

**GENERAL NOTES**

- THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.
- THE EXISTING TOPOGRAPHY IS A COMBINATION OF SURVEY FIELD RUN TOPO PREPARED BY MORRIS AND RITCHIE ASSOCIATES, INC. DATED 12/28/2011, MINSTREL WAY TOPO PROVIDED BY LITTLE AND ASSOCIATES, INC. DATED NOVEMBER, 2006, AND HOWARD COUNTY GIS TOPO (CIRCA 2006).
- 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. 42BB AND 42DA WERE USED FOR THIS PROJECT.
- PROPOSED WATER MAIN WITHIN R/W IS PUBLIC, EXTENDING TO EXISTING MAIN WITHIN SNOWDEN RIVER PARKWAY. WATER IS SERVED THROUGH AN EXISTING PUBLIC WATER MAIN (C-315-W&S) LOCATED ON SNOWDEN RIVER PKWY.
- ALL PROPOSED SEWER IS 8", CONNECTING TO 10" SEWER. PROPOSED 8" SEWER IS SERVED THROUGH AN EXISTING PUBLIC SEWER MAIN (C-315-W&S) LOCATED ON SNOWDEN RIVER PKWY.
- THIS PROJECT UTILIZES ENVIRONMENTAL SITE DESIGN FOR ALL SWM PRACTICES. ALL SWM DEVICES WILL BE PRIVATELY OWNED AND MAINTAINED.
- EXISTING UTILITIES ARE BASED UPON FIELD RUN SURVEY PERFORMED BY MORRIS AND RITCHIE ASSOCIATES, INC. DATED (01/17/2012).
- THERE IS NO FLOODPLAIN ON THIS SITE.
- THERE ARE NO STREAMS, WETLANDS OR STEEP SLOPES ON THIS SITE.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP DATED (08/15/2012).
- NO NOISE STUDY REQUIRED FOR THIS PROJECT.
- GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY JOHN D. HYNES & ASSOC. INC. DATED (7/2012).
- BOUNDARY INFORMATION IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY MORRIS AND RITCHIE ASSOCIATES, INC. DATED DECEMBER, 2011 MDR PLAT NO. 14470 RECORDED (10/16/2000).
- THE APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN (ECP) DOES NOT CONSTITUTE ANY APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAT/PLAN AND/OR 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 SUBDIVISION PLAT/PLAN AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PLAN PROCESS. THEREFORE 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.

**DESIGN NARRATIVE**

- NATURAL AREA PRESERVATIONS**  
THE PROPERTY (3.81 ACRES) IS LOCATED IN AN EXISTING DEVELOPED AREA (3.81 ACRES OF IMPERVIOUS), WHERE MANY OF THE NATURAL RESOURCES THAT WOULD EXIST ON UNDEVELOPED LAND (I.E. WETLANDS, STREAMS, FORESTED AREAS, FLOODPLAINS AND THEIR RESPECTIVE BUFFERS) ARE NO LONGER PRESENT ON SITE. FLOWS FROM THE SITE DISCHARGE INTO AN EXISTING STORM DRAIN SYSTEM, SWALES, AND EXISTING STORMWATER MANAGEMENT POND OFFSITE TO THE SOUTH WEST. THE NATURAL DRAINAGE PATTERNS ON THE SITE WILL CULMINATE TO ONE DISTINCTIVE OUTFALL WITH CONCENTRATED FLOWS OF STORM DRAINS, SWALES, IMPERVIOUS AREAS, AND DRAINAGE CHANNEL. EVERY EFFORT WAS MADE TO CONSERVE AND ENHANCE THE DRAINAGE PATTERNS FROM PRE TO POST CONDITION.
- ESD STORMWATER REQUIREMENTS AND ACHIEVEMENT**  
THE STORM WATER MANAGEMENT REQUIREMENT FOR THIS 3.81 ACRE SITE AND 3.96 ACRE LIMIT OF DISTURBANCE IS MET THROUGH THE IMPLEMENTATION OF ESD TO THE MEP. THE EXISTING SITE IMPERVIOUS IS GREATER THAN 40%. THEREFORE, THE PROJECT IS SUBJECT TO REDEVELOPMENT REQUIREMENTS. THE TARGET RAINFALL AMOUNT FOR WATER QUALITY TREATMENT OF A REDEVELOPMENT PROJECT WITH NO INCREASE IN IMPERVIOUS AREA IS A PE OF 1.0 INCH. THE REQUIRED ESDV OF 3,904 CF, AND A REQUIRED FILTER (AF) OF 2,101 S.F. IS ACHIEVED BY USING THE MICRO-SCALE PRACTICE OF MICRO-BIORETENTION (M-6).
- PROPOSED STORMWATER MANAGEMENT PRACTICES WITHIN THE LIMIT OF DISTURBANCE WILL USE THE MICRO-SCALE PRACTICE OF MICRO-BIORETENTION (M-6). ALL THE MICRO-BIORETENTION (M-6) FACILITIES WILL HAVE OVERFLOW INLETS TO CONVEY PEAK FLOWS TO THE SITE OUTFALL AT A NON-EROSIVE VELOCITY. THE ESD MICRO-SCALE PRACTICES ARE DESIGNED TO MEET THE STORM WATER MANAGEMENT REQUIREMENT OF ESD TO THE MEP.**
- CONSTRUCTION ON SITE WILL BE DONE TO MINIMIZE THE EFFECT OF SEDIMENT EROSION ON THE SITE. THE BUILDINGS AND PARKING AREAS WILL BE CONSTRUCTED, WITH PERIMETER SEDIMENT AND EROSION CONTROL MEASURES. INLET PROTECTION WILL PROTECT THE EXISTING STORM DRAIN SYSTEM FROM BEING FILLED WITH FINE SOIL PARTICLES.

