ENVIRONMENTAL CONCEPT PLAN

W.F. WILSON & 50N5, INC.

PARCEL 378 AND PARCEL 'A' PLAT NO. 7657

ZONED: M-1

DESIGN NARRATIVE

Introduction:

This report will demonstrate how the criteria set forth in the Maryland Stormwater Design Manual, Volumes I and II (effective October 2000, revised May 2009) will be satisfied on this project. The goal of creating hydrology similar to that of "Woods in Good Condition" will be accomplished though the use of the practices contained within Chapter 5 of said manual. The achievement of this goal will remove the requirement of providing Channel Protection Volume.

This property is located on Tax Map 37, Parcel No. 652 & 370 on the Howard County, Maryland Tax Map Database System and consists of 9.30 acres of land. This site consist of two properties possessing approximately 300' of road frontage on Maryland Route 103 (Meadowridge Road). These properties share a common line running in a westerly direction for approximately 500'. At this point Parcel 652 extends approximately 650' into a larger wooded portion of the site. This wooded portion, where the a gravel storage area is being proposed, is estimated to be 6* acres in size. An elevation of 210 located in the area of the road frontage is lowest point of the site. The elevations increase from Maryland Route 103 to the west at a slope averaging 6% to a maximum elevation of 294 feet. There is an existing gravel area of approximately 44,905 5qFt. located on the eastern portion of the site. The adjoining property to the south contains a large warehouse and is part of the Meadowridge Business Park. To the north are several smaller formerly residential properties, which are now zoned M-1. There is also a portion of the northern boundary that is adjoined by the right-of-way of Interstate 95.

Natural Resource Protection:

The nature of this site and the needs of the future owner's business necessitate the need for the bulk of the improvements to be located outside of the pan handle area of the property. Limited by these constraints this design only allows for a small portion of the existing trees to be retained. It should be noted that the topography is favorable to allowing the Micro-Bioretetion facilities to be located near the perimeter of the property allowing additional buffering to the surrounding properties.

Maintenance of Natural Flow Patterns:
It is the intent of the proposed design to discharge runoff similar to the characteristics and direction of this site prior to any of the proposed improvements. Originally the site flows from west to east on a gradual slope, creating sheet flow towards existing parcels 370 and 335. This existing flow accumulates in an existing SWM facility, which is to be replaced with a Bio-retention Facility located on the east side of Parcel 370, then proceeds through a culvert to cross Meadowridge Road. The proposed drainage on this site is designed to be diverted through several Bio-retention facilities then piped through a storm drain system to a proposed structure located on the upstream side of the previous mentioned culvert, which has been shown to be replaced. Although the rear of the existing parcels will see a reduction of drainage, resulting in a possible improvement in the quality in these parcels, the overall flow patterns of this area will be maintained.

III. Reduction of impervious areas through better site design. alternative surfaces and Nonstructural Practices

Only the areas necessary to meet County requirements and provide a safe and effective work environment for this type of construction contractor are being paved. Although the impervious areas have increased, the entirety of them are treated and the full ESDV is met through use of chapter 5 storm water management practices.

N. Integration of Erosion and Sediment Controls into Stormwater Strategy:

This site will utilize areas designed as Bio-Retention facilities as sediment traps during construction.

V. Implementation of E5D Planning Techniques and practices to the Maximum Extent Practicable (MEP)

Several M-6 Micro Bio-retention, F-6 Bio-retention, and three areas of N-2 Non-Rooftop Disconnection Credit have been used to treat all proposed impervious areas. This type of commercial use requires a large unencumbered storage area which creates drainage areas of exceeding the 1/2 acre limit of the M-6 mirco-bioretention facilities. Where these scenarios are encountered, F-6 Bio-Retention facilities have been provided. In all cases the full required E5D volume is being provided.

Request for Design Manual Waiver:

No waivers are being requested at this time.

SITE ANALYSIS DATA CHART

A. TOTAL AREA OF THIS SUBMISSION = 9.30 ac.±.

B. LIMIT OF DISTURBED AREA = 305,576 5qft. or 0.05 Ac±.

C. PRESENT ZONING DESIGNATION = M-1

(PER 10/06/2013 COMPREHENSIVE ZONING PLAN AND THE COMP-LITE ZONING AMENDMENTS DATED 07/20/06).

D. PROPOSED USE: CONTRACTOR'S OFFICE, OUTDOOR AND INDOOR STORAGE FACILITY

E. OPEN SPACE ON SITE: N/A

G. BUILDING COVERAGE OF SITE: 12,075 SQ.FT. OR 0.30 Ac.±
H. PREVIOUS HOWARD COUNTY FILES: WP-00-32, F-00-156, ECP-13-064
I. TOTAL AREA OF FLOODPLAIN LOCATED ON SITE: 0.00 Ac.
J. TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.00 Ac.

