

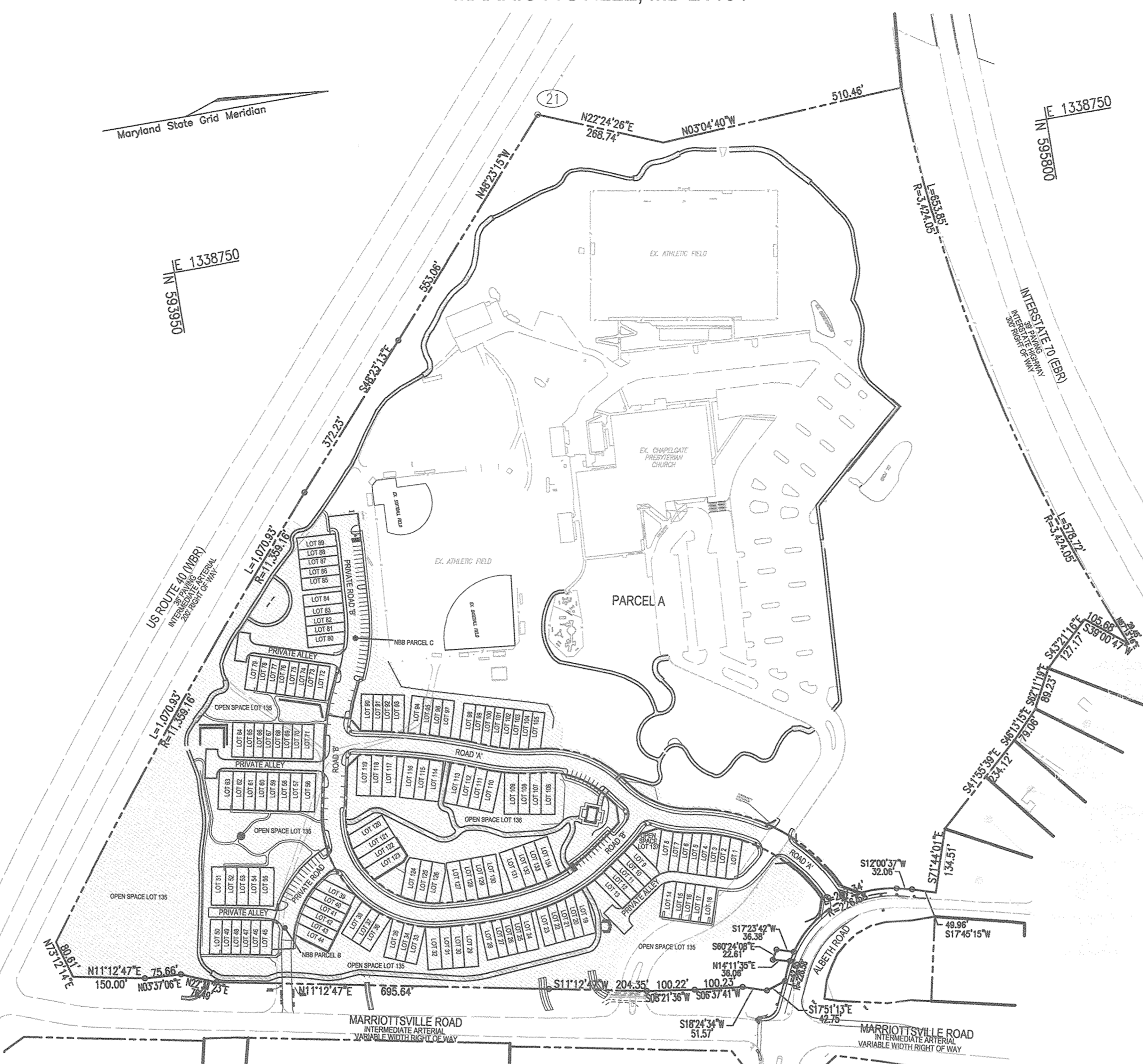
GENERAL NOTES

- 1. PROJECT BACKGROUND: LOCATION: TAX MAP 16, BLOCK 10, PARCELS 110 AND 421 ZONING: CEF-M SUBDIVISION: CHAPELGATE COMPLEX SECTION/AREA: N/A DPZ REFERENCES: BA CASE 86-09E, SDP-88-037, BA CASE 93-07E, SDP-93-12B, PLAT 13157, PLAT 15336, TU-01-01, BA CASE 01-23E, WP-03-94, SDP-02-133FC, PLAT 15923-25, SDP-03-122, TU-06-004, SDP-07-133, WP-08-034, PLAT 20074-76, ZB-1105-M, ECP-18-062, WP-19-056... 2. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED... 3. THE EXISTING TOPOGRAPHY SHOWN HEREON WAS OBTAINED FROM AERIAL PHOTOGRAMMETRY COMPILED BY POTOMAC AERIAL SURVEYS INC. DECEMBER 21, 2017 AND SUPPLEMENTED BY FIELD SURVEYS PREPARED BY VOGEL ENGINEERING+TIMMONS GROUP DATED MARCH 2013, FEB/MARCH 2014 AND FEB/MARCH/JUNE 2018... 19. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, CEMETERIES LOCATED ON THE SUBJECT PROPERTY OR THE COUNTY'S CEMETERY SITE MAP... 20. THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM... 21. STORMWATER MANAGEMENT FOR THE UNITS PROVIDED BY THE USE OF ALTERNATIVE SURFACES AND MICRO-SCALE PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA... 22. IN ACCORDANCE WITH ZONING BOARD DECISION AND ORDER FOR CASE ZB1105-M, THE OPEN SPACE REQUIREMENTS FOR THIS CEF-M PROJECT IS 25% OF GROSS AREA (20.12 AC. GROSS AREA X 25% = 5.03 AC.)... 23. IN ACCORDANCE WITH ZONING BOARD DECISION AND ORDER FOR CASE ZB1105-M, THE RECREATION OPEN SPACE REQUIREMENTS FOR THIS CEF-M PROJECT IS 1,000 SF/UNIT... 24. THE SITE IS NOT LOCATED IN THE HISTORIC DISTRICT OR LISTED ON THE HISTORIC SITES INVENTORY... 25. THE PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON JULY 25TH, 2018 AT 6 PM AT THE CHAPELGATE PRESBYTERIAN CHURCH... 26. THE ENVIRONMENTAL CONCEPT PLAN (ECP 18-062) WAS APPROVED ON FEBRUARY 21, 2019... 27. IN ACCORDANCE WITH ZONING BOARD DECISION AND ORDER FOR CASE ZB1105-M, THIS SUBDIVISION IS REQUIRED TO PROVIDE MODERATE INCOME HOUSING UNITS... 28. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS... 29. TRAFFIC CONTROL DEVICES... 30. PUBLIC TRASH AND RECYCLING COLLECTION WILL BE PROVIDED ALONG THE PUBLIC AND PRIVATE ROADS WITHIN 5' OF THE EDGE OF THE ROADWAY... 31. APPROVAL OF THIS SKETCH PLAN BY THE HOWARD COUNTY ZONING DISTRICT DOES NOT GRANT APPROVAL OF A PROPOSED SEDIMENT CONTROL SCHEME... 32. THIS PROJECT IS SUBJECT TO WP-19-056. ON MARCH 26, 2019; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE TO THE FOLLOWING SECTIONS... SECTION 16.1205(A)(7) REMOVAL OF SPECIMAN TREES 30" IN DIAMETER OR GREATER... SECTION 16.120(C)(4) SINGLE FAMILY ATTACHED LOTS MAY BE APPROVED WITHOUT PUBLIC ROAD FRONTAGE... SECTION 16.116 PROTECTION OF WETLANDS, STREAMS, AND STEEP SLOPES... APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS: 1. THE IDENTIFIED SPECIMAN TREES MAY BE REMOVED PROVIDED THEY ARE REPLACED AT A 2:1 RATIO WITH 3" CALIPER NATIVE TREES FOR A TOTAL OF 54 REPLACEMENT TREES... 2. PROVIDE A CHART ON ALL SUBJECT PLANS TO IDENTIFY THE SPECIMAN TREES PERMITTED TO BE REMOVED... 3. PRIVATE ROADS MUST BE DESIGNED AND CONSTRUCTED TO PUBLIC ROAD STANDARDS... 4. ADDRESS SIGNAGE MAY BE REQUIRED AT THE END OF ALLEYS... 5. ANY TRASH PAD AREAS REQUIRED AT THE END OF PRIVATE ALLEYS MUST BE DESIGNED AND SCREENED... 6. ADD A GENERAL NOTE THAT LOTS 14-15, LOTS 46-54, LOTS 74-79 AND LOTS 82-89 ARE PERMITTED WITHOUT PUBLIC ROAD FRONTAGE... 7. ENCROACHMENTS INTO THE STEEP SLOPES AND STREAM BUFFERS ARE LIMITED TO THE PURPOSE OF INSTALLING THE TRAIL PATH... 8. LOD FOR PATHWAY CONSTRUCTION WILL BE LIMITED TO THE MINIMUM REQUIRED TO COMPLETE THE WORK... 9. GRADING DETAILS WILL BE PROVIDED TO LIMIT DISTURBANCE TO CRITICAL ROOT ZONES... 10. EXERCISE EQUIPMENT AND THE REFLECTION/SITTING AREA WILL BE PLACED OUTSIDE STREAM BUFFERS TO THE EXTENT POSSIBLE.

NOTE:

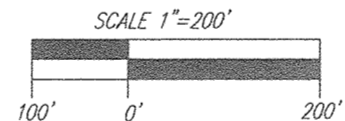
ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.

SKETCH PLAN CHAPELGATE LOTS 1-134, OPEN SPACE LOTS 135-137, PARCEL A AND NON-BUILDABLE PARCELS B&C A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421 MARRIOTTSTVILLE, MD 21104



LOCATION MAP

SCALE: 1"=200'

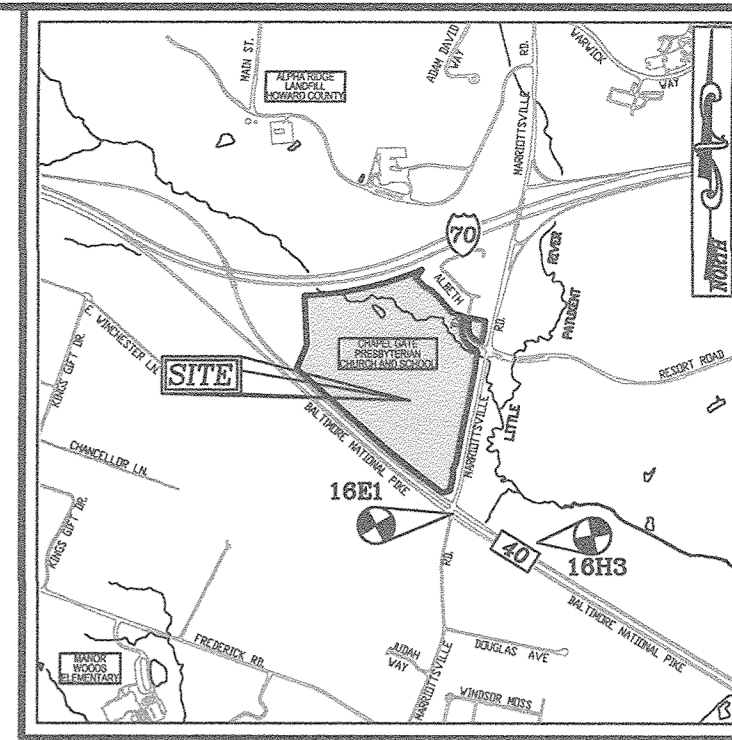


CHAPELGATE CEF-M REGULATIONS:

- A. PERMITTED USES: 1. RELIGIOUS FACILITIES, STRUCTURES AND LAND USE PRIMARILY FOR RELIGIOUS ACTIVITIES... 2. SCHOOLS, PRIVATE ACADEMIC, INCLUDING COLLEGES AND UNIVERSITIES... 3. CHILD DAY CARE CENTERS AND NURSERY SCHOOLS... 4. SINGLE FAMILY ATTACHED DWELLING UNITS... 5. COMMERCIAL COMMERCIAL, DEFINED AS: PUBLIC SPACES WHICH ARE INTENDED FOR COMMUNITY INTERACTION... B. ACCESSORY USES: 1. MAXIMUM DENSITY: 134 TOTAL RESIDENTIAL UNITS... 2. BUILDING/USE SETBACKS: A. FROM EXTERNAL PROPERTY LINES: 30'... 3. MINIMUM DISTANCE BETWEEN SINGLE FAMILY ATTACHED BUILDINGS: A. FACE TO FACE: 30'... 4. HOME OCCUPATIONS, SUBJECT TO THE REQUIREMENTS OF HOWARD COUNTY ZONING REGULATIONS SECTION 128.0.C... 5. OFF-STREET PARKING OF NO MORE THAN ONE COMMERCIAL VEHICLE... 6. STORAGE OF RECREATIONAL VEHICLES OR BOATS... 7. SMALL WIND ENERGY SYSTEM, BUILDING MOUNTED... C. GENERAL BULK REGULATIONS: 1. MAXIMUM DENSITY: 134 TOTAL RESIDENTIAL UNITS... 2. BUILDING/USE SETBACKS: A. FROM EXTERNAL PROPERTY LINES: 30'... 3. MINIMUM DISTANCE BETWEEN SINGLE FAMILY ATTACHED BUILDINGS: A. FACE TO FACE: 30'... 4. HOME OCCUPATIONS, SUBJECT TO THE REQUIREMENTS OF HOWARD COUNTY ZONING REGULATIONS SECTION 128.0.C... 5. OFF-STREET PARKING OF NO MORE THAN ONE COMMERCIAL VEHICLE... 6. STORAGE OF RECREATIONAL VEHICLES OR BOATS... 7. SMALL WIND ENERGY SYSTEM, BUILDING MOUNTED... D. SINGLE FAMILY ATTACHED BULK REGULATIONS: 1. MAXIMUM DENSITY: 134 TOTAL RESIDENTIAL UNITS... 2. BUILDING SETBACKS: A. FRONT, FROM RIGHT-OF-WAY: 5'... 3. MAXIMUM HEIGHT: A. PRINCIPAL STRUCTURE: 45'... E. COMMERCIAL/INSTITUTIONAL: 1. BUILDING SETBACKS: A. FROM THE RESIDENTIAL LOTS: 75'... 2. MAXIMUM HEIGHT: A. GENERAL CEF DISTRICT HEIGHT: 45'... F. OPEN SPACE (OF TOWNHOUSE DEVELOPMENT PROPERTY) 25%... G. ON-SITE AMENITY AREA/RECREATIONAL AREA: 1,000 SF/UNIT... H. MIHU (MODERATE INCOME HOUSING UNITS) 15%... I. NUMBER OF UNITS TO BE MIHU: 21... ** CEF-M REGULATIONS TAKEN FROM PETITIONERS EXHIBIT 3

BENCHMARKS

HOWARD COUNTY BENCHMARK 16E1 (CONC. MON.) N 593250.96 E 1340192.70 ELEV. 463.89 LOCATION: ISH AT CORNER RT-40 & MARRIOTTSTVILLE ROAD... HOWARD COUNTY BENCHMARK 16H3 (CONC. MON.) N 592408.04 E 1341523.97 ELEV. 469.71 LOCATION: RT-40, 0.45 MILES WEST OF TURF VALLEY ROAD



VICINITY MAP SCALE: 1"=2000' ADC MAP: PAGE: 19 BLOCK: B3, B4, C3 & C4

LEGEND

- EXISTING CURB AND GUTTER
EXISTING UTILITY POLE
EXISTING MAILBOX
EXISTING SIGN
PROPERTY LINE
RIGHT-OF-WAY LINE
LOOP TRAIL

