

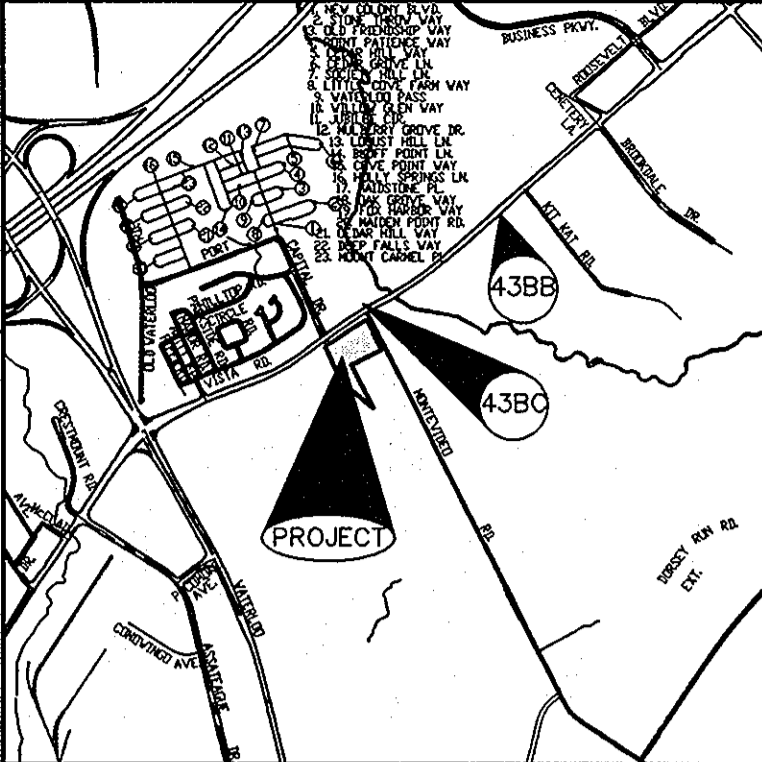
SITE ANALYSIS DATA/TABULATION

A) TOTAL PROJECT AREA..... 4.85±AC.
 B) AREA OF 100-YR. FLOODPLAIN..... N/A
 C) AREA OF STEEP SLOPES (≥ 5%)..... 0.18 AC.
 D) AREA DEDICATED TO US ROUTE 1 ROW..... PREVIOUSLY DEDICATED PLAT #20994
 E) NET AREA OF SITES..... 4.85±AC.
 F) NUMBER OF UNITS ALLOWED..... N/A
 G) NUMBER OF RESIDENTIAL UNITS PROPOSED..... N/A
 H) AREA OF PLAN SUBMISSION..... 4.85±AC.
 I) LIMIT OF DISTURBED AREA..... 4.85±AC.
 J) PEDESTRIAN AMENITIES (5% OF 4.04±AC.)..... 0.20±AC.
 K) PEDESTRIAN AMENITY AREA PROVIDED..... 0.49±AC. (±12%)
 L) PRESENT ZONING DESIGNATION..... CE-CU
 M) PROPOSED USES FOR THE SITE AND STRUCTURES..... COMMERCIAL AND OFFICE
 N) BUILDING FLOOR SPACE DATA:
 FLOOR SPACE ON EA. LEVEL OF PROPOSED BUILDINGS..... 11,770± S.F. (23,540± S.F. TOTAL)
 BUILDING B (EXCLUDING COMMON AREAS)..... 12,130± S.F. (24,260± S.F. TOTAL)
 MINIMUM LOT SIZE REQUIRED..... N/A
 O) PARKING COMPUTATION:
 BANK (3,000 SF - 5 SPACES/1,000SF)..... 15
 RESTAURANT (4,500 SF - 14 SPACES/1,000SF)..... 63
 RETAIL (16,400 SF - 5 SPACES/1,000SF)..... 82
 OFFICE (25,792 SF - 3.3 SPACES/1,000SF)..... 86
 TOTAL..... 246
 P) TOTAL NUMBER OF PARKING SPACES PROVIDED ON-SITE..... 246
 TOTAL SPACES = 246 (INCLUDING 7 HANDICAPPED PARKINGS w/2 VAN ACCESS)
 Q) APPLICABLE DPZ FILE REFERENCES: F-10-047, WP-10-157, CP-10-91
 R) BUILDING COVERAGE AREA..... 25,792± S.F. (15±%)
 S) BUILDING FRONTAGE REQUIREDS (30% MIN. 410 FT)..... 123± L.F.
 BUILDING FRONTAGE PROVIDED..... 356± L.F. (87±%)

