LOCATION MAP
SCALE: 1"=250'

WRE 12
TASK ORDER 01
POTOMAC RIDGE SWM POND "C" RETROFIT (ASSET #10847)
STORMWATER MANAGEMENT CONCEPT
NOT FOR CONSTRUCTION

Department of Environmental Protection
Montgomery County Maryland

VICINITY MAP
SCALE: 1"=2000'
Map 5163, Grid B7
Map Copyright©Kappa LLC
(800)-829-6277 Used with Permission

INDEX TO DRAWINGS		
SHEET NO.	TITLE	SHEET NAME
1	COVER SHEET	CV-01
2	MASTER LEGENDS AND ABBRREVIATIONS	ML-01
3	DRAINAGE AREA MAP	DA-01
4	EXISTING CONDITIONS PLAN	EC-01
5	EXISTING CONDITIONS PROFILES	EC-02
6	DEMOLITION - EXISTING CONDITIONS PLAN	EC-03
7	GRADING AND LAYOUT PLAN	GR-01
8	GRADING AND LAYOUT PLAN	GR-02
9	DAM EMBANKMENT PROFILES	PR-01
10	RISER DETAILS	PR-02
11	SOIL BORING LOGS	SB-01
12	LANDSCAPE PLAN	LP-01
13	LANDSCAPE DETAILS	LP-02

TO ACCOMPANY SPECIFICATIONS INVITATION NO. XXXXX
DATED:

MISS UTILITY

THE CONTRACTOR SHALL CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL UNDERGROUND UTILITIES IN THE AREA OF PROPOSED WORK ARE LOCATED PRIOR TO COMMENCING CONSTRUCTION WORK. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

THE CONTRACTOR IS ALSO RESPONSIBLE FOR LOCATING ALL PRIVATE UTILITIES (NOT LOCATED BY MISS UTILITY) WITHIN M-NCPPC PROPERTY AT THEIR EXPENSE. ALL UTILITIES SHOWN ON THE PLANS ARE PROVIDED FOR INFORMATION ONLY AND SHALL BE CONSIDERED APPROXIMATE. M-NCPPC SHALL NOT BE RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES. ANY UTILITIES OR OTHER UNDERGROUND FACILITIES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S SOLE EXPENSE.

RELATED REQUIRED PERMITS

To be completed by the consultant and placed on the first sheet of the Sediment Control/Stormwater Management plan set for all projects

IT IS THE RESPONSIBLITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE APPROVED SEDIMENT CONTROL PERMIT:

TYPE OF PERMIT	REQ'D	NOT REQ'D	PERMIT NO.	EXPIRATION DATE	WORK RESTRICTION DATES
MCDPS Floodplain district	X				
WATERWAYS/WETLAND(S) a. Corps of Engineers	X				
b. MDE	X				MARCH 1 - JUNE 15 (CLASS I-P)
c. MDE Water Quality Certification	X				MARCH 1 - JUNE 15 (CLASS I-P)
MDE Dam Safety		X			
NPDES NOTICE OF INTENT	X		NA	NA	DATE FILED
OTHERS (Please List):					
WSSC	X				

SEQUENCE OF CONSTRUCTION FOR POTOMAC RIDGE POND "C" (MCDEP ASSET# 10847) SWM POND RETROFIT

Notes:

a. Sediment controls may be added, deleted, or field adjusted by the MCDPS Sediment Control Inspector at any time.

b. For all stakeouts involving grading of any kind, contractor to provide Owner and Engineer with cut sheet a minimum of 72 hours in advance of grading.

Preconstruction

1. Prior to clearing of trees, installing sediment control measures, grading, or any other land disturbing activities, a preconstruction meeting must be conducted on-site with the:
   a) Montgomery County Department of Permitting Services (MCDPS) Sediment Control Inspector (240) 777-6210 (48 hours' notice)
   b) M-NCPPC Forest Conservation Inspector (301) 495-4581 (48 hours' notice)
   c) Owner's representative (240) 777-7789 (48 hours' notice)
   d) Engineer (301) 434-7000 (48 hours' notice)

The limits of disturbance must be field-marked prior to holding the preconstruction meeting.

Sediment Control Installation

2. Clear and grade for installation of sediment control devices only.
3. Install sediment control devices.
4. Once the sediment control devices are installed, the contractor must obtain written approval from the MCDPS inspector before proceeding with any additional clearing, grubbing, or grading.

Embankment Construction Asset #10847

Notes:

a. Items 7-10 to be done under supervision of the professional geotechnical engineer of record.

b. This work can be done concurrently with item 20-23.

5. Excavate embankment of Asset# 10847 for installation of core trench, cut-off trench, twin 48" principal spillway pipe and filter diaphragm.
6. Remove and demolish existing twin CMP principal spillway pipe, low flow pipe and circular risers.
7. Install impervious cutoff trench and lower portion of filter diaphragm in excavated embankment.
8. Install RCP spillway pipe and cradle.
9. Install remaining of embankment including clay core and upper portion of filter diaphragm including drainage pipes.
10. Install head wall on RCP principal spillway pipe.
11. Grade principal spillway outfall for rip-rap and install rip-rap channel.

Riser Structure Replacement Asset #10847

Note:

a. Items 12-17 to be done under supervision of the professional geotechnical engineer of record.

b. All reinforcement & formwork is to be inspected by the geotechnical engineer of record prior to closing forms.

c. Forms shall not be removed for seven days after pour.

d. All hot & cold weather connecting should be done as required per ACI-305 &306 (latest revision respectively.

12. Excavate for riser foundation.
13. Form and pour riser foundation.
14. Install low flow pipe stub.
15. Form & pour riser walls around principal spillway pipes & low flow pipe stub.
16. Form and pour top slab.
17. Install low riser steps, manhole cover and trash racks on riser.
18. Backfill around riser and low flow after 28 days of curing.

Pond Grading Asset #10847

Notes:

a. This work can be done concurrently with item 5-12.

19. Remove existing concrete pilot channel in the facility.
20. Re-grade pond to its final contours.
21. Install riprap within the limits as shown on plans.
22. Install bio-swale upstream of pond and provide a rip-rap at the existing stormdrain outfall per plan.

Miscellaneous Repairs and Modifications

23. Install safety fencing.
24. Install all landscaping.
25. Permanently seed and stabilize the limits of disturbance.

Project Closeout

26. Obtain a punch list inspection from the Owner, Engineer, and MCDPS Sediment Control Inspector.
27. Address all punch list items to the satisfaction of the Owner, Engineer, and MCDPS sediment control inspector.
28. Hold a final inspection with the Owner and Engineer, and MCDPS Sediment Control Inspector.
29. Obtain written approval from the MCDPS Sediment Control Inspector to remove all sediment control devices.

Engineer to complete as-built survey and obtain approval of as-built drawings and final report within 60 days of completion of final inspection by MCDPS.

MS4 SUMMARY TABLE - POND/WETLAND

"FACILITY ID"	FACILITY TYPE	DRAINAGE AREA (AC)1	"CREDITED IA (AC)2"	TARGETED WQv (AC-FT)	PROVIDED WQv (AC-FT)	TARGETED CPv (AC-FT)	PROVIDED CPv (AC-FT)	TARGETED CPQ (CFS)	PROVIDED CPQ (CFS)	TARGETED ESDv (AC-FT)	PROVIDED ESDv (AC-FT)
10847	POND	60.42	14.81	1.36	0.00	2.15	2.45	1.15	1.09	N/A	N/A
N/A	BIOSWALE	21.03	4.83	0.45	0.10	0.58	N/A	0.26	N/A	N/A	N/A

1. Drainage area is the total physical drainage area to the facility, including child facilities.
2. Credited impervious area is the currently untreated impervious area that falls within Montgomery County's MS4 jurisdiction.

PROJECT BENEFITS

1. Improved stormwater management through increased channel protection and water quality.
2. Safety improvements to dam and basin slopes.
3. Improved aesthetics through landscaping.
4. Stormwater pretreatment through use of bioswale.
5. Maintain 2-yr control that existing pond provides.

SITE ADDRESS
13915 SADDLEVIEW DRIVE
NORTH POTOMAC, MARYLAND 20878

SEAL: STATE OF MARYLAND JEFFREY BRIAN BLASS PROFESSIONAL ENGINEER 32457 01/21/2014

PROPERTY DESCRIPTION
POTOMAC RIDGE
HOMEOWNERS ASSOCIATION
PARCEL Q, BLOCK E
PLAT NO. 15131
L. 7472/ F. 807
TAX MAP: ER62
200'S SHEET 218NW 12

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 #: 32457
EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT
REVIEWED DATE
APPROVED DATE
S.M.FILE NO.

SEDIMENT CONTROL TECHNICAL REQUIREMENTS:
REVIEWED DATE
APPROVED DATE

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:
REVIEWED DATE
SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection
Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:
DESIGNED BY: BMF
DWN BY: ADG
CKD BY: JBB
SUBMITTED BY: JBB
PLOT SCALE: AS-SHOWN
PLOT DATE: 4/5/2013
SIZE: ANSI D
FILE NAME: 01-EC-03.DWG

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT (ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

COVER SHEET

SHEET NO.
1 OF 13
CV-01

Attached Xrefs:

Last Saved 1/21/2014 Last Plotted 1/21/2014 3:48 PM Sheet N:\43030\DWG\01-EC-03

MASTER LEGEND

EXISTING CONTOURS — 452
EXISTING INDEX CONTOURS — 450
PROPOSED CONTOURS — 452
PROPOSED INDEX CONTOURS — 450
EXISTING STORM DRAIN PIPE — EX. 36" C.M.P.
PROPOSED STORM DRAIN PIPE — 36" C.M.P.
PROPOSED LIMITS OF DISTURBANCE — LOD LOD
DRAINAGE DIVIDE
DRAINAGE FLOWPATH POINT — A
FLOWPATH
TIME OF CONCENTRATION POINT
LAND USE/LAND COVER BOUNDARY LINE — LU LU
EXISTING SOIL DIVIDE
SOIL TYPE DEMARCATION — 2B
100 YEAR FLOOD PLAIN
1 YEAR WATER SURFACE ELEV.
10 YEAR WATER SURFACE ELEV.
100 YEAR WATER SURFACE ELEV.
PROPOSED/EXISTING RIPRAP
WOOD FENCE
EX. SEWER LINE (BASED UPON WSSC PLANS) — SEW SEW
EXISTING PROPERTY LINE
EXISTING SWM EASEMENT
PROPOSED SWM EASEMENT

CONSTRUCTION SAFETY FENCE — XX XX XX
EX. WATER LINE (BASED UPON WSSC PLANS) — W W W
EX. SEWER MANHOLE — S
EX. STORMDRAIN MANHOLE — D
EX. LIGHT POLE
EX. SIGN
EX. FIRE HYDRANT
EX. TREE TO BE REMOVED
EX. TREE TO REMAIN
SUMP PIT — SP
PUMP
FILTER BAG — FB
SILT FENCE ON PAVEMENT — SFOP SFOP SFOP
STAGING/STOCKPILE AREA
ORANGE BLAZE SAFETY FENCE — OX OX OX
STRUCTURAL LABEL — HW
HEADWALL/ EMZ WALL
TRAVERSE POINT — 642
STABILIZED CONSTRUCTION ENTRANCE — SCE
DRAINAGE SLOPE — 3:1
SILT FENCE — SF SF SF
SUPER SILT FENCE — SSF SSF SSF

MASTER LIST OF ABBREVIATIONS

Ac.	-	ACRE(S)
ACI	-	AMERICAN CONCRETE INSTITUTE
ASTM	-	AMERICAN SOCIETY FOR TESTING MATERIALS
℄	-	CENTERLINE
C/C	-	CENTER-TO-CENTER
CF	-	CUBIC FEET
cfs	-	CUBIC FEET PER SECOND
CL	-	CLASS
C.M.P.	-	CORRUGATED METAL PIPE
CPv	-	CHANNEL PROTECTION VOLUME
D	-	DEPTH
DA	-	DRAINAGE AREA
D50	-	50TH PERCENTILE OF DIAMETER
D.I.P.	-	DUCTILE IRON PIPE
EX.	-	EXISTING
f.p.s.	-	FEET PER SECOND
FT	-	FEET
GALV.	-	GALVANIZED
H.D.P.E.	-	HIGH DENSITY POLYETHYLENE
HGL	-	HYDRAULIC GRADE LINE
HSG	-	HYDROLOGIC SOIL GROUP
INV.	-	INVERT
L	-	LENGTH OF CURVE (CURVE DATA)
L.F.	-	LINEAR FEET
MCDPS	-	MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES
MDE	-	MARYLAND DEPARTMENT OF THE ENVIRONMENT
MH	-	MANHOLE
MNCPPC	-	MARYLAND NATIONAL CAPITAL PARK AND PLANNING COMMISSION
MSHA	-	MARYLAND STATE HIGHWAY ADMINISTRATION
NTS	-	NOT TO SCALE
RCN	-	RUNOFF CURVE NUMBER
R.C.P.	-	REINFORCED CONCRETE PIPE
S.S.	-	SIDE SLOPE
S.W.M.	-	STORMWATER MANAGEMENT
T	-	TANGENT (CURVE DATA)
Tc	-	TIME OF CONCENTRATION
TBR	-	TO BE REMOVED
TYP.	-	TYPICAL
V	-	VELOCITY
WQv	-	WATER QUALITY VOLUME
Ø	-	DIAMETER

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SEAL:

STATE OF MARYLAND — BRIAN J. CARSON — 21708 — PROFESSIONAL ENGINEER — 01/21/2014

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 #: 32457

EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT
REVIEWED DATE
APPROVED DATE
S.M.FILE NO.

