

DOWNTOWN COLUMBIA

MERRIWEATHER - SYMPHONY WOODS NEIGHBORHOOD

TOWN CENTER SECTION 1 AREA 1

PART OF OPEN SPACE LOT 23 - PLAT # 22123

& PART OF OPEN SPACE LOT 9B PB15 P632

CLIENT

MICHAEL MCCALL
 INNER ARBOR TRUST
 10630 LITTLE PATUXENT PARKWAY
 CENTURY PLAZA SUITE 315
 COLUMBIA, MD 21044

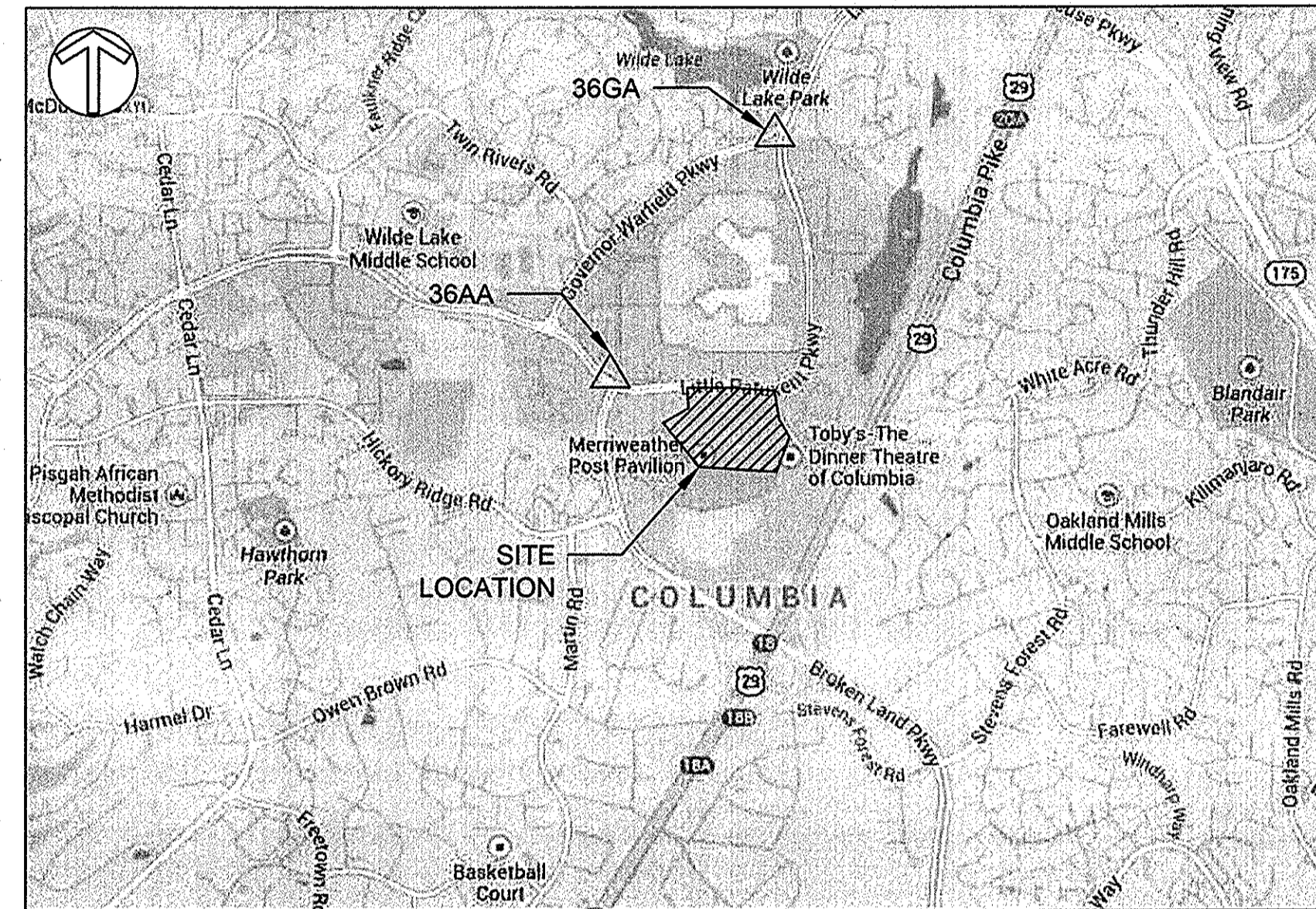
DATE	ISSUES / REVISIONS
5/2/2014	REVISION 1
7/10/2014	REVISION 2