**BENCHMARKS**

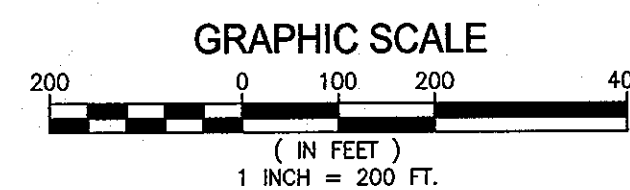
BM 42BB  
N 168065.2671 E 413199.7103  
NAD 83 (ADJ 07) AND NAVD 88  
ELEV. 93.1532

BEING A STAMPED BRASS OR ALUMINUM DISC SET ON TOP OF A 3 FOOT DEEP COLUMN OF CONCRETE. IN THE ISLAND OF THE PARKING LOT FOR LAKE ELKHORN. APPROX. 37.8' SE OF THE FIRE HYDRANT CLOSE TO BROKEN LAND PARKWAY. APPROX. 21.3' NE OF THE SEWER MANHOLE IN THE GRASS AREA BEHIND THE PARKING.

BM 42DA  
N 167110.0171 E 548260.1144  
NAD 83 (ADJ 07) NAVD 88  
ELEV. 91.1287

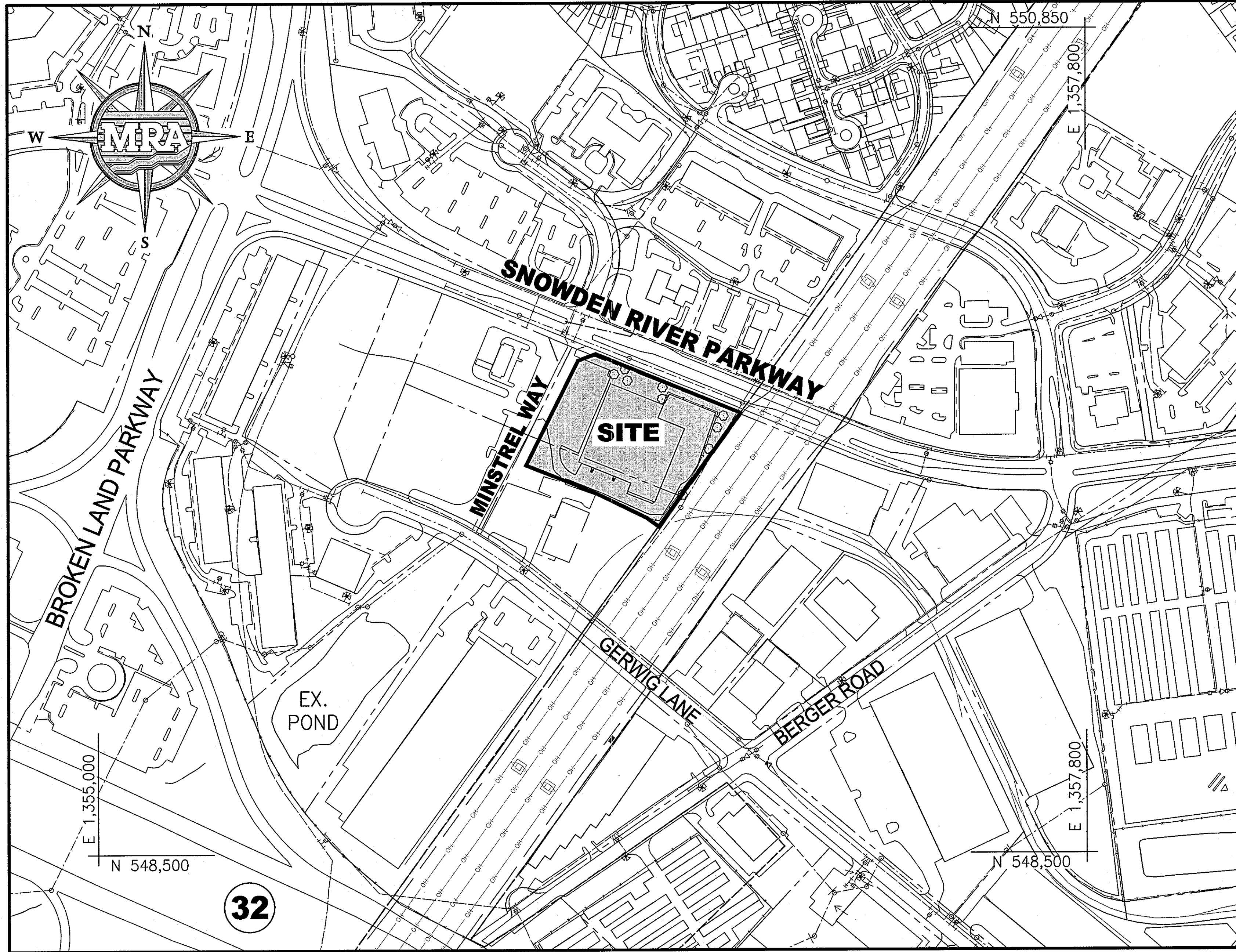
BEING A STAMPED BRASS OR ALUMINUM DISC SET ON TOP OF A 3 FOOT DEEP COLUMN OF CONCRETE. IN THE NW MEDIAN OF THE INTERSECTION OF BROKEN LAND PKWY AND MD RTE 32. APPROX 75' SW FROM THE ONBOUND RAMP TO MD RTE 32 AND APPROX 5.7' SW FROM THE EDGE OF BROKEN LAND PKWY.

DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM:  
HORIZONTAL NAD 83/91  
VERTICAL NAVD 88



**APPROVED DEPARTMENT OF PLANNING AND ZONING**

CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 10/3/12  
CHIEF, DIVISION AND LAND DEVELOPMENT *[Signature]* 10/02/12



**LOCATION PLAN**  
1"=200'

**LEGEND**

- EX. 2 FOOT CONTOURS
- EX. 10 FOOT CONTOURS
- EX. EDGE OF PAVEMENT
- EX. CURB AND GUTTER
- EX. CONCRETE WALK
- EX. C/L ROAD
- EX. ADJACENT PROPERTY LINE
- EX. PROPERTY LINE
- EX. RIGHT OF WAY
- EX. UTILITY EASEMENT
- EX. WATER LINE
- EX. SANITARY LINE
- EX. STORM DRAIN LINE
- EX. FIBER OPTIC CABLE
- EX. URD PRIMARY SEG 3 PHASE
- EX. VERIZON LINE
- EX. GAS
- EX. ELECTRIC
- EX. OVER HEAD UTILITIES
- EX. LIGHT POLE
- EX. U/G UTILITY HANDBOX
- EX. UTILITY POLE
- EX. SIGN
- EX. BOLLARD
- EX. EVERGREEN TREE
- EX. DECIDUOUS TREE
- EX. TREE LINE
- EX. SOILS LINE
- EX. BUILDING/STRUCTURE
- EX. CONC. BLOCK WALL

**NOTE:**  
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**OWNER**  
TSC SNOWDEN RIVER, L.L.C.  
C/O RZZ LLC  
12 GRAY HERON RETREAT  
SAVANNAH, GA 31411-2936  
ATTN: E. EDWARD ZINKE

**DEVELOPER**  
TWO FARMS INC.  
3611 ROLAND AVENUE  
BALTIMORE, MARYLAND 21211  
ATTN.: MR. JEFF BAINBRIDGE  
PHONE: (410)-456-1467