SEDIMENT CONTROL TECHNICAL REQUIREMENTS:
REVIEWED DATE
APPROVED DATE

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:
REVIEWED DATE
SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection — Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.

MR. CRAIG CARSON 240.777.7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

DESIGNED BY: BMF
DWN BY: ADG
CKD BY: JBB
SUBMITTED BY: JBB
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:
PLOT SCALE: AS SHOWN
PLOT DATE: 1/21/2014
SIZE: ANSI D
FILE NAME: 01-EC-03.DWG

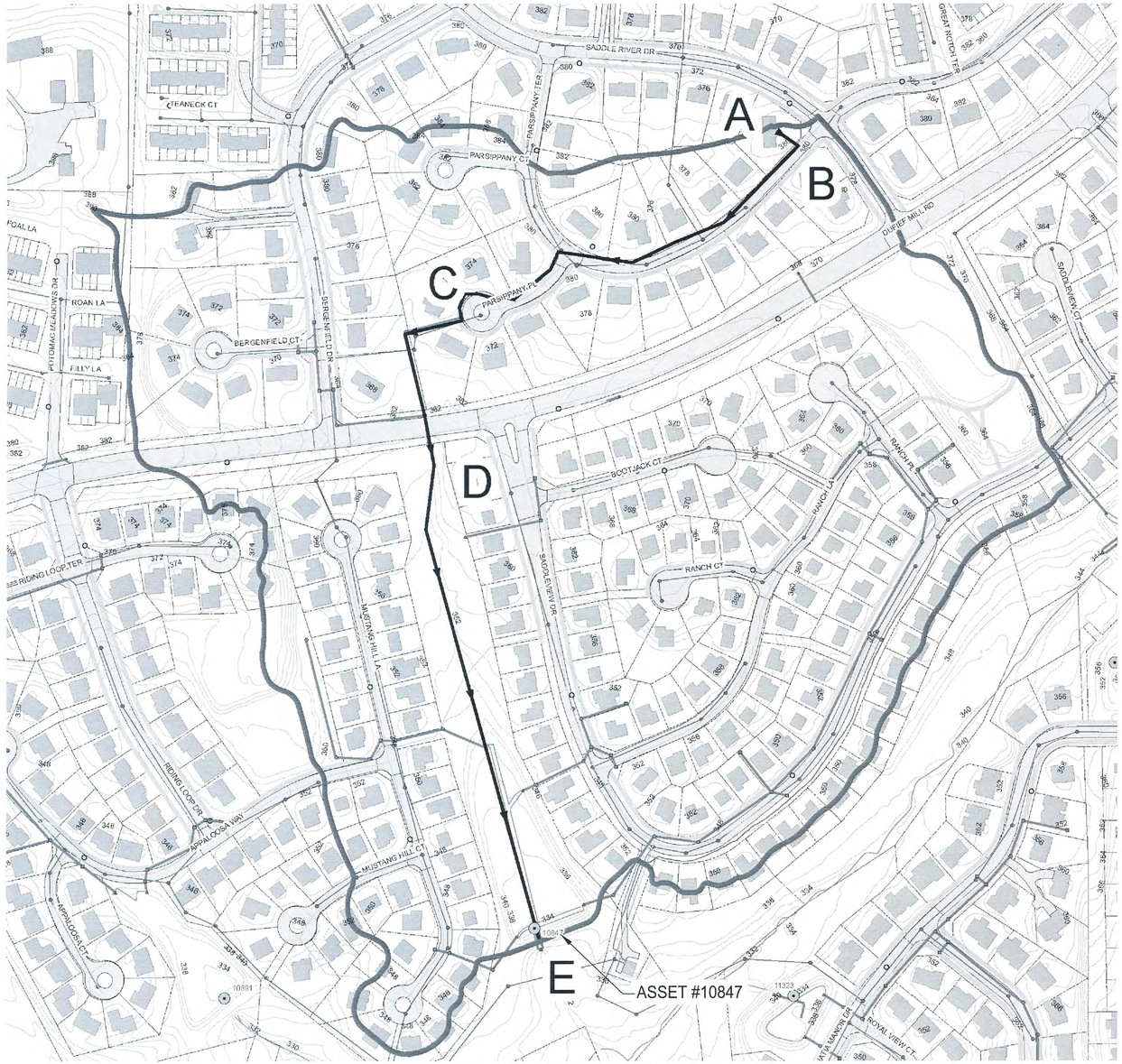
TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

MASTER LEGENDS AND ABBRREVIATIONS

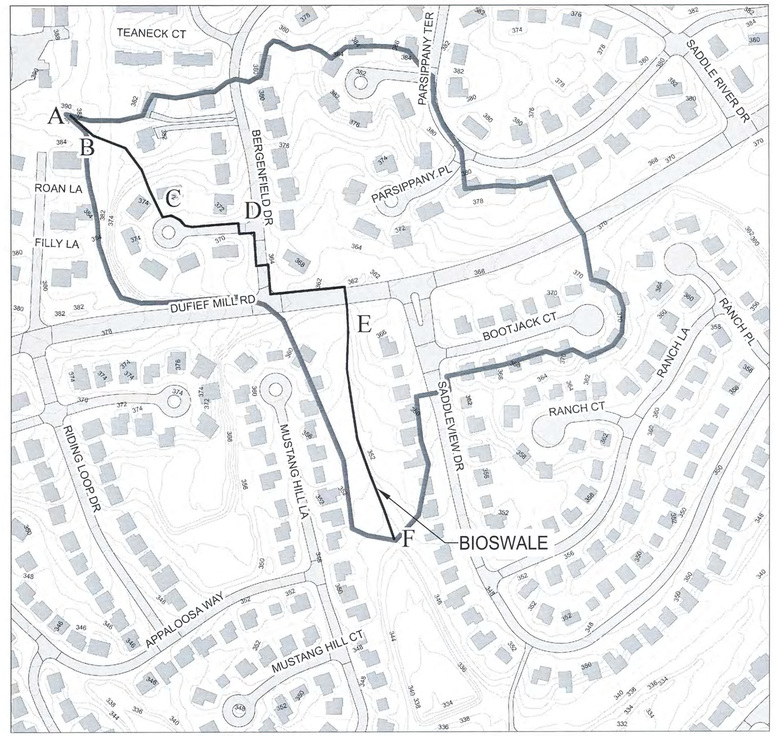
SHEET NO. 2 OF 13

ML-01

Attached Xrefs



STORMWATER MANAGEMENT DRY POND (MCDEP ASSET 10847)



BIOSWALE

Hydrologic Summary		
Name	Potomac Ridge SWM Pond 'C' Bioswale	
MCDEP Asset	10847	
Drainage Area	21.03	Acres
RCN	70	
Time of Concentration	0.147	Hours

Land Use Soil Composition		
Land Use/Hydrolologic Soil Group	B	C
Low Density Residential	13.75	N/A
Medium Density Residential	4.29	2.99

Flow Path Summary					
Segment/Parameter	Flow Type	Length	Slope	Velocity	Surface
A to B	Sheet Flow	50 LF	8%	N/A	Grass-Range, Short
B to C	Shallow Concentrated	350 LF	4.60%	N/A	Unpaved
C to D	Shallow Concentrated	200 LF	2%	N/A	Paved
D to E	Channel	500 LF	N/A	9.0 fps	Storm Drain
E to F	Channel	600 LF	N/A	6.0 fps	Swale

Legend

- TOC Flow Path
- Bioswale Drainage Area
- Property Line
- 2' Contours

Hydrologic Summary		
Name	Potomac Ridge SWM Pond 'C'	
MCDEP Asset	10847	
Drainage Area	60.42	Acres
RCN	74	
Time of Concentration	0.30	Hours

Land Use\Soils Composition		
Land Use\Hydrologic Soil Group	B	C
Low Density Residential	19.68	NA
Medium Density Residential	34.74	6.02

Flow Path Summary					
Segment\Parameter	Flow Type	Length	Slope	Velocity	Surface
A to B	Sheet Flow	50 LF	4%	NA	Dense Grass
B to C	Shallow Concentrated	900 LF	1.50%	NA	Paved
C to D	Open Channel	390 LF	NA	6.0 fps	Storm Drain
D to E	Open Channel	1090 LF	NA	4.0 fps	Natural/Stone Channel

Legend

- Drainage Divide
- TOC Flow Path
- TOC Point of Interest
- 2 Foot Contours

GRAPHIC SCALE

100 0 50 100 200

SCALE: 1" = 100'

N

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SEAL:

STATE OF MARYLAND — JEFFREY BRIAN RUTH — PROFESSIONAL ENGINEER

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 #: 32457

EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT	SEDIMENT CONTROL TECHNICAL REQUIREMENTS:
REVIEWED DATE	REVIEWED DATE
APPROVED DATE	APPROVED DATE
S.M.FILE NO.	

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:

REVIEWED DATE

SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL, IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection — Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCK/VILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

DESIGNED BY: BMF
DWN BY: ADG
SUBMITTED BY: JBB
CKD BY: JBB
PLOT SCALE: 1" = 100'
PLOT DATE: 1/21/2014
SIZE: ANSI D
FILE NAME: 01-EC-03.DWG
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:

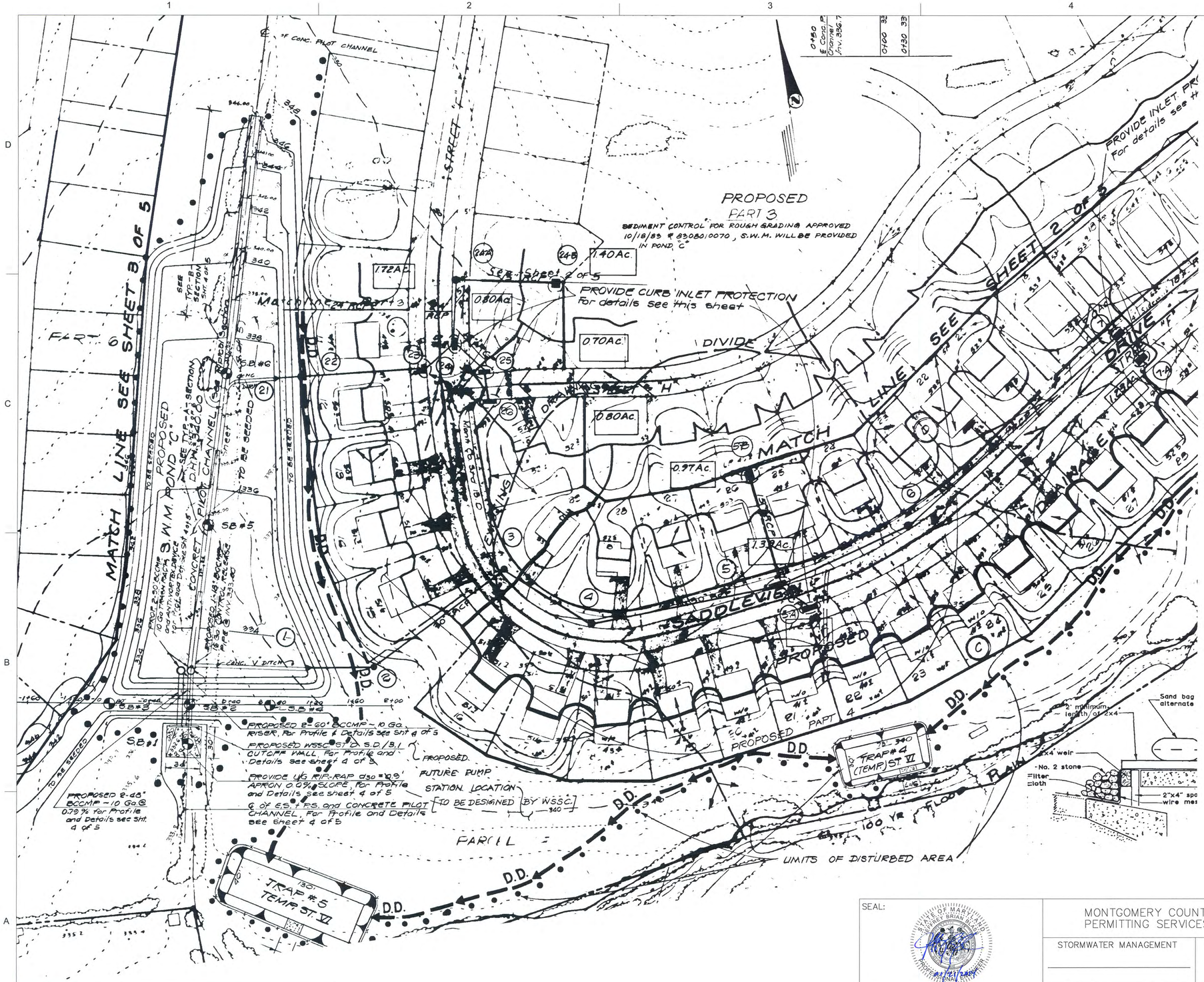
TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

