

**General Notes**

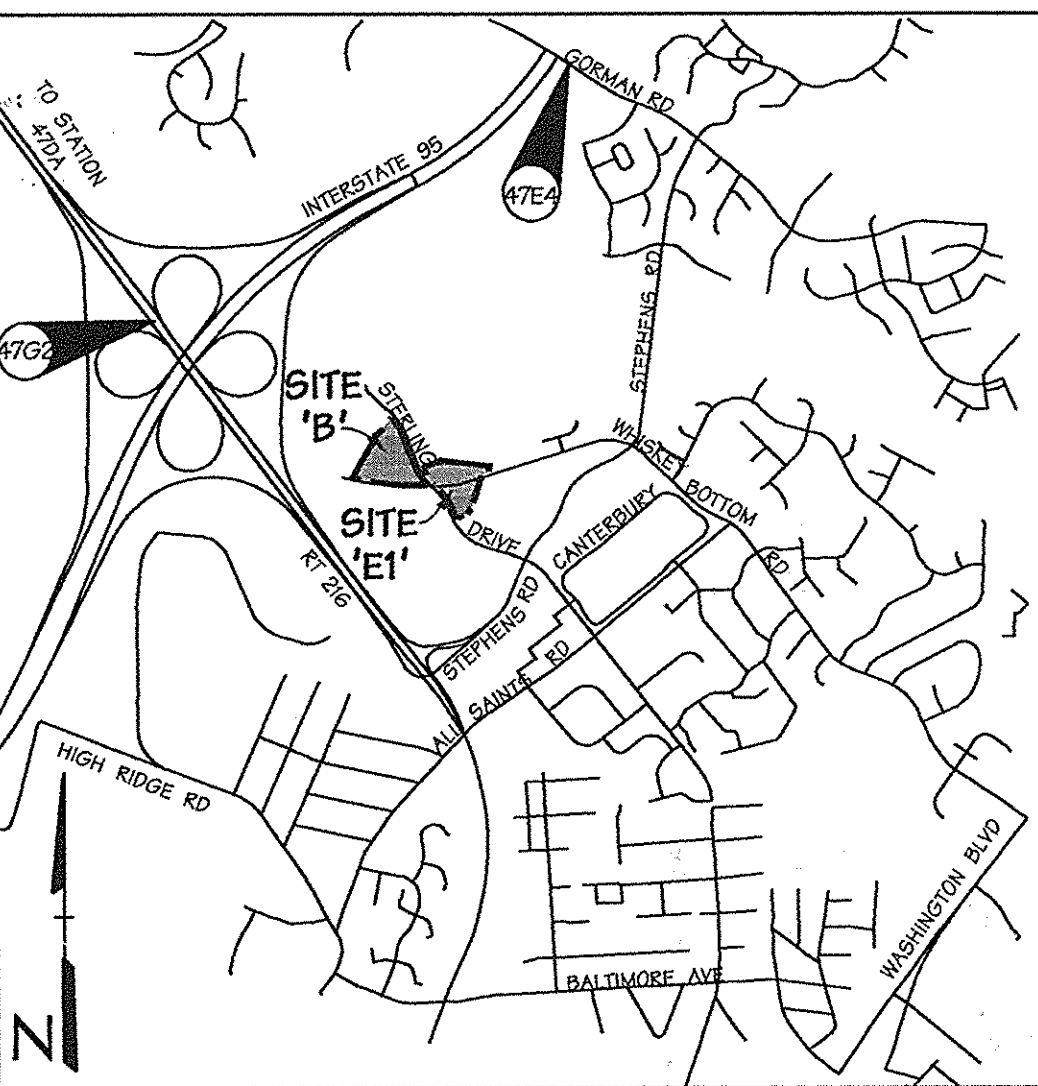
- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at 410-313-1600 at least five (5) working days prior to the start of any work being done.
- The Contractor shall test pit existing utilities as least five (5) days prior to the start of construction to verify their location and elevation. The Contractor shall notify the engineer immediately if the location is different than shown.
- The Contractor shall coordinate the location of all water, sewer and drain house connections with the utility drawings.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Maryland Manual of Uniform Traffic Control Devices (MUTCD).
- All plan dimensions are to face of curb unless otherwise noted such as shown on Sheet 3.
- The existing topography is taken from field run survey with one foot contour intervals prepared by Daft McCune Walker, Inc on August 23, 2011.
- The courses and coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County monument No's 470A, 47E4, and 47G2 were used for this project.
- The Contractor shall maintain a minimum of a 2.0 foot protective cover over all utilities during construction.
- Refer to Architectural drawings for exact building dimensions.
- There are no floodplain, wetlands, streams, buffers, Forest Conservation Easement or 25% steep slopes the subject parcel.
- Project background information:**  
Parcel B: Tax Map: 47; Zoning: MXD-3; Election District: 6; Subdivision Name: Emerson Sect 3 Area 1-Parcel B; Lot/Parcel: 1051; Parcel B Area: 6.401 Ac +/-; File Numbers: P-01-25; S-99-12; PB 339; F-02-101; ZB 979; PB 359; F-12-057; PLAT 15829 (F-02-131)  
Parcel E-1: Tax Map: 47; Zoning: PEC and MXD-3; Election District: 6; Subdivision Name: Revitz Property Parcel E-1; Lot/Parcel: 0165; Parcel E-1 Area: 5.217 Ac +/-; File Numbers: SP-01-12; F-02-111; PLAT 16865 (F-07-055)
- All outdoor lighting shall comply with the requirements of Zoning Section 134. All exterior light fixtures shall be oriented to direct light inward and downward on-site and away from all adjoining residential properties and public roads in accordance with section 134 of the Howard County Zoning Regulations.
- This site has been designed to be in conformance with ADA Regulations 28 CFR Part 36, Revised July 1, 1994. Handicap parking details and signage shall be in accordance with ADAAG (Americans with Disabilities Act Accessibility Guidelines) and COMAR (Code of Maryland Regulations) Section 5.02.02.
- Any damage to the county owned right-of-way shall be corrected at the contractor's expense.
- All sidewalks shall be cross sloped at 1/4" per foot.
- Trench bedding for storm drainage structures shall be in accordance with Howard County Standard 02.01.
- All inlets shall be constructed in accordance with Howard County standards or MSHA standards as specified on the structure.
- All materials and construction shall be in strict accordance with the Howard County Design Manual, Volume IV.
- Building setbacks for Parcel E-1 are based on PEC and MXD-3 (Emerson Design Criteria) zoning. Building setbacks for Parcel B are based only on MXD-3 (Emerson Design Criteria) zoning.
- All onsite driveways and parking areas to be privately maintained.
- All curb radii are to be 5 feet unless otherwise labeled and all curbs are to be 6 inches in height.
- All equipment and tools to be placed so as not to interfere with vehicular or pedestrian movement unless specified.
- The contractor shall be responsible for any damage to existing property which may occur as a result of negligence during the execution of work.
- All proposed handicap ramps shall be in accordance with current ADA standards.
- This property is located within the Metropolitan District.
- Electric, gas, cable, telephone and lighting lines are designed by others.
- This plan has been prepared in accordance with the provisions of section 16.124 of the Howard County Code and Landscape Manual. Landscaping shall be provided in accordance with the Landscape Plan and financial surety shall be paid with the DPW, Developer's Agreement in the amount of \$32,190.00 for 73 shade trees, 3 evergreen trees and 328 shrubs for both Parcels B and E-1.
- (From plat #15828) As a result of the Preliminary Equivalent Sketch Plan being submitted to the County for review prior to 11/15/01. This subdivision is subject to compliance with the fourth edition of the Subdivision and Land Development Regulations. In addition, because this plan did not obtain a signature approval prior to 11/01/01, it is subject to compliance with County Bill 50-2001, which amends the Zoning Regulations, and the amended Zoning Regulations which became effective on 01/08/02. This SDP is subject to the amended Fifth Edition of the Subdivision and Land Development Regulations and the development or construction on this property must comply with the setback and buffer regulations in effect at the time of submission of the SDP, waiver or grading and building permits.
- The Forest Conservation requirements for this development were previously addressed under DPZ File # F-02-111 with clearing 68.21 acres of forest, 26.42 acres of retention and 5.20 acres of reforestation planting provided as part of the Revitz Property Plan and under F-02-131 with clearing 39.47 acres of forest, 45.83 acres of forest retention, and 5.03 acres of reforestation as part of the Emerson Section 3, Area 1 Plan.
- Existing SWM ponds, privately owned and maintained, designed and approved under F-02-111 and F-02-131 meets the requirements for QW and Cpy Management. Existing SWM ponds are owned by the Emerson Community Association. The SWM Pond for Parcel B will be met as shown on the Stormwater Management plans with stone recharge trenches, which shall be owned and maintained by the owner.
- Stormwater management is provided in accordance with the 2000 Maryland Stormwater Design Manual. This project meets the criteria as outlined in the MDE Guidelines to give an administrative waiver and the waiver was approved August 22, 2011. The existing ponds located on parcel G and R were constructed prior to May 4, 2010. A grading permit shall be approved prior to May 4, 2013. This plan is also subject to the administrative waiver unless all stormwater practices are constructed by May 4, 2017.
- The existing utilities shown within Sterling Drive are based on approved Water Drawings, Contract No. 24-4014-D and contract No. 24-4024-D and were field located by DMW, Inc on May 13, 2010.
- The open space requirements for this development were previously addressed under DPZ file no. F-02-111, Plat #15783, record on January 27, 2003. A total of 40,275 of open space is provided on Parcels J, O, P, Q, R, L, K, L, M and N. No open space exists on Parcel B and E-1.
- No cemeteries or historic structures exist within the boundaries of the sites.
- The proposed building shall have an Automatic Fire Protection Sprinkler System (by others).
- Street light placement and the type of fixture and poles shall be in accordance with the Howard County Design Manual, Volume III (2006), section 5.5A. A minimum of 20' shall be maintained between any street light and any trees.
- All sign posts used for traffic control signs installed within the county right-of-way shall be mounted on a 2" galvanized steel perforated square tube post (14 gauge) installed into a 2-1/2" galvanized steel perforated tube sleeve (12 gauge) 3' long. A galvanized steel pole cap shall be mounted on top of each post.
- Site deed reference: Deed 11479117 (Parcel B) & Deed 85481334 (Parcel E-1).
- This site complies with the Howard County Green Building law set forth under Title 3, Subtitle 10 of the Howard County Code and section 3.1005(a) of the Code. Registration with the Green Building Council and the applicable LEED registration fee was paid on 12/18/2009. The LEED New Construction checklist was prepared, signed and dated by the project LEED accredited professional and was received by DPZ on 9/23/11. The proposed building is tentatively certified by LEED with a Silver rating.
- The Traffic Study for this project was updated by Traffic Concepts, Inc. in August 2011.
- The proposed project is in compliance with the APFO Study for the Revitz property prepared by Wells & Associates and Approved Feb. 1, 2002.
- The subject property is zoned MXD-3 for Parcel B and PEC and MXD-3 for Parcel E-1 per the Comprehensive Plan, Feb. 2, 2004. The plan is subject to the Comp Lite Zoning Regulation Amendments effective on July 28, 2006.
- No grading, removal of vegetative cover or trees, paving and new structures shall be permitted within the required wetlands, stream(s) or three buffers, forest conservation easement areas and 100 year floodplain.
- Trash collection, trash pick-up and recycling services will be provided for this building. At full occupancy, pick-up can occur daily.
- The parking on parcel E-1 is being developed to support the proposed building on Parcel B.
- As of the date of the approval of these plans, no information has been received from Verizon or Comcast.
- SHA has agreed to convey the portion of Whiskey Bottom Road that will be located within this site to Howard County, Maryland. Howard County, Maryland by resolution has agreed to convey the roadway to Emerson Development Homeowners' Association, LLC. (Resolution #112-2011 & 119-2011 for Sterling Drive and resolution #119-2011 for Whiskey Bottom Rd.)

49. A VARIANCE (RESOLUTION NO. 118-2011) PURSUANT TO SECTIONS 16.301 AND 16.200 (c) OF THE HOWARD COUNTY CODE WAS GRANTED ON JULY 28, 2011 FOR GOVERNMENT USES FROM THE STRUCTURE AND USE SETBACK FOR A FENCE.

# Site Development Plan for Emerson & Parcel E-1

## Parcel B (Emerson Sect 3 Area 1) & Parcel E-1 (Revitz Property) Maryland Howard County

THE PURPOSE OF REVISION #2 IS:  
1. SHOW THE PROPOSED EMERSON CAMPUS SECURITY FENCE.  
2. ADD ADDITIONAL DRAWING SHEETS ASSOCIATED WITH THE PROPOSED EMERSON CAMPUS SECURITY FENCE.



**VICINITY MAP**

Scale: 1"=2000'  
HOWARD COUNTY ADC MAP NUMBER 5053, BLOCK D10

**BENCHMARK**

**DESCRIPTION**

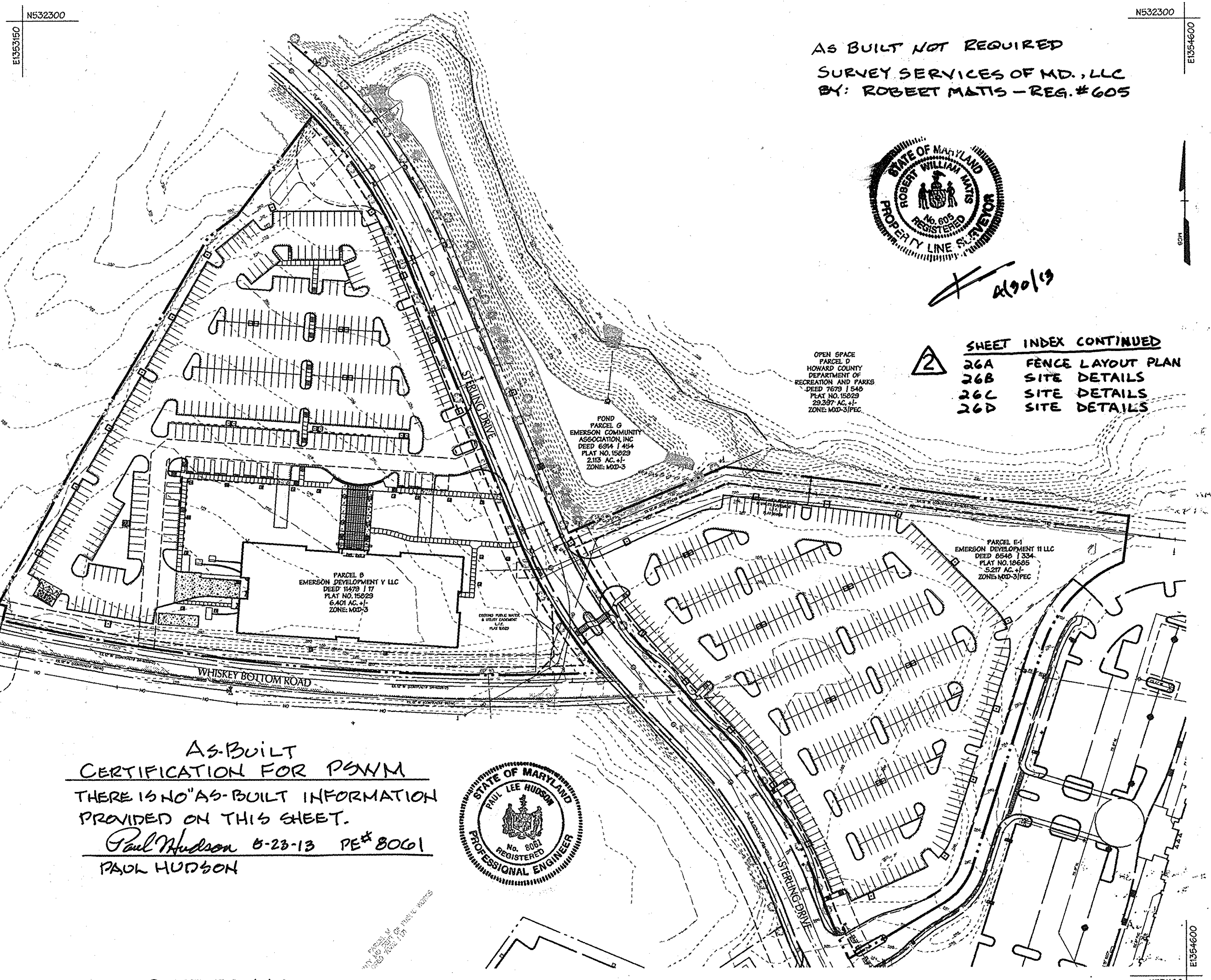
COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NGVD29 (VERTICAL) DATUMS.	47E4 NORTHING: 163326.2295 EASTING: 41336.2550 ELEVATION: 336.909ft.	47E4 NORTHING: 163319.9104 EASTING: 41286.5759 ELEVATION: 96.2879ft.
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**ADDRESS CHART**