# ROYAL FARMS

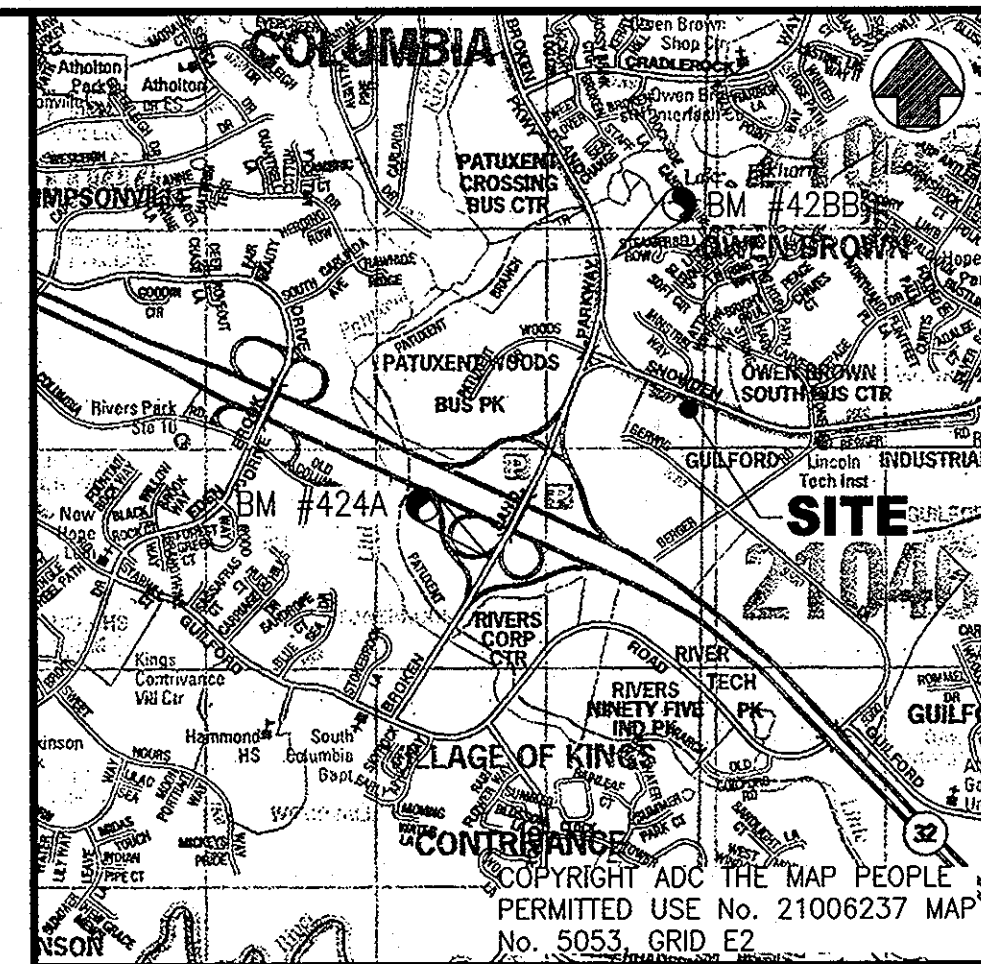
## 9585 SNOWDEN RIVER PARKWAY

### ENVIRONMENTAL CONCEPT PLAN

#### HOWARD COUNTY, MARYLAND

**SHEET INDEX**

- COVER SHEET
- EX. FEATURES & NATURAL RESOURCES MAP
- DEVELOPMENT CONCEPT PLAN



**VICINITY MAP**  
1"=2,000'

**SITE ANALYSIS DATA CHART**

1. TOTAL PROJECT AREA	3.81 ACRES
2. AREA OF PLAN SUBMISSION	3.81 ACRES
3. LIMIT OF DISTURBANCE	3.96 ACRES
4. PRESENT ZONING	NT
5. PROPOSED USE	CONVENIENCE STORE, GAS STA. & CAR WASH
6. PROPOSED FLOOR SPACE	3,500 SF CONV. STORE, 1,407 SF CARWASH
7. TOTAL PARKING SPACES REQUIRED	<b>TO BE DETERMINED AT SDP STAGE.</b>
8. PARKING SPACES PROVIDED	60
9. DPZ FILE REFERENCES	F69-26; SDP 71-70; F01-51; FDP 55(16/118)
10. SANITARY SEWER / WATER SERVICE	PUBLIC/PUBLIC
11. TAX MAP / PARCEL NO.	42 / 375
12. ELECTION DISTRICT	3
13. EX. STEEP SLOPES >15%	0.00 Ac.
14. EX. IMPERVIOUS AREA (ON-SITE)	2.96 Ac.
15. EX. GREEN OPEN AREA	0.85 Ac.
17. PROP. GREEN OPEN AREA	1.79 Ac.
18. PROPOSED IMPERVIOUS AREA	2.62 Ac.
19. EXISTING FOREST ON-SITE	0.00 Ac.
20. ERODIBLE SOILS ON-SITE (CuB)	3.25 Ac.
21. EXISTING WETLANDS AND BUFFER AREA	0.00 Ac.
22. EXISTING FLOODPLAIN & BUFFER AREA	0.00 Ac.

**ADDRESS CHART**

LOT / PARCEL #	STREET ADDRESS
22 / 375	9585 SNOWDEN RIVER PARKWAY

**PERMIT INFORMATION CHART**

SUBDIVISION NAME	PARCEL					
EGU SUB, RSB 6A & 9A	375					
PLAT #	L / F	GRID	ZONING	TAX MAP NO.	ELECT. DIST.	CENSUS TRACT
14470	05258 / 0100	9	NT	42	3	6067.03

**CERTIFICATION OF APPLICANT**

I HEREBY CERTIFY THAT THE INFORMATION SUPPLIED HERewith IS CORRECT AND COMPLETE AND AUTHORIZE SUCH PERIODIC ON-SITE INSPECTIONS BY THE DEPARTMENT OF PLANNING AND ZONING AND THE SUBDIVISION REVIEW COMMITTEE AGENCIES AS MAY BE NECESSARY TO REVIEW THIS APPLICATION AND ANY WAIVER PETITIONS FILED IN CONNECTION HERewith AND TO ENFORCE THE SUBDIVISION REGULATIONS AND OTHER APPLICABLE LAWS. THIS RIGHT-OF-ENTRY SHALL CONTINUE UNTIL ALL ADMINISTRATIVE APPEALS PERTAINING TO THE PROPERTY HAVE BEEN EXHAUSTED. \*IF THE APPLICANT IS THE OWNER'S AGENT, WRITTEN DOCUMENTATION FROM THE PROPERTY OWNER GRANTING THAT AUTHORITY IS REQUIRED.

*E. Edward Zinke* E. Edward Zinke 7/16/12  
(Signature of Property Owner/Agent) (Print Name of Owner/Agent) (Date)

e.zinke9@aol.com  
(Property Owner's Email Address)

1909 Armond Ln Silver Spring, Md 20905  
(Property Owner's Address) (State and Zip Code)

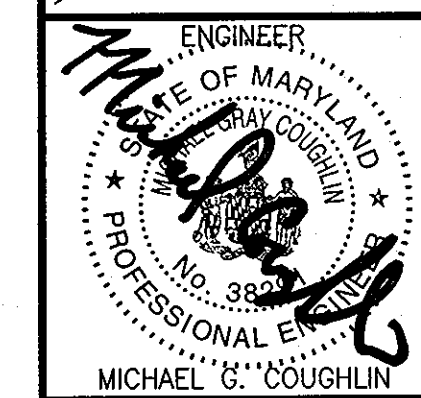
NA  
(Property Owner's Fax Number)

