

ESD Computations	
NORTON #	21-139
Property Address	Treeman Property
Site Area (SURVEY PROPERTY AREA)	91,627 SF
Site Area (SURVEY STUDY AREA)	91,627 SF
Total LOD Area:	57,400 SF
LOD in property:	57,400 SF
LOD outside property:	- SF
Soil Type:	B
Impervious Cover	SF
Existing Asphalt drive to remain	3,990 SF
Existing house/walkways/paths to remain	2,190 SF
Proposed:	
Gravel parking lot	35,223 SF
	SF
	SF
	SF
Total Proposed	35,223 SF
Total Impervious Proposed Project	35,223 SF
Total Impervious in Property	41,409 SF
Impervious % for Pe	45.2 = (41,409/91,627)
Impervious % for Rv	61.4 = (35,223/57,400)
RCN for Woods	55
PE	1.8 in
Rv	0.602 = (0.05+0.009*61.4)
ESDv REQUIRCD	5100 CF = (1.0*0.602*57,400)/12

### STORMWATER MANAGEMENT STATEMENT

ESD IS PROVIDED BY 2 LANDSCAPE INFILTRATION FACILITIES.  
(SEE DRAINAGE AREA ANALYSIS SHEET L-1.1).

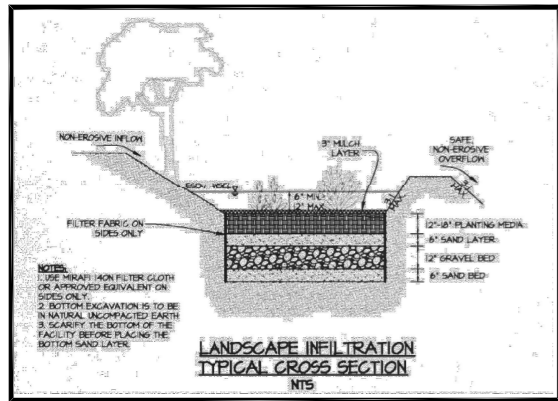
### FACILITY DRAINAGE NOTE

ALL WATER PER DRAINAGE AREA IS REQUIRED TO BE DIRECTED TOWARD RECEIVING STRUCTURE.

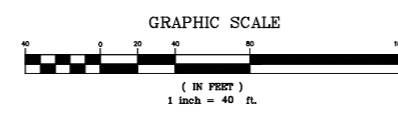
DRAINAGE AREA ANALYSIS														
D.A. NUMBER	DRAINAGE AREA (SF)	IMPERVIOUS (SF)	IMPERVIOUS %	MAX VOLUME PE=2.6"	MIN VOLUME PE=1.0"	TREATMENT STRUCTURE	STRUCTURE LABEL	STRUCTURE DIMENSIONS				STRUCTURE CAP. (CF)	ESDv TREATED (CF)	
								LENGTH (FT)	WIDTH (FT)	AREA (SF)	DEPTH POND (FT)			DEPTH MEDIA (FT)
1	19,984	17,284	86	3,550	1,365	LANDSCAPE INFILTRATION	A	60	17		1	4	2652	2,652
2	18,653	12,820	69	2,707	1,041	LANDSCAPE INFILTRATION	B	60	17		1	4	2652	2,652
											PE REQUIRED = 1.8"	ESD TREATED	5,304	
												ESD REQUIRED	5,186	

LANDSCAPE INFILTRATION CALCULATIONS	
TREEMAN PROPERTY	
Norton #21-139	
Facility - LANDSCAPE INFILTRATION A, D.A.=19,984 SF	
ESDv (MAX) =	(2.6 * .82 * 19984)/12 = 3550 CF
ESDv (MIN) =	(1.0 * .82 * 19984)/12 = 1365 CF
Structure Capacity	(1020*1.0) + (.4*1020*4.0) = 2652 CF
Calculation of Rv for Landscape Infiltration:	
Total Drainage Area	19984 SF
Overland impervious	17284 SF
Total impervious	17284 SF
% Impervious =	17,284/19,984*100 = 86%
Rv=0.05+(.009xI) =	0.05+(.009x86)
Rv =	.82
Facility - LANDSCAPE INFILTRATION B, D.A.=18,653 SF	
ESDv (MAX) =	(2.6 * .67 * 18653)/12 = 2707 CF
ESDv (MIN) =	(1.0 * .67 * 18653)/12 = 1041 CF
Structure Capacity	(1020*1.0) + (.4*1020*4.0) = 2652 CF
Calculation of Rv for Landscape Infiltration:	
Total Drainage Area	18653 SF
Overland impervious	12820 SF
Total impervious	12820 SF
% Impervious =	12,820/18,653*100 = 69%
Rv=0.05+(.009xI) =	0.05+(.009x69)
Rv =	.67