PARKING TABULATION:

TOTAL NUMBER OF DWELLING UNITS PROPOSED: 134 SINGLE FAMILY ATTACHED (SFA) = 134 LOTS
OFF-STREET PARKING SPACES REQUIRED: 2 SPACES PER UNIT
134 x 2 = 268 SPACES REQUIRED
PARKING SPACES PROVIDED: SFA = 1 GARAGE / 1 DRIVEWAY = 134 SPACES IN GARAGE = 63 SPACES (FOR 63 UNITS) 1 SPACES ON DRIVEWAY = 63 SPACES (FOR 63 UNITS) SFA = 2 GARAGE / 2 DRIVEWAY 2 SPACES IN GARAGE = 142 SPACES (FOR 71 UNITS) 2 SPACES ON DRIVEWAY = 142 SPACES (FOR 71 UNITS)
TOTAL OFF STREET PARKING SPACES PROVIDED: = 410 SPACES PROVIDED OFF-STREET
VISITOR PARKING REQUIRED: SFA = 134 UNITS @ 0.5 SPACES PER UNIT 134 x 0.5 = 67 SPACES REQUIRED 79 ON-STREET INDENTED SPACES PROVIDED

RECREATION OPEN SPACE TABULATION:

RECREATION OPEN SPACE REQUIRED = 1,000 SF/UNIT X 134 UNITS = 134,000 SF REQUIRED
TOTAL RECREATION OPEN SPACE TO BE PROVIDED FOR CHAPELGATE
P/O OPEN SPACE 135 -AMENITY AREA 2 = 770 SF -AMENITY AREA 3 = 6,320 SF -AMENITY AREA 4 = 10,330 SF PLUS AMENITIES: PAVILION, GAZEBO, BENCHES, EXERCISE STATIONS, PATHWAY (SEE BELOW)
P/O OPEN SPACE 136 -AMENITY AREA 1 = 7,375 SF PLUS AMENITIES: PAVILION, BENCH, PATHWAY (SEE BELOW)
PATHWAY AMENITY: LOOP TRAIL 10/6' PERMEABLE ASPHALT TRAIL = 3,274 LF @ 10' WIDE = 3,785 LF @ 6' WIDE = 55,360 SF @ 35¢/SF CREDIT = 19,376 SF @ 2.8¢/SF CREDIT = 539,928 SF EXERCISE EQUIPMENT = 3,200 SF BENCHES = 2,000 SF
TOTAL AMENITY CREDIT = 178,080 SF +/-

OPEN SPACE TABULATION:

IN ACCORDANCE WITH THE ZONING BOARD DECISION AND ORDER FOR CASE ZB-1105-M THE OPEN SPACE REQUIREMENTS FOR THIS CEF-M PROJECT IS 25% OF GROSS AREA (20.28 AC. GROSS AREA X 25% = 5.07 AC.).
OPEN SPACE PROVIDED IS REFER TO OPEN SPACE LOT 135-137
CREDITED 9.91 ACRES±
NON-CREDITED 1.28 ACRES±

SHEET INDEX

Table with columns: DESCRIPTION, SHEET NO. Includes entries for COVER SHEET, SITE LAYOUT PLAN, GRADING PLAN, etc.

SITE DATA

LOCATION: NE INTERSECTION US RT 40 / MARRIOTTSTVILLE ROAD
EXISTING ZONING: CEF-M
EXISTING GROSS AREA: 60.7 AC +/-
EXISTING GROSS AREA: 20.28 AC +/-
PROJECT:
AREA OF 100 YEAR FLOODPLAIN: 8.5 AC +/-
AREA OF STEEP SLOPES (25% & GREATER): 4.8 AC
NET AREA (GROSS-STEEP SLOPES & FLOODPLAIN): 47.3 ACRES±
AREA OF RIGHT OF WAY DEDICATION: 2.51 ACRES +/-
TOTAL NUMBER OF UNITS ALLOWED: 134 SFA
TOTAL NUMBER OF UNITS PROPOSED: 134 SFA
PARKING SPACES: REFER TO PARKING TABULATION
PUBLIC ACCESS ROAD: ALBETH ROAD
INTERIOR ROADS: PUBLIC - ACCESS STREETS PRIVATE - ACCESS PLACE PRIVATE ALLEY
BUILDING AREA: N/A
OPEN SPACE REQUIRED: 5.07 ACRES±
OPEN SPACE PROVIDED: 11.19 AC. ± - SEE TABULATION
PROPOSED USE OF SITE: RESIDENTIAL, SINGLE FAMILY ATTACHED DWELLING (SFA)
PROPOSED WATER SYSTEM: PUBLIC
PROPOSED SEWER SYSTEM: PUBLIC
* FLOODPLAIN AREA TO BE DETERMINED WITH FUTURE ANALYSIS

Table: MODERATE INCOME HOUSING UNITS (MIHU) ALLOCATION EXEMPTIONS TRACKING. Columns: Total Number of Lots/Units Proposed, Number of MIHU Required, Number of MIHU Provided Onsite, Number of APFO Allocations Required, MIHU Fee-in-Lieu.

OWNER/DEVELOPER

CHAPELGATE PRESBYTERIAN CHURCH, INC. 2600 MARRIOTTSTVILLE RD. MARRIOTTSTVILLE, MD 21104 (410) 442-5888

Table with columns: NO., REVISION, DATE. Shows revision history.

SKETCH PLAN COVER SHEET CHAPELGATE

LOTS 1-134, OPEN SPACE LOTS 135-137, PARCEL A AND NON-BUILDABLE PARCELS B & C A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421 MARRIOTTSTVILLE, MD 21104

ROBERT H. VOGEL ENGINEERING, INC. ENGINEERS • SURVEYORS • PLANNERS 3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE. DESIGN BY: RHY. DRAWN BY: VE+TG, KG. CHECKED BY: RHY. DATE: MARCH 2019. SCALE: AS SHOWN. W.O. NO.: 13-36 / 40220. SHEET 1 OF 10.

TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY. Valdm... 4/12/19 DATE.

CHAPEL GATE PRESBYTERIAN CHURCH, INC.
FOREST CONSERVATION EASEMENTS

FCEN	SDP-02-133	SDP-07-133	FCP-18-002
#1	6.2811 AC		
#2	2.5797 AC	2.58 AC	2.58 AC
#3	0.3735 AC		
#3A		0.86 AC	0.65 AC
#3B			0.11 AC
#4	0.4309 AC	0.43 AC	0.09 AC
#5	1.0790 AC	1.08 AC	0 AC
#6	2.0558 AC		
#6A		3.44 AC	0.92 AC
#6B			2.18 AC
#6C			0 AC
#7		1.63 AC	2.42 AC
#8			
TOTALS	12.80 AC	12.80 AC	11.73 AC

CURVE TABLE - PUBLIC ROAD A

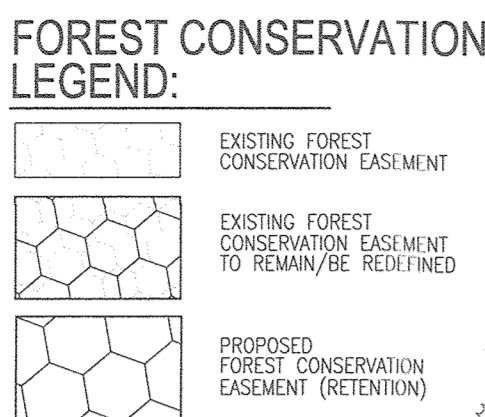
CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
0+19.20 - 3+98.84	379.64	350.00	62°08'50"	538°59'46"W 361.30	210.91
3+98.84 - 5+489.75	170.90	210.00	46°37'40"	532°14'11"W 166.22	90.50
5+489.75 - 7+552.31	162.56	210.00	47°44'27"	530°33'33"W 176.87	97.50
7+552.31 - 8+70.35	118.04	400.00	16°54'27"	514°11'28"W 117.61	59.45
8+70.35 - 10+98.68	228.33	1175.00	11°02'46"	517°07'19"W 226.18	113.62

CURVE TABLE - PUBLIC ROAD B

CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
0+00.00 - 0+85.58	85.58	275.00	17°49'53"	543°20'31"E 85.24	43.14
1+33.84 - 2+85.13	151.29	350.00	26°24'12"	521°13'29"E 159.87	82.10
2+85.13 - 4+78.44	193.31	750.00	13°46'58"	530°38'20"E 180.81	91.10
4+86.68 - 8+47.99	361.31	210.00	95°51'14"	553°40'18"W 111.76	232.63
10+01.11 - 10+146.54	45.43	350.00	07°26'15"	N74°40'57"W 45.40	22.75

CURVE TABLE - PRIVATE ROAD B

CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
10+46.54 - 10+82.03	35.49	350.00	05°48'43"	N68°03'28"W 35.49	17.77
11+39.56 - 12+488.75	129.19	350.00	21°08'57"	N75°43'34"W 128.46	65.34



SDP-02-133 - ORIGINAL EASEMENTS
SDP-07-133 - AMENDED EASEMENTS
THIS PLAN (ECP-18-062 & S-19-001):
- ADDS 2.42 ACRES OF RETENTION
- REMOVES PART OF CURRENT FCEN#3A, #4, #6A
- REMOVES ALL OF FCEN#5 AND FCEN#7
= 12.80 - 11.73 = 1.07 ACRE COMPENSATION DUE FOR EXISTING EASEMENTS REMOVED PLUS THE CEF-M TOWNHOUSE PROJECT OBLIGATION

NOTE:
THE REMOVAL OF ANY FOREST CONSERVATION EASEMENT AREA MUST BE COMPENSATED BY NEW ON-SITE OR OFF-SITE FOREST CONSERVATION EASEMENT.

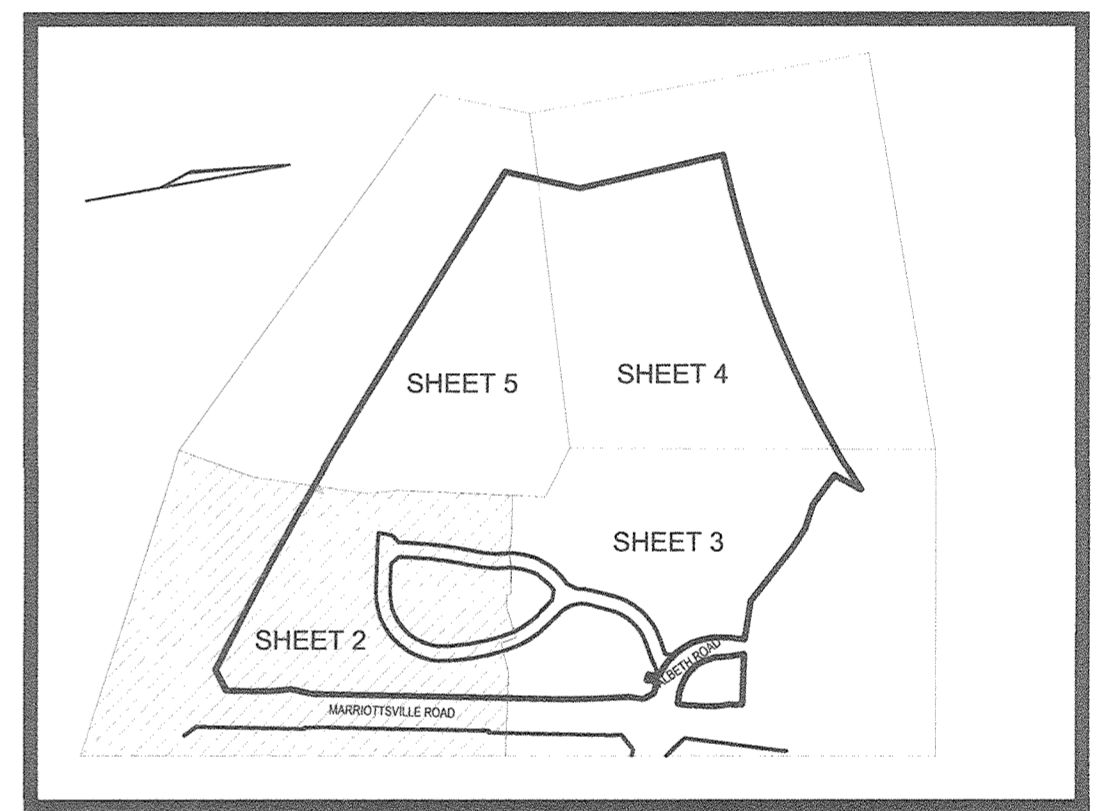
FOREST CONSERVATION NOTES:
1. EXISTING FOREST CONSERVATION EASEMENTS WERE ESTABLISHED TO FULFILL THE FOREST CONSERVATION OBLIGATIONS OF SDP-02-133 AND SDP-07-133. SURETY WAS PREVIOUSLY POSTED WITH THE DEVELOPER'S AGREEMENT FOR SDP-02-133 FOR 12.8 ACRES OF RETENTION. NO SURETY WAS REQUIRED FOR THE RECONFIGURATION UNDER SDP-07-133.
2. UNDER A FUTURE SUBDIVISION PLAN, THE OWNER RESERVES THE RIGHT TO ADJUST THE LIMITS OF THE FOREST RETENTION AREAS ON SITE AND TO PROVIDE OFF-SITE RETENTION AND/OR PAY FEE-IN-LIEU IF RETENTION REQUIREMENTS CANNOT BE MET ON-SITE. THE OWNER SHALL RECORD AN AMENDED PLAT REDEFINING THE AMENDED FOREST CONSERVATION AREAS WITH NO FINANCIAL PENALTY FOR CHANGES OR REDUCTION IN THE LIMITS OF RETENTION. STANDARD FEES WILL BE CHARGED AS SURETY FOR RETENTION OR FOR FEE-IN-LIEU.

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

4-12-19
DATE

SECONDARY ENTRANCE NOTE
1. THIS PROJECT PROPOSES A SECONDARY, GATED EMERGENCY ACCESS POINT WITH KNOX BOX FOR HOWARD COUNTY FIRE & RESCUE SERVICES USE.

