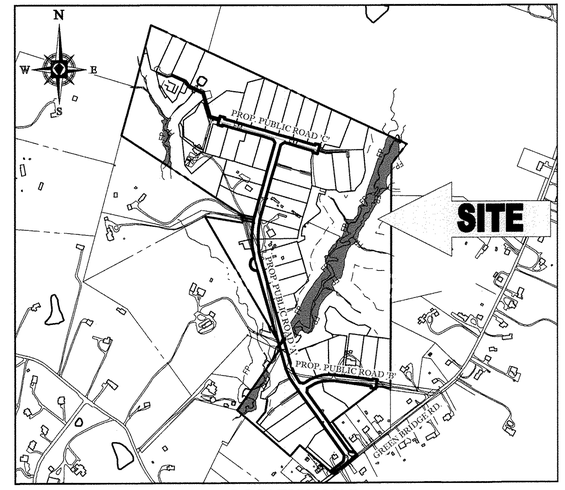
ENVIRONMENTAL CONCEPT PLAN
FOR
SIMPSON & DENAULT PROPERTIES

LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K

LOCATION OF SITE

5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111 & 112
HOWARD COUNTY, MARYLAND



LOCATION MAP
SCALE: 1" = 600'

VICINITY MAP
COPYRIGHT ADC THE MAP PEOPLE
PERMIT USE NO. 29602153-5
SCALE: 1"=2000'
ADC MAP COORDINATES: 24/B5

PREPARED BY

BOHLER ENGINEERING

901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

CONTACT: BRANDON R. ROWE, P.E.

GENERAL NOTES

1. THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE 10/6/2013 COMPREHENSIVE ZONING PLAN.
2. THE PROPERTY BOUNDARY AND ON-SITE EXISTING TOPOGRAPHY IS BASED ON A BOUNDARY & TOPOGRAPHIC SURVEY BY BOHLER ENGINEERING, TITLED: ELM STREET DEVELOPMENT, 5232 GREEN BRIDGE ROAD, 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND, PROJECT NO. SD142048, DATED: 8/25/15; LAST REVISED 11/2/2015.
3. EXISTING OFFSITE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY GIS.
4. A WETLAND DELINEATION REPORT WAS COMPLETED FOR THIS PROJECT BY ENVIRONMENTAL SYSTEMS ANALYSIS, INC. ON 6/30/15 AND A FOREST STAND DELINEATION REPORT WAS COMPLETED BY ENVIRONMENTAL SYSTEMS ANALYSIS, INC. ON 12-2015.
5. AN OBVIOUSLY NON-CRITICAL 100-YR. FLOODPLAIN STUDY WAS COMPLETED FOR THIS PROJECT BY BOHLER ENGINEERING DATED DECEMBER 9, 2015.
6. DISTURBANCE TO ENVIRONMENTALLY SENSITIVE AREAS SHALL BE LIMITED TO THE INSTALLATION OF PUBLIC ROADS AND USE-IN-COMMON DRIVEWAYS APPROXIMATELY 0.89 AC. OF (15-25%) STEEP SLOPES WILL BE DISTURBED..
7. THERE ARE NO CEMETERIES OR HISTORICAL FEATURES KNOWN ONSITE.
8. PRIOR CASE NUMBERS ASSOCIATED WITH THIS PROJECT INCLUDE SP-16-003 AND SP-17-002.
9. APPROVAL OF THE ECP DOES NOT CONSTITUTE APPROVAL OF SUBSEQUENT OR 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 PLAN, SITE DEVELOPMENT PLAN OR RED-LINE REVISION REVIEW STAGE. 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.
10. ALL DRAINAGE AREAS GREATER THAN 2.0 ACRES WILL BE REQUIRED TO PROVIDE TEMPORARY STORMWATER MANAGEMENT DURING CONSTRUCTION.
11. THE SITE IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER WILL BE PROVIDED BY PRIVATE WELLS, PRIVATE SEWAGE DISPOSAL AREAS, AND SHARED SEWAGE DISPOSAL AREA.
12. ALTERNATIVE COMPLIANCE REQUEST WP- 17-105 WILL BE SUBMITTED FOR THE FOLLOWING: (PENDING APPROVAL)
    1.) SECTION 16.1205.(A).(7): REQUEST THE REMOVAL OF TWENTY EIGHT (34) SPECIMEN TREES (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 28, 29, 30, 33, 34, 35, 36, 37, 38, 39, 41, 42, 43, 47, AND 50) AS IDENTIFIED ON THE ENVIRONMENTAL CONCEPT PLAN (ECP-16-025).
    2.) THE APPLICANTS ARE SEEKING A WAIVER FROM SECTION 16.147 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS IN ORDER TO PERMIT THE TRANSFER AND CONVEYANCE OF THE "PIPE STEM" PORTION OF THE FOLLOWING PARCELS :
    DENNIS A . LEAF AND LENORE DENISE SINES PROPERTY (TM 27-18-111), JERRY MAUCK AND JANET BURKE J/T PROPERTY (TM 27-18-98) TO BE MERGED WITH THE ADJOINING DENUALT PROPERTY, WITHOUT THE NECESSITY OF SUBMITTING AND RECORDING A FINAL PLAN AND FINAL PLAT.

DESIGN NARRATIVE

THE AREA OF THIS SUBMISSION IS APPROXIMATELY 100.01 ACRES. THE SITE IS COMPRISED OF THREE (3) PARCELS OF LAND AND IS PARTIALLY WOODED, WITH EXISTING DWELLINGS, OUT BUILDINGS, AND ASSOCIATED DRIVEWAYS. THERE ARE SEVERAL DRAINAGE PATTERNS THAT CONTAIN NON-TIDAL WETLANDS LOCATED WITHIN THE SUBJECT PROPERTIES. THE PROPOSED BUILDABLE LOTS ARE LOCATED PRIMARILY ON THE SIMPSON PROPERTY AND SITUATED ON HIGH GROUND, WITH A SMALLER NUMBER OF BUILDABLE LOTS BEING LOCATED ON THE DENAULT PROPERTY ALONG THE SAME HIGH GROUND.

THE PROPOSED DEVELOPMENT SHALL REMOVE THE EXISTING STRUCTURE(S) AND DRIVEWAY(S) ON THE SIMPSON AND DENAULT PROPERTIES. THE PROPOSED DEVELOPMENT WILL CONSIST OF 46 SINGLE FAMILY DWELLINGS WITH DRIVEWAYS, IT WILL ALSO CONSIST OF THREE (3) PUBLIC ROADS.

APPROXIMATELY 0.50 AC. OF ENVIRONMENTALLY SENSITIVE AREAS (I.E. 100-YEAR FLOODPLAIN, WETLANDS, STREAMS, AND THEIR BUFFERS) WILL BE IMPACTED BE THE CONSTRUCTION OF PROPOSED USE-IN-COMMON DRIVEWAY (FOR LOTS 35-38) AND THE REMOVAL OF THE EXISTING FARM POND AND ASSOCIATED PERMANENT STABILIZATION AS REQUIRED BY HOWARD COUNTY SCD AND MDE.

APPROXIMATELY 2.37 AC. OF ENVIRONMENTALLY SENSITIVE AREAS (I.E. 100-YEAR FLOODPLAIN, WETLANDS, STREAMS, AND THEIR BUFFERS) WILL BE IMPACTED BY THE CONSTRUCTION OF PROPOSED PUBLIC ROAD "A" AND THE RECONSTRUCTION OF THE DRIVEWAY FOR THE MAUCK PROPERTY.

APPROXIMATELY 6.76 AC. OF 15-25% SLOPES WILL BE DISTURBED BY THE PROPOSED RESIDENTIAL DEVELOPMENT. APPROXIMATELY 22.19 AC. OF HIGHLY ERODIBLE SOILS WILL BE DISTURBED BY THE PROPOSED RESIDENTIAL DEVELOPMENT.

NATURAL FLOW PATTERNS SHALL BE PRESERVED. ALL PROPOSED PRACTICES SHALL DISCHARGE ON THE SIDES OF THE AFOREMENTIONED HIGH POINT IN WHICH THEY ARE LOCATED. THE PRACTICES ARE GENERALLY DISPERSED THROUGHOUT THE SITE AND SHALL DISCHARGE ALONG THE OUTER EDGE OF THE LIMIT OF DISTURBANCE TO MIMIC THE LAYOUT OF THE NATURAL GROUND AS IT ENTERS EXISTING DRAINAGE PATTERNS.

SEDIMENT AND EROSION CONTROL SHALL COMPLY WITH THE LATEST EDITION OF THE MDE STANDARDS AND SPECIFICATIONS FOR SEDIMENT CONTROL AS SHOWN ON THE ACCOMPANYING ECP AND SUBSEQUENT SITE DEVELOPMENT PLAN.

IT IS CONCLUDED THAT ALL ESD TO THE MEP REQUIREMENTS AS DEFINED IN THE STORMWATER MANAGEMENT ACT OF 2007 HAVE BEEN MET FOR THE PROPOSED DEVELOPMENT. THE WATER QUALITY TREATMENT HAS BEEN PROVIDED BY THE IMPLEMENTATION OF BIORETENTION, MICRO-BIORETENTION, SUBMERGED GRAVEL WETLAND FACILITIES AND DRY WELLS. THE RECHARGE REQUIREMENT HAS BEEN MET THROUGH THE USE OF BIORETENTION, MICRO-BIORETENTION, SUBMERGED GRAVEL WETLAND AND DRY WELLS.

SITE ANALYSIS DATA / TABULATION

	TOTAL	SIMPSON ET AL PROPERTIES 36	DENAULT PROPERTY 112	T. SIMPSON PROPERTY 34	LEAF/SINES PROPERTIES 111	MAUCK PROPERTY 98
PROJECT NUMBER						
TOTAL PROJECT AREA (GROSS)	99.95 AC.	76.48 AC.	10.14 AC.	12.57 AC.	0.51 AC.	0.25 AC.
AREA OF STREAM/WETLANDS AND BUFFER	23.19 AC.	21.88 AC.	1.31 AC.			
AREA OF 100-YR FLOODPLAIN	7.09 AC.	6.60 AC.	0.49 AC.			
AREA OF FOREST	37.05 AC.	36.78 AC.	0.27 AC.			
AREA OF STEEP SLOPES (25% OR GREATER)	0.89 AC.	0.89 AC.	0			
AREA OF GREEN OPEN SPACE	17.41 AC.					
HIGHLY ERODIBLE SOILS (K> 0.35)	22.19 AC.	18.59 AC.	3.60 AC.			
NET TRACT AREA	91.97 AC.	68.99 AC.	9.63 AC.	12.57 AC.	0.51 AC.	0.25 AC.
LIMIT OF DISTURBED AREA	64.77 AC.	58.95 AC.	5.72 AC.	0.03 AC.	0.04 AC.	0.03 AC.
PRESENT ZONING DESIGNATION	R/R-DEO.					
PROPOSED USE:	SINGLE FAMILY DETACHED DWELLINGS					
IMPERVIOUS COVER	10.28 AC.	9.81 AC.	0.37 AC.	0.03 AC.	0.04 AC.	0.03 AC.

