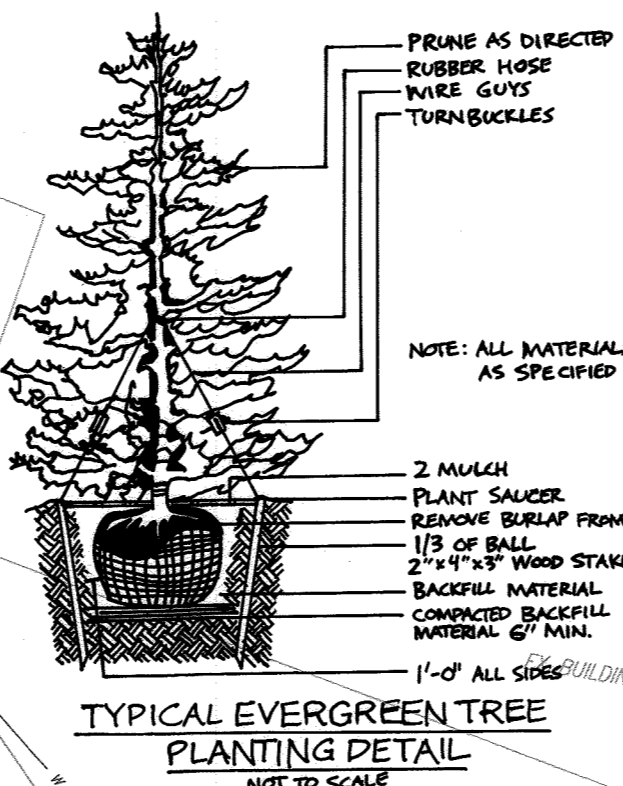


STREET LIGHT LOCATIONS			
ROAD NAME	STATION	OFFSET	FIXTURE/POLE TYPE
BLUE STREAM DRIVE	28+43.00	16.5' RT	LED 150 WATT HPS VAPOR BLACK TEARDROP FIXTURE MOUNTED ON A 23' BLACK FIBERGLASS POLE USING A 4' ARM, WITH A SHROUD
BLUE STREAM DRIVE	30+63.00	16.5' RT	
BLUE STREAM DRIVE	32+00	16.5' RT	
BLUE STREAM DRIVE	33+33.69	18.96' RT	
BLUE STREAM DRIVE	0+93.08	CUL-DE-SAC	
BLUE STREAM DRIVE	1+80.15	CUL-DE-SAC	



LANDSCAPE GENERAL NOTES:

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- STREET TREES ARE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 16.124(a)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$1,400.00 SHALL BE ADDRESSED WITH THE BID COST ESTIMATE.
- ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.

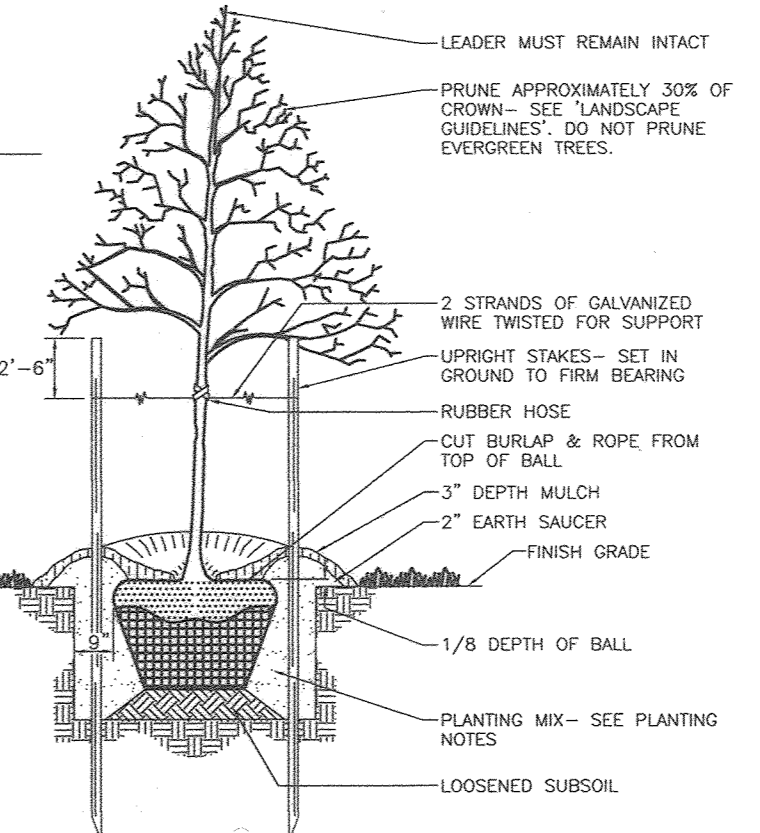
LANDSCAPE SCHEDULE NOTES:

- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, AND CONFORM TO THE MOST CURRENT PLANTING SPECIFICATION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLANT DIFFERS FROM THE LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.
- THE INDIVIDUAL BUILDABLE PARCELS WITHIN THE BLUE STREAM SUBDIVISION WILL COMBINE TO PROVIDE THE AMENITY AREA REQUIREMENT (50% OF OPEN SPACE REQUIREMENT = 6.37 AC.) WITH THEIR CORRESPONDING SITE DEVELOPMENT PLANS. THIS PLAN DOES NOT ACCOUNT FOR ANY OF AMENITY SPACE. REFER TO THE AMENITY AREA CHART FOR THE BLUE STREAM SUBDIVISION, SHEET 1.
- SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPAIRED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITHE LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL LANDSCAPE PLAN WILL RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL DURING THE CONSTRUCTION OF THE FINAL PLAN.

EX SWMF #1 LANDSCAPE SCHEDULE			
KEY	BOTANICAL NAME	SIZE	REM.
26	ACER RUBRUM 'OCTOBER GLORY'	2 1/2'-3' CAL. DBB	
27	OCTOBER GLORY RED MAPLE	2 1/2'-3' CAL. DBB	
33	EASTERN WHITE PINE	6'-8' HT. DBB	

NOTES

- SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" FOR ALL MATERIAL, PRODUCT, AND PROCEDURE SPECIFICATIONS.
- SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
- PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
- KEEP MULCH 1" FROM TRUNK.
- SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
- TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.



TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

STREET TREE CALCULATIONS			
STREET NAME	LINEAR FEET	NO. REQUIRED	NO. PROVIDED
BLUE STREAM DRIVE	1498/40	38	38

PUBLIC ACCESS PLACE STREET TREE SCHEDULE				
KEY	QUAN.	BOTANICAL NAME	SIZE	REM.
+	38	PLATANUS ACERIFOLIA LONDON PLANE TREE	2 1/2"-3" CAL. B & B	

LEGEND:

- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED LIGHT
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING TIELINE (FIELD LOCATED)
- EXISTING STREET TREES (FIELD LOCATED)
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- PROPOSED SIDEWALK
- EX. 20' PUBLIC WATER AND UTILITY EASEMENT (PLAT 21558-21564)
- EX. 10' PARKING SETBACK TO PUBLIC SIDEWALK STREET LIGHT AND STREET TREE MAINTENANCE EASEMENT
- EX. 20' PRIVATE STORM DRAIN DRAINAGE AND UTILITY EASEMENT (PLAT 21558-21564)
- VARIABLE WIDTH PUBLIC WATER, SEWER AND UTILITY EASEMENT (PLAT 21558-21564)
- STREET TREES

SIGNS NOTE

ALL SIGN LOCATIONS ARE APPROXIMATE. HOWARD COUNTY TRAFFIC SHALL FIELD APPROVE OR MARK ALL SIGN LOCATIONS PRIOR TO ANY SIGNS BEING INSTALLED. CALL 410-313-5752.

