

ENVIRONMENTAL CONCEPT PLAN

BALTIMORE NATIONAL PIKE MIDAS

HOWARD COUNTY, MARYLAND

GENERAL NOTES

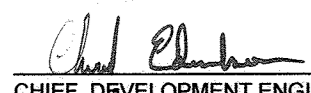

- SUBJECT PROPERTY ZONED B-2 PER 10/06/2013 COMPREHENSIVE ZONING PLAN.
- PROPERTY ADDRESS: 9438 BALTIMORE NATIONAL PIKE, ELLICOTT CITY MARYLAND 21042
- TOTAL AREA OF PROPERTY = 0.9405 AC ±
- LIMIT OF DISTURBANCE = 0.4536 AC ±
- THIS SITE IS ON PUBLIC WATER & SEWER.
- DEED REFERENCE: LIBER 16480, FOLIO 379
- THE EXISTING MIDAS BUILDING TO REMAIN.
- TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERY OR HISTORIC BUILDING LOCATIONS ON-SITE.
- NO ALTERNATIVE COMPLIANCE PETITIONS OR DESIGN MANUAL WAIVERS WILL BE NEEDED FOR THIS SITE.
- THIS SITE IS LOCATED IN THE PLUMTREE WATERSHED AND IS REQUIRED TO PROVIDED STORMWATER MANAGEMENT ATTENUATION FOR THE 10, 100, AND 3 HR. 6" STORMS.
- THIS PLAN HAS BEEN SUBMITTED TO THE ROUTE 40 DESIGN ADVISORY PANEL (DAP) AND HAS RECEIVED COMMENTS, COMMENTS MADE AND THE PLAN HAS BEEN RESUBMITTED.
- THE SOILS SHOWN HAVE BEEN TAKEN FROM THE US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE, WEB SOIL SURVEY WEBSITE. HOWARD COUNTY SOILS GRID 010, SUB-GRID 081.
- THE LOT SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- THE BOUNDARY & TOPOGRAPHY SHOWN WITHIN THE DEVELOPED AREA IS BASED ON A BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY HANOVER LAND SERVICES, INC IN FEBRUARY 2021.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL 24B5 & 24B6, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
- THERE ARE NO WETLANDS, STREAMS, FLOODPLAIN OR THEIR ASSOCIATED BUFFERS, FOREST, ERODIBLE SOILS, STEEP SLOPES 25% OR GREATER, WITHIN THE AREA OF DEVELOPMENT.
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT SUBDIVISION, FOREST CONSERVATION, OR SITE DEVELOPMENT PLAN. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS THAT MAY ALTER THE SITE DESIGN, HOUSE LOCATION, DRIVEWAY LOCATION, GRADING, TREE CLEARING, AND/OR OTHER REQUIREMENTS AS THE DEVELOPMENT PLAN PROCESS THROUGH THE PLAN REVIEW PROCESS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS.
- LANDSCAPING WILL BE PROVIDED AT THE SDP STAGE OF 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 ALTERNATIVE COMPLIANCE HAVE BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING.
- PER SECTION 16.1200 OF THE HOWARD COUNTY CODE, THIS PLAN IS SUBJECT TO FOREST CONSERVATION OBLIGATIONS. FOR THIS PROJECT, THE REFORESTATION/FORESTATION NET TRACT AREA OBLIGATION IS BASED ON THE HOWARD COUNTY FOREST CONSERVATION WORKSHEET AND WILL BE 0.10 ACRES OR 4,356 SQ FT. THE OBLIGATION WILL BE MET BY FEE IN LIEU.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT. \$4,500.00 FOR THE REQUIRED FIFTEEN (15) LANDSCAPING SHADE TREES, \$1,050.00 FOR THE SIX (6) ORNAMENTAL AND ONE (1) EVERGREEN TREES AND \$1,020.00 FOR THE THIRTY FOUR (34) SHRUBS, FOR A TOTAL OF \$6,570.00.
- THE PARKING NEEDS ASSESSMENT FOR THIS PROJECT WAS PREPARED BY MARS GROUP, DATED JUNE 2021, AND UPDATED BY THE TRAFFIC GROUP IN SEPTEMBER OF 2022.
- AN ADMINISTRATIVE ADJUSTMENT WILL BE PROVIDED AT THE NEXT PLAN STAGE FOR A 20% REDUCTION TO THE 30' STRUCTURE AND USE SETBACK TO ALLOW A 5.75' SIDEWALK AT THE SOUTH OF THE EXISTING BUILDING FOR THE MEANS OF INGRESS AND EGRESS.
- PARKING:
 - REQUIRED:
 - RESTAURANT: 14.0 SPACES PER 1,000 SF, 3,200/1,000 X 14.0 = 44.8 SPACES (USE 45)
 - RESTAURANT, OUTDOOR SEATING AREA: 7.0 SPACES PER 1,000 SF 300/1,000 X 7.0 = 2.10 (USE 3) SPACES
 - SERVICE STATION WITH SERVICE BAYS: 3.0 SPACES PLUS 3.0 SPACES PER SERVICE BAY, 3.0 + (3.0 X 8.0) (BAYS) = 27.0 SPACES
 - OFFICE: 3.3 SPACES PER 1,000 SF, 1,800/1,000 X 3.3 = 5.9 SPACES (USE 6)
 - TOTAL REQUIRED PER HOWARD COUNTY ZONING REGULATIONS: 81 SPACES
 - TOTAL PROVIDED: 57 SPACES (INCLUDING 3 HC SPACES)
 - TOTAL REQUIRED PER PARKING NEEDS STUDY: 57 SPACES
 - SEE GENERAL NOTE # 22

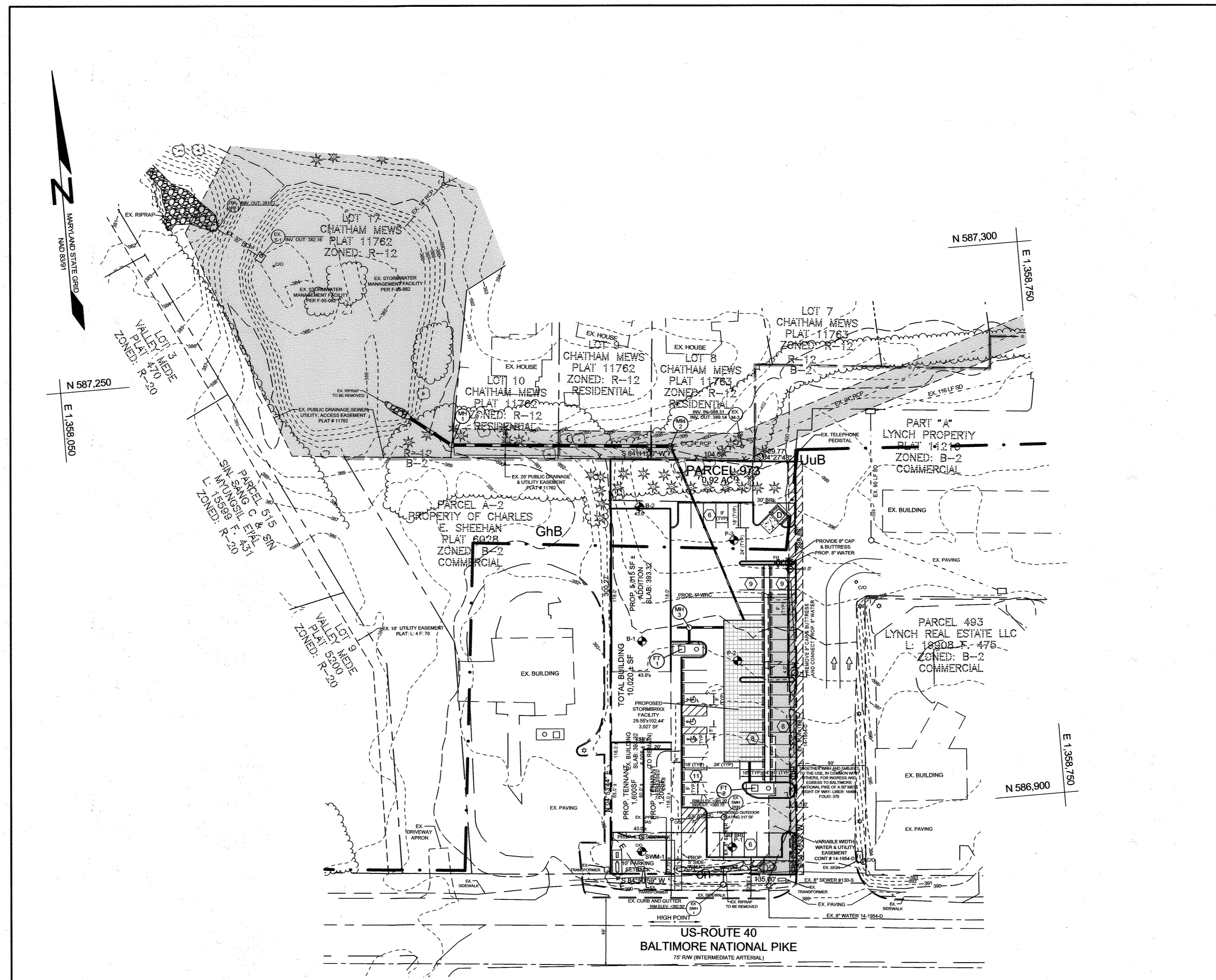
STORMWATER MANAGEMENT NOTES & DESIGN NARRATIVE

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.