NOTE: THE TOTAL PROPERTY AREA IS 99.95 ACRES. 100-YR FLOODPLAINS, FORESTED AREAS, AREAS OF STEEP SLOPES, AND ERODIBLE SOILS HAVE BEEN IDENTIFIED WITHIN THE PROJECT AREA.

PIPE STEM AREA TO BE CONVEYED TO SIMPSON/DENAULT PROPERTIES. LEAF/SINES AND MAUCK PROPERTIES WILL HAVE DIRECT ACCESS TO PROPOSED PUBLIC ROAD 'A' AT THE TIME OF PLAT RECORDATION.

DETERMINE TARGET Pe USING TABLE 5.3
SOIL CONDITIONS "DEVELOPED CONDITION"

HSG	"AREA (Ac)"	IMPERVIOUS (Ac)	PERCENT	"TARGET Pe"
A	0.00	0.00		
B	58.22	10.18	17.49%	
C	7.20	0.10	0.01%	
D	0.00	0.00		
WEIGHTED Pe	65.42	10.28	17.50%	1.18

DETERMINE ESD IMPLEMENTATION GOALS
SOIL CONDITIONS FOR "WOODS IN GOOD CONDITION"

HSG	RCN	AREA (Ac)	PERCENT
A	38.00	0.00	0.00%
B	55.00	57.57	88.9%
C	70.00	7.20	11.1%
D	77.00	0.00	0.00%
TARGET RCN	55.00	64.77	

OWNERS:
PARCEL 36
SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 34
THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.
PARCEL 111
DENNIS A LEAF
LENORE D. SINES
5228 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 112
DANA G DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.
PARCEL 98
JERRY MAUCK
JANET BURKE J/T
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 02528/00654, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : SP-17-002

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 112, 98, & 111
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

STANDARD DRAWING LEGEND
FOR ENTIRE PLAN SET (NOT TO SCALE)

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	ONSITE PROPERTY LINE / R.O.W. LINE	
	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE	
	EASEMENT LINE	
	SETBACK LINE	
	CONCRETE CURB & GUTTER	CURB AND GUTTER; SPILL CURB; TRANSITION CURB; DEPRESSED CURB AND GUTTER
	UTILITY POLE WITH LIGHT	
	POLE LIGHT	
	TRAFFIC LIGHT	
	UTILITY POLE	
	TYPICAL LIGHT	
	ACORN LIGHT	
	TYPICAL SIGN	
170 / 169	CONTOUR LINE	190 / 187
SL	SANITARY SEWER LATERAL	SL
W	UNDERGROUND WATER LINE	W
E	UNDERGROUND ELECTRIC LINE	E
G	UNDERGROUND GAS LINE	G
OH	OVERHEAD WIRE	OH
T	UNDERGROUND TELEPHONE LINE	T
C	UNDERGROUND CABLE LINE	C
	STORM SEWER	
S	SANITARY SEWER MAIN	S
Ⓢ	SANITARY MANHOLE	Ⓢ
Ⓓ	STORM MANHOLE	Ⓓ
	TYPICAL END SECTION	
	HEADWALL OR ENDWALL	
	YARD INLET	
	CURB INLET	
	CLEAN OUT	
Ⓔ	ELECTRIC MANHOLE	Ⓔ
Ⓣ	TELEPHONE MANHOLE	Ⓣ
EB	ELECTRIC BOX	EB
EP	ELECTRIC PEDESTAL	EP
	BENCHMARK	
	BORING	
	FLOODPLAIN	
	STEEP SLOPES (>25%)	
	STEEP SLOPES (15%-25%)	
	IMPERVIOUS AREA	
	MICROBIORETENTION FACILITY NUMBER	1
	WATER QUALITY FACILITY DRAINAGE AREA	
	DIVERSION DIKE	
	SUPER SILT FENCE	SSF
	TREE PROTECTION	TPF
	STREAM BUFFER	SB

STANDARD DRAWING LEGEND
FOR ENTIRE PLAN SET (NOT TO SCALE)

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	STABILIZED CONSTRUCTION ENTRANCE	
	SILT FENCE	SF
	SOILS LINE	
	WETLAND BUFFER	WB
	STREAM BUFFER	
	TREELINE	
(TBR)	TO BE REMOVED	
	SOIL STABILIZATION MATTING	
	OVERFLOW INLET	
	FLOW THROUGH INLET	
	SANITARY INLET	
	CURB INLET	
	REFORESTATION AREA	
	SPECIMEN TREE PROPOSED TO BE REMOVED IN ACCORDANCE WITH THE CONDITIONS OF APPROVAL OF WP-17-105	
	CRITICAL ROOT ZONE	
	PERENNIAL STREAM	
	INTERMITTENT STREAM	
	SEWAGE DISPOSAL AREA	PRIVATE; SHARED
	WELL AREA	
W	WELL	W
	PROPOSED PERCOLATION HOLE	
	PERCOLATION HOLE (PASSED)	
	PERCOLATION HOLE (FAILED)	
	LIMIT OF FIELD RUN SURVEY	
	LIMITS OF FOREST CLEARING	
FP	FLOODPLAIN	FP
LOD	LIMIT OF DISTURBANCE	
RP	ROOT PRUNING	
WB	WETLAND BUFFER	
W	WETLANDS	
	FORCE MAIN	FM

SOILS TABLE

SOILS NAME	SOILS DESCRIPTION	HYDROLOGIC SOILS GROUP	HIGHLY ERODIBLE SOIL	K FACTOR
Co	CODORUS AND HATBORO SILT LOAMS, 0 TO 3 PERCENT SLOPES	C	NO	0.32
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	NO	0.28
GgC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B	NO	0.28
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	YES	0.43
GnB	GLENVILLE-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	YES	0.43
GoB	GLENVILLE-CODORUS SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	YES	0.43
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	NO	0.28
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	NO	0.28

SHEET INDEX

SHEET TITLE	SHEET NUMBER
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OVERALL SITE PLAN	2
OVERALL ENVIRONMENTAL CONCEPT PLAN	3
ENVIRONMENTAL CONCEPT PLAN	4 - 8
SEDIMENT CONTROL AND ENVIRONMENTAL CONCEPT PLAN	9 - 13

GENERAL NOTE:
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APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10-12-17

BENCHMARK
GEODETIC SURVEY CONTROL - 28DA
ELEV. 564.389'
N 570,624.997
E 1,314,434.228
GEODETIC SURVEY CONTROL - 28DB
ELEV. 537.361'
N 569,055.561
E 1,313,795.348

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CIVIL & CONSULTING ENGINEERS · SURVEYORS · PROJECT MANAGERS · ENVIRONMENTAL CONSULTANTS · LANDSCAPE ARCHITECTS

REVISIONS

REV	DATE	COMMENT	BY

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(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	10/2/17
SCALE:	AS NOTED
CAD I.D.:	ECS

PROJECT:
ENVIRONMENTAL CONCEPT PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
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TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

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TOWSON, MARYLAND 21204
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www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
10/6/17

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
1 OF 13

ECP-16-025

LEGEND

- SEPTIC EASEMENT AREA
- STEEP SLOPES 15-25%
- STEEP SLOPES >25%
- SPECIMEN TREE (PROPOSED TO BE REMOVED)
- CRITICAL ROOT ZONE
- 100 YR. FLOODPLAIN

SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

CUT/FILL ANALYSIS

TOTAL CUT = 62,313 CY
TOTAL FILL = 183,125 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 120,812 CY

LIMIT OF DISTURBANCE: 64.77 AC.

NOTES

1. ALL UNDERGROUND ROOF LEADERS WILL BE 6" PVC PIPE.
2. ALL BIO-RETENTION FACILITIES LEADING TO THEIR OWN OUTFALL POINT WILL HAVE OUTFALL PIPES SIZED TO HANDLE THE 10-YR STORM EVENT.
3. STORMWATER QUALITY MANAGEMENT WILL BE PROVIDED BY 7 BIORETENTION, 6 MICRO-BIORETENTION, 1 SUBMERGED GRAVEL WETLAND, FACILITIES AND 296 DRYWELLS.
4. HAZARD CLASS FOR ALL SWM FACILITIES IS "A" DUE TO NO LIFE LOSS FOR FAILURE.

200 100 50 0 200
1"= 200'

OWNERS:	PARCEL 34	PARCEL 112
PARCEL 36 SHERRY ROTHSTEIN DARLENE THOMPSON HARRY SIMPSON DEBBIE RIPPEON PEGGY SIMPSON 5232 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	THOMAS H. SIMPSON 5300 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL. PARCEL 111 DENNIS A LEAF LENORE D. SINES 5226 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	DANA G DENAULT THOMAS C. DENAULT 5222 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL. PARCEL 98 JERRY MAUCK JANET BURKE J/T 5234 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
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5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 02528/00654, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : SP-17-002

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 10.12.17

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BOHLER ENGINEERING
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
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REVISIONS			
REV	DATE	COMMENT	BY

DIG WITH C.A.R.E. CALL BEFORE YOU DIG
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NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	10/2/17
SCALE:	AS NOTED
CAD I.D.:	EC5

PROJECT:

ENVIRONMENTAL CONCEPT PLAN

FOR

SIMPSON & DENAULT, PROPERTIES

LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K

LOCATION OF SITE
5232 GREEN BRIDGE ROAD
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PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
10/3/17

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

ECP-16-025

C:\USERS\AGAMBOA\APPDATA\LOCAL\TEMP\ACPUBLISH_2424\MD142048EC5.DWG PRINTED BY: AGAMBOA 10.03.17 @ 9:19 AM LAST SAVED BY: AGAMBOA

SPECIMEN TREES

ID #	SPECIES NAME	SIZE	CONDITION	SPECIMEN TREES TO REMAIN
1	TULIP POPLAR	34"	GOOD	NO
2	TULIP POPLAR	32"	GOOD	NO
3	TULIP POPLAR	38"	POOR	NO
4	TULIP POPLAR	31"	GPPD	NO
5	TULIP POPLAR	31"	POOR	NO
6	TULIP POPLAR	33"	FAIR	YES
7	TULIP POPLAR	40"	F. GOOD	YES
8	TULIP POPLAR	38"	POOR	YES
9	TULIP POPLAR	31"	GOOD	YES
10	TULIP POPLAR	33"	GOOD	YES
11	TULIP POPLAR	38"	GOOD	YES
12	TULIP POPLAR	36"	GOOD	YES
13	TULIP POPLAR	54"	F. GOOD	NO
14	BLACK OAK	33"	GOOD	YES
15	TULIP POPLAR	33"	F. GOOD	NO
16	TULIP POPLAR	48"	F. GOOD	NO
17	BLACK OAK	34"	POOR	NO
18	WHITE OAK	32"	F. GOOD	NO
19	NORTHERN RED OAK	33"	GOOD	NO
20	RED OAK	31"	F. GOOD	NO
21	BLACK OAK	32"	V POOR	NO
22	NORTHERN RED OAK	31"	V. POOR	NO
23	TULIP POPLAR	31"	GOOD	NO
24	TULIP POPLAR	30"	F. GOOD	NO
25	TULIP POPLAR	31"	GOOD	NO
26	TULIP POPLAR	33"	GOOD	YES
27	SYCAMORE	45"	FAIR	YES
28	TULIP POPLAR	40"	GOOD	NO
29	TULIP POPLAR	33"	GOOD	NO
30	TULIP POPLAR	36"	GOOD	NO
31	TULIP POPLAR	32"	GOOD	YES
32	TULIP POPLAR	32"	GOOD	YES
33	TULIP POPLAR	31"	GOOD	NO
34	TULIP POPLAR	33"	GOOD	NO
35	TULIP POPLAR	40"	GOOD	NO
36	UNCONFIRMED	40"	GOOD	NO
37	NORTHERN RED OAK	34"	GOOD	YES
38	WHITE OAK	52"	GOOD SPLIT ABOVE DBH	NO
39	SOUTHERN RED OAK	31"	GOOD	YES
40	WHITE OAK	30"	GOOD	YES
41	NORTHERN RED OAK	31"	GOOD HEALTHY, IMBALANCED CROWN	NO
42	WHITE OAK	30"	GOOD	NO
43	BLACK OAK	31"	GOOD	NO
44	NORTHERN RED OAK	30"	GOOD	YES
45	WHITE OAK	30"	POOR	YES
46	NORTHERN RED OAK	32"	FAIR POOR	YES
47	SOUTHERN RED OAK	32"	GOOD	YES
48	WHITE OAK	32"	GOOD	YES
49	NORTHERN RED OAK	32"	GOOD	YES
50	RED MAPLE	40"	GOOD	YES

