

GENERAL NOTES

- SUBJECT PROPERTY ZONED R-20 PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN.
- PROPERTY ADDRESS: 5081 CEDAR LANE, COLUMBIA, MARYLAND 21044
- TOTAL AREA OF PROPERTY: 14.69 AC.±
- PUBLIC WATER AND PUBLIC SEWER WILL BE USED WITHIN THIS SITE.
- THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY HOWARD COUNTY SURVEY DIVISION ON OCTOBER 23, 2017. THE TOPOGRAPHY SHOWN HEREON HAS BEEN FIELD RUN BY HOWARD COUNTY SURVEY DIVISION ON OCTOBER 23, 2017. THE EXISTING TOPOGRAPHY SHOWN OUTSIDE THE SITE IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY FLOWN IN 2011.
- REFERENCE: LIBER 1082 FOLIO 368
- THE SOILS SHOWN HAVE BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE.
- NO WETLANDS, STREAMS OR BUFFERS ARE PRESENT ON SITE.
- ALL EXISTING WELLS, SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS WITHIN 100 FEET OF THE PROPERTY BOUNDARIES AND ALL EXISTING AND PROPOSED WELLS THAT ARE LOCATED WITHIN 200 FEET DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS AND SEWAGE DISPOSAL EASEMENTS HAVE BEEN FIELD LOCATED.
- EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- PRELIMINARY GEOTECHNICAL INFORMATION HAS BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE AND FIELD INVESTIGATIONS. IF FUTURE INVESTIGATIONS SHOW UNSATISFACTORY SOIL CONDITIONS FOR ANY OF THE STORMWATER MANAGEMENT TREATMENTS SHOWN, EITHER UNDERDRAINS WILL BE PROVIDED OR A DIFFERENT PRACTICE WILL BE SUBSTITUTED.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NUMBERS 291A AND 291D WERE USED FOR THIS PROJECT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, UNLESS WAIVERS HAVE BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING.
- ALL SWALES TO HAVE EROSION CONTROL MATTING.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF SUBSEQUENT AND ASSOCIATED SUBDIVISION PLANS, SITE DEVELOPMENT PLANS OR RED-LINE REVISIONS. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION OR SITE DEVELOPMENT PLAN STAGES OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- THE STORMWATER MANAGEMENT OBLIGATIONS FOR THIS SITE WILL BE MET BY N-2, NON-ROOFTOP DISCONNECT. THE ARTIFICIAL TURF WILL BE TREATED WITH ITS GRAVEL RESERVOIR DESIGN.
- PREVIOUS DPZ FILE REFERENCES: SDP 33-41.
- FOREST CONSERVATION IS REQUIRED AND WILL BE ADDRESSED AT THE EDP STAGE.