- ### LEGEND
- EXISTING PROPERTY BOUNDARY
  - EXISTING ADJ PROPERTY BOUNDARY
  - - - 336 - - - EX. CONTOUR
  - LOD --- LIMITS OF DISTURBANCE
  - 512 --- PROPOSED CONTOUR
  - FACILITY DRAINAGE AREA
  - PROPOSED LANDSCAPE INFILTRATION FACILITY
  - OFFSITE DRAINAGE AREA
  - EXISTING PROPERTY BOUNDARY
  - EXISTING ADJ PROPERTY BOUNDARY
  - - - 336 - - - EX. CONTOUR
  - 440 --- PROPOSED CONTOUR
  - 2' MNCPPC GIS TOPO --- SURVEY BOUNDARY
  - 2' SURVEY TOPO ---
  - TREE CANOPY FOR AERIAL PHOTO ---
  - PROPOSED LANDSCAPE INFILTRATION ---
  - LOD --- LOD --- LIMIT OF DISTURBANCE
  - PROPOSED LAWN ---
  - BUILDING RESTRICTION LINE/CONDITIONAL USE SETBACK ---
  - PROPOSED GRAVEL PARKING (INCLUDES SOME OF THE EXISTING GRAVEL AREA) ---
  - EXISTING ASPHALT ---
  - WATERSHED BOUNDARY ---



FOR LANDSCAPE INFILTRATION A: ESDv = PONDING DEPTH (1') STORAGE FILTER IN MEDIA (4.0')  
 FOR LANDSCAPE INFILTRATION B: ESDv = PONDING DEPTH (1') STORAGE FILTER IN MEDIA (4.0')  
 \*BOTTOM OF FACILITIES ARE TO BE IN NATURAL ORIGINAL GRADE PER PLAN.



DRAINAGE AREA MAP STUDY  
SCALE: 1" = 40'

### MISS UTILITY

CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. BEFORE EXCAVATION THE CONTRACTOR IS RESPONSIBLE FOR CALLING TICKET CHECK AT 1-866-821-4226 TO VERIFY THAT ALL UTILITIES HAVE BEEN MARKED, 48 HOURS AFTER CALLING MISS UTILITY. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

### NOTE

ALL DISTURBED AREAS MUST BE TOPSOILED PER THE MONTGOMERY COUNTY "STANDARDS AND SPECIFICATIONS FOR TOPSOIL", PRIOR TO FINAL VEGETATIVE STABILIZATION.

Exhibit 11(b)  
OZAH Case No: CU 24-09

TITLE <b>STORMWATER MANAGEMENT CONCEPT PLAN</b>	
PROJECT TREEMAN PROPERTY 2230 SPENCERVILLE ROAD SPENCERVILLE, MD 20868 PARCEL 319 MONTGOMERY COUNTY, MD ELECTION DISTRICT 5	
PREPARED FOR <b>JOSE &amp; NELSY POLANCO</b> 16201 BATSON ROAD SPENCERVILLE, MD 20868 240.353.0444 treemaninc@gmail.com	
5146 DORSEY HALL DRIVE 2ND FLOOR ELLCOTT CITY, MD 21042 O:443.542.9199 NORTONLANDDESIGN.COM LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING	
REVISIONS 	
WATER CLASS TRIBUTARY	IP/IIP UNNAMED
TAX MAP	KS342
SCALE	AS SHOWN
DATE	MAY 2023
WATERSHED	LOWER PATUXENT UPPER PAINT BRANCH
FEMA FLOODPLAIN MAP PANEL #	24031C0380D
ADC MAP PAGE	22 OF 113
PROJ. NO.	21-139
SHEET NO.	SMSC002