SCHEDULE D - STORMWATER MANAGEMENT AREA LANDSCAPING	
LINEAR FEET OF PERIMETER	NO. TREES REQUIRED (20' MIN. CALIPER)
1000 LF	10
2000 LF	20
3000 LF	30
4000 LF	40
5000 LF	50
6000 LF	60
7000 LF	70
8000 LF	80
9000 LF	90
10000 LF	100

POND CONVERSION NOTE (SWMF #2):

THE CONSTRUCTION DETAILS FOR SWMF FACILITY #2, LOCATED ON OPEN SPACE LOT G-1 HAVE BEEN PROVIDED ON P-02-035. SURETY FOR THE POND HAS BEEN POSTED WITH FINAL ROAD CONSTRUCTION PLAN P-18-082. FINAL CONVERSION OF SWMF FACILITY #2 WILL OCCUR UPON COMPLETION OF WORK ASSOCIATED WITH THIS PLAN (P-18-082) AND SDF-18-022 AND WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR.

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA ANGLE	TANGENT	CHORD DIRECTION	CHORD LENGTH
C1	300.00	75.15	14°21'12"	37.77	N58°20'54"W	74.96
C2	100.00	43.88	25°08'26"	22.30	S52°57'17"E	43.53

NO.	REVISION	DATE
2	REVISE PLANS TO ADD NOTES REGARDING THE TRANSFER OF THE STORMWATER MANAGEMENT	11-9-21
1	POND LANDSCAPING FROM P-02-035 TO THIS PLAN	
1	REVISE PLANS TO ADD NOTES REGARDING CONVERSION OF POND 2 BEING NAMED TO P-18-082	5-16-19

FINAL ROAD CONSTRUCTION PLAN
ROAD CONSTRUCTION PLAN
BLUE STREAM DRIVE EXTENSION
A RESUBDIVISION OF PARCELS L-3 & M (DELAOUR AT BLUE STREAM) PARCEL 14, PARCEL L-4
TAX MAP 43 GRID 4 1ST 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 FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. EXPIRATION DATE: 08-27-2020

DESIGN BY: RHW/DZE
DRAWN BY: DZE/KG
CHECKED BY: RHW
DATE: SEPTEMBER 2018
SCALE: AS SHOWN
W.O. NO.: 08-26/40099

2 SHEET OF 7

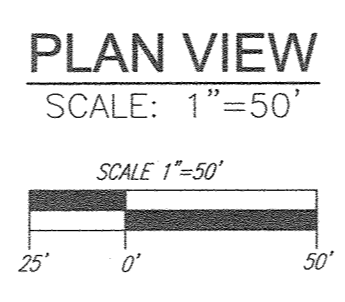
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF HIGHWAYS
DATE: 10/11/2018

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 10-18-18

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10-23-18

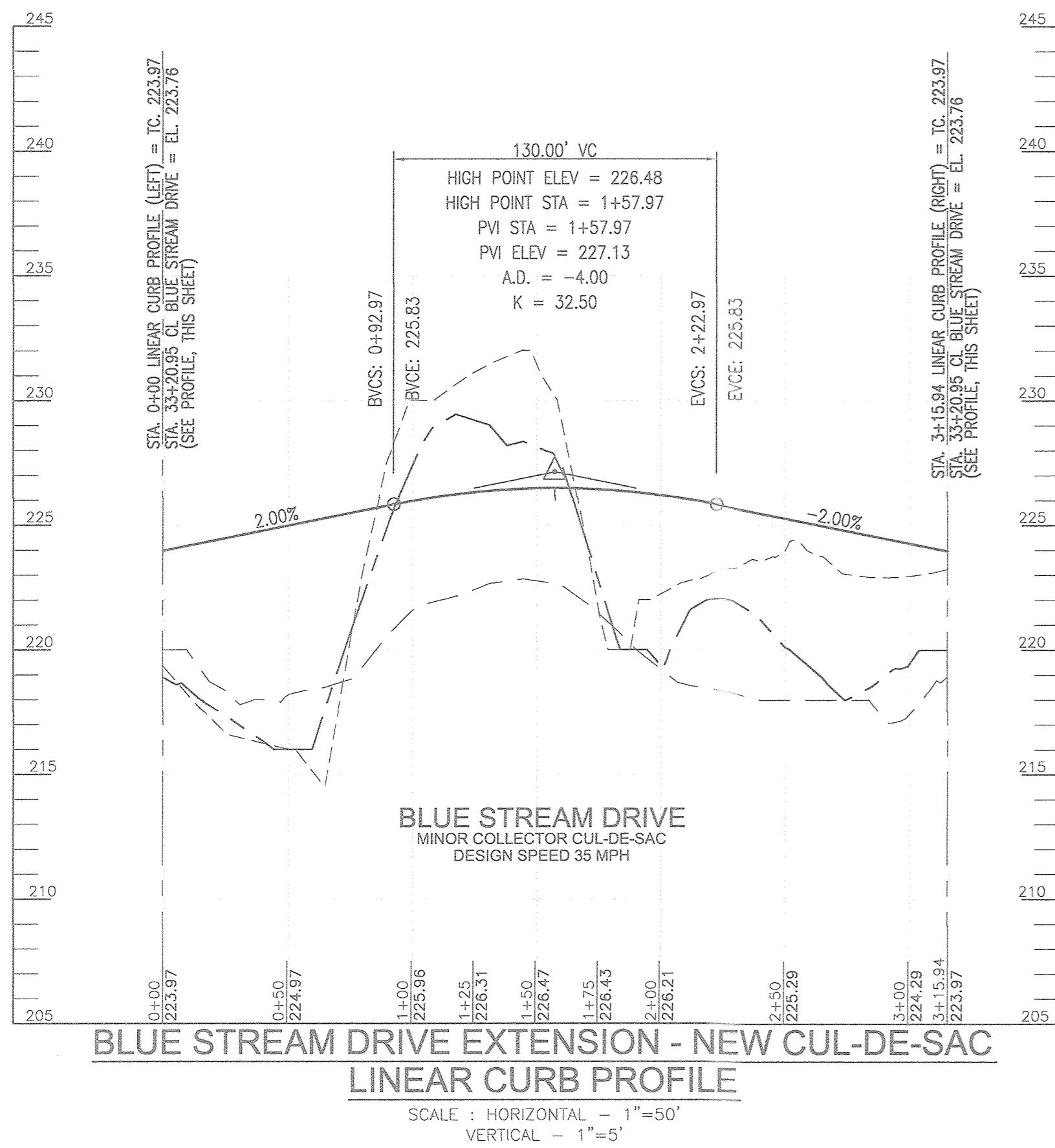
DEVELOPER'S/BUILDER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DATE: 9/17/18

