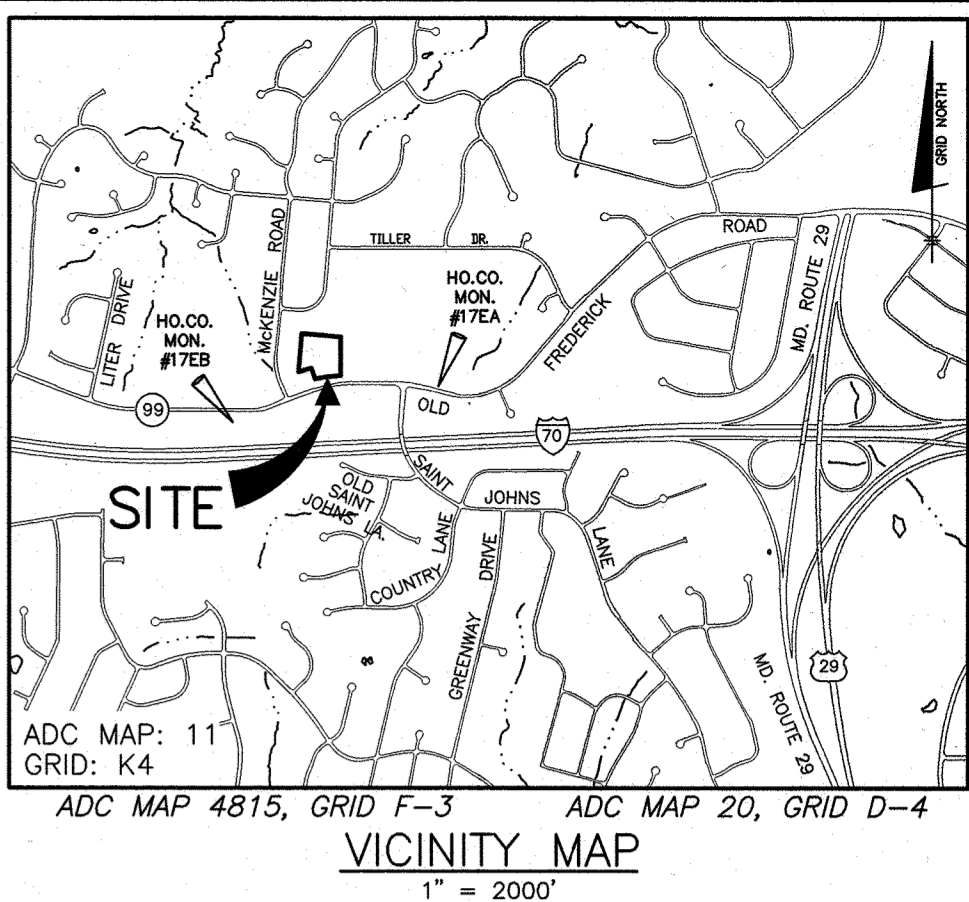


ECP Site Analysis Data Sheet	
Gross Area	3.99 ac
100yr Floodplain	0.00 ac
Slopes 15% or Greater	0.00 ac
Wetlands	0.00 ac
Wetlands Buffer	0.00 ac
Stream	0.00 ac
Stream Buffer	0.00 ac
Forested Area(Excluding Floodplain)	3.10 ac
Erodable Soils(DS/So)	0.00 ac
Right-of-Way Dedication	0.00 ac
Net Site Area	3.99 ac
Limit of Disturbance	3.79 ac
Impervious Area (Developed)	1.00 ac
Green Space(Within LOD)	2.79 ac