LEGEND

- LOD — LIMIT OF DISTURBANCE
- DRAINAGE AREA DIVIDE
- STEEP SLOPES 15-25%
- STEEP SLOPES >25%
- (D.A.) DRAINAGE AREA DESIGNATION
- 100 YR. FLOODPPLAIN EASEMENT

DRAINAGE AREA INFORMATION

D.A.	IMPERVIOUS	PERVIOUS	TOTAL (AC.)
1A (BIO. #1)	1.40	7.23	8.63
1B (OFFSITE)	1.24	5.00	6.24
2 (BIO #2)	0.70	1.58	2.28
3 (BIO #3)	0.32	1.55	1.87
4(BIO #4)	0.21	0.30	0.51
5 (BIO #5)	0.54	4.02	4.56
6 (BIO #6)	0.44	1.96	2.40
7 (MB1)	0.14	0.22	0.36
8 (MB2)	0.14	0.23	0.37
9 (MB3)	0.14	0.23	0.37
10 (MB4)	0.14	0.20	0.34
11 (S.G.W. #1)	0.18	0.46	0.64
12 (BIO#7)	0.15	0.37	0.52
13 (BIO#8)	0.47	0.53	1.00

STORMWATER MANAGEMENT PRACTICES

	LOT NO.	PERMEABLE PAVING A-2 (Y / N)	ESD FACILITY TYPE AND NUMBER	TOTAL AREA (Ac)	ESDv REQUIRED (C.F.)	ESDv PROVIDED (C.F.)
	1	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	2	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	3	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	4	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	5	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	6	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	7	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	8	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	9	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	10	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	11	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	12	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	13	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	14	N	(8) DRYWELLS (M-5)	0.18	1646	1,441
	15	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	16	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	17	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	18	N	MICRO-BIORETENTION # 1 (M-6)	0.35	600	828
	19	N	MICRO-BIORETENTION # 2 (M-6)	0.37	601	828
	20	N	MICRO-BIORETENTION # 3 (M-6)	0.36	604	828
	21	N	MICRO-BIORETENTION # 4 (M-6)	0.34	603	828
	22	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	23	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	24	N	(8) DRYWELLS (M-5)	0.18	1646	1,846
	25	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	26	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	27	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	28	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	29	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	39	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	31	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	32	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	33	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	34	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	35	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	36	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	37	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	38	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	39	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	40	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	41	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	42	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	43	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	44	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	45	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
**	BUILDABLE PRES. PARCEL "C"	N	(7) DRYWELLS (M-5)	0.16	1441	1,846
**	COMMON DRIVE	N	SUBMERGED GRAVEL WETLAND #1 (M-2)	0.83	813	1,208
**	COMMON DRIVE	N	BIORETENTION # 7 (M-6)	0.52	692	1,156
**	COMMON DRIVE	N	BIORETENTION # 8 (M-6)	1.00	2009	2,924
**	PUBLIC ROAD	N	BIORETENTION FACILITY #1	8.63	7378	9,210
**	PUBLIC ROAD	N	BIORETENTION FACILITY #2	2.28	3218	4,625
**	PUBLIC ROAD	N	BIORETENTION FACILITY #3	1.87	1599	3,346
**	PUBLIC ROAD	N	BIORETENTION FACILITY #4	0.51	918	2,251
**	PUBLIC ROAD	N	BIORETENTION FACILITY #5	4.56	3116	2,737
**	PUBLIC ROAD	N	BIORETENTION FACILITY #6	2.40	2252	3,029
	TOTALS			30.59	85,331	94,715

NOTE: THE PROPOSED IMPERVIOUS AREA FOR THIS PROJECT IS 10.29 ACRES. FOR EACH LOT, THE PROPOSED IMPERVIOUS DRAINAGE AREA FOR EACH DRYWELL, HAS BEEN SET AT 1,000 S.F. (MAXIMUM ALLOWED). FOR COMPUTATIONAL PURPOSES, THIS RESULTS IN A GREATER IMPERVIOUS AREA THAN WHAT IS INDICATED ON THE MARYLAND ESD CALCULATIONS. THE PROPOSED ESDv PROVIDED, EXCEEDS THE REQUIRED ESDv. A MORE DETAILED ANALYSIS OF EACH LOT WILL BE PROVIDED AT THE SDP PHASE OF DESIGN.

** NOTE:
PROPOSED IMPERVIOUS AREA DO NOT INCLUDE PROPOSED DWELLINGS.

200 100 50 0 200
1"= 200'

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

HEALTH OFFICER, HOWARD COUNTY HEALTH DEPARTMENT — DATE N/A

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE N/A

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/6/17

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10.12.17

OWNERS:
PARCEL 36
SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 34
THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.
PARCEL 111
DENNIS A LEAF
LENORE D. SINES
5226 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 112
DANA G DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.
PARCEL 98
JERRY MAUCK
JANET BURKE J/T
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 112, 98, & 111
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 02526/00554, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : SP-17-002

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

BOHLER ENGINEERING
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
CORPORATE OFFICE: WARREN, NJ
OFFICES: SOUTHBOROUGH, MA · ALBANY, NY · BUFFALO, NY · CHALFONT, PA · CENTER VALLEY, PA · LAKEWOOD, NJ · BOWIE, MD · TOWSON, MD · WILMINGTON, DE · WARRENTON, VA · FORT LAUDERDALE, FL · TAMPA, FL

THE CONTRACTOR, OWNER AND OWNER'S REPRESENTATIVE SHALL NOT BE COVERED UNDER THIS PLAN UNTIL THEY HAVE SIGNED THE LOD CERTIFICATE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER ENGINEERING, THE LOD CERTIFICATE WILL BE ISSUED FOR CONSTRUCTION PURPOSES ONLY. DO NOT SCALE PLAN. USE ONLY DIMENSIONS AND COORDINATES SHOWN ON PLAN.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE: IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: MD142048
DRAWN BY: AVG
CHECKED BY: JMA
DATE: 10/2/17
SCALE: AS NOTED
CAD I.D.: OVS

PROJECT:
ENVIRONMENTAL CONCEPT PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE:
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

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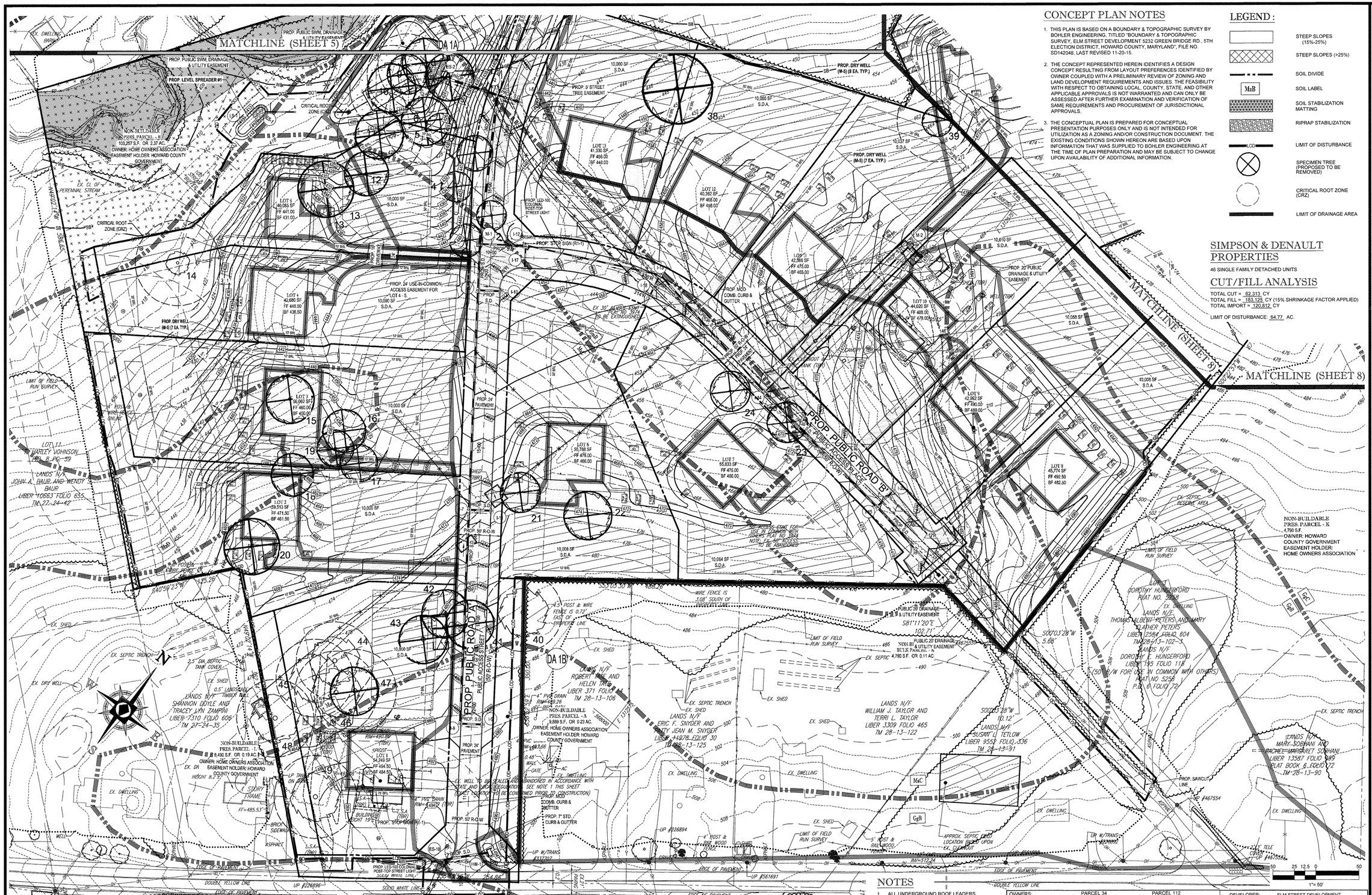
B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
10/3/17