SITE LAYOUT PLAN
SCALE: 1"=50'



KEY MAP
NOT TO SCALE

OWNER/DEVELOPER
CHAPEL GATE PRESBYTERIAN CHURCH, INC.
2600 MARRIOTTVILLE RD.
MARRIOTTVILLE, MD 21104
(410) 442-5888

NO.	REVISION	DATE

SKETCH PLAN
SITE LAYOUT PLAN
CHAPEL GATE
LOTS 1-134, OPEN SPACE LOTS 135-137
PARCEL A AND NON-BUILDABLE PARCELS B & C
A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
MARRIOTTVILLE, MD 21104

ZONED: CEF-M
L. 1388/F. 339 (P. 110)
L. 4163/F. 424 (P. 421)
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT 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. 16193, EXPIRATION DATE: 08-27-2020

DESIGN BY: RHY
DRAWN BY: VE+TG, KG
CHECKED BY: RHY
DATE: MARCH 2019
SCALE: AS SHOWN
W.O. NO.: 13-36 / 40220

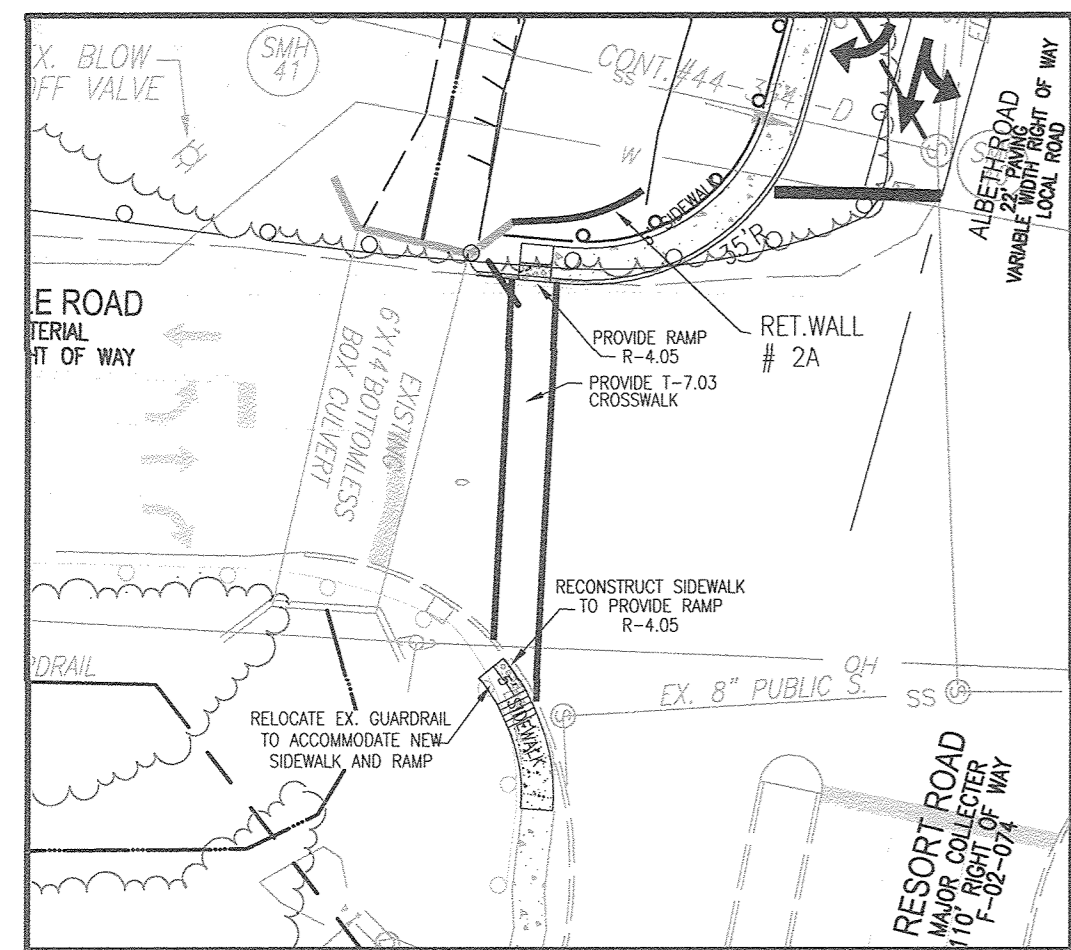
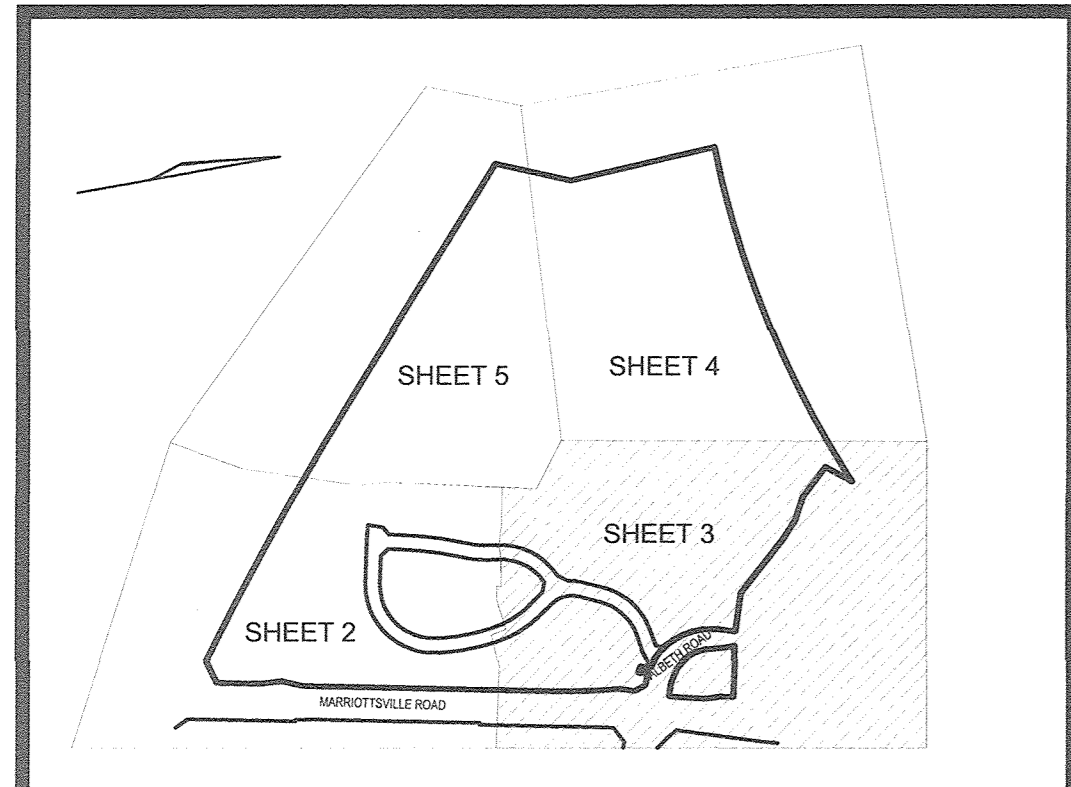
2 SHEET OF 10

- LEGEND:**
- EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREELINE (FIELD LOCATED)
 - EXISTING VEGETATION
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - PROPOSED SIDEWALK
 - PUBLIC 100-YR FLOODPLAIN
 - EX. WETLAND
 - EX. WETLAND BUFFER
 - EX. STREAM
 - EX. STREAM BUFFER
 - LOOP TRAIL
 - VARIABLE WIDTH PUBLIC WATER, SEWER, AND UTILITY EASEMENT
 - EX. SPECIMEN TREE W/ CRITICAL ROOT ZONE
 - AMENITY AREA #1
 - AMENITY AREA BOUNDARY & DESIGNATION

- FOREST CONSERVATION LEGEND:**
- EXISTING FOREST CONSERVATION EASEMENT
 - EXISTING FOREST CONSERVATION EASEMENT TO REMAIN/RE-DESIGNED
 - PROPOSED FOREST CONSERVATION EASEMENT (RETENTION)

NOTE:
THE REMOVAL OF ANY FOREST CONSERVATION EASEMENT AREA MUST BE COMPENSATED BY NEW ON-SITE OR OFF-SITE FOREST CONSERVATION EASEMENT.
REFER TO SHEET 2 TABULATION

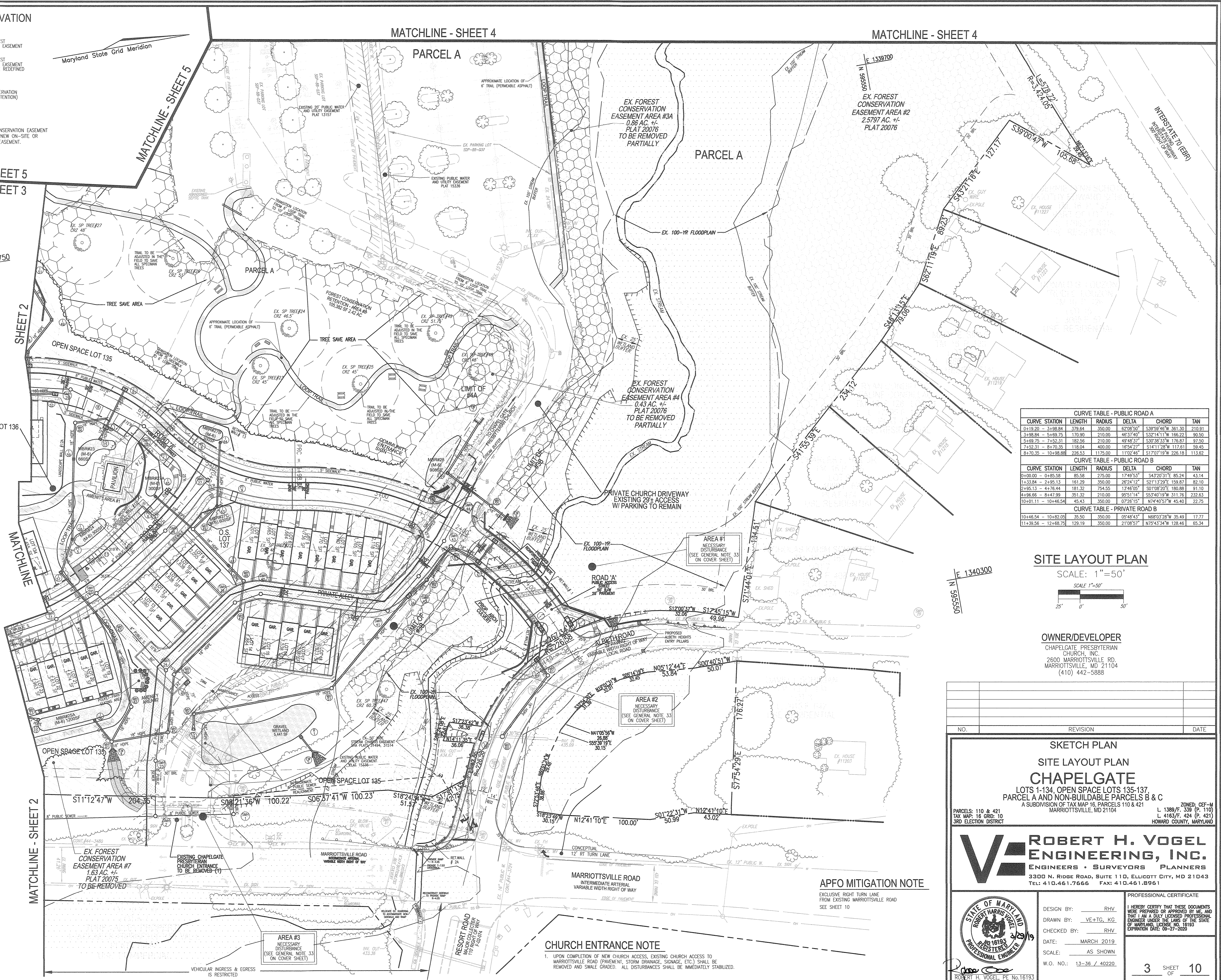
MATCHLINE - SHEET 5
MATCHLINE - SHEET 3



TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Valerie J. Givens
PLANNING DIRECTOR

4-12-19
DATE



CURVE TABLE - PUBLIC ROAD A

CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
0+19.20 - 3+98.84	379.64	350.00	62°08'50"	S39°59'46"W 361.30	210.91
3+98.84 - 5+59.75	170.90	210.00	46°37'40"	S32°14'11"W 166.22	90.50
5+59.75 - 7+52.31	182.56	210.00	49°48'37"	S30°38'33"W 176.87	97.50
7+52.31 - 8+70.35	118.04	400.00	16°54'27"	S14°11'28"W 112.61	59.45
8+70.35 - 10+98.69	228.33	1125.00	11°02'45"	S12°07'19"W 226.18	113.62

CURVE TABLE - PUBLIC ROAD B

CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
0+00.00 - 0+85.58	85.58	275.00	17°49'53"	S43°20'31"E 85.24	43.14
1+33.84 - 2+95.13	161.29	350.00	26°24'12"	S21°13'29"E 159.87	82.10
2+95.13 - 4+76.44	181.32	254.55	13°46'05"	S01°08'20"E 180.88	91.10
4+98.66 - 8+47.99	351.32	210.00	89°51'44"	S35°40'19"W 311.76	232.63
10+01.11 - 10+46.54	45.43	350.00	07°26'15"	N7°40'57"W 45.40	22.75

CURVE TABLE - PRIVATE ROAD B

CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
10+46.54 - 10+82.00	35.50	350.00	05°48'43"	N68°03'28"W 35.42	17.77
11+39.56 - 12+68.75	129.19	350.00	21°08'57"	N75°43'34"W 128.46	65.34

SITE LAYOUT PLAN
SCALE: 1"=50'

OWNER/DEVELOPER
CHAPEL GATE PRESBYTERIAN CHURCH, INC.
2600 MARRIOTTVILLE RD.
MARRIOTTVILLE, MD 21104
(410) 442-5888

NO.	REVISION	DATE

SKETCH PLAN
SITE LAYOUT PLAN
CHAPEL GATE
LOTS 1-134, OPEN SPACE LOTS 135-137
PARCEL A AND NON-BUILDABLE PARCELS B & C
A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
MARRIOTTVILLE, MD 21104

PARCELS: 110 & 421
TAX MAP: 16 GRID: 10
3RD ELECTION DISTRICT

ZONED: CEF-N
L 1389/F, 339 (P. 110)
L 4183/F, 424 (P. 421)
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT 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. 16193, EXPIRATION DATE: 09-27-2029

DESIGN BY: RHY
DRAWN BY: VE+TG, KG
CHECKED BY: RHY
DATE: MARCH 2019
SCALE: AS SHOWN
W.O. NO.: 13-36 / 40220

3 SHEET OF 10

APFO MITIGATION NOTE
EXCLUSIVE RIGHT TURN LANE FROM EXISTING MARRIOTTVILLE ROAD SEE SHEET 10

CHURCH ENTRANCE NOTE
1. UPON COMPLETION OF NEW CHURCH ACCESS, EXISTING CHURCH ACCESS TO MARRIOTTVILLE ROAD (PAVEMENT, STORM DRAINAGE, SIGNAGE, ETC.) SHALL BE REMOVED AND SWALE GRADED. ALL DISTURBANCES SHALL BE IMMEDIATELY STABILIZED.