- SITE IS LOCATED WITHIN THE PLUMTREE WATERSHED, WHICH IS LOCATED IN THE LITTLE PATUXENT RIVER WATERSHED BASIN NO. 02-13-11-05-09-58. ENVIRONMENTALLY SENSITIVE AREAS HAVE BEEN AVOIDED. NO STREAMS, WETLANDS, OR THEIR BUFFERS EXIST WITHIN THE LIMIT OF DISTURBANCE. FOREST CONSERVATION AREA AND ITS BUFFER IS LOCATED IN THE NORTH WEST AREA OF THE LOT, AND WILL NOT BE DISTURBED.
- THE TOTAL ACREAGE OF THE PROPERTY IS 0.94 ACRES. THE AMOUNT OF EXISTING IMPERVIOUS AREA IS 0.45 ACRES. THEREFORE, SINCE THE EXISTING IMPERVIOUS AREA IS GREATER THAN 40% OF THE SITE, THIS PROJECT QUALIFIES FOR REDEVELOPMENT STATUS.
- TO THE GREATEST EXTENT PRACTICABLE THE NATURAL FLOW PATTERNS OF THE SITE HAVE BEEN MAINTAINED.
- A STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE, AND SILT FENCE ON PAVEMENT ARE USED AS SEDIMENT AND EROSION CONTROL MEASURES.
- THE STORMWATER MANAGEMENT OBLIGATIONS FOR THIS LOT WILL BE MET BY THE USE OF TWO FILTERRA FACILITIES, AND ONE STORMBROX FACILITY.
- NO WAIVER PETITIONS OR DESIGN MANUAL WAIVERS HAVE BEEN APPLIED FOR.

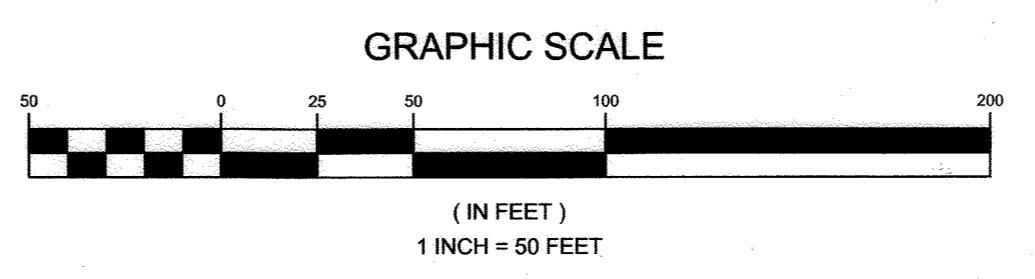
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING


 8/23/23
 CHIEF DEVELOPMENT ENGINEERING DIVISION HSA DATE

 8/18/23
 CHIEF DIVISION OF LAND DEVELOPMENT DATE



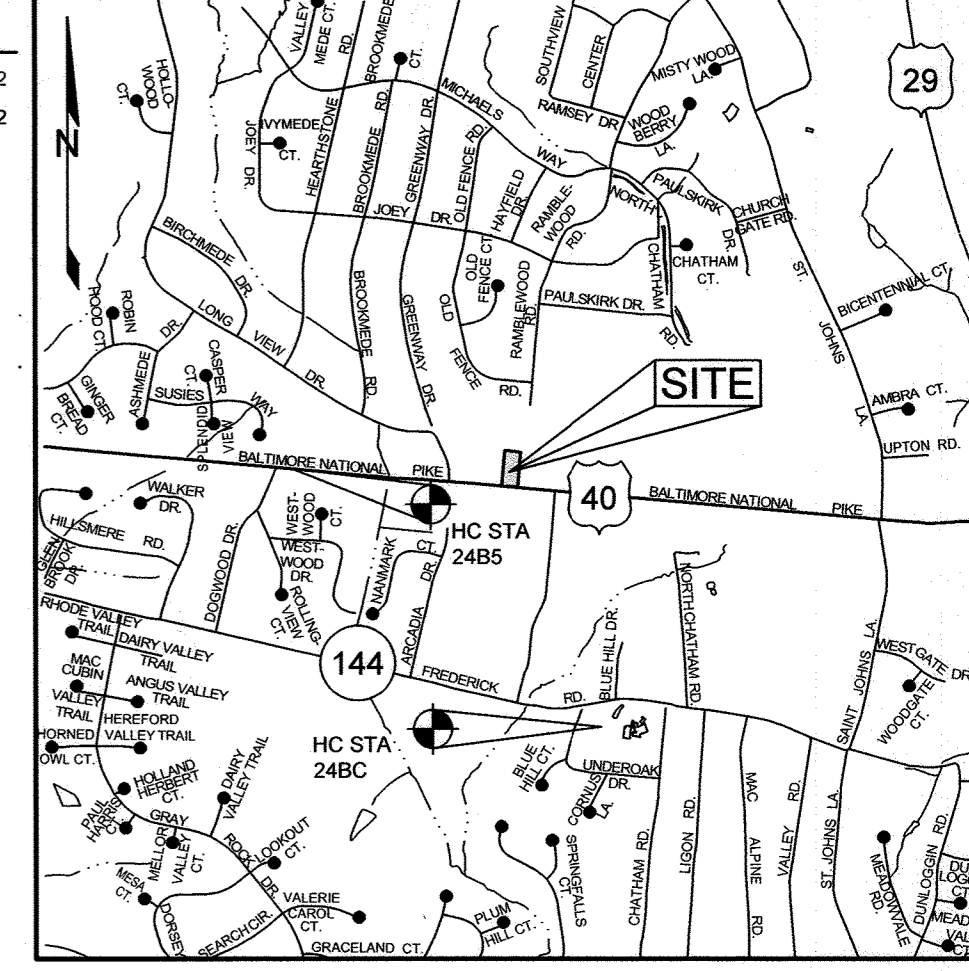
PLAN VIEW
SCALE: 1"=50'

LOT	Pe		ESDv		RECHARGE		SWM PRACTICES FILTERRA (MBO)
	REQUIRED	PROVIDED	REQUIRED	PROVIDED	REQUIRED	PROVIDED	
1	1.3"	1.3"	2,080 CF	2,554 CF	183 CF	183 CF	2



LEGEND

- EXISTING GIS CONTOUR
- EXISTING FIELD RUN CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED TEST BORING
- SOIL BOUNDARY



VICINITY MAP
SCALE: 1"=2000'

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
24BC	585,058.416	1,358,312.354	364.79	6.2' NORTH OF C&P#492; 18.1' NORTH EAST OF ELLICOTT CITY SENIOR CENTER SIGN
24B5	586,956.251	1,356,570.850	390.17	37.9' SOUTH OF WEST BOUND ROUTE 40 CL 28.9' NORTH OF EAST BOUND ROUTE 40 CL

SITE ANALYSIS DATA SHEET

ENVIRONMENTAL AREA	SIZE OR USE
TOTAL PROJECT AREA	0.9405 AC ±
ROW TO BE DEDICATED	0 AC ±
PROPOSED PROJECT AREA	0.8926 AC ±
LIMIT OF DISTURBANCE	0.8926 AC ±
GREEN OPEN AREA (LAWN)	0.0 AC ±
PROPOSED IMPERVIOUS AREA	0.2296 AC ±
STREAM BUFFER	0.0 AC ±
PROPOSED SITE USES	SEE GENERAL NOTE #25
WETLANDS	0 AC ±
WETLAND BUFFERS	0 AC ±
FLOODPLAINS	0 AC ±
FLOODPLAIN BUFFERS	0 AC ±
EXISTING FOREST	0.0 AC ±
SLOPES 15%-24.9%	0.0 AC ±
SLOPES GREATER THAN 25%	0.0 AC ±
HIGHLY ERODIBLE SOILS	0.0 AC ±

- 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 0.035 AND WITH A SLOPE GREATER THAN 5 PERCENT.