BENCHMARK NAD'83 HORIZONTAL

HO. CO. #43BB
 STAMPED BRASS DISK SET ON TOP OF CONCRETE BASE.
 N 550,534.19' E 1,376,905.25'

HO. CO. #43BC
 STAMPED BRASS DISK SET ON TOP OF CONCRETE BASE.
 N 549,592.091' E 1,375,466.62'



Pe Determination

Soils	Area (ft ²)	Impermeous (%)	% Imp.	Pe	Pe X A
A					
B	50540	36591	73%	2.2	111186
C	104645	74735	71%	2	209290
D	20536	12549	61%	1.8	36964.8
Total	176521	124974	71%		357842.8

Effective Pe to be Addressed = 1 2.0

Q(p) and Q(i) Requirements

Development Area Requiring 5% and 100% Management
 DA = 21700 sf
 Imp = 21700 sf Impermeous
 100% Percent Impermeous
 P_{req} = 0.9500 Runoff Coefficient
 P_{imp} = 7.2 Runoff in Inches
 ESD_{req} = 12614.00 CF Storage Req'd to provide Q(p) and Q(i)
 ESD_{prov} = 14388.26 cf
 118% Provided

DA	Facility	ESD _{req} (cfs)	ESD _{prov} (cfs)
MB-1	U/G	943.4 cf	1038.0 cf
MB-2	U/G	355.9 cf	1655.6 cf
MB-3	U/G	1090.9 cf	2575.3 cf
MB-4	U/G	537.2 cf	1490.9 cf
MB-5	U/G	771.8 cf	1864.4 cf
MB-6	U/G	818.8 cf	1830.9 cf
PP-1	A-2	158.8 cf	158.8 cf
PP-2	A-2	657.7 cf	657.7 cf
PP-3	A-2	297.7 cf	388.8 cf
PP-4	A-2	275.2 cf	486.9 cf
Totals		6552.2 cf	14388.3 cf

Note: ESD_{prov} is based on 70% of the calculated requirements.

Redevelopment Summary of Requirements

Category	Value	Value
Total Site Area	4.0 AC	Existing Impermeous Surface = 2.4 AC
Effective Development Area	4.0 AC	Proposed Impermeous Surface = 2.9 AC

In accordance with Section 5.2 of the existing impervious must equal 40% or more to qualify for the redevelopment approach to stormwater management. Verification: 59.4%

Requirement Determination

Category	Value	Value
Impermeous Credit	1.2 AC	Pe
Water Quality Requirement	1.2 AC or 5272 SF	1.0 inches
Full Management Requirement	0.5 AC or 2160 SF	2.0 inches

Addressed Through ESD Implementation

Verification of ESD Implementation

Drainage Area (Type)	WQV (Impervious)	Impermeous Area Addressed	Full PFC Exemption
PP-1(A-2)	9922 sf	19605 sf	0.24 ac
PP-2(A-2)	4697 sf	9922 sf	0.14 ac
PP-3(A-2)	12396 sf	0.28 ac	
MB-200-0	5808 sf	0.13 ac	
MB-200-1	8900 sf	0.21 ac	0.20 ac
MB-400-0		6302 sf	0.16 ac
MB-400-1		6756 sf	0.16 ac
MB-400-2			
Total	37803.0 sf	38377.0 sf	0.8 ac

Total Requirement Met YES Full Management Req'd Met YES

DESIGN NARRATIVE:
 THE SITES CURRENT USE IS A MOTEL, RESTAURANT AND COMMERCIAL BUILDING AND IS APPROXIMATELY 4.04 AC. THERE ARE NO SIGNIFICANT NATURAL AREAS OTHER THAN A TREE STAND AND SOME SPECIMEN TREES.