ENVIRONMENTAL CONCEPT PLAN

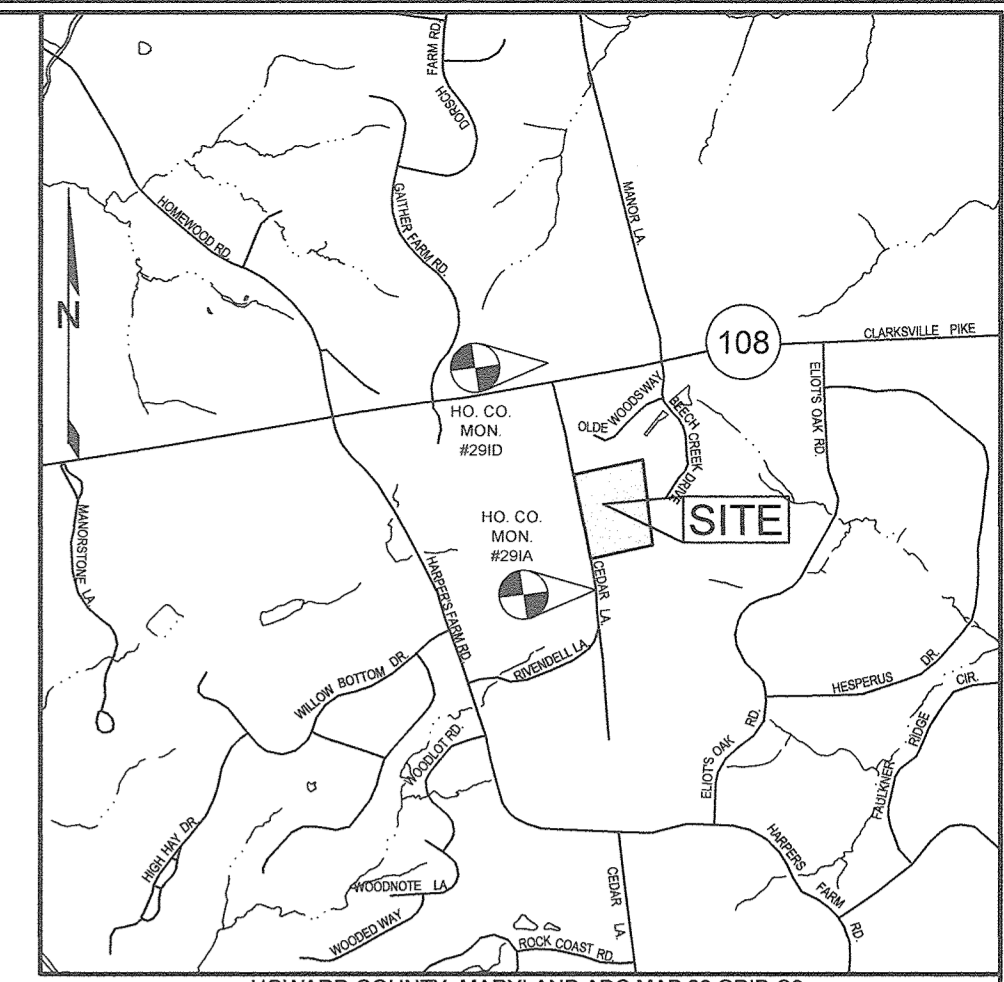
CEDAR LANE PARK

BOCCE COURT

HOWARD COUNTY, MARYLAND

LEGEND

- EXISTING CONTOUR: - - - - - 382
- SOIL BOUNDARY: - - - - -
- EXISTING PRIVACY FENCE: [Symbol]
- EXISTING SPLIT RAIL FENCE: [Symbol]
- EXISTING TREELINE: [Symbol]



HOWARD COUNTY, MARYLAND ADC MAP 26 GRID C5
VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS				
NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
291A	568,986.067	1,343,640.177	482.15	3.9' W OF END OF CURB ON CEDAR LN, 41.7' S FROM FIREHYDRANT
291D	571,234.373	1,343,193.107	473.87	5.8' NW OF END OF CURB ON CEDAR LN, 28.0' NE FROM G. OF CEDAR LN.

SITE ANALYSIS DATA SHEET

ENVIRONMENTAL AREA	SIZE OR USE
TOTAL PROJECT AREA	14.69 ACRES±
LIMIT OF DISTURBANCE	0.8818 ACRES±
*GREEN OPEN AREA (LAWN)	0.3040 ACRES±
*IMPERVIOUS AREA	0.5778 ACRES±
PROPOSED SITE USES	COMMERCIAL
*WETLANDS	0.00 ACRES±
*WETLAND BUFFERS	0.00 ACRES±
*FLOODPLAINS	0.00 ACRES±
*FLOODPLAIN BUFFERS	0.00 ACRES±
*EXISTING FOREST	0.00 ACRES±
*SLOPES GREATER THAN 15% (2)	0.00 ACRES±
*SLOPES GREATER THAN 25%	0.00 ACRES±
*HIGHLY ERODIBLE SOILS	0.0000 ACRES±

- NOTES:
- SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.
 - 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.
 - *AREA WITHIN LOD

STORMWATER MANAGEMENT PRACTICES

LOT #	ADDRESS	DRY-WELL M-5 (NUMBER)	NON-ROOFTOP DISCONNECT N-2 (Y/N)	ROOFTOP DISCONNECT N-1 (Y/N)	MICRO-BIO M-6 (NUMBER)
N/A	5081 CEDAR LANE	0	Y	N	0

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	ENVIRONMENTAL CONCEPT PLAN
3	CONCEPTUAL STORMWATER MANAGEMENT PLAN, DRAINAGE AREA MAP, NOTES, AND DETAILS

OWNER/DEVELOPER

HOWARD COUNTY DEPARTMENT OF RECREATION & PARKS
C/O PAUL WALKER
7120 OAKLAND MILLS ROAD
COLUMBIA, MARYLAND 21046
410-313-1695