FOREST CONSERVATION LEGEND:

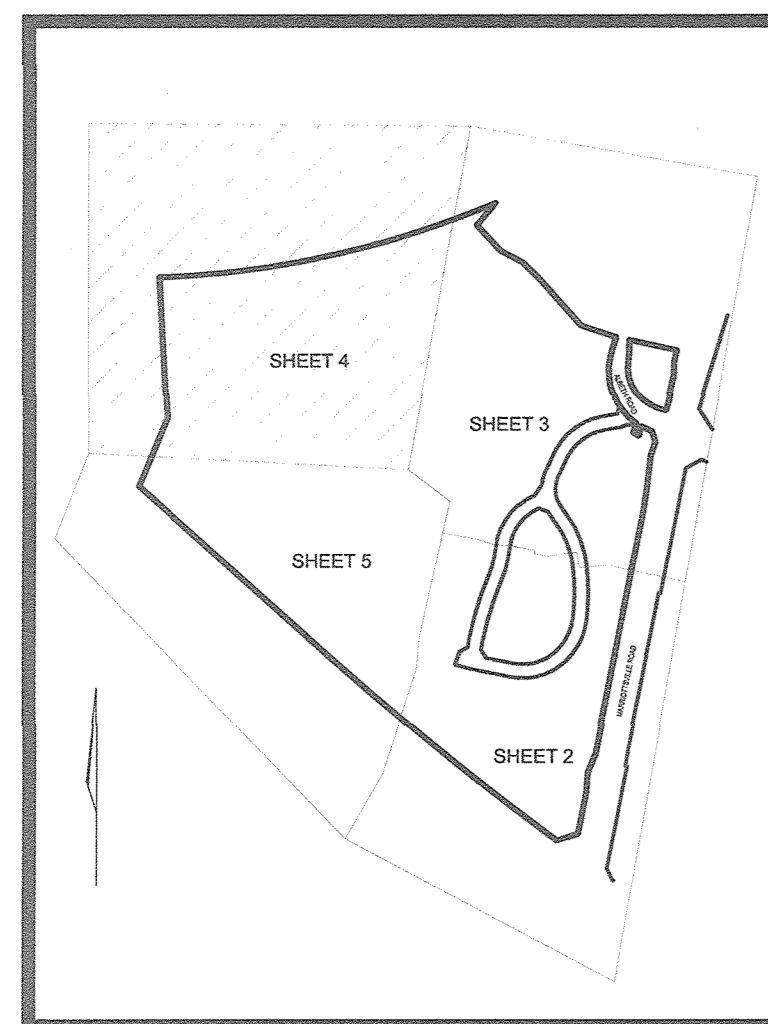
- EXISTING FOREST CONSERVATION EASEMENT
- EXISTING FOREST CONSERVATION EASEMENT TO REMAIN/RE-DEFINED
- PROPOSED FOREST CONSERVATION EASEMENT (RETENTION)

NOTE:
THE REMOVAL OF ANY FOREST CONSERVATION EASEMENT AREA MUST BE COMPENSATED BY NEW ON-SITE OR OFF-SITE FOREST CONSERVATION EASEMENT.
REFER TO SHEET 2 TABULATION

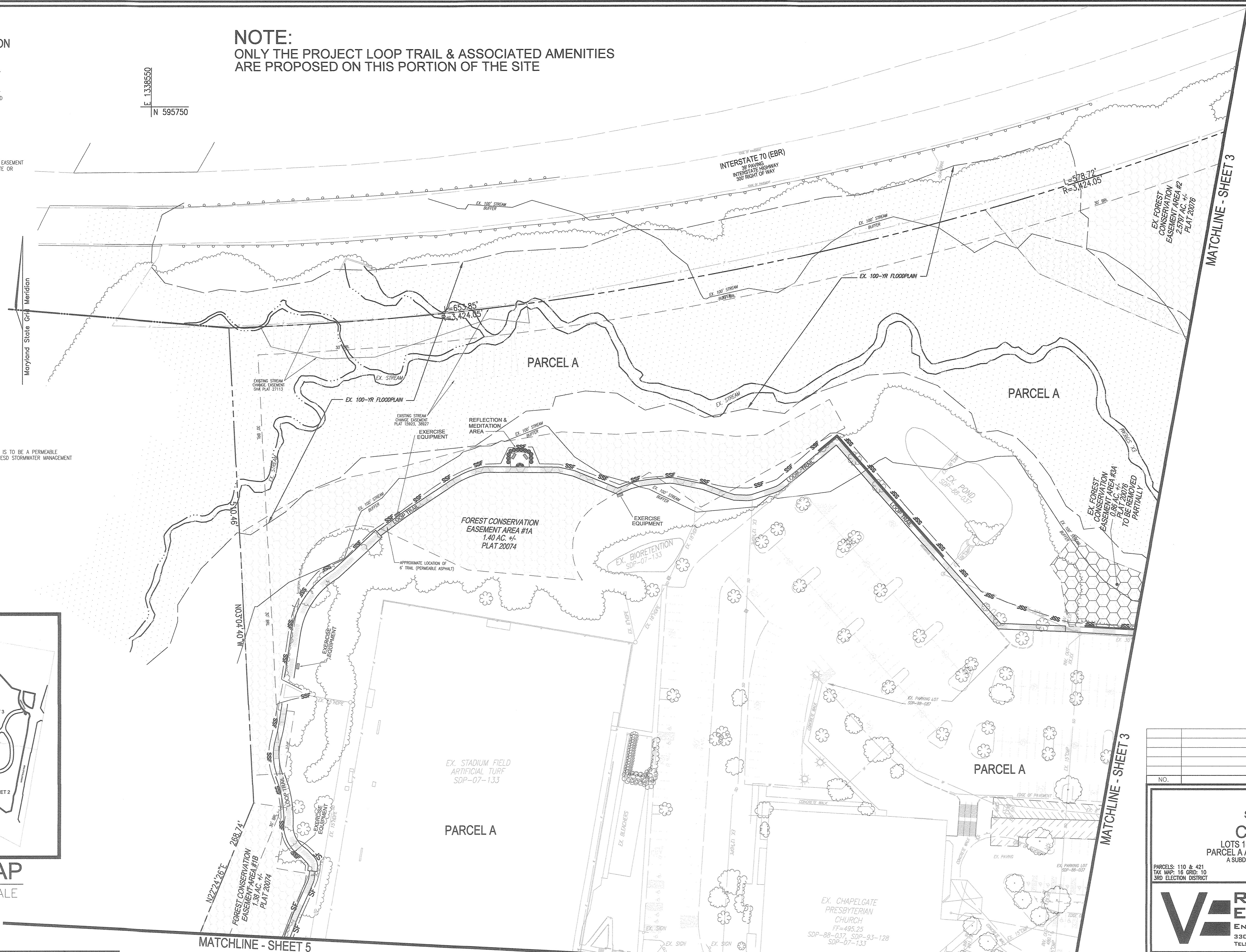
NOTE:
ONLY THE PROJECT LOOP TRAIL & ASSOCIATED AMENITIES ARE PROPOSED ON THIS PORTION OF THE SITE

SWM NOTE:

1. THE LOOP TRAIL AS SHOWN HEREON IS TO BE A PERMEABLE ASPHALT SURFACE PROVIDING ITS OWN ESD STORMWATER MANAGEMENT



KEY MAP
NOT TO SCALE



- LEGEND:**
- EXISTING CURB AND CUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - EXISTING TREELINE (FIELD LOCATED)
 - EXISTING VEGETATION
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - LOOP TRAIL
 - PUBLIC 100 YR FLOODPLAIN
 - EX. STREAM
 - EX. STREAM BUFFER

OWNER/DEVELOPER
CHAPELGATE PRESBYTERIAN CHURCH, INC.
2600 MARRIOTTSVILLE RD.
MARRIOTTSVILLE, MD 21104
(410) 442-5888

NO.	REVISION	DATE

SKETCH PLAN
SITE LAYOUT PLAN
CHAPELGATE

LOTS 1-134, OPEN SPACE LOTS 135-137
PARCEL A AND NON-BUILDABLE PARCELS B & C
A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
MARRIOTTSVILLE, MD 21104
ZONED: CE7-M
L 1389/F. 339 (P. 110)
L 4163/F. 424 (P. 421)
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: RHV
DRAWN BY: VE+TG, KG
CHECKED BY: RHV
DATE: MARCH 2019
SCALE: AS SHOWN
W.O. NO.: 13-38 / 402220

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2020

STATE OF MARYLAND
ROBERT H. VOGEL
REGISTERED PROFESSIONAL ENGINEER
16193
3/29/19

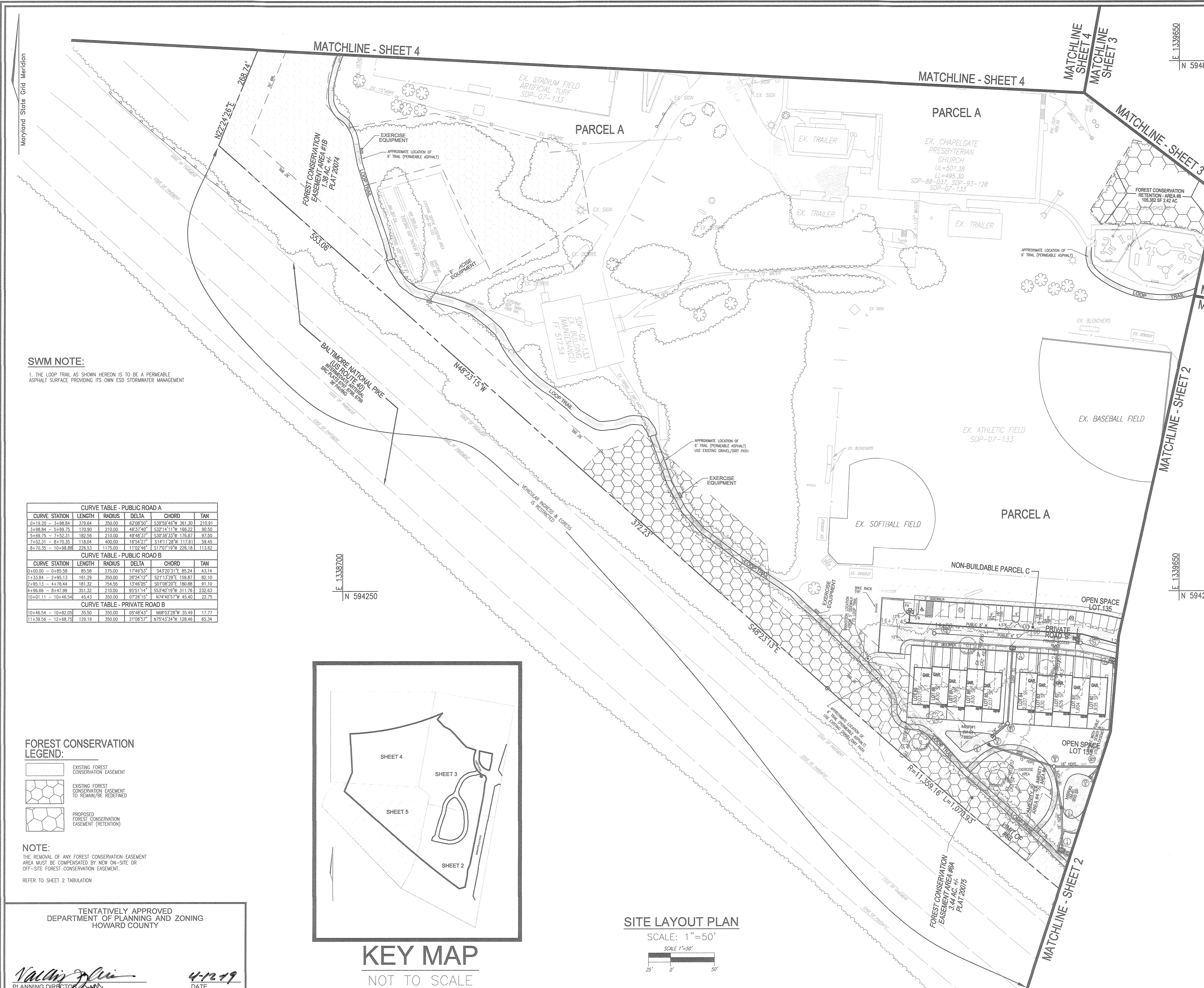
4 SHEET OF 10

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Valerie...
PLANNING DIRECTOR
DATE: 4-12-19

CHAPELGATE EXISTING AMENITIES NOTE
PER THE ZB-1105-M DECISION AND ORDER, THE EXISTING CHAPELGATE BALL FIELDS, PLAYGROUNDS AND TOT LOTS AS WELL AS THE NEWLY PROPOSED CHAPELGATE AMENITIES SHALL BE SHARED WITH THE COMMUNITY.

SITE LAYOUT PLAN
SCALE: 1"=50'
SCALE 1"=50'
25' 0' 50'



LEGEND:

	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING VEGETATION
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	PROPOSED SIDEWALK
	LOOP TRAIL
	VARIABLE WIDTH PUBLIC WATER, SEWER, AND UTILITY EASEMENT
	EX. SPECIMEN TREE W/ CRITICAL ROOT ZONE
	EX. SP. TREE #37 CRZ 48.75'
	AMENITY AREA #1
	AMENITY AREA BOUNDARY & DESIGNATION

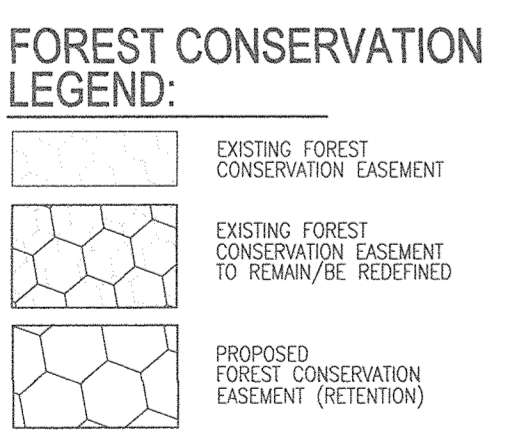
SWM NOTE:
 1. THE LOOP TRAIL AS SHOWN HEREON IS TO BE A PERMEABLE ASPHALT SURFACE PROVIDING ITS OWN ESD STORMWATER MANAGEMENT

CHAPEL GATE EXISTING AMENITIES NOTE
 PER THE ZB-1105-M DECISION AND ORDER, THE EXISTING CHAPEL GATE BALL FIELDS, PLAYGROUNDS AND TOT LOTS AS WELL AS THE NEWLY PROPOSED CHAPEL GATE AMENITIES SHALL BE SHARED WITH THE COMMUNITY.

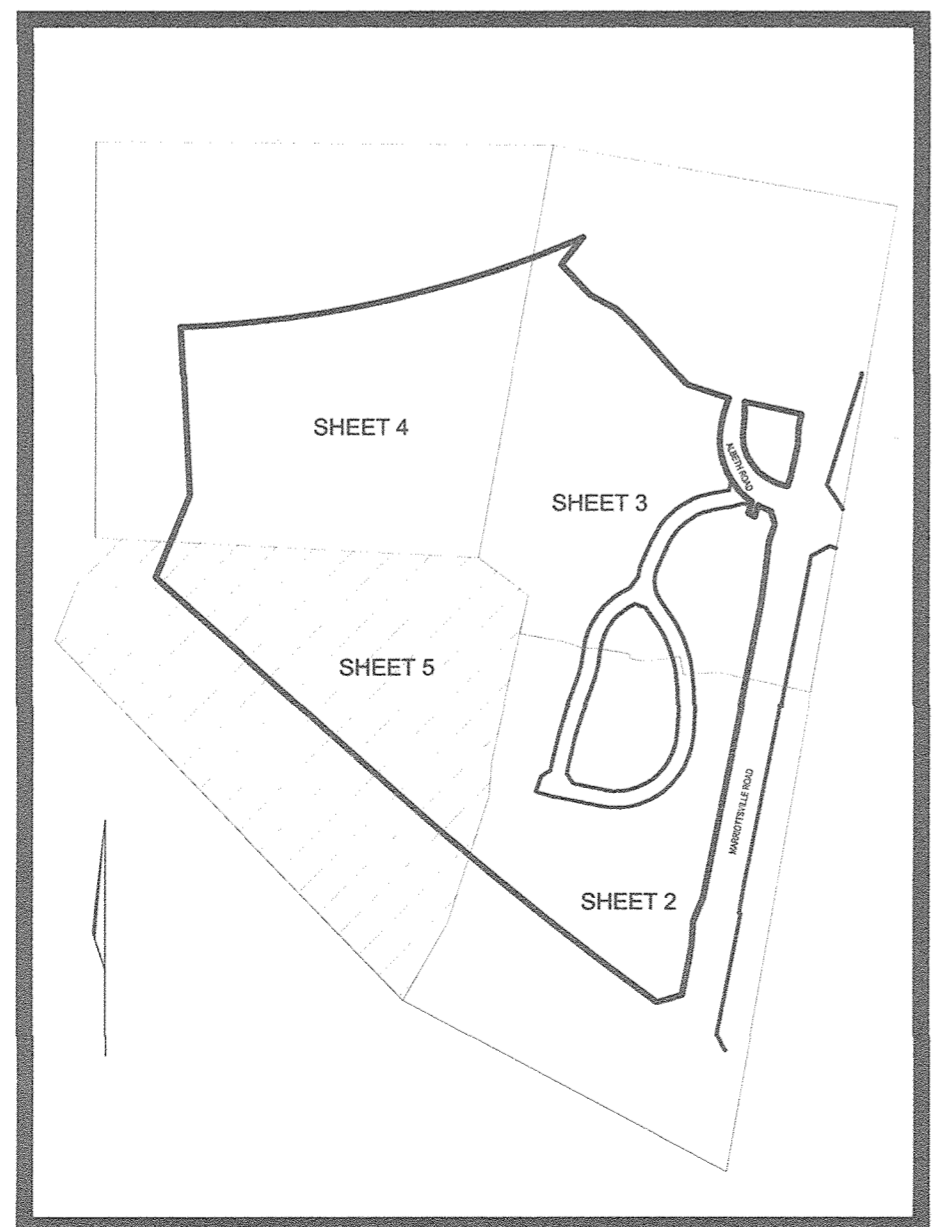
CURVE TABLE - PUBLIC ROAD A					
CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
0+19.20 - 3+98.84	379.64	350.00	62°08'50"	S33°59'46"W 361.30	210.91
3+98.84 - 5+49.75	170.90	210.00	46°37'40"	S32°14'11"W 166.22	80.50
5+49.75 - 7+52.31	182.56	210.00	47°48'37"	S30°36'37"W 176.87	97.58
7+52.31 - 8+70.35	118.04	400.00	16°54'27"	S14°11'28"W 117.81	59.45
8+70.35 - 10+98.88	228.53	1175.00	11°02'46"	S17°07'19"W 226.18	113.62