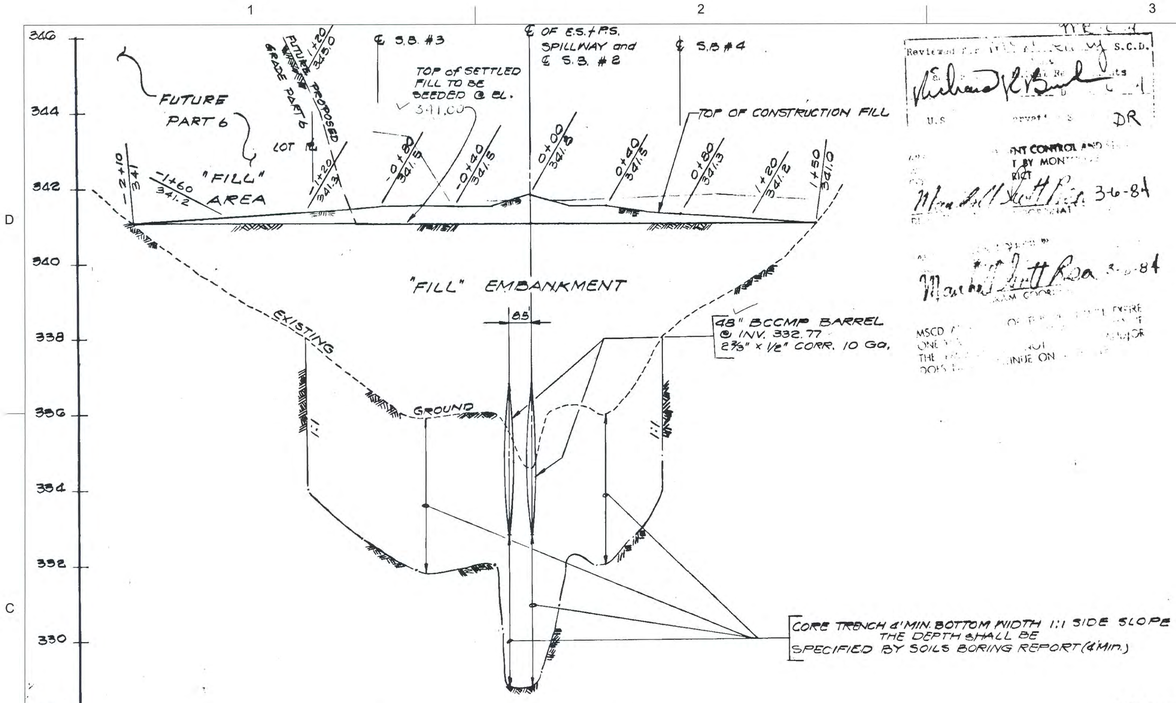
DRAINAGE AREA MAP

SHEET NO. 3 OF 13

DA-01

Attached XrefS:

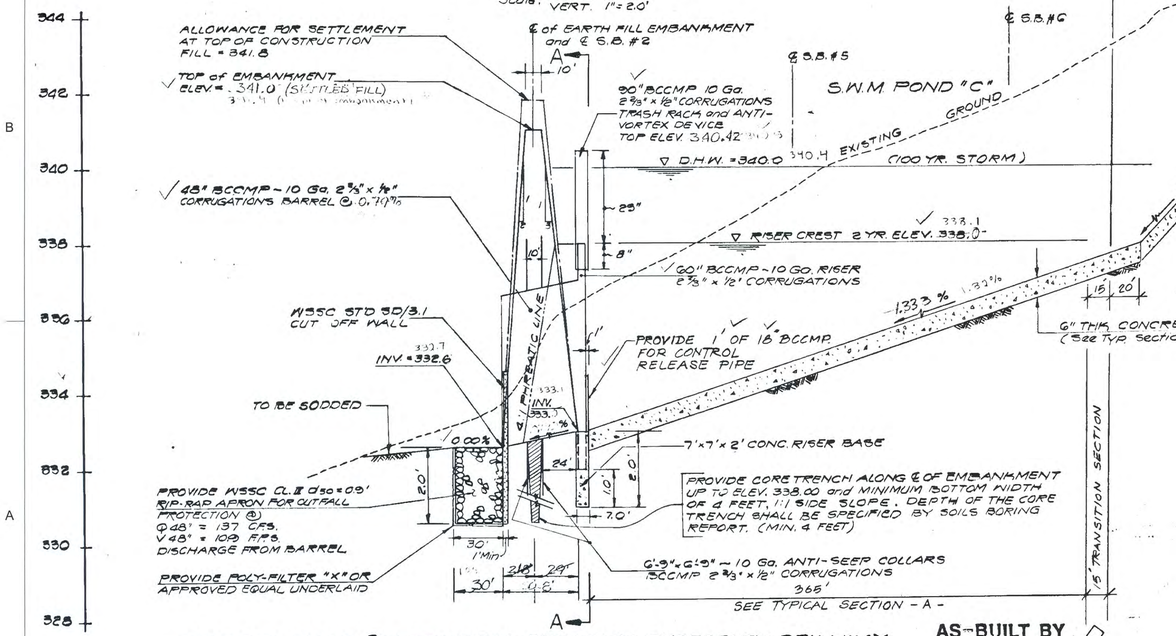

PROPOSED
PART 3
SEDIMENT CONTROL FOR ROUGH GRADING APPROVED 10/18/83 # 830810070, S.W.M. WILL BE PROVIDED IN POND "C"
1.72Ac.
1.40Ac.
0.80Ac.
0.70Ac.
0.80Ac.
0.97Ac.
1.33Ac.
PROVIDE CURB INLET PROTECTION For details see this sheet
PROVIDE INLET PROTECTION For details see this sheet
SEE Sheet 2 of 5
SEE SHEET 3 OF 5
SEE SHEET 2 OF 5
MATCH LINE SEE SHEET H
DIVIDE
PROPOSED POND "C" 3 S.W.M.
PROPOSED 2-66" RCCMP @ 0.79% For Profile and Details see Sht. 4 of 5
PROPOSED 6'-0" RCCMP @ 0.5% For Profile and Details see Sht. 4 of 5
PROPOSED 6'-0" RCCMP @ 1.0



This pond is constructed as per the approved stormwater management plan and subsequent revisions and substantially meets the requirements of the Soil Conservation Service MD378 "Standards and Specifications for Ponds".

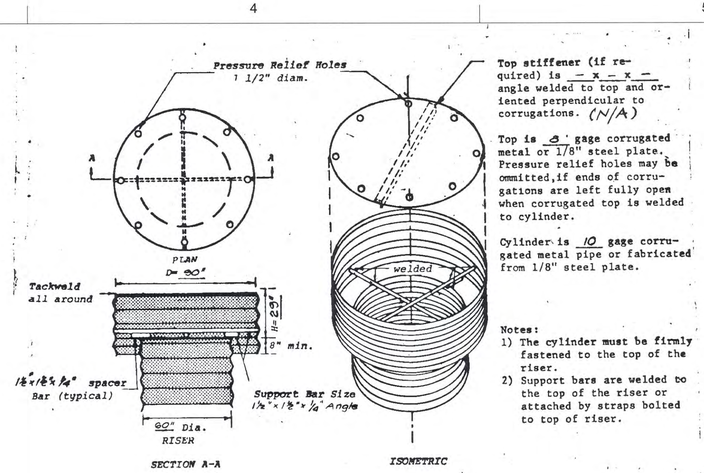
PROPOSED PROFILE ALONG ℄ TOP OF EMBANKMENT for S.W.M. POND "C"

(for Stationing see Sheet 1 of 5)
Scale: HORIZ. 1"=50'
VERT. 1"=2.0'



PROFILE ALONG ℄ OF PRINCIPAL SPILLWAY, EMERGENCY SPILLWAY AND ALONG CONCRETE PILOT CHANNEL FOR S.W.M. POND "C"

SCALE: HORIZ. 1"=50'
VERT. 1"=2.0'



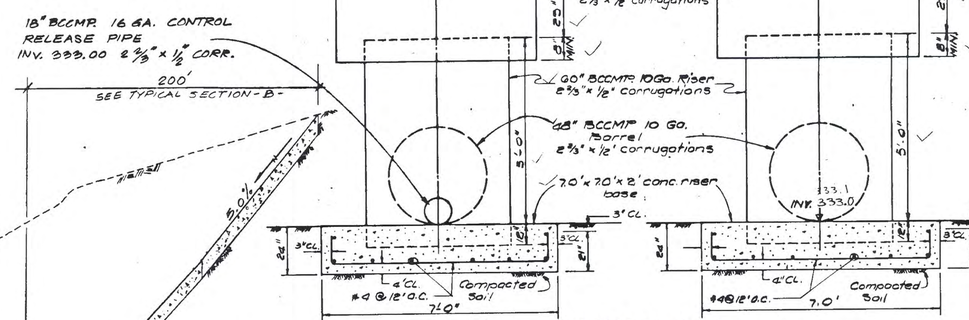
Top stiffener (if required) is — x — x — angle welded to top and oriented perpendicular to corrugations. (N/A)

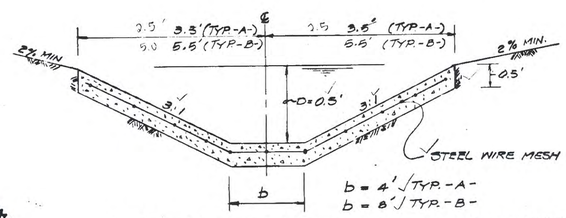
Top is 8 gage corrugated metal or 1/8" steel plate. Pressure relief holes may be omitted if ends of corrugations are left fully open when corrugated top is welded to cylinder.

Cylinder is 10 gage corrugated metal pipe or fabricated from 1/8" steel plate.

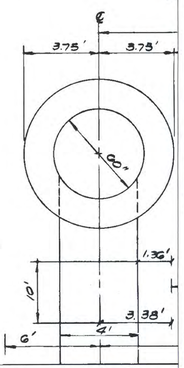
Notes:
1) The cylinder must be firmly fastened to the top of the riser.
2) Support bars are welded to the top of the riser or attached by straps bolted to top of riser.

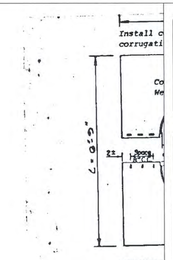
CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE
(not to scale)
FOR S.W.M. POND "C"





TYPICAL SECTION OF CONCRETE PILOT CHANNEL
NOT TO SCALE





NOTES FOR COLLARS:
1. All materials to be in construction and cons specifications.
2. When specified on the of collars shall be i construction and cons specifications.

BARREL SIZE	L
48"	6'-5"

FOR

PAVING TO BE USED ONLY WHERE DIRECTED OR SHOWN. WHEN CONCRETE PAVING IS USED, WIRE MESH SHALL BE EXTENDED DOWN INTO CUTOFF WALL AT LOWER END OF PAVEMENT.

2'-0"

℄ 4@12" C.C. EACH WAY

STANDARD CUTOFF WALL TO BE USED AT ALL PIPE OUTLETS UNLESS OTHERWISE DIRECTED. f'c=4000 PSI 28 DAYS.