COVER SHEET

CEDAR LANE PARK BOCCE COURT

5081 CEDAR LANE

TAX MAP 29 GRID 17 5TH ELECTION DISTRICT PARCEL 67 HOWARD COUNTY, MARYLAND

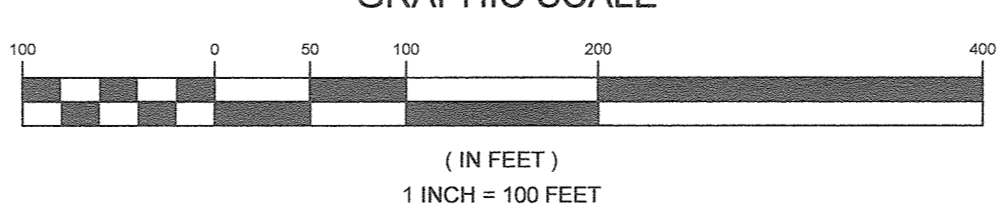
	SILL ENGINEERING GROUP, LLC 11130 Dovedale Court, Suite 200 Marriottsville, Maryland 21104 Phone: 413.325.5076 Fax: 410.696.2022 Email: info@sillengineering.com Civil Engineering for Land Development	DESIGN BY: PS DRAWN BY: DL/AEA CHECKED BY: PS SCALE: AS SHOWN DATE: SEPTEMBER 24, 2018 PROJECT #: 18-003 SHEET #: 1 of 3
	PROFESSIONAL CERTIFICATION: 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. 32025, EXPIRATION DATE: JUNE 20, 2019	



LOCATION MAP

SCALE: 1"=100'

GRAPHIC SCALE



STORMWATER MANAGEMENT NOTES & DESIGN NARRATIVE

BELOW IS A LIST TO DESCRIBE THE STORMWATER MANAGEMENT REQUIREMENTS AND ACHIEVEMENTS FOR THE SITE PER THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II, AS AMENDED BY THE STORMWATER MANAGEMENT ACT OF 2007.

- STEEP SLOPES EXIST ON-SITE IN THE AREA OF DEVELOPMENT. IF NECESSARY, A WAIVER WILL BE SUBMITTED FOR THESE FEATURES TO REMAIN ON THE PROPOSED LOTS AND/OR BE DISTURBED. NO OTHER ENVIRONMENTALLY SENSITIVE AREAS EXIST ON-SITE. MATURE TREES EXIST ON SLOPE SLOPES AND AS STREET TREES AND PARKING LOT TREES. THE AREA IS NATURALIZED AND HAS A GRAVEL PATH. NO OTHER FORESTS, WETLANDS, STREAMS AND ASSOCIATED BUFFERS WERE FOUND ON SITE.
- STORMWATER MANAGEMENT OBLIGATIONS WILL BE TREATED BY UTILIZING SHEET FLOW, NON ROOFTOP DISCONNECT.
- TO THE GREATEST EXTENT PRACTICABLE THE NATURAL FLOW PATTERNS OF THE SITE HAVE BEEN MAINTAINED BY DIRECTING STORM DRAIN, AND SHEET FLOW RUNOFF TO LOCATIONS WITHIN THE NATURAL DRAINAGE DIVIDES.
- A STABILIZED CONSTRUCTION ENTRANCE, SILT FENCES, AND TEMPORARY SOIL STABILIZATION ARE USED AS SEDIMENT AND EROSION CONTROL.
- IMPERVIOUS AREAS HAVE BEEN REDUCED BY UTILIZING PERVIOUS AREAS FOR TREATMENT.
- NO DESIGN MANUAL AND WAIVER PETITION REQUESTS HAVE BEEN MADE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Clum 10.10.18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Jim Hanks 9/18/18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

