIVATE 15" WISE EMPRIMAY AND TITLE CLUBRING PROPOSED ON GREAT FIELD OF 19 ARE TO BE ADDED TO THE TOTAL PROPOSED ON GREAT FROM THE PROPOSED OF THE PRO

48. THE WOOPFIGNION OF THE SEPTIC SYSTEM AT 6376 PRESTINCK DRAY (GREENE FIELDS, LOT 19) MUST BE APPROVED BY A HEALTH DEPARTMENT INSECTIONS PROR TO SIGNATURE OF THE PLAT OF REMSON FOR GREENE PROPERTY OF THE PLAT OF REMSON FOR GREENE PROPERTY OF THE FIELD OF THE FIEL

49. A PRIVATE ROAD STREET NAME SION ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY, BUREAU OF HICHMAY ALONG ROUTE 108 UNLESS IT WAS PROVIDED UNDER F-18-081. A PRIVATE ROAD STREET NAME SICK SHALL BE FABRICATE AND INSTALLED BY HOWARD COUNTY, BUREAU OF HICHMAYS FOR THE CHITAVICE PROMPRESTRICK CRICE. BOTH OF THESE SICKS SHALL BE PAID FOR BY THE DEVELOPER/OWNERS. CONTACT NOWARD COUNTY TRAFFIC DINSON AT 410-313-3522 FOR BETAINS, AND COST ESTIMATE TRAFFIC DINSON AT 410-313-3522 FOR BETAINS, AND COST ESTIMATE.

50. THE USE-IN-COMMON DISPERINC ASSESSION TO BE SHIPN ON CREEK TRUSS, LIST 19, If MIST BE AUGID BY A REVISION PLAY APPROVED BY HAVING COUNT OF DISPERIENT OF THE AUGID BY A REVISION PLAY APPROVED BY HAVING COUNTY COUNTY OF THE AUGID BY A REVISION BY HAVING AND COUNTY OF THE AUGID BY THE AUGI

51. PER SECTION 105.0.0.2. OF THE ZONNO REGULATIONS, THE DESIGN OF THIS CLUSTER SUBDIMSION REFLECTS THE INTERDED PRINCIPAL USE OF THE PRESERVATION PARCEL, ENVIRONMENTAL PROTECTION, BY MANION THE STREAMS RELIANCE, THESE OFFICES, ADDITIONAL FOREST CONSERVATION AND STEPS SLOPES WITHIN THE LIMITS OF THE PRESERVATION PARCELS AND NOT WITHIN THE CLUSTER LOTS. THESE EMPROMENTAL FRANKES ARE PROTECTED BY WARROUS PROTECTION. JOSEPH S. 1.

ON SEPTEMBER 17, 2020, AND PURSUANT TO SECTION 16.1216. THE DIRECTION OF THE DEPARTMENT OF PLANNING AND ZONING, DIRECTION OF RECREATION AND PARKS AND ADMINISTRATOR OF COMMUNITY SUSTAINABILITY CONSIDERS AND APPROVED A REQUEST FOR A VARANCE WITH RESPECT TO SECTION 16.1203(A)(3) OF THE SUBMINISTON AND LAND DEPARTMENT OF COMMUNITY OF THE SUBMINISTON AND LAND DEPARTMENT OF COMMUNITY OF THE SUBMINISTRATION OF THE SU

ON SEPTIBIES 15, 2020, AND PURSUANT TO SECTION 16,104. THE DIRECTOR OF THE DEPARTMENT OF PLANNING ON SEPTIBLIES 15, 2020, AND PURSUANT TO SECTION 16,104. ATERNATIVE COMPULACE WITH RESPECT TO SECTION AND ZOONING, CONSIDERED AND APPROVED A REQUEST FOR ATTERNATIVE COMPULACE WITH RESPECT TO SECTION 12,200(2)(2) OF THE SERBONSON AND LAW DUE OF THE SERBONSON AND LAW DEPARTMENT OF SECTION AND LAW TO SECTION CONTINUES TO ALLOW LOTS 7-12 OF THE CLARISATILE CONSIDERATION TO SERVE LOTS 7-12 AUST ER RECORDED PROOF TO THE RECORDATION OF THE TINAL PLAT FOR CLARRISHILE CHROSING, PHASE 2, A USE-R-COMMON MARTHANICE ADREBMENT FOR LOTS 7-12 AUST BE RECORDED WITH THE PLAT OF RUSSION OF THE TINAL PLAT FOR FIRED STANDING AND LAW TO SERVE LOTS 7-12 AUST BE RECORDED PROOF TO THE RECORDED WITH THE PLAT OF RUSSION OF 10.1 19 OF THE ORDER FIELDS SUDMISSION.

53. ON AUGUST 1, 2019, BGE APPROVED THE PLAN AS LONG AS TREES WERE NOT PLANTED UNDER THE

54. ALL WELL LOCATIONS AND REPLACEMENT AREAS MUST BE AT LEAST 50 FEET FROM ALL ROADSIDE SWALES OR, AS AN ALTERNATIVE, UTILIZE CURB AND CUTTER ROADWAY DESIGN.

53. THE SHAPED DRIVEWLY MAINTENANCE EASTLEINT FOR LOTS TO THROUGH 12 SHALL INCLUDE A CLAUSE GRAVITH PRIMARY TO LOT TO TOR AN AREA OF ACCESS AND UTILIZATION TO THE TERRARY WELL LOCATION AS SHOWN ON TENAL PERCOLARION CERTIFICATION PLAY. A DRAFT OF THIS CLAUSE IS TO BE PROVIDED TO HOWARD COUNTY HEAD DEPARTMENT PROR TO SIGNATURE APPROVAL OF THE FIRM PLAY.

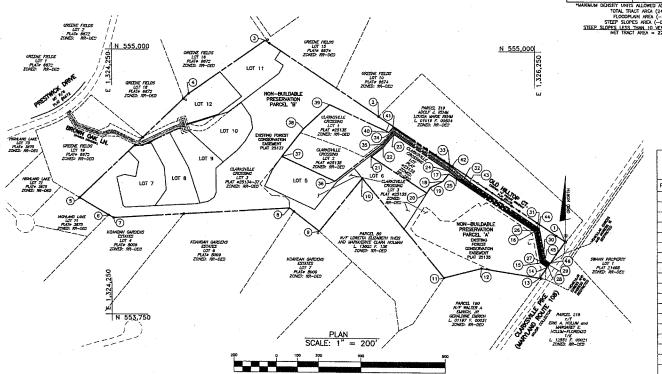
		HYCROLOGIC	ALTERNATE	L SURVEY HOWARD COUNTY, MARYLAND	
SYMBOL	HYDRIC	GROUP	GROUP	NAME	k-VALUE
GgB		В		GLENELG LOAM, 3 TO 8 PERCENT SLOPES	0.2
Gn8*	YES	C		GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	0.37/0.32
Go8"		C	C	GLENVILLE-CODORUS SILT LOAMS, 0 TO 8 PERCENT SLOPES	0.37
GgC		8		GLENEUG LOAM, 8 TO 15 PERCENT SLOPES	0.2
GbB		8		GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	0.2

** Highly Erodible, K>0.35, and steeper than 5% or 15% and greater slopes taken from the NRCS web soil survey august 2014, Map 23.

CLARKSVILLE CROSSING, PHASE 2 PRELIMINARY EQUIVALENT SKETCH PLAN LOTS 5 THRU 12. AND NON-BUILDABLE PRESERVATION

TAX MAP 34, GRID 23, P/O PARCEL 301 5TH ELECTION DISTRICT, HOWARD COUNTY, MD

PARCELS 'A' & 'B'



| 98 | Tulio poder | 34.5 | 57.75 | Recum | POOR MAILTSTEAMIO, 3108M OR | 99 | Tulio poder | 23.5 | 64.75 | Recum | OSTACK | 100 | Tulio poder | 30 | 6500 | Recum | Ann. | Ann.

LEGEND GgB SOILS DELINEATION 480 478 EXISTING CONTOURS PROPOSED CONTOUR

EXISTINGTREE LINE PROPOSED TREE LINE DRAINAGE AREA PROPOSED STRUCTURE

EXISTING STRUCTURE

SLOPES 15% TO 19,99% SLOPES 25% AND GREATER

EVELOPER: ROCK REALTY, INC, C/O H & H ROCK COMPANIES 6800 DEERPATH ROAD SUITE \$100 ELKRIDGE, MARYLAND 21075 410-579-2442

PROPOSED WELL BOX

+ + + +

DENSITY CHART TAX MAP 34, GRID 23, PARCEL 301 2455 / 425 - 5 011 22.45 / 2 = 11 D.U.* (PHASE I - 4 UNITS PHASE II - 7 UNITS) DEO SENDING PARCEL SAVAGE PROPERTY F-20-TAX MAP 13 P/O PARCEL 10

TOTAL AREA O

DENSITY UNITS

MAXIMUM DED UNITS ALLOWED

NUMBER OF UNIT

DEO DENSITY UNITS RECEIVED FOR THIS

VICINITY MAP SCALE: 1" = 2000' ADC MAP 31; GRID C4

BOUNDARY

COORDINATES

BOUNDARY COORDINATES

POINT #	NORTHING	EASTING
1	554117.5932	1326412.4434
2	554702.8376	1325528.6870
3	555057.8737	1324992.4944
4	554805.1582	1324632.6753
- 5	554310.1276	1324116.6821
. 6	554229.3810	1324253.5834
7	554215.6258	1324276.2396
8	554268.2421	1325107.2782
9	554159.1374	1325248.1999
10	554411.4735	1325451.8093
11	553943.5768	1325838.2797
12	553989.2829	1326014.9349
.13	553945.6380	1326290.1711
14	553996.6929	1326326.4747
15	554017.8683	1326295.4137
16	554165.6369	1325267.4481
17	554434.2133	1325861.8805
16	554399,9870	1325834.8557
19	554368.9402	1325773.5848
20	554342.9875	1325757.1774
` 21	554512.9031	1325494.1170
22	554557.4541	1325551.0478

23 554619.3499 1325602.2353

POINT #	NORTHING	EASTING
24	554448.6099	1325860.0635
25	554416.1955	1325899.9555
26	554169.2410	1326272.8725
27	554021.4259	1326300.8469
25	554001.5837	1326329.9524
29	554008.9199	1326335.1690
30	554026.7624	1326308.9967
31	554174.6473	1326281.0091
32	554406.4289	1325931.0041
33	554458.2919	1325867.1769
34	554635,3126	1325599.8644
35	554573.3010	1325548.5812
36	554396.0762	1325322.1094
37	554511.3674	1325070.6705
38	554642.2028	1325174.0056
39	554756.8921	1325298.1622
40	554628.3386	1325578.5251
41	554651.2753	1325597.4936
42	554467.9740	1325874,2903
43	554396,6623	1325962.0527
44	554180.0536	1326289.1457
45	554032.0988	1326317.1465
46 ·	554016.2560	1326340.3855

1 PRELIMINARY EQUIVALENT SKETCH PLAN COVER SHEET 2-3 PREUMINARY EQUIVALENT SKETCH PLAN GRADING AND SEDIMENT & EROSION CONTROL PLAN
4-5 PREUMINARY EQUIVALENT SKETCH PLAN GRADING AND SEDIMENT & EROSION CONTROL PLAN
6 PREUMINARY EQUIVALENT SKETCH PLAN STORMDRAIN DRAINAGE AREA MAP PRELIMINARY EQUIVALENT SKETCH PLAN, PERCOLATION CERTIFICATION PLAN AN STORMWATER MANAGEMENT PLAN
PREUMINARY EQUIVALENT SKETCH PLAN STORMWATER MA LIMINARY EQUIVALENT SKETCH PLAN LANDSCAPE PLAN, NOTES AND DETAILS
LIMINARY EQUIVALENT SKETCH PLAN FOREST CONSERVATION PLAN, NOTES AND DET.