2/3 DU MINIMU SEE NO

NOTE: 1.
(1) BANK SLOPE TO BE 3:1 TYPICAL (FOR EARTH)

CONCR

CUT O

CUT

2/3 DU MINIMU SEE NO

6"x6" - W2.1 x W2.1 WWF MESH.

CONCRETE CUTOFF WALL

CUT

Reviewed for ... by S.C.D.
U.S. ... DR
ANT CONTROL AND ... BY MONT ... RICT
... 3-6-84
... 3-6-84
MSCD ... ONE ... THE ... DOES ... INUE ON

AS-BUILT BY
MONTGOMERY/KONTGIAS ENTERPRISES
POTOMAC OFFICE

SEAL:
STATE OF MARYLAND — SURVEYOR BRIAN E. ... — PROFESSIONAL ENGINEER

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 #: 32457
EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT		SEDIMENT CONTROL TECHNICAL REQUIREMENTS:	
REVIEWED	DATE	REVIEWED	DATE
APPROVED	DATE	APPROVED	DATE
S.M.FILE NO.			

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:
REVIEWED DATE

SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection
Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

DESIGNED BY: BMF
DWN BY: ADG
CKD BY: JBB
SUBMITTED BY: JBB
PLOT SCALE: 1.0000'=1"
PLOT DATE: 1/21/2014
SIZE: ANSI D
FILE NAME: 01-EC-03.DWG
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:

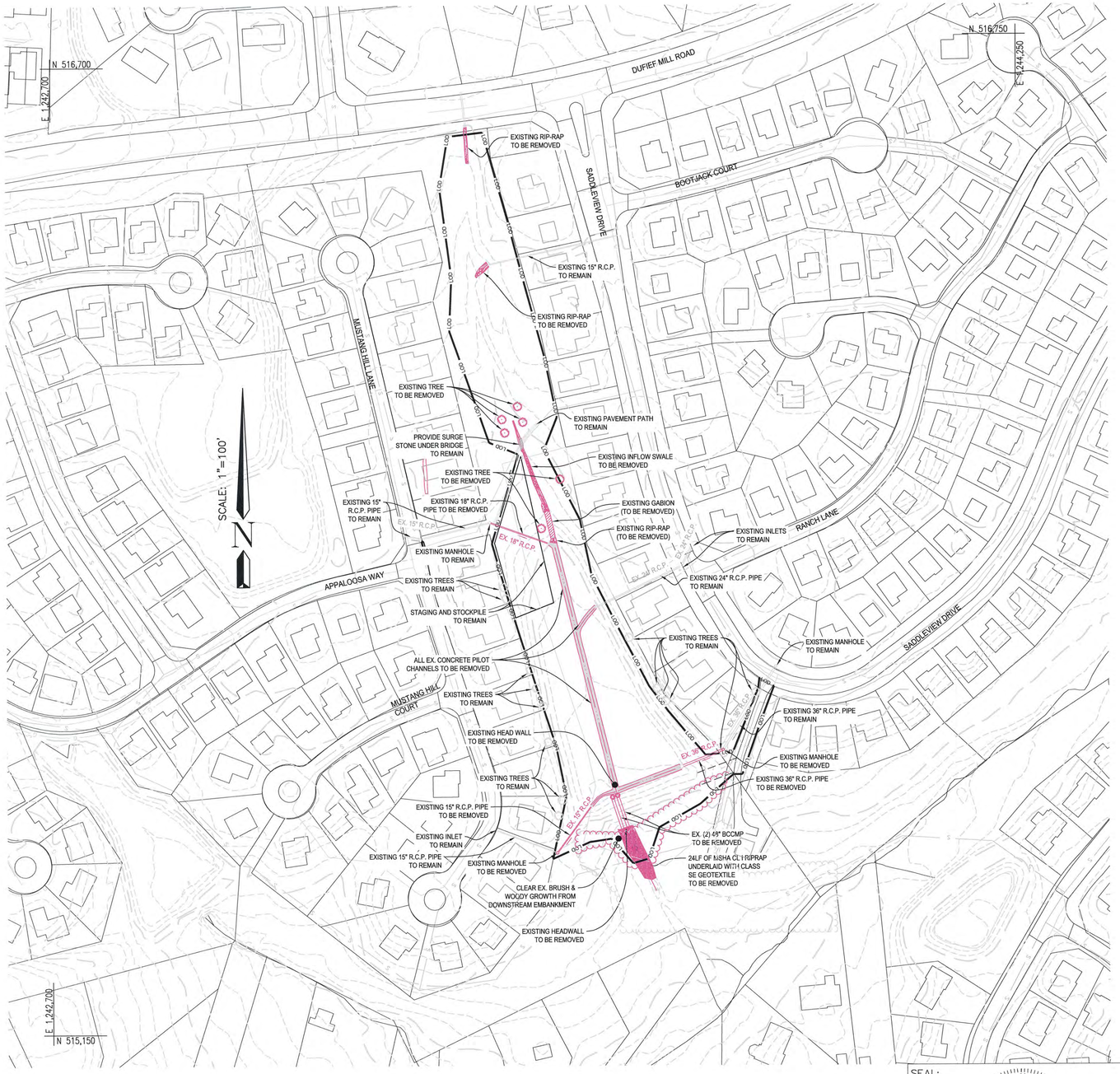
TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #108471) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

EXISTING CONDITIONS PROFILES

SHEET NO. 5 OF 13
EC-02

Attached Xrefs:

Last Saved 1/21/2014 Last Plotted 1/21/2014 3:47 PM Sheet N:\43030\DWG\01-EC-03



LEGEND

- EXISTING RIP-RAP ANDINFLOW SWALE
- EXISTING CONRETE PILOT CHANNELS
- EXISTING GABION
- EXISTING PAVEMENT PATH
- EXISTING TREE
- EXISTING TREE LINE

NOTE: ALL ITEMS TO BE REMOVED ARE SHOWN IN RED.

GRAPHIC SCALE

100 0 50 100 200

SCALE: 1" = 100'

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SEAL:

STATE OF MARYLAND — JEFFREY BRIAN BLOOM — 32457 — PROFESSIONAL ENGINEER

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 #: 32457

EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT	SEDIMENT CONTROL TECHNICAL REQUIREMENTS:
REVIEWED DATE	REVIEWED DATE
APPROVED DATE	APPROVED DATE
S.M.FILE NO.	

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:

REVIEWED DATE

SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL, IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection — Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: BMF
DWN BY: ADG
SUBMITTED BY: JBB
CKD BY: JBB
PLOT SCALE: 1.00'
SIZE: ANSI D
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:
PLOT DATE: 1/21/2014
FILE NAME: 01-EC-03-SHT-6.DWG

MR. CRAIG CARSON 240.777.7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

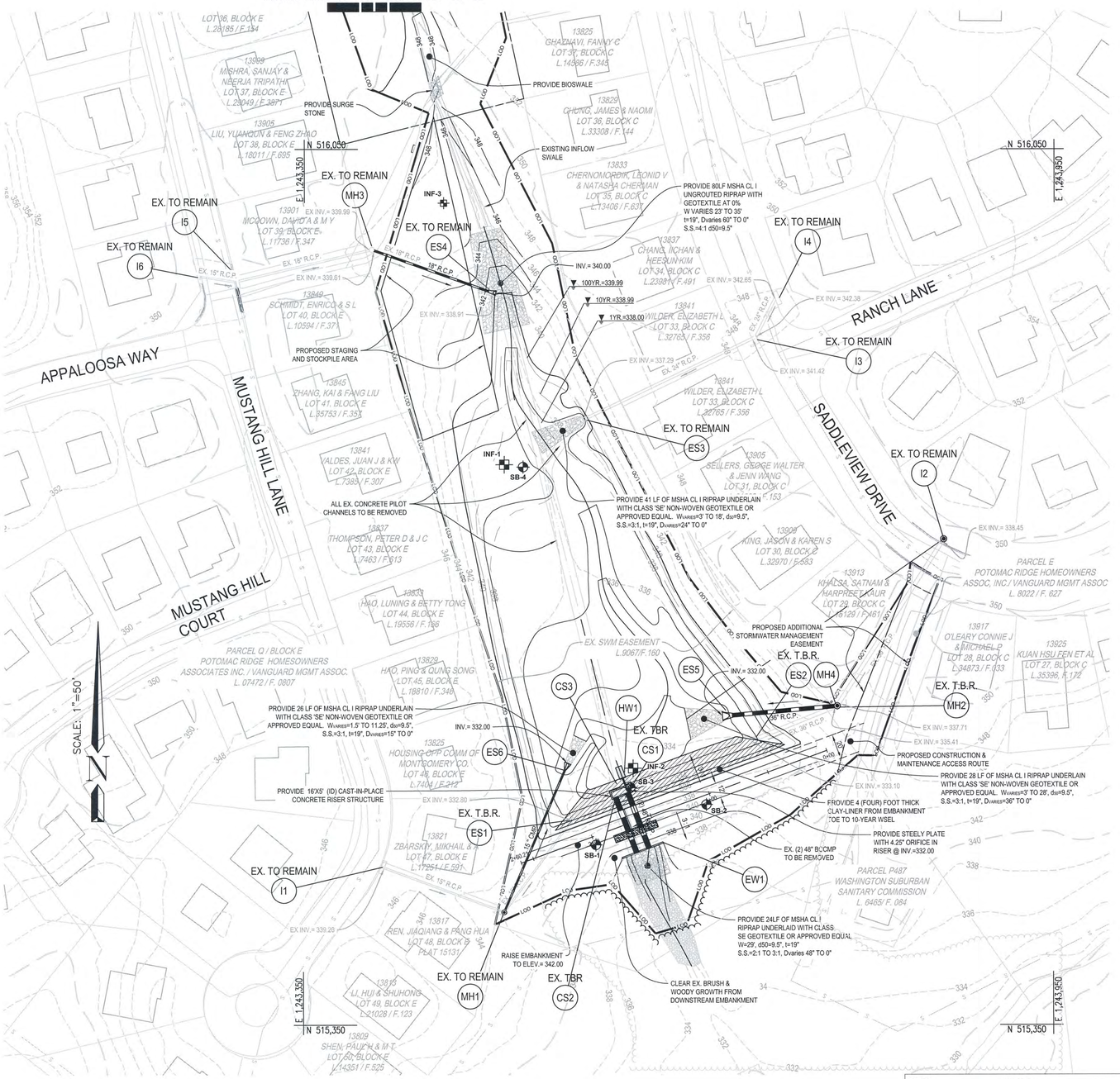
DEMOLITION - EXISTING CONDITIONS PLAN

SHEET NO. 6 OF 13

EC-03

Attached Xrefs

MATCH LINE "A"–"A" SEE SHEET GR-02



PROPOSED POND ROUTING ASSET # 10847			
FREQUENCY	PEAK DISCHARGE (cfs)		POND WSEL (ft)
	INFLOW	OUTFLOW	
1-YEAR	42.33	1.07	338.00
2-YEAR	69.40	9.26	338.07
10-YEAR	170.24	124.82	338.99
100-YEAR	293.80	250.38	339.99

SWM REQUIREMENT VS. PROVIDED CAPACITY			
DESCRIPTION	UNIT	REQUIRED	PROVIDED
WATER QUALITY STORAGE VOLUME	Ac-ft	1.36	0.10
CHANNEL PROTECTION VOLUME	Ac-ft	2.15	2.45
CHANNEL PROTECTION RELEASE RATE	cfs	1.15	1.07

PROPOSED POND DATA FOR ASSET # 10847	
DESCRIPTION	ELEVATION
POND BOTTOM	332.00
PERMANENT POOL	N/A
TOP OF DAM	342.00

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SEAL:

STATE OF MARYLAND — JEFFREY BRIAN BLOOM — No. 32457 — PROFESSIONAL ENGINEER

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 #: 32457

EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT
REVIEWED DATE
APPROVED DATE
S.M.FILE NO.