SHEET TITLE:
OVERALL ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
3 OF 13

ECP-16-025



CONCEPT PLAN NOTES

1. THIS PLAN IS BASED ON A BOUNDARY & TOPOGRAPHIC SURVEY BY BOHLER ENGINEERING, TITLED "BOUNDARY & TOPOGRAPHIC SURVEY, ELM STREET DEVELOPMENT 5232 GREEN BRIDGE RD., 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND", FILE NO. SD142048, LAST REVISED 11-20-15.
2. THE CONCEPT REPRESENTED HEREIN IDENTIFIES A DESIGN CONCEPT RESULTING FROM LAYOUT PREFERENCES IDENTIFIED BY OWNER COUPLED WITH A PRELIMINARY REVIEW OF ZONING AND LAND DEVELOPMENT REQUIREMENTS AND ISSUES. THE FEASIBILITY WITH RESPECT TO OBTAINING LOCAL, COUNTY, STATE, AND OTHER APPLICABLE APPROVALS IS NOT WARRANTED AND CAN ONLY BE ASSESSED AFTER FURTHER EXAMINATION AND VERIFICATION OF SAME REQUIREMENTS AND PROCUREMENT OF JURISDICTIONAL APPROVALS.
3. THE CONCEPTUAL PLAN IS PREPARED FOR CONCEPTUAL PRESENTATION PURPOSES ONLY AND IS NOT INTENDED FOR UTILIZATION AS A ZONING AND/OR CONSTRUCTION DOCUMENT. THE EXISTING CONDITIONS SHOWN HEREON ARE BASED UPON INFORMATION THAT WAS SUPPLIED TO BOHLER ENGINEERING AT THE TIME OF PLAN PREPARATION AND MAY BE SUBJECT TO CHANGE UPON AVAILABILITY OF ADDITIONAL INFORMATION.

LEGEND :

- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- MaB — SOIL LABEL
- SOIL STABILIZATION MATTING
- RIPRAP STABILIZATION
- LOD — LIMIT OF DISTURBANCE
- SPECIMEN TREE (PROPOSED TO BE REMOVED)
- CRITICAL ROOT ZONE (CRZ)
- LIMIT OF DRAINAGE AREA

SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

CUT/FILL ANALYSIS

TOTAL CUT = 62,313 CY
TOTAL FILL = 183,125 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 120,812 CY

LIMIT OF DISTURBANCE: 64.77 AC.

NOTES

1. ALL UNDERGROUND ROOF LEADERS WILL BE 6" PVC PIPE.
2. ALL BIO-RETENTION FACILITIES LEADING TO THEIR OWN OUTFALL POINT WILL HAVE OUTFALL PIPES SIZED TO HANDLE THE 10-YR STORM EVENT.
3. STORMWATER QUALITY MANAGEMENT WILL BE PROVIDED BY 7 BIORETENTION, 6 MICRO-BIORETENTION, 1 SUBMERGED GRAVEL WETLAND, FACILITIES AND 296 DRYWELLS.
4. HAZARD CLASS FOR ALL SWM FACILITIES IS "A" DUE TO NO LIFE LOSS FOR FAILURE.

★ NOTE: PROPOSED IMPERVIOUS AREA DOES NOT INCLUDE PROPOSED DWELLINGS.

OWNERS:	PARCEL 34	PARCEL 112
PARCEL 38 SHERRY ROTHSTEIN DARLENE THOMPSON HARRY SIMPSON DEBBIE RIPPEON PEGGY SIMPSON 5232 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL	THOMAS H. SIMPSON 5300 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL PARCEL 111 DENNIS A LEAF LENORE D. SINES 5226 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL	ANNA G DENAULT THOMAS C. DENAULT 5222 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL PARCEL 98 JERRY MAUCK JANET BURKE JTT 5234 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL

SUBDIVISION NAME: TBD
SECTION/AREA: NA
DEED # 11361/00222, 00183/00554, 15884/003894, 02528/00654, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : SP-17-002

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

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PARCEL: 34, 36, 112, 98, & 111
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

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APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/6/17

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10-12-17

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CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
CORPORATE OFFICE: WARREN, NJ
OFFICES: SOUTHBOROUGH, MA · ALBANY, NY · ROCHESTER, NY · CENTER VALLEY, PA · DOVER, DE · SYRACUSE, NY · TOWSON, MD · STERLING, VA · RICHMOND, VA · FORT LAUDERDALE, FL · ORLANDO, FL · TAMPA, FL

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REVISIONS

REV.	DATE	COMMENT	BY

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NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	10/2/17
SCALE:	1" = 50'
CAD I.D.:	EC5

PROJECT:
ENVIRONMENTAL CONCEPT PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & I, & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18, PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

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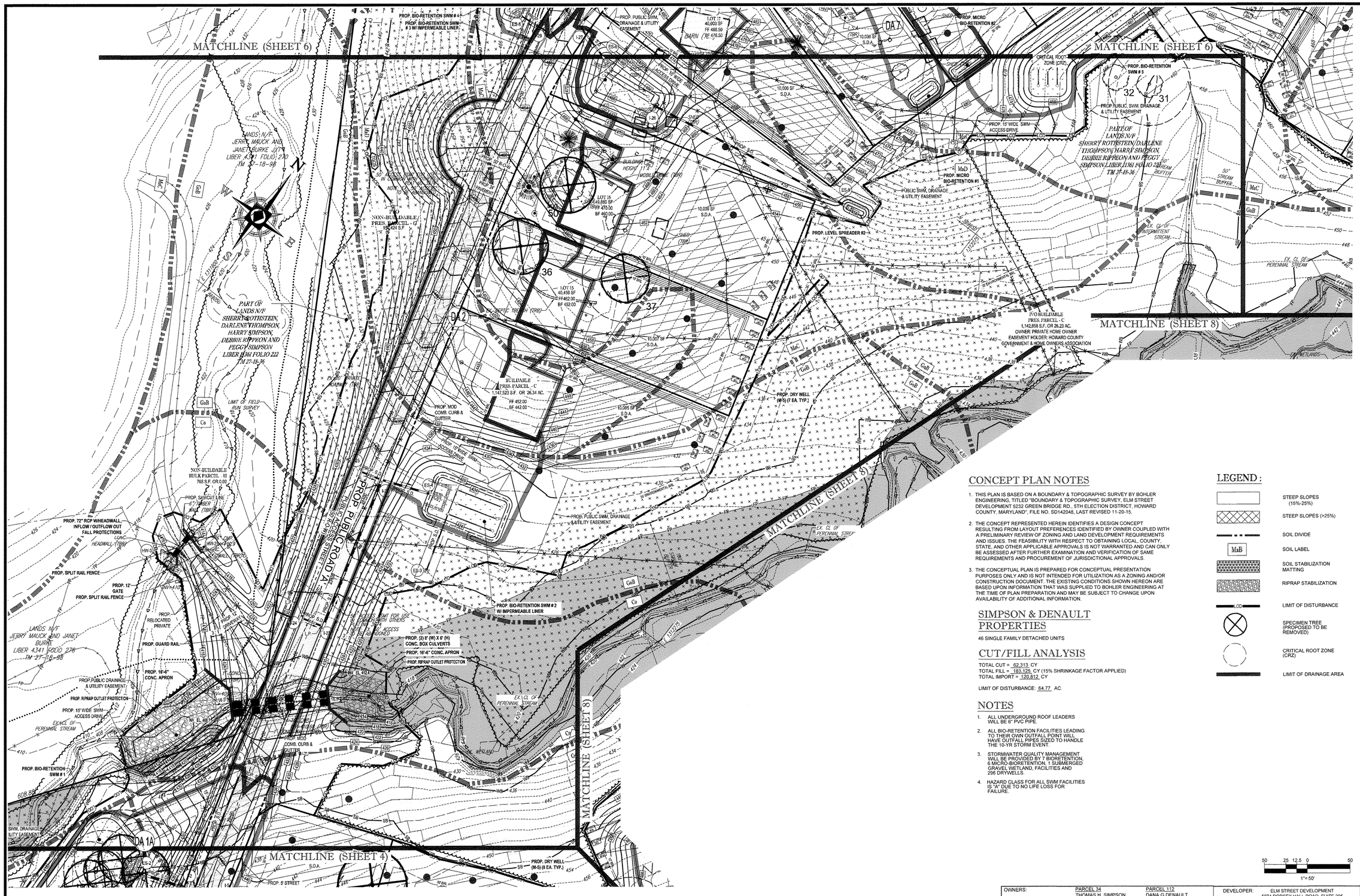
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
10/3/16

SHEET TITLE:
ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
4 OF 13

ECP-16-025



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1. THIS PLAN IS BASED ON A BOUNDARY & TOPOGRAPHIC SURVEY BY BOHLER ENGINEERING, TITLED "BOUNDARY & TOPOGRAPHIC SURVEY, ELM STREET DEVELOPMENT 5232 GREEN BRIDGE RD., 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND", FILE NO. SD142048, LAST REVISED 11-20-15.
2. THE CONCEPT REPRESENTED HEREIN IDENTIFIES A DESIGN CONCEPT RESULTING FROM LAYOUT PREFERENCES IDENTIFIED BY OWNER COUPLED WITH A PRELIMINARY REVIEW OF ZONING AND LAND DEVELOPMENT REQUIREMENTS AND ISSUES. THE FEASIBILITY WITH RESPECT TO OBTAINING LOCAL, COUNTY, STATE, AND OTHER APPLICABLE APPROVALS IS NOT WARRANTED AND CAN ONLY BE ASSESSED AFTER FURTHER EXAMINATION AND VERIFICATION OF SAME REQUIREMENTS AND PROCUREMENT OF JURISDICTIONAL APPROVALS.
3. THE CONCEPTUAL PLAN IS PREPARED FOR CONCEPTUAL PRESENTATION PURPOSES ONLY AND IS NOT INTENDED FOR UTILIZATION AS A ZONING AND/OR CONSTRUCTION DOCUMENT. THE EXISTING CONDITIONS SHOWN HEREON ARE BASED UPON INFORMATION THAT WAS SUPPLIED TO BOHLER ENGINEERING AT THE TIME OF PLAN PREPARATION AND MAY BE SUBJECT TO CHANGE UPON AVAILABILITY OF ADDITIONAL INFORMATION.

SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

CUT/FILL ANALYSIS

TOTAL CUT = 62,313 CY
TOTAL FILL = 183,125 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 120,812 CY

LIMIT OF DISTURBANCE: 64.77 AC.

NOTES

1. ALL UNDERGROUND ROOF LEADERS WILL BE 6" PVC PIPE.
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LEGEND :

- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- MaB — SOIL LABEL
- SOIL STABILIZATION MATTING
- RIPRAP STABILIZATION
- LOD — LIMIT OF DISTURBANCE
- SPECIMEN TREE (PROPOSED TO BE REMOVED)
- CRITICAL ROOT ZONE (CRZ)
- LIMIT OF DRAINAGE AREA

50 25 12.5 0 50
1"= 50'

★ NOTE: PROPOSED IMPERVIOUS AREA DOES NOT INCLUDE PROPOSED DWELLINGS.