REVISION BENCHMARK ENGINEERS & LUND SURVEYORS & PLANNERS ENGINEERING, INC. 8460 BALTRICRE NATIONAL PIREA SLETE 315 A ELLECTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644



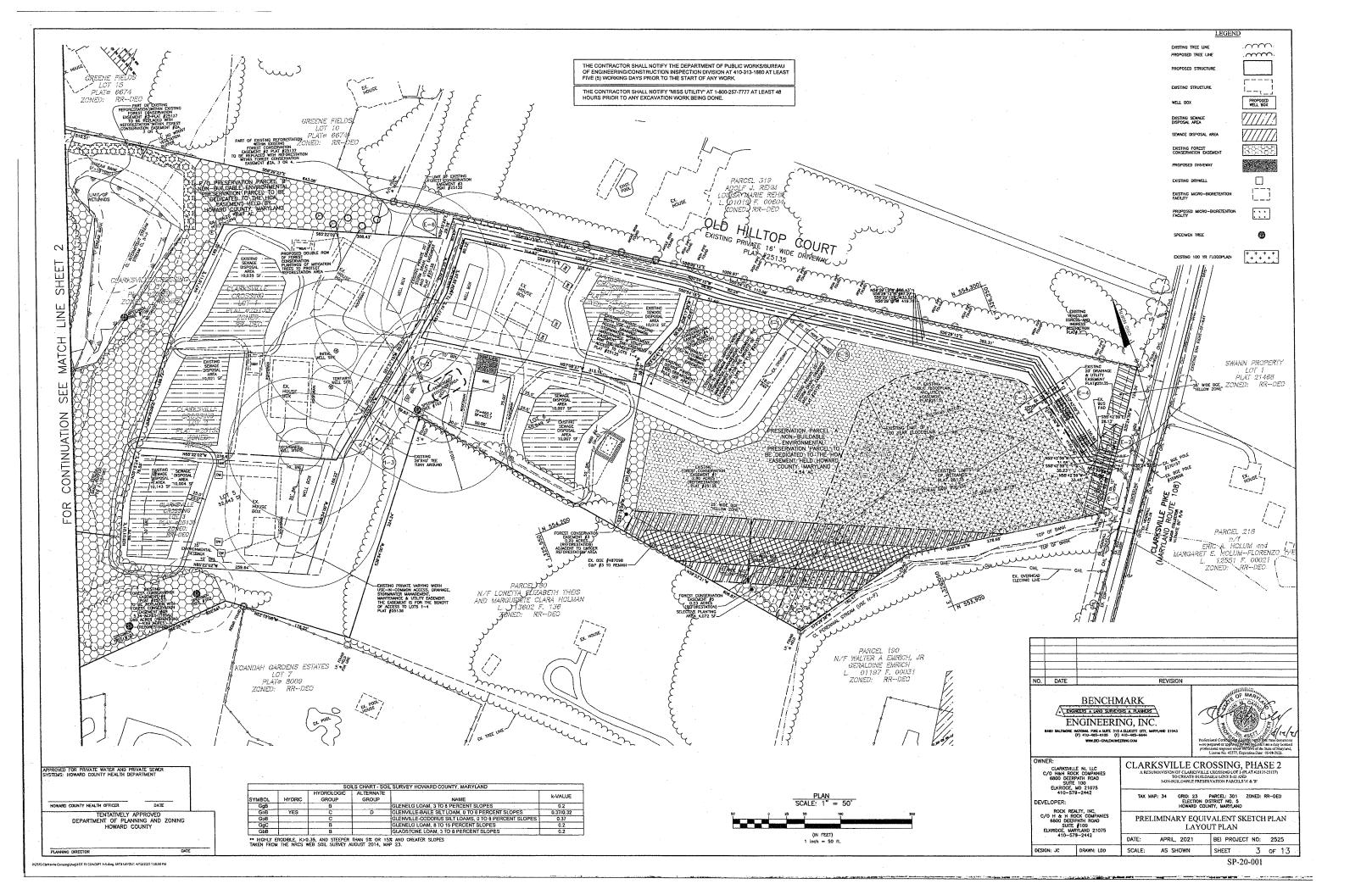
CLARKSVILLE CROSSING, PHASE 2

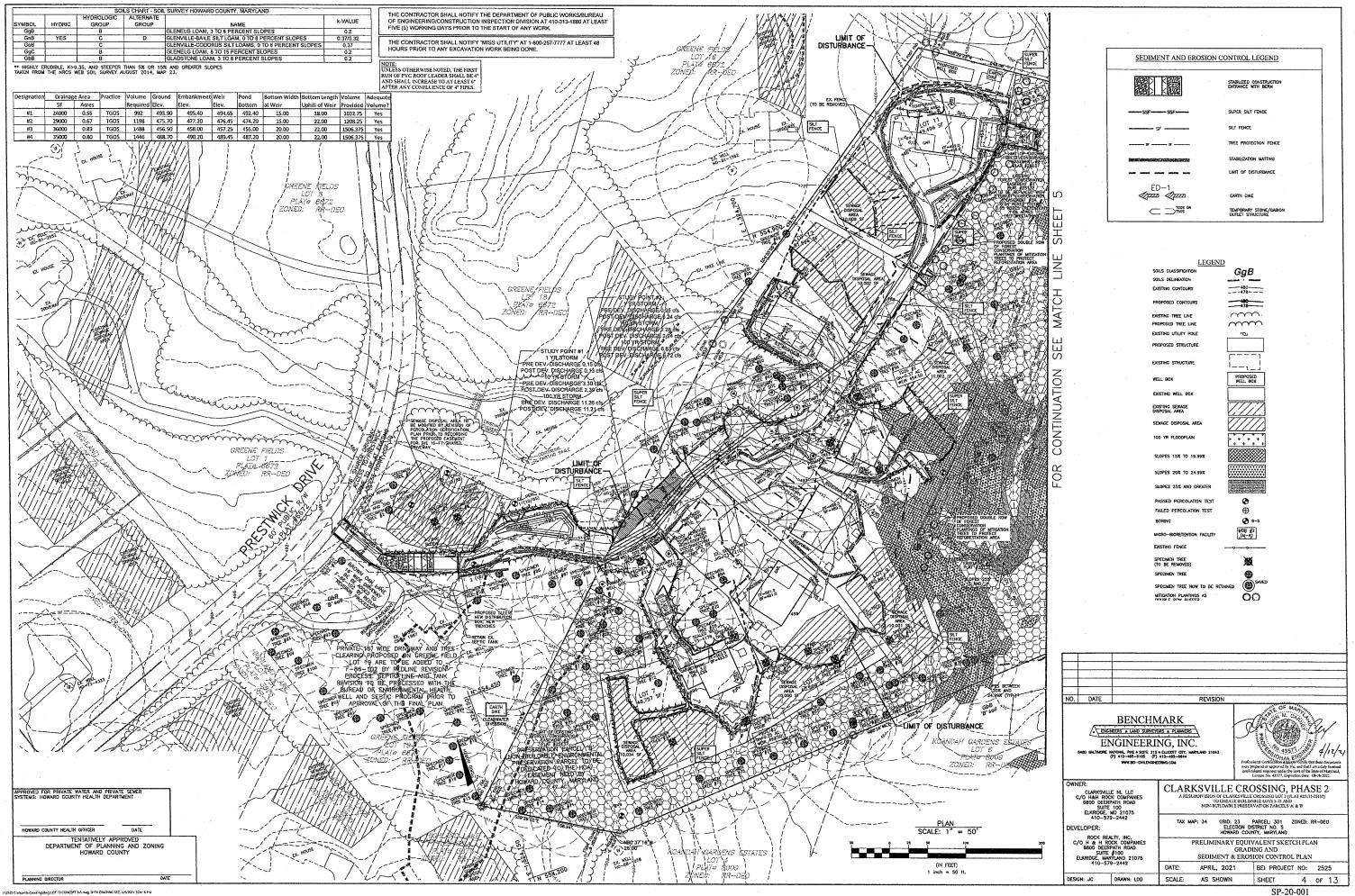
GRID: 23 PARCEL: 301 ZONED: RR-DEO ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND

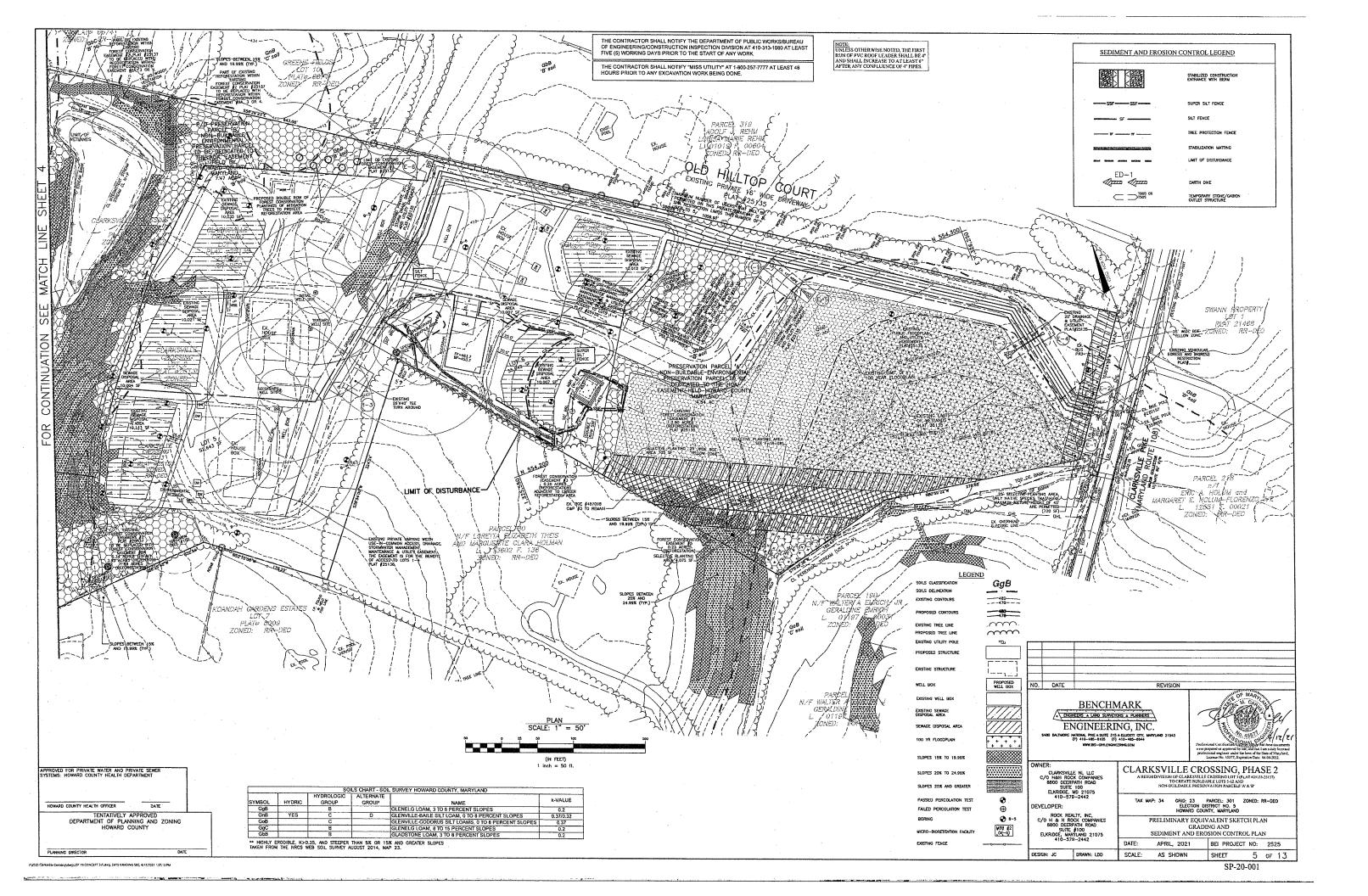
PRELIMINARY EQUIVALENT SKETCH PLAN COVER SHEET

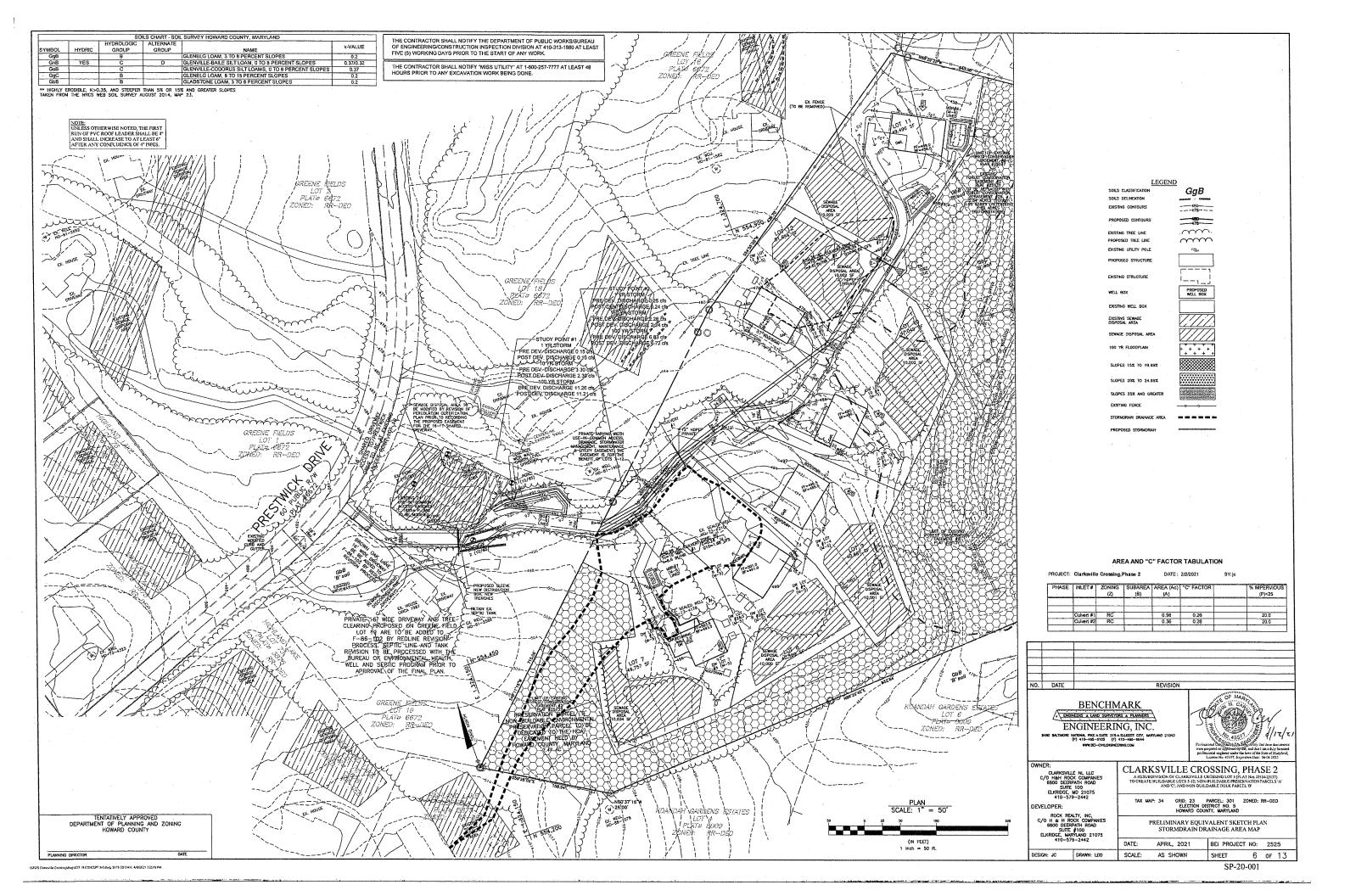
BEI PROJECT NO: 2525 DATE: APRIL, 2021 SCALE: SHEET 1 OF 13