CURVE TABLE - PUBLIC ROAD B					
CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
0+00.00 - 0+85.58	85.58	275.00	17°49'53"	S43°20'31"E 85.24	43.14
0+85.58 - 2+95.13	181.29	350.00	26°24'12"	S21°13'29"E 159.87	82.10
2+95.13 - 4+76.44	181.32	254.55	13°46'06"	S01°08'20"W 180.88	91.10
4+76.44 - 8+47.89	351.32	210.00	59°51'14"	S53°40'19"W 311.76	232.63
8+47.89 - 10+46.54	45.43	350.00	09°48'43"	N68°03'28"W 35.49	17.77
10+46.54 - 12+18.75	129.19	350.00	21°08'57"	N75°43'34"W 128.46	65.34

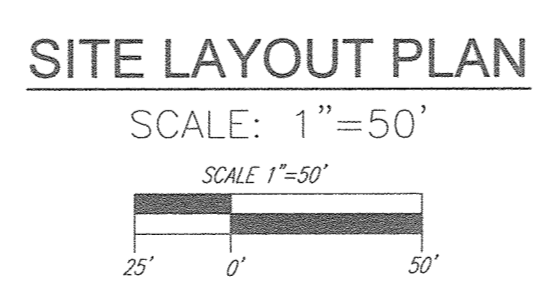
CURVE TABLE - PRIVATE ROAD B					
CURVE STATION	LENGTH	RADIUS	DELTA	CHORD	TAN
10+46.54 - 10+82.05	35.50	350.00	09°48'43"	N68°03'28"W 35.49	17.77
10+82.05 - 12+18.75	129.19	350.00	21°08'57"	N75°43'34"W 128.46	65.34



NOTE:
 THE REMOVAL OF ANY FOREST CONSERVATION EASEMENT AREA MUST BE COMPENSATED BY NEW ON-SITE OR OFF-SITE FOREST CONSERVATION EASEMENT.
 REFER TO SHEET 2 TABULATION



KEY MAP
 NOT TO SCALE



TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

Valerie Flynn
 PLANNING DIRECTOR

4-12-19
 DATE

OWNER/DEVELOPER
 CHAPEL GATE PRESBYTERIAN CHURCH, INC.
 2600 MARRIOTTVILLE RD.
 MARRIOTTVILLE, MD 21104
 (410) 442-5888

NO.	REVISION	DATE

SKETCH PLAN
SITE LAYOUT PLAN
CHAPEL GATE
 LOTS 1-134, OPEN SPACE LOTS 135-137
 PARCEL A AND NON-BUILDABLE PARCELS B & C
 A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
 MARRIOTTVILLE, MD 21104

PARCELS: 110 & 421
 TAX MAP: 16 GRID: 10
 3RD ELECTION DISTRICT

ZONED: CEF-M
 L. 1388/F. 339 (P. 110)
 L. 4163/F. 424 (P. 421)
 HOWARD COUNTY, MARYLAND

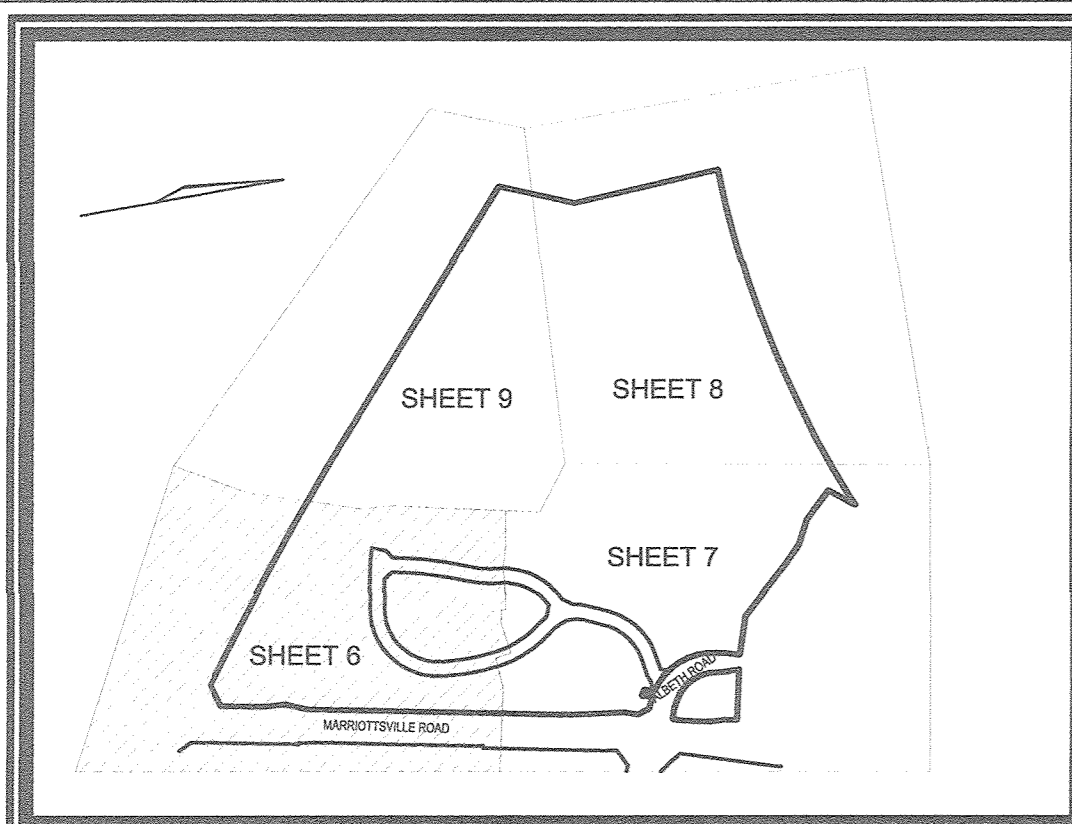
ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHY
 DRAWN BY: VE+TG, KG
 CHECKED BY: RHY
 DATE: MARCH 2019
 SCALE: AS SHOWN
 W.O. NO.: 13-38 / 40220

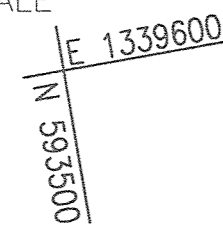
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 08-27-2020

5 SHEET OF 10



KEY MAP

NOT TO SCALE



SWM NOTE:

1. THE LOOP TRAIL AS SHOWN HEREON IS TO BE A PERMEABLE ASPHALT SURFACE PROVIDING ITS OWN ESD STORMWATER MANAGEMENT

NOTE:

EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

HSCD NOTES:

APPROVAL OF THIS SKETCH PLAN DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME.

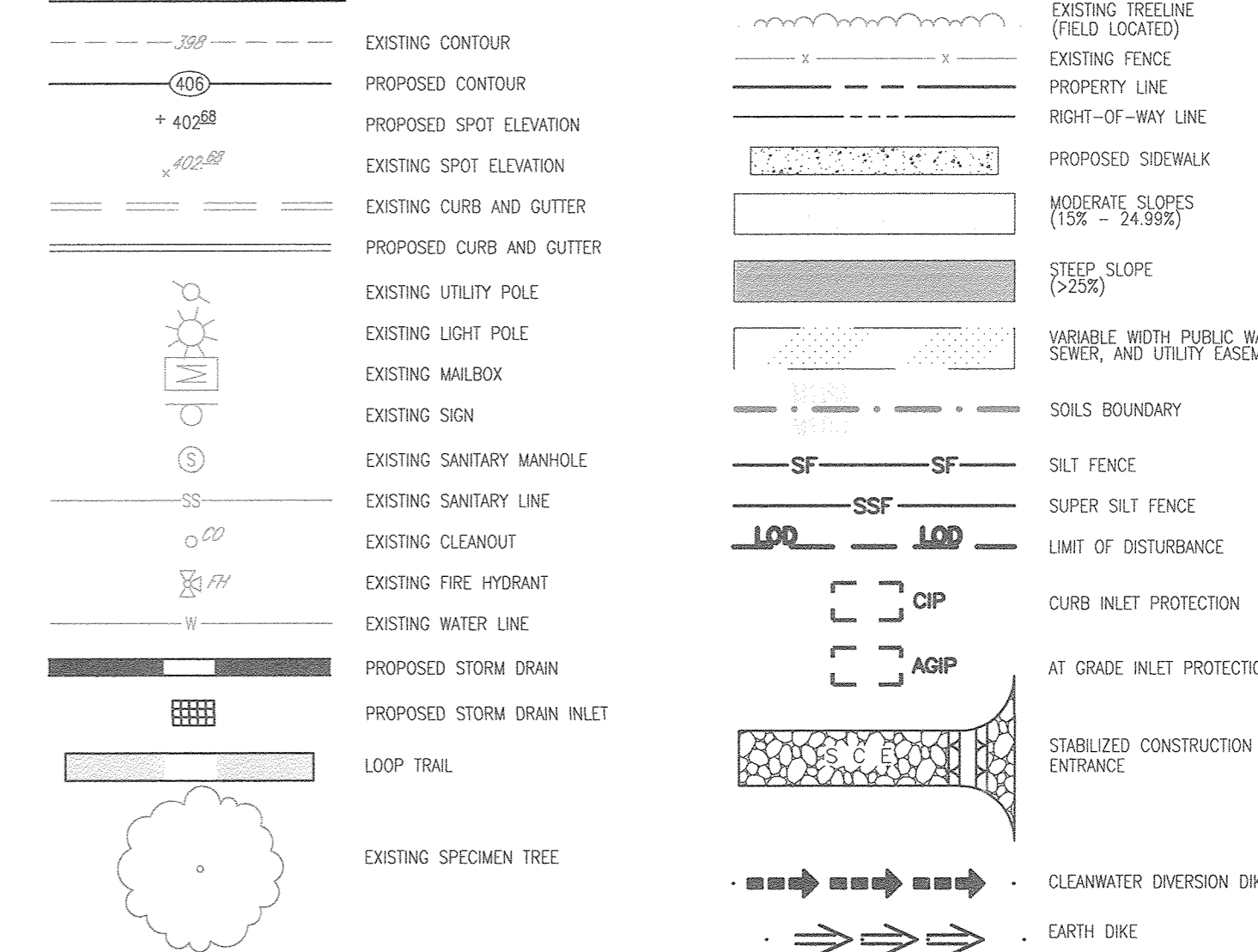
- THE FINAL PLAN SHALL INCLUDE A SEQUENCE OF CONSTRUCTION WHICH SHALL DETAIL SEDIMENT & EROSION CONTROLS AND REQUIRED PHASING.
- THE PROJECT SHALL ADDRESS ANY TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS.
- THE FINAL PLAN SUBMISSION SHALL PROVIDE A DRAINAGE AREA MAP SPECIFIC TO CHOSEN SEDIMENT CONTROLS.
- THE FINAL PLAN SUBMISSION SHALL PROVIDE COMPUTATIONS TO VERIFY VELOCITIES ALONG DIKES, SWALES AND AT DIKES OUTLET LOCATIONS.

NOTE:

SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

- SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART
- DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

LEGEND:



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
B0A	BALILE SILT LOAM, 0 TO 3 PERCENT SLOPES	C/D	.49	NO
C0C	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B	.43	YES
G0B	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	.37	YES
G0H	GLENELG BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	C	.49	YES
H0	HATBORO-CODORUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	B/D	.43	NO
M0D	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	.32	YES
L0F	LUORTHENS, HIGHWAY, 0 TO 45 PERCENT SLOPES	B	—	YES
L0D	URBAN LAND-UDORTHENS COMPLEX, 0 TO 15 PERCENT SLOPES	D	—	NO

— SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
 — HOWARD COUNTY SOILS MAP NUMBER 12 - SYKESVILLE SE
 — K VALUES PER <https://www.howard.gov/documents> * K FACTORS (USE KW)
 NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT * LIMITS OF PROJECT

OWNER/DEVELOPER

CHAPEL GATE PRESBYTERIAN CHURCH, INC.
 2600 MARRIOTTVILLE RD.
 MARRIOTTVILLE, MD 21104
 (410) 442-5888

NO.	REVISION	DATE

**SKETCH PLAN
 GRADING PLAN**

CHAPEL GATE

LOTS 1-134, OPEN SPACE LOTS 135-137
 PARCEL A AND NON-BUILDABLE PARCELS B & C
 A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
 MARRIOTTVILLE, MD 21104

PARCELS: 110 & 421
 TAX MAP: 16 GRID: 10
 3RD ELECTION DISTRICT

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

I HEREBY CERTIFY THAT 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. 18193, EXPIRATION DATE: 09-27-2020