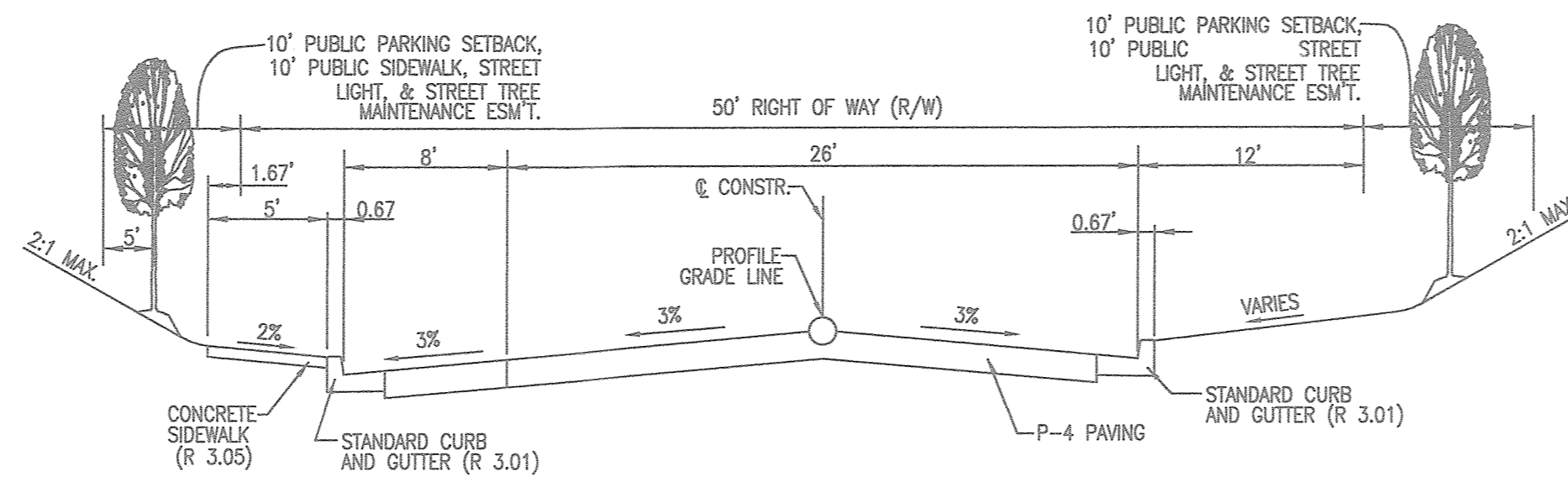


ROAD CLASSIFICATION			
STREET NAME	CLASSIFICATION	DESIGN SPEED	LIMITS
BLUE STREAM DRIVE	MINOR COLLECTOR	35	STA. 28+65.57 TO 33+99.56

OWNER/DEVELOPER
BLUE STREAM 3 LLC
P.O. BOX 416
ELLICOTT CITY, MD 21041
C/O ARNOLD SAGNER
410-465-2020



BLUE STREAM DRIVE EXTENSION - NEW CUL-DE-SAC LINEAR CURB PROFILE
 SCALE: HORIZONTAL - 1"=50'
 VERTICAL - 1"=5'



BLUE STREAM DRIVE (W/ PARKING - LEFT SIDE) TYPICAL ROADWAY SECTION
 BLUE STREAM DRIVE
 MINOR COLLECTOR CUL-DE-SAC
 DESIGN SPEED: 35 MPH
 LIMITS OF CONSTRUCTION:
 @ STA. 28+50 TO @ STA. 33+20.95
 (SECTION NOT TO SCALE)

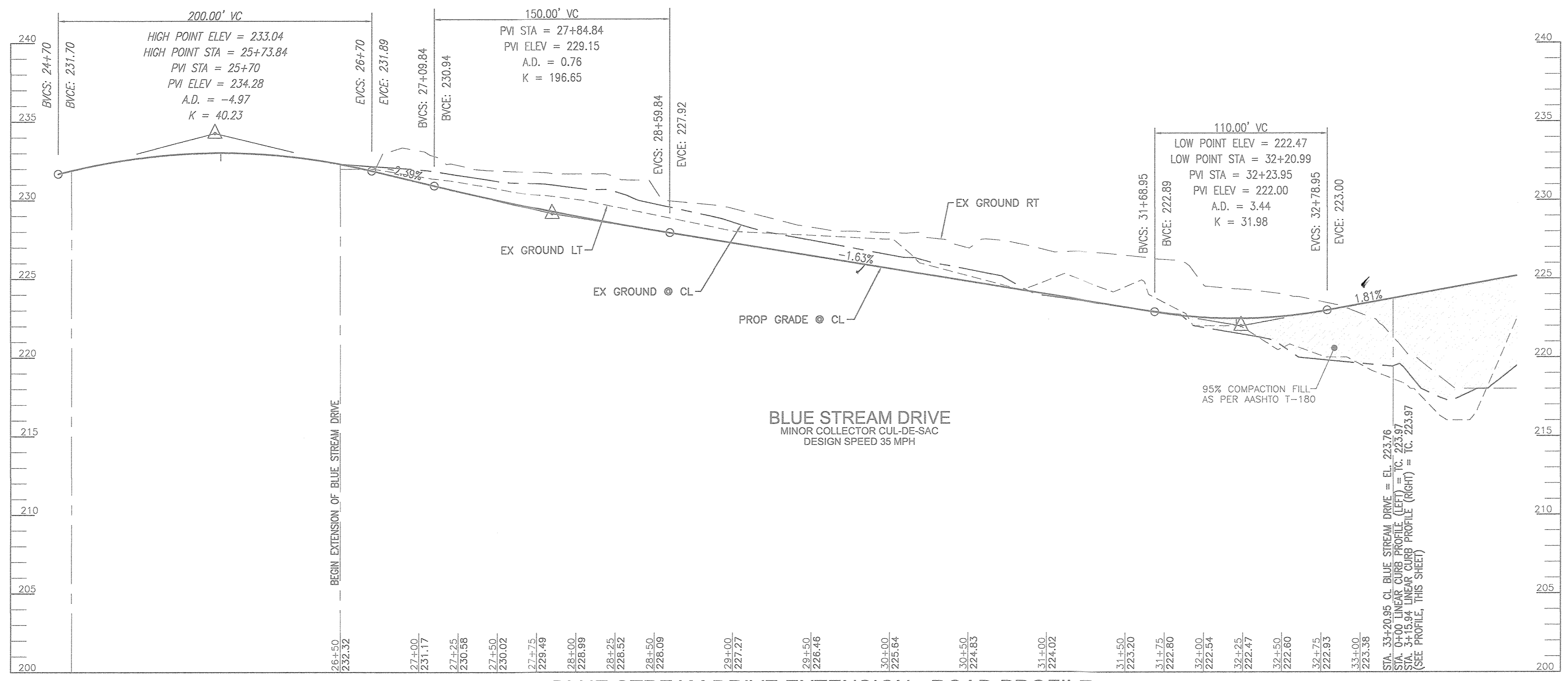
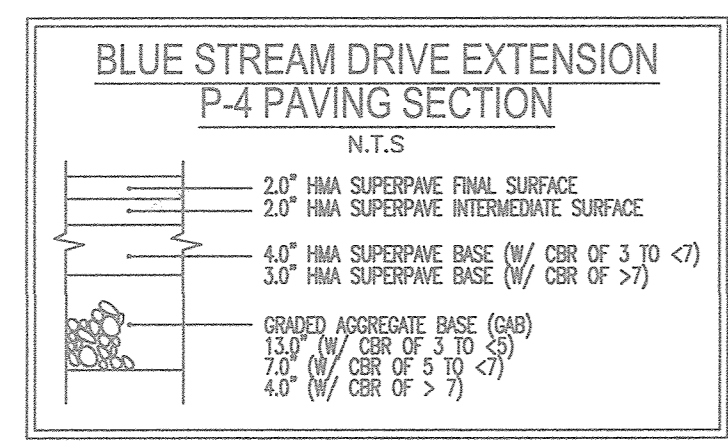
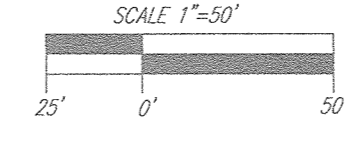
PAVEMENT MARKING LEGEND