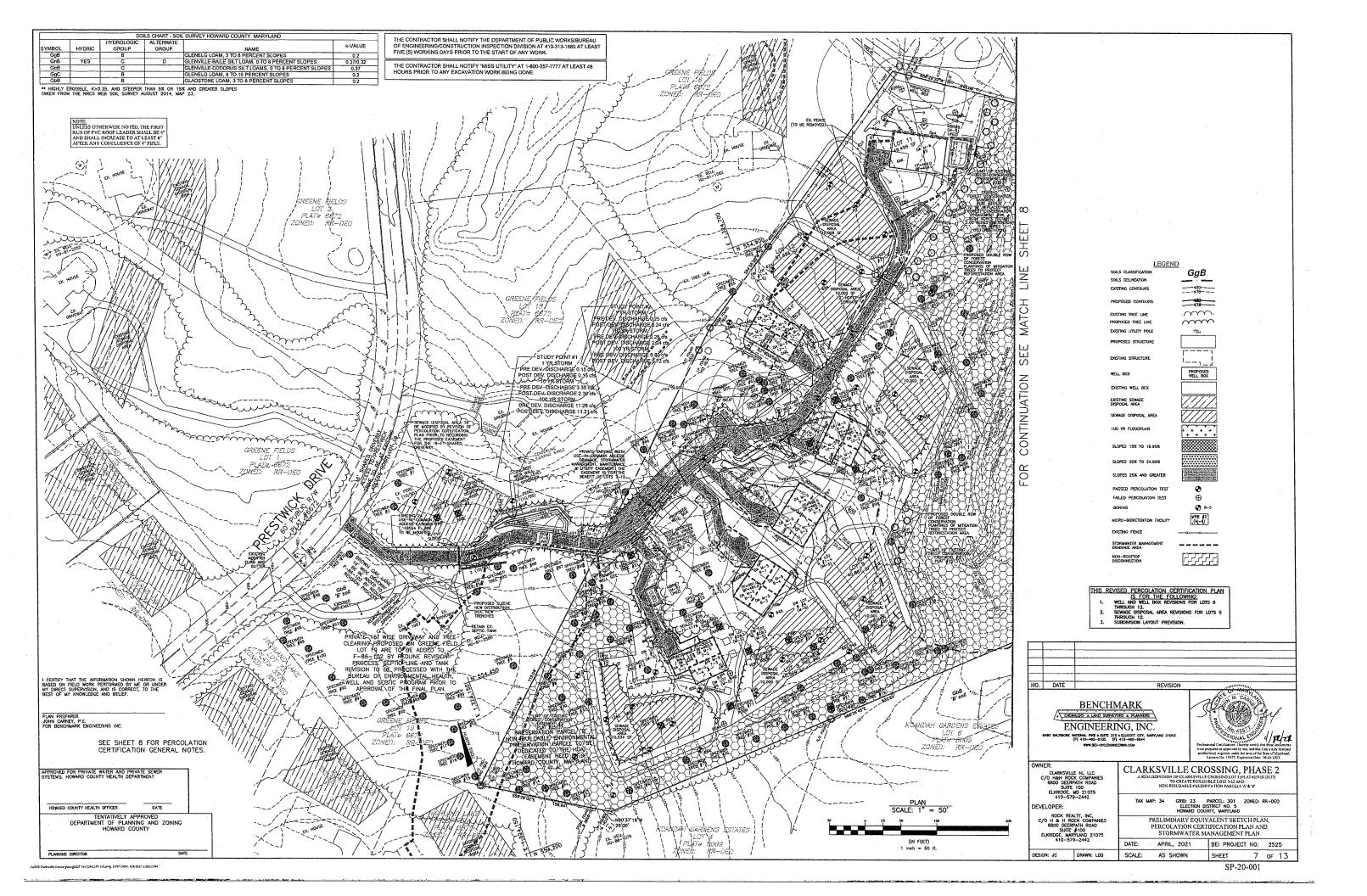


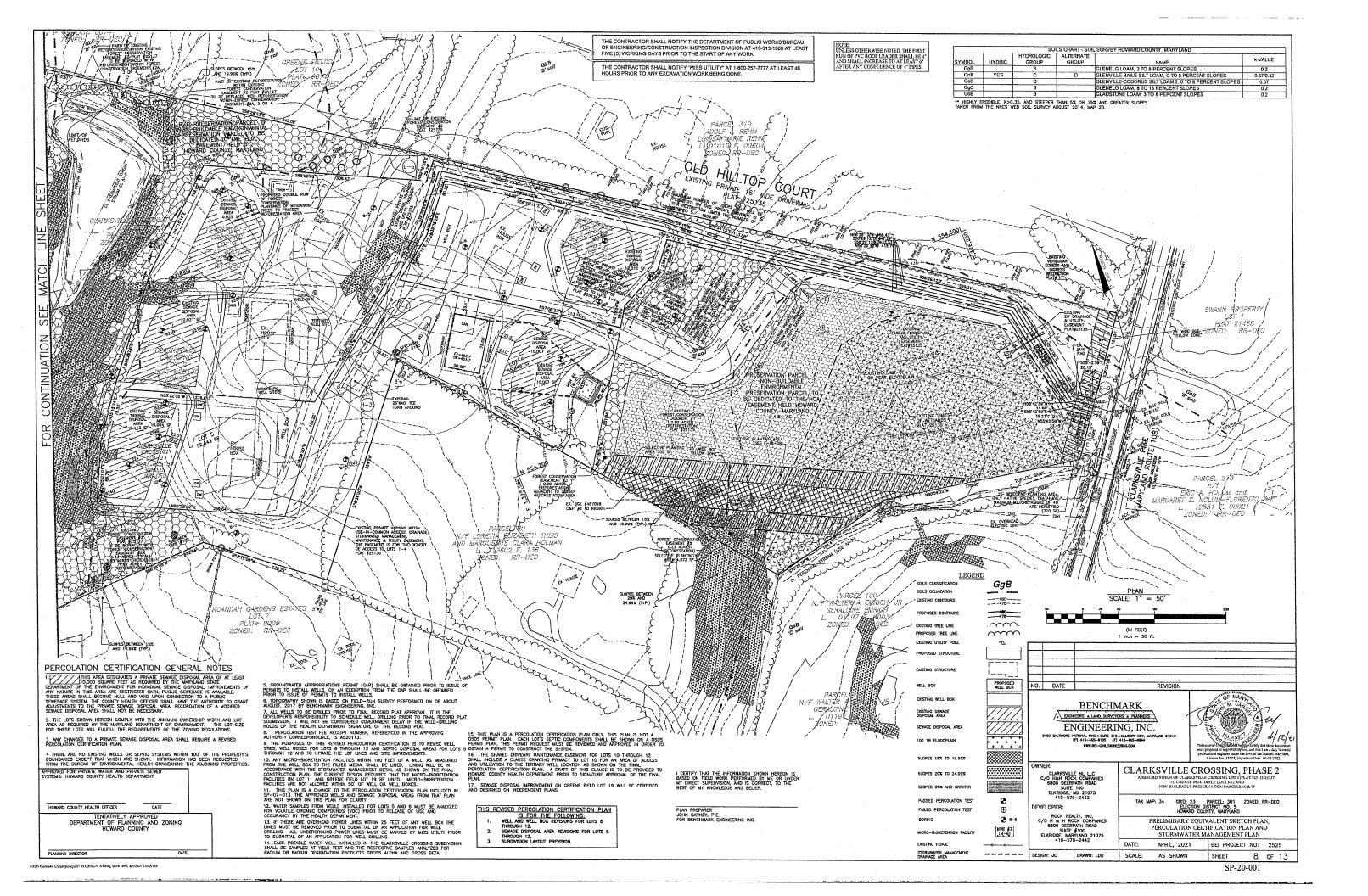












CONSTRUCTION SPECIFICATIONS

B.4.C Specifications for Micro-Bloretention. Rain Gardens, Landscape Infiltration & infiltration Berms

1. Material Specifications:

The allowable materials to be used in these practices are detailed in Table 8.4.1

2. Filtering Media or Planting Soil:

The soil shall be a uniform mix, free of stones, sturnps, roots or other similar objects larger than two Inches. No other materials or substances shall be mixed or dumped within the micro-bioretention practice that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass, or other noxious weeds as specified under COMAR 15.08.0.105. The planting soil shall be tested and shall meet the following

Soil Component - Loamy Sand or Sandy Loam (USDA Soil Textural Classification)
Organic Content - Minimum 10% by dry weight (ASTM D 2974). In general, this can be met with a mixture of loamy and(60%-65%) and compost (33% to 40%) or sandy loam (30%), coarse sand (30%), and compost (40%).
Clay Content - Media shall have a clay content of less than 5%. pH Range - Should be between 5.5 - 7.0. Amendments (e.g., lime, iron sulfate plus sulfur) may be mixed into the soil to increase or decrease pH.

There shall be at least one soil test per project. Each test shall consist of both the standard soil test for pH, and additional tests of organic matter, and soluble saits. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the topsoil was excavated.

It is very important to minimize compaction of both the base of bioretention practices and the required backfill. When possible, use excavation hose to remove original soil. If practices are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with furt type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high-pressure tires will cause excessive compaction resulting in reduced infiltration rates and is not acceptable.

Compaction will significantly contribute to design failure.

Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation such as a chisel plow, ripper, or subsoiler. These tilling operations are to refracture the soil profile through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rotelliters typically do not till deep enough to reduce the effects of compaction from heavy

Rototill 2 to 3 inches of sand into the base of the bioretention facility before backfilling the optional sand layer. Pump any ponded

When backfilling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand, then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade.

en backfilling the bioretention facility, place soil in litts 12° to 18°. Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials with light equipment such as a compact loader or a dozer/loader with marsh tracks.

4. Plant Material:

Recommended plant material for micro-bioretention practices can be found in Appendix A. Section A.2.3.

5 Plant Installation

Compost is a better organic material source, is less likely to float, and should be placed in the invert and other low areas. Mulch should be placed in surrounding to a uniform thickness of 2° to 3°. Shredded or chipped hardwood mulch is the only accepted mulch. Pine mulch and wood chips will float and move be the perimeter of the bioretention area during a storm event and are not acceptable. Shredded mulch must be well aged (6 to 12 months) for acceptance.

Rootslock of the plant material shall be kept moist during transport and on-site storage. The plant root ball should be planted so 1/8th of the ball is above final grade surface. The diameter of the planting pit shall be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight during the entire planting process. Thoroughly water ground bed cover after installation.

Trees shall be braced using 2' by 2' stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

Grasses and legume seed should be drilled into the soil to a depth of at least one inch. Grass and legume plugs shall be planted following the non-grass ground cover planting specifications

topsoit specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers defeats, or at a minimum, impactes this goal. Only affertilizer if wood chips or multi-dar enesed to sentend the soil. Robiciti ureal keritiers at a ratie of 2 pounds per 1000 square levet.

Underdrains should meet the following criteria:

- Pipe- Should be 4* to 6* diameter, slotted or perforated rigid plastic pipo (ASTMF 758, Type PS 28, or AASHTO-M:278) in a gravel layer. The preferred material is slotted, 4* rigid pipe (e.g., PVC or HDPE).
 Perforations If perforated pipe is used, perforations should be 3* diameter located 6* on center with a minimum of four holes per row. Pipe shall be wrapped with a ½* (No. 4 or 4×4) galvanized hardware cloth.
 Gravel The gravel layer (No. 5* stone preferred) shall be at least 3* thick above and below the underdrain
 The main collector pipe shall be at a minimum 0.5% slope.
 A rigid, non-perforated observation well must be provided (one per every 1,0000 square feet) to provide a clean-out port and monitor performance of the filter.
 A 4* layer of pea gravel (½* to ½* stone) shall be located between the filter media and underdrain to prevent infigration of fines into the underdrain. This layer may be considered part of the filter bed when bed thickness exceeds 24*.