PARCEL NUMBERS	STREET ADDRESS
PARCEL B	9111 STERLING DRIVE
PARCEL E-1	9090 STERLING DRIVE

**Sheet Index**

SHEET	DESCRIPTION
1	COVER SHEET
2	SITE PLAN PARCEL B
3	SITE PLAN PARCEL E-1
4	GRADING AND UTILITY PLAN PARCEL B
5	GRADING AND UTILITY PLAN PARCEL E-1
6	SITE DETAILS
7	SITE DETAILS
8	SITE DETAILS
9	SITE DETAILS
10	PHASE II EROSION & SEDIMENT CONTROL PLAN - 'B'
11	PHASE II EROSION & SEDIMENT CONTROL PLAN - 'B'
12	PHASE II EROSION & SEDIMENT CONTROL PLAN - 'E-1'
13	PHASE II EROSION & SEDIMENT CONTROL PLAN - 'E-1'
14	EROSION & SEDIMENT CONTROL DETAILS
15	EROSION & SEDIMENT CONTROL DETAILS
16	EROSION & SEDIMENT CONTROL DRAINAGE AREA MAP & DETAILS - 'B & E-1'
17	STORM DRAIN DRAINAGE AREA & SOILS MAP - 'B'
18	STORM DRAIN DRAINAGE AREA & SOILS MAP - 'E-1'
19	STORM DRAIN PROFILES
20	UTILITY PROFILES & GROUNDWATER RECHARGE
21	LANDSCAPE PLAN - 'PARCEL B'
22	LANDSCAPE PLAN - 'PARCEL E-1'
23	LANDSCAPE DETAILS
24	LIGHTING PLAN - 'B'
25	LIGHTING PLAN - 'E-1'
26	SIGNAGE & STRIPING PLAN



AS BUILT NOT REQUIRED  
SURVEY SERVICES OF MD, LLC  
BY: ROBERT MATIS - REG. #605



**SHEET INDEX CONTINUED**

26A	FENCE LAYOUT PLAN
26B	SITE DETAILS
26C	SITE DETAILS
26D	SITE DETAILS

AS-BUILT CERTIFICATION FOR PSWM  
THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.  
Paul Hudson 8-23-13 PE# 8061  
PAUL HUDSON



**Site Analysis Data Chart**

PARCEL B (EMERSON SECT 3 AREA 1)	PARCEL E-1 (REVITZ PROPERTY)
<b>1. General Site Data</b> a. Present Zoning: MXD-3 b. Applicable DPZ File References: P-01-25; S-99-12; PB-339; F-02-131; ZB 979; PB 359; PLAT 15829; F-12-057 c. Proposed Use: 5-story commercial office building with supporting parking. d. Proposed Water: Public e. Proposed Sewer: Public f. Any other relevant information: N/A g. Area of steep slopes: 0 Acres h. Area of floodplain: 0 Acres <b>2. Area Tabulation</b> a. Total Site Area: 6.401 Ac +/- b. Limit of Disturbed Area: 265,786 SF / 6.10 Ac +/- c. Total Impervious Area: 171,694 SF / 3.94 Ac (62%) d. Building Coverage of Site: 0.70 Acres and 11.0% of Site Area <b>3. Parking Space Data</b> a. Number of Parking Spaces Required by Zoning Regulations and Criteria: 153,454 SF Office @ 3.31/1000 = 507 spaces b. Number of Parking Spaces Provided On-Parcel B: 337 spaces Parking for Parcel B: Regular (9'x18') = 114 1/2 Compact (8'5"x18') = 109 FEV/LEV (9'x18') = 39 3/4 Visitor (9'x18') = 3 (Fuel Emitting Vehicles / Low Emitting Vehicles) Handicapped (8'x18') = 16 (13 reg. 2 van) Total: 337 <b>4. Floor Area Ratio (FAR) Calculation</b> Building area = 153,454 SF Lot area (lots B and E1) = 278,828 SF + 227,253 SF = 506,081 SF FAR = 153,454 SF / 506,081 SF = 0.303 < 0.35 max. permitted FAR Note: Any future proposal for additions to the building created under SDP 12-010 and/or any proposal in the future for additional structures on either parcel B or E-1 may require Planning Board review and approval if the FAR exceeds 0.35.	<b>1. General Site Data</b> a. Present Zoning: PEC and MXD-3 b. Applicable DPZ File References: SP-01-12; F-02-111; F-07-055; PLAT 16865 c. Proposed Use: Supporting parking for office building on Parcel B. d. Proposed Water: N/A e. Proposed Sewer: N/A f. Any other relevant information: N/A g. Area of steep slopes: 0 Acres h. Area of floodplain: 0 Acres <b>2. Area Tabulation</b> a. Total Site Area: 5.217 Ac +/- b. Limit of Disturbed Area: 200,786 SF / 4.61 Ac +/- c. Total Impervious Area: 146,158 SF / 3.36 Ac (64%) d. Building Coverage of Site: N/A <b>3. Parking Space Data</b> a. Number of Parking Spaces Required by Zoning Regulations and Criteria: See Parcel B b. Number of Parking Spaces Provided On-Parcel E-1: 426 spaces Parking for Parcel E-1: Regular (9'x18') = 312 Compact (8'5"x18') = 114 Total: 426

**PROFESSIONAL CERTIFICATION REV#2**  
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. 45282, EXPIRATION DATE: 05/21/2016

**FOR REVISION**

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

*Robert Matis* 4-10-12  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Paul Hudson* 4-2-12  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Paul Hudson* 4/10/12  
DIRECTOR DATE

10/11/13 **CAMPUS PERIMETER SECURITY FENCE**  
3-28-13 Add 4 FEV/LEV Spaces on Parcel B

**EMERSON PARCEL B & E-1**  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING

OWNER/DEVELOPER:  
PARCEL B - EMERSON DEVELOPMENT V.LLC  
PARCEL E-1 - EMERSON DEVELOPMENT V.LLC

SUITE 200  
TIMONIAN ROAD 21033  
TAX MAP 47 GRD 2 PARCEL 1051  
EMERSON SECTION 3 AREA 1  
DEED 11079117  
TAX ACCT # 06-572953  
PLAT 15829

SUITE 200  
TIMONIAN ROAD 21033  
TAX MAP 47 GRD 2 PARCEL 165  
REVITZ PROPERTY  
DEED 11079119  
TAX ACCT # 06-572221  
PLAT 16865

**DMW**  
DAFT MCCUNE WALKER INC

240 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
P: 410 296 3333 F: 410 296 4708 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SECTION NAME	SECTION AREA	DATE	LOT B / PAR. 1051
EMERSON & REVITZ PROPERTY	SECTION 3 AREA 1	12/10/11	LOT E-1 PAR. 0165
RATP OR LIP	BLOCK	ZONE	TRACT
15829 & 16865	2D	MXD-3	6
OWNER	DEED	TRACT	
			606803

**COVER SHEET**

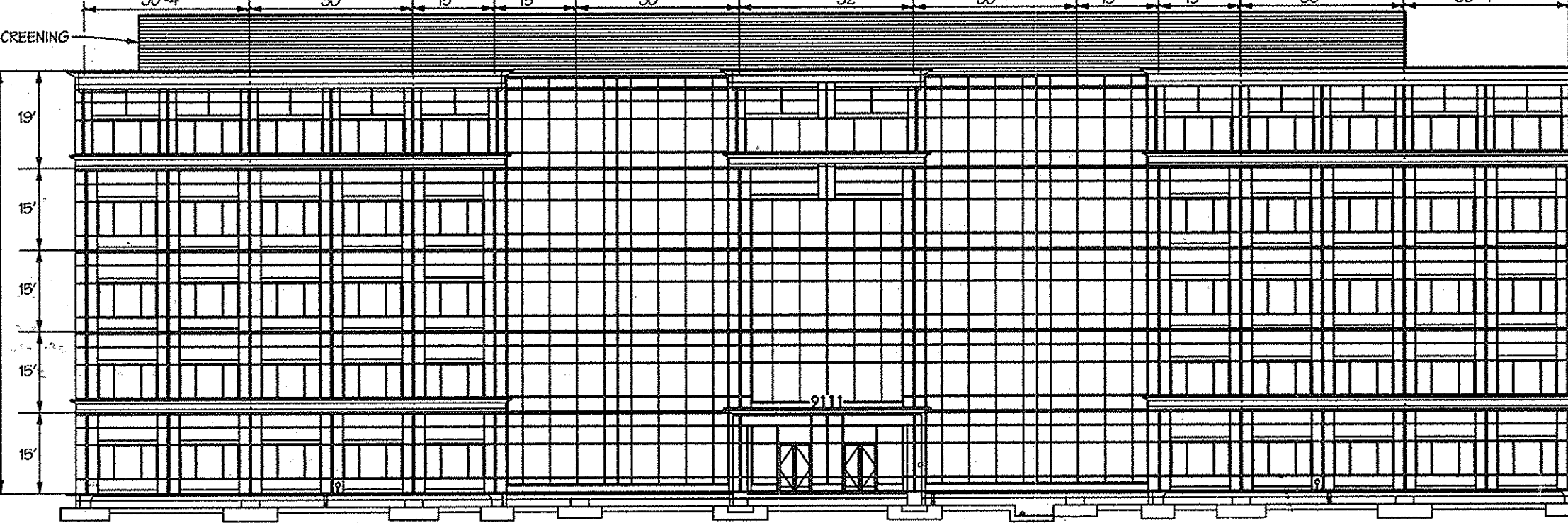
Des. By	JBS	Scale	AS SHOWN	Proj. No.	95054.60
Dwn. By	JBS/TPC	Date	12-13-11		
Chk. By	MCBJ/JDF	Approved			1 of 26

**SITE PLAN**

Scale: 1"=100'

**PROPOSED BUILDING FLOOR AREA**

30,566 SF	1ST FLOOR AREA
30,722 SF	2ND FLOOR AREA
30,722 SF	3RD FLOOR AREA
30,722 SF	4TH FLOOR AREA
30,722 SF	5TH FLOOR AREA
153,454 SF	TOTAL FLOOR AREA



**BUILDING ELEVATION**

Not to Scale  
BUILDING FACADE TO BE CONCRETE/MASONRY AND GLASS

**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. 16928, EXPIRATION DATE: 5/13/12.



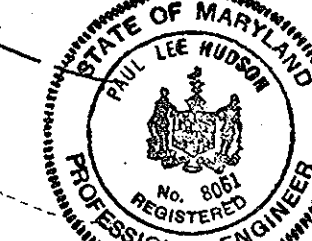


**LEGEND**

- PROPERTY BOUNDARY
- - - EX RIGHT OF WAY
- - - ADJACENT PROPERTY BOUNDARY
- - - EX EASEMENT
- - - EX ROADS AND WALKS
- - - 280 EX MAJOR CONTOUR
- - - EX MINOR CONTOUR
- FOREST CONSERVATION EASEMENT
- ⊗ EX STREET TREE
- ⊗ EX STREET TREE TO BE REMOVED
- ⊕ EX STREET LIGHT
- ⊕ EX STORM DRAIN
- ⊕ EX SANITARY SEWER
- ⊕ EX WATER
- OH EX OVERHEAD ELECTRIC
- ▭ PROP. BUILDING
- ▭ PROP. CURB / EDGE OF PAVING
- ▭ PROP. DEPRESSED CURB
- ▭ PROP. REVERSE CURB
- ⊕ PROP. GROUP LIGHT (BY OTHERS)
- ⊕ PROP. SINGLE LIGHT (BY OTHERS)
- ⊕ PROP. LIGHT (BY OTHERS)
- ▭ LIMIT OF DISTURBANCE
- 24" D. ⊕ PROP. STORM DRAIN
- 8" PVC ⊕ PROP. SANITARY SEWER
- 8" W. --- PROP. WATER
- EX 100 YR FLOODPLAIN
- EX STREAM
- STREAM BUFFER
- WETLAND BUFFER
- WETLAND

AS-BUILT  
CERTIFICATION FOR PAVM  
THERE IS NO "AS-BUILT" INFORMATION  
PROVIDED ON THIS SHEET

Paul Hudson 5-23-13  
PAUL HUDSON PE# 6061



AS BUILT NOT REQUIRED  
SURVEY SERVICES OF MR. L.C.  
BY: ROBERT MATIS - REG # 605

- NOTES:
- UNLESS LABELED OTHERWISE ALL CURB RADIUS ARE FIVE (5) FOOT.
  - SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
  - STREET LIGHT SHALL BE A 250 WATT HPS VAPOR COBIA FINURE (C/OFF) MOUNTED ON A 30" BRONZE FIBERGLASS POLE USING A 12" ARM. STREET LIGHT SHALL BE INSTALLED BY BGE AND PAID FOR BY THE DEVELOPER AS PART OF THE DEVELOPER'S AGREEMENT.
  - FOR LOCATION OF PAVING TYPES SEE SHEET 26 OF 26.

LIMIT OF DISTURBANCE = 265,786 SF. 6.10 AC. ±

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>Robert Matis</i> CHIEF, DIVISION OF LAND DEVELOPMENT	4-10-12 DATE
<i>Chad Chandler</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	4-2-12 DATE
<i>Michael A. Taylor</i> DIRECTOR	4/6/12 DATE

3-28-13 4 FEV/LEV Spaces  
DATE REV. REVISION DESCRIPTION

**EMERSON PARCEL B & E-1**  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING  
OWNER/DEVELOPER:  
PARCEL B - EMERSON DEVELOPMENT V, LLC  
PARCEL E-1 - EMERSON DEVELOPMENT II, LLC  
TEXAS STATION COURT  
SUITE 200  
TIMONUM, MD 21093  
EMERSON SECTION 3 AREA 1  
DEED: 1407017  
TAX ACT # 06-572953  
PLAT: 158229

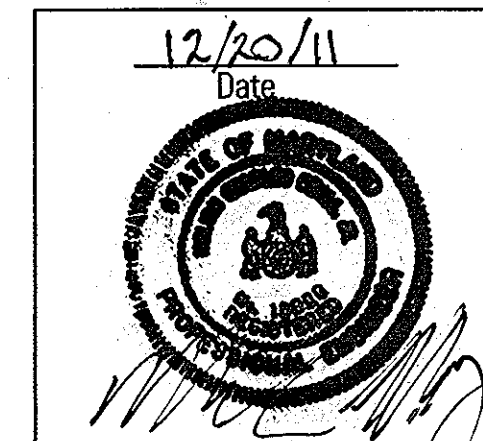
**DMW**  
DAFT MCCUNE WALKER INC.

200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
P: 410 296 3333 F: 410 296 4706 WWW.DMW.COM

SECTION NAME RENTZ PROPERTY & EMERSON 3A	SECTION AREA SECTION 3 AREA 1	LOT/PARCEL # PARCEL B & E-1
BLK # OR L.P. 55029 & 156685	BLK # OR L.P. 20	BLK # OR L.P. 47
WATER CODE 1000-3	BLK # OR L.P. 1000-3	BLK # OR L.P. 6
GENUS TRACT 606903	GENUS TRACT 606903	GENUS TRACT 606903

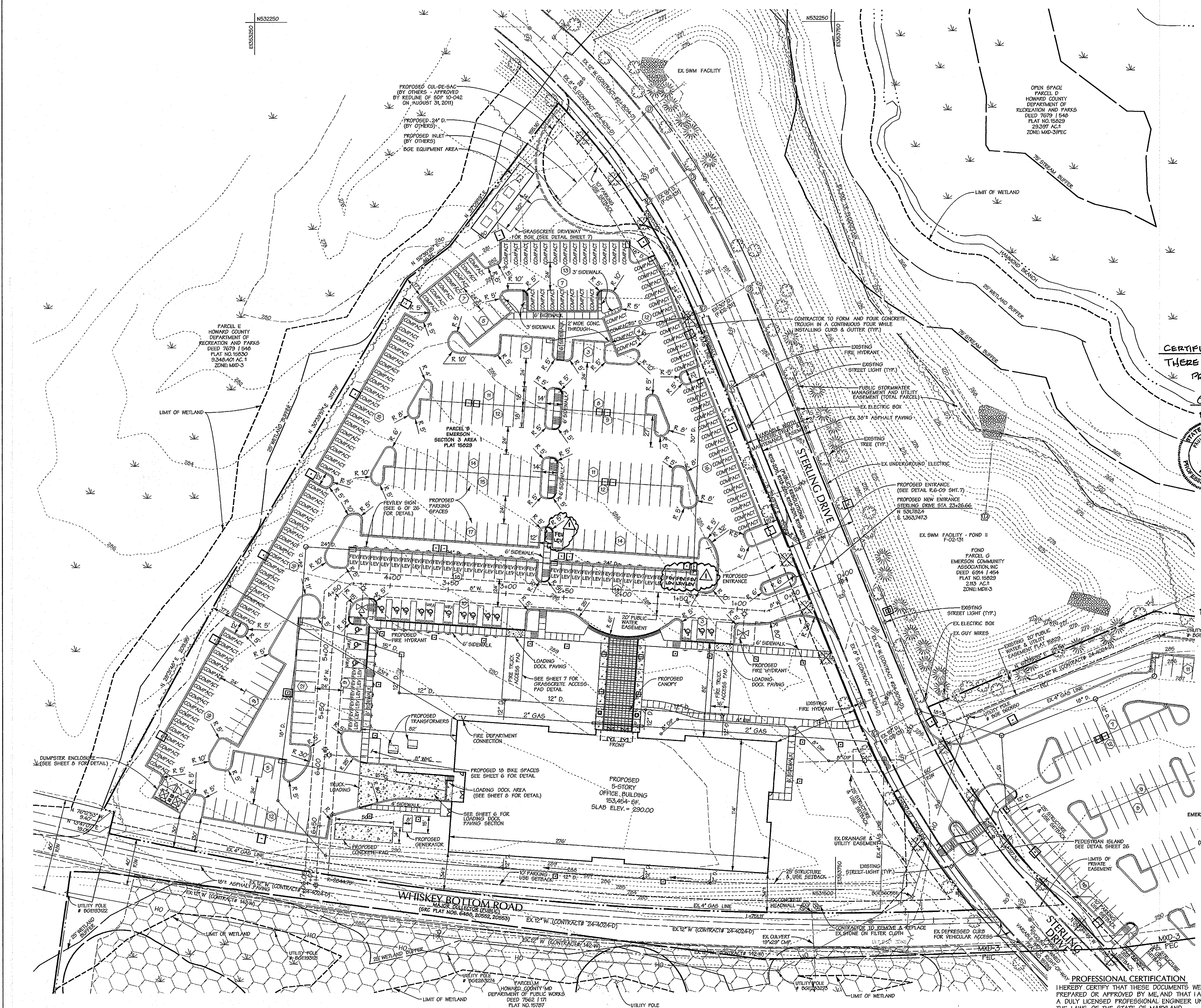
TITLE: **SITE PLAN - PARCEL 'B'**

Des. By: JBS	Scale: 1"=40'	Proj. No.: 95054.6
Dm. By: JSS	Date: 12-13-11	
Chk. By: MCB/JDF	Approved:	<b>2 of 26</b>



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. 16328. EXPIRATION DATE: 5/13/12.