**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. 38291, EXPIRATION DATE: 01/13/14.

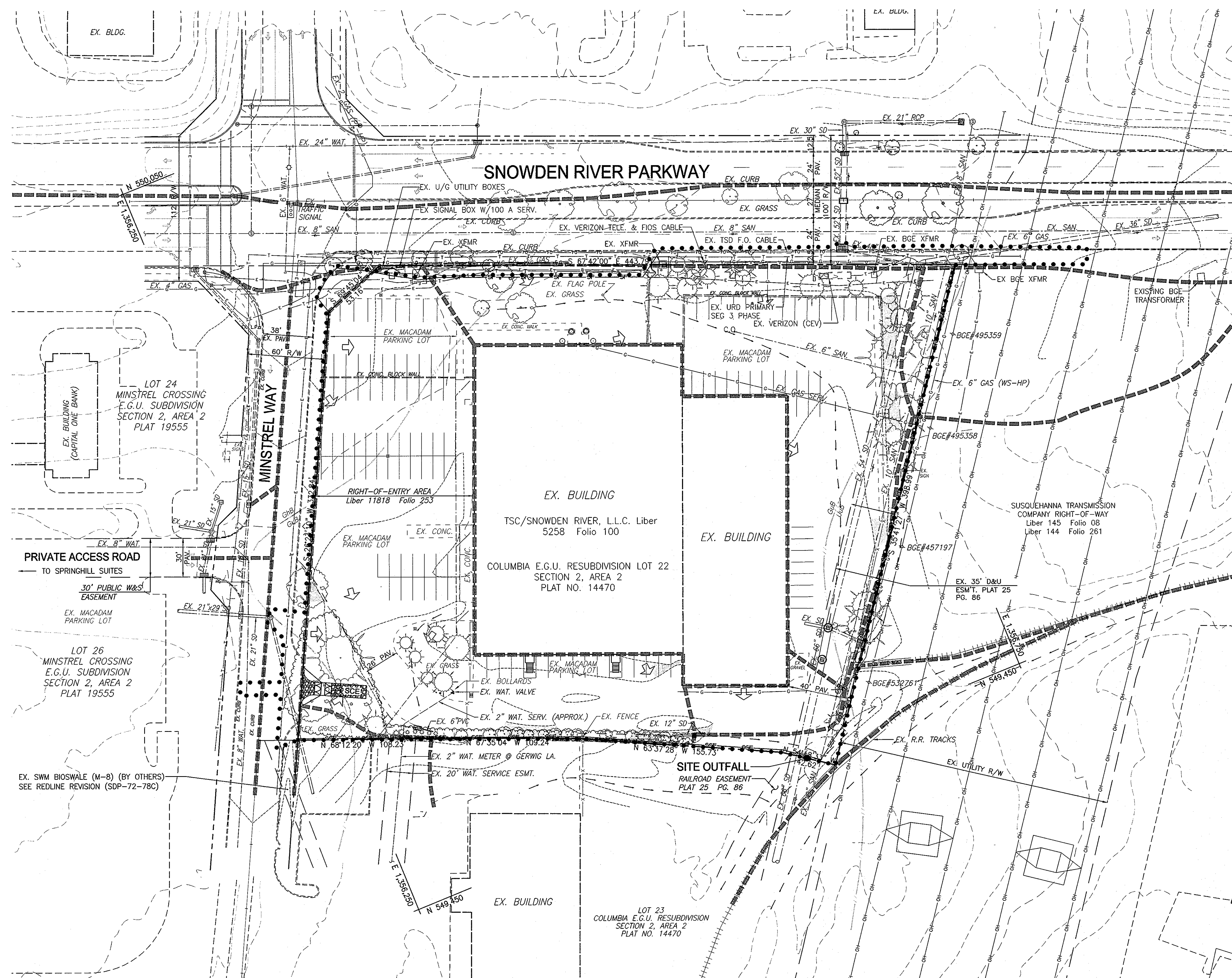
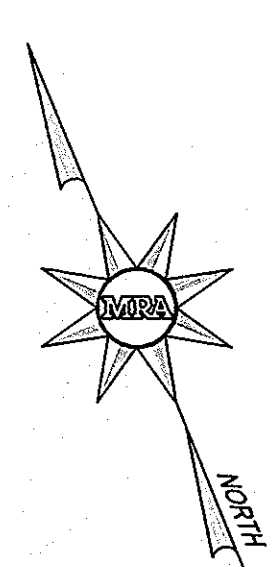


**MORRIS & RITCHIE ASSOCIATES, INC.**  
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS  
1220-C EAST JOPPA ROAD, SUITE 505  
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MRA@GTA.COM  
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**ROYAL FARMS STORE #186**  
9585 SNOWDEN RIVER PARKWAY  
**ENVIRONMENTAL CONCEPT PLAN**  
COVER SHEET  
ECP-13-002  
TAX MAP 42 ~ PARCEL 375 ~ LOT 22  
TAX ASSESSMENT DISTRICT 3 ~ ZONING NT  
EMPLOYMENT CENTER INDUSTRIAL  
3RD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
		17297
		SCALE: AS SHOWN
		DATE: 09.24.2012
		DRAWN BY: MJS
		DESIGN BY: MGC
		REVIEW BY: PRC
		SHEET: 1 OF 3