**BENCH MARKS - NAD '83**  
 HO. CO. #17EA ELEV. 479.48  
 STAMPED BRASS DISK SET ON TOP OF CONC. (3" DEEP) COLUMN LOCATED IN THE ISLAND IN FRONT OF MOUNT HEBRON HIGH SCHOOL, 33.7' SOUTH OF THE FLAG POLE AND 21.3' NORTH OF THE CURB AND 49.7' WEST OF A 15' WHITE PINE.  
 N 594,357.7264' E 1,357,519.3741'  
 HO. CO. #17EB ELEV. 454.18  
 STAMPED BRASS DISK SET ON TOP OF CONC. (3" DEEP) COLUMN LOCATED 224' WEST OF THE ENTRANCE TO BETHANY FIRE STATION, 19' SOUTH OF THE CL. OF OLD FREDERICK ROAD AND 38.6' EAST OF G&E POLE #474631.  
 N 593,814.0053' E 1,355,731.8864'



**GENERAL NOTES**

- SUBJECT PROPERTY IS ZONED R-20 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY DEED PLOT BY BENCHMARK ENGINEERING, INC. IN AUGUST, 2021. THE EXISTING TOPOGRAPHY IS BASED ON FIELD SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. IN AUGUST, 2021. EXISTING UTILITIES ARE BASED ON FIELD SURVEY AND HOWARD COUNTY GIS.
- THERE ARE NO WETLANDS, STREAMS, THEIR BUFFERS, 100-YEAR FLOODPLAIN OR 25% OR GREATER STEEP SLOPES WITH MORE THAN 20,000SF OF CONTIGUOUS AREA LOCATED ON THIS PROJECT SITE.
- THIS SITE IS WITHIN THE METROPOLITAN DISTRICT.
- TO THE BEST OF OUR KNOWLEDGE, INFORMATION, AND BELIEF, THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES LOCATED ON THIS SITE.
- THE FOREST STAND DELINEATION REPORT AND THE WETLANDS CERTIFICATION LETTER WERE PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED NOVEMBER 11, 2021.
- THIS PROJECT IS SUBJECT TO THE FOREST CONSERVATION REQUIREMENTS. FOREST CONSERVATION CHECKLIST AND PLAN SHALL BE PART OF THE FINAL PLAN SUBMITTAL.
- APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION AND/OR SITE DEVELOPMENT PLAN.
- 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 AND/OR SITE DEVELOPMENT PLAN STAGES. THEREFORE, THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS (INCLUDING THOSE THAT MAY ALTER OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES.
- STORMWATER MANAGEMENT PRACTICES SHOWN ON THIS PLAN ASSUME ADEQUATE SOIL BORING TEST RESULTS. THE DESIGN MAY NEED TO BE ADJUSTED AT THE PRELIMINARY PLAN STAGE AFTER SOIL BORING TESTING HAS BEEN COMPLETED AND AN ALTERNATE PRACTICE MAY NEED TO BE UTILIZED.
- THE SEDIMENT AND EROSION CONTROL SHOWN IN THIS PLAN SET IS A SCHEMATIC PRELIMINARY DESIGN. A MORE DETAILED DESIGN COMPLETE WITH SEQUENCE OF CONSTRUCTION, NOTES, DETAILS AND COMPUTATIONS SHALL BE PROVIDED AT THE PRELIMINARY PLAN STAGE.
- THE STORMWATER MANAGEMENT SYSTEM SHOWN ON THIS PLAN IS AN APPROXIMATION OF THE SIZE, SHAPE, AND LOCATION. IT IS UNDERSTOOD THAT THIS SYSTEM HAS NOT BEEN DESIGNED AND THE ACTUAL DESIGN MAY CHANGE, ALTERING THE NUMBER OF UNITS ALLOCATED FOR THIS DEVELOPMENT.

**DESIGN NARRATIVE:**  
 THERE ARE NO WETLANDS, STREAMS, THEIR REQUIRED BUFFERS, 100-YEAR FLOODPLAIN OR STEEP SLOPES LOCATED ON THIS PROPERTY. THERE ARE NO NATURAL RESOURCES TO BE PRESERVED. THE MAJORITY OF THE PROPERTY IS FORESTED AND THERE ARE 10 SPECIMEN TREES ON THE PROPERTY. TREES WILL BE REMOVED AS PART OF THE DEVELOPMENT. THE ACTUAL NUMBER OF SPECIMEN TREES REMOVED WILL BE DETERMINED AS THE DESIGN AND PLANS PROGRESS.