Professional Engr. No. 16328



114-26-06 2011







**LEGEND**

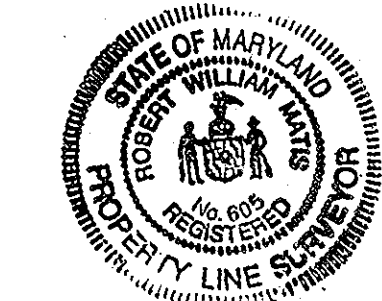
- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
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- EX. EASEMENT
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- ▬ 8" PVC PROP. SANITARY SEWER
- ▬ 8" W. PROP. WATER
- EX. 100 YR FLOODPLAIN
- EX. STREAM
- STREAM BUFFER
- WETLAND BUFFER
- WETLAND

NOTES:  
1) FOR PROFILES SEE SHEETS 19 & 20 OF 26.

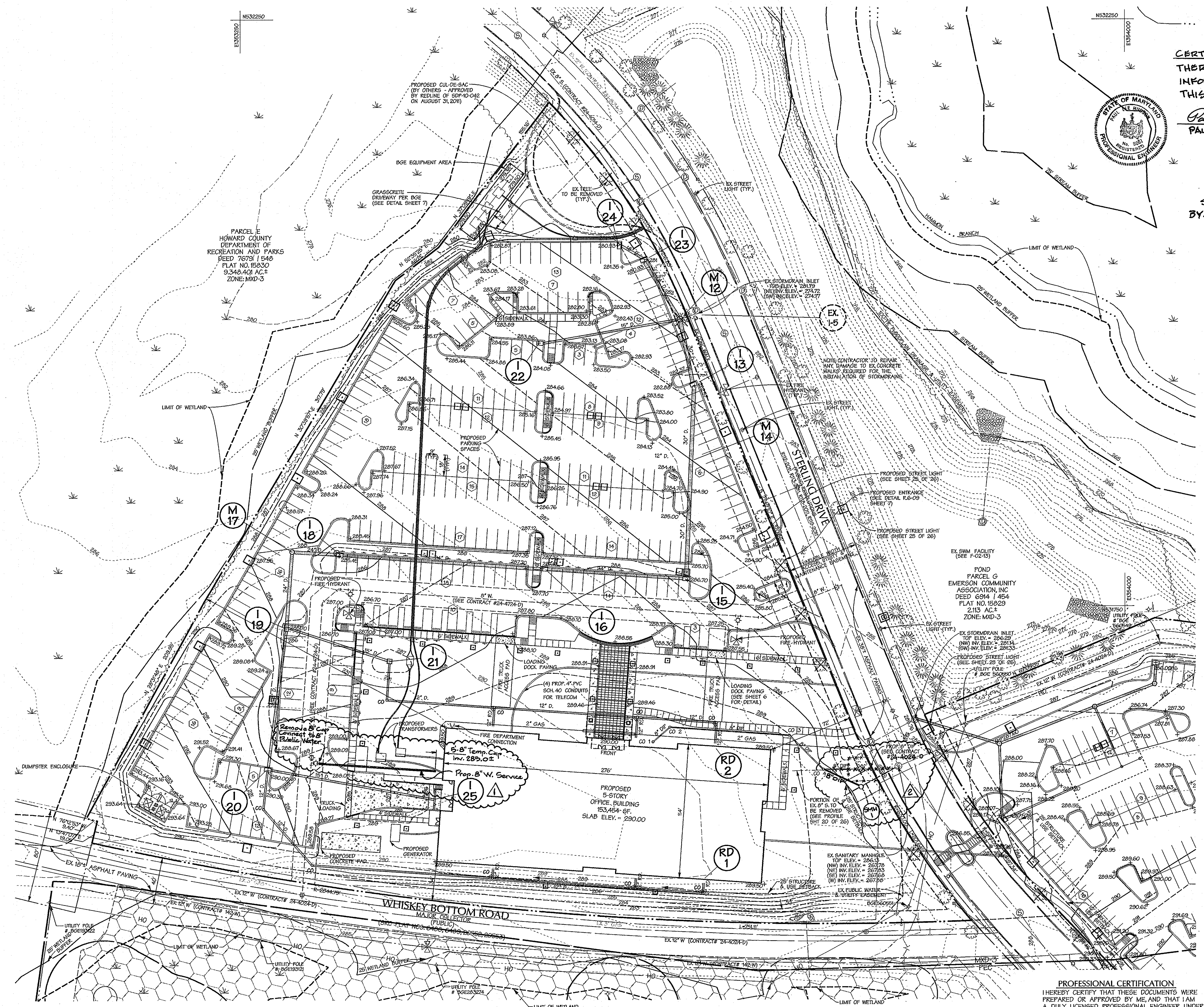
**AS-BUILT CERTIFICATION FOR PENNM**  
THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.

*Paul Hudson* 5-23-13  
PAUL HUDSON PE#8061

**AS BUILT NOT REQUIRED**  
SURVEY SERVICES OF MD, LLC.  
BY: ROBERT MATIS REG# 605



4/9/13



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>Chad Edmundo</i> CHIEF, DIVISION OF LAND DEVELOPMENT	4-10-12 DATE
<i>Chad Edmundo</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	4-2-12 DATE
<i>David A. Unger</i> DIRECTOR	<i>Walter</i> DATE

10-25-12	A	San. Sewer to SHM 1 - As Built
9-4-12	B	Private Water Service
Date	No.	Revision Description

**EMERSON PARCEL B & E-1**  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING  
OWNER/DEVELOPER:  
PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
112345 STATION COURT  
SUITE 200  
TIMORUM MD 21085  
TAX MAP #7 GRID # PARCEL 1051  
EMERSON SECTION 3 AREA 1  
DEED: 147517  
TAX ACCT # 06-572553  
PLAT: 158229

PARCEL 'E-1' - EMERSON DEVELOPMENT II, LLC  
112345 STATION COURT  
SUITE 200  
TIMORUM MD 21085  
TAX MAP #7 GRID # PARCEL 1051  
REVIZ PROPERTY  
DEED: 147517  
TAX ACCT # 06-572227  
PLAT: 16685

For Rev. 1 & 2 Only  
3/22/13  
Date

PE No. 16928

12/20/11  
Date

**DMW**  
DAFT MCCUNE WALKER INC  
200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21284  
P: 410.296.3333 F: 410.296.4795 WWW.DMW.COM  
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SUBDIVISION NAME	EMERSON SECTION 3 AREA 1	LOT/PARCEL #	PARCEL B & E-1
PLAT OR L.P.	20	BLK #	47
SECTION	20	LOT DISTRICT	6
DATE	12/20/11	GENSR TRACT	606903
DATE		SYMBOL CODE	

<b>TITLE</b> GRADING & UTILITY PLAN - PARCEL 'B'					
Des. By	JBS	Scale	1"=40'	Proj. No.	95054.6
Dm. By	JBS	Date	12-13-11	4 of 26	
Chk. By	MCBJ/JDF	Approved			

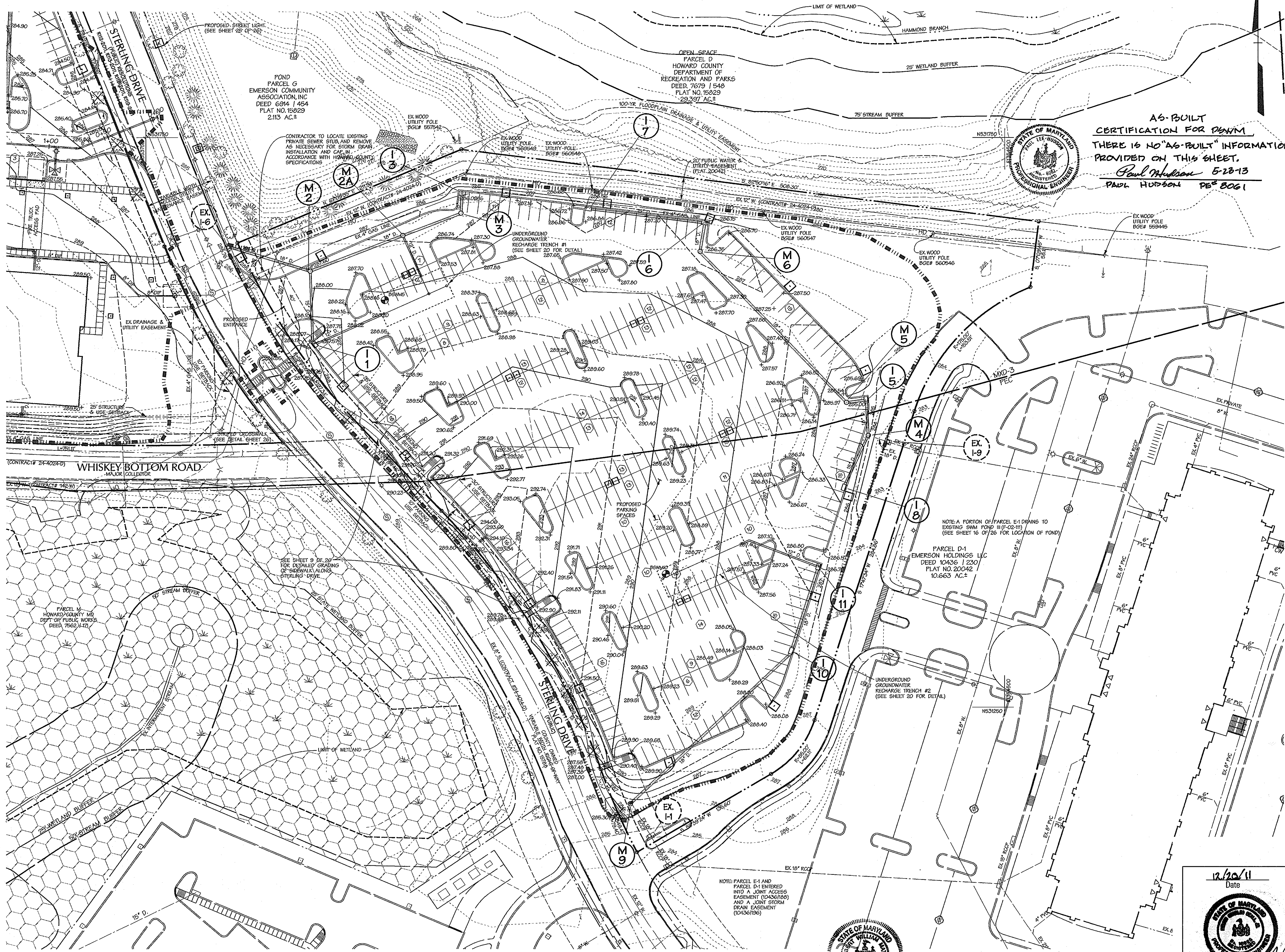
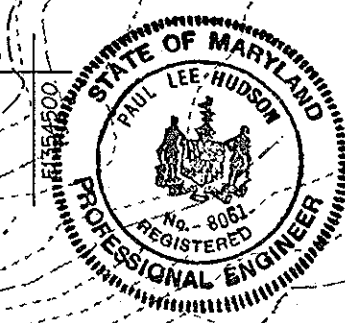
**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16928, EXPIRATION DATE: 5/13/12.



**LEGEND**

- PROPERTY BOUNDARY
- - - EX. RIGHT OF WAY
- - - ADJACENT PROPERTY BOUNDARY
- - - EX. EASEMENT
- - - EX. ROADS AND WALKS
- - - EX. MAJOR CONTOUR
- - - EX. MINOR CONTOUR
- - - FCE
- - - FOREST CONSERVATION EASEMENT
- ⊗ EX. STREET TREE
- ⊗ EX. STREET TREE TO BE REMOVED
- ⊕ EX. STREET LIGHT
- ⊕ EX. STORMDRAIN
- ⊕ EX. SANITARY SEWER
- ⊕ EX. WATER
- ⊕ OH
- ⊕ EX. OVERHEAD ELECTRIC
- ▭ PROP. BUILDING
- ▭ PROP. CURB / EDGE OF PAVING
- ▭ PROP. DEPRESSED CURB
- ▭ PROP. REVERSE CURB
- ⊕ PROP. GROUP LIGHT (BY OTHERS)
- ⊕ PROP. SINGLE LIGHT (BY OTHERS)
- ⊕ PROP. LIGHT (BY OTHERS)
- ▭ LIMIT OF DISTURBANCE
- ▭ 24" D
- ▭ 8" PVC
- ▭ 8" W
- ▭ PROP. WATER
- ▭ EX. 100 YR FLOODPLAIN
- ▭ EX. STREAM
- ▭ STREAM BUFFER
- ▭ WETLAND BUFFER
- ▭ WETLAND

**AS-BUILT CERTIFICATION FOR PDMM**  
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.  
*Paul Hudson* 5-28-13  
 PAUL HUDSON PE# 8061



NOTES:  
 1) FOR PROFILES SEE SHEETS 19 OF 26.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>Keith S. ...</i> CHIEF, DIVISION OF LAND DEVELOPMENT	4/10/12 DATE
<i>Paul Hudson</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	4/2/12 DATE
<i>Mark A. ...</i> DIRECTOR	4/1/12 DATE

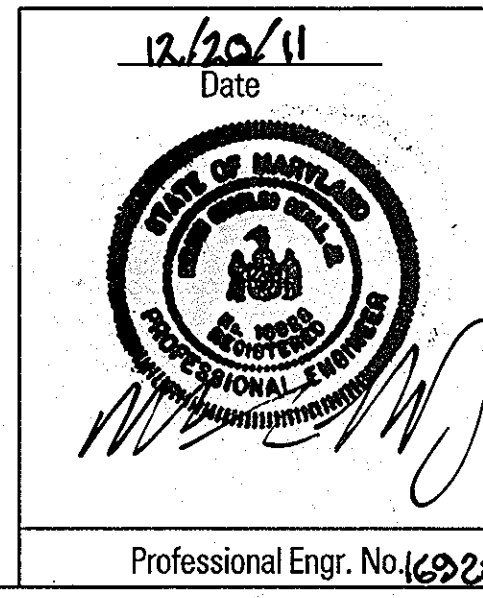
Date	No.	Revision Description
<b>EMERSON PARCEL B &amp; E-1</b>		
L.E.E.D. BUILDING		
5-STORY COMMERCIAL OFFICE BUILDING		
OWNER/DEVELOPER:		
PARCEL 'B' - EMERSON DEVELOPMENT V, LLC 1 TEXAS STATION COURT SUITE 200 TIMONIUM, MD 21083 TAX MAP #7 GRID 3 PARCEL 1051 EMERSON SECTION 3 AREA 1 DEED: 1147917 TAX ACCT # 06-572593 PLAT: 15629	PARCEL 'E-1' - EMERSON DEVELOPMENT I, LLC 1 TEXAS STATION COURT SUITE 200 TIMONIUM, MD 21083 TAX MAP #7 GRID 20 PARCEL 165 RENTZ PROPERTY DEED: 1101619 TAX ACCT # 06-57227 PLAT: 15635	

<b>DMW</b> DAFT MCCUNE WALKER INC		
200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM		
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS		
SECTION NAME RENTZ PROPERTY & EMERSON SECTION 3 AREA 1 PLAT OR REF # 15629 & 15635	SECTION/AREA SECTION 3 AREA 1 TAX/ZONE MAP # 47 SHEET/REVISION 6	LOT/PARCEL # PARCEL B & E-1 CENSUS TRACT 606903
<b>TITLE</b>		
<b>GRADING &amp; UTILITY PLAN - PARCEL 'E-1'</b>		
Des. By JBS	Scale 1"=40'	Proj. No. 95054.6
Drn. By JSS	Date 12-13-11	<b>5 of 26</b>
Chk. By MCBJ/JDF	Approved	