OWNERS:	PARCEL 34	PARCEL 112	DEVELOPER: ELM STREET DEVELOPMENT
PARCEL 38 SHERRY ROTHSTEIN DARLENE THOMPSON HARRY SIMPSON DEBBIE RIPPEON PEGGY SIMPSON 5232 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL	THOMAS H. SIMPSON 5300 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL PARCEL 111 DENNIS A LEAF LENORE D. SINES 5226 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL	DANA G DENAULT THOMAS C. DENAULT 5222 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL PARCEL 98 JERRY MAUCK JANET BURKE JTT 5234 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL	5074 DORSEY HALL ROAD, SUITE 205 COLUMBIA, MD 21042 CONTACT: JASON VAN KIRK PHONE: (410) 720-3021 TAX MAP: 27 GRID: 18 ZONED: RR-DEO PARCEL: 34, 36, 112, 98, & 111 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SUBDIVISION NAME: TBD SECTION/AREA: N/A DEED # 11361/00222, 00183/00554, 15884/003894, 02528/00554, 05889/00490 04341/00270, & 03201/00539		PREVIOUS FILE No. : SP-17-002	

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

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APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 10-12-17

C:\USERS\ADAMSON\APPDATA\LOCAL\TEMP\ACPUBLISH_3424\MD142048SHEET.DWG PLOTTED BY: ADAMSON 10.03.17 @ 9:20 AM LAST SAVED BY: ADAMSON

BOHLER ENGINEERING
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
CORPORATE OFFICE: WARREN, NJ
OFFICES: SOUTHBOROUGH, MA · ALBANY, NY · ROSCOMMON, MI · CENTER VALLEY, PA · SYRACUSE, NY · STERLING, VA · FORT LAUDERDALE, FL · TOWSON, MD · PORT LAUDERDALE, FL · RICHMOND, VA
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REVISIONS

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NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	10/2/17
SCALE:	1" = 50'
CAD I.D.:	EC5

PROJECT:
ENVIRONMENTAL CONCEPT PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

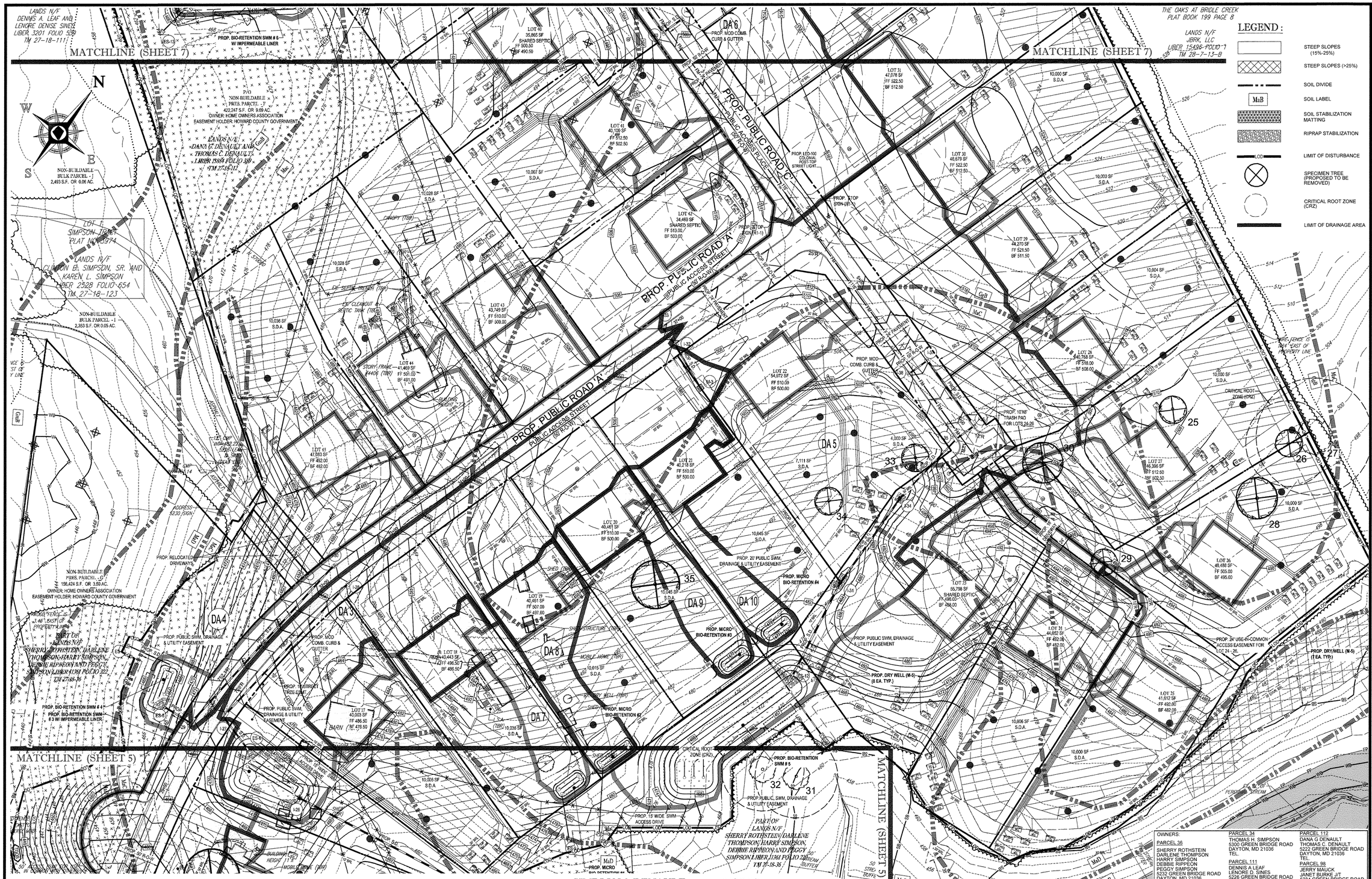
BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
10/2/17

SHEET TITLE:
ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
5 OF 13

ECP-16-025



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CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 10-12-17

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 02528/00654, 05889/00490 04341/00270, & 03201/00539

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OWNERS:

PARCEL 35
SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 34
THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 111
DENNIS A LEAF
LENORE D. SINES
5226 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 112
DANA C DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 98
JERRY MAUCK
JANET BURKE J/T
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 112, 98, & 111
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING

CORPORATE OFFICE: WARREN, NJ
OFFICES: SOUTHBOROUGH, MA; ALBANY, NY; ROMONCOMA, NY; CENTER VALLEY, PA; HARRISBURG, PA; BOWIE, MD; STERLING, VA; FORT LAUDERDALE, FL; PHILADELPHIA, PA

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
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NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	10/2/17
SCALE:	1" = 50'
CAD I.D.:	EC5

PROJECT:

ENVIRONMENTAL CONCEPT PLAN

FOR

SIMPSON & DENAULT, PROPERTIES

LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L, & NON-BUILDABLE BULK PARCEL D & H-K

LOCATION OF SITE

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B.R. ROWE
PROFESSIONAL ENGINEER
No. 40808
10/3/17

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SHEET NUMBER:

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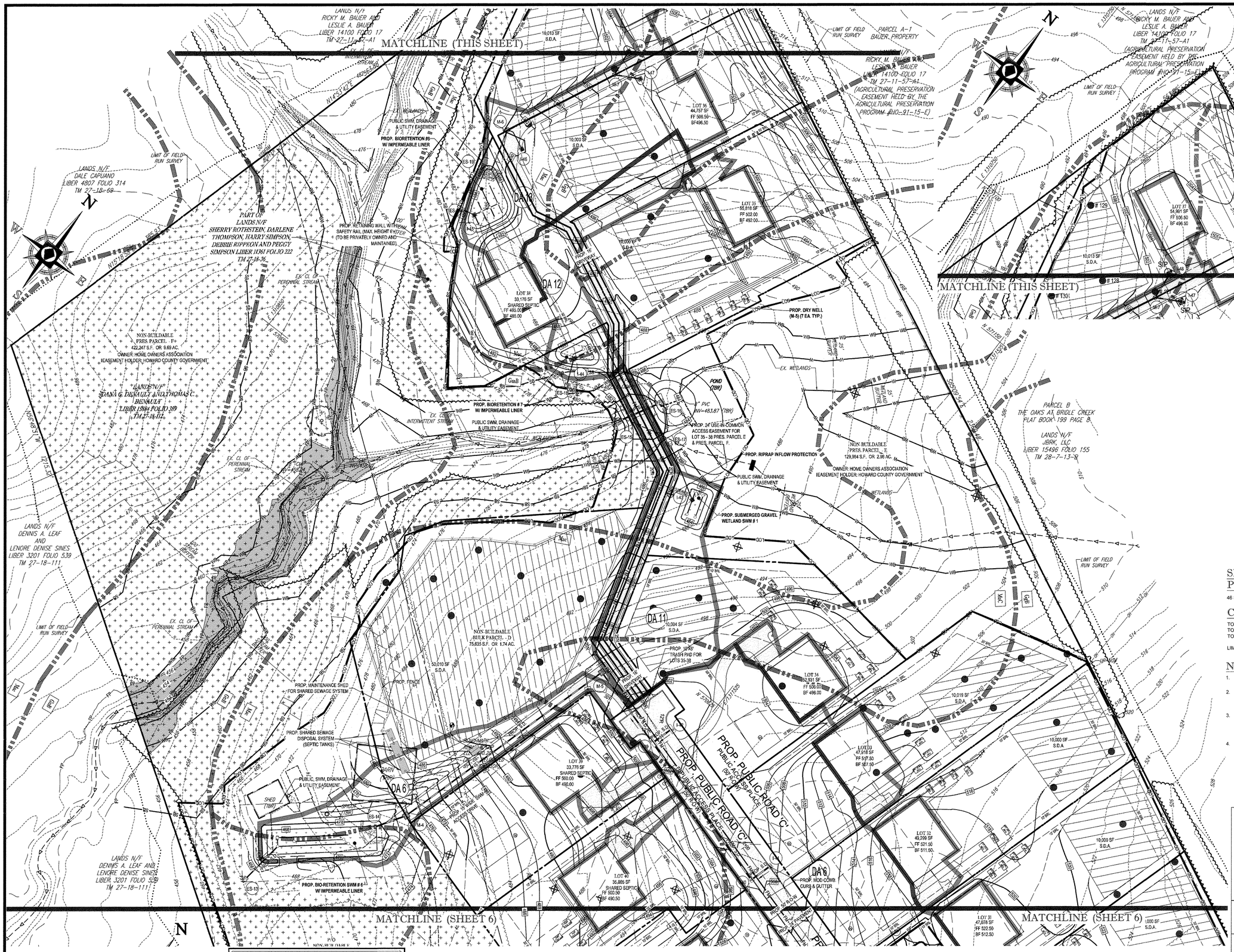
ECP-16-025



LEGEND :