- (A) 5" DOUBLE YELLOW
- (B) LANE ARROWS

DISTRIBUTION FUNDING TRUST II
 TAX MAP 43 PARCEL 382
 PARCEL G-2, LOT C2
 MEADOWRIDGE BUSINESS PARK
 PLAT No. 12534
 ZONED M-1
 USE: INDUSTRIAL

PAVEMENT MARKING PLAN

SCALE: 1"=50'



BLUE STREAM DRIVE EXTENSION - ROAD PROFILE
 SCALE: HORIZONTAL - 1"=50'
 VERTICAL - 1"=5'

NO.	REVISION	DATE

FINAL ROAD CONSTRUCTION PLAN
ROAD PROFILES AND PAVEMENT MARKING PLAN
BLUE STREAM DRIVE EXTENSION
 A RESUBDIVISION OF PARCELS L-3 & M (DELAFOUR AT BLUE STREAM) PARCEL 14, PARCEL L-4
 TAX MAP 43 GRID 4 1ST ELECTION DISTRICT

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3380 N. RIDGE ROAD, SUITE 110 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE
 DESIGN BY: RHW/DZE
 DRAWN BY: DZE/KG
 CHECKED BY: RHW
 DATE: SEPTEMBER 2018
 SCALE: AS SHOWN
 W.O. NO.: 06-26/40099

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

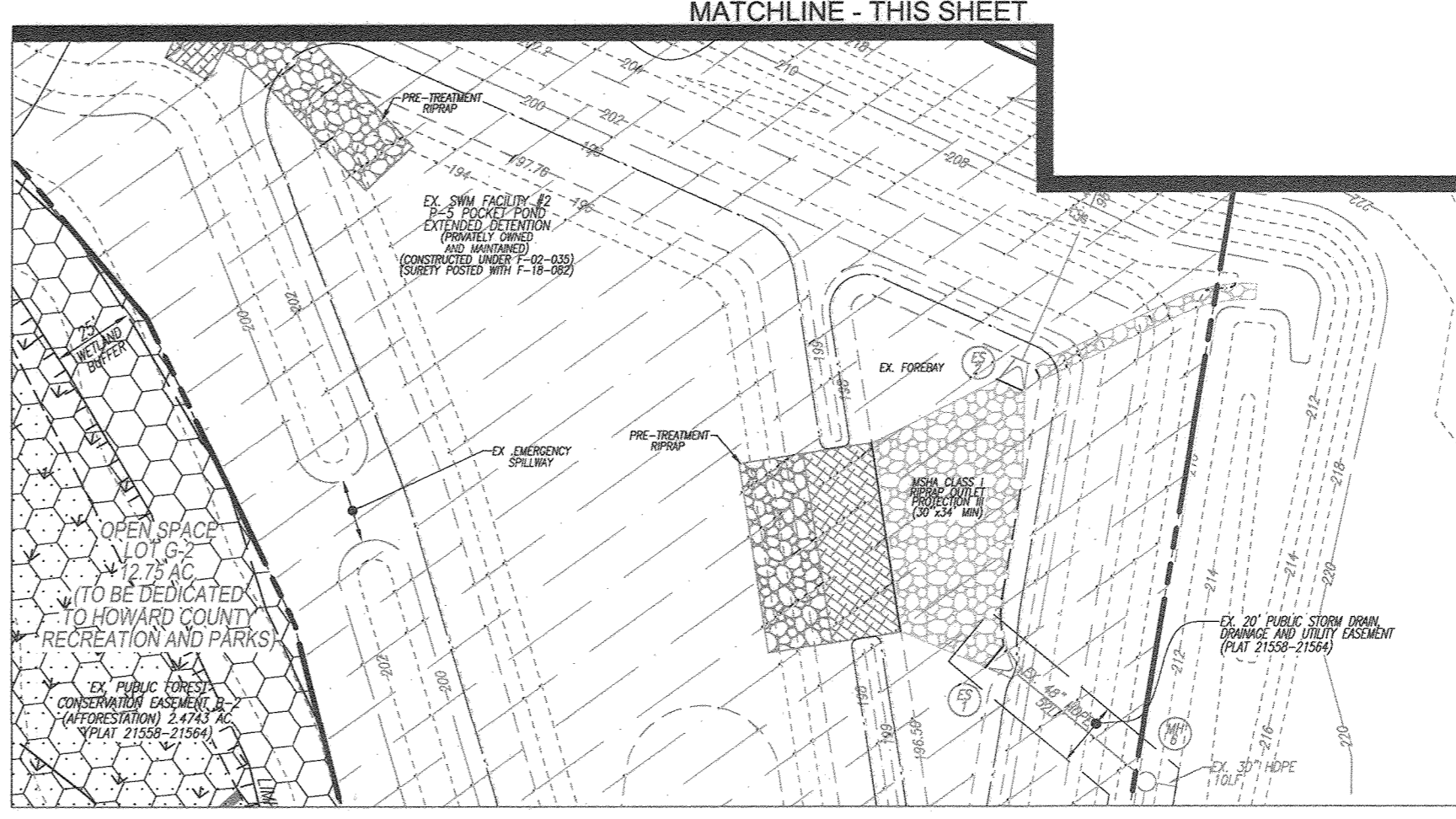
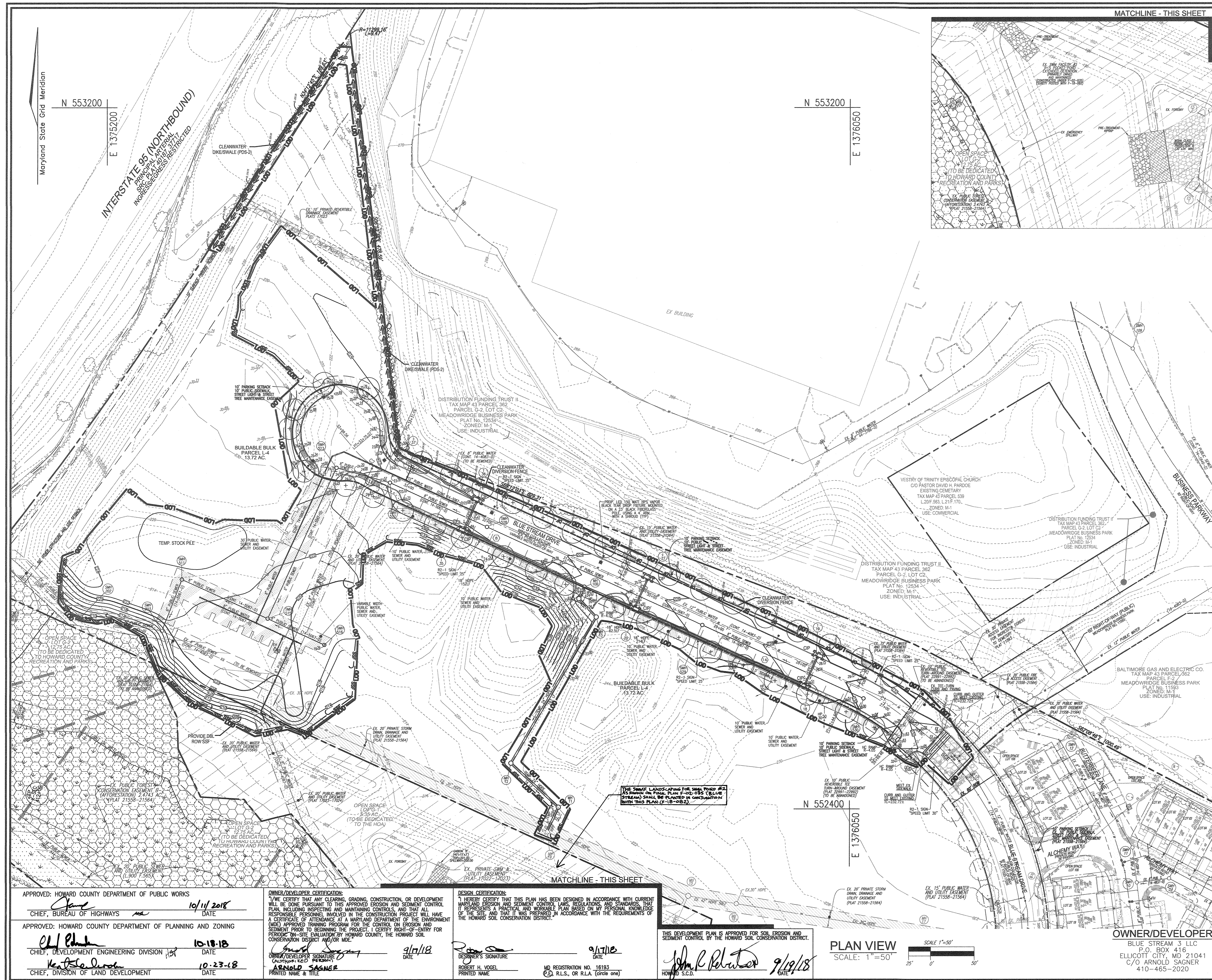
3 SHEET OF 7