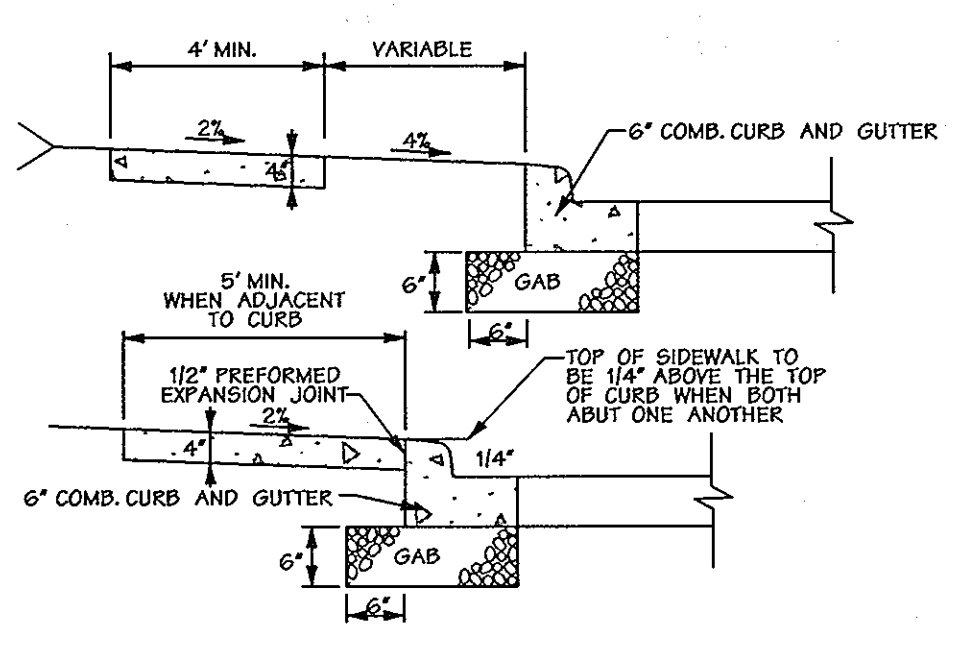
AS-BUILT NOT REQUIRED  
 SURVEY SERVICES OF MD, LLC.  
 BY: ROBERT MATIS REG. #605



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. 16228, EXPIRATION DATE: 5/28/12

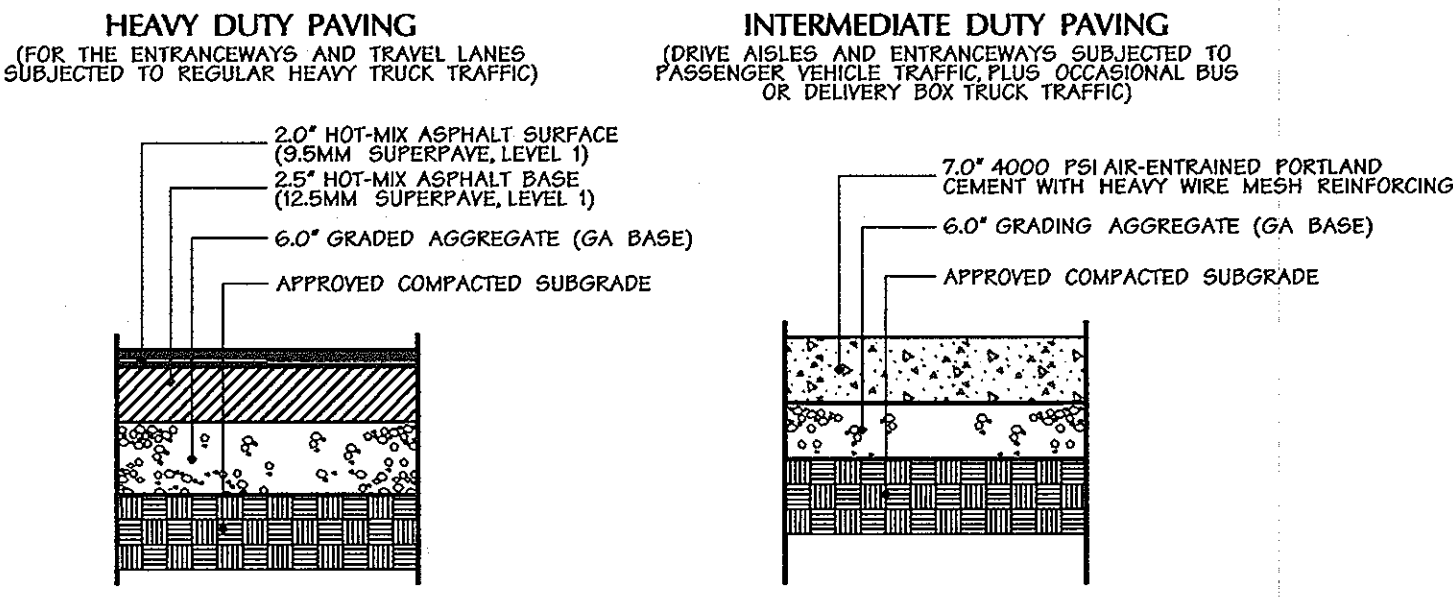
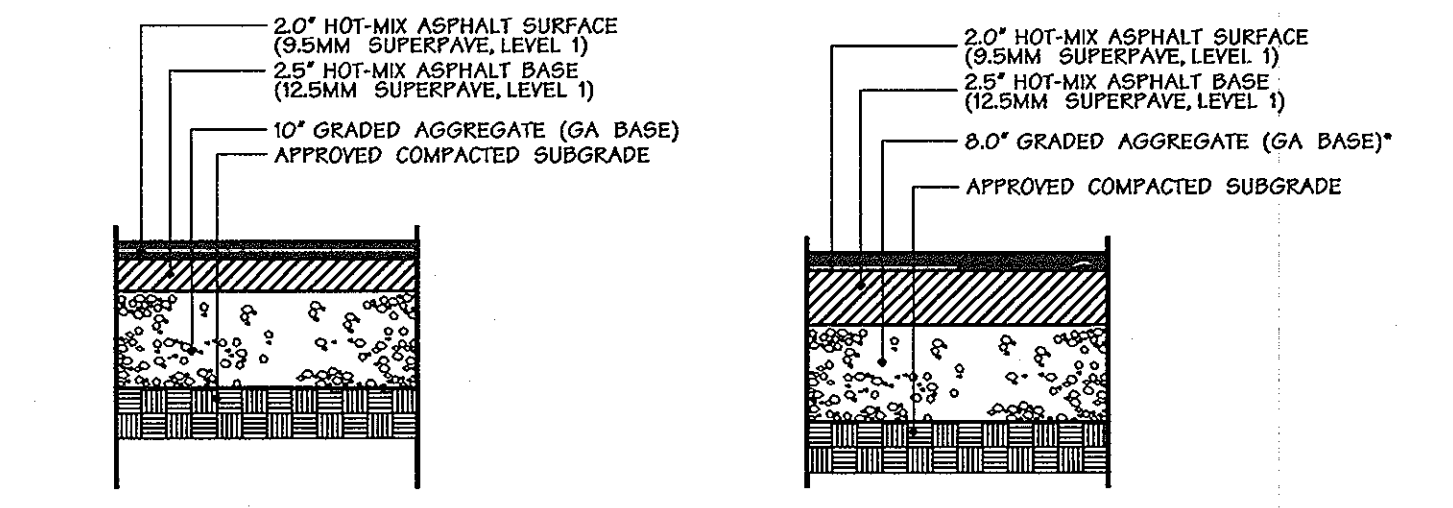






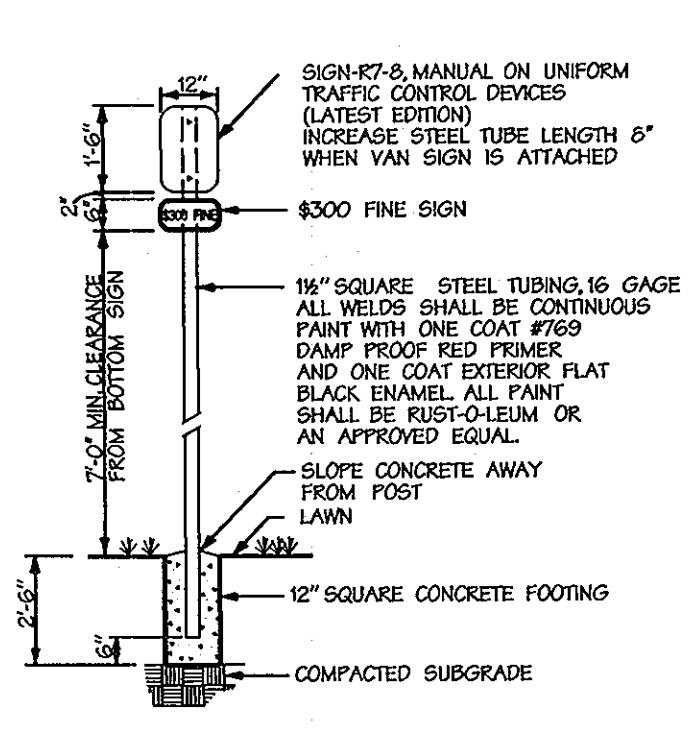
**Concrete Sidewalk**  
Not to Scale

NOTES:  
1. SIDEWALK TO BE SCRIBED IN 5'-0" MAXIMUM SQUARES.  
2. EXPANSION JOINTS ACROSS SIDEWALK NOT TO BE MORE THAN 15' APART.  
3. 1/2" PREFORMED EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK.  
4. CONCRETE TO BE MIX NO.3.  
5. WHEN SIDEWALK ADJUTS CURB SIDEWALK SHALL BE 1" ABOVE CURB WITH 1/2" PREFORMED EXPANSION JOINT BETWEEN SIDEWALK AND CURB.  
6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 45 FEET THE HEADERS SHALL BE PLACED AT THE EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.  
7. 4" SIDEWALK REQUIRES A PASSING AREA (SEE H.O.CO.STD. DETAIL R-4.01)  
8. SEE SITE PLAN FOR PROPOSED SIDEWALK WIDTHS.



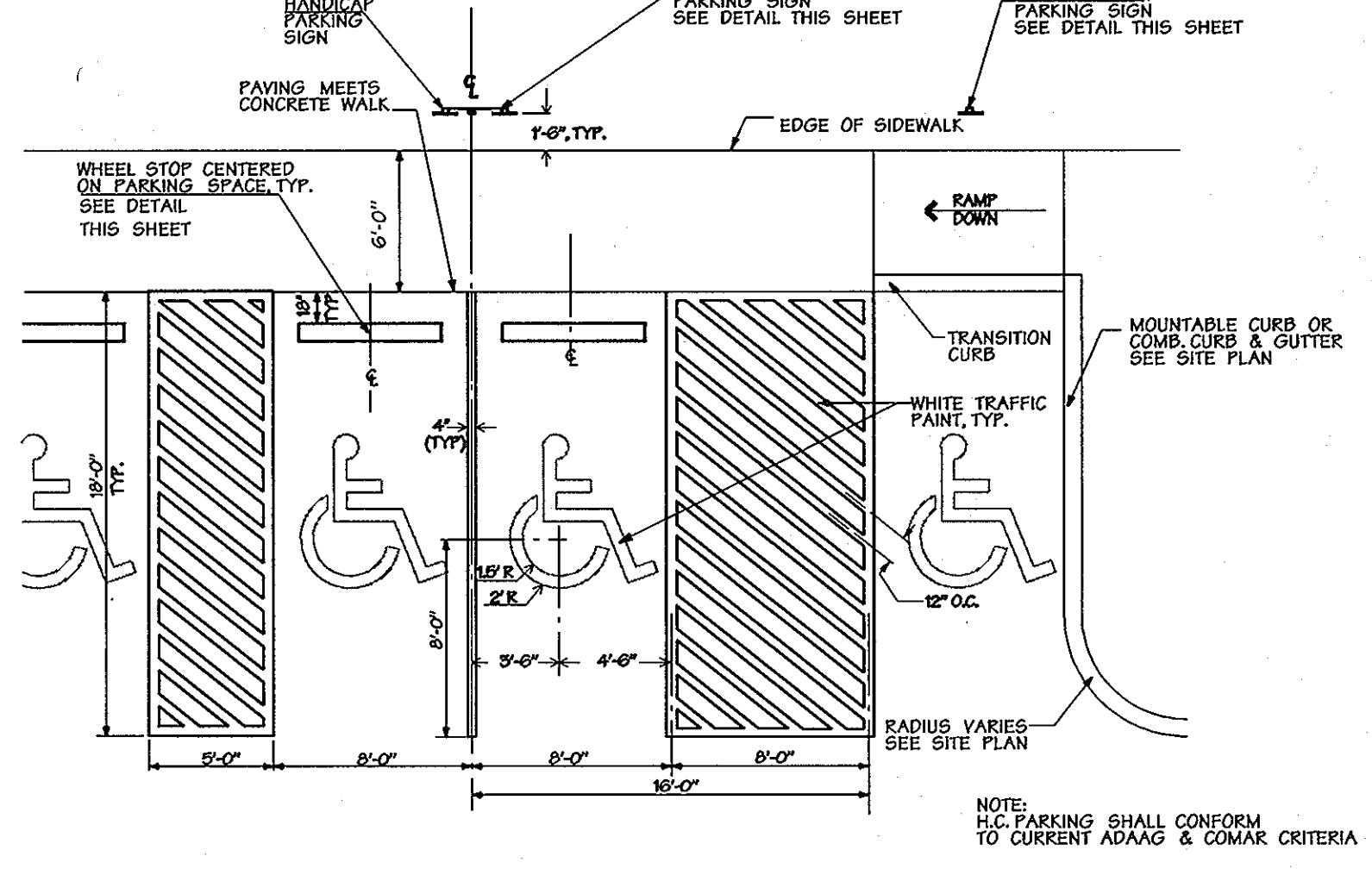
**Paving Details**  
Not to Scale

NOTES:  
1. PAVING SECTIONS WERE DESIGNED BY HERBST BENSON & ASSOCIATES ON JANUARY 2011.  
2. CONTRACTOR TO VERIFY WITH GEOTECHNICAL ENGINEER ON-SITE PRIOR TO PAVING.  
3. FOR LOCATION OF PAVING TYPES SEE SHEET 26 OF 26.

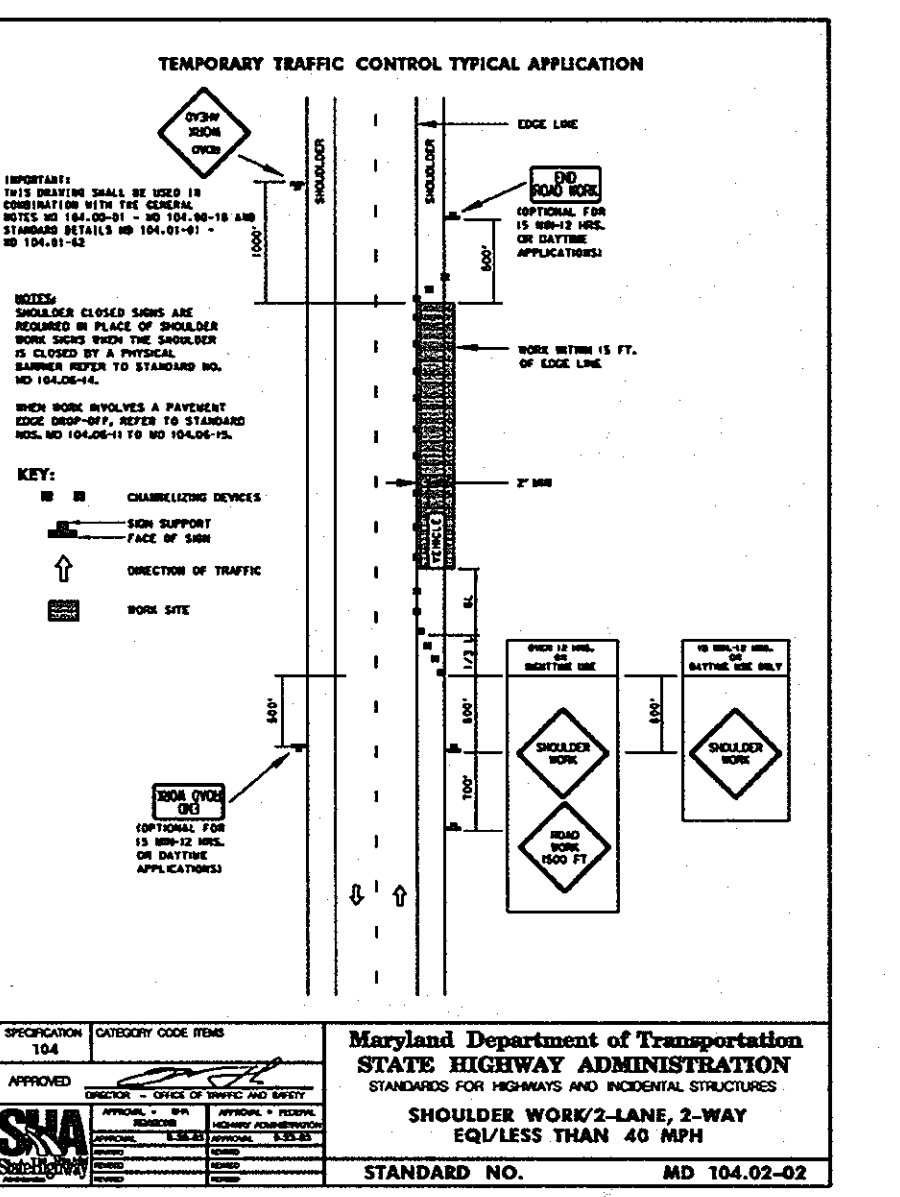


NOTES:  
1. DISTANCE FROM GROUND TO BOTTOM OF SIGN SHALL BE 7'-0".  
2. SEE HANDICAPPED PARKING SPACE DETAIL THIS SHEET FOR LOCATION OF HANDICAPPED SIGN.  
3. SIGNS SHALL CONFORM TO CURRENT ADAAG & COMAR CRITERIA.