DESIGN BY: RHY
 DRAWN BY: VE+TG, KG
 CHECKED BY: RHY
 DATE: MARCH 2019
 SCALE: AS SHOWN
 W.O. NO.: 13-38 / 40220

6 SHEET OF 10

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

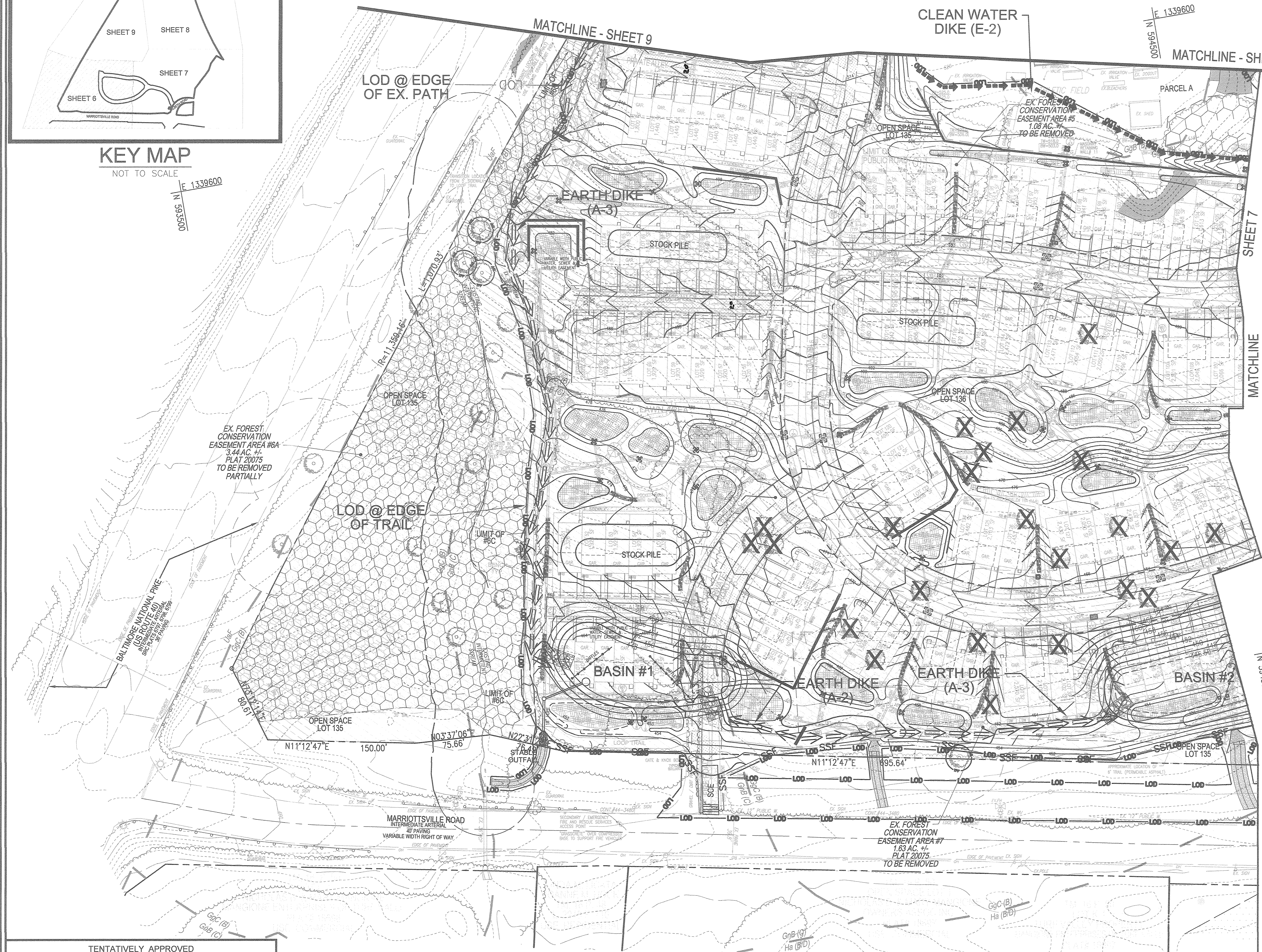
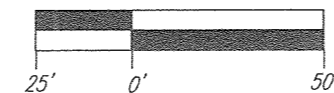
Valerie Flynn
 PLANNING DIRECTOR

4-12-19
 DATE

GRADING PLAN

SCALE: 1"=50'

SCALE 1"=50'



LEGEND:

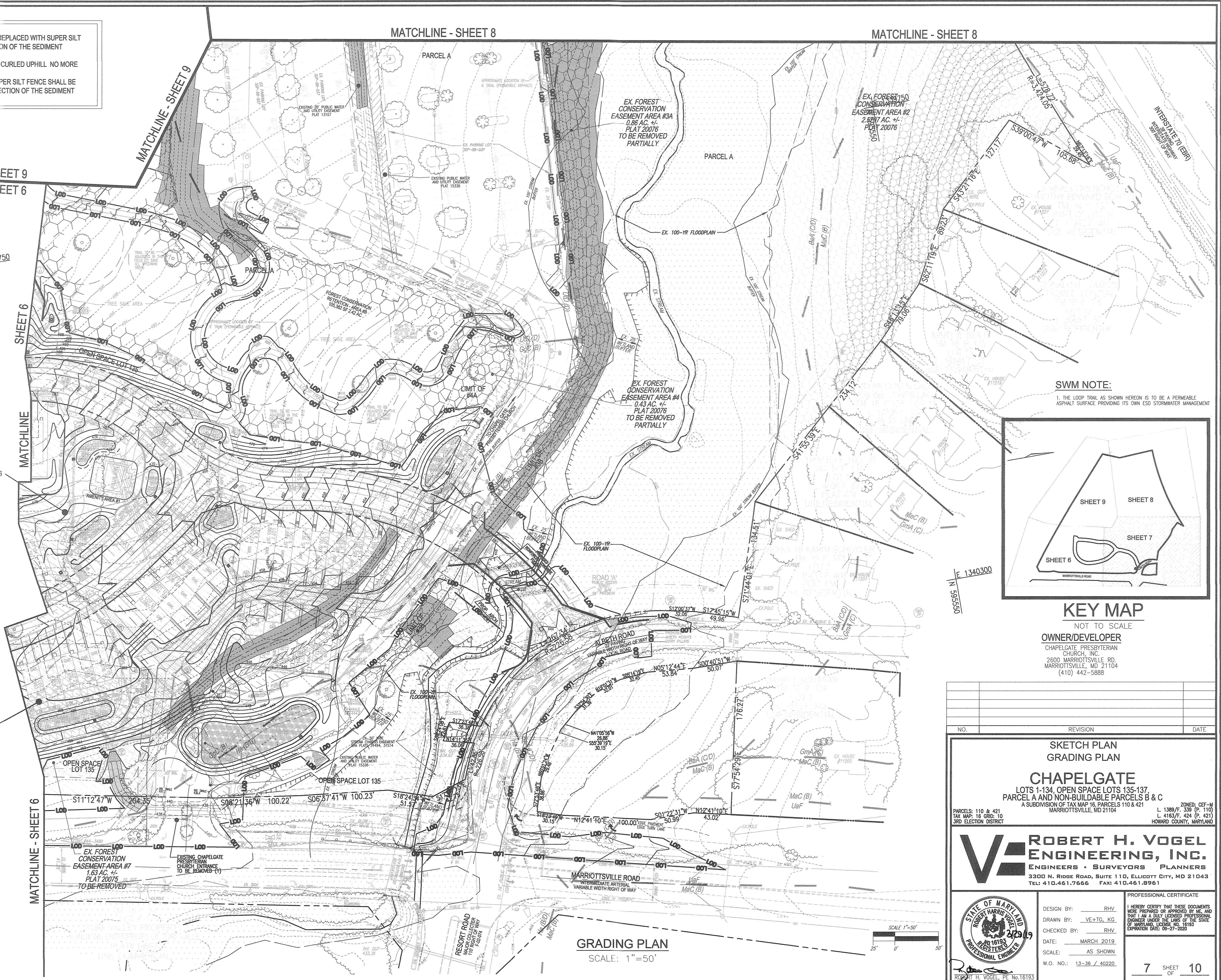
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	LOOP TRAIL
	EXISTING SPECIMEN TREE
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	PROPOSED SIDEWALK
	MODERATE SLOPES (15% - 24.99%)
	STEEP SLOPE (>25%)
	PUBLIC 100 YR FLOODPLAIN
	EX. WETLAND
	EX. WETLAND BUFFER
	EX. STREAM
	EX. STREAM BUFFER
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	CURB INLET PROTECTION
	AT GRADE INLET PROTECTION
	STABILIZED CONSTRUCTION ENTRANCE
	SOILS BOUNDARY
	VARIABLE WIDTH PUBLIC WATER, SEWER, AND UTILITY EASEMENT
	CLEANWATER DIVERSION DIKE
	EARTH DIKE

NOTE:
 - SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
 - SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART
 - DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

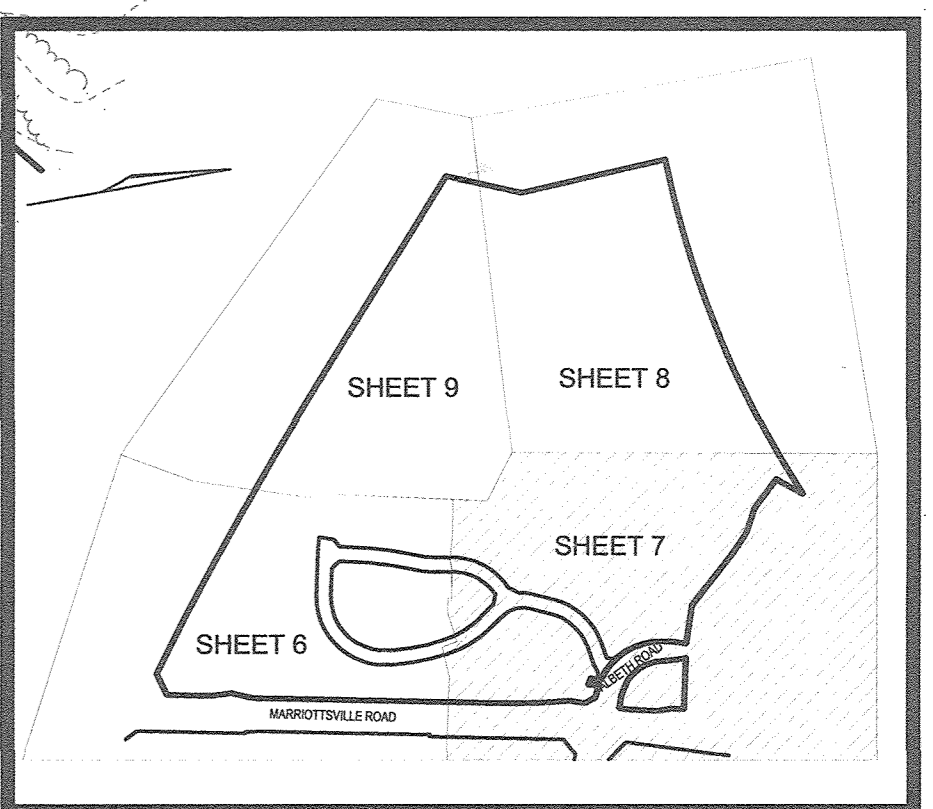
MATCHLINE - SHEET 9
 MATCHLINE - SHEET 6

MATCHLINE - SHEET 8

MATCHLINE - SHEET 8



SWM NOTE:
 1. THE LOOP TRAIL, AS SHOWN HEREON IS TO BE A PERMEABLE ASPHALT SURFACE, PROVIDING ITS OWN ESD STORMWATER MANAGEMENT.



KEY MAP
 NOT TO SCALE

OWNER/DEVELOPER
 CHAPEL GATE PRESBYTERIAN CHURCH, INC.
 2600 MARRIOTTVILLE RD.
 MARRIOTTVILLE, MD 21104
 (410) 442-5888

CHURCH ENTRANCE NOTE

1. UPON COMPLETION OF NEW CHURCH ACCESS, EXISTING CHURCH ACCESS TO MARRIOTTVILLE ROAD (PAVEMENT, STORM DRAINAGE, SIGNAGE, ETC.) SHALL BE REMOVED AND SWALE GRADED. ALL DISTURBANCES SHALL BE IMMEDIATELY STABILIZED.

HSCD NOTES:

- APPROVAL OF THIS SKETCH PLAN DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME.
- THE FINAL PLAN SHALL INCLUDE A SEQUENCE OF CONSTRUCTION WHICH SHALL DETAIL SEDIMENT & EROSION CONTROLS AND REQUIRED PHASING.
 - THE PROJECT SHALL ADDRESS ANY TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS.
 - THE FINAL PLAN SUBMISSION SHALL PROVIDE A DRAINAGE AREA MAP SPECIFIC TO CHOSEN SEDIMENT CONTROLS.
 - THE FINAL PLAN SUBMISSION SHALL PROVIDE COMPUTATIONS TO VERIFY VELOCITIES ALONG DIKES, SWALES AND AT DIKES OUTLET LOCATIONS.

NOTE:
 EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
BsA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES	C/D	.49	NO
CsC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B	.43	YES
CsB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	.37	YES
CsH	GLENELG BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	C	.49	YES
ts	HATBORO-CODORUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	B/D	.43	NO
MdD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	.32	YES
UoF	UOORHANTS, HIGHWAY, 0 TO 65 PERCENT SLOPES	D	-	YES
UoD	URBAN LAND-UOORHANTS COMPLEX, 0 TO 15 PERCENT SLOPES	D	-	NO

-SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
 -HOWARD COUNTY SOILS MAP NUMBER 12 - SYKESVILLE SE
 -K VALUES PER www.howardcounty.org/documents * K FACTORS (USE KW)
 NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT * LIMITS OF PROJECT

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

Valley Spring
 PLANNING DIRECTOR
 4/12/19
 DATE

GRADING PLAN
 SCALE: 1"=50'

NO.	REVISION	DATE

**SKETCH PLAN
 GRADING PLAN**
CHAPEL GATE
 LOTS 1-134, OPEN SPACE LOTS 135-137
 PARCEL A AND NON-BUILDABLE PARCELS B & C
 A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
 MARRIOTTVILLE, MD 21104

PARCELS: 110 & 421
 TAX MAP: 16 GRID: 10
 3RD ELECTION DISTRICT

ZONED: CEF-N
 L 1389/F 339 (P. 110)
 L 4183/F 424 (P. 421)
 HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
 ENGINEERING, INC.**
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

STATE OF MARYLAND
 REGISTERED PROFESSIONAL ENGINEER
 NO. 16193
 4/29/19

DESIGN BY: RHY
 DRAWN BY: VE+TG, KG
 CHECKED BY: RHY
 DATE: MARCH 2019
 SCALE: AS SHOWN
 W.O. NO.: 13-38 / 40220

I HEREBY CERTIFY THAT 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. 16193, EXPIRATION DATE: 08-27-2025

7 SHEET OF 10

LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	LOOP TRAIL
	EXISTING SPECIMEN TREE
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	MODERATE SLOPES (15% TO 24.99%)
	STEEP SLOPE (>25%)
	PUBLIC 100 YR FLOODPLAIN
	EX. STREAM
	EX. STREAM BUFFER
	LIMIT OF DISTURBANCE
	SOILS BOUNDARY

SWM NOTE:
 1. THE LOOP TRAIL AS SHOWN HEREON IS TO BE A PERMEABLE ASPHALT SURFACE PROVIDING ITS OWN ESD STORMWATER MANAGEMENT

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
BaA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES	C/D	49	NO
GgC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B	43	YES
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	37	YES
GhB	GLENELG BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	C	49	YES
Hs	HATBORO-CODORUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	B/D	43	NO
MdD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	32	YES
UaF	UDORTHERTS, HIGHWAY, 0 TO 65 PERCENT SLOPES	-	-	YES
Ud	UDRAN LAND-UDORTHERTS COMPLEX, 0 TO 15 PERCENT SLOPES	D	-	NO

NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT * LIMITS OF PROJECT

SOILS INFORMATION FROM USDA WEB SOIL SURVEY WEBSITE
 -HOWARD COUNTY SOILS MAP NUMBER 12 - SYKESVILLE SE
 *K VALUES PER <https://www.howardocd.org/documents> - *K FACTORS (USE KW)