THE PROJECT PROPOSED UNDER THIS ECP QUALIFIES FOR THE REDEVELOPMENT CRITERIA AND THEREFORE, 50% OF THE EXISTING IMPERVIOUS (PROPOSED IMPERVIOUS EQUALS EXISTING) IS BEING ADDRESSED FOR WATER QUALITY (EACH MICRO PRACTICE IS DESIGNED BASED ON THE 1" Pe) AND EVERYTHING ABOVE THAT THRESHOLD IS BEING ADDRESSED FOR FULL STORM WATER MANAGEMENT CRITERIA INCLUDING PROTECTION OF 10 AND 100 YEAR STORMS BECAUSE OF THE DISCHARGE INTO DEEP RUN TO ADDRESS THE LARGER STORMS A TOTAL ESD-VOLUME WAS DETERMINED AND THEN DISTRIBUTED THROUGHOUT THE SITE TO ESSENTIALLY REDUCE IMPERVIOUS AND POTENTIALLY IMPROVE THE DOWNSTREAM FLOODPLAIN CONDITIONS. THE METHODS OF TREATMENT ARE MICRO-BIORETENTION AND PERVIOUS CONCRETE. THE RUNOFF WILL MATCH OR BE LESS THAN THE EXISTING CONDITIONS. A DESIGN MANUAL WAIVER FOR ALTERNATIVE COMPLIANCE WILL BE UTILIZED TO ACCOMMODATE THIS APPROACH.

THE NATURAL RESOURCES ON SITE CURRENTLY ARE ONLY THE SMALL FOREST STAND WHICH WILL BE REMOVED AS NECESSARY. CONTRACT SHALL ADJUST ALL STRUCTURE TOP ELEVATIONS TO MATCH PROPOSED GRADES.

AS REFLECTED IN THE PROPOSED PLAN BY MAINTAINING THE STORMDRAIN CONVEYANCE. HOWEVER, AS A RESULT OF USING THE MICRO-BIORETENTION FACILITIES AND PERVIOUS CONCRETE WE WILL BE REINTRODUCING WATER TO THE GROUND IN A WELL-DISTRIBUTED MANNER THROUGHOUT THE SITE. AS A RESULT OF REDEVELOPMENT THE PROPOSED SITE DESIGN WILL EFFECTIVELY REDUCE THE IMPERVIOUS SURFACES BY MORE THAN 50% AND MAINTAIN GREEN AREAS DISPERSED THROUGHOUT THE SITE. SEDIMENT AND EROSION CONTROL IS MANAGED THROUGH DIVERSION DIKES AND SILT FENCE TO CONVEY WATER BACK INTO THE EXISTING STORMDRAIN SYSTEM AS IS CURRENTLY THE CASE. ESD PLANNING TECHNIQUES HAVE BEEN UTILIZED TO THE MAXIMUM EXTENT PRACTICABLE AS INDICATED BY THE FACT THAT ALL OF THE REQUIREMENTS HAVE BEEN MET BY UTILIZATION OF CHAPTER 3 METHODS.