The main collector pipe for underdrain systems shall be constructed at a minimum slope of 0.5%. Observation wells and/or clean-out pipes must be provided (one minimum per every 1000 square feet of surface area).

These practices may not be constructed until all contributing drainage area has been stabilized

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

- A. THE OWNER SHALL MANTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALY.
 MAINTENANCE OF MULCH AND SOIL IS LUITED TO CORRECTING AREAS OF EROSION OR WASH
 OCHECKED FOR DISEASE AND INSECT INTESTATION AND MAINTENANCE WILL ADDRESS DEAL
 MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LUITED TO THE
 FOLLOWING: 2000 MARTAND STORMMATER DESION MANUAL VOLUME. IT, TABLE A.1, AND 2.
- B. THE OWNER SHALL PERFORM A PLANT INSPECTION IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- C. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLED.
- D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

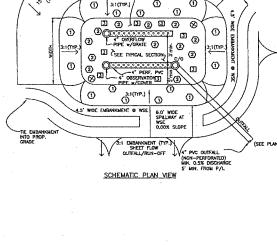
OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANGSCAPED AREAS. THE OWNER SHALL ENSURE THE AREAS RECEIVING RUNOFF ARE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

DESIGNATIONS	
1. The monitoring wells and structures shall be inspected on a quarterly basis and after every large storm event.	,
Water levels and sediment build up in the monitoring wells shall be recorded over a period of several days to insure trench drainage.	
3. A log book shall be maintained to determine the rate at which the facility drains	
 When the facility becomes clogged so that it does not drain down within the 72 hour time period, corrective action shall be taken. 	

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

· · · · · · · · · · · · · · · · · · ·	
PLANNING DIRECTOR	DATE



15' GRASS SHEET FLOW (TYP.) - INFLOW

S CAR

MBR-6

Facility

454.50 454.00

PROJECT: Clarksville Crossing Lots 5-12

Orainage Area (SF)

The total ESDv provided by this design is:

The total Rev provided by this design is: 410
Micro-Bioretention facilities within the 100' well radius must be pro

Facility Summary

(SF)

1(%)

PLANTINGS (SEE INFO. THIS SHEET)

1

CONSTRUCTED WITH IMPERIMEABLE LINE WHEN INSTALLED WITHIN THE TOO! WE PADIUS, THIS LINER SHOULD INCLUDE ENTIRE SUBES AND BOTTOM OF THE EXCOVATION AND EXTERN TO TOP OF EMBANGIENT. LINER ON SIDE SLOPES SHALL BE BELOW TOP SOIL SEE. SPECIFICATIONS CHART THIS SHEET.

MICROBIORETENTION PLANTING DATA

1. PLANTINGS WITHIN THE PONDING AREA OF THE
MORCH-BIORETHION FACULTY ARE TO BE OF A
MEDIUM TO HIGH WATER TOLERANCE.

2. PLANTINGS ALOND THE PERBUTERT (BERM) AREA OF
THE MICRO-BIORETENTION FACULTY ARE TO BE OF A
LOW TO MEDIUM WATER TOLERANCE. I. AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN OND AREA OF THE MICRO-BROREINTION FACILITY FEAR O.B. PIPE AND UNDERDRAIN.

MICROBIORETENTION PLANTING SCHEDULE (SPECIFIC NUMBER OF PLANTINGS SHALL SE DETERMINED WITH FINAL DESIGN AT PLOT PLAN PHASE)

1 VINCA MINOR (COMMON PERWINKLE)

(2) AJUSTA REPTAS (CREEPING BUNGLEWEED)

Reg'd Stone Stone Storage Total ESDv

(cf)

itorage (cf)

MICRO-BIORETENTION DETAILS (TYPICAL)

PLANTINGS

Notes

FILTER

H LENGTH (ft) WIDTH (ft) AREA (sf) 1 2 3

Rev (ct)

| 3 | IRIS VERSICOLOR (IRIS) | CALLUNA VULGARIS (HEATHER) | (2 PER FACILITY)

BIORETENTION FACILITIES

MBR-8 455.50 458.00 457.00 456.83 454.83 454.50 454.00 453.17 31.0 19.1 594 57 50 27 YES MBR-9 464.00 463.50 462.50 462.33 460.33 460.00 459.50 458.50 34.4 12.5 454 44 38 20 NO

Ponded Volume Provided (cf)

MICRO-BIORETENTION FACILITIES (M-6) Req'd Ponded Storage

 MBR2 (0/42)
 18,468
 6,001
 43%
 0.440
 677
 508
 612
 169
 152
 793
 1.17
 169

 TOTALS
 23,429
 2302
 2894
 712
 3606
 422

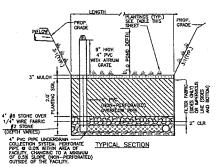
454.50 454.00 453.00 452.83 450.83 450.60 450.00 449.17 22.6 13.0 361 35 30 16 NO 497.50 497.00 496.00 495.63 493.83 493.50 493.00 491.42 15.0 5.0 75 7 6 3 YES

ELEVATIONS (SEE TYPICAL BIORETENTION DETAIL)

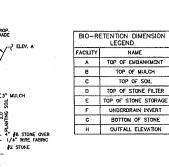
DATE: 02/02/21

(ci)

| NON-ROOFTOP DISCONNECTION (N-2) | Facility | Impervious | Drainage | Volume | ESDV | ontrib. (Pervious | Contral No. 2) | Ontrib. (Pervious | Contral No. 2)







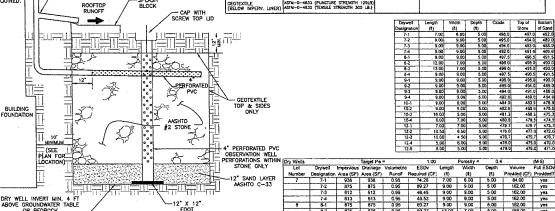
4" PVC PIPE UNDERDRAIN COLLECTION SYSTEM, PERFORATE PIPE © 0.0% WITHIN AREA OF FACILITY, CHANGING TO A MINIMUM OF 0.5% SLOPE (NON-PERFORATED) OUTSIDE OF THE FACILITY.	TYPICAL PROFILE			
	MATERIALS	& SPECIFICATIONS	FOR MICRO	-BIORETENTION
	MATERIAL	SPECIFICATION	SIZE	1

PLANTINGS (TYP.)
SEE TABLE THIS
SHEFT

W.

ELEY, B

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS	SEE APPENDIX A; TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOANY SAND 60-65% COMPOST 35-40% OR SANDY LOAM 30% COARSE SAND 30% & COMPOST 40%	H/A	USDA SOIL TYPES: LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN 10% BY DRY WEIGHT ASTM D 2974		
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
GEOTEXTILE (CLASS "C")		N/A	PE TYPE ! NONWOVEN
GEOTEXTILE (1/4" WIRE MESH)		1/4" WIRE MESH	1/4" WIRE MESH
UNDERGRAIN GRAVEL	AASHTO M-43	NO. 57 OR NO. 6 0.375 TO 0.750	
UNDERDRAIN PIPING	F758, TYPE PS28 CR AASHTO W-278	4" TO 6" RIGID SCH.40 PVC, SDR35 OR HDPE	3/8" PERF. 6 6" O/C, 4 HOLES PER ROW; MINIMUM OF 2" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES.
IMPERVIOUS LINER	ASTIM-D-4833 (THICKNESS) ASTIM-D-412 (TENSLE STRENGTH 1,100 LB. ELONGATION 2003) ASTIM-D-024 (TEAR RESISTANCE — 150 LB_/N) ASTIM-D-471 (WATER ADSCRIPTION: +8 TO -27 MASS)	30 MIL THICK	LINGS TO BE ULTRAVOLET RESISTANT, A CROTECTILE FASRIC SHOULD BE USED TO PROTECT THE LINES FROM PUNCTURE.
GEOTEXTILE	ASTN-D-4833 (PUNCTURE STRENGTH 125LB)		



DRY WELL DETAIL

SEE DRYWELL IMENSIONS CHART

-12" X 12".

DRY WELL INVERT MIN. 4 FT ABOVE GROUNDWATER TABLE

	6-2	875	875	0.95	69.27	12.00	7.00	5.00	168.00	yes
	5-3	875	875	0.95	69.27	13.00	7.00	5.00	182.00	yes
	5-4	875	875	0.95	59.27	9.00	9.00	5,00	162.00	yes
9	9-1	937	937	0.95	74.18	9.00	9.00	5.00	162.DO	yes
:	9-2	938	938	0.95	74,26	9.00	9.00	5.00	162.00	yes
	9-3	938	938	0.95	74.26	9.00	9.00	5.00	162.00	yes
	9-4	937	937	0.95	74.18	9.00	9.00	5.00	162.00	yes
10	10-1	625	625	0.95	49.48	9.00	9,00	5.00	162.00	yes
	10-2	875	675	0.95	69.27	9.00	9.00	5,00	162.00	yes
	10-3	865	- 865	0.95	68.48	16.00	5.00	5.Q0	160.00	yes
	10-4	875	875	0.95	69.27	6.00	7.00	5.00	112.00	yes
12	12-1	875	875	0.95	89.27	7.03	7.00	5.00	98.00	yes
	12-2	875	875	0.95	69.27	10,50	6.50	5.00	136.50	905
	12-3	625	625	0.95	49.48	10.00	4.50	5.00	90.00	yes
	12-4	500	500	0.95	39.58	5.00	6.00	5.00	60.00	yes
-	12-5	625	625	0.95	49.48	6.00	5.00	5.00	. 80.00	yes
L			A	*****					2952.5)

NO. DATE REVISION BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC.

8480 BALTHORE NATIONAL PIKE A SLETE 315 A ELLICOTY CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644



OWNER: CLARKSVILLE NL LLC
C/O H&H ROCK COMPANIES
6800 DEERPATH ROAD
SUITE 100
ELKRIDGE, MD 21075
410-579-2442 DEVELOPER: ROCK REALTY, INC, C/O H & H ROCK COMPANES 6800 DEERPATH ROAD SUITE \$100 ELKRIGGE, MARYLAND 21075 410-579-2442

DRAWN: LDD

September 1

DESIGN: JC

CLARKSVILLE CROSSING, PHASE 2 NVISION OF CLARKS VILLE CROSSING LOT 3 (PLAT #2 TO CREATE BUILDABLE LOTS 5-12 AND NON-BUILDABLE PRESERVATION PARCELS 'A' & TV

TAX MAP: 34 GRID: 23 PARCEL: 301 ZONED: RR-DEO ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND PRELIMINARY EQUIVALENT SKETCH PLAN STORMWATER MANAGEMENT NOTES AND DETAIL APRIL, 2021 BEI PROJECT NO: 2525 DATE: .9 of 13 AS SHOWN SHEET SCALE:

SP-20-001

*The ESDs summary table portrays storage in excess of that required for Environmental Site Design requirements N-- D--4-- Di---- T----+ D- - 4 00