SEDIMENT CONTROL TECHNICAL REQUIREMENTS:
REVIEWED DATE
APPROVED DATE

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:
REVIEWED DATE
SEDIMENT CONTROL PERMIT NO.
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection — Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

DESIGNED BY: BMF
DWN BY: ADG
CKD BY: JBB
SUBMITTED BY: JBB
PLOT SCALE: 1" = 50'
PLOT DATE: 1/21/2014
STATE: MD
ANSI D
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:
FILE NAME: 01-EC-03.DWG

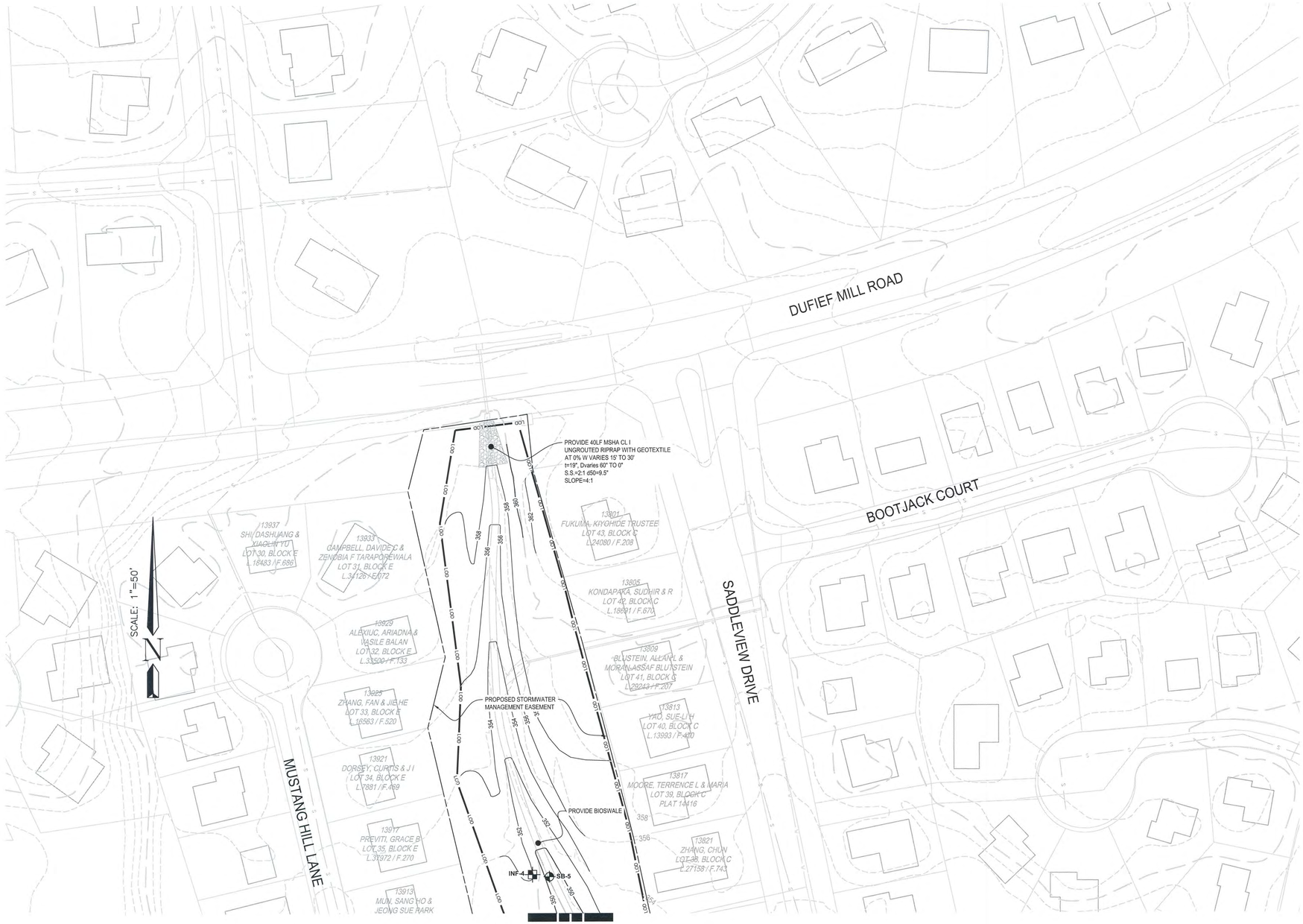
TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

GRADING AND LAYOUT PLAN

SHEET NO.
7 OF 13

GR-01

Attached Xrefs:



MATCH LINE "A"-"A" SEE SHEET GR-01

GRAPHIC SCALE

50 0 25 50 100

SCALE: 1" = 50'

SWM REQUIREMENT VS. PROVIDED CAPACITY			
DESCRIPTION	UNIT	REQUIRED	PROVIDED
WATER QUALITY STORAGE VOLUME	Ac-ft	0.45	0.10
CHANNEL PROTECTION VOLUME	Ac-ft	0.58	0.00
CHANNEL PROTECTION RELEASE RATE	cfs	0.26	0.00

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SEAL:

STATE OF MARYLAND
JEFFREY BRIAN BLAST
PROFESSIONAL ENGINEER
21/01/2014

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 #: 32457

EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT

REVIEWED DATE

APPROVED DATE

S.M.FILE NO.

SEDIMENT CONTROL TECHNICAL REQUIREMENTS:

REVIEWED DATE

APPROVED DATE

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:

REVIEWED DATE

SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection
Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

DESIGNED BY: BMF
DWN BY: ADG
CKD BY: JBB
SUBMITTED BY: JBB
PLOT SCALE: 1"=50'
PLOT DATE: 1/21/2014
SIZE: ANSI D
FILE NAME: 01-EC-03.DWG
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:

TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

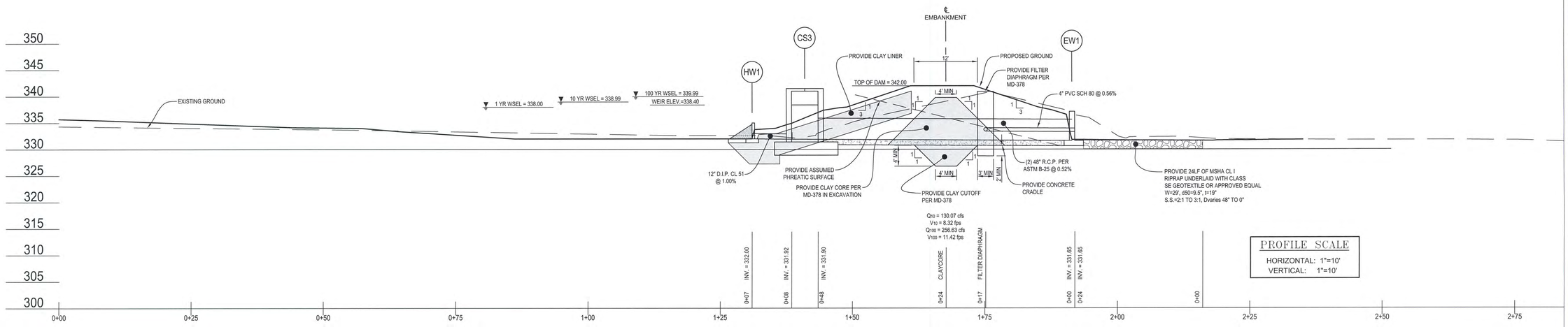
GRADING AND LAYOUT PLAN

SHEET NO.
8 OF 13

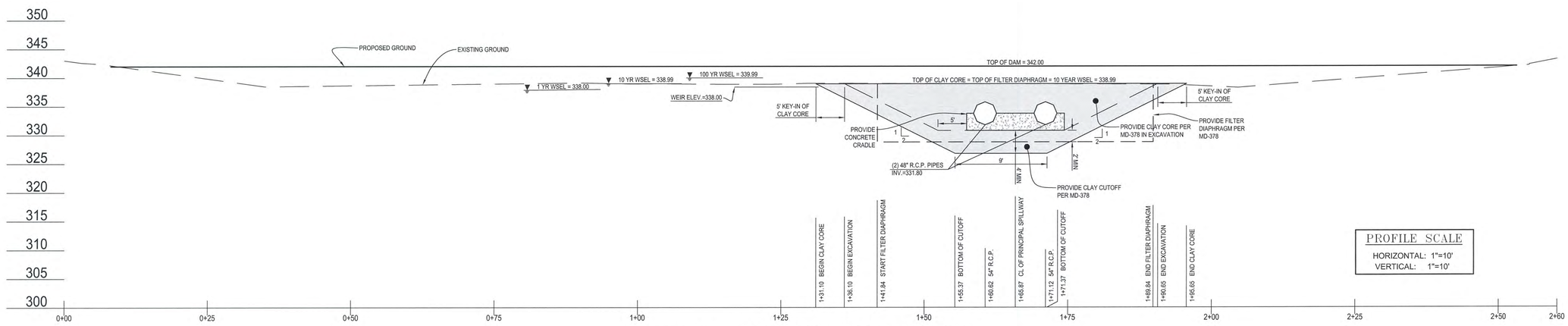
GR-02

Attached Xrefs:

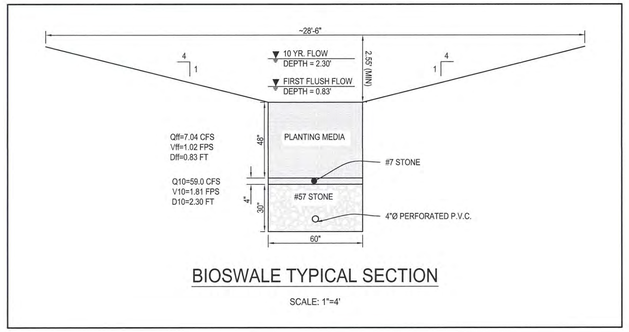
Last Saved 1/21/2014 Last Plotted 1/21/2014 3:47 PM Sheet N:\43030\DWG\01-EC-03



PROFILE ALONG CENTERLINE OF PRINCIPAL SPILLWAY



PROFILE ALONG CENTERLINE OF EMBANKMENT



BIOSWALE TYPICAL SECTION

SCALE: 1"=4'

GRAPHIC SCALE
10 0 5 10 20
SCALE: 1" = 10'

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SEAL:

STATE OF MARYLAND — JEFFREY BRIAN BUSCH — 32457 — PROFESSIONAL ENGINEER

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 #: 32457

EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT	SEDIMENT CONTROL TECHNICAL REQUIREMENTS:
REVIEWED DATE	REVIEWED DATE
APPROVED DATE	APPROVED DATE
S.M.FILE NO.	

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:

REVIEWED DATE

SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection
Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

DESIGNED BY: BMF
DWN BY: ADG
SUBMITTED BY: JBB
CKD BY: JBB
PLOT SCALE: 1"=10'
PLOT DATE: 1/21/2014
FILE NAME: 01-EC-03.DWG
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:

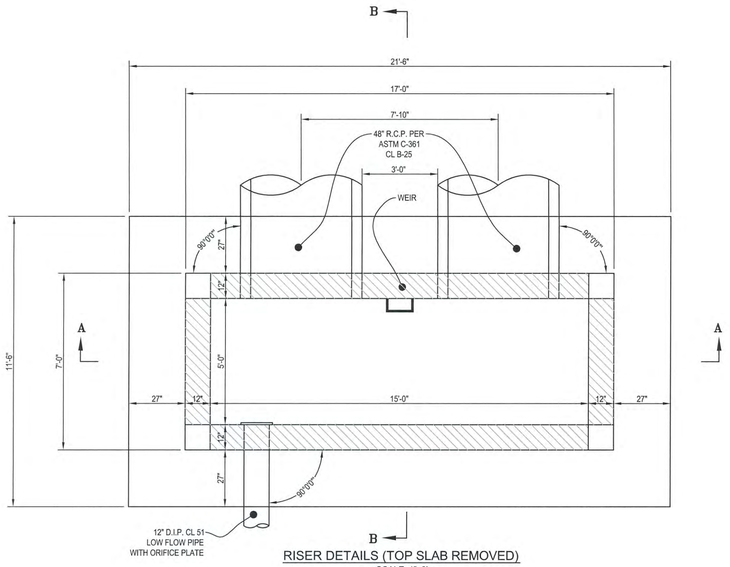
TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #108471) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

DAM EMBANKMENT PROFILES

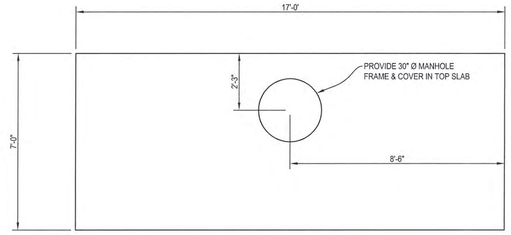
SHEET NO.
9 OF 13

PR-01

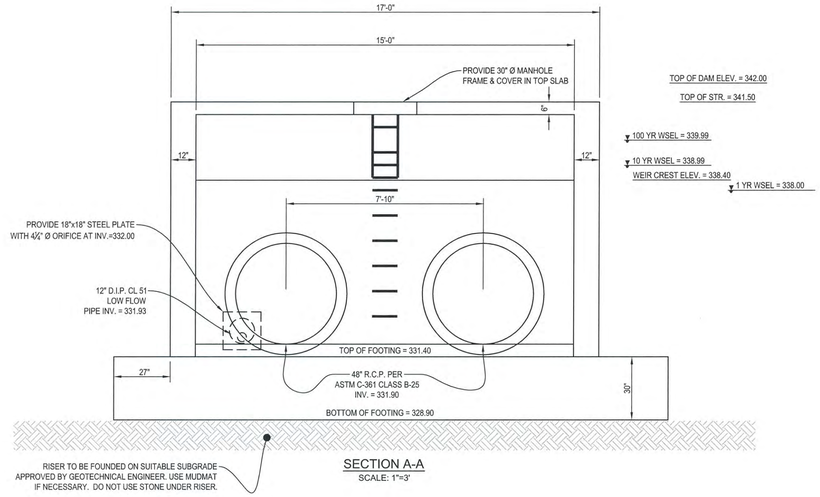
Attached Xrefs:



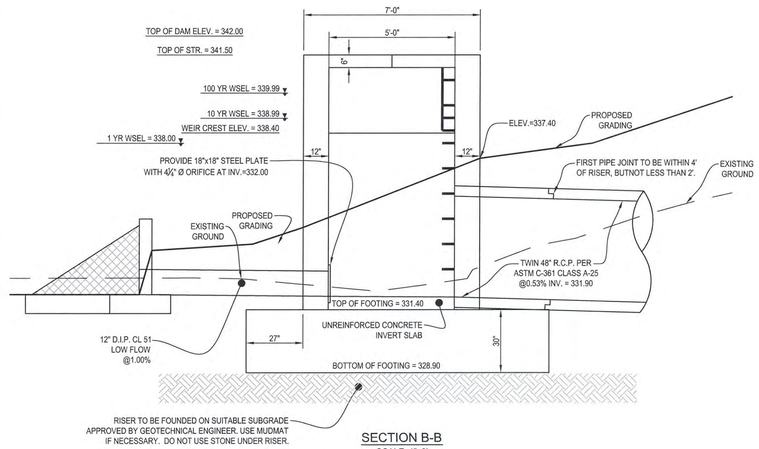
RISER DETAILS (TOP SLAB REMOVED)
SCALE: 1"=3'



TOP SLAB
SCALE: 1"=3'



SECTION A-A
SCALE: 1"=3'



SECTION B-B
SCALE: 1"=3'

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SEAL:

STATE OF MARYLAND
STANLEY BRIAN BOND
PROFESSIONAL ENGINEER

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 #: 32457

EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT	SEDIMENT CONTROL TECHNICAL REQUIREMENTS:	ADMINISTRATIVE REQUIREMENTS:
REVIEWED DATE	REVIEWED DATE	REVIEWED DATE
APPROVED DATE	APPROVED DATE	SEDIMENT CONTROL PERMIT NO.
S.M.FILE NO.		MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

Department of Environmental Protection
Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: BMF
DWN BY: ADG
CKD BY: JBB
SUBMITTED BY: JBB
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:
PLOT SCALE: 1'=1'
PLOT DATE: 1/21/2014
SIZE: ANSI D
FILE NAME: 01-EC-03.DWG

MR. CRAIG CARSON 240-777-7719
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

RISER DETAILS

SHEET NO.
10 OF 13

PR-02

Attached XrefS:

KIM ENGINEERING, INC. — BORING NUMBER SB-1

KIM ENGINEERING, INC.
Consulting Geotechnical Engineers
Silver Spring, Maryland

BORING NUMBER SB-1
PAGE 1 OF 1

CLIENT	Charles P. Johnson & Associates, Inc	PROJECT NAME	Site # 1 Muddy Branch Potomac Ridge WRE 12-01
PROJECT NUMBER	G13060BC	PROJECT LOCATION	Gray Colt Drive, Gaithersburg, MD 20878
DATE STARTED	7/19/13 COMPLETED 7/19/13	GROUND ELEVATION	340 ft HOLE SIZE 6 inches
DRILLING CONTRACTOR	K.E.I	GROUND WATER LEVELS:	
DRILLING METHOD	solid stem auger	AT TIME OF DRILLING	---
LOGGED BY	Yonas CHECKED BY RON	AT END OF DRILLING	---
NOTES		AFTER DRILLING	---

MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)
Topsoil at 5 inches			
Light brown with red mottling, moist, medium dense, silty sand with some clay (FILL)	SS 1	44	3-5-7 (12)
Light reddish brown, moist, loose, sandy silt with clay (FILL)	SS 2	56	2-4-6 (10)
	SS 3	50	3-3-3 (6)
Red, moist, loose, micaceous silty SAND (SM) with some clay	SS 4	39	4-4-4 (8)
Disintigrated rock consisting of gray, dry, very dense, fine silty SAND (SM)	SS 5	78	34-50/3"

Bottom of borehole at 14.4 feet.

GEOTECH BH PLOTS - GINT STD US.GDT - 9/4/13 16:31 - C:\PROGRAM FILES\GINT\PROJECTS\SITE # 1 MUDDY BRANCH POTOMAC RIDGE WRE 12-01.GPJ

KIM ENGINEERING, INC. — BORING NUMBER SB-2

KIM ENGINEERING, INC.
Consulting Geotechnical Engineers
Silver Spring, Maryland

BORING NUMBER SB-2
PAGE 1 OF 1

CLIENT	Charles P. Johnson & Associates, Inc	PROJECT NAME	Site # 1 Muddy Branch Potomac Ridge WRE 12-01
PROJECT NUMBER	G13060BC	PROJECT LOCATION	Gray Colt Drive, Gaithersburg, MD 20878
DATE STARTED	7/18/13 COMPLETED 7/18/13	GROUND ELEVATION	340 ft HOLE SIZE 6 inches
DRILLING CONTRACTOR	K.E.I	GROUND WATER LEVELS:	
DRILLING METHOD	solid stem auger	AT TIME OF DRILLING	---
LOGGED BY	Yonas CHECKED BY RON	AT END OF DRILLING	---
NOTES		AFTER DRILLING	---

MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)
Topsoil at 4 inches			
Red, moist, loose to medium dense, sandy silt with some clay (FILL)	SS 1	33	3-3-3 (6)
	SS 2	78	5-7-10 (17)
Red and brown, moist, loose, some what micaceous silty sand with some clay (FILL)	SS 3	61	3-4-6 (10)
Dark brown, moist, medium dense, fine silty SAND (SM)	SS 4	72	3-7-18 (25)
Disintigrated rock consisting of tan, dry, very dense, fine silty SAND (SM)	SS 5	73	19-50/5"

Bottom of borehole at 14.4 feet.

GEOTECH BH PLOTS - GINT STD US.GDT - 9/4/13 16:31 - C:\PROGRAM FILES\GINT\PROJECTS\SITE # 1 MUDDY BRANCH POTOMAC RIDGE WRE 12-01.GPJ

KIM ENGINEERING, INC. — BORING NUMBER SB-3

KIM ENGINEERING, INC.
Consulting Geotechnical Engineers
Silver Spring, Maryland

BORING NUMBER SB-3
PAGE 1 OF 1

CLIENT	Charles P. Johnson & Associates, Inc	PROJECT NAME	Site # 1 Muddy Branch Potomac Ridge WRE 12-01
PROJECT NUMBER	G13060BC	PROJECT LOCATION	Gray Colt Drive, Gaithersburg, MD 20878
DATE STARTED	7/18/13 COMPLETED 7/18/13	GROUND ELEVATION	334 ft HOLE SIZE 6 inches
DRILLING CONTRACTOR	K.E.I	GROUND WATER LEVELS:	
DRILLING METHOD	solid stem auger	AT TIME OF DRILLING	4.25 ft / Elev 329.75 ft Caved Depth at 7.3 feet
LOGGED BY	Yonas CHECKED BY RON	AT END OF DRILLING	5.42 ft / Elev 328.58 ft
NOTES		24hrs AFTER DRILLING	3.50 ft / Elev 330.50 ft Caved Depth at 3.5 feet

MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)
Topsoil at 5 inches			
Mottled tan and brown, dry, medium dense,silty SAND (SM)	SS 1	44	3-5-7 (12)
Disintigrated rock consisting of tan, dry, very dense, silty SAND (SM)	SS 2	67	35-50/5"
Disintigrated rock consisting of tan, dry, very dense, micaceous silty SAND (SM) with some gravel.	SS 3	60	50/5"

Bottom of borehole at 6.4 feet.

GEOTECH BH PLOTS - GINT STD US.GDT - 9/4/13 16:31 - C:\PROGRAM FILES\GINT\PROJECTS\SITE # 1 MUDDY BRANCH POTOMAC RIDGE WRE 12-01.GPJ

KIM ENGINEERING, INC. — BORING NUMBER SB-

KIM ENGINEERING, INC.
Consulting Geotechnical Engineers
Silver Spring, Maryland

BORING NUMBER SB-
PAGE 1 OF

CLIENT	Charles P. Johnson & Associates, Inc	PROJECT NAME	Site # 1 Muddy Branch Potomac Ridge WRE 12-01
PROJECT NUMBER	G13060BC	PROJECT LOCATION	Gray Colt Drive, Gaithersburg, MD 20878
DATE STARTED	7/18/13 COMPLETED 7/18/13	GROUND ELEVATION	338 ft HOLE SIZE 6 inches
DRILLING CONTRACTOR	K.E.I	GROUND WATER LEVELS:	
DRILLING METHOD	solid stem auger	AT TIME OF DRILLING	---
LOGGED BY	Yonas CHECKED BY RON	AT END OF DRILLING	---
NOTES		AFTER DRILLING	---

MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)
Topsoil a: 5 inches			
Mottled light gray and brown, moist, loose, fine silty SAND(SM)	SS 1	44	3-3-3 (6)
Dark brown, dry, dense, silty SAND (SM)	SS 2	67	4-21-27 (48)
Disintigrated rock consisting of light tan, dry, very dense, fine silty SAND (SM)	SS 3	56	13-29-50/4"
	SS 4	100	50/6"

Bottom of borehole at 9.0 feet.

GEOTECH BH PLOTS - GINT STD US.GDT - 9/4/13 16:31 - C:\PROGRAM FILES\GINT\PROJECTS\SITE # 1 MUDDY BRANCH POTOMAC RIDGE WRE 12-01.GPJ

KIM ENGINEERING, INC. — BORING NUMBER SB-5

KIM ENGINEERING, INC.
Consulting Geotechnical Engineers
Silver Spring, Maryland

BORING NUMBER SB-5
PAGE 1 OF 1

CLIENT	Charles P. Johnson & Associates, Inc	PROJECT NAME	Site # 1 Muddy Branch Potomac Ridge WRE 12-01
PROJECT NUMBER	G13060BC	PROJECT LOCATION	Gray Colt Drive, Gaithersburg, MD 20878
DATE STARTED	7/18/13 COMPLETED 7/18/13	GROUND ELEVATION	352 ft HOLE SIZE 6 inches
DRILLING CONTRACTOR	K.E.I	GROUND WATER LEVELS:	
DRILLING METHOD	solid stem auger	AT TIME OF DRILLING	---
LOGGED BY	Yonas CHECKED BY RON	AT END OF DRILLING	---
NOTES		AFTER DRILLING	---

MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)
Topsoil at 5 inches			
Brown with mottled gray, moist, loose, sandy silt with clay (FILL)	SS 1	67	2-2-4 (6)
Brown, moist, loose, sandy silt with clay (FILL)	SS 2	78	3-4-6 (10)
Brown, moist, loose, silt with some sand (FILL)	SS 3	72	3-3-4 (7)
	SS 4	67	3-5-5 (10)

Bottom of borehole at 10.0 feet.

GEOTECH BH PLOTS - GINT STD US.GDT - 9/4/13 16:31 - C:\PROGRAM FILES\GINT\PROJECTS\SITE # 1 MUDDY BRANCH POTOMAC RIDGE WRE 12-01.GPJ

KIM ENGINEERING, INC. — BORING NUMBER INF-3

KIM ENGINEERING, INC.
Consulting Geotechnical Engineers
Silver Spring, Maryland

BORING NUMBER INF-3
PAGE 1 OF 1

CLIENT	Charles P. Johnson & Associates, Inc	PROJECT NAME	Site # 1 Muddy Branch Potomac Ridge WRE 12-01
PROJECT NUMBER	G13060BC	PROJECT LOCATION	Gray Colt Drive, Gaithersburg, MD 20878
DATE STARTED	7/18/13 COMPLETED 7/18/13	GROUND ELEVATION	347 ft HOLE SIZE 6 inches
DRILLING CONTRACTOR	K.E.I	GROUND WATER LEVELS:	
DRILLING METHOD	solid stem auger	AT TIME OF DRILLING	---
LOGGED BY	Yonas CHECKED BY RON	AT END OF DRILLING	---
NOTES		AFTER DRILLING	---

MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)
Topsoil first 5 inches			
Brown, moist, loose, fine sandy silt with some clay (FILL)	SS 1	78	4-4-4 (8)
Mottled tan, moist, medium dense, silty sand with quartz gravel (FILL)	SS 2	72	3-7-6 (13)

Bottom of borehole at 5.0 feet.