SHEET INDEX

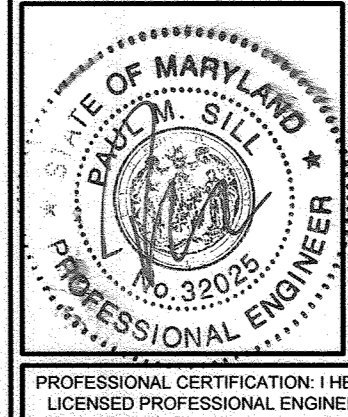
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS, DEMOLITION PLAN & FOREST STAND DELINEATION
3	CONCEPTUAL GRADING & SEDIMENT AND EROSION CONTROL PLAN
4	WQV DRAINAGE AREA MAP AND DETAILS
5	100 YEAR STORM DRAINAGE AREA MAP

COVER SHEET

TENNANT COMMERCIAL BUILDING

9438 BALTIMORE NATIONAL PIKE
ZONED: B-2
PARCEL 973
HOWARD COUNTY, MARYLAND

TAX MAP 24 GRID 4
2ND ELECTION DISTRICT



SILL ENGINEERING GROUP, LLC
 16005 Frederick Road, 2nd Floor
 Woodliffe, Maryland 21797
 Phone: 413.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: S2S
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: JULY 14, 2023
 PROJECT #: 20-051
 SHEET #: 1 of 5

OWNER

9438 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 C/O BRODY TENNANT
 BRODY@TENNANTCOMMERCIAL.COM
 443-547-1600

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, 2025.

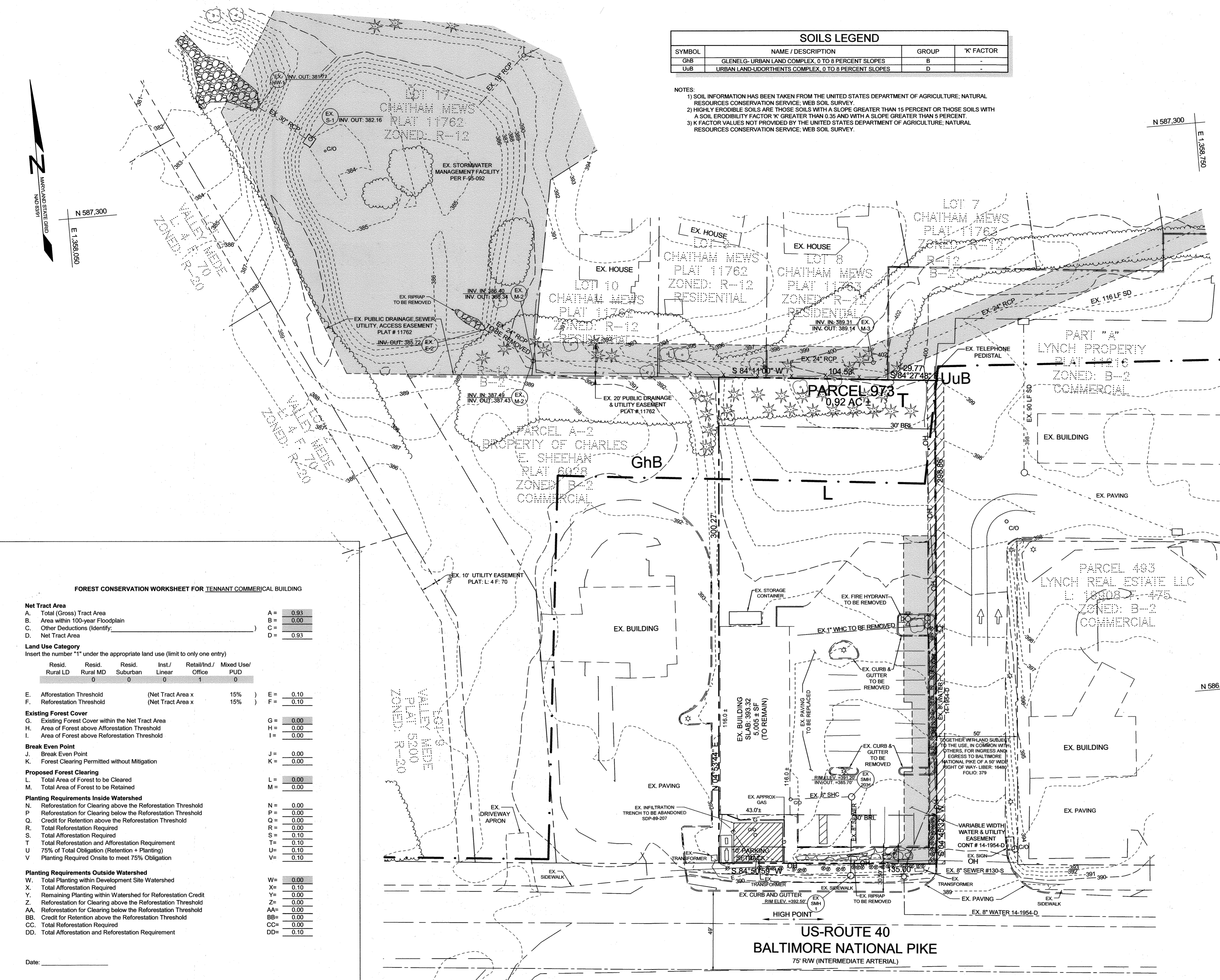
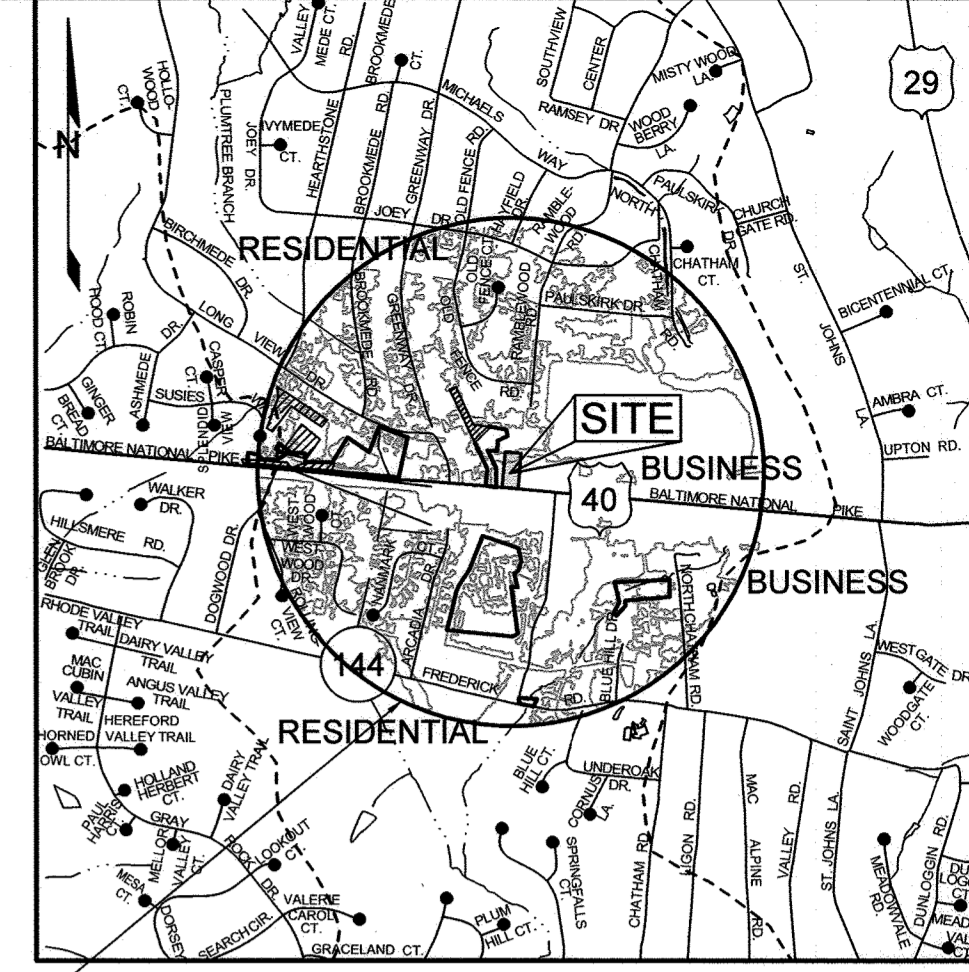


SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GhB	GLENELG- URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	B	-
UuB	URBAN LAND-UDORTHEMENTS COMPLEX, 0 TO 8 PERCENT SLOPES	D	-

- NOTES:
 1) SOIL INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB 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.
 3) 'K' FACTOR VALUES NOT PROVIDED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY.