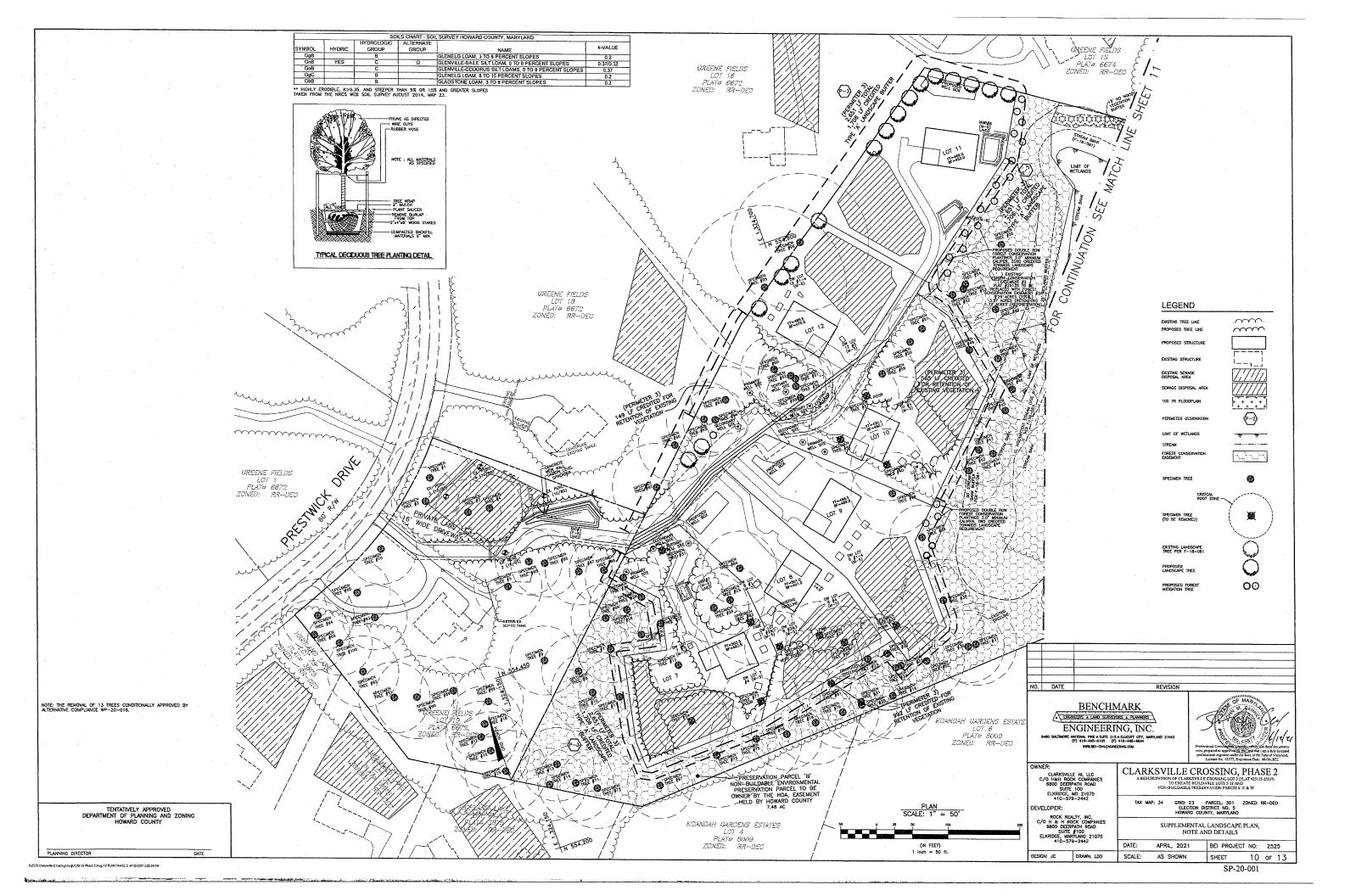
4105

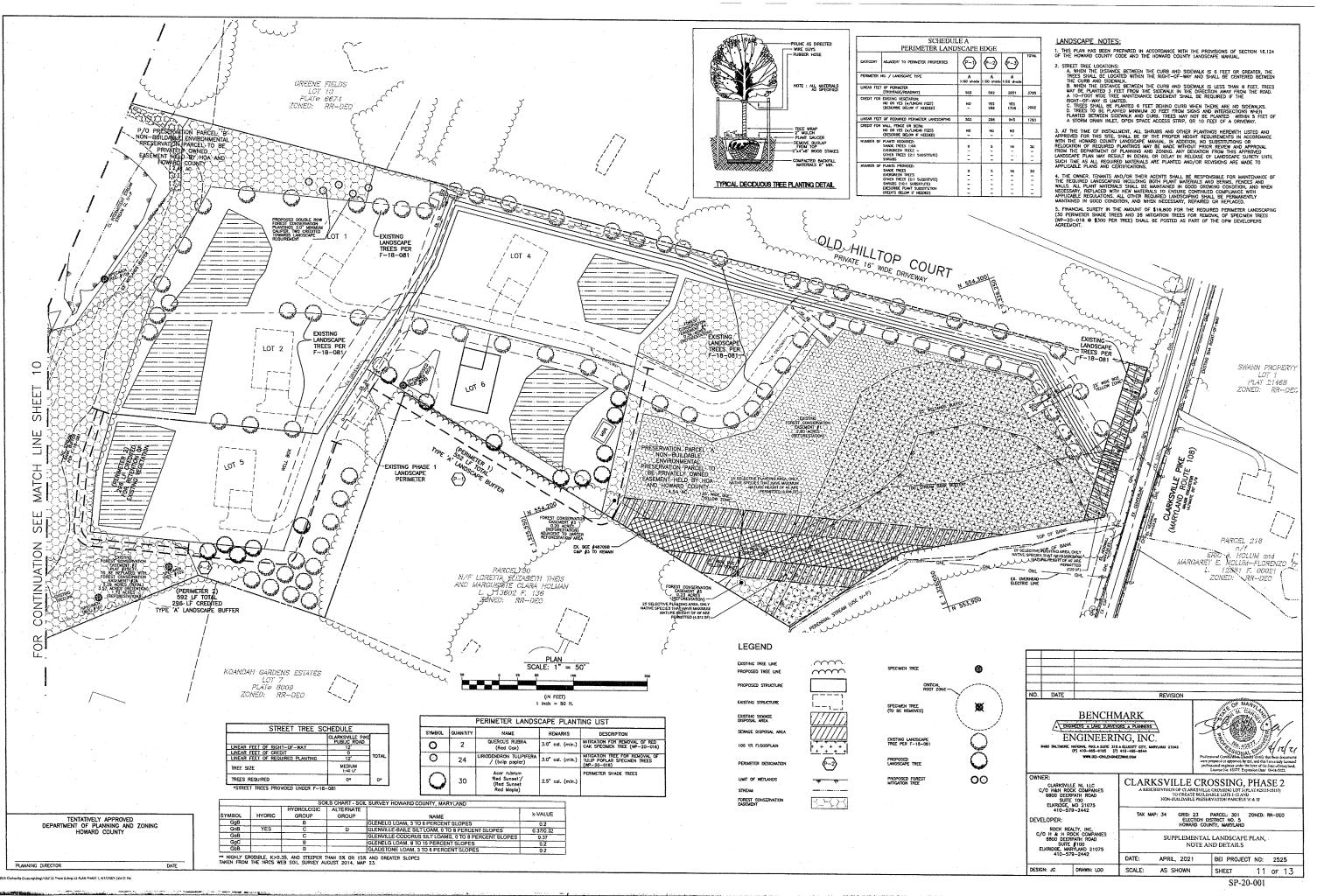
	DESIGNATIONS	Non-Roomop L	ASCON.	larget Pe =	1.00							(N-2)	
	 The monitoring wells and structures shall be inspected on a quarterly basis and after every large storm event. 	Disconnection	Impervious	Drainage	Volumetric	ESDv	Contrib. Pervious	Contrib. Imp.	Disconnection	Ratio	Pe Treated	Volume	Lot
	Water levels and sediment build up in the monitoring wells shall be recorded over a	Designation	Area (SF)	Area (SF)	Runoff	Required (CF)	Length (ft)	Length (ft)	Length (ft)		(inches)	Provided (CF)	
	period of several days to insure trench drainage.	NR-1	470	1091	0.44	39.80	80	16	16	0.4	0.4	15.92	Driveway
	3. A log book shall be maintained to determine the rate at which the facility drains	NR-2	3644	7506	0.49	304.58	9	16	16	1.0	1.0	304.58	Driveway
	 When the facility becomes clogged so that it does not drain down within the 72 hour time- period, corrective action shall be taken. 	NR-3	825	1783	0.47	69.30	2	12	12	1.0	1.0	69.30	Lot 7
5. The maint	5. The maintenance log book shall be available to Howard County for inspection to insure	NR-4	1801	3522	0.51	149.75	12	12	12	1.0	1.0	149.75	Lot 8
	compliance with operation and maintenance criteria.	NR-5	1562	3277	0.48	130.80	7	12	- 12	1.0	1.0	130.80	Lot 9
	e. Once the performance characteristics of the infiltration facility have been verified, the monitoring schedule can be reduced to an annual basis unless the performancy data.	NR-6	717	1442	0.50	59.78	0	20	26	1.0	1.0	59.78	Lot 10
	indicates that a more frequent schedulo is required.											730.14	-

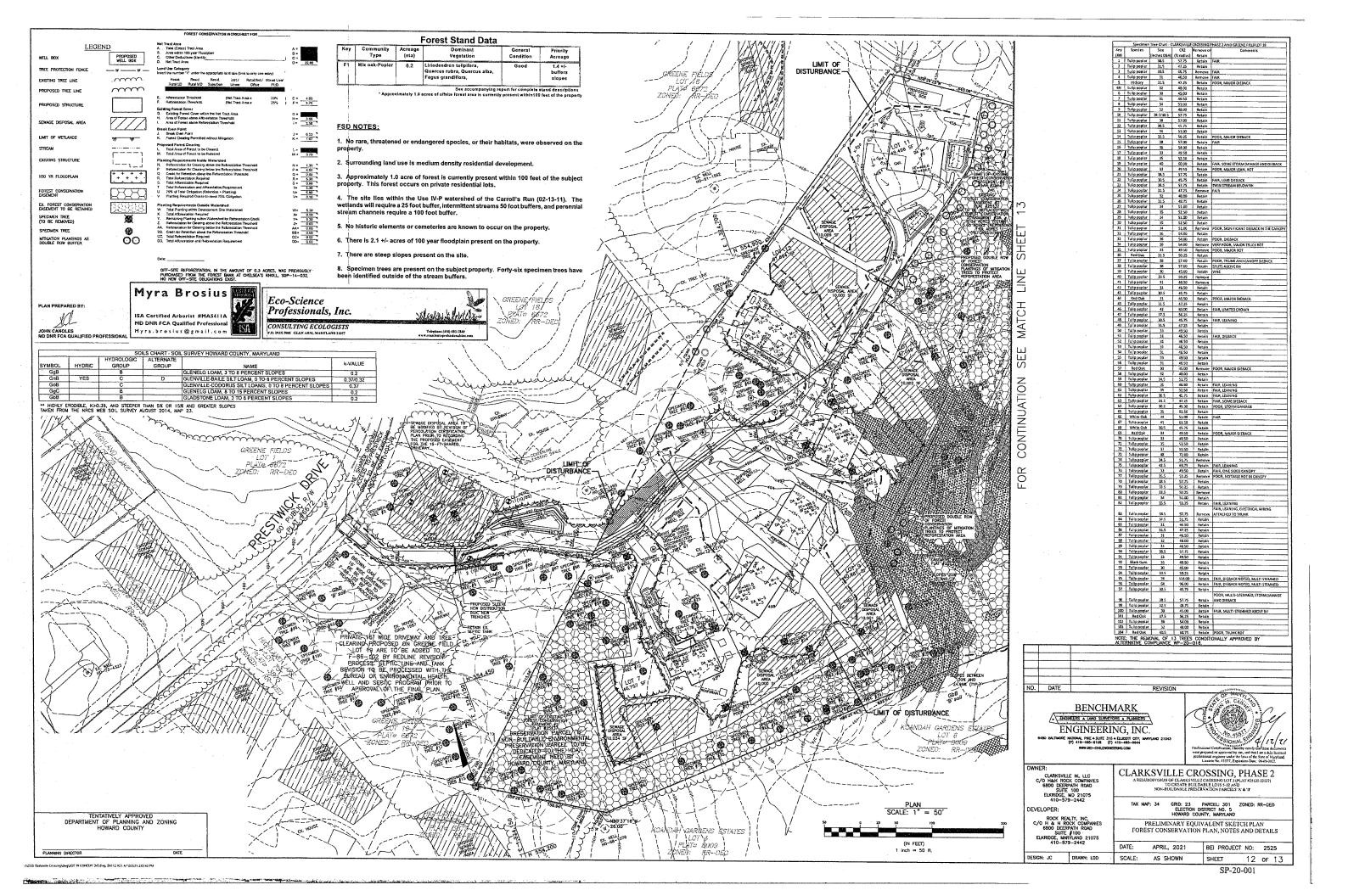
| Impendous | Drainage | Life | Rv | ESDV (cf) | Length (t) | Width (t) | Depth (t) | Porosity | Grade | Top of Stores | Stores |