INDEX OF SHEETS

- 1 COVER SHEET
- 2 ENVIRONMENTAL CONCEPT PLAN

LEGEND

EXISTING	PROPOSED
--- MAJOR CONTOUR	--- DRAINAGE AREA BOUNDARY
--- MINOR CONTOUR	--- SUB-DRAINAGE AREA BOUNDARY
SS SANITARY SEWER	--- LIMIT OF SUBMISSION
--- STREAM CENTERLINE	SD 8" SD STORM DRAIN
SD STORM DRAIN	BERM
W WATER SUPPLY	RAIN GARDEN
E ELECTRIC	COBBLE OUTFALL
G GAS	RAINWATER HARVESTING
C COMMUNICATIONS	LANDSCAPE BERM
--- PROPERTY LINE	PERMEABLE PAVING
--- EASEMENT	IMPERVIOUS PAVING
--- VEGETATION	FLEXIBLE PERVIOUS PAVING
WUS WATERS OF THE U.S.	DECORATIVE PERMEABLE PAVERS (VEHICULAR)
SB STREAM BUFFER	DECORATIVE PERMEABLE PAVERS (PEDESTRIAN)
WB WETLAND BUFFER	MULCH FOOTPATH
△ TRAVERSE POINT	WOOD DECKING
SLOPES >25%	STONE DUST
WETLAND	COBBLE STONE EDGE
TREE	DIRECTION OF STORMWATER FLOW
18" TREE	W WATER LINE
	SS SANITARY SEWER LINE
	4" SHC
	1" WHC
	SSF SUPER SILT FENCE
	⊗ TREE REMOVAL



SCALE 1" = 2,000' VICINITY MAP

ADC MAP COORD. MAP: 4935 GRID: C7

COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS Nos. 36AA, 36GA
 THE ELEVATIONS SHOWN HEREON ARE BASED ON NAVD '88 DATUM.

SITE ANALYSIS DATA CHART

TOTAL PROJECT AREA: 216,196 SF OR 4.98 AC
 LIMIT OF DISTURBED AREA: 230,576 SF OR 5.29 AC
 WETLAND AREA - 0.04 AC
 WETLAND BUFFER AREA - 0.05 AC
 FLOODPLAIN AREA - 0.0 AC
 FLOODPLAIN BUFFER AREA - 0.0 AC
 FOREST AREA - 2.3 AC
 STEEP SLOPES AREA - 0.8 AC
 ERODIBLE SOILS AREA - 0.5 AC
 PROPOSED USE - OPEN SPACE
 PROPOSED IMPERVIOUS AREA - 1.0 AC

GENERAL NOTES

- NO 100 YEAR FLOODPLAINS ARE LOCATED WITHIN OR ADJACENT TO THE PROJECT AREA.
- NO CRITICAL HABITATS FOR RARE, THREATENED OR ENDANGERED SPECIES ARE PRESENT WITHIN THE PROJECT AREA.
- NO HISTORIC STRUCTURES OR OTHER HISTORIC RESOURCES ARE PRESENT WITHIN THE PROJECT AREA.
- PLANT COMMUNITY TYPES ON-SITE INCLUDE FOREST (F1) AND TREE CANOPY (T).
- SOIL TYPES ARE TAKEN FROM HOWARD COUNTY SOIL MAP NO. 18 SAVAGE NW.
- ADJACENT LAND USES ARE COMMERCIAL (20 AND 22-15) AND INSTITUTIONAL (41-4).
- THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202(B)(IV) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SINCE THE SUBJECT PROPERTY IS PART OF A PLANNED UNIT DEVELOPMENT WHICH HAS PRELIMINARY DEVELOPMENT PLAN APPROVED AND WAS SUBSTANTIALLY DEVELOPED PRIOR TO 1992.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION 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 SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- FOREST STAND DELINEATION IS FOR INFORMATIONAL PURPOSES ONLY AND THAT THE SITE IS EXEMPT FROM FOREST CONSERVATION OBLIGATIONS PER SECTION 16.1202(B)(IV) OF THE HOWARD COUNTY CODE SINCE THE SITE IS PART OF A PLANNED UNIT DEVELOPMENT PREDOMINANTLY COMPLETED PRIOR TO 1992.