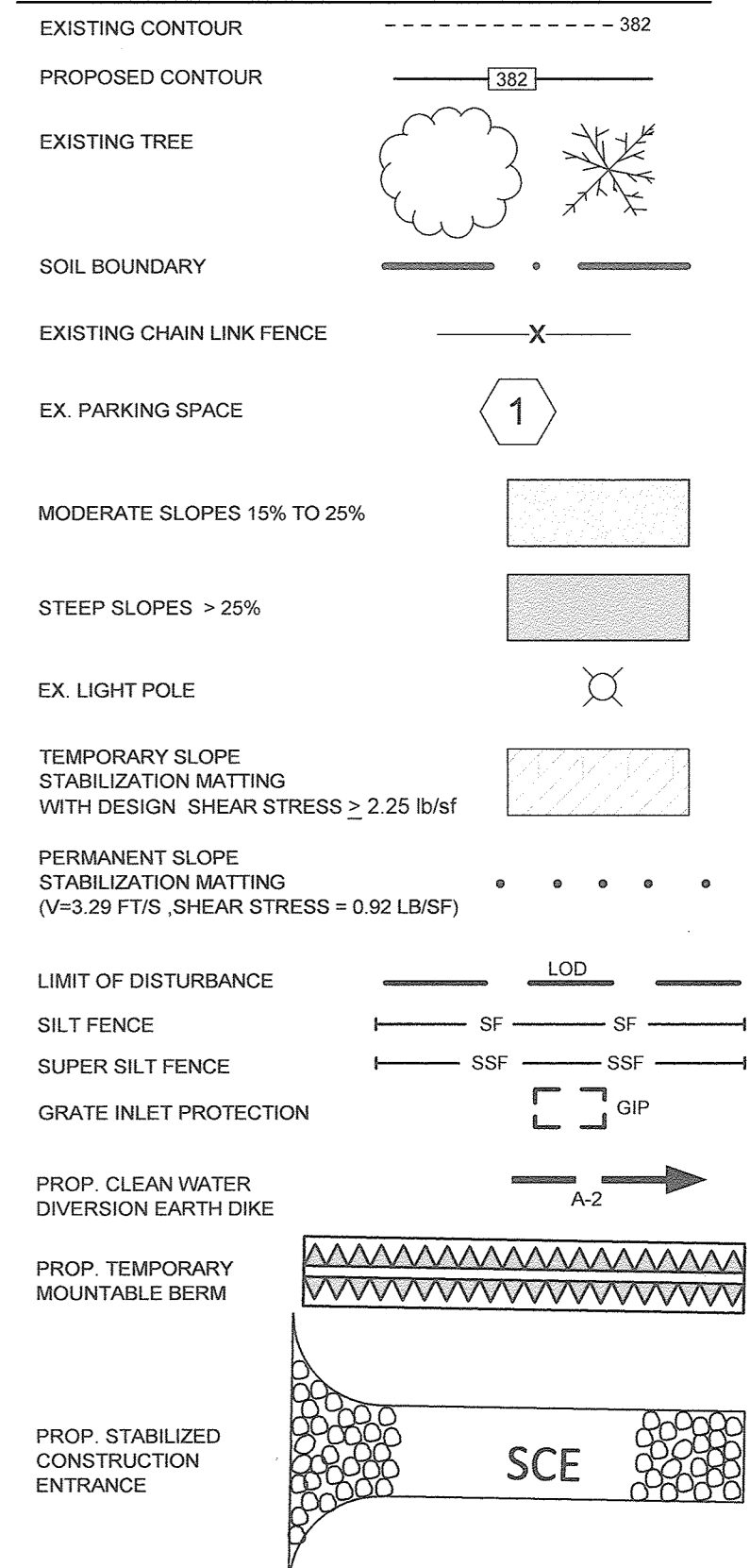
N 569,948

E 1,343,489

N 569,949

E 1,343,932

LEGEND



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
UuB	URBAN LAND- UDORTHERNTS COMPLEX, 0 TO 8 PERCENT SLOPES	D	0.28

- NOTES:
- 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE; WEBB SOIL SURVEY
 - 2) 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.

OWNER/DEVELOPER

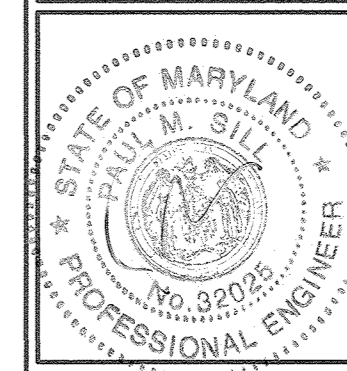
HOWARD COUNTY DEPARTMENT OF RECREATION & PARKS
 C/O PAUL WALKS
 7120 OAKLAND MILLS ROAD
 COLUMBIA, MARYLAND 21046
 410-313-1695