### LEGEND

	EX. 2 FOOT CONTOURS
	EX. 10 FOOT CONTOURS
	EX. EDGE OF PAVEMENT
	EX. CURB AND GUTTER
	EX. CONCRETE WALK
	EX. C/L ROAD
	EX. RAIL ROAD TRACKS
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	EX. EVERGREEN TREE
	EX. DECIDUOUS TREE
	EX. TREE LINE
	EX. SOILS LINE/DESCRIPTION
	EX. BUILDING/STRUCTURE
	EX. CONC. BLOCK WALL
	EX. STEEP SLOPES 15%-25%
	EX. STEEP SLOPES >25%
	EX. SUB DRAINAGE AREA DIVIDE
	EX. DRAINAGE PATTERN CONCENTRATED FLOW
	EX. DRAINAGE PATTERN SHEET FLOW
	PROPOSED LIMIT OF DISTURBANCE

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**MRA**  
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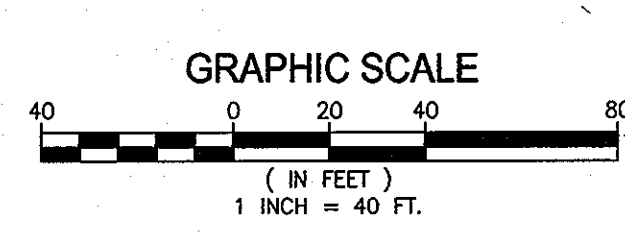
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**MICHAEL G. COLQUHOUN**  
PROFESSIONAL ENGINEER  
NO. 38291  
EXPIRES 01/13/14

**ROYAL FARMS STORE #186**  
9585 SNOWDEN RIVER PARKWAY  
**ENVIRONMENTAL CONCEPT PLAN**  
**EX. FEATURES & NATURAL RESOURCES MAP**  
ECP-13-002  
TAX MAP 42 ~ PARCEL 375 ~ LOT 22  
TAX ASSESSMENT DISTRICT 3 ~ ZONING NT  
EMPLOYMENT CENTER INDUSTRIAL  
3RD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
		17297
		SCALE: AS SHOWN
		DATE: 09.24.2012
		DRAWN BY: MJS
		DESIGN BY: MGC
		REVIEW BY: PRC
		SHEET: 2 OF 3

**EXISTING FEATURES AND NATURAL RESOURCES MAP**  
SCALE: 1"=40'



**APPROVED DEPARTMENT OF PLANNING AND ZONING**

*[Signature]* 10/3/12  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 10/02/12  
CHIEF, DIVISION AND LAND DEVELOPMENT DATE

**SOILS LEGEND**

SYMBOL	NAME/ DESCRIPTION	SOIL TYPE
GhB	GLENLEG - URBAN LAND COMPLEX, 0 - 8 PERCENT SLOPES	B
GhC	GLENVILLE - URBAN LAND - UDORTHERTS COMPLEX, 0 - 8 PERCENT SLOPES	C
UaB	URBAN LAND - UDORTHERTS COMPLEX, 0 - 8 PERCENT SLOPES	D

**SITE DATA**

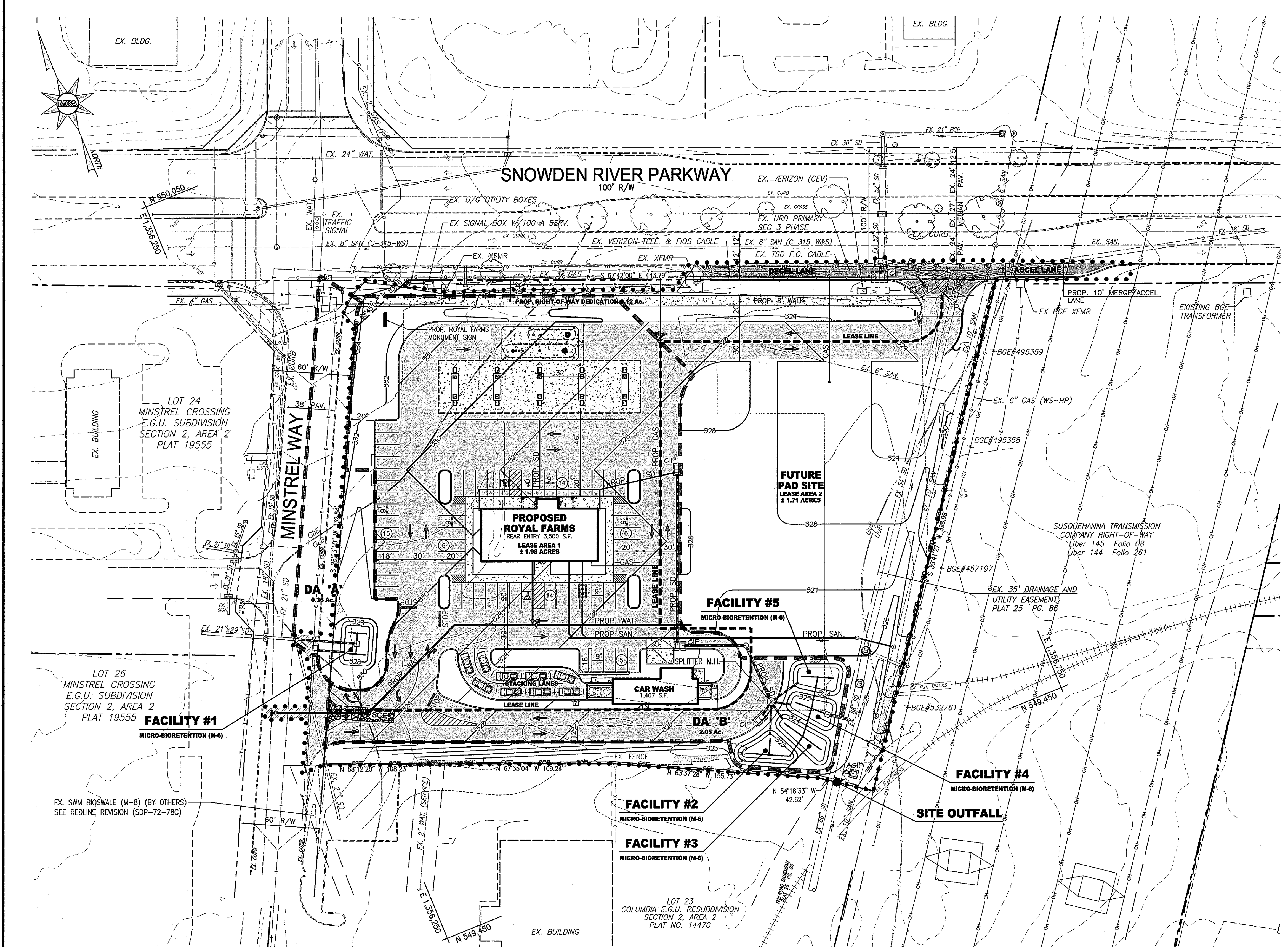
EXISTING SITE AREA	3.81 ACRES ±
PROPOSED DISTURBED AREA	3.47 ACRES + 0.49 S.R.P. R/W = 3.96 AC TOTAL
EXISTING DISTURBED IMPERVIOUS AREA	3.13 ACRES ±
PROPOSED IMPERVIOUS AREA	3.13 ACRES ±
HYDROLOGICAL SOIL GROUP	C - 85% D - 5% B - 10%

DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM:  
HORIZONTAL NAD 83/91  
VERTICAL NAVD 88

**OWNER**  
TSC SNOWDEN RIVER, L.L.C.  
C/O RZZ LLC  
12 GRAY HERON RETREAT  
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3611 ROLAND AVENUE  
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ATTN: MR. JEFF BAINBRIDGE  
PHONE: (410)-456-1467

P:\17297\UDE\PL01\Env Concept\17297-ENVCONP1-2.dwg, 9/20/2012 1:01:07 PM, MSullivan, Copyright 2012 Morris & Ritchie Associates, Inc.



### LEGEND

---2---	EX. 2 FOOT CONTOURS	---	PROP. 1 FT. CONTOUR
---10---	EX. 10 FOOT CONTOURS	---	PROP. 2 FT. CONTOUR
---	EX. EDGE OF PAVEMENT	---	PROP. 10 FT. CONTOUR
---	EX. CURB AND GUTTER	---	PROP. CONCRETE WALK
---	EX. CONCRETE WALK	---	PROP. CURB & GUTTER
---	EX. C/L ROAD	---	PROP. PAVEMENT
---	EX. RAIL ROAD TRACKS	---	PROP. PAVEMENT PUBLIC
---	EX. FENCE	---	PROP. MILL & OVERLAY PAV.
---	EX. ADJACENT PROPERTY LINE	---	PROP. HANDICAPPED SPACE
---	EX. PROPERTY LINE	---	PROP. TRAFFIC FLOW ARROWS
---	EX. RIGHT OF WAY	---	PROP. WATER
---	EX. UTILITY EASEMENT	---	PROP. SEWER
---	EX. WATER LINE	---	PROP. STORM DRAIN
---	EX. SANITARY LINE	---	PROP. DRAINAGE DIVIDE
---	EX. STORM DRAIN LINE	---	---
---	EX. FIBER OPTIC CABLE	---	---
---	EX. URD PRIMARY SEG 3 PH.	---	---
---	EX. VERIZON LINE	---	---
---	EX. GAS	---	---
---	EX. ELECTRIC	---	---
---	EX. OVER HEAD UTILITIES	---	---
---	EX. LIGHT POLE	---	---
---	EX. U/G UTILITY HANDBOX	---	---
---	EX. UTILITY POLE	---	---
---	EX. SIGN	---	---
---	EX. BOLLARD	---	---
---	EX. EVERGREEN TREE	---	---
---	EX. DECIDUOUS TREE	---	---
---	EX. TREE LINE	---	---
---	EX. SOILS DIVISION LINE / SOILS TYPE DESIGNATION	---	---
---	EX. BUILDING/STRUCTURE	---	---
---	EX. CONC. BLOCK WALL	---	---
---	EX. STEEP SLOPES >25%	---	---

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**ROYAL FARMS STORE #186**  
9585 SNOWDEN RIVER PARKWAY  
**ENVIRONMENTAL CONCEPT PLAN**  
DEVELOPMENT CONCEPT PLAN  
ECP-13-002  
TAX MAP 42 ~ PARCEL 375 ~ LOT 22  
TAX ASSESSMENT DISTRICT 3 ~ ZONING NT  
EMPLOYMENT CENTER INDUSTRIAL  
3RD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:	17297
		SCALE:	AS SHOWN
		DATE:	09.24.2012
		DRAWN BY:	MJS
		DESIGN BY:	MGC
		REVIEW BY:	PRC
		SHEET:	3 OF 3