LEGEND

- EXISTING GIS CONTOUR
- EXISTING FIELD RUN CONTOUR
- EXISTING TREELINE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING HYDRANT
- EXISTING TELECOM
- EXISTING GAS
- EXISTING ELECTRIC
- EXISTING DECIDUOUS TREE
- EXISTING PINE TREE
- EXISTING PLANTING SHRUB
- EXISTING FENCE LINE
- EXISTING LIGHT POLE
- EXISTING CONCRETE
- SOIL BOUNDARY
- EXISTING TREES
- EXISTING LAWN



FOREST CONSERVATION WORKSHEET FOR TENNANT COMMERCIAL BUILDING

Net Tract Area

A. Total (Gross) Tract Area	A = 0.93
B. Area within 100-year Floodplain	B = 0.00
C. Other Deductions (Identify)	C = 0.00
D. Net Tract Area	D = 0.93

Land Use Category
 Insert the number "1" under the appropriate land use (limit to only one entry)

Resid.	Resid.	Resid.	Inst./	Retail/Ind./	Mixed Use/
Rural LD	Rural MD	Suburban	Linear	Office	PUD
0	0	0	0	1	0

E. Afforestation Threshold (Net Tract Area x 15%) E = 0.10
F. Reforestation Threshold (Net Tract Area x 15%) F = 0.10

Existing Forest Cover

G. Existing Forest Cover within the Net Tract Area	G = 0.00
H. Area of Forest above Afforestation Threshold	H = 0.00
I. Area of Forest above Reforestation Threshold	I = 0.00

Break Even Point

J. Break Even Point	J = 0.00
K. Forest Clearing Permitted without Mitigation	K = 0.00

Proposed Forest Clearing

L. Total Area of Forest to be Cleared	L = 0.00
M. Total Area of Forest to be Retained	M = 0.00

Planting Requirements Inside Watershed

N. Reforestation for Clearing above the Reforestation Threshold	N = 0.00
P. Reforestation for Clearing below the Reforestation Threshold	P = 0.00
Q. Credit for Retention above the Reforestation Threshold	Q = 0.00
R. Total Reforestation Required	R = 0.00
S. Total Afforestation Required	S = 0.10
T. Total Reforestation and Afforestation Requirement	T = 0.10
U. 75% of Total Obligation (Retention + Planting)	U = 0.10
V. Planting Required Onsite to meet 75% Obligation	V = 0.10

Planting Requirements Outside Watershed

W. Total Planting within Development Site Watershed	W = 0.00
X. Total Afforestation Required	X = 0.10
Y. Remaining Planting within Watershed for Reforestation Credit	Y = 0.00
Z. Reforestation for Clearing above the Reforestation Threshold	Z = 0.00
AA. Reforestation for Clearing below the Reforestation Threshold	AA = 0.00
BB. Credit for Retention above the Reforestation Threshold	BB = 0.00
CC. Total Reforestation Required	CC = 0.00
DD. Total Afforestation and Reforestation Requirement	DD = 0.10

- FOREST STAND DELINEATION NOTES**
- SUBJECT PROPERTY ZONED R-20 PER 10/08/2013 COMPREHENSIVE ZONING PLAN.
 - TOTAL AREA OF PROPERTY = 0.9405 AC ±
 - DEED REFERENCE: LIBER 16480, FOLIO 379
 - PROPERTY ADDRESS: 9438 BALTIMORE NATIONAL PIKE, ELICOTT CITY, MARYLAND 21042
 - THE BOUNDARY & TOPOGRAPHY SHOWN WITHIN THE DEVELOPED AREA IS BASED ON A BOUNDARY & TOPOGRAPHIC SURVEY PERFORMED BY HANNOVER LAND SERVICES, INC. IN FEBRUARY 2021.
 - TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERY LOCATIONS ON-SITE.
 - THERE ARE NO WETLANDS, STREAMS, OR THEIR ASSOCIATED BUFFERS, STEEP SLOPES 25% OR GREATER, OR FOREST WITHIN THE AREA OF DEVELOPMENT.
 - LIMIT OF DISTURBANCE: 0.9035 AC ±
 - APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT SUBDIVISION, FOREST CONSERVATIONS, OR SITE DEVELOPMENT PLAN. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS THAT MAY ALTER THE SITE DESIGN, BUILDING LOCATION AND ON SITE PARKING REQUIREMENTS AS THE DEVELOPMENT PLAN PROCESSES THROUGH THE PLANNING REVIEW PROCESS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS.
 - LANDSCAPING WILL BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE OF 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 ALTERNATIVE COMPLIANCE HAVE BEEN APPROVED OR ACTIVITIES HAVE BEEN DETERMINED ESSENTIAL BY THE DEPARTMENT OF PLANNING AND ZONING.
 - THE SITE IS LOCATED WITHIN THE PLUMTREE WATERSHED, WHICH IS ALSO LOCATED IN THE LITTLE PATUXENT RIVER WATERSHED BASIN NO. 021311050956.

FOREST STAND DELINEATION NARRATIVE

THE PROJECT IS LOCATED AT 9438 BALTIMORE NATIONAL PIKE, ELICOTT CITY, MARYLAND 21042 AND IS ALSO KNOWN AS TAX MAP 24, GRID 4, PARCEL 973. THE PROPERTY IS CURRENTLY ZONED B-2 AND CONSISTS OF APPROXIMATELY 0.94 ACRES.

CURRENTLY PARCEL 973 HAS AN AUTO SERVICING CENTER OPERATING ON-SITE. THE BALANCE OF THE PROPERTY IS GRASSY WITH PLANTED WHITE PINES COVERED IN INVASIVE ORIENTAL BITTERSWEET ALONG THE REAR PROPERTY LINE. THERE ARE PLANTED EUONYMUS SHRUBS AT THE ROUTE 40 PERIMETER AND PARKING AREA. THE SITE HAS GENTLE SLOPES. NO STEEP SLOPES WERE OBSERVED ON THE SUBJECT PROPERTY.

THERE ARE NO SPECIMEN TREES OR STATE CHAMPION TREES OR TREES 75% OF THE SIZE (DIAMETER) OR GREATER OF STATE CHAMPION TREES LOCATED ON-SITE.

NO WETLANDS, STREAMS, OR THEIR BUFFERS EXIST ON-SITE.

NO FLOODPLAIN EXIST ON-SITE.

NO PORTION OF THE HOWARD COUNTY GREEN INFRASTRUCTURE NETWORK IS ON-SITE.

NO RARE, THREATENED, OR ENDANGERED SPECIES ARE KNOWN TO OCCUR ON THE SUBJECT PROPERTY.

THIS PROJECT IS SITUATED IN THE PLUMTREE BRANCH WATERSHED, WHICH IS ALSO LOCATED IN THE LITTLE PATUXENT RIVER WATERSHED BASIN NO. 021311050956.

THERE ARE NO KNOWN HISTORIC STRUCTURES OR OTHER HISTORIC RESOURCES ON-SITE.

THERE ARE NO KNOWN CEMETRIES ON-SITE.

THERE ARE NO KNOWN SIGNIFICANT NATURAL OR BUILT FEATURES ON-SITE.

FOREST CONSERVATION ACT COMPLIANCE

THE PROPOSED PROJECT WILL BE ON A SINGLE LOT LARGER THAN 40,000 SF & THEREFORE IS NOT ELIGIBLE FOR ANY EXEMPTIONS. IN ACCORDANCE WITH THE REFORESTATION OBLIGATION WILL BE ADDRESSED AT THE NEXT STAGE OF DEVELOPMENT.