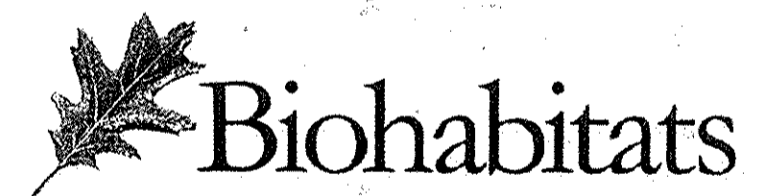
DESIGN NARRATIVE

THE DOWNTOWN COLUMBIA MERRIWEATHER SYMPHONY WOODS NEIGHBORHOOD IS ZONED AS DOWNTOWN PARKLAND. THE PROPOSED DEVELOPMENT ACTIVITIES WITHIN THE PARKLAND INCLUDE AMENITY STRUCTURES AND A PERMEABLE PATH NETWORK. CURRENTLY, THE MAJORITY OF THE SITE IS TREE COVERED WITH A TURF UNDERSTORY. PROPOSED IMPERVIOUS COVER WILL COME PRIMARILY FROM SERVICE ROADS, PARKING, AND THE ROOFTOPS OF THE BUTTERFLY BUILDING AND CHRYSALIS.

THE ENVIRONMENTAL CONCEPT PLAN INCLUDES THE CONCEPTUAL BASIS OF DESIGN FOR MEETING ENVIRONMENTAL SITE DESIGN (ESD) REQUIREMENTS TO THE MAXIMUM EXTENT PRACTICABLE (MEP). SINCE THE EXISTING TREE CANOPY SERVES AS AN IRREPLACEABLE MECHANISM FOR REDUCING STORMWATER AND DEFINES THE CHARACTER OF SITE, THE PLAN AIMS TO MAXIMIZE TREE RETENTION DURING CONSTRUCTION AND MAINTAIN TREE HEALTH IN PERPETUITY. AS SUCH, THE PROPOSED STORMWATER MANAGEMENT CONCEPT AIMS TO AVOID EXCAVATION THAT WOULD IMPACT THE CRITICAL ROOT ZONE OF THE EXISTING TREES AND ENHANCE THE EXISTING SOIL'S CAPACITY TO ABSORB PRECIPITATION, IMPEDE EXISTING FLOW PATHS AND RETAIN RUNOFF IN MICRO-POOLS TO PROMOTE INFILTRATION.

ALL PROPOSED PATHS WILL BE WOOD DECKING OR POROUS PAVING AND WERE EXCLUDED FROM IMPERVIOUS COMPUTATIONS BY DIRECTION FROM HOWARD COUNTY STAFF. LIKEWISE, PROPOSED PARKING SPACES WILL ALSO USE PERVIOUS PAVING. PRIMARY IMPERVIOUS AREAS ARE ASSOCIATED WITH PROPOSED BUILDINGS ON THE EASTERN PORTION OF THE SITE AND THE DRIVEWAY ON THE WESTERN PORTION. SOILS IN THE AREA OF DEVELOPMENT ARE PREDOMINATELY WELL DRAINING, GLADSTONE-LEGORE COMPLEX (GDB AND GDC) AND ARE CLASSIFIED AS HYDROLOGIC SOIL GROUP B (HSG-B). CISTERNS ARE ALSO INCLUDED TO CAPTURE RUNOFF FROM THE CHRYSALIS AMPHITHEATER AND THE BUTTERFLY BUILDING. A RAIN GARDEN IS PROPOSED TO TREAT STORMWATER ON THE WESTERN SIDE OF THE SITE. TOGETHER, THESE PRACTICES CAPTURE THE FULL ESD VOLUME. BERMS ARE PROPOSED THROUGHOUT THE SITE TO IMPEDE AND RETAIN RUNOFF, ENCOURAGE INFILTRATION AND CREATE MICROHABITATS. THESE ARE THOUGHT TO BE SUPPLEMENTARY FEATURES.

OTHER RESOURCES PRESENT ON THE SITE, BUT UNIMPACTED BY DEVELOPMENT ACTIVITIES, INCLUDE INTERMITTENT AND EPHEMERAL STREAM CHANNELS, ASSOCIATED STREAM BUFFERS AND STEEP SLOPES. SINCE THE SITE IS LOCATED IN DOWNTOWN, NO FOREST CONSERVATION PLAN IS REQUIRED. HOWEVER, A FOREST STAND DELINEATION WAS PREPARED AND SHOWS EXISTING ENVIRONMENTAL RESOURCES ON THE 16 ACRE SITE.