SIGN COLORS:  
LETTERS AND BORDER - GREEN  
WHITE 1/2" SYMBOLS ON BLUE BACKGROUND  
BACKGROUND - WHITE



NOTE:  
1. HANDICAPPED PARKING SHALL CONFORM TO CURRENT ADAAG & COMAR CRITERIA

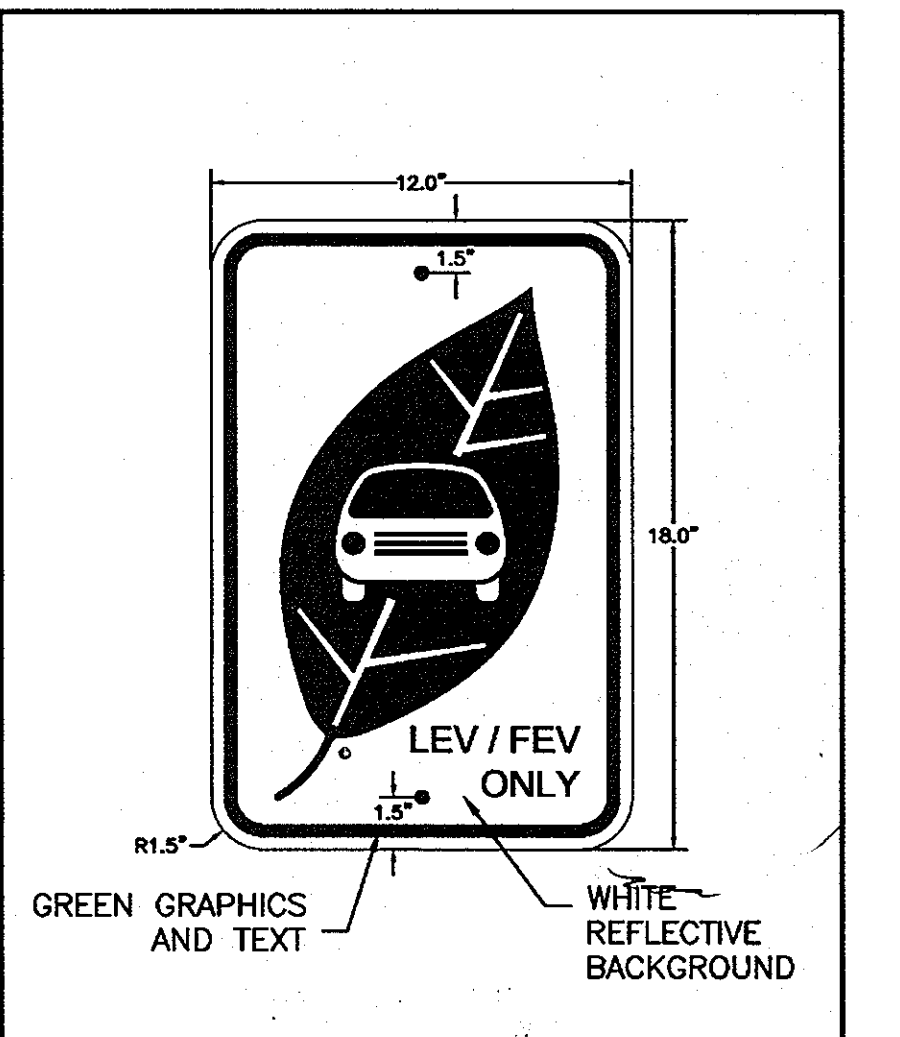
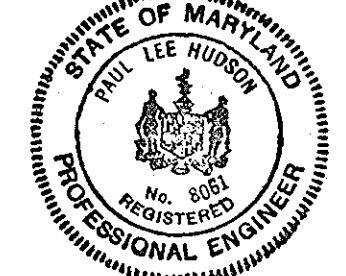


NOTES:  
1. TYPE C SIDEWALK RAMP IS TO BE USED AT LOCATIONS WHERE THE SIDEWALK MUST BE PLACED IMMEDIATELY ADJACENT TO THE BACK OF THE CURB. THE SIDEWALK SHALL BE AT LEAST 5' IN WIDTH.  
2. ALL RAMP SHALL HAVE A WARNING TEXTURE EXTENDING THE FULL WIDTH OF THE DEPTH OF THE CURB RAMP.  
3. 7" CONG. CURB AND GUTTER IS SHOWN DETAILS TO BE SIMILAR FOR MODIFIED CURB AND BITUMINOUS CURB.  
4. 4" SIDEWALK REQUIRES A PASSING AREA (SEE H.O.CO.STD. DETAIL R-4.01).

AS-BUILT NOT REQUIRED  
SURVEY SERVICES OF MD., LLC.  
BY: ROBERT MATIS - REG. #605



AS-BUILT  
CERTIFICATION FOR PSWM  
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.  
Paul Hudson 5-23-13  
PAUL HUDSON PE #8061



TITLE: LOW-EMISSION & FUEL-EFFICIENT VEHICLE PREFERRED PARKING SIGN  
WWW.GREENSIGNDESIGNS.COM  
SALES@GREENSIGNDESIGNS.COM

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
K. J. Shalaby, CHIEF, DIVISION OF LAND DEVELOPMENT, 4.10.12  
Chad Edwards, CHIEF, DEVELOPMENT ENGINEERING DIVISION, 4.2.12  
Dorinda A. Lytle, DIRECTOR, 4.10.12