GENERAL NOTES

1. THE SUBJECT PROPERTY IS ZONED CE-CU PER THE 2-2-04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING REGULATORY AMENDMENTS EFFECTIVE 7-28-2006.
2. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004.
3. BOUNDARY IS BASED ON BOUNDARY SURVEY CONDUCTED BY BENCHMARK ENGINEERING, INC. ON OR ABOUT MAY 2008.
4. EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD SURVEY CONDUCTED BY BENCHMARK ENGINEERING, INC. ON OR ABOUT MAY 2008.
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. #43BB AND #43BC WERE USED FOR THIS PROJECT.
6. EXISTING UTILITIES SHOWN HAVE BEEN TAKEN FROM CONTRACT DRAWINGS #26-W&S AND FIELD SURVEYED LOCATIONS. IF NECESSARY CONTRACT SHALL ADJUST ALL STRUCTURE TOP ELEVATIONS TO MATCH PROPOSED GRADES.
7. THERE ARE NO WETLANDS, STREAMS OR THEIR BUFFERS OR STEEP SLOPES WITH A CONTIGUOUS AREA OF 20,000 SQ.FT. OR GREATER LOCATED ON PARCEL A.
8. THERE IS NO 100-YEAR FLOODPLAIN LOCATED WITHIN THE BOUNDARIES OF PARCEL A.
9. THERE ARE SEVERAL EXISTING STRUCTURES LOCATED ON THIS SITE ALL TO BE REMOVED.
10. THERE ARE NO CEMETERIES LOCATED ON THIS SITE.
11. A NOISE STUDY IS NOT REQUIRED FOR THIS DEVELOPMENT.
12. THIS PROJECT IS SUBJECT TO A TRAFFIC STUDY TO BE PREPARED AND SUBMITTED WITH THE INITIAL SDP SUBMISSION.
13. THIS SITE IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
14. WATER IS PUBLIC. THE CONTRACT NUMBER IS 36 WAS THE DRAINAGE AREA IS "PATAPSCO RIVER".
15. SEWER IS PUBLIC. THE CONTRACT NUMBER IS 36 WAS. THE DRAINAGE AREA IS "PATAPSCO RIVER".
16. THE FOREST CONSERVATION ACT OBLIGATION FOR THIS PROJECT IS ANTICIPATED TO BE MET BY PAYMENT OF A FEE-IN-LIEU.
17. A WAIVER PETITION (WP-10-157) APPROVED ON JUNE 3, 2010 TO WAIVE SECTION 16.155(a)(1)(i) REQUIRING A SITE DEVELOPMENT PLAN FOR MASS GRADING OF NON-RESIDENTIAL PROPERTY; SECTION 16.1202(a) REQUIRING SUBMISSION OF A FOREST CONSERVATION PLAN ON PARCEL A AND SECTION 16.1202(a)(10) REQUIRING THE RETENTION OF SPECIMEN TREES SO AS TO REMOVE THE FOUR TREES LOCATED ON PARCEL A AND C. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 1. ALL FUTURE DEVELOPMENT ON PARCEL A AND/OR GRADING AND DEVELOPMENT ON PARCEL C WILL REQUIRE SUBMISSION OF A SITE DEVELOPMENT PLAN.
 2. THE DEVELOPER SHALL PROVIDE ENHANCED SHADE TREE PLANTINGS AT A RATIO OF 2 PER 1 SPECIMEN TREE REMOVED IN ADDITION TO STANDARD LANDSCAPING REQUIREMENTS UNDER THE SITE DEVELOPMENT PLAN FOR PARCEL A.
 3. THE STORMWATER MANAGEMENT REQUIREMENTS SHALL BE MET ON THE SITE DEVELOPMENT PLAN. AN ENVIRONMENTAL CONCEPT PLAN IS REQUIRED PRIOR TO SUBMISSION OF THE SDP.
 4. WAIVER OF SECTION 16.1202(a) IS ONLY FOR A TEMPORARY DEFERRAL OF THE FOREST CONSERVATION PLAN REQUIREMENT UNTIL THE SITE IS DEVELOPED WITH A SITE DEVELOPMENT PLAN. IF A SITE DEVELOPMENT PLAN IS NOT SUBMITTED IN A TIMELY MANNER, THE DEVELOPER IS REQUIRED TO ADDRESS THE FOREST CONSERVATION OBLIGATION FOR THE LIMIT OF DISTURBANCE INDICATED FOR THIS SITE UNDER THE GRADING PLAN AND GRADING PERMIT APPLICATION.
18. VARIANCES HAVE BEEN APPLIED FOR TO REDUCE SETBACKS FROM EXTERNAL ROW FROM 40' TO 16' ALONG THE SIDE OF THE PROPERTY.
19. A DESIGN MANUAL WAIVER APPROVED ON JULY 28, 2010 REQUESTING THE WAIVING OF SECTIONS 5.2.1.A OF CHAPTER 5 OF THE HOWARD COUNTY DESIGN MANUAL, VOLUME 1 REQUIRING MANAGEMENT CONTROL OF THE 10 AND 100 YEAR STORMS TO ALLOW FOR ALTERNATIVE COMPLIANCE BY ADDRESSING ALL IMPERVIOUS THAT EXCEEDS THE EXISTING FOR THE 100 YEAR STORM AND EFFECTIVELY REDUCING THE IMPERVIOUS BY 50%.