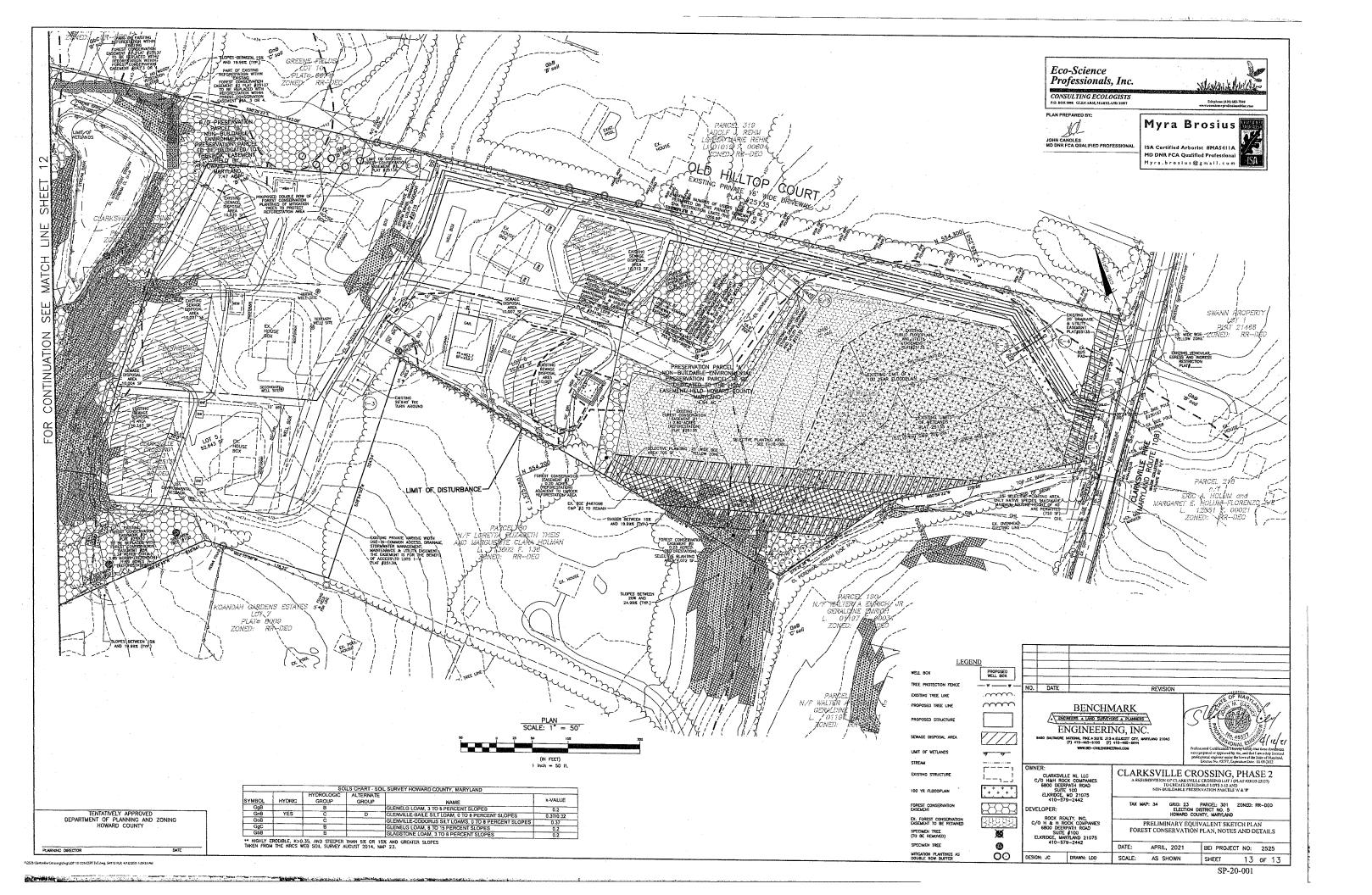
1,583 CF greater than require

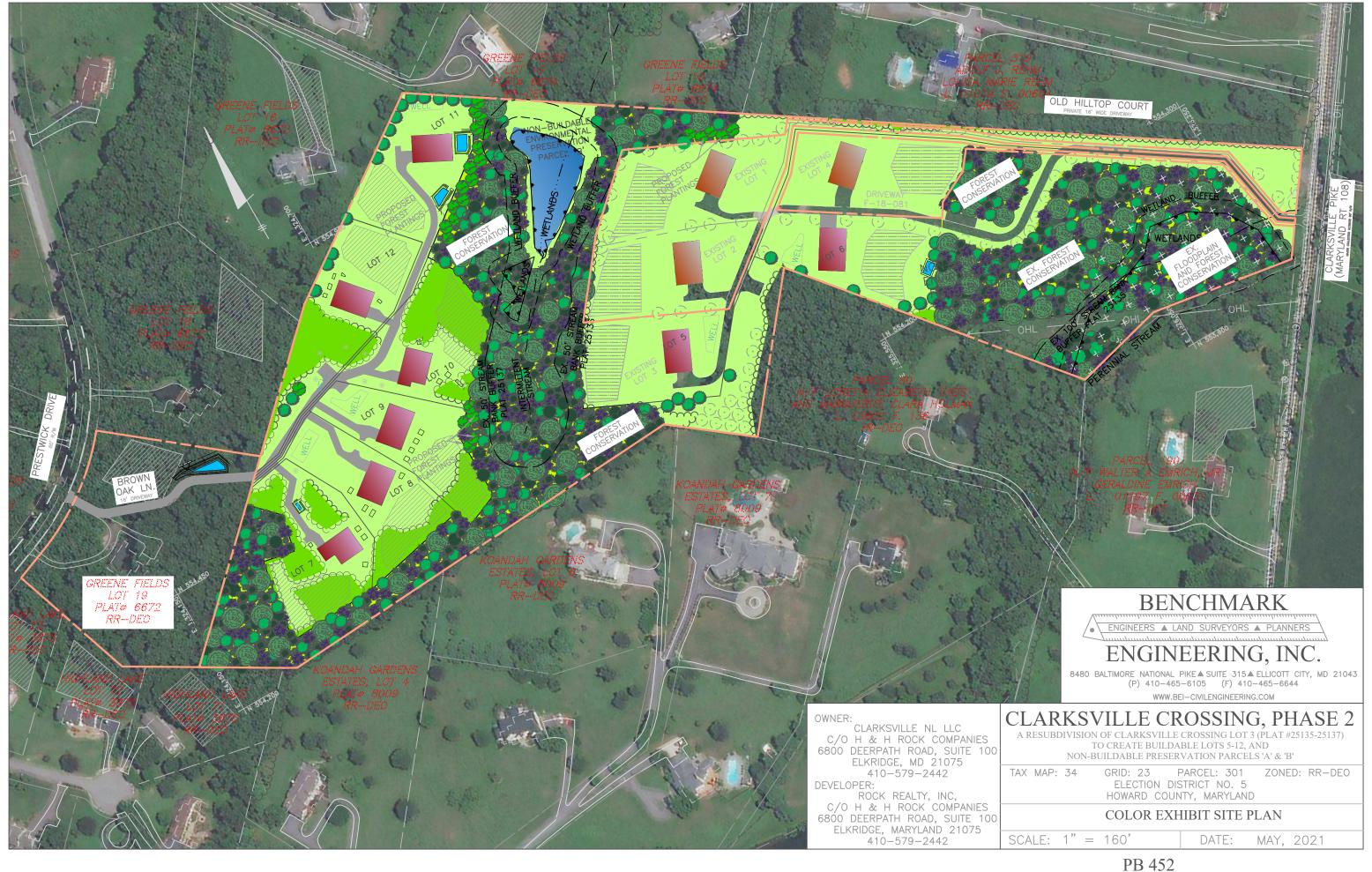
DRY WELL (M-5)











CLARKSVILLE CROSSING, PHASE 2

Minimum Lot Size Chart						
Lot	Gross	Pipestem	Minimum			
	Area (SF)	Area (SF)	Lot Size (SF)			
5	52,643	7,855	44,788			
6	55,849	5,974	49,875			
8	40,569	331	40,238			
9	40,881	702	40,179			
10	47,049	980	46,069			
11	49,034	4,131	44,903			
12	52,156	4,124	48,032			

PRELIMINARY EQUIVALENT SKETCH PLAN LOTS 5 THRU 12, AND NON-BUILDABLE PRESERVATION PARCELS 'A' & 'B' TAX MAP 34, GRID 23, P/O PARCEL 301 5TH ELECTION DISTRICT, HOWARD COUNTY, MD

DENSITY CHART			
PARCEL INFORMATION	TAX MAP 34, GRID 23, PARCEL 301		
TOTAL AREA OF SUBDIVISION	24.55 AC		
DENSITY UNITS ALLOWED BY RIGHT	24.55 / 4.25 = 5 D.U.		
MAXIMUM DEO UNITS ALLOWED	22.45 / 2 = 11 D.U.*		
NUMBER OF UNITS PROPOSED	11 (PHASE I — 4 UNITS PHASE II — 7 UNITS)		
DEO DENSITY UNITS RECEIVED FOR THIS PLAT	6		
DEO SENDING PARCEL	SAVAGE PROPERTY F-20- TAX MAP 13 P/O PARCEL 109		

*MAXIMUM DENSITY UNITS ALLOWED AS FOLLOWS: TOTAL TRACT AREA (24.55 gc.) FLOODPLAIN AREA (-2.10 ac.) STEEP SLOPES AREA (-0.16 ac.) STEEP SLOPES LESS THAN 10 VERT. FEET (+0.16 ac.) NET TRACT AREA = 22.45 ac.

A RESUBDIVISION OF CLARKSVILLE CROSSING LOT 3 (PLAT #25135-25137)

TO CREATE BUILDABLE LOTS 5-12, AND NON-BUILDABLE PRESERVATION PARCELS 'A' & 'B'

ELECTION DISTRICT NO. 5

HOWARD COUNTY, MARYLAND

COVER SHEET

PARCEL: 301

SITE DATA TABULATION

1) GENERAL SITE DATA

a. PRESENT ZONING: RR-DEO

LOCATION: TAX MAP 34 - GRID 23 - PARCEL 301

APPLICABLE DPZ FILE REFERENCES: ECP-13-077,

SP-07-013, F-14-048, WP-13-075, WP-14-006, WP-14-053, WP-18-099, F-18-081, WP-20-016

d. DEED REFERENCE: L. 18416 F. 0195

PROPOSED USE OF SITE: 8 SFD LOTS:

2 NON-BUILDABLE PRESERVATION PARCELS
f. PROPOSED WATER AND SEWER:
PRIVATE WATER AND PRIVATE SEWER SYSTEMS
2) AREA TABULATION
a. TOTAL AREA OF OVERALL SITE
b. AREA OF 100 YEAR FLOODPLAIN (APPROX.) 2.10 Ac.±
c. AREA OF STEEP SLOPES (25% OR GREATER) 0.16 Ac.±
AREA OF STEEP SLOPES LESS THAN 10 VERT. FEET
PLUS AREAS OF STEEP SLOPES WITHIN FLOODPLAIN 0.16 Ac. ±
d. NET AREA OF SITE (PHASE II)
f. LIMIT OF DISTURBANCE (APPROX.)
g. AREA OF PROPOSED BUILDABLE LOTS
h. AREA OF BUILDABLE PRESERVATION PARCELS 0.00 Ac.
i. AREA OF NON-BUILDABLE PRESERVATION PARCELS 12.01 Ac.±
k. AREA OF PROPOSED PUBLIC ROAD
I. AREA OF PROPOSED PUBLIC R/W DEDICATION 0.00 Ac.
3) DENSITY TABULATION
a. NET AREA OF OVERALL SITE 24.55 Ac.±
b. TOTAL NUMBER OF LOTS ALLOWED PER ZONING
1 UNIT PER 4.25 GROSS ACRES ALLOWED BY RIGHT 5
1 UNIT PER 2 NET ACRES (MAX) PER DEO PROVISION 11
4) UNIT/LOT TABULATION
a. TOTAL NUMBER OF BUILDABLE LOTS PROPOSED ON THIS SUBMISSION AND F-18-081 11
b. TOTAL NUMBER OF NON-BUILDABLE PRESERVATION
PARCELS PROPOSED ON THIS SUBMISSION

BENCHMARK

ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MD 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM

were prepared or approved by the and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 45577, Expiration Date: 06-08-2022

OWNER:

CLARKSVILLE NL LLC C/O H & H ROCK COMPANIES 6800 DEERPATH ROAD SUITE 100 ELKRIDGE, MD 21075 410-579-2442

DEVELOPER:

ROCK REALTY, INC, C/O H & H ROCK COMPANIES 6800 DEERPATH ROAD SUITE #100 ELKRIDGE, MARŸLAND 21075 410-579-2442

GRID: 23

BEI PROJECT NO: 2525

OF

ZONED: RR-DEO

DESIGN: JC

DRAWN: LDD

DATE:

TAX MAP: 34

SCALE: AS SHOWN SHEET

MAY, 2021

c. TOTAL NUMBER OF BUILDABLE PRESERVATION PARCELS PROPOSED ON THIS SUBMISSION 0

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- 2. SUBJECT PROPERTY ZONED RR-DEO PER THE 10-6-2013 COMPREHENSIVE ZONING PLAN.
- 3. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- 4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NO. 341A AND 341B WERE USED FOR THIS PROJECT.
- 5. TRACT BOUNDARY IS BASED ON FIELD RUN BOUNDARY SURVEY PERFORMED ON OR ABOUT SEPTEMBER 25, 2018 BY BENCHMARK ENGINEERING, INC.
- 6. TOPOGRAPHY SHOWN IS BASED ON FIELD-RUN SURVEY PERFORMED ON OR ABOUT AUGUST. 2017 BY BENCHMARK ENGINEERING, INC.
- 7. EXISTING UTILITIES SHOWN ARE BASED ON FIELD LOCATIONS BY BENCHMARK ENGINEERING, INC., HOWARD COUNTY GIS, F-18-081 AND SP-07-013.
- 8. WETLAND AND FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., DATED MARCH, 2018
- 9. THE GEOTECHNICAL REPORTS WERE PREPARED BY HILLLIS-CARNES ENGINEERING ASSOCIATES, INC. IN APRIL, 2007 AND BY GEOLAB GEOTECHNICAL LABORATORIES, INC. IN OCTOBER, 2013.
- 10. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, THEIR REQUIRED BUFFERS, 100YR FLOODPLAIN, STEEP SLOPES OR FOREST CONSERVATION EASEMENTS. EXCEPT AS APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
- 11. THE 100-YEAR FLOODPLAIN STUDY WAS PREPARED BY BENCHMARK ENGINEERING, INC. IN MARCH, 2018. THERE IS NO CHANGE IN LAND USE WITHIN THE DRAINAGE AREA LIMITS FROM WHAT WAS USED IN THAT FLOODPLAIN ANALYSIS. THIS STUDY WAS APPROVED UNDER THE REVIEW OF F-18-081. NO NEW FLOODPLAIN STUDY IS REQUIRED.
- 12. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THIS
- 13. THIS SITE IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER WILL BE PRIVATE ON-SITE FACILITIES AND IN ACCORDANCE WITH THE PERCOLATION CERTIFICATION PLAN APPROVED AS PART OF SP-07-013 AND AS REVISED.
- 14. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT PER F-18-081.
- 15. A TRAFFIC STUDY IS REQUIRED FOR THIS SUBDIVISION, IT IS PROVIDED BY MARS GROUP, INC., DATED JUNE,
- 16. STORMWATER MANAGEMENT ENVIRONMENTAL SITE DESIGN (ESD) HAS BEEN PROVIDED TO THE MAXIMUM EXTENT PRACTICAL (MEP). THE DECLARATION OF CONVENANTS SHALL BE RECORDED FOR ON-LOT DEVICES AND ALL SHARED SWM DEVICES SHALL BE PRIVATELY OWNED AND MAINTAINED IN ACCORDANCE WITH MAINTENANCE EASEMENT
- 17. THIS SUBDIVISION COMPLIES WITH THE REQUIREMENTS OF SECTION 16.200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION AS IT WAS PREVIOUSLY PROVIDED BY F-18-081 AND IS TO BE REVISED AND REVIEWED FOR THIS PLAN. FOREST CONSERVATION OBLIGATION IS TO BE FULFILLED BY RETENTION OF 3.65 ACRES. ON-SITE REFORESTATION OF 5.30 ACRES, AND A PREVIOUSLY PURCHASED FOREST BANK OF 0.3 ACRES (CHELSEA'S KNOLL SDP-14-032).
- 18. LANDSCAPING IS PROVIDED WITH A CERTIFIED LANDSCAPE PLAN IN ACCORDANCE ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL POSTING OF SURETY FOR REQUIRED LANDSCAPING IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL WILL BE REQUIRED. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410)-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 20. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 21. A) THE R1-1 (STOP) SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
- B) THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430)
- C) ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MDMUTCD).
- D) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED (QUICK PUNCH) SQUARE TUBE POST (14 GA) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GA) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO (QUICK PUNCH) HOLES ABOVE GROUND LEVEL.