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 Restore the Earth & Inspire Ecological Stewardship

MERRIWEATHER - SYMPHONY WOODS NEIGHBORHOOD ECP

TITLE SHEET

PROJECT NO.: 13039.01 SCALE: AS SHOWN

SEAL: [Professional Engineer Seal] BY: TB CHECK: CS

DWS NO.: [Professional Engineer Seal]

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Ch. E. [Signature] 7-22-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

V. J. [Signature] 7/15/14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

PERMIT INFORMATION CHART

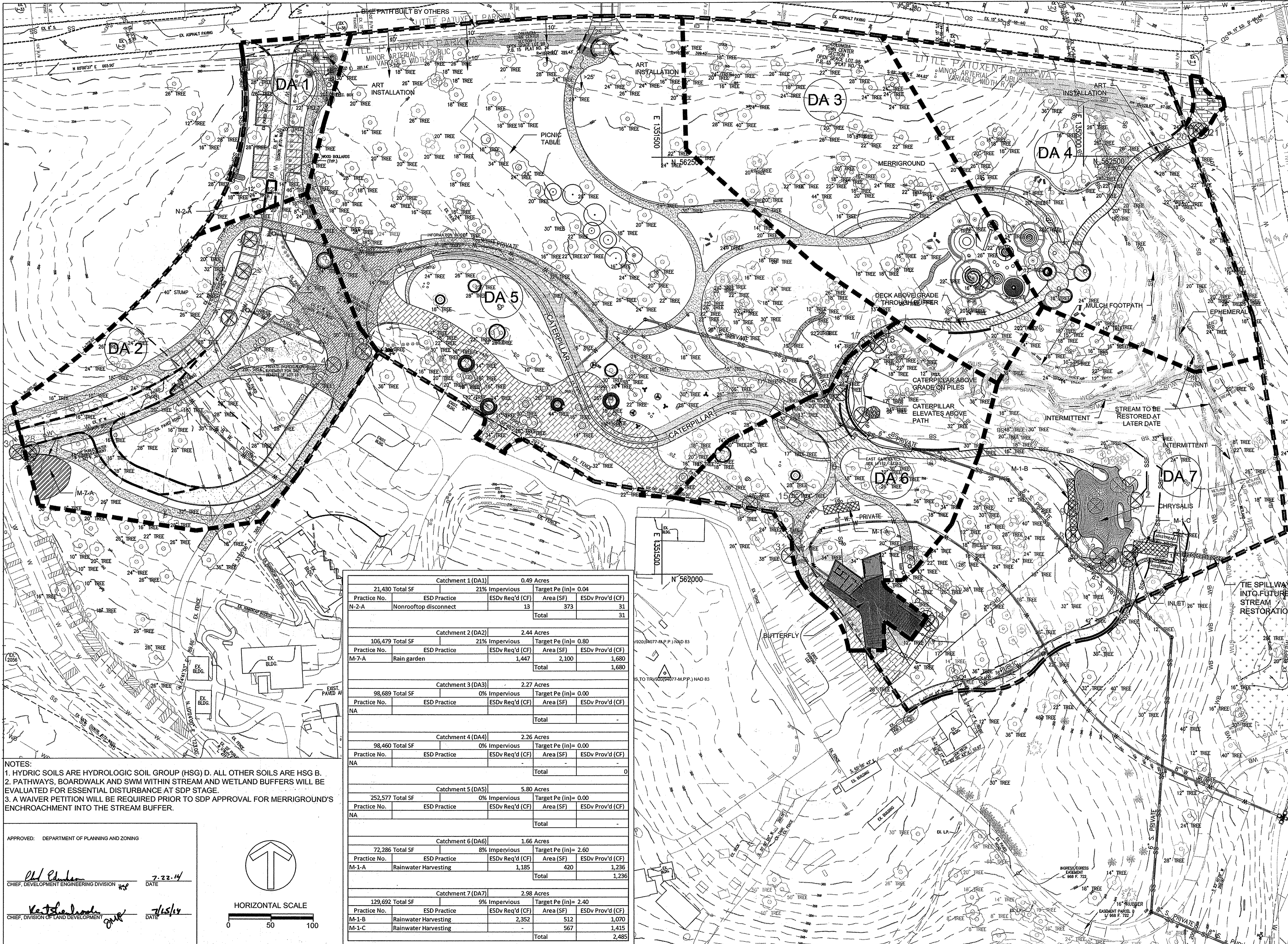
SUBDIVISION NAME COLUMBIA TOWN CENTER		SECTION/AREA 1/1	LOT/PARCEL# 23/452
PLAT# OR LUF 22123	GRID# 0001	ZONING NT	TAX MAP NO. 0036
WATER CODE PUBLIC		ELECT. DISTR. 5	CENSUS TRACT 6056.02
SEWER CODE PUBLIC			