SOILS LEGEND

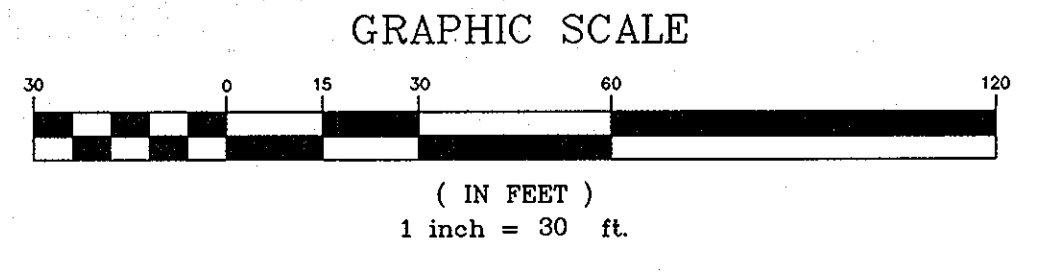
MAP SYMBOL	SOIL GROUP	SOIL TYPE
BeB2	C	BELTSVILLE SILT LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED
BeC2	C	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
L1	D	LEONARDTOWN SILT LOAM
SiC2	B	SASSAFRAS GRAVELLY SAND LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
SiD2	B	SASSAFRAS GRAVELLY SAND LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED

* INDICATES HYDROLYZING SOILS
 TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 30

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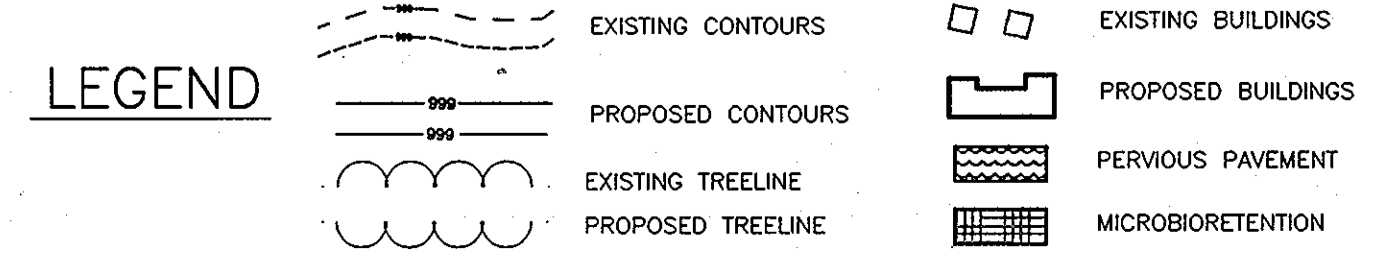
[Signature] 9/07/10
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 9/9/10
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