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50 25 12.5 0 50
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PARCEL 36	PARCEL 111
SHERRY ROTHSTEIN DARLENE THOMPSON HARRY SIMPSON DEBBIE RIPPEON PEGGY SIMPSON 5232 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	DENNIS A LEAF LENORE D. SINES 5226 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL
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CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/6/17
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SHEET NUMBER:
7 OF 13

ECP-16-025

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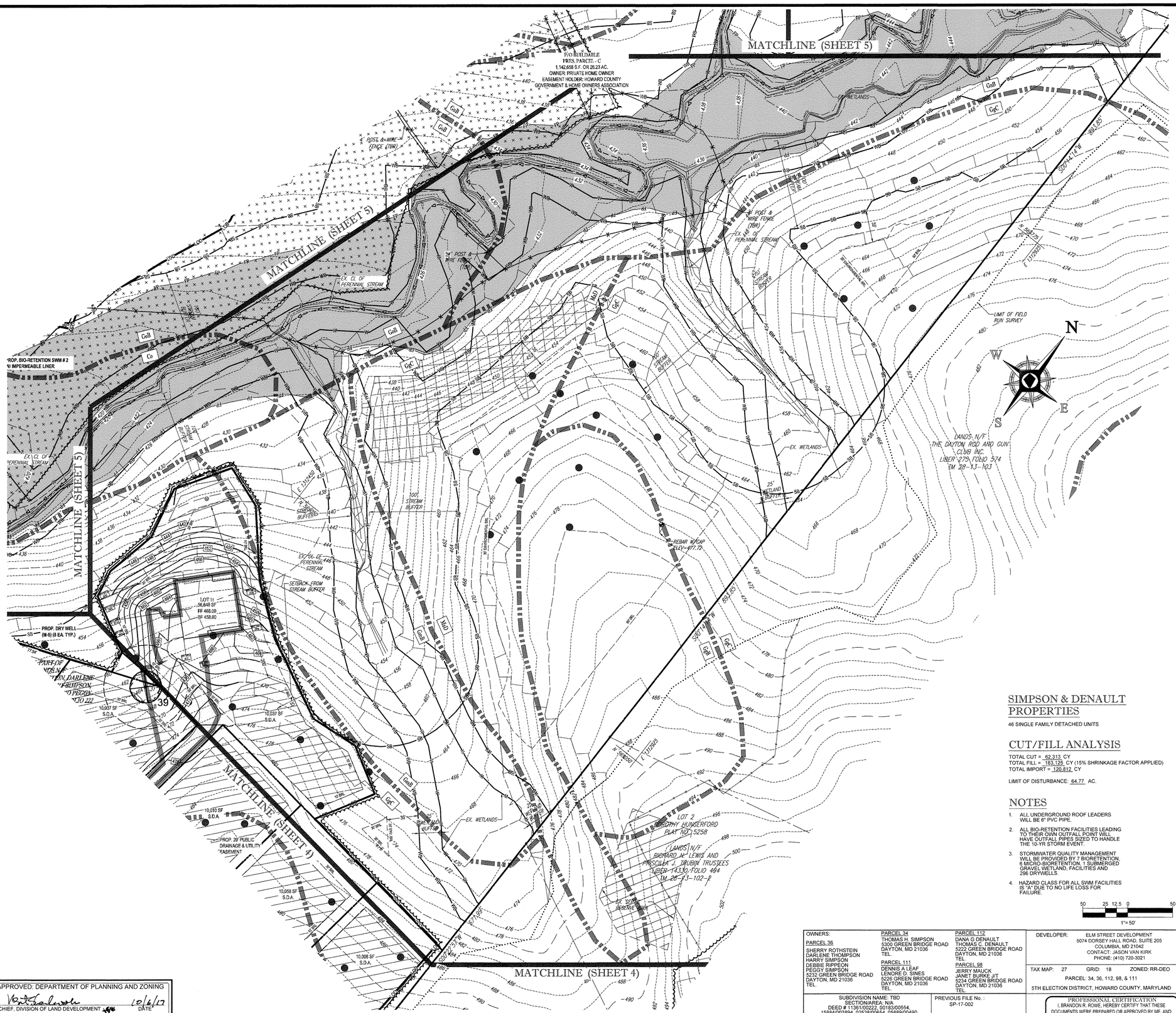
SPECIMEN TREES

ID #	SPECIES NAME	SIZE	CONDITION	SPECIMEN TREES TO REMAIN
1	TULIP POPLAR	34"	GOOD	NO
2	TULIP POPLAR	32"	GOOD	NO
3	TULIP POPLAR	38"	POOR	NO
4	TULIP POPLAR	31"	GPPD	NO
5	TULIP POPLAR	31"	POOR	NO
6	TULIP POPLAR	33"	FAIR	YES
7	TULIP POPLAR	40"	F. GOOD	YES
8	TULIP POPLAR	38"	POOR	YES
9	TULIP POPLAR	31"	GOOD	YES
10	TULIP POPLAR	33"	GOOD	YES
11	TULIP POPLAR	38"	GOOD	YES
12	TULIP POPLAR	36"	GOOD	YES
13	TULIP POPLAR	54"	F. GOOD	NO
14	BLACK OAK	33"	GOOD	YES
15	TULIP POPLAR	33"	F. GOOD	NO
16	TULIP POPLAR	48"	F. GOOD	NO
17	BLACK OAK	34"	POOR	NO
18	WHITE OAK	32"	F. GOOD	NO
19	NORTHERN RED OAK	33"	GOOD	NO
20	RED OAK	31"	F. GOOD	NO
21	BLACK OAK	32"	V POOR	NO
22	NORTHERN RED OAK	31"	V. POOR	NO
23	TULIP POPLAR	31"	GOOD	NO
24	TULIP POPLAR	30"	F. GOOD	NO
25	TULIP POPLAR	31"	GOOD	NO
26	TULIP POPLAR	33"	GOOD	YES
27	SYCAMORE	45"	FAIR	YES
28	TULIP POPLAR	40"	GOOD	NO
29	TULIP POPLAR	33"	GOOD	NO
30	TULIP POPLAR	36"	GOOD	NO
31	TULIP POPLAR	32"	GOOD	YES
32	TULIP POPLAR	32"	GOOD	YES
33	TULIP POPLAR	31"	GOOD	NO
34	TULIP POPLAR	33"	GOOD	NO
35	TULIP POPLAR	40"	GOOD	NO
36	UNCONFIRMED	40"	GOOD	NO
37	NORTHERN RED OAK	34"	GOOD	YES
38	WHITE OAK	52"	GOOD SPLIT ABOVE DBH	NO
39	SOUTHERN RED OAK	31"	GOOD	YES
40	WHITE OAK	30"	GOOD	YES
41	NORTHERN RED OAK	31"	GOOD HEALTHY, IMBALANCED CROWN	NO
42	WHITE OAK	30"	GOOD	NO
43	BLACK OAK	31"	GOOD	NO
44	NORTHERN RED OAK	30"	GOOD	YES
45	WHITE OAK	30"	POOR	YES
46	NORTHERN RED OAK	32"	FAIR POOR	YES
47	SOUTHERN RED OAK	32"	GOOD	YES
48	WHITE OAK	32"	GOOD	YES
49	NORTHERN RED OAK	32"	GOOD	YES



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4. HAZARD CLASS FOR ALL SWM FACILITIES IS "A" DUE TO NO LIFE LOSS FOR FAILURE.

50 25 12.5 0 50
1"= 50'

★ NOTE: PROPOSED IMPERVIOUS AREA DOES NOT INCLUDE PROPOSED DWELLINGS.

OWNERS:	PARCEL 34	PARCEL 112
PARCEL 36	THOMAS H. SIMPSON	DANA C DENAULT
SHERRY ROTHSTEIN	5300 GREEN BRIDGE ROAD	THOMAS C. DENAULT
DARLENE THOMPSON	DAYTON, MD 21036	5222 GREEN BRIDGE ROAD
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		TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 112, 98, & 111
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 02528/00654, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : SP-17-002

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

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APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10-12-17

C:\USERS\ADAMBOR\APPDATA\LOCAL\TEMP\ACPUBLISH_2424\MD142048ESD_SHEET5.DWG PLOTTED BY: ADAMBOR 10.03.17 @ 9:21 AM LAST SAVED BY: ADAMBOR

BOHLER ENGINEERING
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
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THE INFORMATION, DESIGNS AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER ENGINEERING. ONLY APPROVED, SIGNED AND SEALED PLANS ARE AUTHORIZED FOR CONSTRUCTION PURPOSES. COPIES WITHOUT SEAL OR SIGNATURE ARE FOR REVIEW ONLY.

REVISIONS

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NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	10/2/17
SCALE:	1" = 50'
CAD I.D.:	EC5

PROJECT:
ENVIRONMENTAL CONCEPT PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

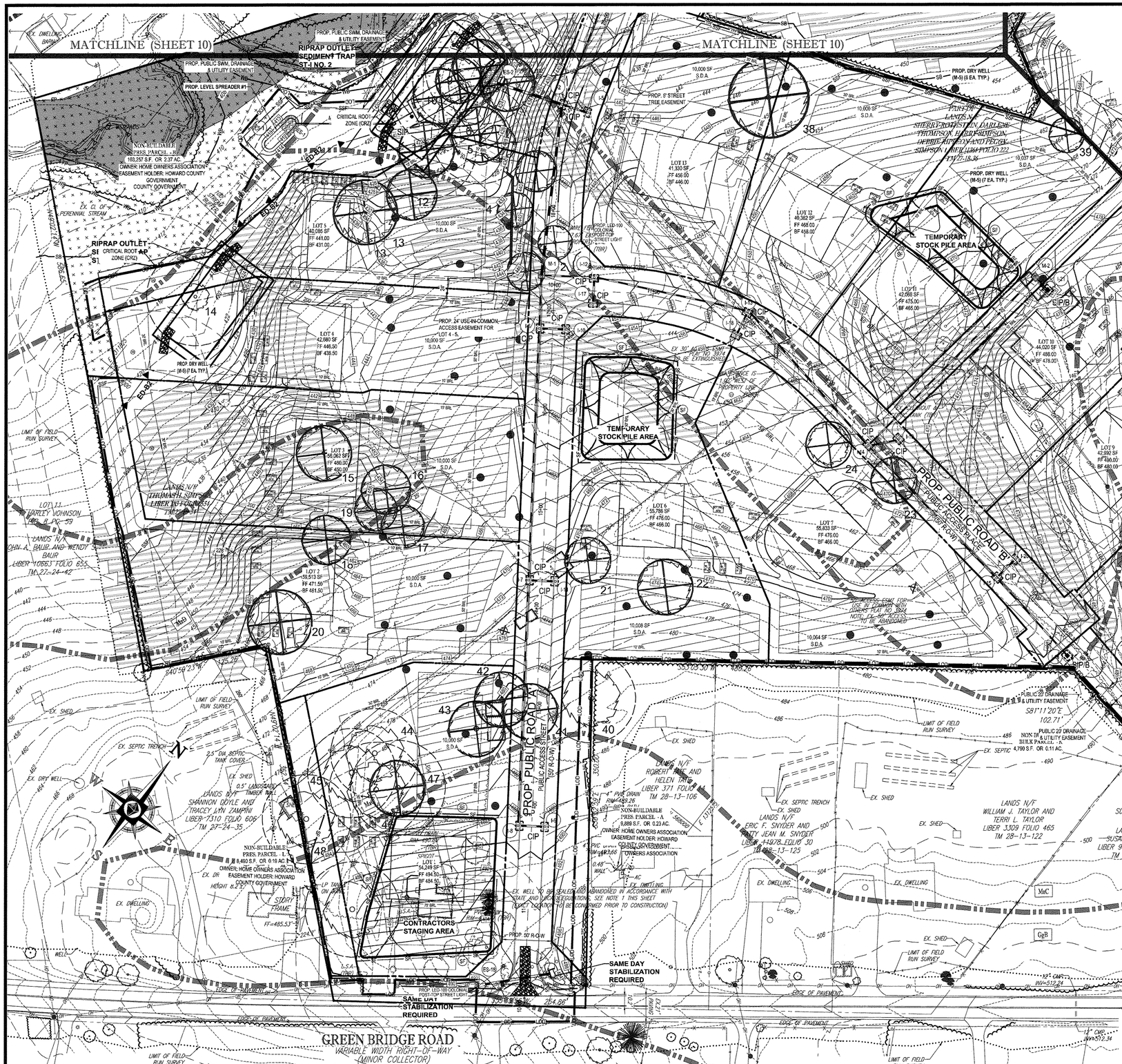
BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE NO. 40808
10/3/17