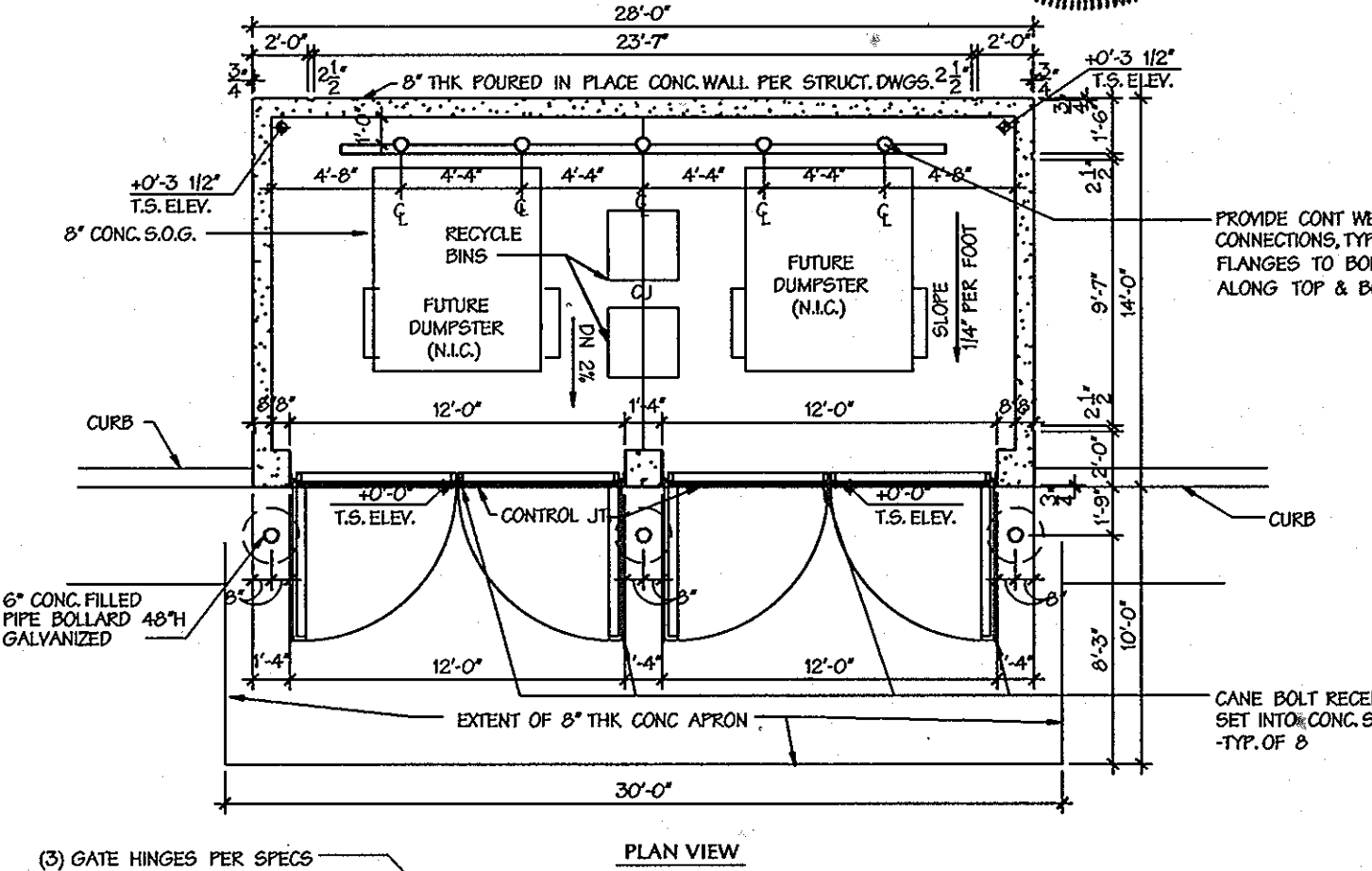
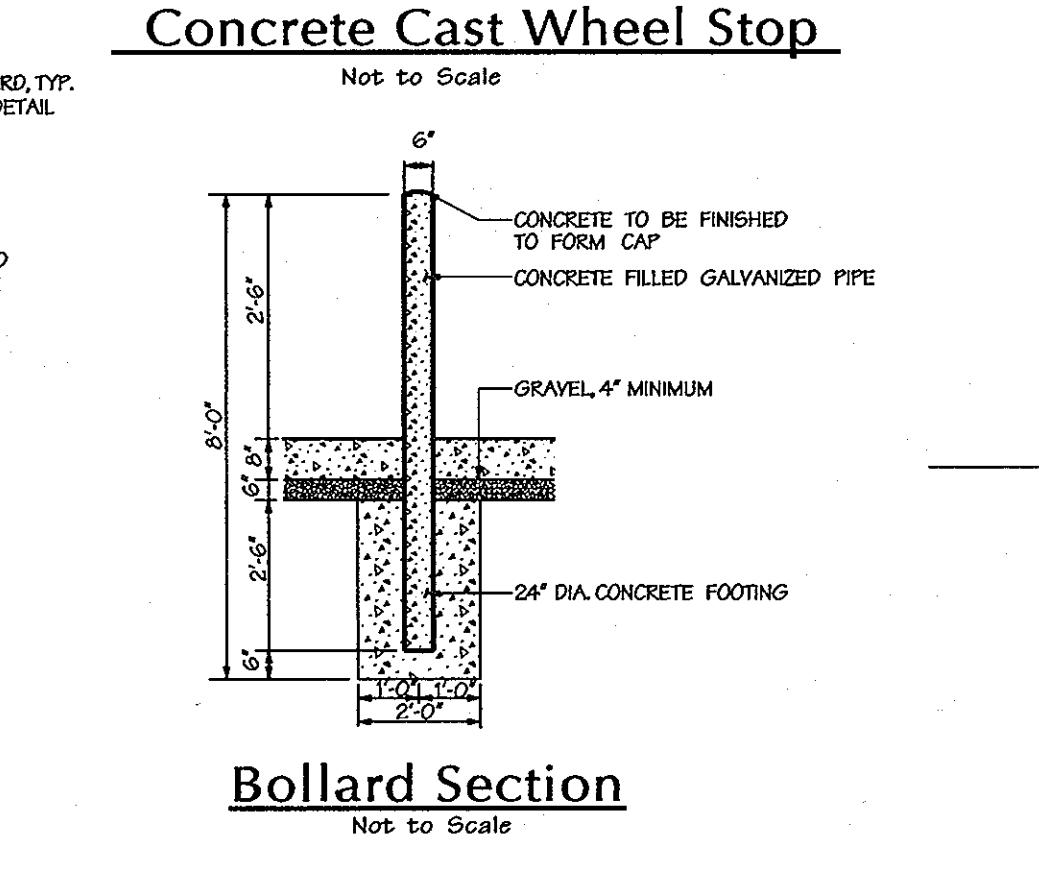
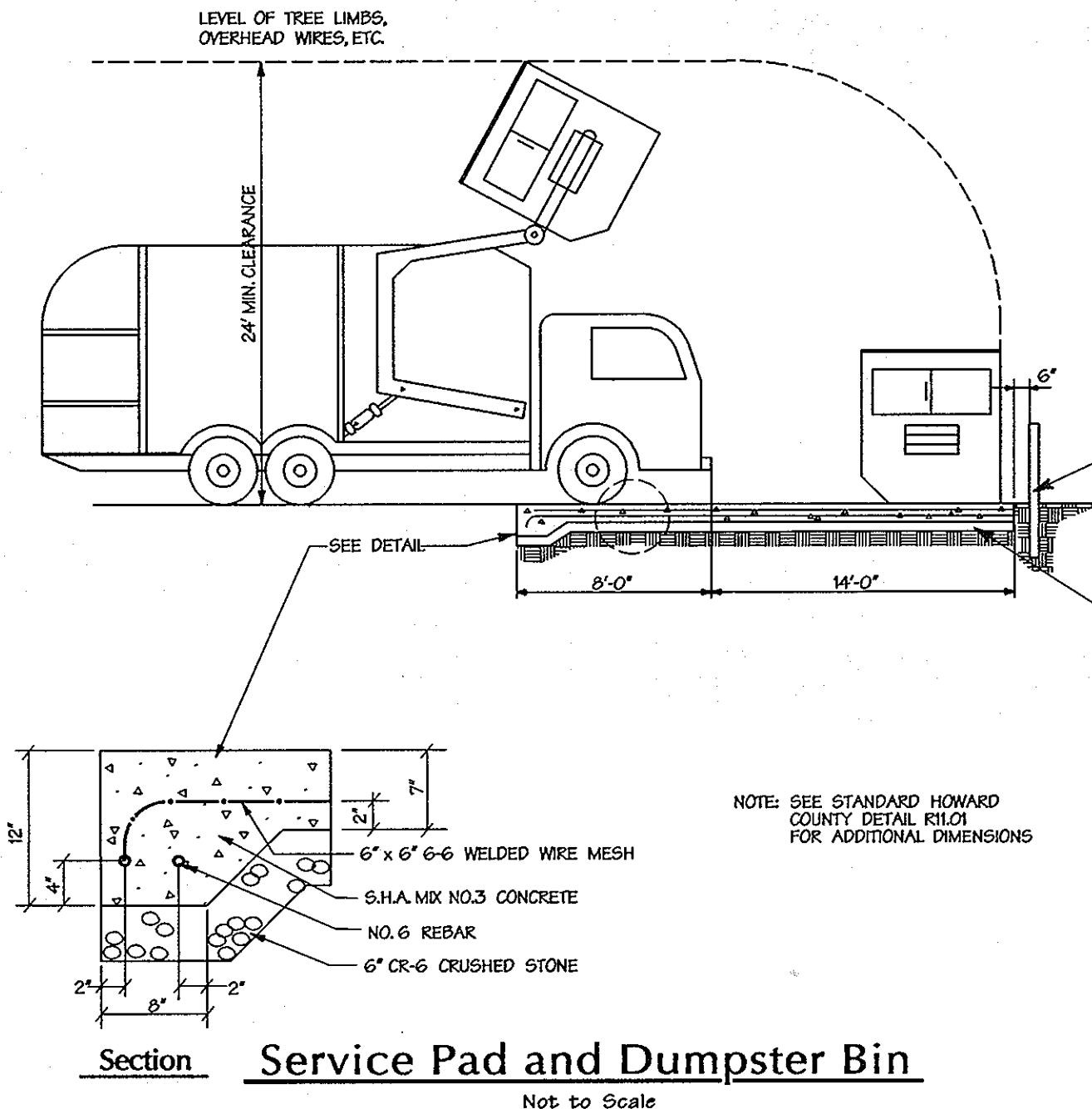
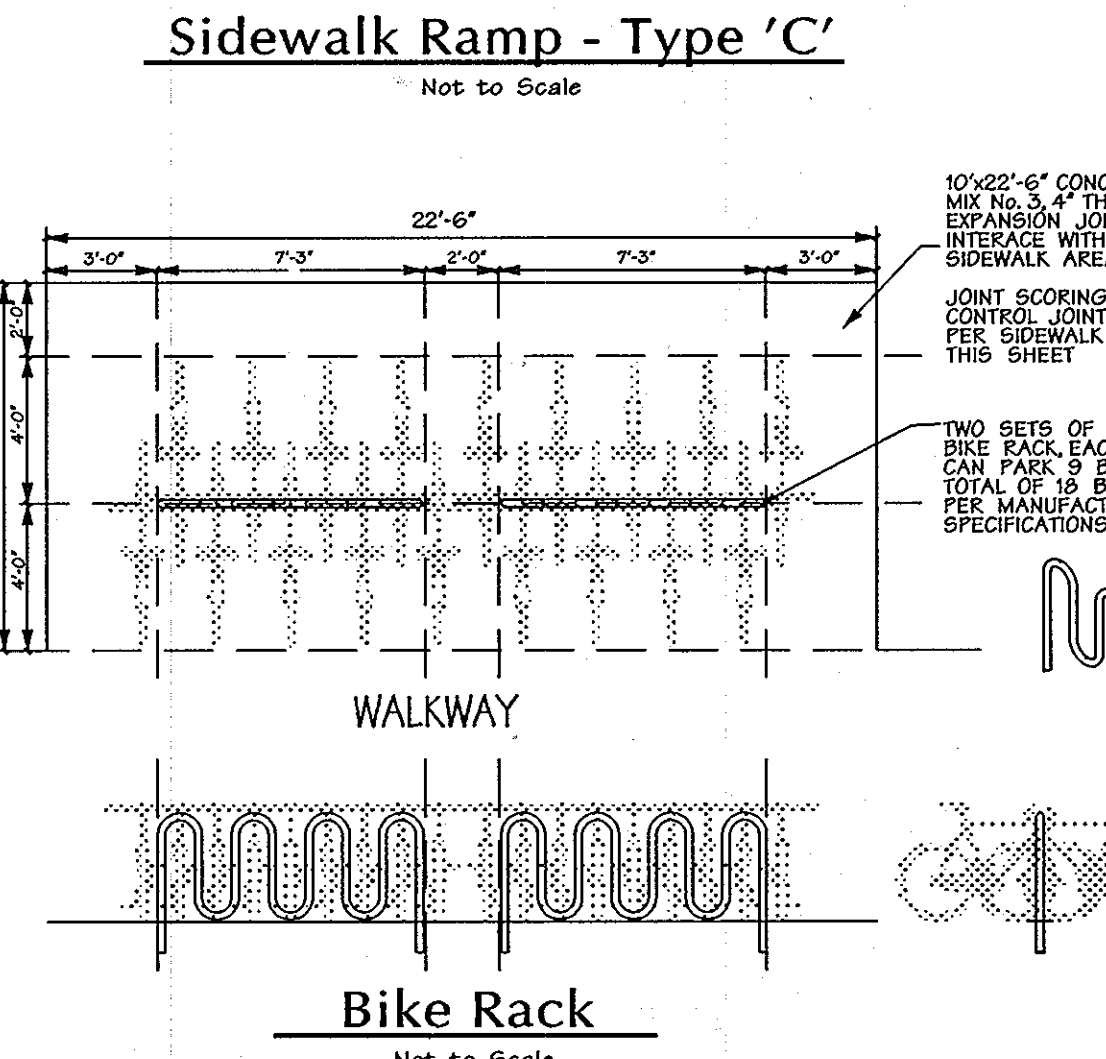
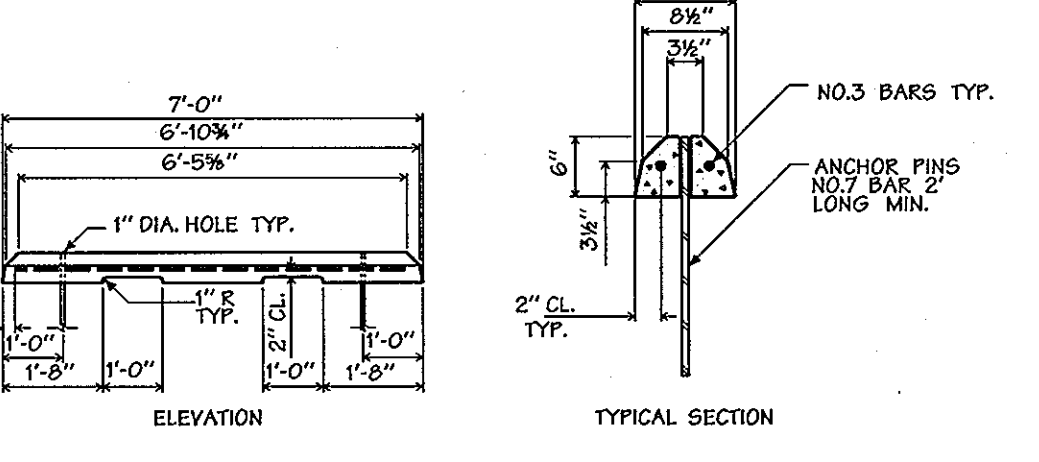
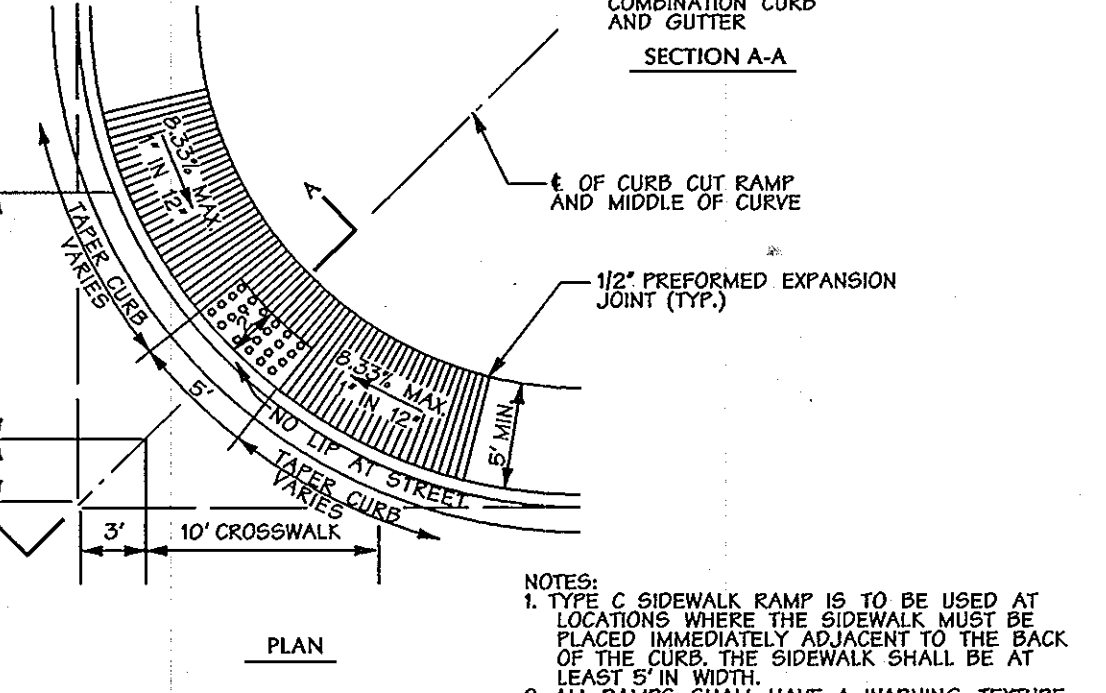
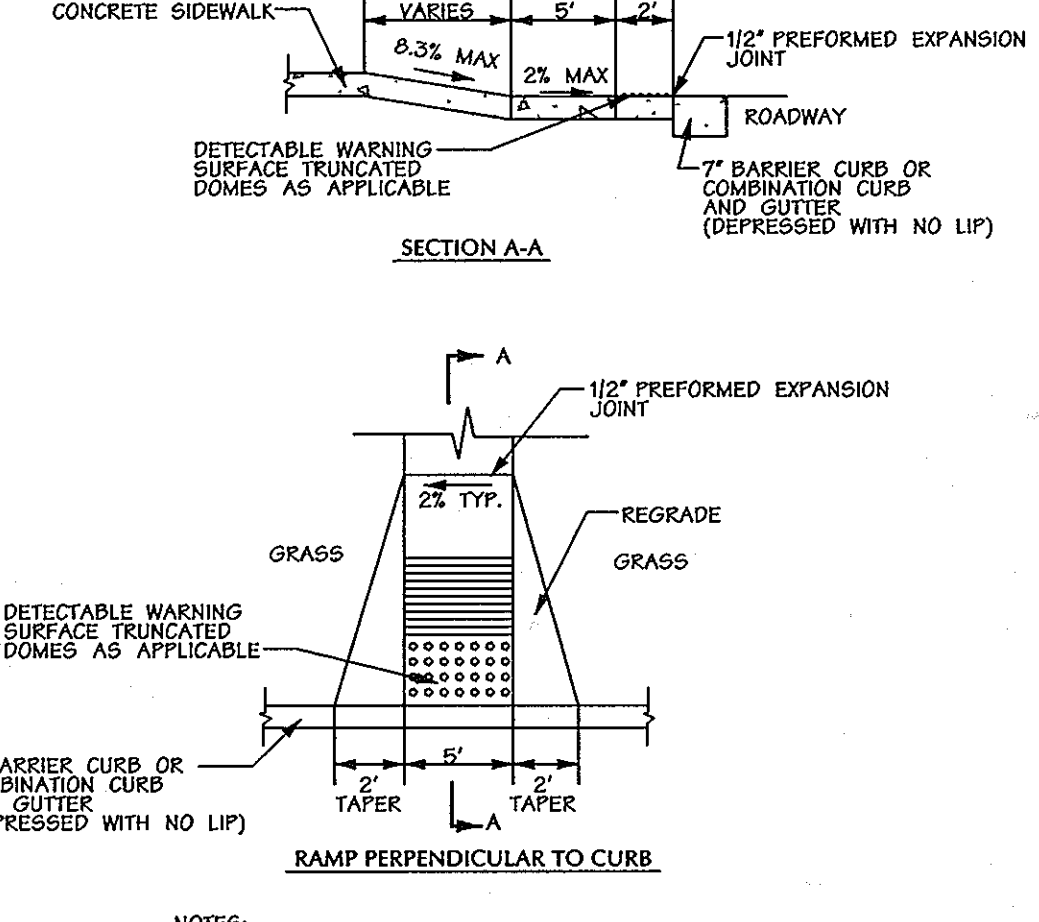
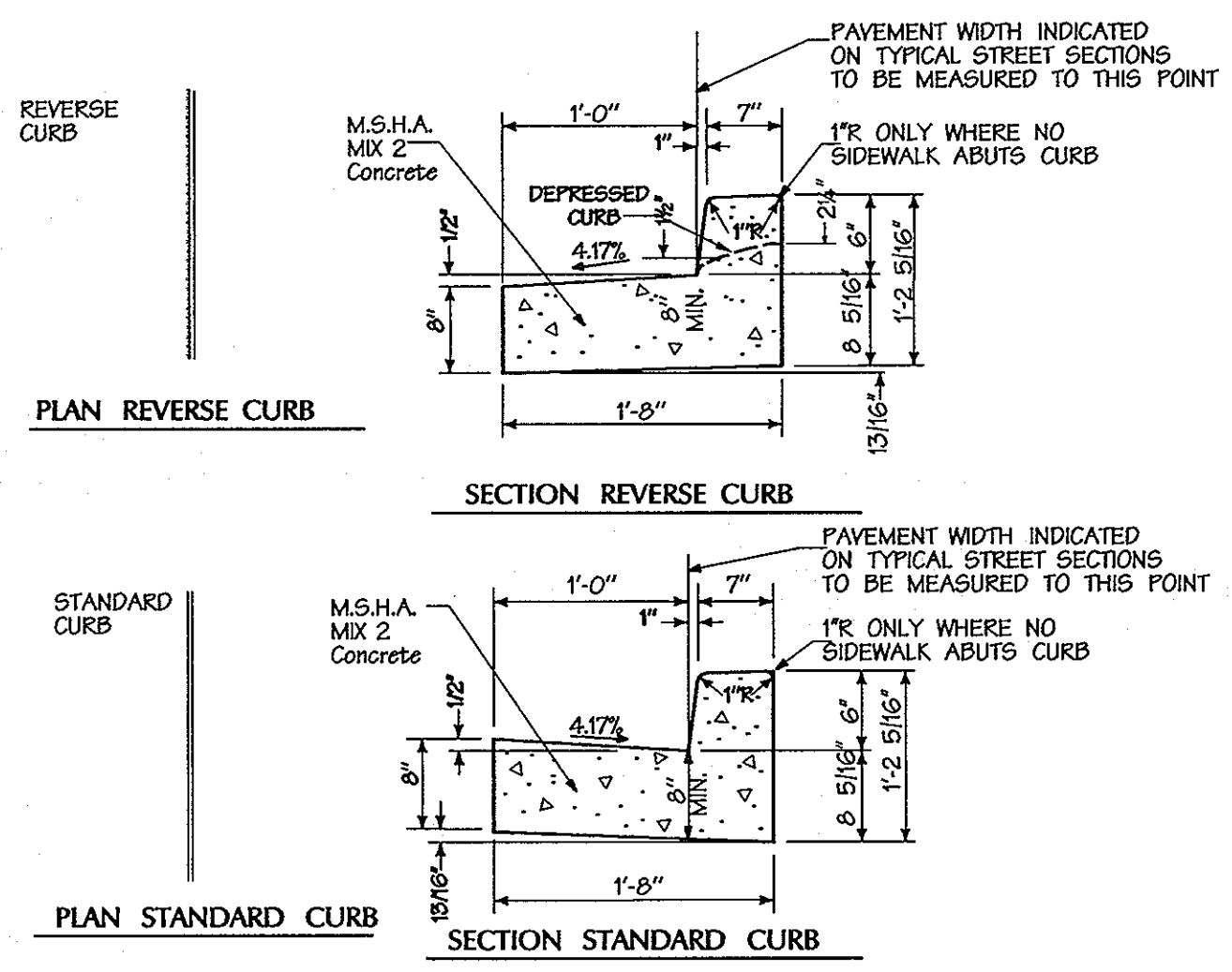
**EMERSON PARCEL B & E-1**  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING  
OWNER/DEVELOPER:  
PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
1 TERAS STATION COURT SUITE 200  
TIMONIA, MD 21085  
TAX MAP 47 GRID 8 PARCEL 1051  
EMERSON SECTION 3 AREA 1  
DEED: H47917  
TAX ACCT # 06-572253  
PLAT: 15629



230 EAST PENNSYLVANIA AVENUE - TOWSON, MD 21286  
P - 410-254-3333 F - 410-254-8766 WWW.DMW.COM  
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

**SITE DETAILS**

Des. By	JBS	Scale	AS NOTED	Proj. No.	95054.6
Dim. By	JSS	Date	12-13-11		
Chk. By	MCB/JDF	Approved			6 of 26



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. 16228, EXPIRATION DATE: 5/13/12