SHEET INDEX

NO.	DESCRIPTION
1	GRADING AND SWM
2	SEDIMENT AND EROSION CONTROL PLANS
3	EXISTING CONDITIONS/FOREST STAND DELINEATION



BENCHMARK ENGINEERING, INC.
 ENGINEERS • LAND SURVEYORS • PLANNERS

8480 BALTIMORE NATIONAL PIKE & SUITE 418 A ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644

60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702
 (P) 301-371-3505 (F) 301-371-3506
 WWW.BE-CIVLENGINEERING.COM

Professional Certification: I 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. 28559, Expiration Date: 7-23-2011.

OWNER/DEVELOPER: **Montevideo Crossing, LLC**
 8850 Columbia 100 Parkway
 Suite 400
 Columbia, MD 21045
 410-739-9091

PROJECT: **MONTEVIDEO CROSSING COMMERCIAL DEVELOPMENT**

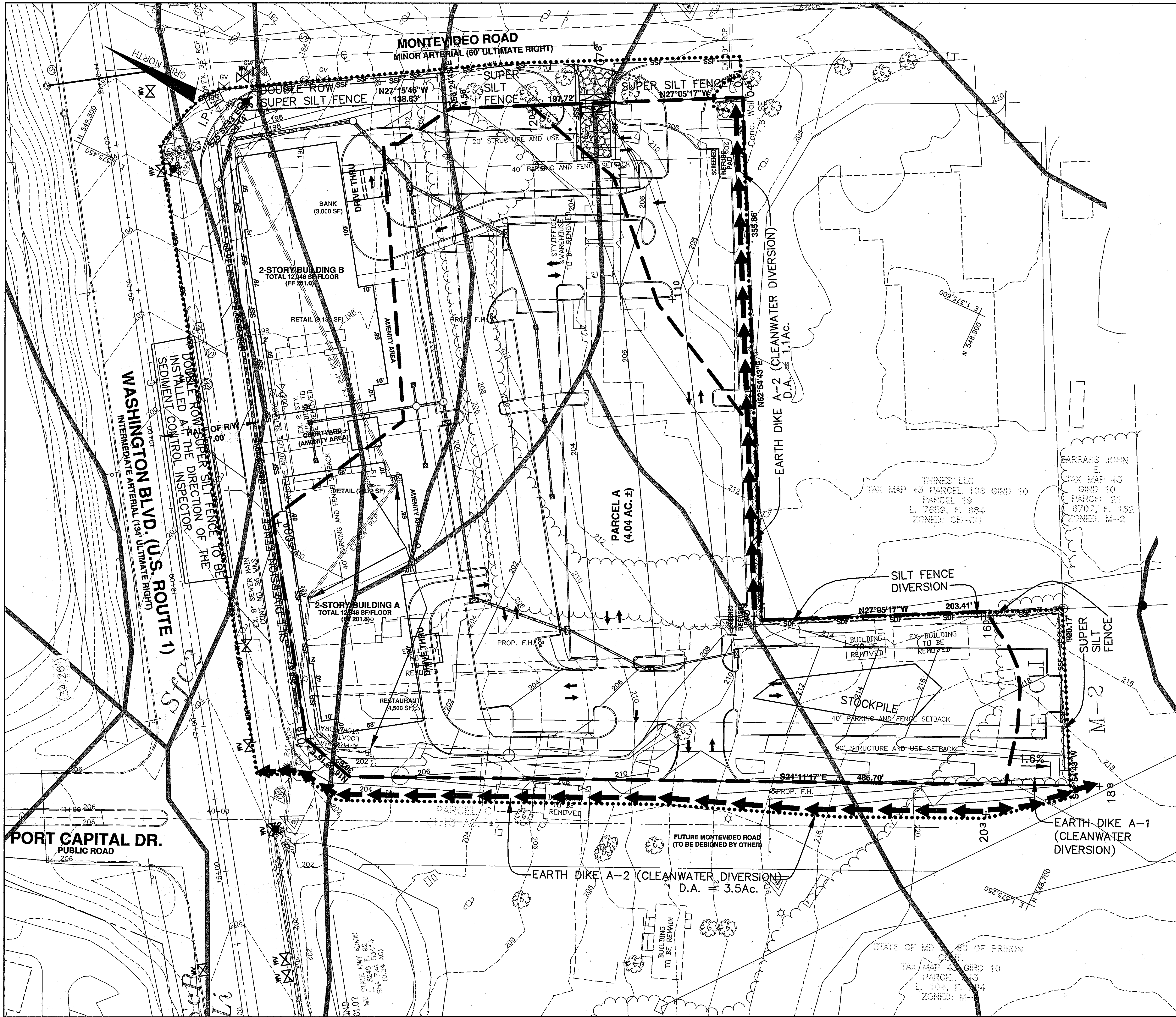
LOCATION: TAX MAP 43
 PARCEL A GRID 10
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **GRADING AND SWM ENVIRONMENTAL CONCEPT PLAN**