SHEET TITLE:
ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
8 OF 13

ECP-16-025



CONCEPT PLAN NOTES

1. THIS PLAN IS BASED ON A BOUNDARY & TOPOGRAPHIC SURVEY BY BOHLER ENGINEERING, TITLED "BOUNDARY & TOPOGRAPHIC SURVEY, ELM STREET DEVELOPMENT 5232 GREEN BRIDGE RD., 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND", FILE NO. SD142048, LAST REVISED 11-20-15.
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SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

CUT/FILL ANALYSIS

TOTAL CUT = 62,313 CY
TOTAL FILL = 183,125 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 120,812 CY

LIMIT OF DISTURBANCE: 64.77 AC.

NOTES

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LEGEND:

- STABILIZED CONSTRUCTION ENTRANCE
- SF — SILT FENCE
- DIVERSION DIKE
- SSF — SUPER SILT FENCE
- TPF — TREE PROTECTION FENCE
- CIP — CURB INLET PROTECTION
- SIP/B — STANDARD INLET PROTECTION
- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- MaB — SOIL LABEL
- RIPRAP STABILIZATION
- LOD — LIMIT OF DISTURBANCE
- SPECIMEN TREE (PROPOSED TO BE REMOVED)
- CRITICAL ROOT ZONE (CRZ)
- P — STREAM PUMP AROUND PRACTICE (DETAIL 1.2)
- AREAS OF SAME DAY STABILIZATION

GENERAL NOTE

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APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION JR	DATE 10-12-17

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PREVIOUS FILE No.: SP-17-002

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BOHLER ENGINEERING

CORPORATE OFFICE: WARREN, NJ
OFFICES: SOUTHBOROUGH, MA; HUNTINGTON, MD; RONKONKOMA, NY; CHARLOTTESVILLE, VA; CENTER VALLEY, PA; TAMPA, FL; BOWIE, MD; STERLING, VA; FORT LAUDERDALE, FL; PHILADELPHIA, PA

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

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DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	10/2/17
SCALE:	1" = 50'
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FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K
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B.R. ROWE
PROFESSIONAL ENGINEER
No. 40808
10/3/17

SHEET TITLE:
SEDIMENT CONTROL AND ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
9 OF 13

ECP-16-025

LEGEND:

- STABILIZED CONSTRUCTION ENTRANCE
- SF — SILT FENCE
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SIMPSON & DENAULT PROPERTIES

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TOTAL FILL = 183,125 CY (15% SHRINKAGE FACTOR APPLIED)
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PARCEL 36 SHERRY ROTHSTEIN DARLENE THOMPSON HARRY SIMPSON DEBBIE RIPPEON PEGGY SIMPSON 5232 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	THOMAS H. SIMPSON 5300 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL. PARCEL 111 DENNIS A LEAF LENORE D. SINES 5226 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	DANA G DENAULT THOMAS C. DENAULT 5222 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL. PARCEL 98 JERRY MAUCK JANET BURKE J/T 5234 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.		5074 DORSEY HALL ROAD, SUITE 205 COLUMBIA, MD 21042 CONTACT: JASON VAN KIRK PHONE: (410) 720-3021
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APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 10-12-17

D:\USERS\ADAMSON\APPDATA\LOCAL\TEMP\ACPUBLISH_3424\SD142048ECS.DWG PLOTTED BY: ADAMSON 10:33:17 @ 0:22 AM LAST SAVED BY: ADAMSON

BOHLER ENGINEERING
CIVIL & CONSULTING ENGINEERS
SURVEYORS
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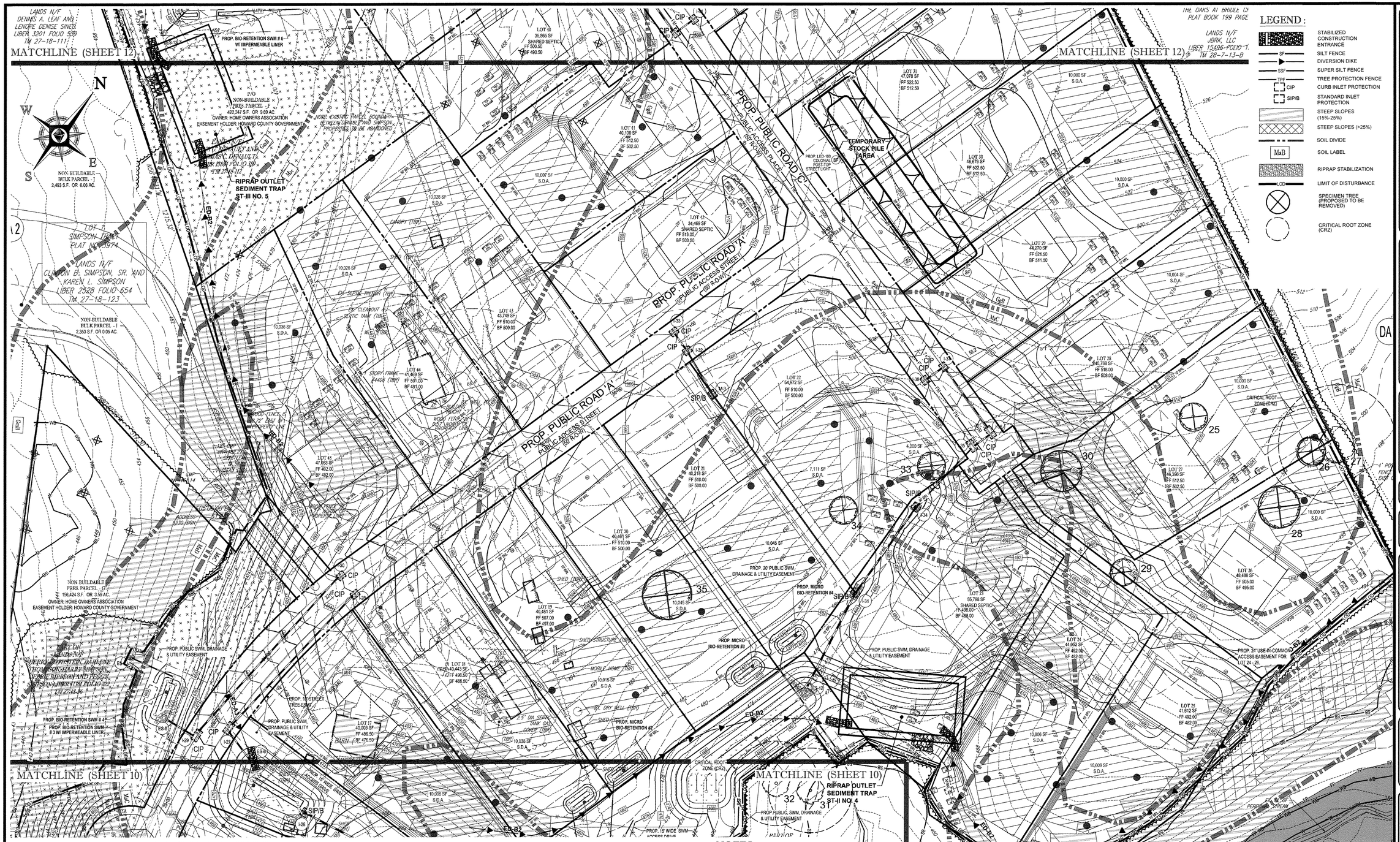

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5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 112, 98, & 111
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 02528/00654, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : SP-17-002

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/0/2019

1"= 50'

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REV	DATE	COMMENT	BY

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NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	10/2/17
SCALE:	1" = 50'
CAD I.D.:	EC5

PROJECT:
ENVIRONMENTAL CONCEPT PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, F - G & L, & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
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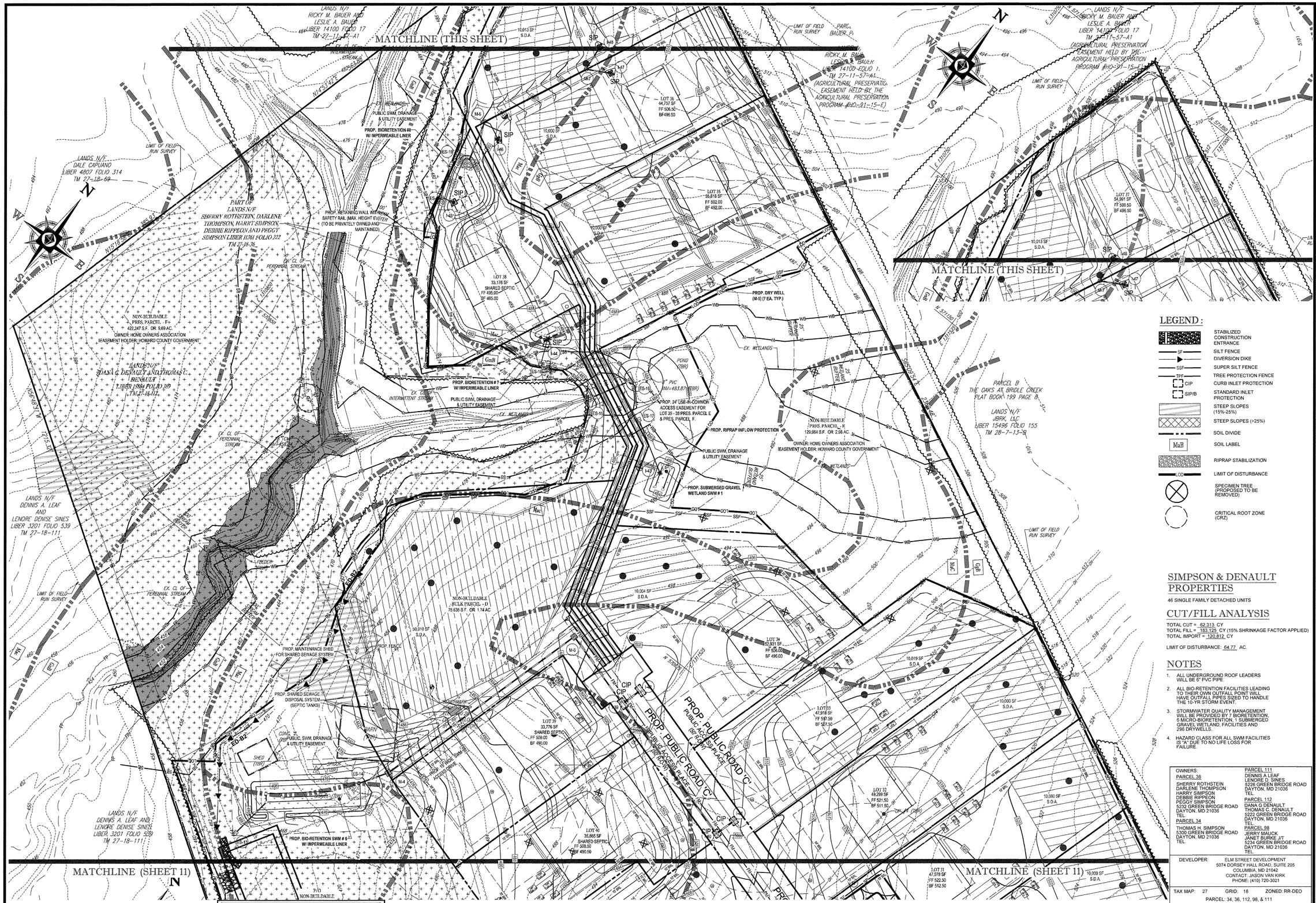
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
STATE OF MARYLAND LICENSE NO. 40808
10/3/17