ENVIRONMENTAL CONCEPT PLAN
 CEDAR LANE PARK BOCCIE COURT

5081 CEDAR LANE

TAX MAP 29 GRID 17
5TH ELECTION DISTRICT

PARCEL 67
HOWARD COUNTY, MARYLAND

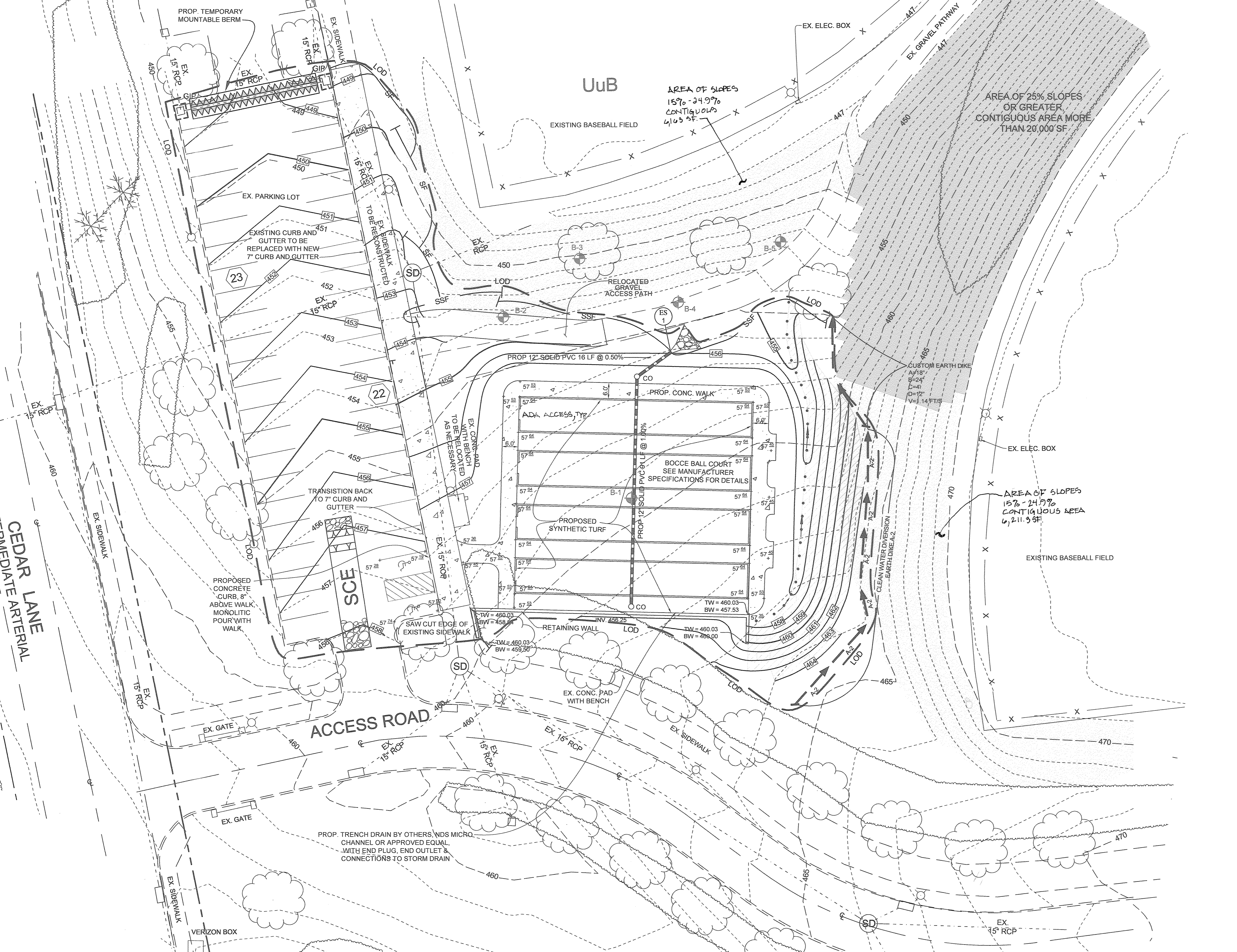


SILL ENGINEERING GROUP, LLC
 11130 Dovedale Court, Suite 200
 Marriottsville, Maryland 21104
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: DL/AEA
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: SEPTEMBER 24, 2018
 PROJECT #: 18-003
 SHEET #: 2 of 3