Professional Engr. No. 16228

12/25/11 Date

12/25/11 Date

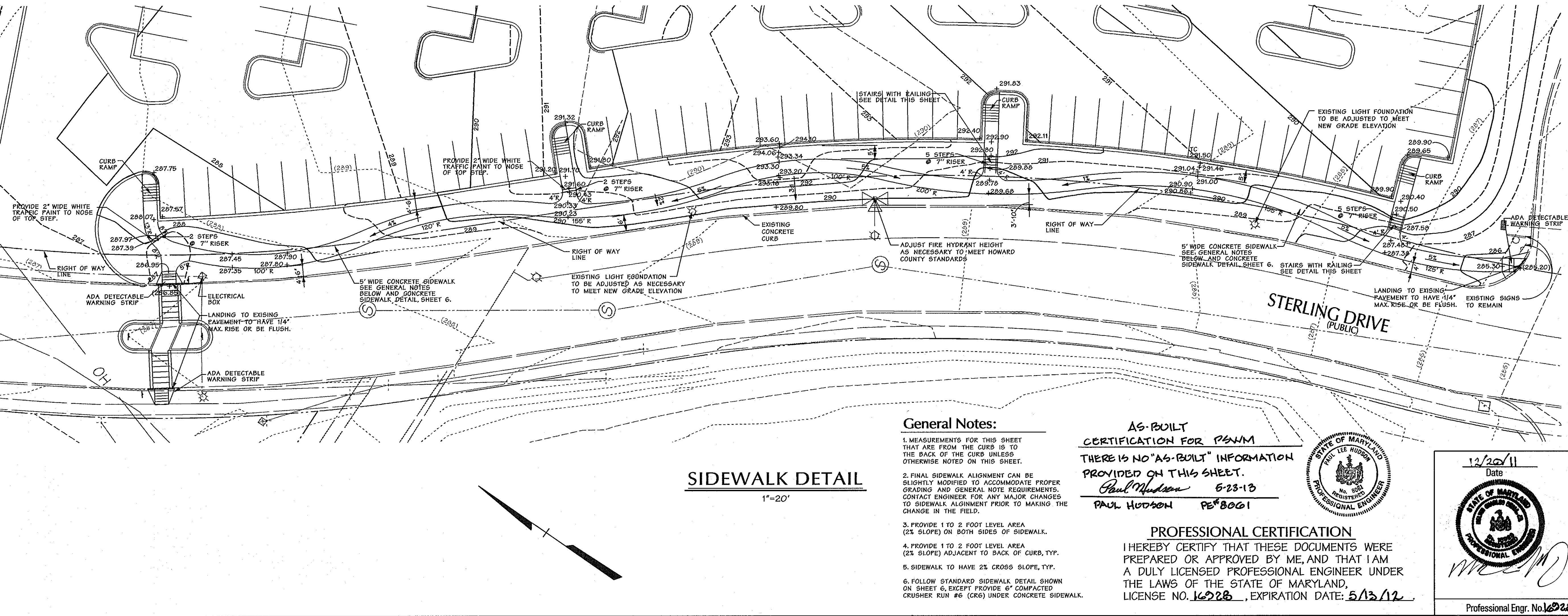
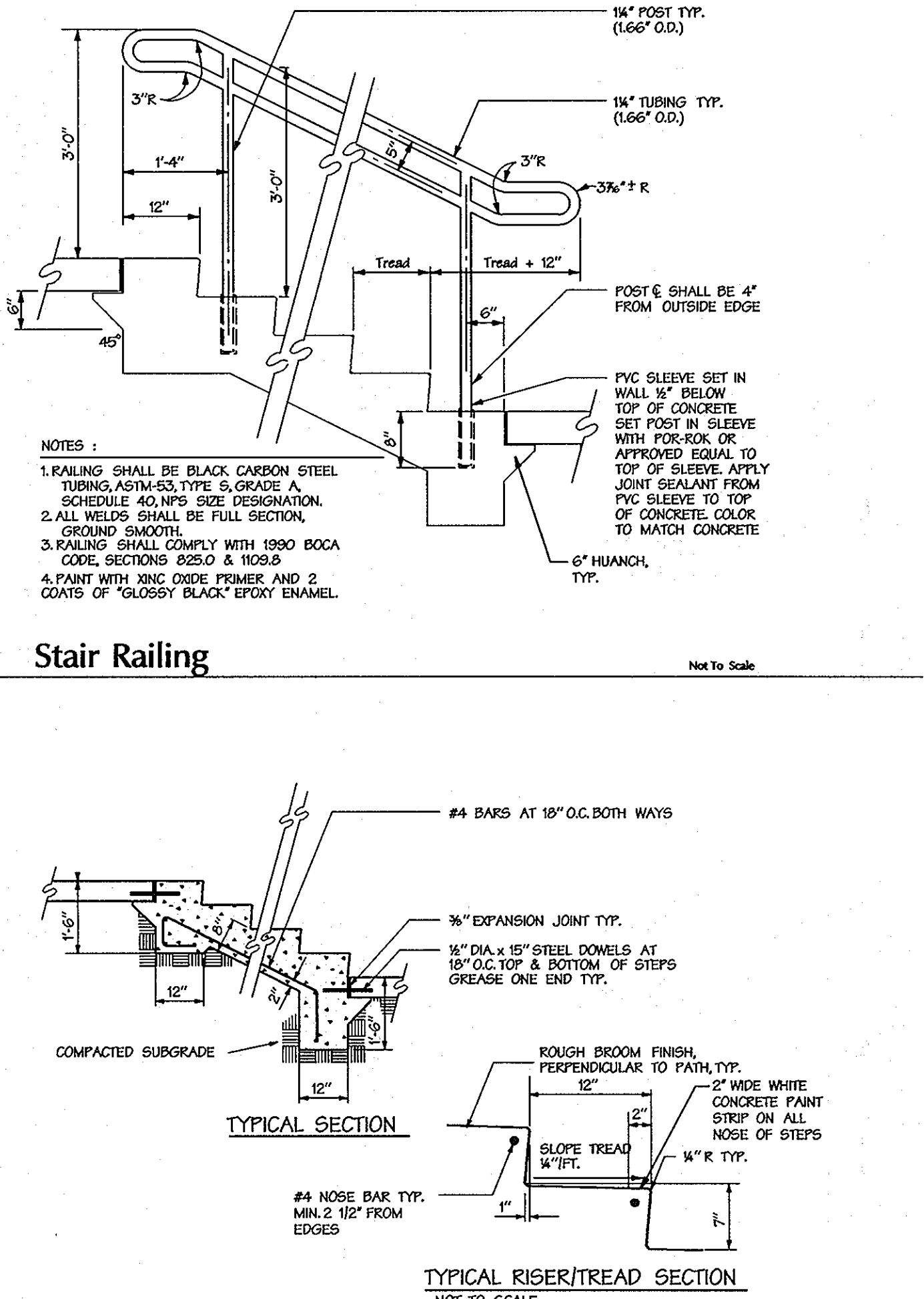
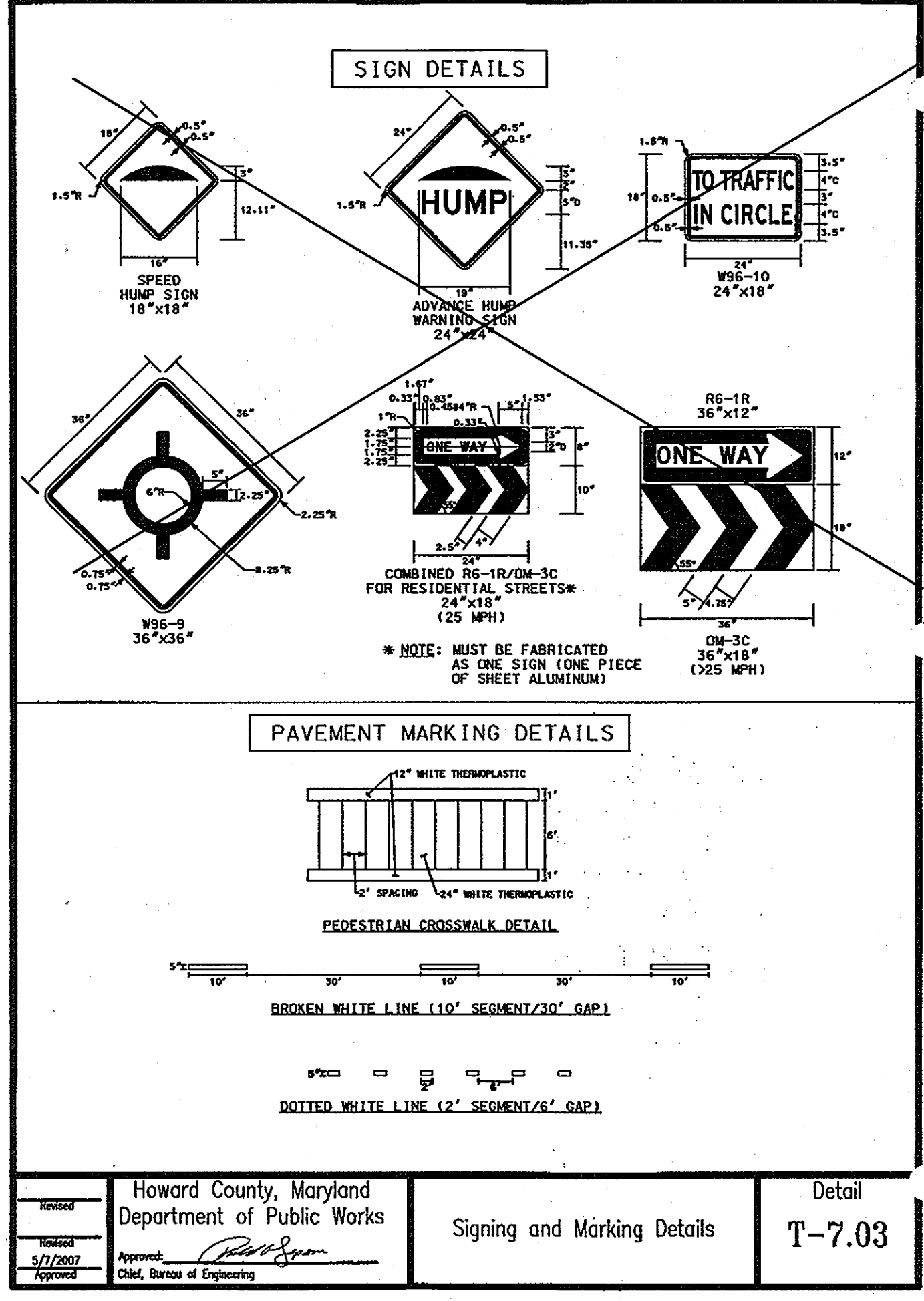
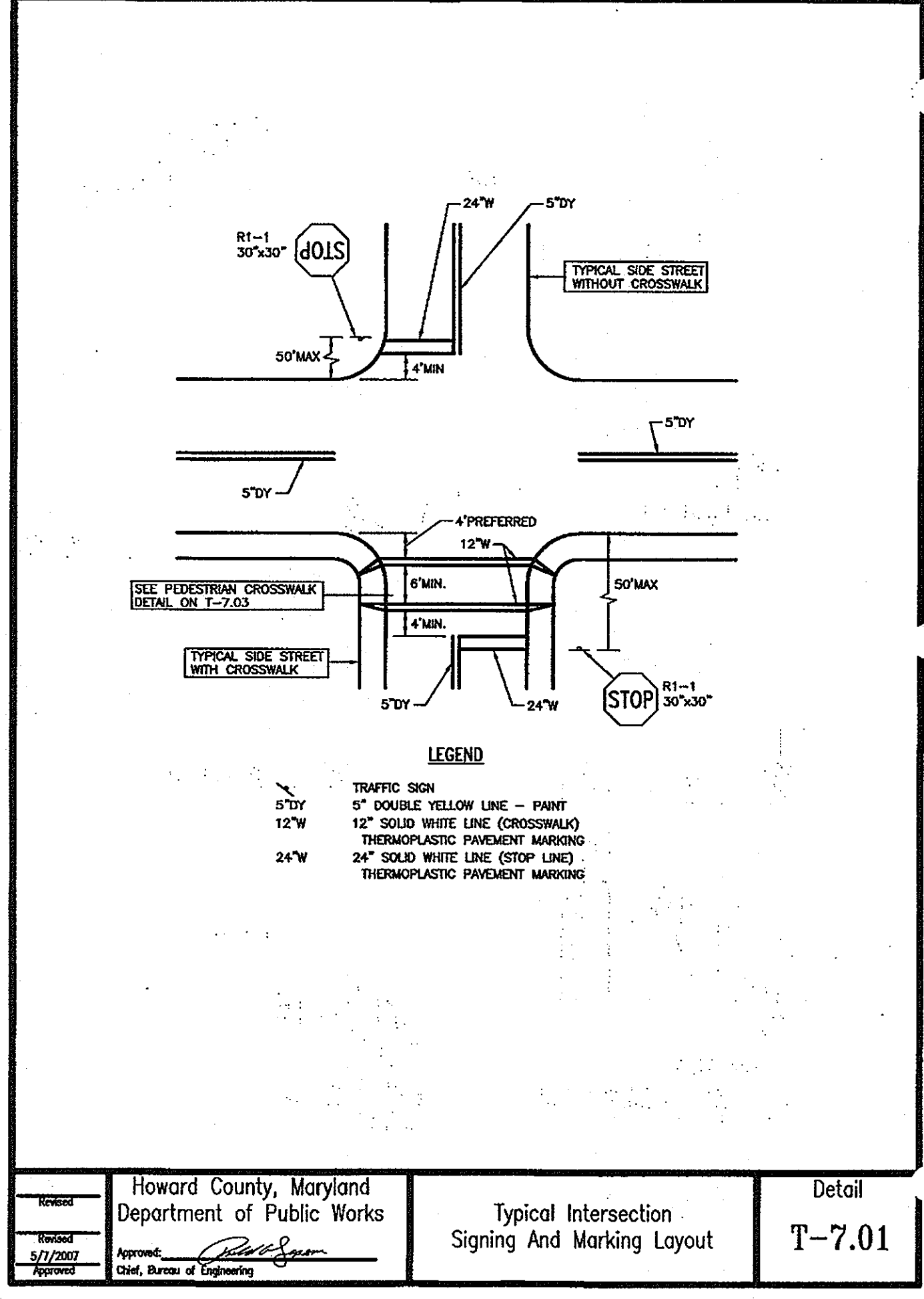
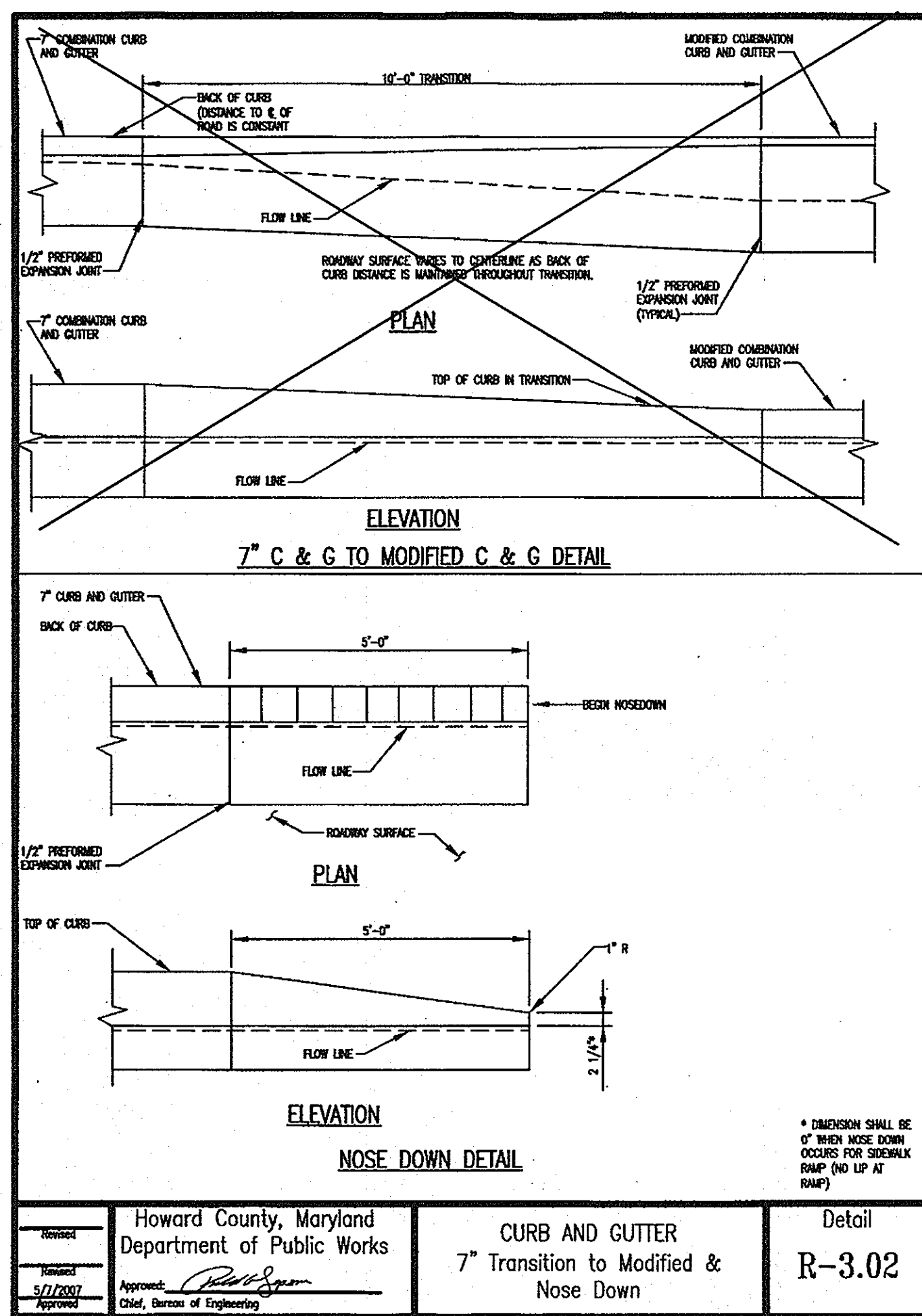












**AS-BUILT NOT REQUIRED  
SURVEY SERVICES OF MD, L.L.C.  
BY: ROBERT MATIS - REG#605**

STATE OF MARYLAND  
ROBERT MATIS  
PROPERTY LINE SURVEYOR

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

West Standen  
CHIEF, DIVISION OF LAND DEVELOPMENT 4-10-12 DATE

Paul Hudson  
CHIEF, DEVELOPMENT ENGINEERING DIVISION 4-7-12 DATE

Mark A. Uge  
DIRECTOR 4/10/12 DATE

Date	No.	Revision Description

**EMERSON PARCEL B & E-1**  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING

OWNER/DEVELOPER:  
PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
1 TEXAS STATION COURT  
SUITE 200  
TIMONIUM, MD 21085  
TAX MAP 47 GRID 8 PARCEL 1051  
EMERSON SECTION 3 AREA 1  
DEED: 1479717  
TAX ACCT # 06-572253  
PLAT: 162829

PARCEL 'E-1' - EMERSON DEVELOPMENT II, LLC  
1 TEXAS STATION COURT  
SUITE 200  
TIMONIUM, MD 21085  
TAX MAP 47 GRID 20 PARCEL 165  
RENTZ PROPERTY  
DEED: 1479719  
TAX ACCT # 06-572221  
PLAT: 162695

**DMW**  
DAFT MCCUNE WALKER INC

230 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
F: 410 299 2223 F: 410 296 4705 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS,  
ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

DESIGNER NAME	SECTION/AREA	LOT/PARCEL #
EMERSON DEVELOPMENT V, LLC	SECTION 3 AREA 1	PARCEL B & E-1 PAR. 165
EMERSON DEVELOPMENT II, LLC	SECTION 3 AREA 1	PARCEL 165