22. THE EXISTING STRUCTURES TO BE REMOVED LOCATED ON LOTS 6-12 ARE TO BE REMOVED PRIOR TO THE SUBMITTAL OF THE RECORD PLAT FOR SIGNATURE.

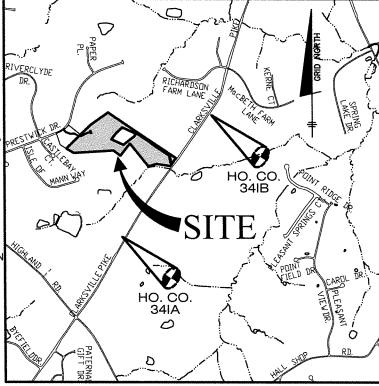
THIS AREA DESIGNATES A PRIVATE SEWAGE DISPOSAL AREA OF AT LEAST 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED. THIS SEWAGE DISPOSAL AREA SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE DISPOSAL AREA. RECORDATION OF A REVISED SEWAGE DISPOSAL AREA SHALL NOT BE NECESSARY.

24. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.

- 25. ALL WELLS AND SEPTIC FIELDS WITHIN 100 FEET OF THE PROPERTY HAVE BEEN SHOWN.
- 26. ALL WELLS ARE TO BE DRILLED PRIOR TO SUBMITTAL OF THE RECORD PLAT FOR SIGNATURE. IT IS THE DEVELOPERS RESPONSIBILITY TO SCHEDULE THE WELL DRILLING PRIOR TO THE FINAL PLAT SUBMISSION. IT WILL NOT BE CONSIDERED 'GOVERNMENT DELAY' IF THE WELL DRILLING HOLDS UP THE HEALTH DEPARTMENT'S SIGNATURE OF THE RECORD PLAT.
- 27. WAIVER PETITION WP-13-075, A REQUEST TO WAIVE SUBSECTIONS 16.144(K)(3)(i) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WAS APPROVED ON DECEMBER 20, 2012 SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE ENVIRONMENTAL CONCEPT PLAN WAS SUBMITTED 30-DAYS PRIOR TO THE SUBMISSION OF THE FINAL PLAN.
 - THE FINAL PLAN SUBMISSION WAS SUBMITTED TO DPZ ON JULY 28, 2013. COMPLIANCE WITH PREVIOUS COMMENTS FROM THE DEVELOPMENT ENGINEERING DIVISION AND THE HEALTH DEPARTMENT.

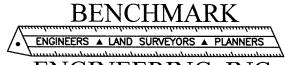
28. WAIVER PETITION, WP-14-006, A REQUEST TO WAIVE SUBSECTIONS 16.144(K)(3)(I) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WAS APPROVED ON AUGUST 22, 2013 SUBJECT TO THE FOLLOWING CONDITIONS:

- 1. THE APPLICANT MUST REDESIGN THE STORMWATER MANAGEMENT FOR THIS SUBDIVISION TO MEET THE CURRENT ENVIRONMENTAL SITE DESIGN (ESD) REQUIREMENTS, AND THEREFORE, THE MAY 4, 2013 MDE GRAND-FATHERING DEADLINE IS NO LONGER APPLICABLE TO THIS PROJECT'S DEADLINE.
- THE ENVIRONMENTAL CONCEPT PLAN MUST BE APPROVED PRIOR TO THE SUBMISSION OF THE FINAL PLAN.
- THE FINAL PLAN SUBMISSION WAS SUBMITTED TO DPZ ON JANUARY 28, 2014. COMPLIANCE WITH PREVIOUS COMMENTS FROM THE DEVELOPMENT ENGINEERING DIVISION AND THE HEALTH DEPARTMENT PER WP-13-075.
- 5. ADVISORY: FUTURE REQUESTS FOR ADDITIONAL EXTENSIONS TO THE VARIOUS DEADLINE DATES WILL NOT BE GRANTED.



SCALE: 1" = 2000'ADC MAP 31; GRID C4

CONTINUED ON NEXT PAGE



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Professional Certification I hereby certify that these documents were prepared of approved by me, and that I am a duly licensed professional engineer interview the laws of the State of Maryland, License No. 45577, Expiration Date: 06-08-2022.

OWNER:

CLARKSVILLE NL LLC C/O H & H ROCK COMPANIES 6800 DEERPATH ROAD SUITE 100 ELKRIDGE, MD 21075 410-579-2442

DEVELOPER:

ROCK REALTY, INC. C/O H & H ROCK COMPANIES 6800 DEERPATH ROAD SUITE #100 ELKRIDGE, MARYLAND 21075 410-579-2442

CLARKSVILLE CROSSING, PHASE 2

A RESUBDIVISION OF CLARKSVILLE CROSSING LOT 3 (PLAT #25135-25137) TO CREATE BUILDABLE LOTS 5-12, AND NON-BUILDABLE PRESERVATION PARCELS 'A' & 'B'

TAX MAP: 34

GRID: 23 PARCEL: 301 ZONED: RR-DEO ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND

SHEET

GENERAL NOTES AND VICINITY MAP

DATE: MAY, 2021 BEI PROJECT NO: 2525

DESIGN: JC

DRAWN: LDD

SCALE: AS SHOWN

OF

PB 452

GENERAL NOTES CONTINUED:

- 29. WAIVER PETITION, WP-14-053, WAS APPROVED ON JANUARY 6, 2014 TO SECTION 16.116(a)(1) AND 16.116(a)(2)(i) WHICH STATES GRADING, REMOVAL OF VEGETATIVE COVER AND TREES, PAVING AND NEW STRUCTURES SHALL NOT BE PERMITTED WITHIN 25' OF A WETLAND AND WITHIN 50' OF AN INTERMITTENT STREAMBANK; SECTION 16.120(b)(4)(iii)b WHICH PROHIBITS STREAM BUFFERS ON RESIDENTIAL LOTS LESS THAN 10 ACRES; AND SECTION 16.1205(a)(10) WHICH CONSIDERS SPECIMEN TREES A PRIORITY. SINCE SP-07-013 RECEIVED SIGNATURE APPROVAL ON OCTOBER 10, 2008 PRIOR TO THE STATES ADOPTION OF SB-666 IT WAS DETERMINED THAT THE WAIVER FOR SPECIMEN TREE REMOVAL IS NOT REQUIRED SINCE THIS PROJECT WOULD BE CONSIDERED GRAND-FATHERED. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
- THE APPLICANT MUST CONTACT MDE FOR ANY NECESSARY PERMITS FOR DISTURBANCES TO THE ENVIRONMENTAL FEATURES. THE MDE TRACKING PERMIT NUMBER MUST BE ADDED TO ALL PLAN SUBMISSIONS
- COMPLIANCE WITH PREVIOUS COMMENTS FROM THE DEVELOPMENT ENGINEERING DIVISION ISSUED UNDER F-14-048 AND ECP-13-072
- ON ALL FUTURE SUBDIVISION PLANS AND BUILDING PERMIT PLANS, PROVIDE A BRIEF DESCRIPTION OF WAIVER PETITION WP-14-053, AS A GENERAL NOTE TO INCLUDE REQUESTS, SECTIONS OF THE REGULATIONS 2012, MAP 34, AS APPROVED BY THE HOWARD COUNTY COUNCIL 34ND WAVER PETITIONS WP-13-075, WP-14-006, AND WP-14-053 HAVE EXCEEDED THE MILESTONE DATES AS PART OF PLAN HOWARD 2030. ASSOCIATED WITH THEIR VALIDITY.
- 31. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH - 12' AND (16' SERVING MORE THAN ONE RESIDENCE).
- SURFACE 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING
- GEOMETRY MAX. 15% GRADE, MAX. 10% GRADE CHANGE & MIN. 45' TURNING RADIUS. STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOAD)
- DRAINAGE ELEMENTS CAPABLE OF SAFELY PASSING 100 YEAR FLOOD PLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
- STRUCTURE CLEARANCES MINIMUM 12 FEET.
- MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE.
- PREVIOUS HOWARD COUNTY FILE NUMBERS: ECP-13-077, SP-07-013, F-14-048, WP-13-075. WP-14-006. WP-14-053, WP-18-099, F-18-081, WP-20-016
- 33. ALTERNATIVE COMPLIANCE, WP-18-099, HAS BEEN APPROVED BY HOWARD COUNTY DIRECTOR OF PLANNING AND ZONING DATED JUNE 13, 2018.

APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

- 1. THE ALTERNATIVE COMPLIANCE PETITION NUMBER (WP-18-099) AND ITS CONDITIONS OF APPROVAL
- MUST BE ADDED TO ALL SUBDIVISION PLANS AND FINAL PLAT, F-18-081.

 2. THE DEVELOPER SHALL PLANT TWENTY-FOUR (24) 3" MINIMUM CALIPER NATIVE SHADE TREES IN ADDITION TO THE REQUIRED PERIMETER LANDSCAPING TO MITIGATE THE REMOVAL OF THE SPECIMEN TREES WILL BE BOUNDED WITH THE DEVELOPER'S AGREEMENT UNDER THE FINAL SUBDIVISION PLAN.
- 3. PROTECTIVE MEASURES SHALL BE UTILIZED DURING CONSTRUCTION TO PROTECT THE SPECIMEN TREES THAT ARE PROPOSED TO REMAIN. INCLUDE DETAILS OF THE PROPOSED TREE PROTECTION MEASURES ON THE FINAL PLAN.
- 4. THE ALTERNATIVE COMPLIANCE APPROVAL APPLIES ONLY TO THE TWELVE (12) SPECIMEN TREES TO BE REMOVED AS SHOWN ON THE WAIVER PLAN EXHIBIT. THE REMOVAL OF ANY OTHER SPECIMEN TREES ON THE PROPERTY IS NOT PERMITTED UNLESS IT CAN BE SUFFICIENTLY DEMONSTRATED BY THE APPLICANT TO BE JUSTIFIED.
- 5. NO DISTURBANCE SHALL BE PERMITTED WITHIN ENVIRONMENTAL FEATURES AND REQUIRED BUFFERS EXCEPT
- FOR THE NECESSARY ENVIRONMENTAL DISTURBANCES FOR THE USE-IN-COMMON DRIVEWAY ENTRANCE AS SHOWN ON FINAL PLAN.
- 34. THE PREVIOUSLY EXISTING WELL, HO-81-1246, WAS SEALED AND THE WELL ABANDONMENT REPORT SUBMITTED TO THE HEALTH DEPARTMENT PRIOR TO HEALTH DEPARTMENT SIGNATURE OF THE RECORD PLAT FOR F-18-081.
- 35. ALL WELLS ESTABLISHED IN THIS SUBDIVISION MUST BE SAMPLED AT YIELD TEST AND SAMPLES ANALYZED FOR RADIUM AND/OR DEGRADATION PRODUCTS GROSS ALPHA AND GROSS BETA.
- 36. THE DEVELOPER REQUESTED A WAIVER TO DESIGN MANUAL, VOLUME III, SECTION 2.6.B, THAT REQUIRES A SHARED DRIVEWAY THAT CROSSES A 100-YEAR FLOODPLAIN TO BE A PUBLIC ACCESS PLACE AND THE DRAINAGE ELEMENT WITHIN THE 100-YEAR FLOODPLAIN TO OVERTOP THE EXISTING DRIVEWAY BY NO MORE THAN 1'. BASED ON THE INFORMATION PROVIDED WITH THE SUBMITTAL. HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING HAS APPROVED THE REQUEST IN A LETTER DATED JUNE 20, 2018.
- 37. STORMWATER MANAGEMENT SHALL BE PROVIDED FOR THIS PROJECT BASED ON GUIDELINES ESTABLISHED BY THE 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUMES I & II AS AMENDED BY THE STORMWATER MANAGEMENT ACT OF 2007. ENVIRONMENTAL SITE DESIGN METHODS SHALL BE UTILIZED. INCLUDING NON-ROOFTOP DISCONNECTION (N-2), DRY WELLS (M-5), AND MICRO-BIORETENTION (M-6) FACILITIES. ALL FACILITIES ARE TO BE PRIVATELY OWNED AND MAINTAINED.
- 38. THE STORMWATER MANAGEMENT SYSTEMS SHOWN ON THIS PLAN ARE CONCEPTUAL IN SIZE, SHAPE AND LOCATION. THE ACTUAL DESIGN MAY CHANGE WITH BUILDING PERMIT PLAN.
- 39. A PLANNING BOARD HEARING AND APPROVAL IS REQUIRED FOR THIS SUBDIVISION. THIS PRELIMINARY EQUIVALENT SKETCH PLAN WAS APPROVED BY THE THE PLANNING BOARD ON _ ___, PB CASE #
- 40. COMMUNITY MEETING WAS HELD ON FEBRUARY 11, 2019 AT THE 5TH DISTRICT VOLUNTEER FIRE DEPARTMENT.