DATE: JUNE, 2010 PROJECT NO. 1916
 JULY, 2010

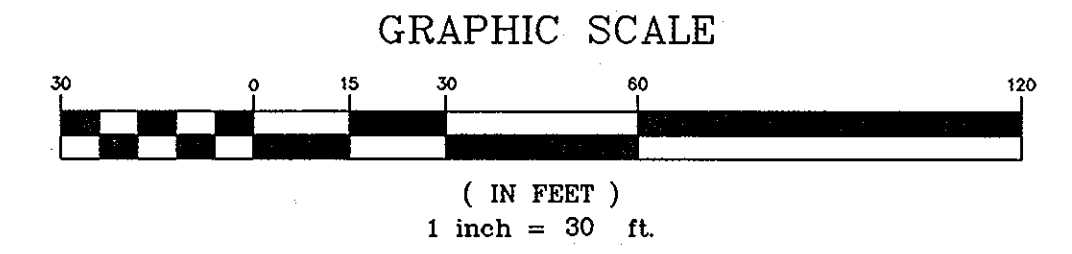
SCALE: AS SHOWN DRAWING 1 OF 3

Design: BFC Draft: BFC Check:



LEGEND

- SOILS CLASSIFICATION ChB2
- SOILS DELINEATION ———
- EXISTING CONTOURS - - - - -
- PROPOSED CONTOURS —————
- EXISTING WOODS LINE ~~~~~
- FIELD LOCATED WOODS LINE ~~~~~
- EXISTING STRUCTURE □
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE ▨
- SUPER SILT FENCE ——— SSF
- EARTH DIKE ———>>>



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Keith S. D... 9/2/10
 CHIEF, DIVISION OF LAND DEVELOPMENT 88 DATE

Chris... 9/2/10
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 82 DATE

MAP SYMBOL	SOIL GROUP	SOIL TYPE
Beb2	c	BELTSVILLE SILT LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED
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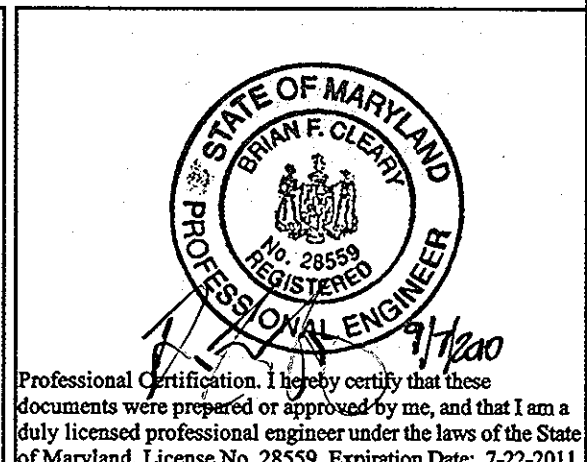
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 (P) 301-371-3505 (F) 301-371-3506
 WWW.BEI-CIVLENGINEERING.COM