PROFESSIONAL CERTIFICATION: 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. 32025, EXPIRATION DATE: JUNE 20, 2019

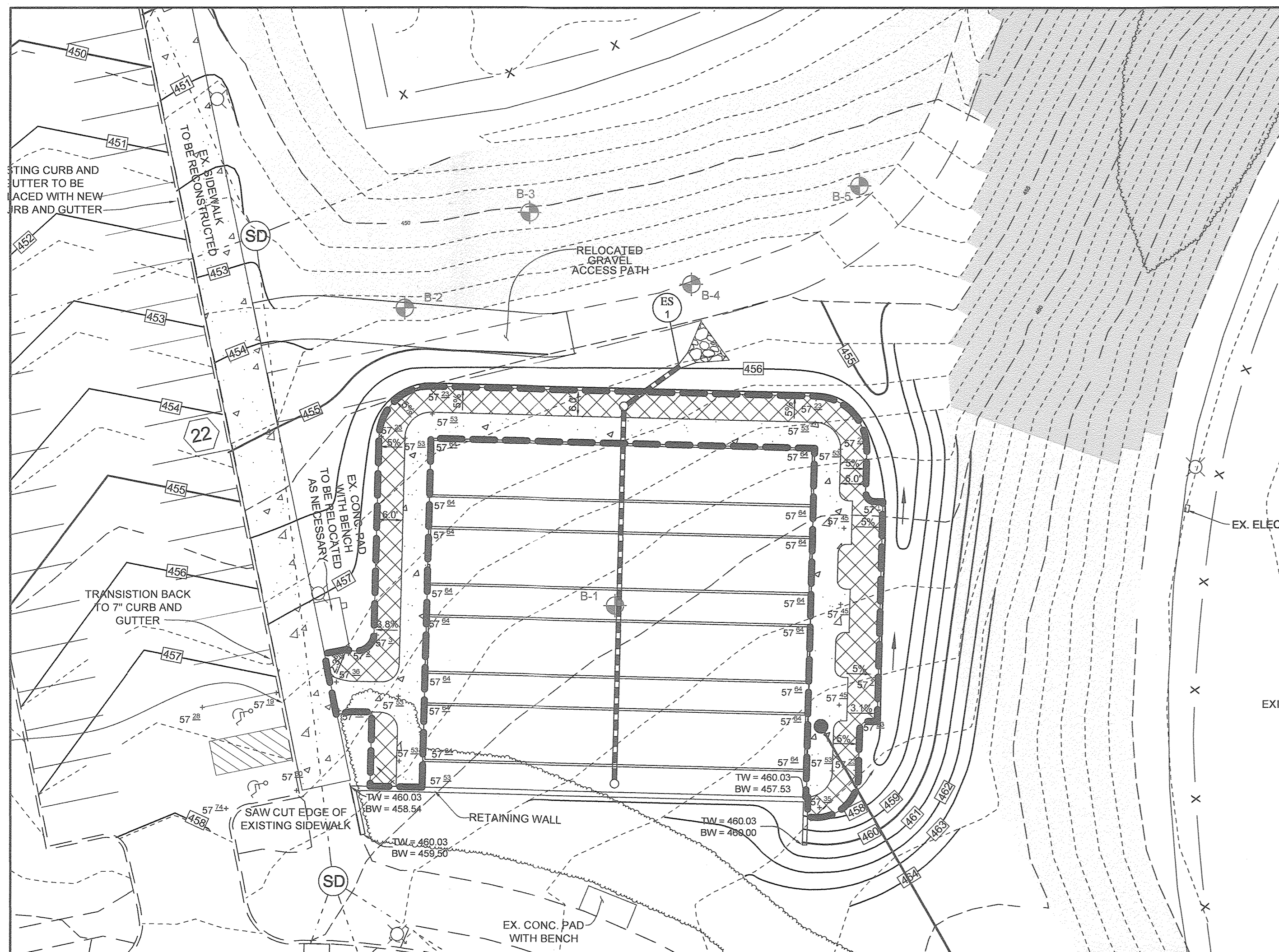
ECP-18-048



PLAN VIEW

SCALE: 1"=20'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] DATE: 10.10.18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] DATE: 9/28/18
 CHIEF, DIVISION OF LAND DEVELOPMENT

