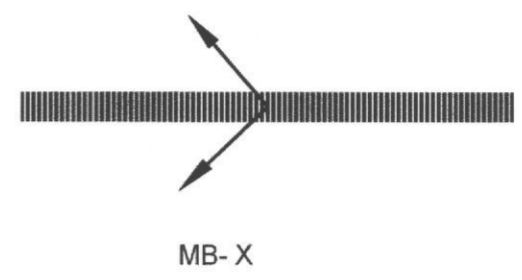


VICINITY MAP

LEGEND



DRAINAGE AREA DIVIDE
MICRO BIORETENTION

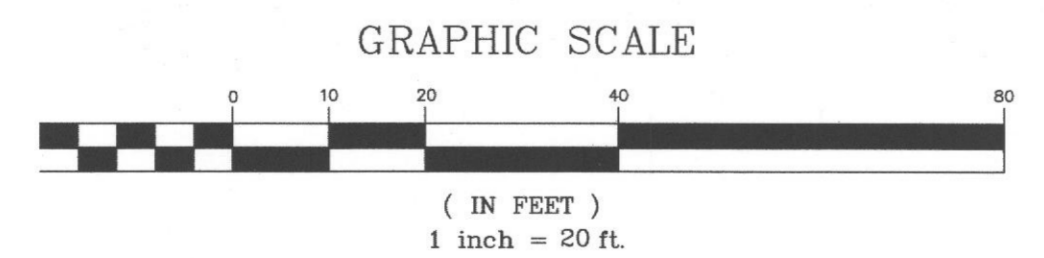
SEE SWM-4 AND SWM-5 FOR STORMWATER MANAGEMENT CALCULATIONS

PRACTICE	DIMENSION	CONTRIBUTING DRAINAGE AREA	IMP. AREA	REQ'D TREATMENT VOLUME, ESDv (cf)	75% ESDv (cf)	PROV'D STORAGE VOLUME, ESDv (cf)	RECHARGE VOLUME (cf)	Pi REQ'D	Pe PROV'D
Microbioretention-1	Area = 147.7sf 2' Media w/1' ponding	3405	2667	213	160	244	N/A	1.0 in	1.05 in
Microbioretention-2	Area = 83.86sf 2' Media w/1' ponding	3405	2667	213	160	232	N/A	1.0 in	1.62 in
Microbioretention-3	Area = 133.58sf 2' Media w/1' ponding	3405	2667	213	160	232	N/A	1.0 in	1.05 in
Microbioretention-4	Area = 133.58sf 2' Media w/1' ponding	3405	2667	213	160	232	N/A	1.0 in	1.62 in
Microbioretention-5	Area = 133.58sf 2' Media w/1' ponding	3405	2667	213	160	232	N/A	1.0 in	1.62 in
Microbioretention-6	Area = 146.7sf 2' Media w/1' ponding	3405	2667	213	160	273	N/A	1.0 in	
TOTAL		20430 SF	16002 SF	1277	958	1,445			

Existing Imp. Area	0.75	AC
Proposed Imp. Area	0.64	AC
New Imp. Area (Proposed Imp. Area - Ex. Imp. Area)	-0.11	AC
Redevelopment Imp. Area (1/2 Existing Imp. Area)	0.38	AC
Total Imp. Area to Treat (Redev. + New Imp.)	0.27	AC

ESDv = [(PE)*(RV)*(A)]/12	ESDv REQUIRED	75%
I = Imp Area / Drainage Area	REDEVELOPMENT	958 CU FT
PE = ESDv * 12 / Rv * A		
Rv = 0.05 + 0.009*I	ESDv PROVIDED =	1445 CU FT *

REQUIREMENT	VOLUME REQ'S (CUBIC FEET)		Discharge (CFS)		NOTE
	Existing	Proposed	Existing	Proposed	
ESDv	1277	1445 Cu Ft *	N/A	N/A	TREATMENT PROVIDED BY MICROBIORETENTION
Rev	N/A	N/A	N/A	N/A	REDEVELOPMENT
CPv	N/A	N/A	N/A	N/A	ADDRESSED BY ESDv
Qv	N/A	N/A	4.9	4.7	ADDRESSED BY ESDv
Qov	N/A	N/A	6.9	6.7	ADDRESSED BY ESDv



Architect

Architects & Design Consultants
 (434)260-1292
 ftemelisso.ftadc@gmail.com

Civil / Structural

M.A. Design Group LLC
 Consulting Engineers
 1705 Chester Mill Road
 Silver Spring, MD 20906

MEP

SiTa Engineering,
 1334 9th Street,
 NW Suite 206
 Washington DC, 20001

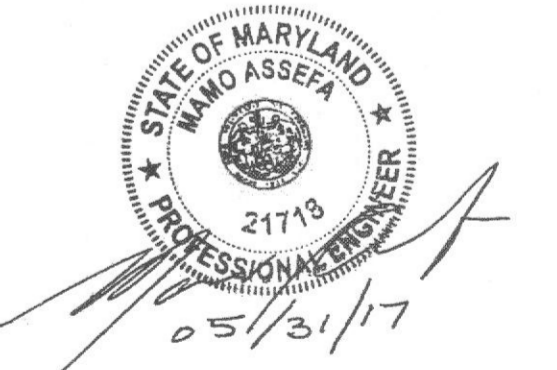
Owner / Client

Herena USA, LLC
 210 E. Lexington Street
 Baltimore, Maryland 21202

Herena USA
 E. Lombard Street
 1622-1634 Lombard Street
 922 S. Bethel Street
 Baltimore, MD 21212

REV	DESCRIPTION	DATE
4	SWM-ES	05/20/2017
3	SWM-ES	09/29/2016
2	SWM-ES	08/15/2016
1	BID-SET	02/5/2016

REVISION HISTORY



Date: 02/5/2016
 Project # 1501.01
QUALITY CONTROL
 E BMP DRAINAGE AREA MAP

SWM-3

ESD # 7121

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. 21718, Expiration Date: 2017-09-16