OWNER/DEVELOPER: Montevideo Crossing, LLC 8850 Columbia 100 Parkway Suite 400 Columbia, MD 21045 410-739-9091	PROJECT: MONTEVIDEO CROSSING COMMERCIAL DEVELOPMENT
LOCATION: TAX MAP 43 PARCEL A - GRID 10 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	TITLE: SEDIMENT AND EROSION CONTROL ENVIRONMENTAL CONCEPT PLAN
DATE: JUNE, 2010 JULY, 2010	PROJECT NO. 1916
SCALE: AS SHOWN	DRAWING 2 OF 3



SOILS LEGEND		
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TAKEN FROM SOILS SURVEY, ISSUED JULY 1968, MAP NO. 30



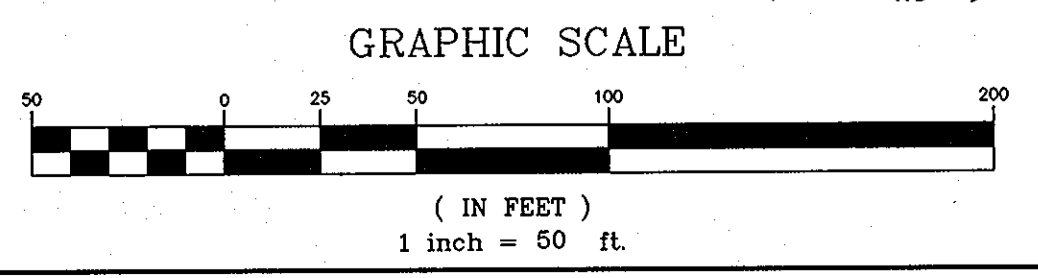
Forest Stand/Vegetative Cover					
Forest Stand No.	Community Type	Acreage	Dominant Vegetation	General Condition	Priority Acreage (ex. In buffers)
1	Mixed Oak	0.39	White oak, red oak, scarlet oak, pignut hickory, multiflora rose, English ivy, vinca vine, Japanese honeysuckle	Good	0
2	Mixed Oak	0.74	White oak, red oak, maple-leaved viburnum, lowbush blueberry, Virginia creeper, Japanese honeysuckle	Very Good	0

NOTE: 0.15 ACRES OF FS-2 ARE LOCATING WITHIN PARCEL A.

Specimen Trees				
Specimen Tree (ST) #	Common Name	Botanical Name	Size DBH	Condition
1	Red Oak	Quercus rubra	31.5"	Good
2	Scarlet Oak	Quercus coccinea	33.5	Poor
3	Scarlet Oak	Quercus coccinea	34"	Fair
4	White Oak	Quercus alba	30"	Good

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9/27/10
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 9/27/10
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

SITE PLAN
 SCALE: 1" = 50'



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STATE OF MARYLAND
 BRAN F. CLEARY
 PROFESSIONAL ENGINEER
 License No. 28559
 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. 28559, Expiration Date: 7-22-2011.

OWNER/DEVELOPER: Montevideo Crossing, LLC 8850 Columbia 100 Parkway Suite 400 Columbia, MD 21045 410-739-9091	PROJECT: MONTEVIDEO CROSSING COMMERCIAL DEVELOPMENT
LOCATION: TAX MAP 43 PARCEL A - GRID 10 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	TITLE: EXISTING CONDITIONS AND FOREST STAND DELINEATION ENVIRONMENTAL CONCEPT PLAN
DATE: JUNE, 2010 JULY, 2010	PROJECT NO. 1916
Design: BFC Draft: BFC Check:	SCALE: AS SHOWN DRAWING 3 OF 3