ENVIRONMENTAL SITE DESIGN SUMMARY TABLE

PRACTICE	DIMENSIONS	DRAINAGE AREA (ac)	IMP. AREA (ac)	STORAGE VOLUME, ESDv (cf)	TREATMENT VOLUME, ESDv (cf)	RECHARGE VOLUME (cf)	P_E
MICROBIORETENTION #1	AREA = 1220 SF, 2.5' MEDIA W/ 6" PONDING	0.59	0.35	1830	2440	142	1.90
MICROBIORETENTION #2	AREA = 589 SF, 2.5' MEDIA W/6" PONDING	0.34	0.20	884	1178	69	1.65
	TOTALS	**0.93**	**0.55**	**2714**	**3618**	**211**	

Existing Imp. Area	0.18 ac
Proposed Imp. Area	0.59 ac
New Imp. Area (Proposed Imp. Area - Exist. Imp. Area)	0.41 ac
Redevelopment Imp. Area (1/2 Exist. Imp. Area)	0.09 ac
Total Imp. Area to Treat (Redev. + New Imp.)	**0.50 ac**
Total Imp. Area Treated by Bioretention	**0.55 ac**

ESD_V PROVIDED	**3618 cf**
ESDv REQUIRED	**3579 cf**

RECHARGE PROVIDED	**211 cf**
RECHARGE REQUIRED	**197 cf**

*NOTE: MICROBIORETENTION FACILITIES ONLY STORE 75% OF THE ESD_V TREATMENT VOLUME. THE TOTAL ESD_V PROVIDED IN THE ABOVE TABLE IS THE 100% ESD_V BEING TREATED BY MICROBIORETENTION #1 & #2.

$ESD_v = [(P_E)*(R_v)*(A)]/12$
I = Imp. Area / Drainage Area
$P_E = ESD_V * 12 / R_V * A$
$R_V = 0.05 + 0.009 * (I)$

TABLE 1–A

STORMWATER MANAGEMENT STORAGE REQUIREMENTS

REQUIREMENT	VOLUME REQ'D (CUBIC FEET)	VOL. PROVIDED (CUBIC FEET)	EXIST. DISCHARGE	PROP. DISCHARGE	NOTES
ESD_V	3579	3618	N/A	N/A	TREATMENT PROVIDED BY MICROBIORETENTION
R_{EV}	197	211	N/A	N/A	PROVIDED BY GRAVEL BED IN MICROBIORETENTION BELOW THE UNDERDRAIN
C_{PV}	N/A	N/A	N/A	N/A	ADDRESSED BY ESD_V
Q_{10}	N/A	N/A	41.29 CFS	40.31 CFS	ADDRESSED BY ESD_V
Q_{100}	N/A	N/A	64.91 CFS	64.37 CFS	ADDRESSED BY ESD_V