GEOTECH BH PLOTS - GINT STD US.GDT - 9/4/13 16:31 - C:\PROGRAM FILES\GINT\PROJECTS\SITE # 1 MUDDY BRANCH POTOMAC RIDGE WRE 12-01.GPJ

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SEAL:

STATE OF MARYLAND — JEFFREY BRIAN BLASS — PROFESSIONAL ENGINEER

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 #: 32457

EXPIRATION DATE: 06/20/2014

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:

STORMWATER MANAGEMENT	SEDIMENT CONTROL TECHNICAL REQUIREMENTS:
REVIEWED DATE	REVIEWED DATE
APPROVED DATE	APPROVED DATE
S.M.FILE NO.	

NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED OF A MCDPS ACCESS PERMIT

ADMINISTRATIVE REQUIREMENTS:

REVIEWED DATE

SEDIMENT CONTROL PERMIT NO.

MCDPS APPROVAL OF THIS PLAN WILL EXPIRE ONE YEAR FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED, UNLESS THE PERMIT HAS BEEN EXTENDED.

Department of Environmental Protection
Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

DATE:	JAN., 2014
TASK ORDER NO.:	12-01
CONTRACT NO.:	
FILE NUMBER:	
DESIGNED BY:	BMF
DWN BY:	ADG
CKD BY:	JBB
SUBMITTED BY:	JBB
PLOT SCALE:	1"=10'
PLOT DATE:	1/21/2014
SIZE:	ANSI D
FILE NAME:	01-EC-03.DWG

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

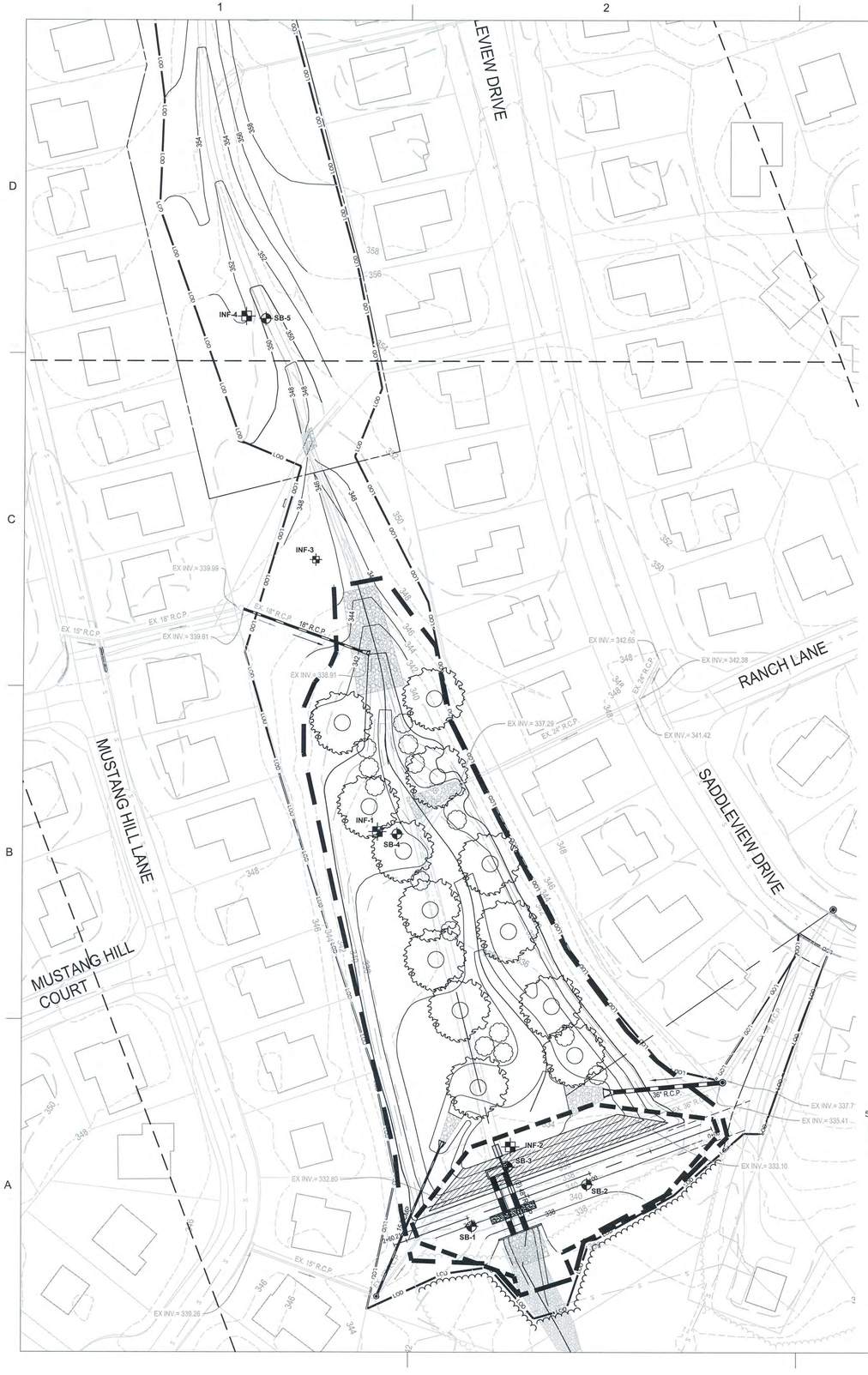
TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

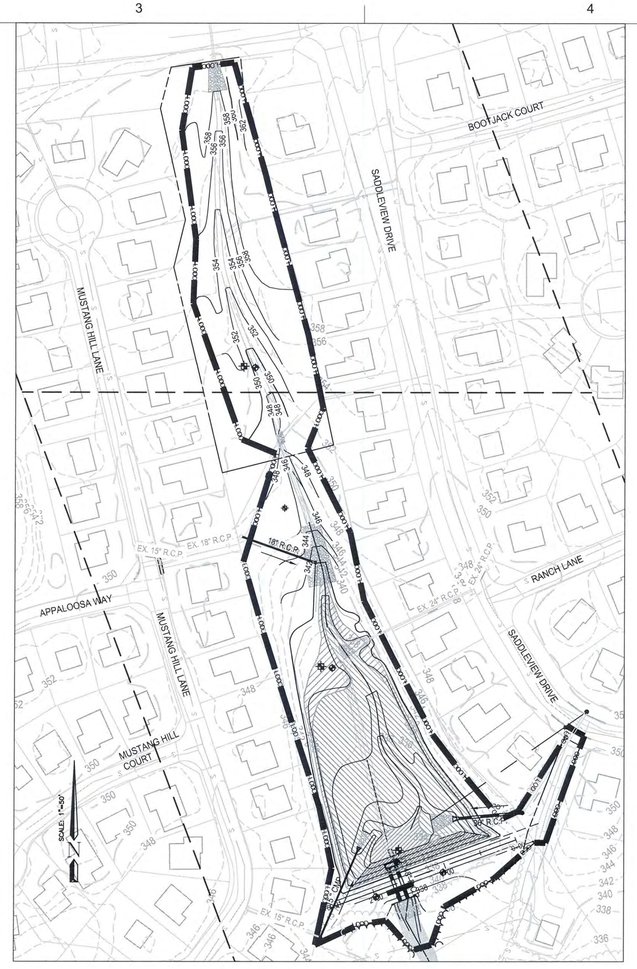
SOIL BORING LOGS

SHEET NO.
11 OF 13

SB-01

Attached Xrefs:





HYDROLOGIC ZONES PLAN INSET

SCALE: 1"=100'

GRAPHIC SCALE

100 0 50 100 200

SCALE: 1" = 100'

GRAPHIC SCALE

50 0 25 50 100

SCALE: 1" = 50'

PLANTING SCHEDULE

KeyCode	Qty	Botanical Name	Common Name	Size/Cond. at Planting	Remarks	Zone(s)
CANOPY TREES*, UNDERSTORY TREES						
AR		Acer rubrum	Red Maple			2,3,4,5
CC		Carpinus caroliniana	American Hornbeam			3,4,5
NS		Nyssa sylvatica	Black Gum			3,4
QA		Quercus alba	White Oak			3,4,5
QB		Quercus bicolor	Swamp White Oak			2,3,4,5
QP		Quercus phellos	Willow Oak			3,4,5
Shrubs						
CO		Cephalanthus occidentalis	Buttonbush			2,3
LB		Lindera benzoin	Spicebush			3,4
IV		Ilex verticillata 'Winter Gem'	Winter Gem Winterberry			3,4,5
VD		Viburnum dentatum	Arrowhead Viburnum			3,4
VP		Viburnum prunifolium	Cranberrybush Vinburnum			3,4
* All "Trees" shall have straight, non bowing, or irregular trunks and leaders and be uniformly branched out with vibrant well developed root systems.						
Forbs (Aquatic emergents)						
AI		Aesclepias incarnata	Swamp Milkweed			3
AP		Aster puniceus	Purplestem Aster			2,3
CC		Carex comosa	bristly sedge			2,3
IVE		iris versicolor	ble flag			2,3
JE		Juncus effusus	Soft Rush			2,3
PC		Pontederia cordata	Pickerelweed			2
Forbes Sedges						
PP		Polygonum pensylvanicum	Pennsylvania Smartweed			3
RL		Rudbeckia laciniata	Cutleaf Coneflower			3
SR		Soliago rugosa	Wrinkleleaf Goldenrod			3
CP		Carex pennsylvanica	Pennsylvanis Sedge			3

HYDROLOGIC ZONES		
ZONE	ZONE DESCRIPTION	HYDROLOGIC CONDITIONS
1	DEEP WATER POOL	1'-6' DEPTH BELOW NORMAL POOL ELEVATION
2	SHALLOW WATER BENCH (LOW MARSH)	0"-12" DEPTH BELOW NORMAL POOL ELEVATION
3	SHORELINE FRINGE (HIGH MARSH)	0"-12" ELEVATION ABOVE NORMAL POOL (REGULARLY INUNDATED)
4	RIPARIAN FRINGE	1'-4' ELEVATION ABOVE NORMAL POOL (PERIODICALLY INUNDATED)
5	FLOODPLAIN TERRACE	2YR TO 10YR WATER SURFACE ELEVATION (INFREQUENTLY INUNDATED)
6	UPLAND SLOPES	100YR WATER SURFACE ELEVATION AND ABOVE (SELDOM/NEVER INUNDATED)

NOTES:
1. Plant list categories reflect the primary zone each plant will tolerate. Some plants have ranges that include several zones. See planting plan for actual limits of all plant materials.
2. All areas within the LOD not receiving other specified plant material shall be seeded with the turfgrass seed mix, see specifications on Planting Plan(s).
3. Seed quantities, percentages and mixes are based on pure live seed.
4. The embankment area shall be cleared of all woody vegetation. The embankment shall remain free of woody vegetation through appropriate maintenance and regular mowing.

GENERAL NOTES:
1. THIS PLAN SHALL ONLY BE USED FOR LANDSCAPE IMPROVEMENTS AS SHOWN. THIS PLAN SHALL NOT BE USED FOR ANY OTHER CONSTRUCTION PURPOSE. SEE THE SITE PLAN FOR SITE GRADING.
2. THE EXISTING UTILITIES SHOWN HEREON HAVE BEEN LOCATED USING INFORMATION AVAILABLE AT THE TIME THIS PLAN WAS PREPARED. PRIOR TO DIGGING, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES VIA TEST PIT WITHIN THE LIMITS OF CONSTRUCTION SHOWN ON THIS PLAN AND CONFIRM THAT NO CONFLICTS EXIST. ANY CONFLICTS MUST BE BROUGHT TO THE ATTENTION OF CPJ AND THE OWNER PRIOR TO STARTING CONSTRUCTION.

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

LEGEND

PROPOSED LIMIT OF LANDSCAPING
APPROX. DAM EMBANKMENT ZONE (TURF GRASS ONLY)

LEGEND

(NS) SHADE TREE

SHRUBS

HERBACEOUS/AQUATIC EMERGENTS, FORBES

LANDSCAPE ARCHITECT CERTIFICATE

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS CORRECT AND TAKEN FROM AVAILABLE PLANS AND RECORDS.