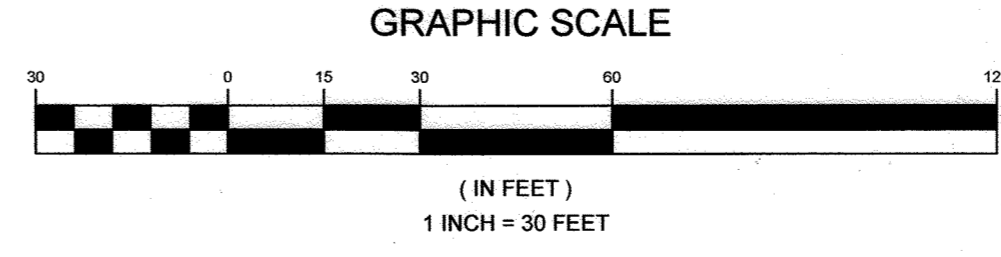
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Edmond
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8/23/23

John Williams Sr. AC
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8/18/23

Joanne Carey
 JOANNE CAREY, RLA (4148)
 MD DNR QUALIFIED PROFESSIONAL

EXISTING CONDITIONS/DEMOLITION PLAN
 SCALE: 1"=30'



EXISTING CONDITIONS, DEMOLITION PLAN & FOREST STAND DELINEATION TENNANT COMMERCIAL BUILDING

9438 BALTIMORE NATIONAL PIKE

TAX MAP 24 GRID 4 2ND ELECTION DISTRICT ZONED: B-2 PARCEL 973 HOWARD COUNTY, MARYLAND

SILL ENGINEERING GROUP, LLC

16005 Frederick Road, 2nd Floor
 Woodbine, Maryland 21797
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: S2S
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: JULY 14, 2023
 PROJECT #: 20-061
 SHEET #: 2 of 5

OWNER

9438 BALTIMORE NATIONAL PIKE
 9438 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 C/O BRODY TENNANT
 BRODY@TENNANTCOMMERCIAL.COM
 443-547-1600

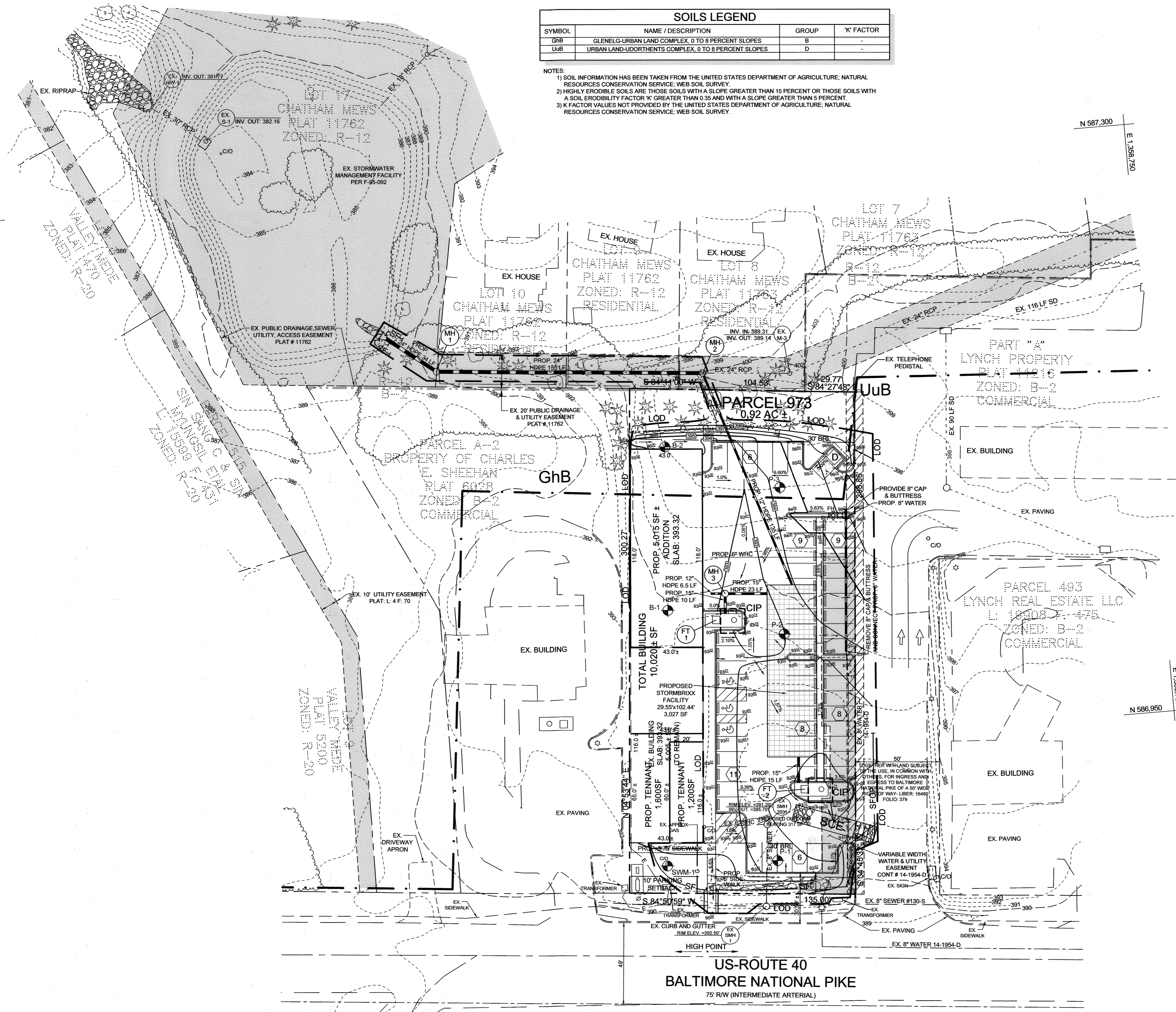
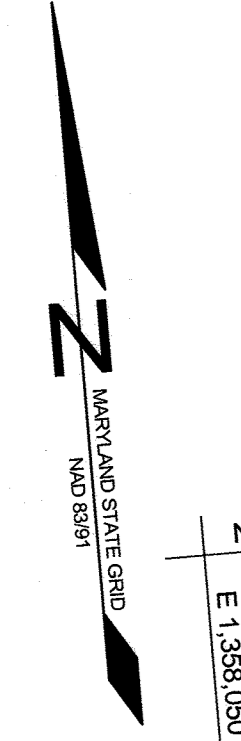
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LEGEND

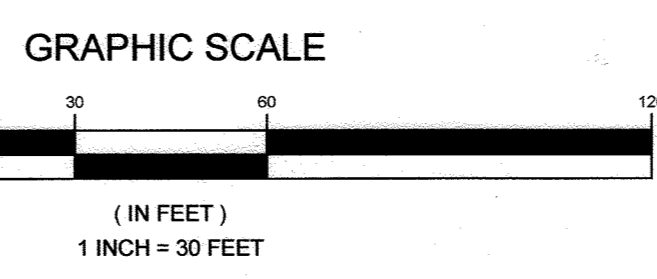
- EXISTING GIS CONTOUR 382
- EXISTING FIELD RUN CONTOUR 382
- PROPOSED CONTOUR 382
- EXISTING TREELINE
- EXISTING UTILITY POLE
- EXISTING WATER VALVE
- EXISTING HYDRANT
- EXISTING TELECOM
- EXISTING GAS
- EXISTING ELECTRIC
- EXISTING PLANTING SHRUB
- EXISTING DECIDUOUS TREE
- EXISTING PINE TREE
- EXISTING FENCE LINE
- EXISTING LIGHT POLE
- PROPOSED FENCE LINE
- PROPOSED TEST BORING
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- SUPER SILT FENCE
- SOIL BOUNDARY

SOILS LEGEND			
SYMBOL	NAME / DESCRIPTION	GROUP	'K' FACTOR
GhB	GLENELG-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	B	-
UuB	URBAN LAND-UDORTMENTS COMPLEX, 0 TO 8 PERCENT SLOPES	D	-

NOTES:
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 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.
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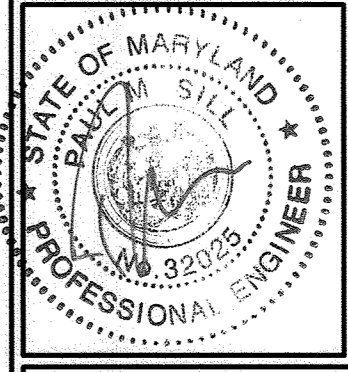
US-ROUTE 40
 BALTIMORE NATIONAL PIKE
 75' R/W (INTERMEDIATE ARTERIAL)



PLAN VIEW
 SCALE: 1"=30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 8-23-23
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 8/18/23
 CHIEF, DIVISION OF LAND DEVELOPMENT