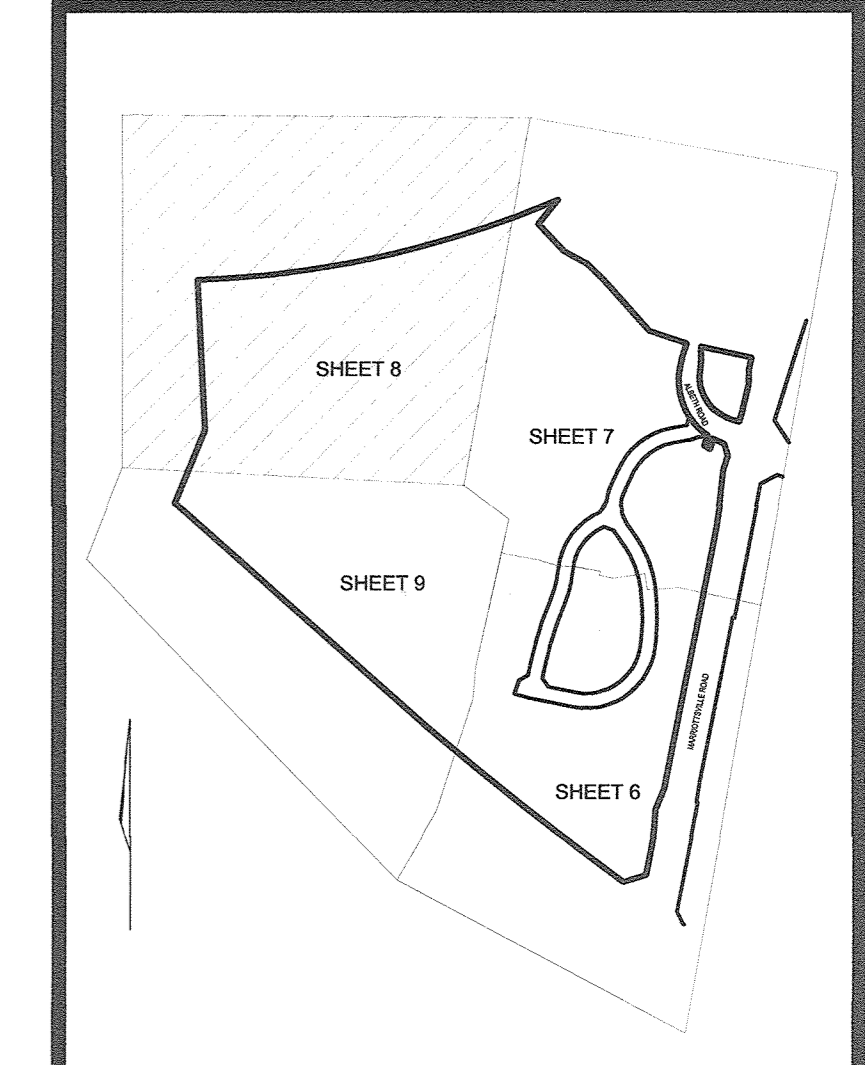
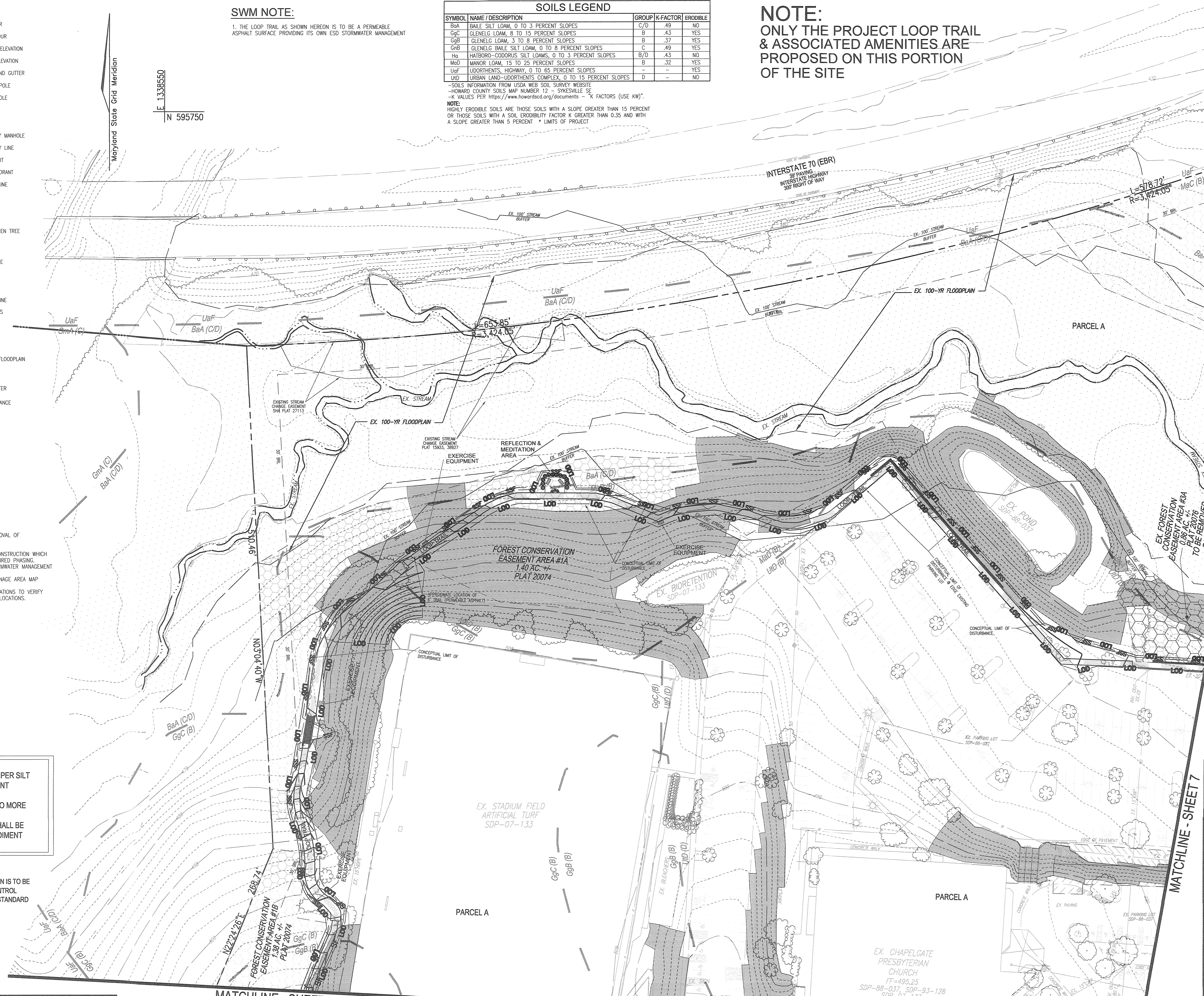
NOTE:
 ONLY THE PROJECT LOOP TRAIL & ASSOCIATED AMENITIES ARE PROPOSED ON THIS PORTION OF THE SITE

HSCD NOTES:
 APPROVAL OF THIS SKETCH PLAN DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME.

- THE FINAL PLAN SHALL INCLUDE A SEQUENCE OF CONSTRUCTION WHICH SHALL DETAIL SEDIMENT & EROSION CONTROLS AND REQUIRED PHASING.
- THE PROJECT SHALL ADDRESS ANY TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS.
- THE FINAL PLAN SUBMISSION SHALL PROVIDE A DRAINAGE AREA MAP SPECIFIC TO CHOSEN SEDIMENT CONTROLS.
- THE FINAL PLAN SUBMISSION SHALL PROVIDE COMPUTATIONS TO VERIFY VELOCITIES ALONG DIKES, SWALES AND AT DIKES OUTLET LOCATIONS.

NOTE:
 - SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
 - SILT FENCE SHALL BE CURLED UPHILL. NO MORE THAN 35 FEET APART
 - DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

NOTE:
 EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DATES/DAYS IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.



KEY MAP
 NOT TO SCALE

OWNER/DEVELOPER
 CHAPEL GATE PRESBYTERIAN CHURCH, INC.
 2600 MARRIOTTVILLE RD.
 MARRIOTTVILLE, MD 21104
 (410) 442-5888

NO.	REVISION	DATE

SKETCH PLAN GRADING PLAN
CHAPEL GATE
 LOTS 1-134, OPEN SPACE LOTS 135-137
 PARCEL A AND NON-BUILDABLE PARCELS B & C
 A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
 MARRIOTTVILLE, MD 21104

PARCELS: 110 & 421
 TAX MAP: 16 GRID: 10
 3RD ELECTION DISTRICT

ZONED: CE1-M
 L. 1389/F. 339 (P. 110)
 L. 4163/F. 424 (P. 421)
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT 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. 16193, EXPIRATION DATE: 09-27-2020

DESIGN BY: RHV
 DRAWN BY: VE+TG, KG
 CHECKED BY: RHV
 DATE: MARCH 2019
 SCALE: AS SHOWN
 W.O. NO.: 13-36 / 402220

8 SHEET OF 10

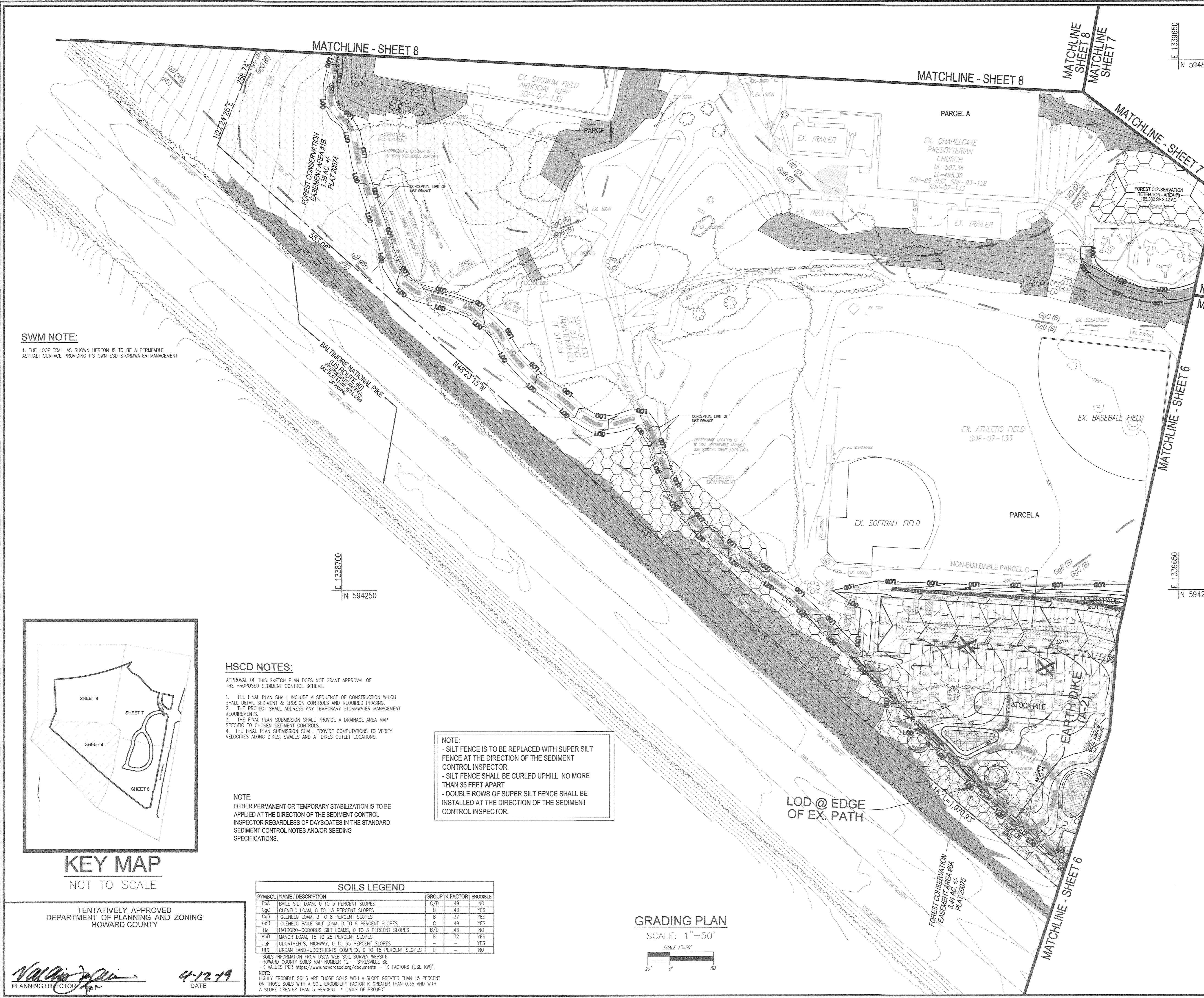
TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

Valerie J. Kelly
 PLANNING DIRECTOR

4-12-19
 DATE

E. 1338550
 N 594800

GRADING PLAN
 SCALE: 1"=50'
 SCALE 1"=50'



LEGEND:

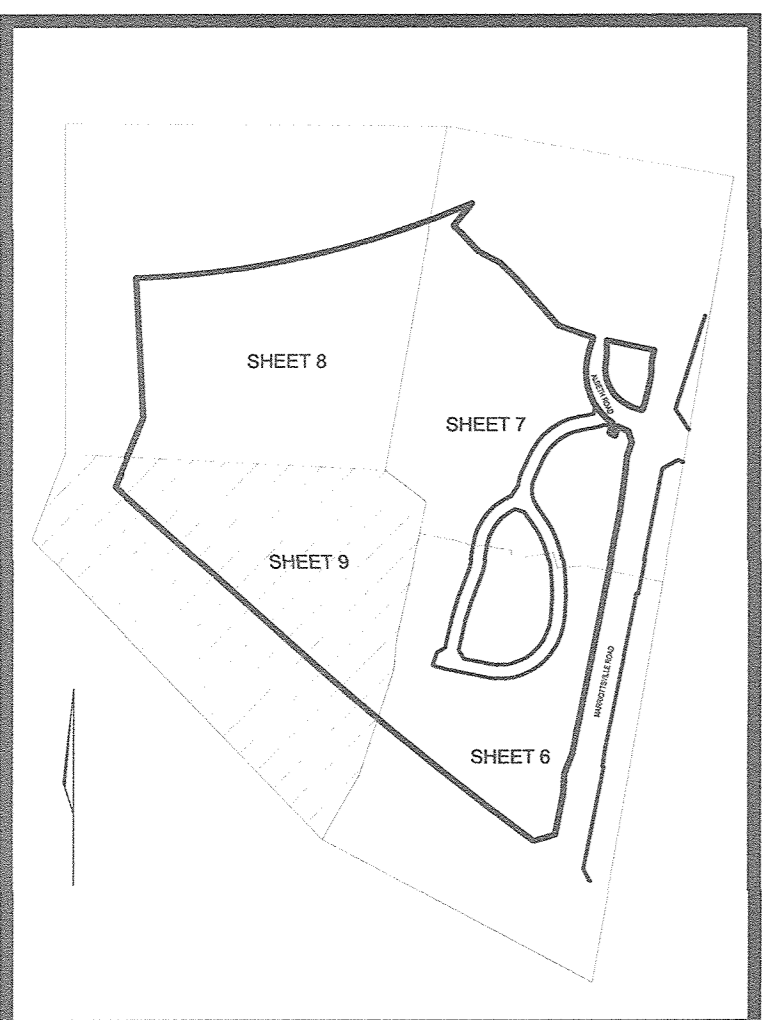
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	LOOP TRAIL
	EXISTING SPECIMEN TREE
	EXISTING TREELINE (FIELD LOCATED)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	MODERATE SLOPES (15% - 24.99%)
	STEEP SLOPE (>25%)
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	CURB INLET PROTECTION
	AT GRADE INLET PROTECTION
	SOILS BOUNDARY
	PROPOSED SIDEWALK
	VARIABLE WIDTH PUBLIC WATER, SEWER, AND UTILITY EASEMENT
	CLEANWATER DIVERSION DIKE
	EARTH DIKE

SWM NOTE:
 1. THE LOOP TRAIL AS SHOWN HEREON IS TO BE A PERMEABLE ASPHALT SURFACE PROVIDING ITS OWN ESD STORMWATER MANAGEMENT

HSCD NOTES:
 APPROVAL OF THIS SKETCH PLAN DOES NOT GRANT APPROVAL OF THE PROPOSED SEDIMENT CONTROL SCHEME.
 1. THE FINAL PLAN SHALL INCLUDE A SEQUENCE OF CONSTRUCTION WHICH SHALL DETAIL SEDIMENT & EROSION CONTROLS AND REQUIRED PHASING.
 2. THE PROJECT SHALL ADDRESS ANY TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS.
 3. THE FINAL PLAN SUBMISSION SHALL PROVIDE A DRAINAGE AREA MAP SPECIFIC TO CHOSEN SEDIMENT CONTROLS.
 4. THE FINAL PLAN SUBMISSION SHALL PROVIDE COMPUTATIONS TO VERIFY VELOCITIES ALONG DIKES, SWALES AND AT DIKES OUTLET LOCATIONS.