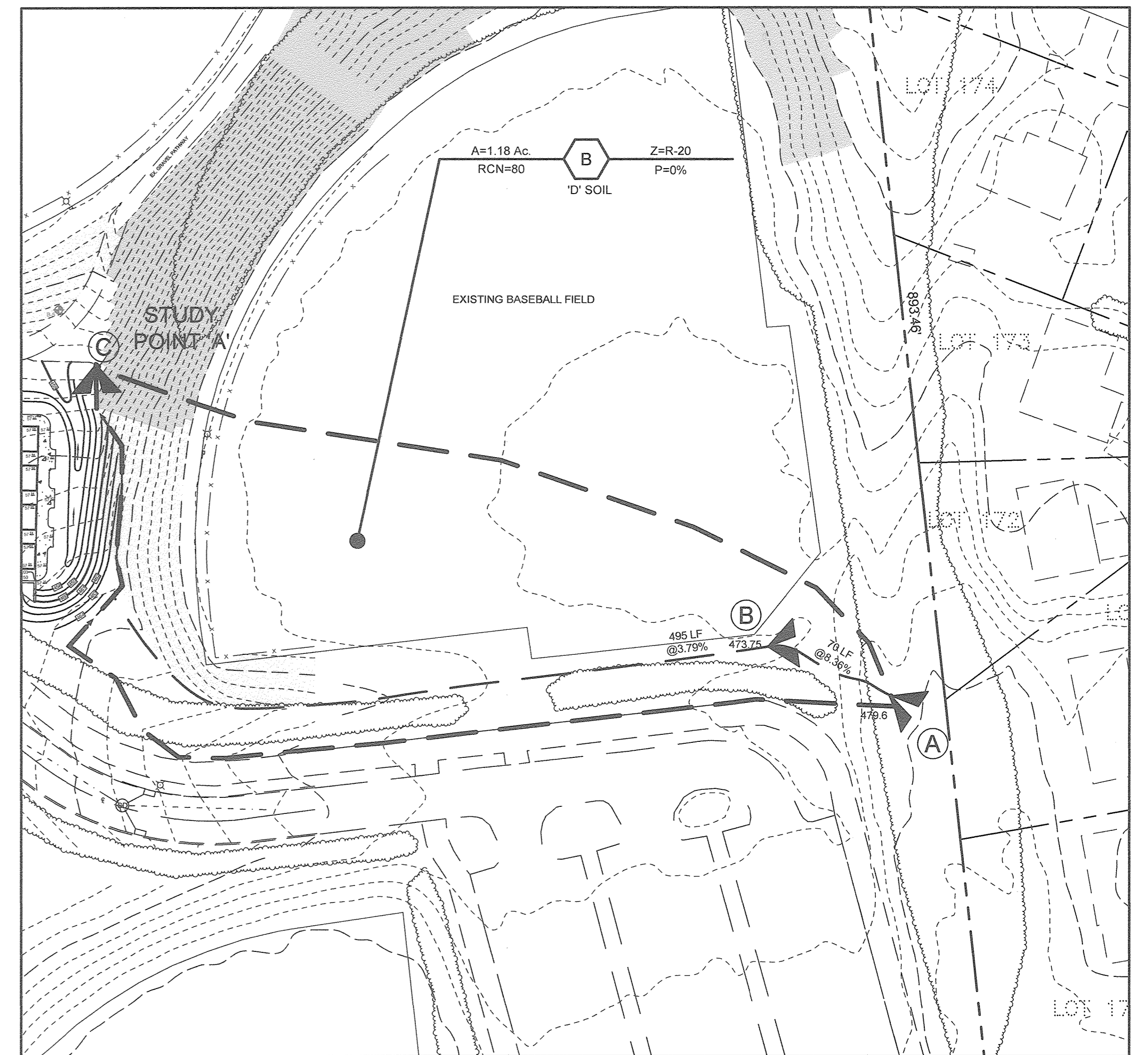


STORMWATER MANAGEMENT DETAIL
SCALE: 1" = 20'

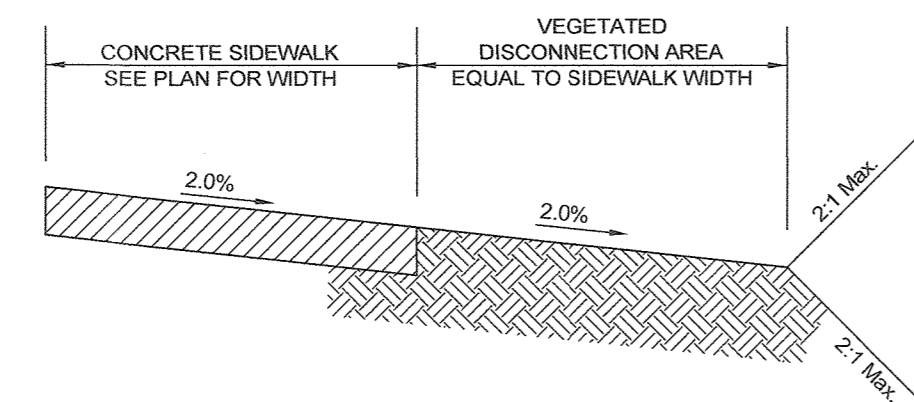
A=0.083 Ac. Z=R-20
P_e = 1.0 IN. 'D' SOIL P=60%

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED DRAINAGE AREA LINE
- DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)



SEDIMENT AND EROSION CONTROL DRAINAGE AREA MAP
SCALE: 1" = 50'