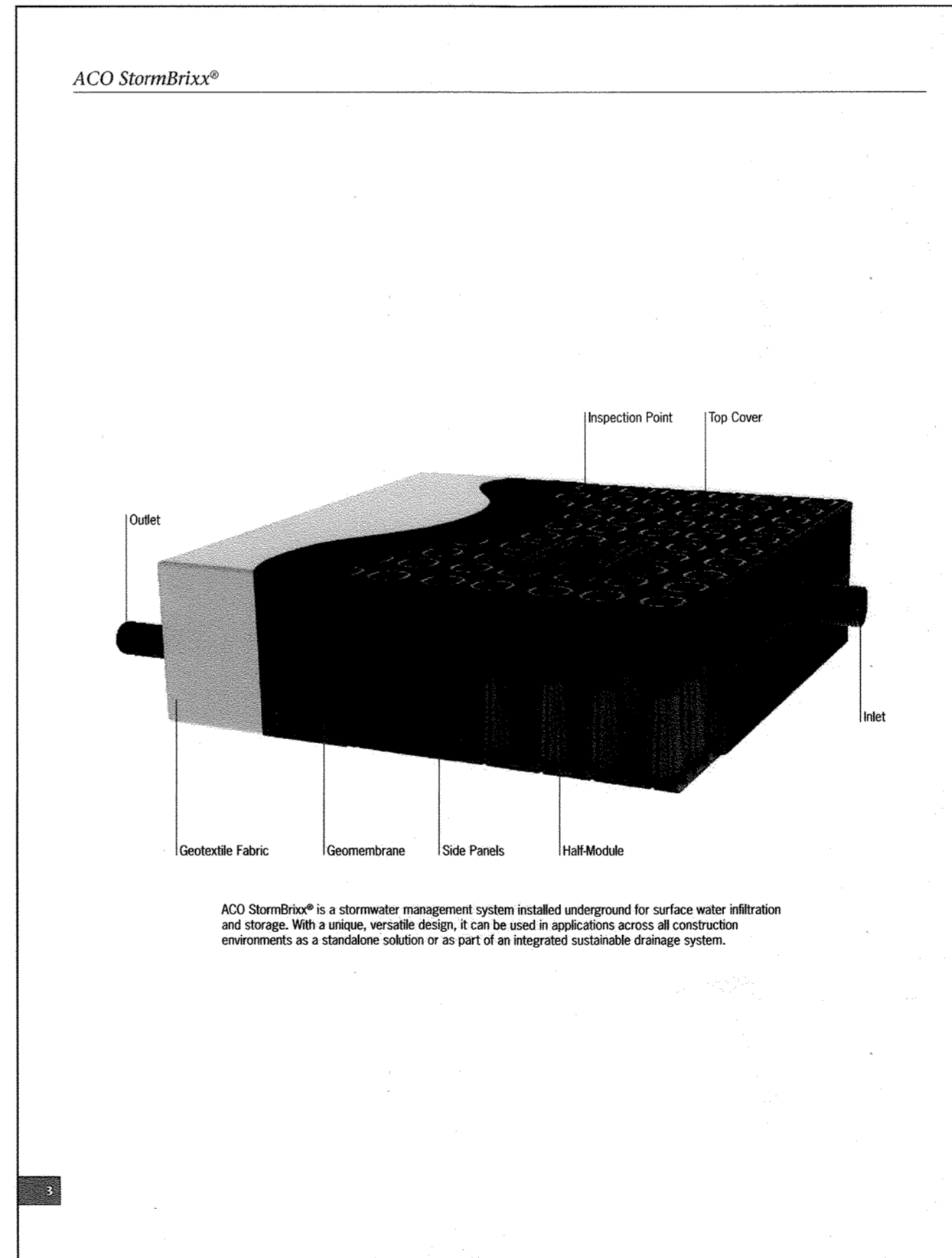
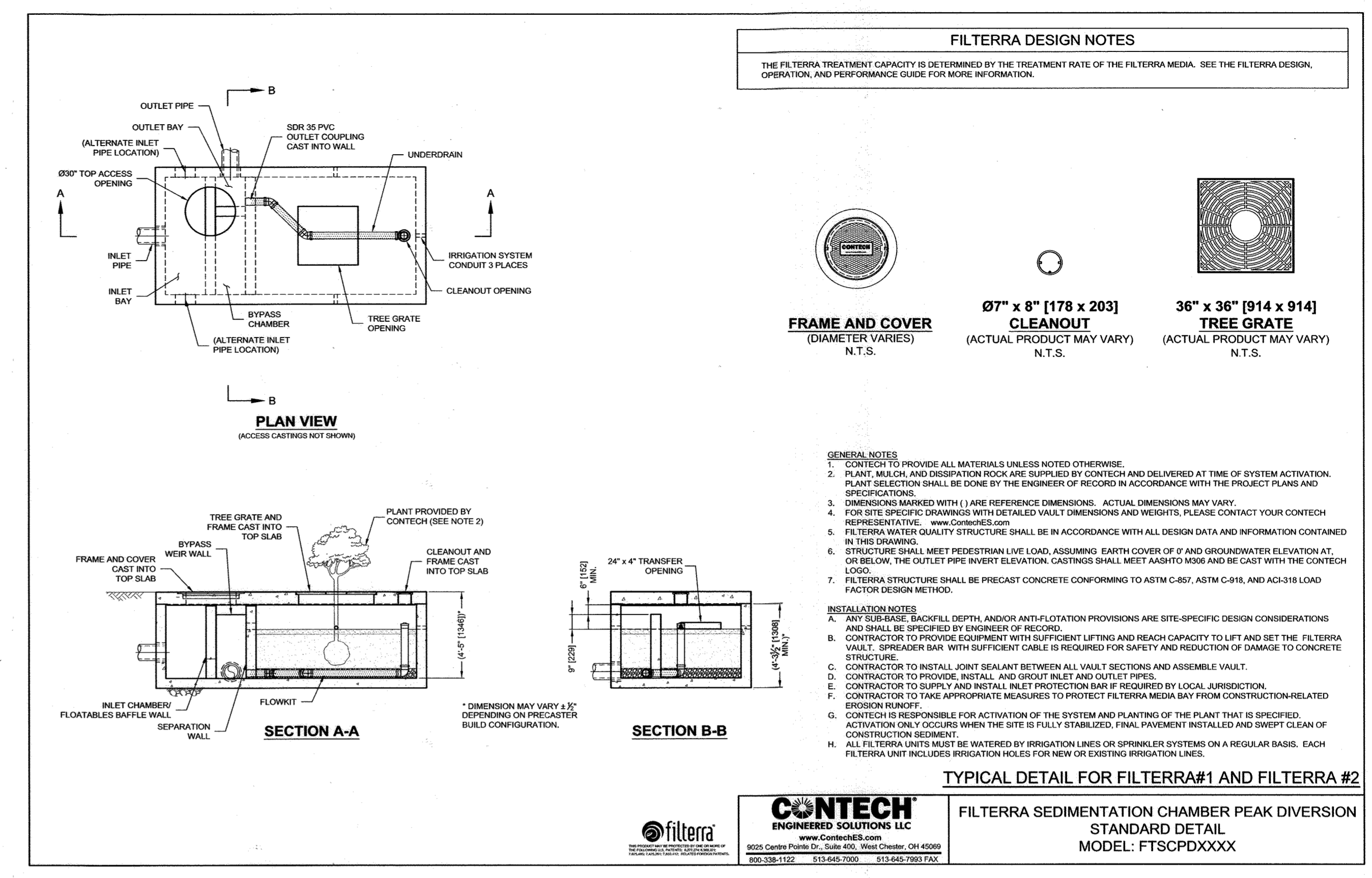
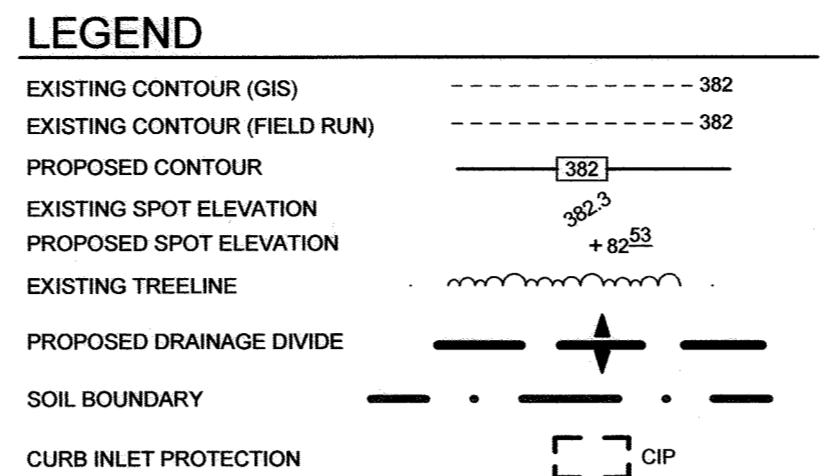
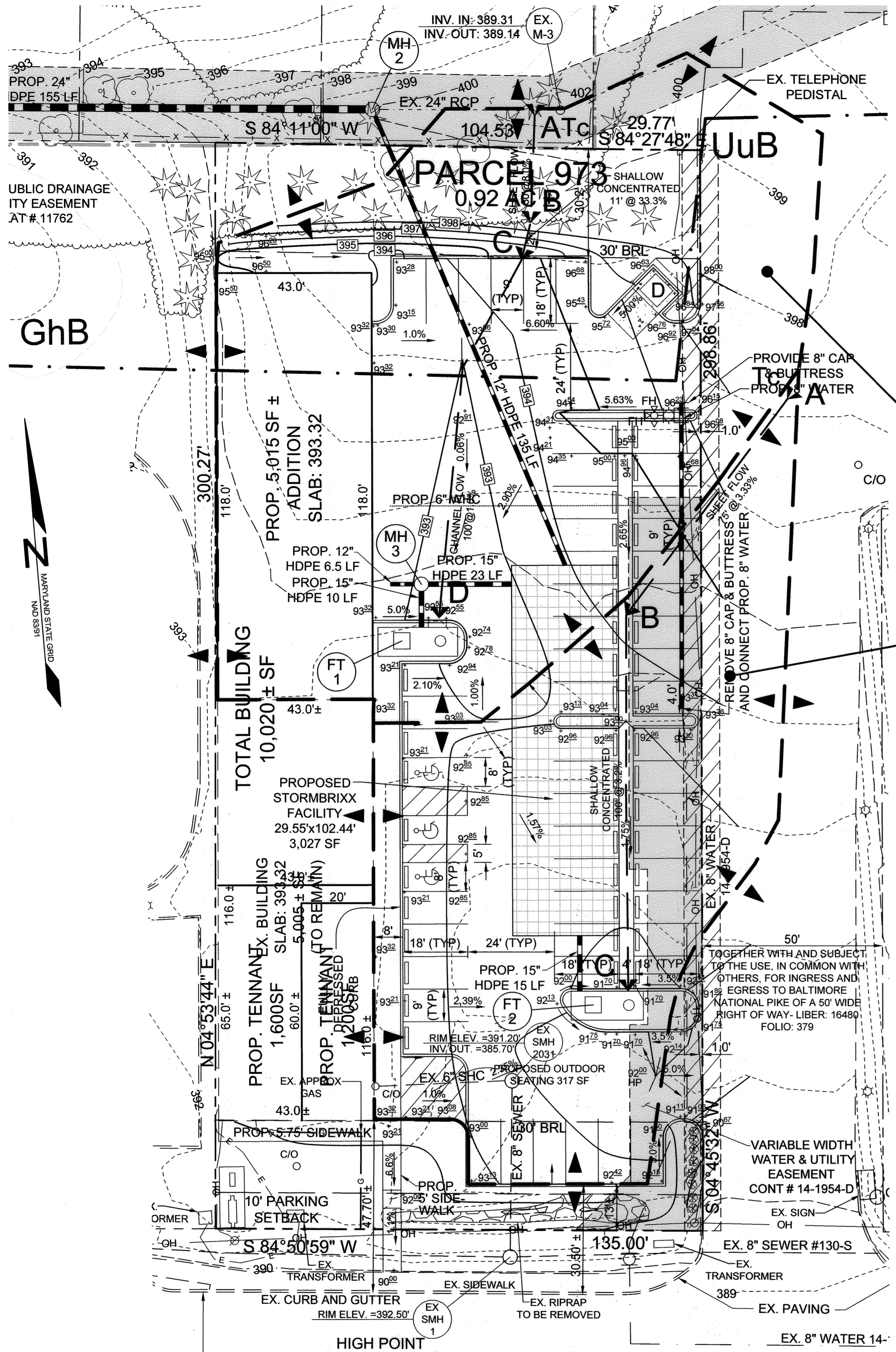
CONCEPTUAL GRADING & SEDIMENT AND EROSION CONTROL PLAN
TENNANT COMMERCIAL BUILDING
 9438 BALTIMORE NATIONAL PIKE
 TAX MAP 24 GRID 4 2ND ELECTION DISTRICT
 ZONED: B-2
 PARCEL 973 HOWARD COUNTY, MARYLAND