DRAINAGE AREAS				ENVIRONMENTAL SITE DESIGN PRACTICES			
LABEL	DA	I	%I	LABEL	ESD TYPE	AF	PE
(A)	15,720 SF	7,836 SF	50%	SWM 1	MICRO-BIORETENTION (M-6)	482 SF	1"
				SWM 2	MICRO-BIORETENTION (M-6)	450 SF	1"
				SWM 3	MICRO-BIORETENTION (M-6)	450 SF	1"
				SWM 4	MICRO-BIORETENTION (M-6)	450 SF	1"
				SWM 5	MICRO-BIORETENTION (M-6)	450 SF	1"
(B)	89,248 SF	76,820 SF	86%		TOTAL ESD PROVISIONS	2,282 SF	1"
					ESD REQUIREMENTS	2,101 SF	1"

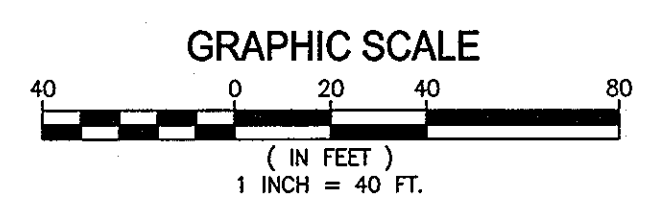
**CONCEPT PLAN**  
SCALE: 1"=40'

**DESIGN NARRATIVE**

- NATURAL AREA PRESERVATIONS**  
THE PROPERTY (3.81 ACRES) IS LOCATED IN AN EXISTING DEVELOPED AREA (3.81 ACRES OF IMPERVIOUS), WHERE MANY OF THE NATURAL RESOURCES THAT WOULD EXIST ON UNDEVELOPED LAND (I.E. WETLANDS, STREAMS, FORESTED AREAS, FLOODPLAINS AND THEIR RESPECTIVE BUFFERS) ARE NO LONGER PRESENT ON SITE. FLOWS FROM THE SITE DISCHARGE INTO AN EXISTING STORM DRAIN SYSTEM, SWALES, AND EXISTING STORMWATER MANAGEMENT POND OFFSITE TO THE SOUTH WEST. THE NATURAL DRAINAGE PATTERNS ON THE SITE WILL CULMINATE TO ONE DISTINCTIVE OUTFALL WITH CONCENTRATED FLOWS OF STORM DRAINS, SWALES, IMPERVIOUS AREAS, AND DRAINAGE CHANNEL. EVERY EFFORT WAS MADE TO CONSERVE AND ENHANCE THE DRAINAGE PATTERNS FROM PRE TO POST CONDIION.
- ESD STORMWATER REQUIREMENTS AND ACHIEVEMENT**  
THE STORM WATER MANAGEMENT REQUIREMENT FOR THIS 3.81 ACRE SITE AND 3.96 ACRE LIMIT OF DISTURBANCE IS MET THROUGH THE IMPLEMENTATION OF ESD TO THE MEP. THE EXISTING SITE IMPERVIOUS IS GREATER THAN 40%. THEREFORE, THE PROJECT IS SUBJECT TO REDEVELOPMENT REQUIREMENTS. THE TARGET RAINFALL AMOUNT FOR WATER QUALITY TREATMENT OF A REDEVELOPMENT PROJECT WITH NO INCREASE IN IMPERVIOUS AREA IS A PE OF 1.0 INCH. THE REQUIRED ESDV OF 3,904 CF, AND A REQUIRED FILTER (AF) OF 2,101 S.F. IS ACHIEVED BY USING THE MICRO-SCALE PRACTICE OF MICRO-BIORETENTION (M-6).
- PROPOSED STORMWATER MANAGEMENT PRACTICES WITHIN THE LIMIT OF DISTURBANCE WILL USE THE MICRO-SCALE PRACTICE OF MICRO-BIORETENTION (M-6).** ALL THE MICRO-BIORETENTION (M-6) FACILITIES WILL HAVE OVERFLOW INLETS TO CONVEY PEAK FLOWS TO THE SITE OUTFALL AT A NON-EROSIVE VELOCITY. THE ESD MICRO-SCALE PRACTICES ARE DESIGNED TO MEET THE STORM WATER MANAGEMENT REQUIREMENT OF ESD TO THE MEP.
- CONSTRUCTION ON SITE WILL BE DONE TO MINIMIZE THE EFFECT OF SEDIMENT EROSION ON THE SITE.** THE BUILDINGS AND PARKING AREAS WILL BE CONSTRUCTED, WITH PERMIETER SEDIMENT AND EROSION CONTROL MEASURES. INLET PROTECTION WILL PROTECT THE EXISTING STORM DRAIN SYSTEM FROM BEING FILLED WITH FINE SOIL PARTICLES.

**SITE DATA**

EXISTING SITE AREA	3.81 ACRES ±
PROPOSED DISTURBED AREA	3.81 ACRES + 0.49 S.R.P. R/W =4.30 Ac TOTAL
EXISTING DISTURBED IMPERVIOUS AREA	3.13 ACRES ±
PROPOSED IMPERVIOUS AREA	3.13 ACRES ±
HYDROLOGICAL SOIL GROUP	C - 85% D - 5% B - 10%



**APPROVED DEPARTMENT OF PLANNING AND ZONING**

CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*[Signature]* 10/3/12  
DATE

CHIEF, DIVISION AND LAND DEVELOPMENT  
*[Signature]* 10/02/12  
DATE

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