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CLIENT

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DATE:	ISSUES / REVISIONS
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7/10/2014	REVISION 2



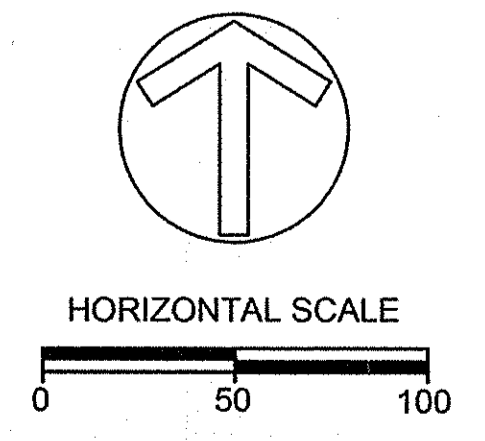
Catchment 1 (DA1) 0.49 Acres				
21,430 Total SF		21% Impervious	Target Pe (in) = 0.04	
Practice No.	ESD Practice	ESDv Req'd (CF)	Area (SF)	ESDv Prov'd (CF)
N-2-A	Nonrooftop disconnect	13	373	31
		Total		31
Catchment 2 (DA2) 2.44 Acres				
106,479 Total SF		21% Impervious	Target Pe (in) = 0.80	
Practice No.	ESD Practice	ESDv Req'd (CF)	Area (SF)	ESDv Prov'd (CF)
M-7-A	Rain garden	1,447	2,100	1,680
		Total		1,680
Catchment 3 (DA3) 2.27 Acres				
98,689 Total SF		0% Impervious	Target Pe (in) = 0.00	
Practice No.	ESD Practice	ESDv Req'd (CF)	Area (SF)	ESDv Prov'd (CF)
NA				
		Total		0
Catchment 4 (DA4) 2.26 Acres				
98,460 Total SF		0% Impervious	Target Pe (in) = 0.00	
Practice No.	ESD Practice	ESDv Req'd (CF)	Area (SF)	ESDv Prov'd (CF)
NA				
		Total		0
Catchment 5 (DA5) 5.80 Acres				
252,577 Total SF		0% Impervious	Target Pe (in) = 0.00	
Practice No.	ESD Practice	ESDv Req'd (CF)	Area (SF)	ESDv Prov'd (CF)
NA				
		Total		0
Catchment 6 (DA6) 1.66 Acres				
72,286 Total SF		8% Impervious	Target Pe (in) = 2.60	
Practice No.	ESD Practice	ESDv Req'd (CF)	Area (SF)	ESDv Prov'd (CF)
M-1-A	Rainwater Harvesting	1,185	420	1,236
		Total		1,236
Catchment 7 (DA7) 2.98 Acres				
129,692 Total SF		9% Impervious	Target Pe (in) = 2.40	
Practice No.	ESD Practice	ESDv Req'd (CF)	Area (SF)	ESDv Prov'd (CF)
M-1-B	Rainwater Harvesting	2,352	512	1,070
M-1-C	Rainwater Harvesting		567	1,415
		Total		2,485

NOTES:
 1. HYDRIC SOILS ARE HYDROLOGIC SOIL GROUP (HSG) D. ALL OTHER SOILS ARE HSG B.
 2. PATHWAYS, BOARDWALK AND SWM WITHIN STREAM AND WETLAND BUFFERS WILL BE EVALUATED FOR ESSENTIAL DISTURBANCE AT SDP STAGE.
 3. A WAIVER PETITION WILL BE REQUIRED PRIOR TO SDP APPROVAL FOR MERRIGROUND'S ENCHROACHMENT INTO THE STREAM BUFFER.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 7-22-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 7/23/14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE



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ENVIRONMENTAL
 CONCEPT PLAN

PROJECT NO.:	13039.01	SCALE:	1" = 50'
BY:	TB	CHECK:	CS
DWG. NO.:	2 OF 02		