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 10/11/2018

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 10-18-18

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10-23-18

OWNER/DEVELOPER
 BLUE STREAM 3 LLC
 P.O. BOX 416
 ELLICOTT CITY, MD 21041
 C/O ARNOLD SAGNER
 410-465-2020



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 SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED LIGHT
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREELINE (FIELD LOCATED)
	EXISTING STREET TREES (F-02-035)
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	MIB2 SOILS BOUNDARY
	MDS3 SOILS BOUNDARY
	PROPOSED SIDEWALK
	EX. 20' PUBLIC WATER AND UTILITY EASEMENT (PLAT 21558-21564)
	EX. 10' PARKING SETBACK TO PUBLIC SIDEWALK STREET LIGHT AND STREET TREE MAINTENANCE EASEMENT
	EX. 20' PRIVATE STORM DRAIN DRAINAGE AND UTILITY EASEMENT (PLAT 21558-21564)
	VARIABLE WIDTH PUBLIC WATER, SEWER AND UTILITY EASEMENT (PLAT 21558-21564)
	EX. FOREST CONSERVATION EASEMENT (AFFORESTATION) (PLAT 21558-21564)
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	CURB INLET PROTECTION

POND CONVERSION NOTE (SWM#2):
 THE CONSTRUCTION DETAILS FOR SWM FACILITY #2, LOCATED ON OPEN SPACE LOT G-1 HAVE BEEN PREPARED ON F-02-035 SURVEY FOR THE POND HAS BEEN PERFORMED WITH FINAL ROAD CONSTRUCTION PLAN F-18-082. FINAL CONVERSION OF SWM FACILITY #2 WILL OCCUR UPON COMPLETION OF ROAD ASSOCIATED WITH THIS PLAN (F-18-082) AND SDR-18-022, AND WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR.

- SEDIMENT CONTROL NOTES:**
1. SEDIMENT CONTROLS INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY.
 2. A DOUBLE ROW OF "SUPER" SILT FENCE IS TO BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
 3. STOCKPILES EXCEEDING 15 FEET IN HEIGHT SHALL BE BENCHED.
 4. SILT FENCE SHALL BE CURLED UPHILL AT 35 FT. INTERVALS WHEREVER IT RUNS DOWNHILL.
 5. EITHER TEMPORARY OR PERMANENT SEEDING AND STABILIZATION IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS PROVIDED IN THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

NO.	REVISION	DATE
2	REVISE PLANS TO ADD NOTES REGARDING THE TRANSFER OF THE STORMWATER MANAGEMENT	11-9-21
	POND LANDSCAPING FROM F-02-035 TO THIS PLAN	
1	REVISE PLANS TO ADD NOTES REGARDING CONVERSION OF SWM FACILITY #2 FROM F-18-082 TO F-18-082	5-16-19

**FINAL ROAD CONSTRUCTION PLAN
 GRADING, SEDIMENT AND EROSION
 CONTROL PLAN**

BLUE STREAM DRIVE EXTENSION
 A RESUBDIVISION OF PARCELS L-3 & M
 (DELAOUR AT BLUE STREAM) PARCEL 14, PARCEL L-4
 TAX MAP 43 GRID 4 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERS, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8966

	DESIGN BY: RHW/DZE	PROFESSIONAL CERTIFICATE I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 08-27-2020
	DRAWN BY: DZE/KG	
	CHECKED BY: RHW	
	DATE: SEPTEMBER 2018	
	SCALE: AS SHOWN	
W.O. NO.: 08-26/40099	4	7

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 10/11/2018

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 10-18-18

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10-23-18

OWNER/DEVELOPER CERTIFICATION:
 I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION IN HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.

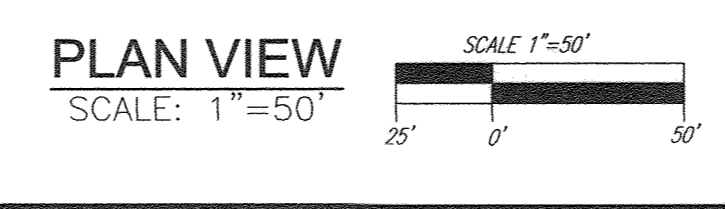
OWNER/DEVELOPER SIGNATURE: ARNOLD SAGNER
 PRINTED NAME & TITLE: ARNOLD SAGNER
 DATE: 9/17/18

DESIGN CERTIFICATION:
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

DESIGNER'S SIGNATURE: ROBERT H. VOGEL
 PRINTED NAME: ROBERT H. VOGEL
 MD REGISTRATION NO. 16193
 (P.E. R.L.S., OR R.L.A. (circle one))
 DATE: 9/17/18

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

DATE: 9/19/18
 HOWARD S.C.D.