EXISTING FLOW PATTERNS SHALL BE MAINTAINED. THE PROPOSED OVERALL DRAINAGE PATTERNS SHALL MIMIC THE EXISTING CONDITION DRAINAGE PATTERN OF WEST AND EAST FLOW.

IMPERVIOUS AREAS ARE BEING MINIMIZED AND WILL ONLY CONSIST OF THE PROPOSED DRIVEWAYS AND ROOFTOPS.

SEDIMENT AND EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE 2011 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. OFFSITE CLEAN WATER SHALL BE DIVERTED AROUND THE SITE. THE ENTIRE PERIMETER OF THE LIMIT OF DISTURBANCE SHALL INCLUDE CONTROLS SUCH AS SILT FENCE, SUPER SILT FENCE, DIVERSION FENCING AND/OR DIKES BASED ON TOPOGRAPHY. THERE ARE NO IMPACTS TO THE STORMWATER MANAGEMENT DESIGN BASED ON SEDIMENT AND EROSION CONTROL.

THE 26 PROPOSED (M-5) DRY WELLS, AND 7 PROPOSED (M-6) MICRO BIO-RETENTION SHALL ADEQUATELY TREAT THE PROPOSED IMPERVIOUS AREAS. THE PRACTICES SHALL ALL DISCHARGE AT A LOCATION THAT IS NOT DETRIMENTAL TO THE ADJACENT PROPERTIES.

AT FUTURE STAGES OF THE PROJECT, ADDITIONAL TREATMENT PRACTICES MAY BE INVESTIGATED AND UTILIZED, IF POSSIBLE.

FULL TREATMENT OF THE ESDV IS BEING PROVIDED THEREFORE THIS PROJECT CAN BE CONSIDERED TO BE TREATED TO THE MAXIMUM EXTENT PRACTICAL.

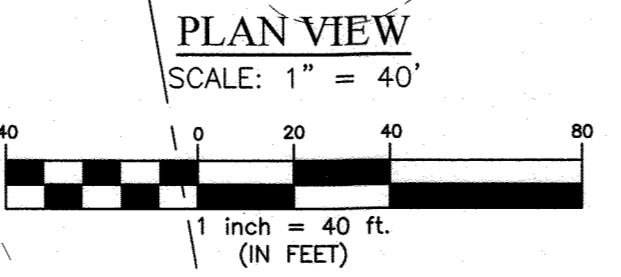
ESD STORMWATER MANAGEMENT SUMMARY TABLE																			
DRAINAGE AREA	MDE	Practice Type	BMP	No. Used	DA (sf)	Imp Area (sf)	% Imp	Rv	Pe required	Required		Provided		Ownership					
										Required	Provided	25 DA7	Required		Provided	REV	Provided		
(M-4)	(M-4)	Micro-Bio-retention	MB-1	1	11,885	4,945	41%	0.42	1.2	331	246.6	PASS	366	533	1.8	126	186	H.O.A.	
(M-4)	(M-4)	Micro-Bio-retention	MB-2	1	6,550	3,595	55%	0.54	1.2	191	100	PASS	191	273	1.7	48	80	H.O.A.	
(M-4)	(M-4)	Micro-Bio-retention	MB-5	1	3,956	1,900	48%	0.48	1.2	79.12	101.86	102	PASS	190	265	2.0	40	71	H.O.A.
(M-4)	(M-4)	Micro-Bio-retention	MB-6	1	5,083	1,500	30%	0.32	1.2	101.86	320	PASS	190	265	2.0	40	71	H.O.A.	
(M-4)	(M-4)	Micro-Bio-retention	MB-7	1	15,530	2,925	19%	0.22	1.2	310.6	320	PASS	341	570	2.0	85	106	H.O.A.	
(M-4)	(M-4)	Micro-Bio-retention	MB-4	1	11,852	4,805	41%	0.41	1.2	237.04	340	PASS	492	739	1.8	123	249	H.O.A.	
(M-4)	(M-4)	Micro-Bio-retention	MB-3	1	5,237	1,350	26%	0.28	1.2	104.74	111	PASS	148	247	2.0	37	44	H.O.A.	
LOT 1	(M-5)	Drywell	DW-2	2	1,476	1,476	100%	0.95	1.2	0	49	N/A	140	196	1.7			Private	
LOT 2	(M-5)	Drywell	DW-1	4	2,400	2,400	100%	0.95	1.2	0	39	N/A	228	313	1.6			Private	
LOT 3	(M-5)	Drywell	DW-1	4	2,400	2,400	100%	0.95	1.2	0	39	N/A	228	313	1.6			Private	
LOT 4	(M-5)	Drywell	DW-1	4	2,400	2,400	100%	0.95	1.2	0	39	N/A	228	313	1.6			Private	
LOT 5	(M-5)	Drywell	DW-1	4	2,400	2,400	100%	0.95	1.2	0	39	N/A	228	313	1.6			Private	
LOT 6	(M-5)	Drywell	DW-1	4	2,400	2,400	100%	0.95	1.2	0	39	N/A	228	313	1.6			Private	
LOT 7	(M-5)	Drywell	DW-1	4	2,400	2,400	100%	0.95	1.2	0	39	N/A	228	313	1.6			Private	
OFFSITE	(N-2)	Non-Rooftop Disconnection	NRDC-1	1	6,180	2,392	39%	0.40	1.2	0	3788	N/A	205	126	0.6			Public	
OFFSITE	(N-2)	Non-Rooftop Disconnection	NRDC-2	1	1,025	410	40%	0.41	1.2	0	615	N/A	35	21	0.6			Public	
Totals per Individual Drainage Areas				35	83,274	38,698	46%	0.26				3941	5910	1.5	886	885			
Totals per Overall Site					173,760	34,752	20%	0.23	1.2			3996	5910		885	885			