STATE OF MARYLAND · JOHN STURM · REGISTERED LANDSCAPE ARCHITECT · 755

DATE

ERIC J. STURM
REGISTERED LANDSCAPE
ARCHITECT MD. # 755

Department of Environmental Protection
Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.	MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: BMF
DWN BY: ADG
CKD BY: JBB
SUBMITTED BY: JBB
PLOT SCALE: 1=50'
PLOT DATE: 1/21/14
SIZE: ANSI D
DATE: JAN., 2014
TASK ORDER NO.: 12-01
CONTRACT NO.:
FILE NUMBER:
FILE NAME: 01-EC-03.DWG

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

LANDSCAPE PLAN

SHEET NO.
12 OF 13

LP-01

Attached X-refs:

Last Saved 1/21/2014 Last Plotted 1/21/2014 3:46 PM Sheet N:\43030\DWG\01-EC-03

GENERAL PLANTING NOTES

1. ALL PLANT MATERIAL SHALL CONFORM TO THE SIZES GIVEN IN THE PLANT LIST AND SHALL BE NURSERY GROWN IN ACCORDANCE WITH THE "AMERICAN STANDARD FOR NURSERY STOCK," ANSI Z60.1, LATEST EDITION.
2. ALL PLANTING SHALL BE IN ACCORDANCE WITH STANDARD AMERICAN ASSOCIATION OF NURSERYMEN PROCEDURES AND SPECIFICATIONS.
3. CONTRACTOR AND OWNER'S REPRESENTATIVE SHALL VERIFY THE CORRECT LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO INSTALLATION OF ANY PLANT MATERIALS.
4. PLANT MATERIAL LOCATION TO BE STAKED IN THE FIELD AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
5. ALL PLANT BEDS AND PLANTING AREAS TO BE MULCHED TO A DEPTH OF 2" SHREDDED HARDWOOD BARK UNLESS OTHERWISE NOTED ON DRAWINGS OR SPECIFICATIONS.
6. ALL AREAS DISTURBED BY PLANTING OPERATIONS SHALL BE FINE GRADED AND SEEDED
7. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE BEFORE MAKING ANY SUBSTITUTIONS OR CHANGES
8. ALL PLANT BEDS SHALL BE CONTAINED WITH A SPADED EDGE UNLESS OTHERWISE NOTED ON DRAWINGS
9. QUANTITIES SHOWN ON PLANT LIST ARE FOR THE CONTRACTORS CONVENIENCE ONLY AND ARE NOT GUARANTEED TO BE ACCURATE. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLAN AND QUANTITIES SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN SHALL APPLY.
10. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF MONTGOMERY COUNTY, MARYLAND.
11. CONTRACTOR IS TO PROVIDE ALL MATERIALS AND LABOR INCLUDING PLANTS, PLANTER FILL MATERIALS, MULCHES, SOIL PREPARATION, DECORATIVE ITEMS, INSPECTION, AND TRANSPORTATION.
12. TOPSOIL TO A DEPTH OF 4" IN ALL AREAS TO BE SEEDED OR SODDED
13. EACH PLANTING BED AREA IS TO RECEIVE A MINIMUM OF 6" OF PREPARED SOIL CULTIVATED TO A 12" DEPTH. PREPARED SOIL SHALL BE MIXED AS FOLLOWS: 2/3 SANDY LOAM TOPSOIL FREE OF ROOTS, ROCKS, WEEDS, AND OTHER DEBRIS AND 1/3 PEAT MOSS OR APPROVED ORGANIC MULCH.
14. SOIL ADDITIVES TO BE GRANULAR FERTILIZER OF A 1:2:1 RATIO. SOIL OUTSIDE RANGE OF 5.0 - 7.0 pH SHALL BE TREATED APPROPRIATELY TO CORRECT FOR HIGH ALKALINITY OR ACIDITY.
15. THE USE OF ON-SITE TOPSOIL MUST BE APPROVED IN ADVANCE BY LANDSCAPE ARCHITECT.
16. SODDED AND SEEDED AREAS SHALL BE PROPERLY PREPARED, FINISH GRADED AND HAND ROLLED PRIOR TO SOD PLACEMENT OR SEEDING. SEEDED AREAS SHALL BE RE-SEEDED AS NECESSARY TO PROVIDE AN EVEN STAND OF SPECIFIED PLANTINGS.
17. TOPSOIL MOVED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGRADED SURFACES PROVIDING A MINIMUM OF 4" OF EVEN COVER TO ALL DISTURBED AREAS. SUCH AREAS SHALL BE STABILIZED THROUGH SEEDING AS SHOWN.

AREAS TO BE TOP DRESSED

A. PRIOR TO ALL SOIL PREPARATION WORK, ALL CONSTRUCTION AND PLANTING IN THE AREA SHALL HAVE BEEN COMPLETED.

B. CLEARING: PRIOR TO APPLICATION OF TOP DRESS MATERIAL, THE GROUND SURFACE SHALL BE WELL DRAINED AND CLEAR OF ALL DEBRIS OR ANY OTHER MATERIAL WHICH MAY HINDER THE PROPER APPLICATION OF SUBSEQUENT MAINTENANCE OPERATIONS.

C. PRECAUTIONS: DO NOT WORK SOIL WHILE FROZEN OR WET. DO NOT WORK SOIL IN A DUSTY CONDITION, BUT MOISTEN TO PREVENT A DUST NUISANCE.

D. AERATE ALL THE TOP DRESSED AREAS, USING A CORE REMOVING AERATOR.

E. ANY BARE AREAS LARGER THAN 1 SQ. FT. SHOULD BE RESTORED TO FINISHED GRADE WITH SCREENED COMPOSTED SEWAGE SLUDGE OR FINE GRADE TOPSOIL (SUBMIT SAMPLE FOR APPROVAL). USE EQUIPMENT AND METHODS COMMON TO SUCH WORK AND TILL SOIL TO THOROUGHLY INCORPORATE THE SCREENED COMPOSTED SLUDGE INTO EXISTING SOIL.

F. FERTILIZER: FOLLOWING THE AERATION PROCESS, APPLY A STARTER FERTILIZER EVENLY AT THE RATE OF 1 CY/1000 SQ. FT. INTO THE TOP 2 INCHES OF SOIL BY CROSS DISKING OR OTHER APPROPRIATE METHOD.

G. SOW SEED ONLY AFTER THE SCREENED SOIL AMENDMENT AND FERTILIZER HAVE BEEN APPLIED AND THOROUGHLY SETTLED BY RAINFALL OR WATERING. OVERSEED LAWN AREAS EVENLY AT A RATE OF 2 LBS/1000 SQ. FT. SEED WITH EQUIPMENT THAT PROVIDES A MULTI-DIRECTIONAL SEEDING PATTERN TO ENSURE PROPER SEEDING RATE AND UNIFORMITY OF SEEDING.

H. MULCHING: AFTER SEEDING, COVER BARE AREAS THAT HAVE BEEN REPAIRED WITH CLEAN WHEAT STRAW. A MINIMUM OF 50% OF THE SOIL SURFACE SHALL BE COVERED UNTIL GERMINATION HAS OCCURRED.

GENERAL NOTES:
1. THIS PLAN SHALL ONLY BE USED FOR LANDSCAPE IMPROVEMENTS AS SHOWN. THIS PLAN SHALL NOT BE USED FOR ANY OTHER CONSTRUCTION PURPOSE. SEE THE SITE PLAN FOR SITE GRADING.
2. THE EXISTING UTILITIES SHOWN HEREON HAVE BEEN LOCATED USING INFORMATION AVAILABLE AT THE TIME THIS PLAN WAS PREPARED. PRIOR TO DIGGING, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES VIA TEST PIT WITHIN THE LIMITS OF CONSTRUCTION SHOWN ON THIS PLAN AND CONFIRM THAT NO CONFLICTS EXIST. ANY CONFLICTS MUST BE BROUGHT TO THE ATTENTION OF CPJ AND THE OWNER PRIOR TO STARTING CONSTRUCTION.

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. The excavator is responsible for compliance with requirements of Chapter 36A of the Montgomery County Code.

SHA TURFGRASS SEED MIX		
MIX %	SPECIES	
	Common Name	Scientific Name
90	tall fescue	*Schedonorus phoenix* (Scop.) Holub
5	Kentucky bluegrass	*Poa pratensis* L. ssp. *pratensis*
5	perennial ryegrass	*Lolium perenne* L. ssp. *perenne*

SEEDING SEASONS AND SEED MIXES				
REGION	SEEDING SEASON - MONTH/DAY			
	Spring	Summer	Fall	Late Fall
	SHA Turfgrass Seed Mix			
1	4/1 to 6/15	6/16 to 7/31	8/1 to 10/1	10/2 to 11/1
2	3/1 to 5/15	5/16 to 7/31	8/1 to 10/20	10/21 to 11/20
3	3/1 to 5/1	5/2 to 7/31	8/1 to 10/31	11/1 to 11/30
1, 2, and 3	–	Plus Additive A or B	–	Plus Additive C
	Plus Additive D when seeding: • Areas 30 ft and greater from the pavement edge • Slopes 4:1 and steeper			
	When seeding areas within 4 miles of a State airport: Areas flatter than 4:1 - Use no Additives; Slopes 4:1 and steeper - Use SHA Special Purpose Seed Mix in lieu of SHA Turfgrass Seed Mix			
	Additives: A = Weeping Lovegrass; B = Foxtail Bristlegrass; C = SHA Temporary Seed Mix; D = Sericea Lespedeza			

Follow Maryland State Highway Administration specifications and guidelines for turfgrass establishment and seed applications.

TURFGRASS SEED DETAILS

NOT TO SCALE

NOTES:
-FOR CONTAINER SHRUBS, COMPLETELY REMOVE ALL NON-BIODEGRADABLE CONTAINERS AND SCARIFY ROOT BALL

-FOR B&B SHRUBS, CUT AND REMOVE METAL CAGE, TWINE, BURLAP CAN REMAIN

SHRUB PLANTING DETAIL

NOT TO SCALE

DECIDIOUS TREE PLANTING DETAIL

NOT TO SCALE

PERENNIAL PLANTING DETAIL

NOT TO SCALE

NOTES

1. TREES ARE NOT PERMITTED WITHIN TEN (10) FEET OF PUBLIC UTILITIES.
2. ALL REQUIRED LANDSCAPE MATERIAL INDICATED ON APPROVED PLANS WILL BE REQUIRED THROUGH THE LIFE OF THE PROJECT AND MUST BE REPLACED IF REMOVED OR DEAD AFTER IMPLEMENTATION BY THE PROPERTY OWNER.
3. NO PLANT SUBSTITUTIONS, TYPE, SIZE, OR QUANTITY DEVIATIONS FROM THE APPROVED LANDSCAPE OR BUFFER PLANS SHALL BE MADE WITHOUT PRIOR APPROVAL FROM THE MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION.

LANDSCAPE ARCHITECT CERTIFICATE

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS CORRECT AND TAKEN FROM AVAILABLE PLANS AND RECORDS.

STATE OF MARYLAND · ERIC JOHN STURM · LICENSED LANDSCAPE ARCHITECT · 755

DATE

ERIC J. STURM
REGISTERED LANDSCAPE
ARCHITECT MD. # 755

Department of Environmental Protection
Montgomery County Maryland

MARK	DESCRIPTION	DATE	APPR.

MARK	DESCRIPTION	DATE	APPR.

DATE: JAN., 2014 | TASK ORDER NO.: 12-01 | CONTRACT NO.: | FILE NUMBER:

DESIGNED BY: BMF | DWN BY: ADG | CKD BY: JBB | SUBMITTED BY: JBB | PLOT SCALE: AS-SHOWN | PLOT DATE: 1/21/2014 | SIZE: ANSI D | FILE NAME: 01-EC-03.DWG

MR. CRAIG CARSON 240-777-7713
MONTGOMERY COUNTY DEPARTMENT
OF ENVIRONMENTAL PROTECTION
255 ROCKVILLE PIKE
ROCKVILLE, MD 20850

CPJ Associates

TASK ORDER 12-01
POTOMAC RIDGE SWM POND RETROFIT
(ASSET #10847) - NOT FOR CONSTRUCTION
DARNESTOWN (6TH) ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

LANDSCAPE DETAILS

SHEET NO.
13 OF 13

LP-02

Attached Xrefs:

Last Saved 1/21/2014 Last Plotted 1/21/2014 3:46 PM Sheet N:\43030\DWG\01-EC-03