OWNER/DEVELOPER
 BLUE STREAM 3 LLC
 P.O. BOX 416
 ELLICOTT CITY, MD 21041
 C/O ARNOLD SAGNER
 410-465-2020

SOILS LEGEND				
SYMBOL	NAME / DESCRIPTION	GROUP	HYDRIC	ERODIBLE
B&B2	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	C	NO	NO
ChD3	CHILLUM-FAIRFAX LOAMS, 5 TO 15 PERCENT SLOPES	C	NO	NO
K&C2	KEYPORT SILT LOAM, 3 TO 10 PERCENT SLOPES, MODERATELY ERODED	C	NO	NO
I&B	IUKA LOAM, 15 TO 30 PERCENT SLOPES, SEVERELY ERODED	C	NO	NO
S1B2	SASSAFRAS LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED	B	NO	NO
S1D2	SASSAFRAS LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED	B	NO	NO
S1C2	SASSAFRAS GRAYLY SANDY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED	B	NO	NO
S&E	SASSAFRAS SOIL, 15 TO 40 PERCENT SLOPES	B	NO	NO

NOTE: BASED ON HOWARD SOIL SURVEY

LEGEND:	
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING LIGHT POLE
	PROPOSED LIGHT POLE
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED LIGHT
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING STREET TREES (F_02-035)
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	PROPOSED SIDEWALK
	EX. 20' PUBLIC WATER AND UTILITY EASEMENT (PLAT 21558-21564)
	EX. 10' PARKING SETBACK (PLAT 21558-21564)
	EX. 10' PUBLIC SIDEWALK STREET LIGHT AND STREET TREE MAINTENANCE EASEMENT (PLAT 21558-21564)
	EX. 20' PRIVATE STORM DRAIN DRAINAGE AND UTILITY EASEMENT (PLAT 21558-21564)
	EX. FOREST CONSERVATION EASEMENT (AFFORESTATION) (PLAT 21558-21564)
	VARIABLE WIDTH PUBLIC WATER SEWER AND UTILITY EASEMENT (PLAT 21558-21564)

POND CONVERSION NOTE (SWMF#2):
 THE CONSTRUCTION DETAILS FOR SWMA FACILITY #2, LOCATED ON OPEN SPACE LOT G-1 HAVE BEEN APPROVED ON F-02-032. SURETY FOR THE POND HAS BEEN POSTED WITH FINAL ROAD CONSTRUCTION PLAN F-18-082. FINAL CONVERSION OF SWMA FACILITY #2 WILL OCCUR UPON COMPLETION OF WORK ASSOCIATED WITH THIS PLAN (F-18-082) AND SDP-18-022 AND WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR.

NO.	REVISION	DATE
1	REVISED PLAN TO ADD NOTES REGARDING CONVERSION OF POND 2 BEING ADDED TO F-18-082.	5-16-19

FINAL ROAD CONSTRUCTION PLAN
STORM DRAIN DRAINAGE AREA MAP, AND SOILS MAP
BLUE STREAM DRIVE EXTENSION
 A RESUBDIVISION OF PARCELS L-3 & M (DELAOUR AT BLUE STREAM) PARCEL 14, PARCEL L-4 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110 TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 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
 DESIGN BY: RHW/DZE
 DRAWN BY: DZE/KG
 CHECKED BY: RHW
 DATE: SEPTEMBER 2018
 SCALE: AS SHOWN
 W.O. NO.: 06-26/40099

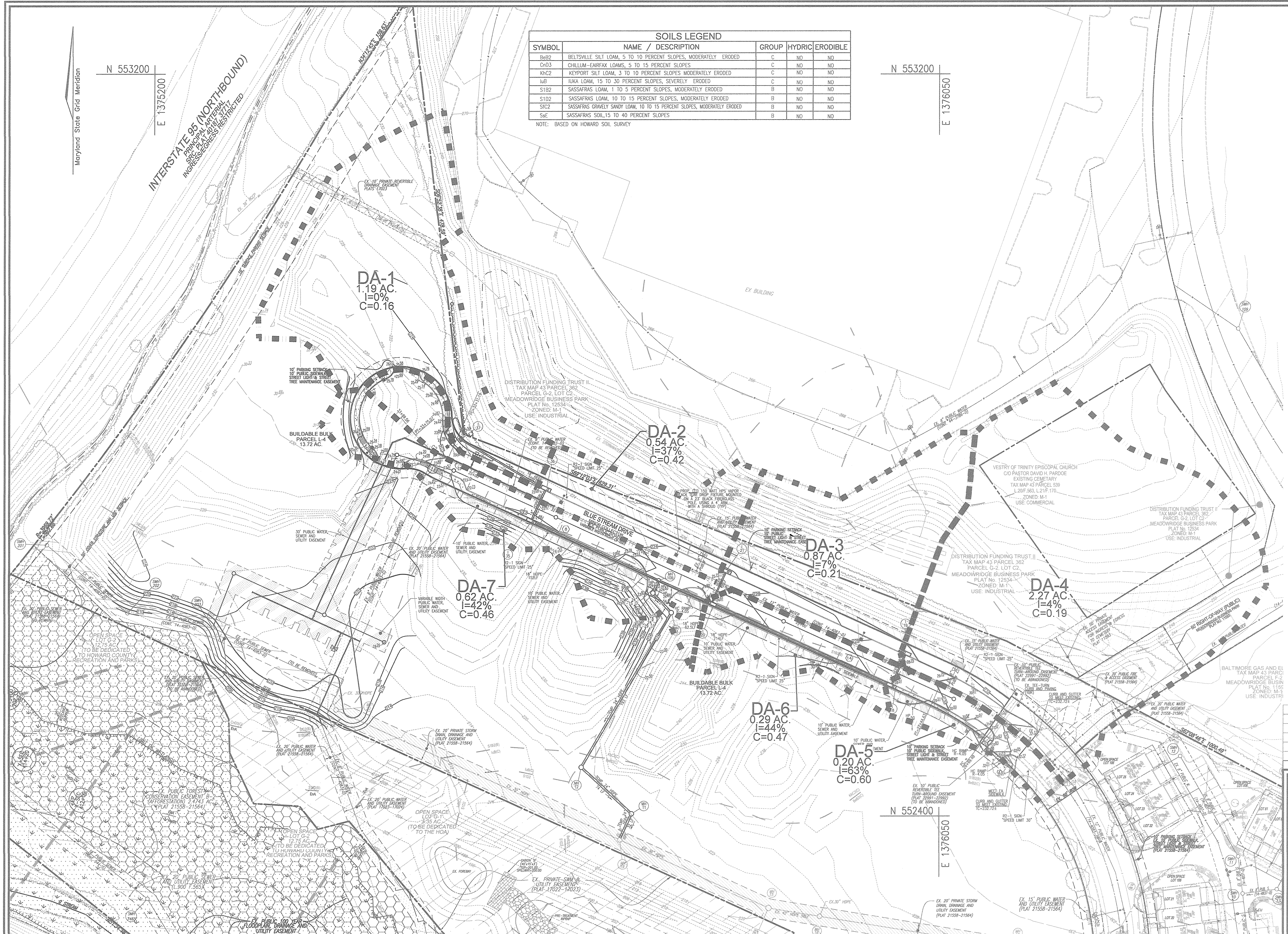
6 SHEET OF 7

SD Drainage Area Chart				
DRAINAGE AREA	AREA	I	C	IMP
DA-1	1.19	0.16	0%	
DA-2	0.54	0.42	37%	
DA-3	0.87	0.21	7%	
DA-4	2.27	0.19	4%	
DA-5	0.20	0.60	63%	
DA-6	0.29	0.47	44%	
DA-7	0.62	0.46	42%	