K. NET TRACT AREA = 9.30 Ac±
(TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA)
L. TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 Ac±

M. TOTAL AREA OF FOREST = 6.0 Ac.*
N. TOTAL GREEN OPEN AREA = 4.85 Ac.*
O. TOTAL IMPERVIOUS AREA = 4.53 Ac.*
P. AREA OF ERODIBLE SOILS = 9.30 Ac.*

RECREATIONAL AREA PROVIDED: N/A

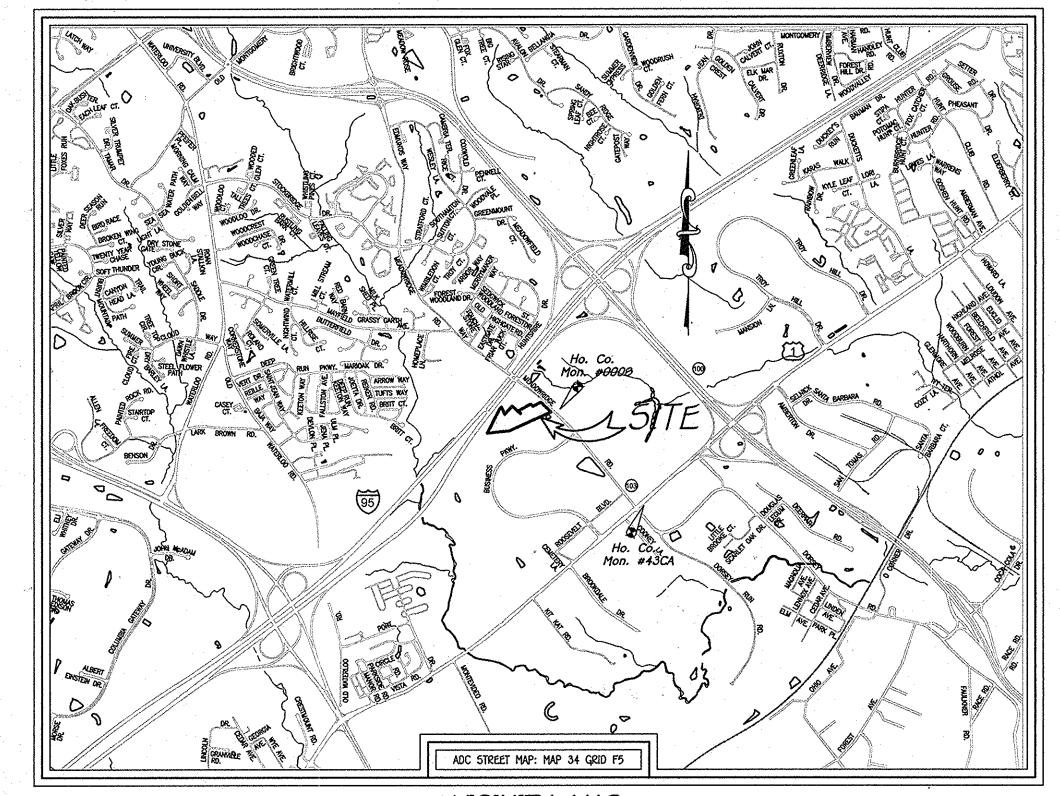
	LEGEND
SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL
	EXISTING CONTOUR 10' INTERVAL
	PROPOSED CONTOUR 2' INTERVAL
	PROPOSED CONTOUR 10' INTERVAL
ECM	EROSION CONTROL MATTING
roo	LIMIT OF DISTURBANCE
18 50	proposed storm drain pipe
<u>#75</u>	PROPOSED SEWER
	proposed stormwater management
	existing stormdrain
	existing sewer
	existing water
	existing water, sewer, & utility easemen
x x	PROPOSED FENCE
	PROPOSED CONCRETE SIDEWALK
55F	SUPER SILT FENCE
V	denotes points of ingress and egress
	EXISTING TO BE REMOVED
	proposed gravel
	PROPOSED PAVING
	existing gravel
	EARTH DIKE

TAX MAP No. 37 GRID No. 22

PARCEL Nos. 652 and 378

FIRST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP

SCALE: 1" = 2000'

BENCHMARK INFORMATION

HOWARD COUNTY CONTROL STATION #0008 - HORIZONTAL - NAD '83)
N 554,701.0067
E 1,377,647.6025
ELEVATION = 215.333 - VERTICAL - (NAVD '88)

HOWARD COUNTY CONTROL STATION #43CA - HORIZONTAL - (NAD '83) N 552,686,1301

N 552,686.1301 E 1,379,388.3784 ELEVATION = 191.601 - VERTICAL - (NAVD '88)

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1000 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.

2. THE CONTRACTOR SHALL NOTIFY (MISS UTILITY) AT 1-000-257-7777 AT LEAST 40 HOURS PRIOR TO ANY

3. THE SUBJECT PROPERTY IS ZONED M-1 PER 10/06/13 COMPREHENSIVE ZONING PLAN.
4. EXISTING TOPOGRAPHY SHOWN IS FROM HOWARD COUNTY GIS TOPOGRAPHY SHOWN AT 2' CONTOUR INTERVAL.
5. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS

BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 0009 AND 43CA WERE USED FOR THIS PROJECT.

6. STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. WE ARE PROPOSING THE USE OF THREE AREAS OF (N-2) NON-ROOFTOP DISCONNECTION CREDIT, ONE (M-6) MICRO-BIORETENTION FACILITY AND FOUR (F-6) BIO-RETENTION FACILITIES.

7. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED

FOR THIS PROJECT.

8. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.

9. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.

10. LANDSCAPING WILL BE PROVIDED AT THE SITE DEVELOPMENT STAGE OF THIS PROJECT.

11. FOREST CONSERVATION WILL BE ADDRESSED AT THE SITE DEVELOPMENT STAGE OF THIS PROJECT.

12. 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 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.

13. SOIL BORING INFORMATION WILL BE PROVIDED AT THE SDP STAGE OF THIS PROJECT.

14. APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF SUBSEQUENT OR ASSOCIATED SUBDIMISION OR SITE DEVELOPMENT PLANS OR RED-LINE REVISIONS. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIMISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIMISION PLAN, SITE DEVELOPMENT PLAN, OR RED-LINE REVISION PROCESSES. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THE PROJECT PROGRESSES

THROUGH THE PLAN REVIEW PROCESS.

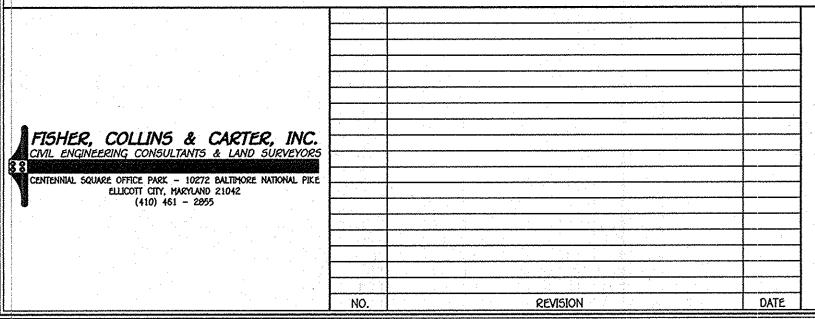
15. A LETTER REGARDING THE USE BY FORMER OWNER MEADOWRIDGE CEMETERY, WILL BE PROVIDED AT THE SDP

16. THIS SITE CONTAINS NO 100 YEAR FLOODPLAIN OR STEEP SLOPES. ALSO AS DETERMINED BY AN ENVIRONMENTAL STUDY CONDUCTED BY ECOTONE, INC. DATED MARCH 2013, NO STREAMS OR WETLANDS EXIST ON PROPERTY.

17. A REQUEST TO WAVE TO THE FIFTH PARAGRAPH OF THE DESIGN MANUAL VOLUME III SECTION 2.9 C., STATING "THE PAVING SECTION OF PARKING LOTS SHALL BE IN ACCORDANCE WITH THE STANDARD DETAILS, VOLUME IV ALLOWING THE USE OF A GRAVEL LOT TO SATISFY THE NEEDS OF THIS TYPE OF CONTRACTOR WILL BE PROVIDED AT THE SDP STAGE OF THIS PROJECT.

STORMWATER MANAGEMENT SUMMARY TABLE

AREA ID	E5Dv Req. Cu.Ft.	E50v Pvd. Cu.Ft.	% Impervious	Remarks
N-2 (1)	176	176	100%	Non-Roofop Disconnection Credit
N-2 (2)	579	579	100%	Non-Roofop Disconnection Credit
N-2 (3)	239	239	100%	Non-Roofop Disconnection Credit
M-6 (1)	1,235	1,351	67%	Micro-Bioretention
M-6 (2)	1,031	1,296	47%	Micro-Bioretention
F-6 (1)	1,127	7,984	59%	Bio-retention
F-6 (2)	6,213	6,381	<i>9</i> 3%	Bio-retention
F-6 (3)	2,596	2,602	77%	Bio-retention





PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY
ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS
OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/15.

Frank John Manalansan II

OWNER & DEVELOPER

J.E.H. PROPERTIES II, LLC
6586 MEADOWRIDGE ROAD
ELKRIDGE, MARYLAND 21075-6115
(443)-755-8720

Chief, Division of Land Development						6-59-14 Date	
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PROJECT				SECTION		PARCEL NO.	
PROJECT							
	OGE MEMORIAL P	ARK			-	652, 378	
	OGE MEMORIAL P	ARK ZONE	TAX	(/ZONE	- ELEC. DIST.	652, 378 CENSUS TR.	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

TITLE SHEET

W.F. WILSON & SONS, INC PARCEL 370 AND PARCEL 'A' PLAT NO. 7657

ZONED: M-1 TAX MAP NO.: 37 GRID NO.: 22 PARCEL NO.: 652 & 370 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: JUNE 4, 2014
SHEET 1 OF 4

ECP-14-034