**LEGEND**

- SOILS CLASSIFICATION: AbC
- SOILS DELINEATION: ---999---
- EXISTING CONTOURS: ---999---
- PROPOSED CONTOURS: ---999---
- EXISTING STRUCTURE: [Symbol]
- PROPOSED STRUCTURE: [Symbol]
- EXISTING TREELINE: [Symbol]
- PROPOSED TREELINE: [Symbol]
- DRYWELL DRAINAGE AREA: [Symbol]
- MICRO-BIO DRAINAGE AREA: [Symbol]
- LIMIT OF DISTURBANCE: [Symbol]
- SILT FENCE: [Symbol]
- STABILIZED CONSTRUCTION ENTRANCE: [Symbol]
- STOCKPILE: [Symbol]
- PAVING IMPERVIOUS AREA: [Symbol]
- DWELLING PERVIOUS AREA: [Symbol]
- SPECIMEN TREE: [Symbol]

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 3-21-22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JP  
 [Signature] 2/2/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT

SOILS CHART - SOL SURVEY HOWARD COUNTY, MARYLAND				
SYMBOL	HYDRIC GROUP	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME
GgC	B			GLENELG LOAM, 8 TO 15 PERCENT SLOPES
GhB	B	D		GLENELG URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES



**BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE SUITE 315 A ELICOTT CITY, MARYLAND 21043  
 (P) 410-465-8100 (F) 410-465-8844  
 WWW.BE-CVLENGINEERING.COM

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. 22707, effective 06/26/2019 to 06/26/2023.

**OWNER/DEVELOPER:** BECKER BUILDING COMPANY, LLC  
 2077 SOMERVILLE ROAD SUITE 206 ANNAPOLIS, MD 21401

**9572 OLD FREDERICK ROAD SUBDIVISION**

TAX MAP: 17 - GRID: 15 - PARCEL: 359  
 ZONED: R-20  
 ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

**ENVIRONMENTAL CONCEPT PLAN**

DATE: JANUARY, 2022 BEI PROJECT NO. 3013  
 SCALE: 1" = 30' SHEET 1 OF 1

ECP-22-022