SILL ENGINEERING GROUP, LLC
 16005 Frederick Road, 2nd Floor
 Woodbine, Maryland 21797
 Phone: 443.325.5076
 Fax: 410.696.2022
 Email: info@sillengineering.com
 Civil Engineering for Land Development

DESIGN BY: PS
 DRAWN BY: SZS
 CHECKED BY: PS
 SCALE: AS SHOWN
 DATE: JULY 14, 2023
 PROJECT #: 20-061
 SHEET #: 3 of 5

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. 32029, EXPIRATION DATE JUNE 20, 2023



product comparisons

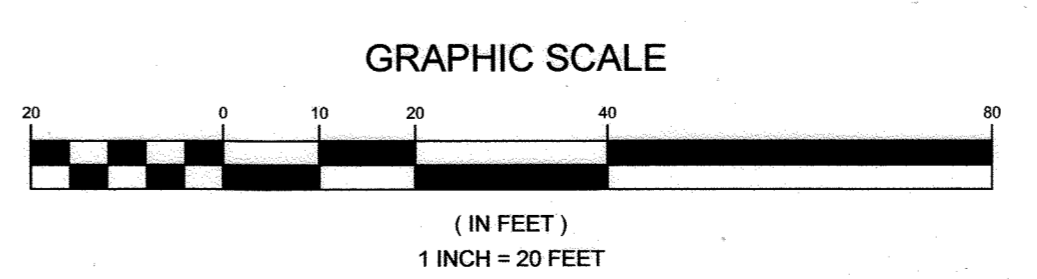
PARAMETER	ACO StormBrixx	StormBrixx
Porosity	97%	95%
Height	36.0"	24.1"
No. of Layers*	1.3	1.4
Vertical Strength	7310.0 lb/ft ²	9502.9 lb/ft ²
Lateral Strength	1462.0 lb/ft ²	1984.2 lb/ft ²
Design Life	50 years	60 years
Maximum Installation Depth**	21'	14'
Applications	<ul style="list-style-type: none"> Landscaped areas, no vehicles Landscaped areas with sit-on mowers Pedestrian areas Driveways or car parks with vehicle traffic up to 15,000 lbs For applications with heavy duty vehicles and/or high ground water, please contact ACO 	<ul style="list-style-type: none"> Landscaped areas, no vehicles Landscaped areas with sit-on mowers Pedestrian areas Driveways or car parks with vehicle traffic up to 15,000 lbs Fire truck, delivery vehicles, or other heavy duty vehicle traffic up to 65,100 lbs For applications with unusually large loads and/or high ground water, please contact ACO

*Extra layers may be suitable in specific applications. Please consult ACO.
**Ground improvements may be required. Ground water is not taken into account.

STORMBRIXX UNDERGROUND DETENTION SYSTEM
SCALE: N.T.S.

US-ROUTE 40
BALTIMORE NATIONAL PIKE
75' R/W (INTERMEDIATE ARTERIAL)

WQv DRAINAGE AREA MAP
SCALE: 1"=20'



OWNER
9438 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
C/O BRODY TENNANT
BRODY@TENNANTCOMMERCIAL.COM
443-547-1600

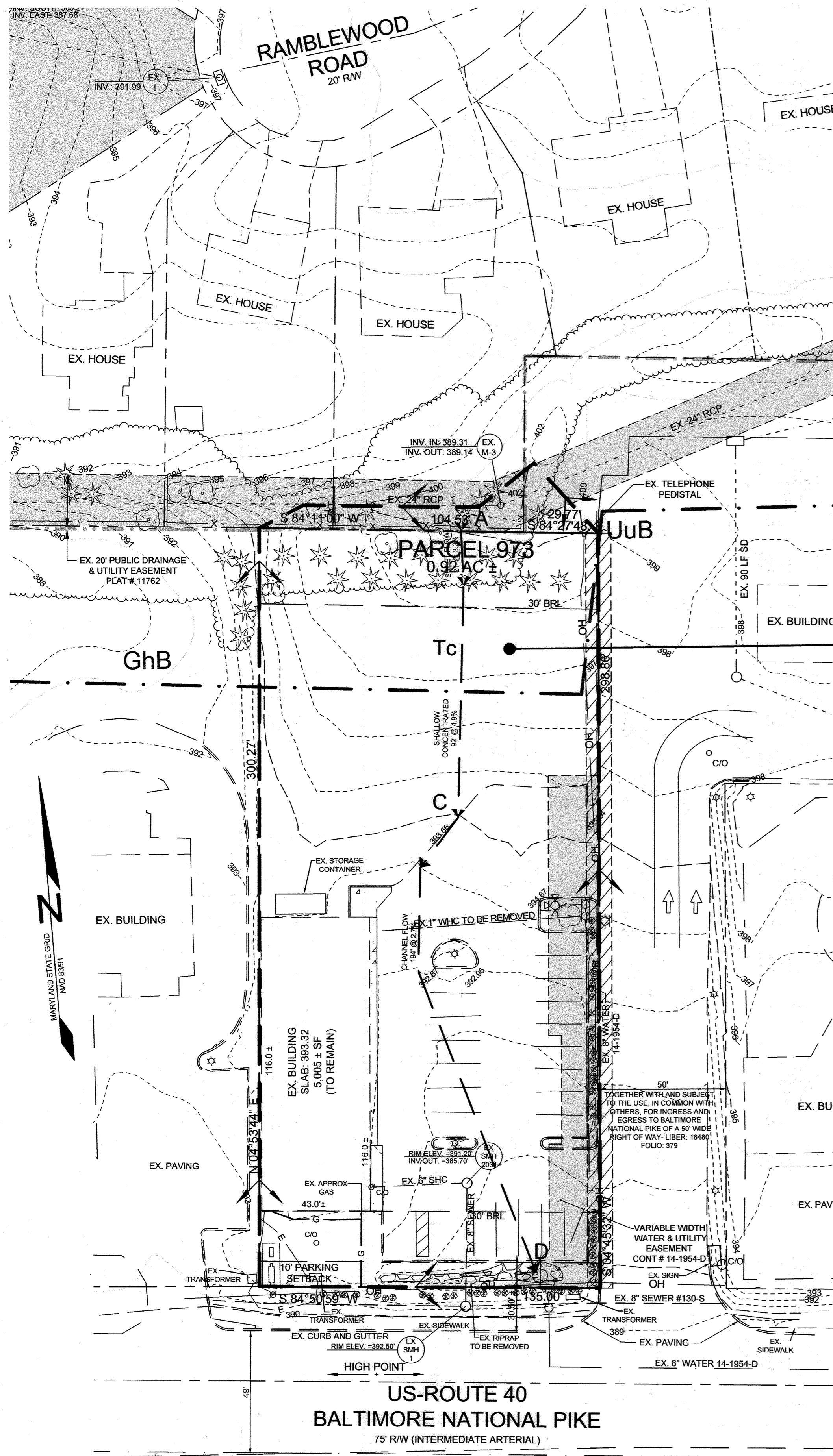
WQv DRAINAGE AREA MAP AND DETAILS
TENNANT COMMERCIAL BUILDING
9438 BALTIMORE NATIONAL PIKE
TAX MAP 24 GRID 4
2ND ELECTION DISTRICT
ZONED: B-2
PARCEL 973
HOWARD COUNTY, MARYLAND