SHEET TITLE:
SEDIMENT CONTROL AND ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
11 OF 13

ECP-16-025



LEGEND:

- STABILIZED CONSTRUCTION ENTRANCE
- SF — SILT FENCE
- DIVERSION DIKE
- SSF — SUPER SILT FENCE
- TPF — TREE PROTECTION FENCE
- CIP — CURB INLET PROTECTION
- SIP/B — STANDARD INLET PROTECTION
- STEEP SLOPES (15%-25%)
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SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

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TOTAL CUT = 62,313 CY
TOTAL FILL = 183,125 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 120,812 CY

LIMIT OF DISTURBANCE: 64.77 AC.

NOTES

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3. STORMWATER QUALITY MANAGEMENT WILL BE PROVIDED BY 7 BIORETENTION, 6 MICRO-BIORETENTION, 1 SUBMERGED GRAVEL WETLAND, FACILITIES AND 296 DRYWELLS.
4. HAZARD CLASS FOR ALL SWM FACILITIES IS "A" DUE TO NO LIFE LOSS FOR FAILURE.

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PARCEL 34 THOMAS H. SIMPSON 5300 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL	PARCEL 98 JERRY MAUCK JANET BURKE J/T 5234 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL

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APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10-2-17

50 25 12.5 0 50
1"= 50'

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
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SURVEYORS
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ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICE: WARREN, NJ
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FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K
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HOWARD COUNTY, MARYLAND

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B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE NO. 40808
10/3/17

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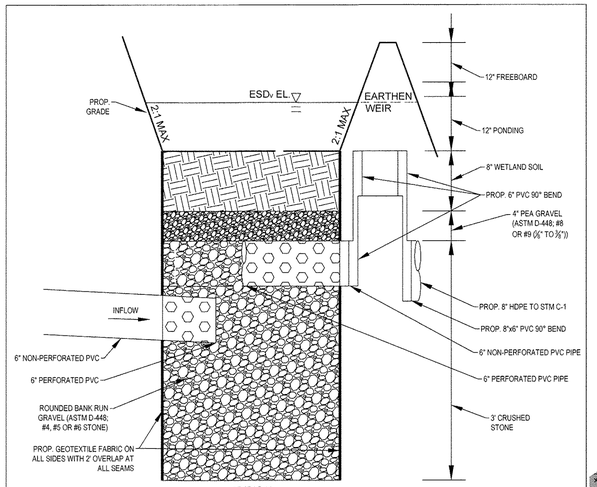
SHEET NUMBER:
12 OF 13

ECP-16-025



TYPICAL

SUBMERGED GRAVEL WETLAND FACILITY SECTION

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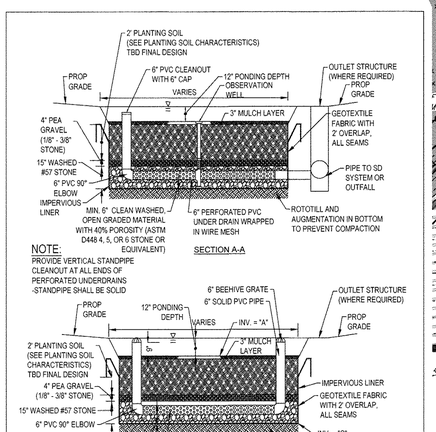
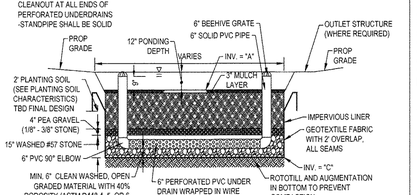


SECTION A-A

NOTE:
PROVIDE VERTICAL STANDPIPE CLEANOUT AT ALL ENDS OF PERFORATED UNDERDRAINS
-STANDPIPE SHALL BE SOLID



SECTION B-B

NOTE:
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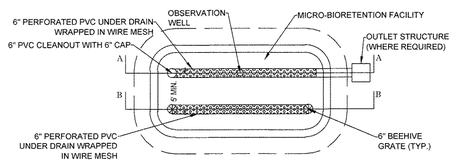
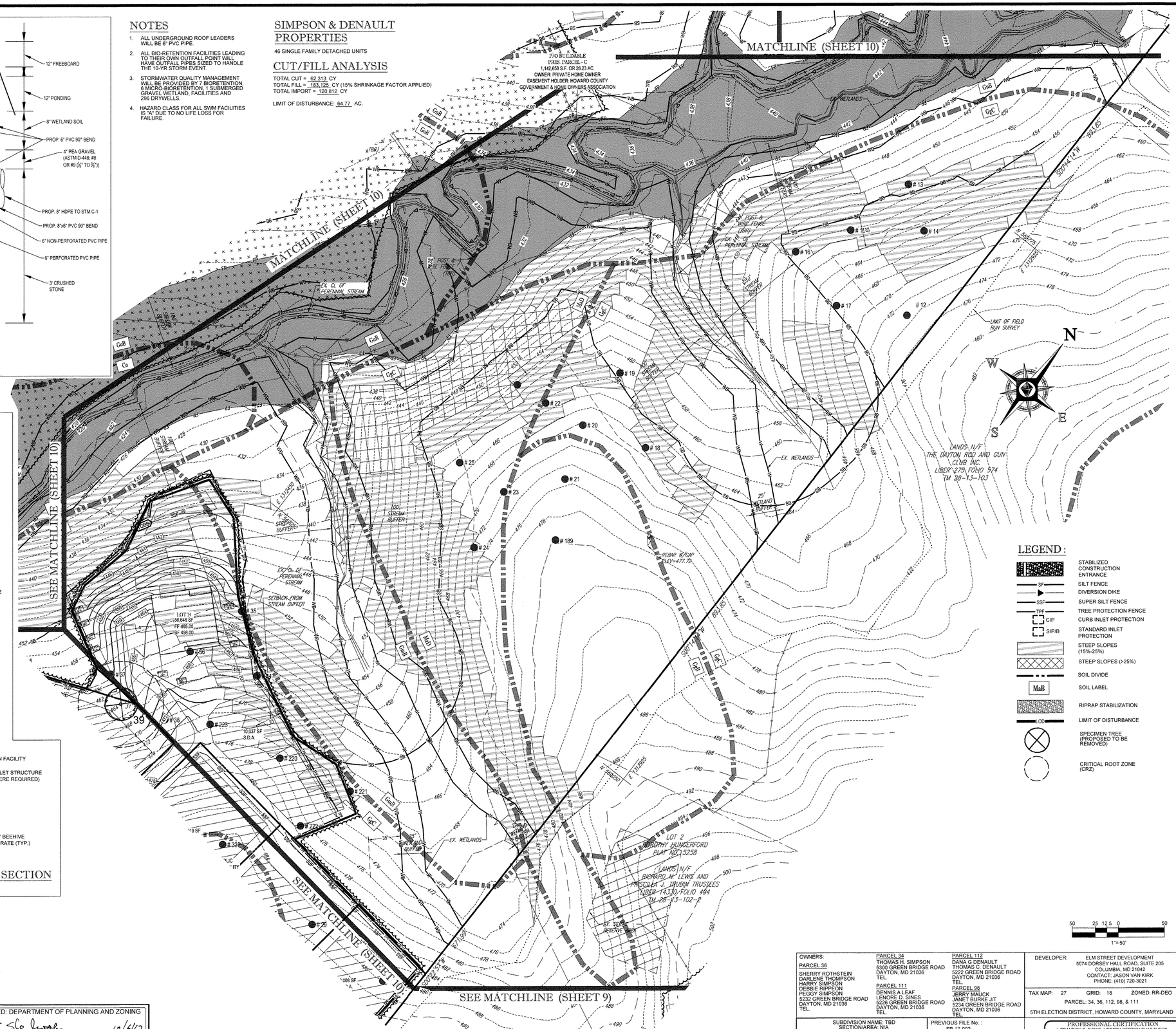


PLAN VIEW

TYPICAL MICRO-BIORETENTION FACILITY SECTION

NOT TO SCALE



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OWNERS:	PARCEL 34	PARCEL 112
PARCEL 36	THOMAS H. SIMPSON	DANA G DENAULT
SHERRY ROTHSTEIN	5300 GREEN BRIDGE ROAD	THOMAS C. DENAULT
DARLENE THOMPSON	DAYTON, MD 21036	5222 GREEN BRIDGE ROAD
HARRY SIMPSON	TEL.	DAYTON, MD 21036
DEBBIE RIPPEON	PARCEL 111	TEL.
PEGGY SIMPSON	DENNIS A LEAF	PARCEL 98
5232 GREEN BRIDGE ROAD	LENORE D. SINES	JERRY MAUCK
DAYTON, MD 21036	5226 GREEN BRIDGE ROAD	JANET BURKE JT
TEL.	DAYTON, MD 21036	5234 GREEN BRIDGE ROAD
	TEL.	DAYTON, MD 21036
		TEL.

DEVELOPER: ELM STREET DEVELOPMENT
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APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/6/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 10-12-17

BOHLER ENGINEERING
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OFFICES: SOUTHBOROUGH, MA; ALBANY, NY; BOHLER ENGINEERING OF VIRGINIA, LLC; CHALLENT, PA; CENTER VALLEY, PA; FORT LAUDERDALE, FL; TOWSON, MD; WOODBRIDGE, VA
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