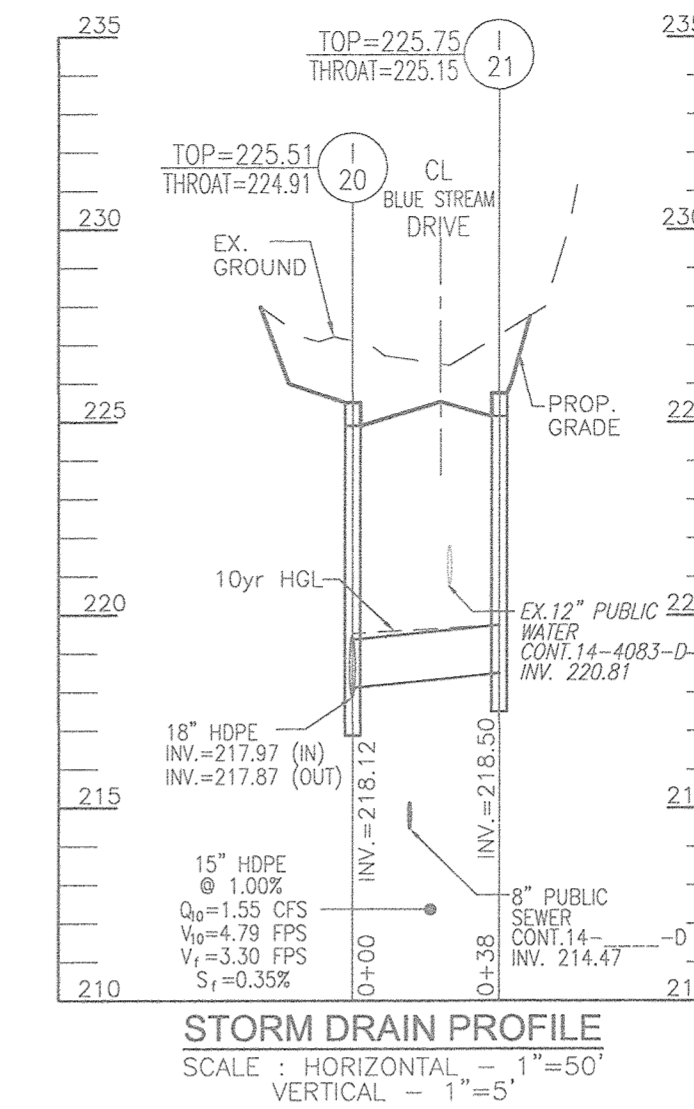
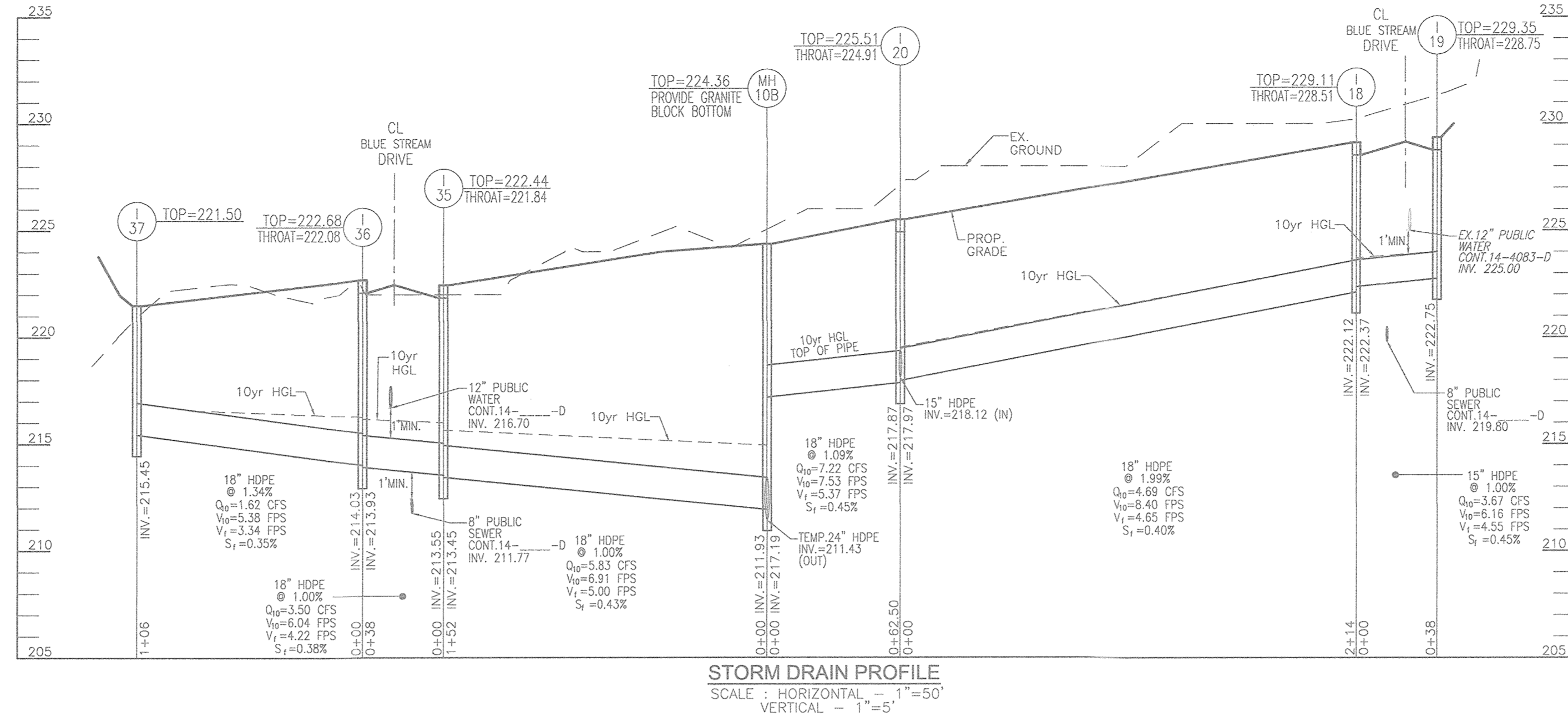
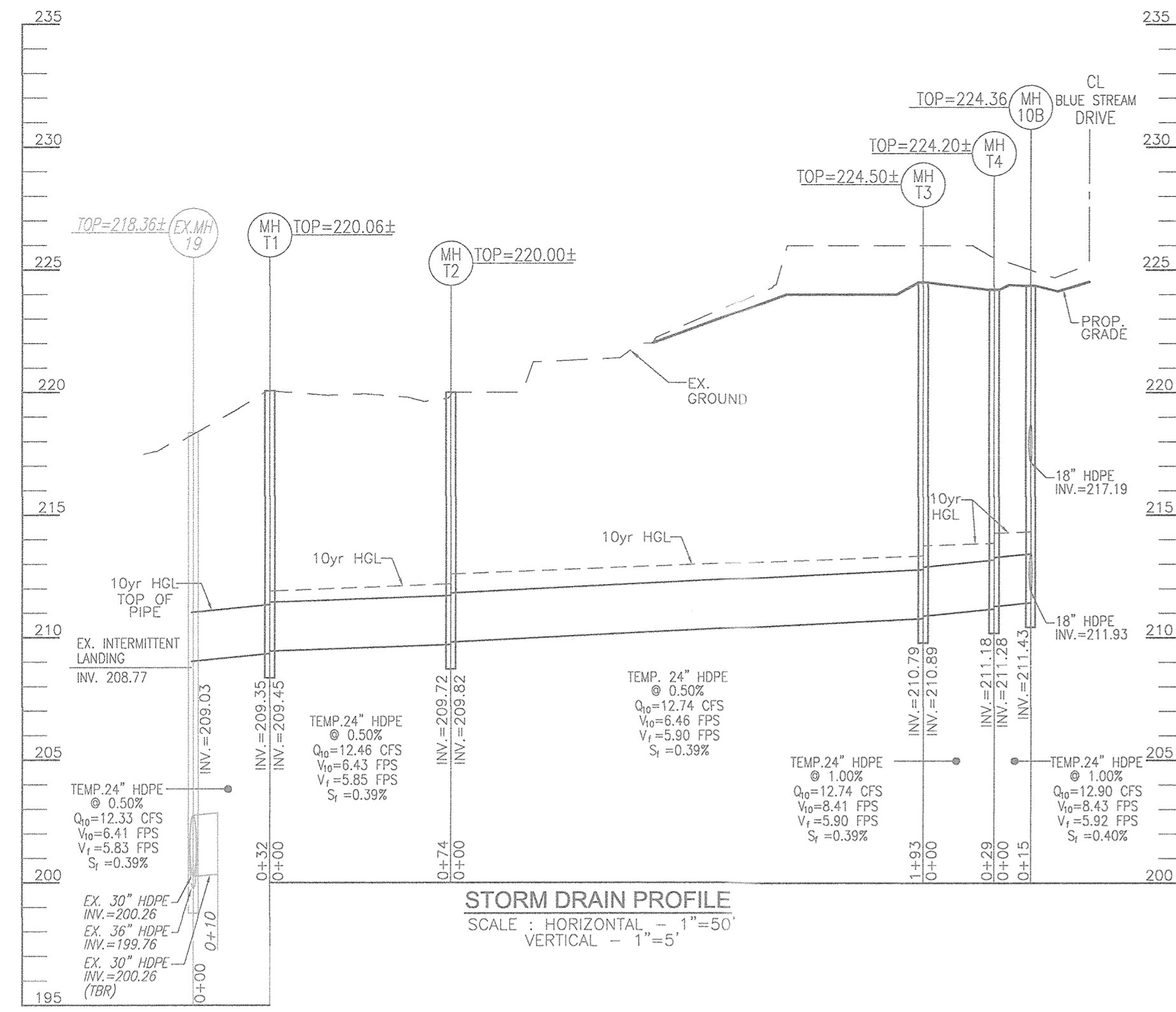
OWNER/DEVELOPER
 BLUE STREAM 3 LLC
 P.O. BOX 416
 ELLICOTT CITY, MD 21041
 C/O ARNOLD SAGNER
 410-465-2020