NOTE:
 - SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
 - SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART
 - DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

NOTE:
 EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE
BaA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES	C/D	.49	NO
GgC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B	.43	YES
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	.37	YES
GgB	GLENELG BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	C	.49	YES
Hg	HATBORO-CODORUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	B/D	.43	NO
MdD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	.32	YES
UgF	UDORTMENTS, HIGHWAY, 0 TO 65 PERCENT SLOPES	-	-	YES
UgD	URBAN LAND-UDORTMENTS COMPLEX, 0 TO 15 PERCENT SLOPES	D	-	NO

GRADING PLAN
 SCALE: 1"=50'

TENTATIVELY APPROVED
 DEPARTMENT OF PLANNING AND ZONING
 HOWARD COUNTY

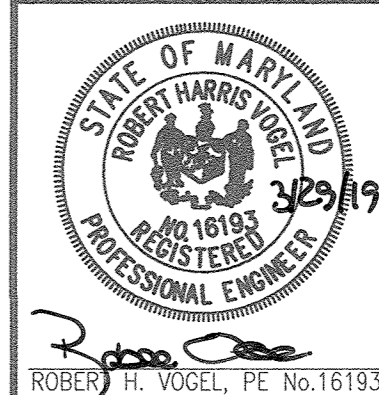
Valerie J. Davis
 PLANNING DIRECTOR
 4-12-19
 DATE

OWNER/DEVELOPER
 CHAPEL GATE PRESBYTERIAN CHURCH, INC.
 2600 MARRIOTTSDRIVE RD.
 MARRIOTTSDRIVE, MD 21104
 (410) 442-5888

NO.	REVISION	DATE

SKETCH PLAN GRADING PLAN
CHAPEL GATE
 LOTS 1-134, OPEN SPACE LOTS 135-137,
 PARCEL A AND NON-BUILDABLE PARCELS B & C
 A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
 MARRIOTTSDRIVE, MD 21104
 ZONED: CEF-M
 L 1389/F. 339 (P. 110)
 L 4163/F. 424 (P. 421)
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961

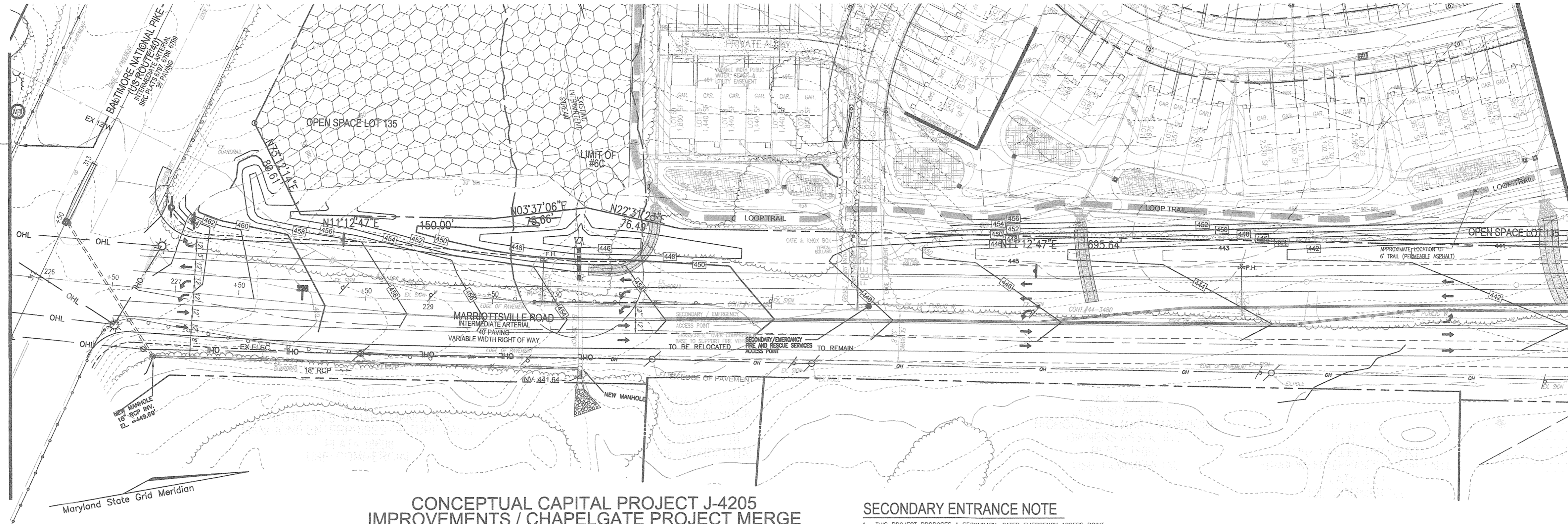


PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2020.
 DESIGN BY: RHY
 DRAWN BY: VE+TG, KG
 CHECKED BY: RHY
 DATE: MARCH 2019
 SCALE: AS SHOWN
 W.O. NO.: 13-38 / 40220
 9 SHEET OF 10

NOTE:
REFER TO CAPITAL PROJECT J-4205 PLANS FOR IMPROVEMENTS BEYOND THIS POINT

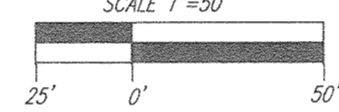
NOTES:

- CAPITAL PROJECT J-4205 PLAN REQUIRES REVISION.
1. OPEN SECTION CHANNEL DESIGN SHOWN AT/NEAR REAR LOTS 24 - 38 REQUIRES REVISION. GRADING SHOWN ENCLOSES ONTO CHAPELGATE PROPERTY.
 2. GRADING SHOWN CONFLICTS WITH REQUIRED CHAPELGATE PROJECT GRADING SCHEME. CAPITAL PROJECT J-4205 MAY REQUIRE A RETAINING WALL TO MESH GRADING.
 3. CAPITAL PROJECT PLAN NEEDS REVISION TO PORTRAY THE CHAPELGATE PROJECT'S SECONDARY, GATED EMERGENCY ACCESS POINT WITH KNOX BOX FOR HOWARD COUNTY FIRE & RESCUE SERVICES USE.
 4. PROPOSED LEFT TURN LANE (NEAR REAR LOT 24-28) INTO EXISTING CHURCH DRIVEWAY SHOULD BE ELIMINATED. EXISTING CHURCH DRIVEWAY ENTRANCE WILL BE REMOVED.



CONCEPTUAL CAPITAL PROJECT J-4205 IMPROVEMENTS / CHAPELGATE PROJECT MERGE

SCALE: 1"=50'



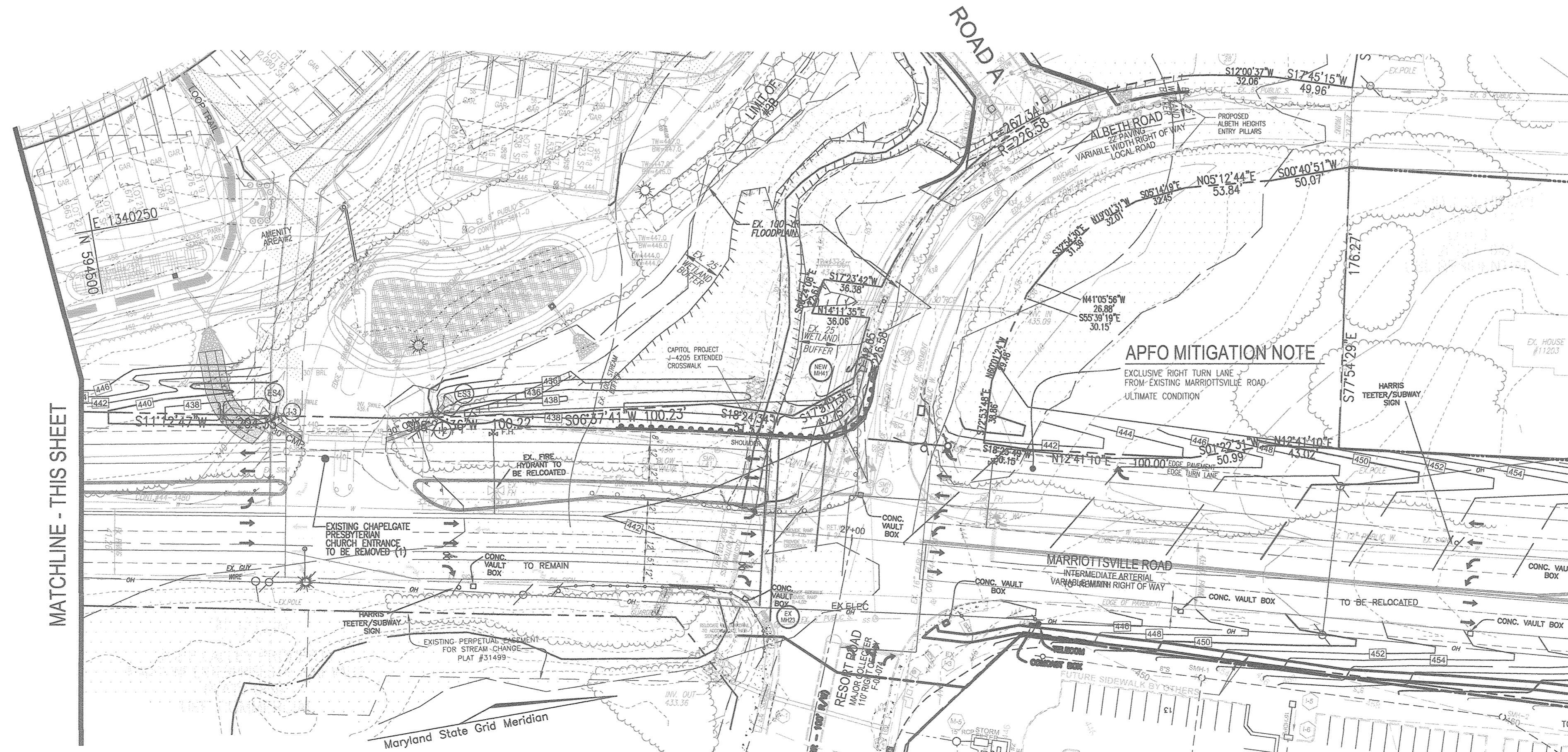
SECONDARY ENTRANCE NOTE

1. THIS PROJECT PROPOSES A SECONDARY, GATED EMERGENCY ACCESS POINT WITH KNOX BOX FOR HOWARD COUNTY FIRE & RESCUE SERVICES USE.

MATCHLINE - THIS SHEET

NOTES:

- CAPITAL PROJECT J-4205 PLAN REQUIRES REVISIONS.
1. EXISTING CHAPELGATE DRIVEWAY ENTRANCE AT MARRIOTTSVILLE ROAD SHALL BE REMOVED.
 2. HOWARD COUNTY - DEVELOPMENT ENGINEERING REQUESTED THE EXISTING STORM DRAIN UNDER THE ENTRANCE DRIVEWAY BE REMOVED.
 3. PROPOSED MARRIOTTSVILLE ROAD LEFT TURN LANE (NEAR REAR LOT 19-23) INTO EXISTING CHURCH DRIVEWAY SHOULD BE ELIMINATED. EXISTING ENTRANCE WILL BE REMOVED.
 4. INTERSECTION OF ALBETH ROAD AND MARRIOTTSVILLE ROAD REQUIRES REVISIONS TO:
 - A. SHOW/PROVIDE THE EXCLUSIVE RIGHT TURN LANE FROM MARRIOTTSVILLE ROAD ONTO ALBETH ROAD.
 - B. REVISE CURB FILLETS AT THE ALBETH ROAD INTERSECTION IN ACCORDANCE WITH CHAPELGATE LANE IMPROVEMENTS TO ALBETH ROAD. SEE SHEET 3.
 - C. AMEND SIGNAL EQUIPMENT LOCATION(S).
 - D. AMEND GUARDRAIL TO RESPECT CHAPELGATE SIDEWALK.
 - E. EXTEND CHAPELGATE CROSSWALK
 - F. AMEND GRADING/STORMWATER MANAGEMENT AT ALBETH ROAD / MARRIOTTSVILLE ROAD INTERSECTION
 - G. AMEND PLANS IN ACCORDANCE WITH LATEST CROSS CULVERT PROPOSAL
- "CHAPELGATE" TO PAY INTO CAPITAL PROJECT FUND FOR IMPROVEMENT.



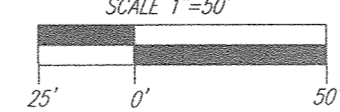
MATCHLINE - THIS SHEET

CHURCH ENTRANCE NOTE

1. UPON COMPLETION OF NEW CHURCH ACCESS, EXISTING CHURCH ACCESS TO MARRIOTTSVILLE ROAD (PAVEMENT, SIGNAGE, ETC.) SHALL BE REMOVED. ALL DISTURBANCES SHALL BE IMMEDIATELY STABILIZED.

CONCEPTUAL CAPITAL PROJECT J-4205 IMPROVEMENTS / CHAPELGATE PROJECT MERGE

SCALE: 1"=50'



APFO MITIGATION NOTE

EXCLUSIVE RIGHT TURN LANE FROM EXISTING MARRIOTTSVILLE ROAD ULTIMATE CONDITION

NOTE:
REFER TO CAPITAL PROJECT J-4205 PLANS FOR IMPROVEMENTS BEYOND THIS POINT

OWNER/DEVELOPER
CHAPELGATE PRESBYTERIAN CHURCH, INC.
2600 MARRIOTTSVILLE RD.
MARRIOTTSVILLE, MD 21104
(410) 442-5888

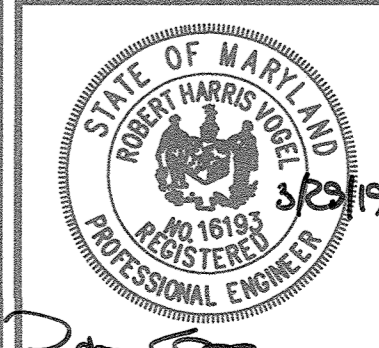
NO.	REVISION	DATE

SKETCH PLAN
CONCEPTUAL CAPITAL PROJECT J-4205 IMPROVEMENTS / CHAPELGATE PROJECT MERGE
CHAPELGATE

LOTS 1-134, OPEN SPACE LOTS 135-137
PARCEL A AND NON-BUILDABLE PARCELS B & C
A SUBDIVISION OF TAX MAP 16, PARCELS 110 & 421
MARRIOTTSVILLE, MD 21104

PARCELS: 110 & 421
TAX MAP: 16 GRID: 10
3RD ELECTION DISTRICT

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110, ELICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT 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. 16193, EXPIRATION DATE 08-27-2020.

DESIGN BY: RHV
DRAWN BY: VE+TG, KG
CHECKED BY: RHV
DATE: MARCH 2019
SCALE: AS SHOWN
W.O. NO.: 13-38 / 40220

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

Valerie D. Liu
PLANNING DIRECTOR

4-12-19
DATE

NOTE:
MARRIOTTSVILLE ROAD - CAPITAL PROJECT J-4205 PLAN INFORMATION SHOWN HEREON WAS TAKEN FROM THE LATEST INFORMATION MADE AVAILABLE TO VOGEL ENGINEERING+TIMMONS GROUP