DESIGN BY: PS
DRAWN BY: S2S
CHECKED BY: PS
SCALE: AS SHOWN
DATE: JULY 14, 2023
PROJECT #: 20-051
SHEET #: 4 of 5

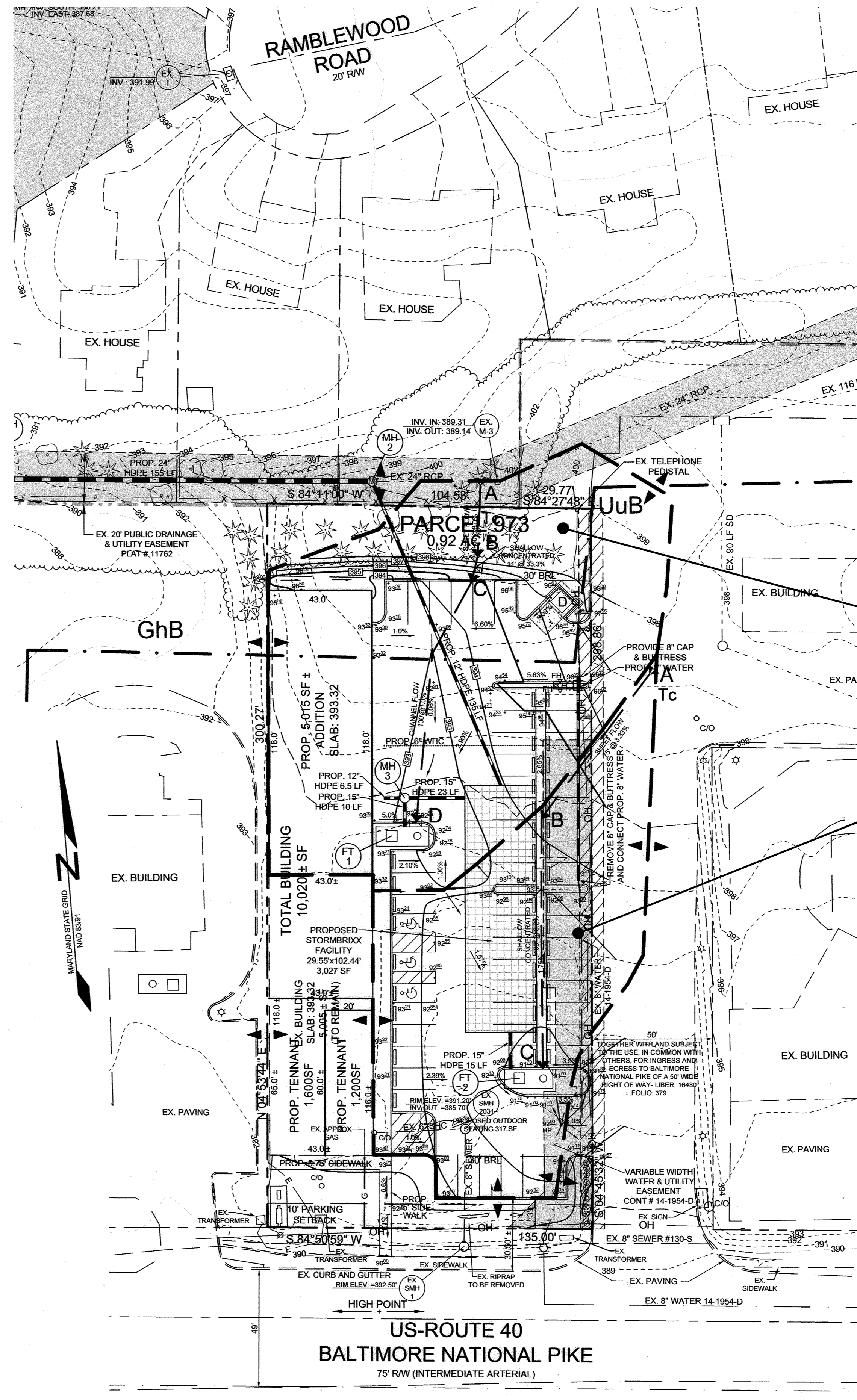
SILL ENGINEERING GROUP, LLC
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Woodlawn, Maryland 21197
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
8-23-23
DATE: 8/18/23
DATE: 8/18/23

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. 32028, EXPIRATION DATE JUNE 20, 2023



**EXISTING CONDITIONS
DRAINAGE AREA MAP**
SCALE: 1"=30'



**PROPOSED CONDITIONS
DRAINAGE AREA MAP**
SCALE: 1"=30'

LEGEND

EXISTING CONTOUR (GIS)	---	382
EXISTING CONTOUR (FIELD RUN)	---	382
PROPOSED CONTOUR	---	382.3
EXISTING SPOT ELEVATION	+	382.3
PROPOSED SPOT ELEVATION	+	382.3
EXISTING TRELLINE	~	
PROPOSED DRAINAGE DIVIDE	---	
SOIL BOUNDARY	---	

A=0.96 Ac. RCN=75
DA-X Tc=0.173HR
 'B' & 'D' SOILS
 P=0%
 FOR 100 YEAR ROUTING:
 EXISTING CONDITION IS
 MODELLED AS WOODS IN GOOD
 CONDITION

A=0.52 Ac. RCN=88
DA-1 Tc=0.144HR
 'B' & 'D' SOILS
 P=73%

A=0.34 Ac. RCN=98
DA-2 Tc=0.101HR
 'D' SOILS
 P=100%

NOTE: THIS SITE IS LOCATED IN THE PLUMTREE WATERSHED AND IS REQUIRED TO PROVIDED STORMWATER MANAGEMENT ATTENUATION FOR THE 10, 100, AND 3.5HR. 6.6" STORMS.
 NOTE: SEE SHEET 4 FOR FILTERRA AND STORMBRIXX DETAILS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] DATE: 8-23-23
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] DATE: 8/18/23
 CHIEF, DIVISION OF LAND DEVELOPMENT

OWNER
 9438 BALTIMORE NATIONAL PIKE
 9438 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 C/O BRODY TENNANT
 BRODY@TENNANTCOMMERCIAL.COM
 443-547-1600

**100 YEAR STORM DRAINAGE AREA MAP
TENNANT COMMERCIAL BUILDING**

9438 BALTIMORE NATIONAL PIKE

TAX MAP 24 GRID 4 2ND ELECTION DISTRICT ZONED: B-2 PARCEL 973 HOWARD COUNTY, MARYLAND

	DESIGN BY: PS
	DRAWN BY: SZS
	CHECKED BY: PS
	SCALE: AS SHOWN
	DATE: JULY 14, 2023
PROJECT #: 20-061	
SHEET # 5 of 5	

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, 2023