PLAN VIEW
 SCALE: 1"=50'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 10/11/2018
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 10-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 10-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT



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STRUCTURE SCHEDULE								
STR #	TYPE	LOCATION	TOP	THROAT	INV. IN	INV. OUT	DETAIL	REMARKS
I-18	TYPE A-10	N 552539.62, E 1376000.40	228.11	228.51	222.12	222.12	D-4.03	
I-19	TYPE A-10	N 552575.38, E 1376014.39	228.35	228.75	-	222.75	D-4.03	
I-20	TYPE A-10	N 552629.97, E 1375801.93	225.51	224.91	218.12/217.97	217.87	D-4.03	
I-21	TYPE A-10	N 552663.13, E 1375821.61	225.75	225.15	-	218.50	D-4.03	
I-35	TYPE A-10	N 552717.20, E 1375610.28	222.44	221.84	213.55	213.45	D-4.03	
I-36	TYPE A-10	N 552752.10, E 1375626.17	222.68	222.08	214.03	213.93	D-4.03	
I-37	TYPE 'S'	N 552895.64, E 1375532.38	221.50	-	215.55	215.45	D-4.22	
M-10B	STD. 4' PRECAST MANHOLE	N 552854.08, E 1375746.54	224.36	-	217.10 - 211.93	211.43	G 5.12	(1)
M-11	STD. 4' PRECAST MANHOLE	N 552402.58, E 1375717.15	220.05	-	209.45	209.35	G 5.12	(1)
M-12	STD. 4' PRECAST MANHOLE	N 552452.77, E 1375682.77	220.00	-	209.82	209.72	G 5.12	
M-13	STD. 4' PRECAST MANHOLE	N 552619.35, E 1375760.23	224.50	-	210.89	210.79	G 5.12	
M-14	STD. 4' PRECAST MANHOLE	N 552640.43, E 1375740.32	224.20	-	211.28	211.18	G 5.12	(1)

NOTE: 1. TOP ELEVATIONS ARE AT CENTER TOP OF HEADPIECE FOR TYPE 'A-S', 'A-10', TOP OF GRATE FOR ALL TYPE 'S' INLETS, AND TOP OF MANHOLE COVER FOR 'D' INLETS AND PRECAST MANHOLES.
2. FOR TOP SLAB SLOPES SEE GRADING PLAN.

PIPE SCHEDULE		
Size	Class	Length (LF)
15"	HDPE	76
18"	HDPE	573
24"	HDPE	343

HDPE is to be smooth interior.
Contractor shall install pipe in accordance with manufacturer's specifications.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 10/11/2018
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature] 10-18-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 10-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

OWNER/DEVELOPER
 BLUE STREAM 3 LLC
 P.O. BOX 416
 ELLICOTT CITY, MD 21041
 C/O ARNOLD SAGNER
 410-465-2020

NO. _____ REVISION _____ DATE _____

FINAL ROAD CONSTRUCTION PLAN
 STORM DRAIN PROFILES
 BLUE STREAM DRIVE EXTENSION
 A RESUBDIVISION OF PARCELS L-3 & M
 (DELACOUR AT BLUE STREAM) PARCEL 14, PARCEL L-4
 TAX MAP 43 GRID 4 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110 TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 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. 11933 EXPIRATION DATE: 08-27-2020

DESIGN BY: RHV/DZE
 DRAWN BY: DZE/KG
 CHECKED BY: RHV
 DATE: SEPTEMBER 2018
 SCALE: AS SHOWN
 W.O. NO.: 05-26/40099

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