TYPICAL NON-ROOFTOP DISCONNECT
NOT TO SCALE

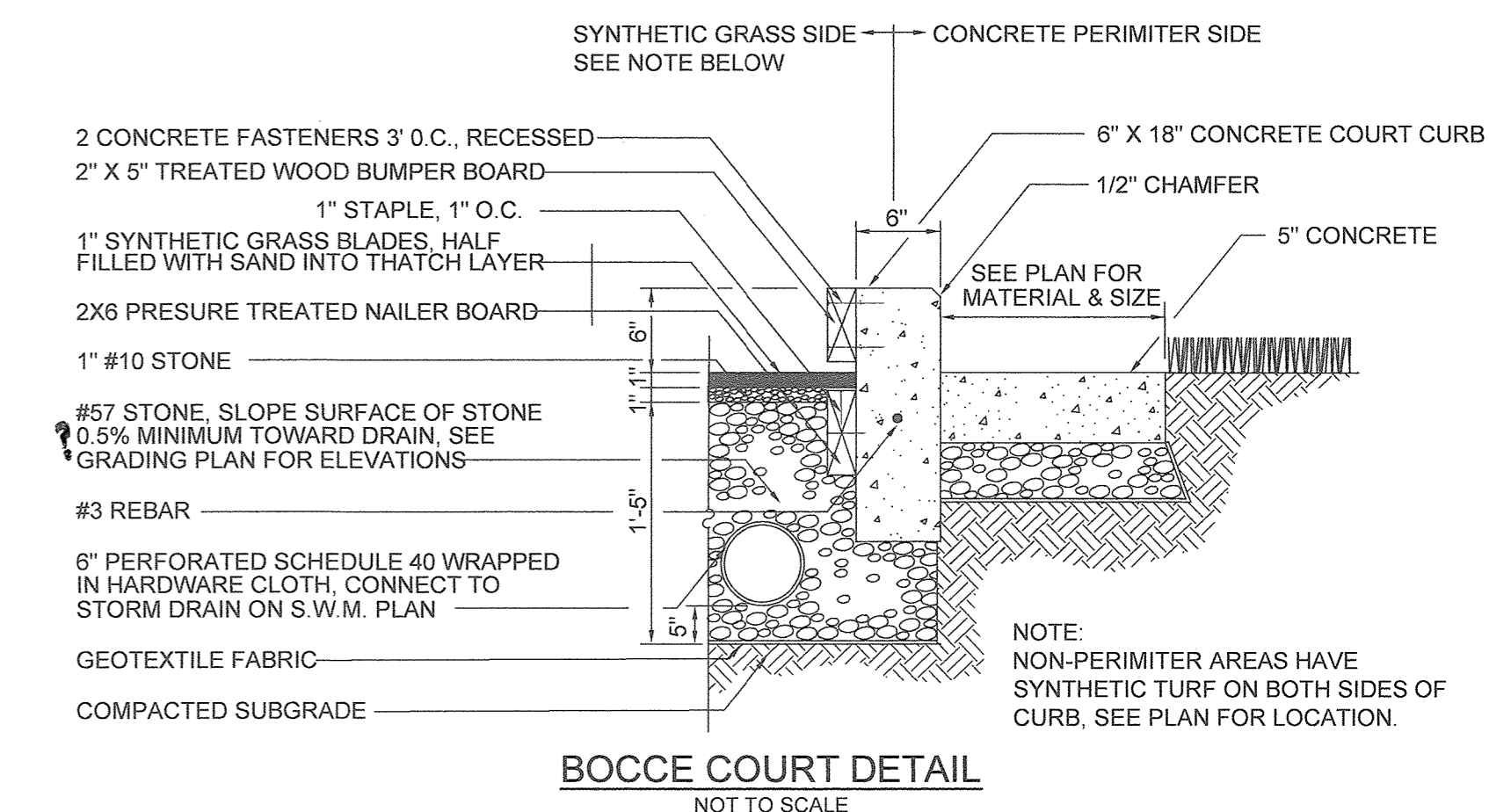
- NOTES:
- DISCONNECTION CONTRIBUTING LENGTH STARTS AT THE BEGINNING OF THE SIDEWALK.

D.A.	P _e		ESDV	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
A	1.0'	1.0'	253 CF	891 CF

- NOTES:
- TREATMENT FOR THE ENVIRONMENTAL SITE DESIGN VOLUMES (ESDV) WILL BE PROVIDED FOR AS FOLLOWS:
 - DRAINAGE AREA A: DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)
 - ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT PRACTICABLE HAS BEEN PROVIDED FOR THIS SITE.
 - OVERBANK FLOOD PROTECTION VOLUME (OP) AND EXTREME FLOOD VOLUME (QF) ARE NOT REQUIRED FOR THIS SITE.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1) DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

- MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED 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.



BOCCE COURT DETAIL
NOT TO SCALE

OWNER/DEVELOPER

HOWARD COUNTY DEPARTMENT OF RECREATION & PARKS
C/O PAUL WALSKY
7120 OAKLAND MILLS ROAD
COLUMBIA, MARYLAND 21046
410-313-1695

CONCEPTUAL STORMWATER MANAGEMENT PLAN, DRAINAGE AREA MAP, NOTES, AND DETAILS CEDAR LANE PARK BOCCE COURT

5081 CEDAR LANE

TAX MAP 29 GRID 17 PARCEL 67
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

		DESIGN BY: PS
	11130 Dovedale Court, Suite 200 Marriottsville, Maryland 21104 Phone: 413.325.5076 Fax: 410.696.2022 Email: info@sillengineering.com Civil Engineering for Land Development	DRAWN BY: DL/AEA
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