- 41. PER SECTION 105.0.G.1.D, NON-BUILDABLE PRESERVATION PARCEL 'A' IS TO BE DEDICATED TO THE HOMEOWNERS ASSOCIATION, AN EASEMENT WILL BE HELD BY HOWARD COUNTY. MARYLAND. THE INTENDED USE OF THE PARCEL IS ENVIRONMENTAL
- 42. PER SECTION 105.0.G.1.d, NON-BUILDABLE PRESERVATION PARCEL 'B' IS TO BE DEDICATED TO THE HOMEOWNERS ASSOCIATION, AN EASEMENT WILL BE HELD BY HOWARD COUNTY. MARYLAND. THE INTENDED USE OF THE PARCEL IS ENVIRONMENTAL
- 43. THE DEVELOPER WILL ENTER INTO AN AGREEMENT TO PAY A FEE-IN-LIEU OF THE CONSTRUCTION FOR THE MODERATE INCOME HOUSING UNIT REQUIREMENT AT THE FINAL PLAN STAGE.
- 44. THIS PROPERTY IS DESIGNATED A TIER III PROPERTY PER THE SUSTAINABLE GROWTH AND AGRICULTURAL PRESERVATION ACT OF
- 45. ANY CHANGES TO A PRIVATE SEWAGE AREA SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- 46. THIS SUBDIVISION IS NOT LOCATED ON A SCENIC ROAD.
- 47. THE PRIVATE 16' WIDE DRIVEWAY AND TREE CLEARING PROPOSED ON GREENE FIELD LOT 19 ARE TO BE ADDED TO F-86-102 BY REDLINE REVISION PROCESS. THE NECESSARY ENVIRONMENTAL ANALYSIS WILL BE PROVIDED AT THE TIME OF REDLINE SUBMISSION. SEPTIC LINE AND TANK REVISION TO BE PROCESSED WITH THE BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM PRIOR TO RECORDATION OF THE DRIVEWAY
- 48. THE MODIFICATION OF THE SEPTIC SYSTEM AT 6576 PRESTWICK DRIVE (GREENE FIELDS, LOT 19) MUST BE APPROVED BY A HEALTH DEPARTMENT INSPECTOR PRIOR TO SIGNATURE OF THE PLAT OF REVISION FOR GREENE FIELDS, LOT 19. REVISION OF THE SEWAGE DISPOSAL AREA (SDA) ON LOT 19 OCCURS AS A REVISION OF THE PERCOLATION CERTIFICATION PLAN FOR GREENE FIELD LOT 19. AFTER APPROVAL OF THE PERCOLATION CERTIFICATION PLAN REVISION, AN ONSITE SEWAGE DISPOSAL SYSTEM (OSDS) DESIGN PLAN MUST BE SUBMITTED TO THE HEALTH DEPARTMENT FOR APPROVAL. THE SEPTIC SYSTEM MODIFICATION MAY COMMENCE WHEN THE OSDS DESIGN PLAN IS APPROVED.
- A PRIVATE ROAD STREET NAME SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY. BUREAU OF HIGHWAYS ALONG ROUTE 108 UNLESS IT WAS PROVIDED UNDER F-18-081. A PRIVATE ROAD STREET NAME SIGN SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY, BUREAU OF HIGHWAYS FOR THE ENTRANCE FROM PRESTWICK DRIVE. BOTH OF THESE SIGNS SHALL BE PAID FOR BY THE DEVELOPER/OWNERS. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.
- THE USE-IN-COMMON DRIVEWAY EASEMENT TO BE SHOWN ON GREENE FIELDS, LOT 19, IT MUST BE ADDED BY A REVISION PLAT APPROVED BY HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING PRIOR TO SIGNATURE APPROVAL OF CLARKSVILLE CROSSING, PHASE 2 FINAL SUBDIVISION PLAN. A DEED MUST BE RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND, CREATING THE EASEMENT.
- PER SECTION 105.0.G.2. OF THE ZONING REGULATIONS, THE DESIGN OF THIS CLUSTER SUBDIVISION REFLECTS THE INTENDED PRINCIPAL USE OF THE PRESERVATION PARCEL ENVIRONMENTAL PROTECTION, BY HAVING THE STREAMS, WETLANDS, THEIR BUFFERS, FLOODPLAIN, FOREST CONSERVATION AND STEEP SLOPES WITHIN THE LIMITS OF THE PRESERVATION PARCELS AND NOT WITHIN THE CLUSTER LOTS. THESE ENVIRONMENTAL FEATURES ARE PROTECTED BY VARIOUS PERPETUAL EASEMENTS.

52. ALTERNATIVE COMPLIANCE (WP-20-016) TO THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS FOR CLARKSVILLE CROSSING, PHASE 2, WAS APPROVED.

ON SEPTEMBER 17, 2020, AND PURSUANT TO SECTION 16.1216, THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING, DIRECTOR OF RECREATION AND PARKS AND ADMINISTRATOR OF COMMUNITY SUSTAINABILITY CONSIDERED AND APPROVED A REQUEST FOR A VARIANCE WITH RESPECT TO SECTION 16.1205(A)(3) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO REMOVE 1.3 OR THE 10.4 SPECIMEN TREES IDENTIFIED ON SITE. THE FINAL DECISION ACTION PLAN REPORT CONTAINS ADDITIONAL

INFORMATION. CONDITIONS FOR APPROVAL OF SECTION 16.1205(A)(3):

1. THE ALTERNATIVE COMPLIANCE APPROVAL APPLIES ONLY TO SPECIMEN TREES #3, #4, #24, #31, #34, #35, #40, #41, #57, #74, #77, #80, AND #83 AS SHOWN ON THE ALTERNATIVE COMPLIANCE PLAN EXHIBIT. THE REMOVAL OF ANY OTHER SPECIMEN TREES ON THE SUBJECT PROPERTY IS NOT PERMITTED UNDER THIS APPROVAL. PROTECTIVE MEASURES SHALL BE UTILIZED DURING CONSTRUCTION TO PROTECT THE SPECIMEN TREES THAT ARE PROPOSED TO REMAIN. INCLUDE DETAILS OF THE PROPOSED TREE PROTECTION MEASURES ON THE FINAL SUBDIVISION PLANS.

2. THE REMOVAL OF SPECIMEN TREES #3, #4, #24, #31, #34, #35, #40, #41, #57, #74, #77, #80, AND #83 WILL REQUIRE THE PLANTING OF 26 NATIVE SHADE TREES ONSITE. THE TREES SHALL BE A MINIMUM OF 3" DIAMETER AT BREAST HEIGHT AND SHALL BE SHOWN ON THE LANDSCAPE AND FOREST CONSERVATION PLAN SHEETS AS PART OF THE FINAL SUBDIVISION PLANS FOR PHASE 2. THE TREES WILL BE BONDED ALONG WITH THE REQUIRED PERIMETER LANDSCAPING.

ON SEPTEMBER 15, 2020, AND PURSUANT TO SECTION 16.104, THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING, CONSIDERED AND APPROVED A REQUEST FOR ALTERNATIVE COMPLIANCE WITH RESPECT TO SECTION 16.120(C)(2) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO ALLOW LOTS 7-12 OF THE CLARKSVILLE CROSSING SUBDIVISION TO SHARE AN ACCESS EASEMENT INSTEAD OF REPOVALING BURGLES CONDITIONS FOR ADDROVAL OF SECTION 14 202(C)(2)

PROVIDING PUBLIC ROAD FRONTAGE. CONDITIONS FOR APPROVAL OF SECTION 16.120(C)(2):

1. A PLAT OF REVISION FOR LOT 19 OF THE GREENE FIELDS SUBDIVISION PROVIDING THE SHARED ACCESS EASEMENT TO SERVE LOTS 7–12 MUST BE RECORDED PRIOR TO THE RECORDATION OF THE FINAL

PLAT FOR CLARKSVILLE CROSSING, PHASE 2.

2. A USE-IN-COMMON MAINTENANCE AGREEMENT FOR LOTS 7-12 MUST BE RECORDED WITH THE PLAT OF REVISION OF LOT 19 OF THE GREENE FIELDS SUBDIVISION.

53. ON AUGUST 1, 2019, BGE APPROVED THE PLAN AS LONG AS TREES WERE NOT PLANTED UNDER THE POWELINES.

54. ALL WELL LOCATIONS AND REPLACEMENT AREAS MUST BE AT LEAST 50 FEET FROM ALL ROADSIDE SWALES OR, AS AN ALTERNATIVE, UTILIZE CURB AND GUTTER ROADWAY DESIGN.

55. THE SHARED DRIVEWAY MAINTENANCE EASEMENT FOR LOTS 10 THROUGH 12 SHALL INCLUDE A CLAUSE GRANTING PRIMACY TO LOT 10 FOR AN AREA OF ACCESS AND UTILIZATION TO THE TERTIARY WELL LOCATION AS SHOWN ON THE FINAL PERCOLATION CERTIFICATION PLAN. A DRAFT OF THIS CLAUSE IS TO BE PROVIDED TO HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO SIGNATURE APPROVAL OF THE FINAL PLAN. 56. A REVISED PERCOLATION CERTIFICATION PLAN, REVISING THE SEWAGE DISPOSAL AREA ON GREENE FIELDS LOT 19 TO NOT BE IN CONFLICT WITH THE PROPOSED ACCESS EASEMENT, ASSOCIATED GRADING AND STORMWATER DEVICES. MUST BE SIGNED BY THE HEALTH OFFICER PRIOR TO HEALTH OFFICER SIGNATURE OF THE FINAL RECORD PLAT FOR THIS SUBDIVISION. ADDITIONAL PERCOLATION TESTING MAY BE REQUIRED, ADDITIONAL SPECIMEN TREES MAY BE DESIGNATED FOR REMOVAL. THE REVISED SEWAGE DISPOSAL AREA MUST DEMONSTRATE THAT THE 10,000 SF SEWAGE DISPOSAL AREA, THE HOUSE AND THE DRIVEWAY EASEMENT ARE ALL ACHIEVABLE PRIOR TO THE APPROVAL OF THE ACCESS EASEMENT. IF IT IS NOT POSSIBLE TO DEMONSTRATE THE SHARED DRIVEWAY EASEMENT AND THE REVISED SEWAGE DISPOSAL AREA THE DRIVEWAY WILL NOT BE ALLOWED.

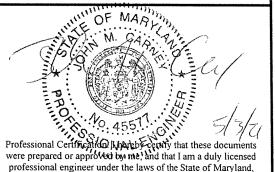
BENCHMARK

ENGINEERS A LAND SURVEYORS A PLANNERS

ENGINEERING, INC.

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OWNER:

CLARKSVILLE NL LLC C/O H & H ROCK COMPANIES 6800 DEERPATH ROAD SUITE 100 ELKRIDGE, MD 21075 410-579-2442

DEVELOPER:

ROCK REALTY, INC, C/O H & H ROCK COMPANIES 6800 DEERPATH ROAD SUITE #100 ELKRIDGE, MARŸLAND 21075 410-579-2442

License No. 45577, Expiration Date: 06-08-2022. CLARKSVILLE CROSSING, PHASE 2 A RESUBDIVISION OF CLARKSVILLE CROSSING LOT 3 (PLAT #25135-25137)

TO CREATE BUILDABLE LOTS 5-12, AND NON-BUILDABLE PRESERVATION PARCELS 'A' & 'B'

TAX MAP: 34

GRID: 23 PARCEL: 301 ZONED: RR-DEO ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND

GENERAL NOTES

DATE: MAY, 2021 BEI PROJECT NO: 2525

DESIGN: JC

DRAWN: LDD

SCALE: AS SHOWN

SHEET OF