PLAT OR LOT	BLOCK #	TRACED	TRACED	TRACED	TRACED
21277 & 21278	20	20	47	6	606903

**SITE DETAILS**

Des. By	Scale	AS NOTED	Proj. No.
TPC	AS NOTED		95054.6

Dim. By	Date	12-13-11
JSS/TPC	12-13-11	

9 of 26

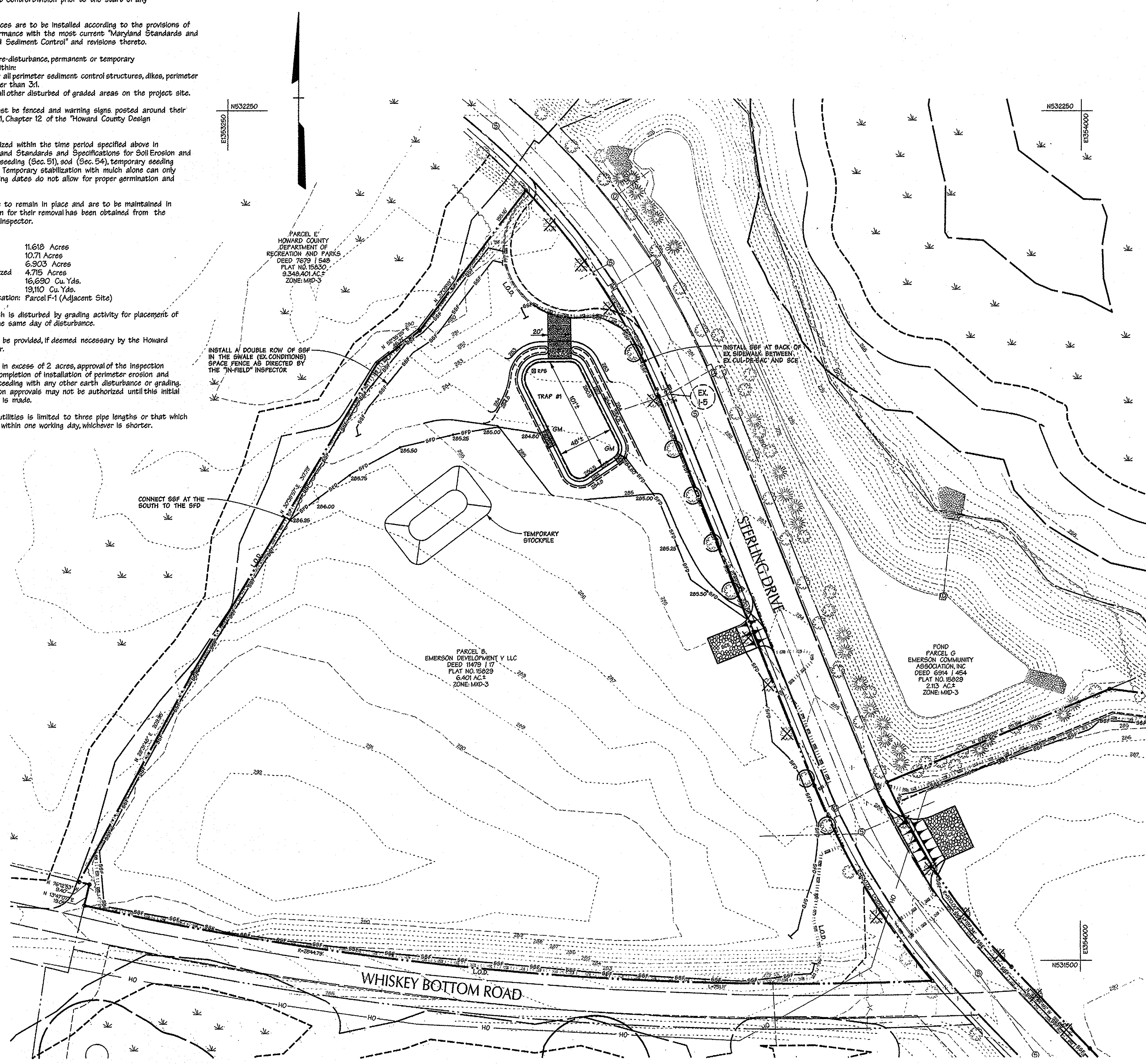
SDP-12-010



**STANDARD SEDIMENT CONTROL NOTES**

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, and Permits, Sediment Control Division prior to the start of any construction (410-313-1855).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current Maryland Standards and Specifications for Soil Erosion and Sediment Control and revisions thereto.
3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within:
  - a. Seven (7) calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1.
  - b. Fourteen (14) days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12 of the "Howard County Design Manual", Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the "1934 Maryland Standards and Specifications for Soil Erosion and Sediment Control" for permanent seeding (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50), and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:
 

Total Area of Site	11.618 Acres
Total Area Disturbed	10.71 Acres
Area to be roofed or paved	6.903 Acres
Area to be vegetatively stabilized	4.715 Acres
Total Cut	16,690 Cu. Yds.
Total Fill	19,110 Cu. Yds.
Off-site waste/borrow area location:	Parcel F-1 (Adjacent Site)
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. Trenching for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.



**SEQUENCE OF CONSTRUCTION**

1. Obtain a grading permit for the proposed work.
2. Notify the Howard County Department of Permits and Licenses (DLP) at least 48 hours prior to beginning work (2 days)
3. Install the Stabilized Construction Entrance (SCE) and perimeter controls; Super Silt Fence (SBF) and Super Fence Diversion (SFD) and tree protection as shown on the plans, (5 days)
4. With permission from the Sediment Control Inspector, install Sediment Trap No. 1 and No. 2 with SFD. (5 days)
5. Upon completion of the sediment traps and with permission of the Sediment Control Inspector, begin clearing and grubbing operations across the remaining site area. Temporarily stockpile excavated material in the designated locations. Continue grading operations to bring the site to proposed grades stabilizing paved areas with gravel subbase. Begin proposed building construction (3 weeks)
6. Continue building construction and trench for and install the storm drains; connect to the existing structures as shown on sheet 11 and 13. Install inlet protection or inlet blocking with RPS as inlets are completed. The following inlets shall also be wrapped with SBF: I-1, I-3, I-6, I-7, H-3, I-10, I-19, I-23, I-24 and I-25. (12 months)
7. When earthwork has reached appropriate grades, continue with construction of storm drains, water and sanitary sewer along with other dry utility lines (i.e. electric/telecom duct bank and gas service line). Install the proposed underground groundwater recharge trench No. 1, per the plans. Temporarily plug the 12" PVC pipe leading to the trench for connection at a later time. (30 days)
8. The contractor shall take care to direct runoff from disturbed areas to the sediment trap or perimeter sediment control devices at all times during construction.
9. Begin construction of the curbs and sidewalks across the site and place asphalt pavement base courses. Adjust SFD on sheet 13 to maintain drainage to Trap No. 2. (20 days)
10. As grading operations and utility construction near completion, install the PVC area drains and roof drain leaders around the building and parking lot. (8 days)
11. Fine grade the site and install permanent seed and mulch on lawn areas. Establish a minimum 70% uniform cover of vegetative species in the previous areas. (14 days)
12. Upon stabilization of the site and with permission of the sediment control inspector, remove the sediment traps. Remove the soft sub base material from pool area prior to backfilling with appropriate fill/silt material. Backfill the trap areas, and install the concrete curb, gravel subbase, and asphalt pavement base courses in the trap areas. Complete the storm drain system with underground groundwater trench No. 2. Temporarily plug the 12" PVC pipe leading to the trench for connection at a later time. install SBF around inlets I-5, I-8, I-11, and I-22 as indicated in the Final Grading Inset for Trap No. 1 and No. 2. (2 weeks)
13. Remove inlet blocking and repair inlet protection measure after asphalt base course.
14. Proceed with final paving operations and install the site landscaping per the plans.
15. Upon final stabilization of all remaining areas and with the permission of the Sediment Control Inspector, remove the 12" plugs to underground groundwater recharge trenches No. 1 & 2. Remove the remaining sediment control measures and stabilize any areas disturbed by doing so.

**LEGEND**

- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX. ROADS AND WALKS
- EX. MAJOR CONTOUR
- EX. MINOR CONTOUR
- FOREST CONSERVATION EASEMENT
- PROP. BUILDING
- PROP. CURB
- PROP. DEPRESSED CURB
- PROP. GROUP LIGHT
- PROP. SINGLE LIGHT
- PROP. LIGHT
- PROP. MAJOR CONTOUR
- PROP. MINOR CONTOUR
- LIMIT OF DISTURBANCE
- SBF
- SFD
- OCF
- AGIP
- IB
- SCE
- STABILIZED CONSTRUCTION ENTRANCE
- EROSION CONTROL MATTING
- REMOVAL PUMPING STATION
- GABION INFLOW PROTECTION (GABION MATTRESS)
- MOUNTABLE BERM
- TREE PROTECTION
- TREE TO BE REMOVED

**DEVELOPER'S CERTIFICATE**

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

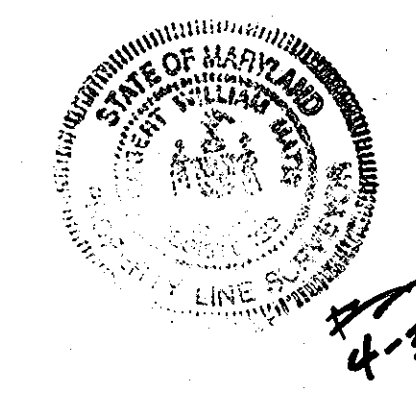
*James F. Knott, Jr.*  
 Signature of Developer  
**James F. Knott, Jr.**  
 Print Name  
 11/2/11  
 Date

**ENGINEER'S CERTIFICATE**

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

*Melvin C. Beatty, Jr.*  
 Signature of Engineer  
**Melvin C. Beatty, Jr.**  
 Print Name  
 11/2/11  
 Date

**AS-BUILT NOT REQUIRED**  
**SURVEY SERVICES OF MD., LLC.**  
**BY: ROBERT MATIS - REG# 605**



**STONE OUTLET SEDIMENT TRAP (ST II)**

EXISTING DA	TRAP #1
3.87 AC	
PROPOSED DA (MAX)	4.67 AC
STORAGE REQUIRED	16,812 CF
STORAGE PROVIDED	19,156 CF
WET STORAGE REQUIRED	8,406 CF
WET STORAGE PROVIDED	9,663 CF
WET STORAGE ELEVATION RANGE	280.5 TO 282.3
DRY STORAGE REQUIRED	8,406 CF
DRY STORAGE PROVIDED	9,494 CF
DRY STORAGE ELEVATION RANGE	282.3 TO 283.0
WEIR LENGTH	20'
BOTTOM DIMENSION	10' x 48'
TOP EMBANKMENT ELEVATION	284.0 (MIN)
TOP EMBANKMENT WIDTH	4 FT. (MIN)
CLEANOUT STORAGE REQUIRED	4,203 CF
CLEANOUT STORAGE PROVIDED	5,132 CF
CLEANOUT ELEVATION	281.5
SIDE SLOPES	2:1
BOTTOM ELEVATION	280.5
MIN. ELEVATION OF EXIST. GROUND	282.3

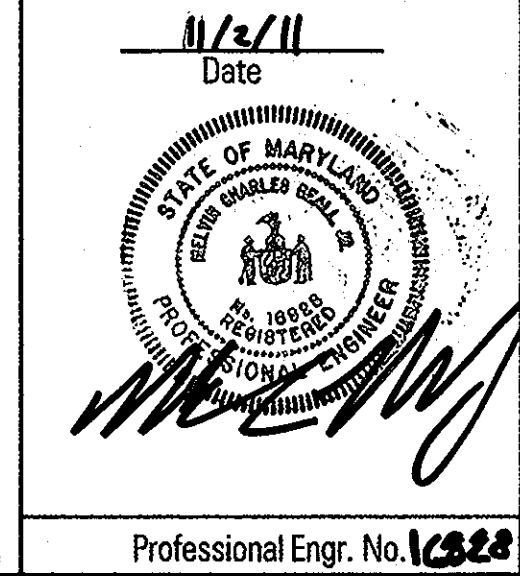
**AS-BUILT CERTIFICATION FOR PDWM**  
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET  
*Paul Hudson* 5-23-13  
**PAUL HUDSON PE# 8061**



**UTILITY CONSTRUCTION OUTSIDE SEDIMENT CONTROL PRACTICES**

1. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
2. IMMEDIATELY FOLLOWING PIPE INSTALLATION, THE TRENCH SHALL BE BACKFILLED, COMPACTED AND IMMEDIATELY STABILIZED (PERMANENT SEED AND MULCH) AT THE END OF EACH WORK DAY.
3. SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY. (SILT FENCE AS PER SCS STANDARD DRAWING - E-15-3)
4. THE CONTRACTOR SHALL DISTURB AND OPEN TRENCH THE MINIMUM PRACTICAL AREA REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
5. ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS". ANY EROSION AND SEDIMENT CONTROL PRACTICES DAMAGED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

**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. **16538**, EXPIRATION DATE: **5-13-12**



This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
*John A. Pelletier, ICS*  
 Howard Soil Conservation District  
 11/2/11  
 Date

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

<i>Kevin S. Sheldahl</i> CHIEF, DIVISION OF LAND DEVELOPMENT	4-10-12 DATE
<i>Chad Edmondson</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	4-2-12 DATE
<i>Paula K. Taylor</i> DIRECTOR	4/10/12 DATE

**EMERSON PARCEL B & E-1**  
**L.E.E.D. BUILDING**  
**5-STORY COMMERCIAL OFFICE BUILDING**  
 OWNER/DEVELOPER:  
 PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
 172446 STATION COURT  
 SUITE 200  
 TAKOMA, MD 20905  
 TAX MAP #7 GRID 20 PARCEL 1051  
 DEED: 10/17/07  
 TAX ACCT # 06-572553  
 PLAT: 18685  
 PARCEL 'E-1' - EMERSON DEVELOPMENT V, LLC  
 172446 STATION COURT  
 SUITE 200  
 TAKOMA, MD 20905  
 TAX MAP #7 GRID 20 PARCEL 1055  
 REVIZ PROPERTY  
 DEED: 10/16/08  
 TAX ACCT # 06-572227  
 PLAT: 18685

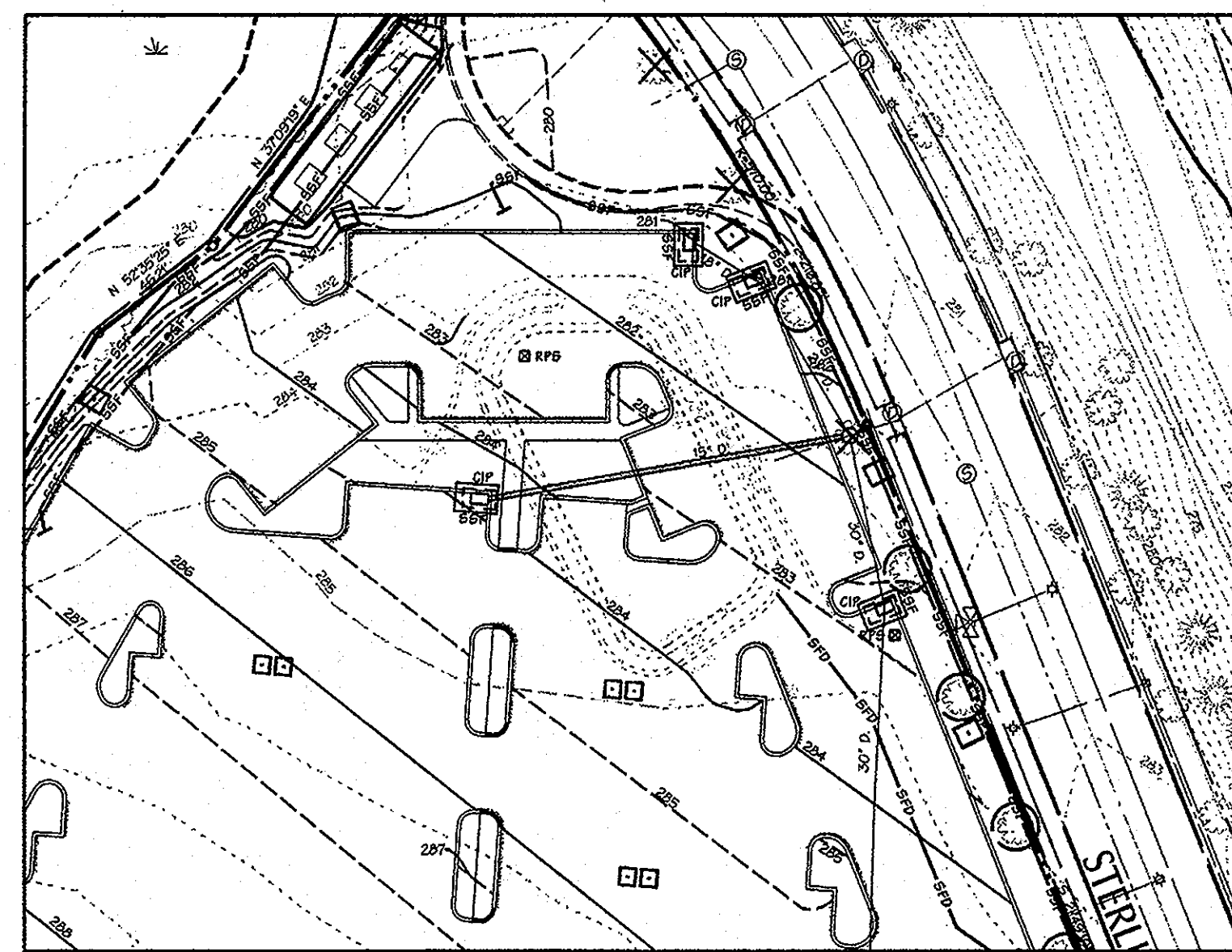
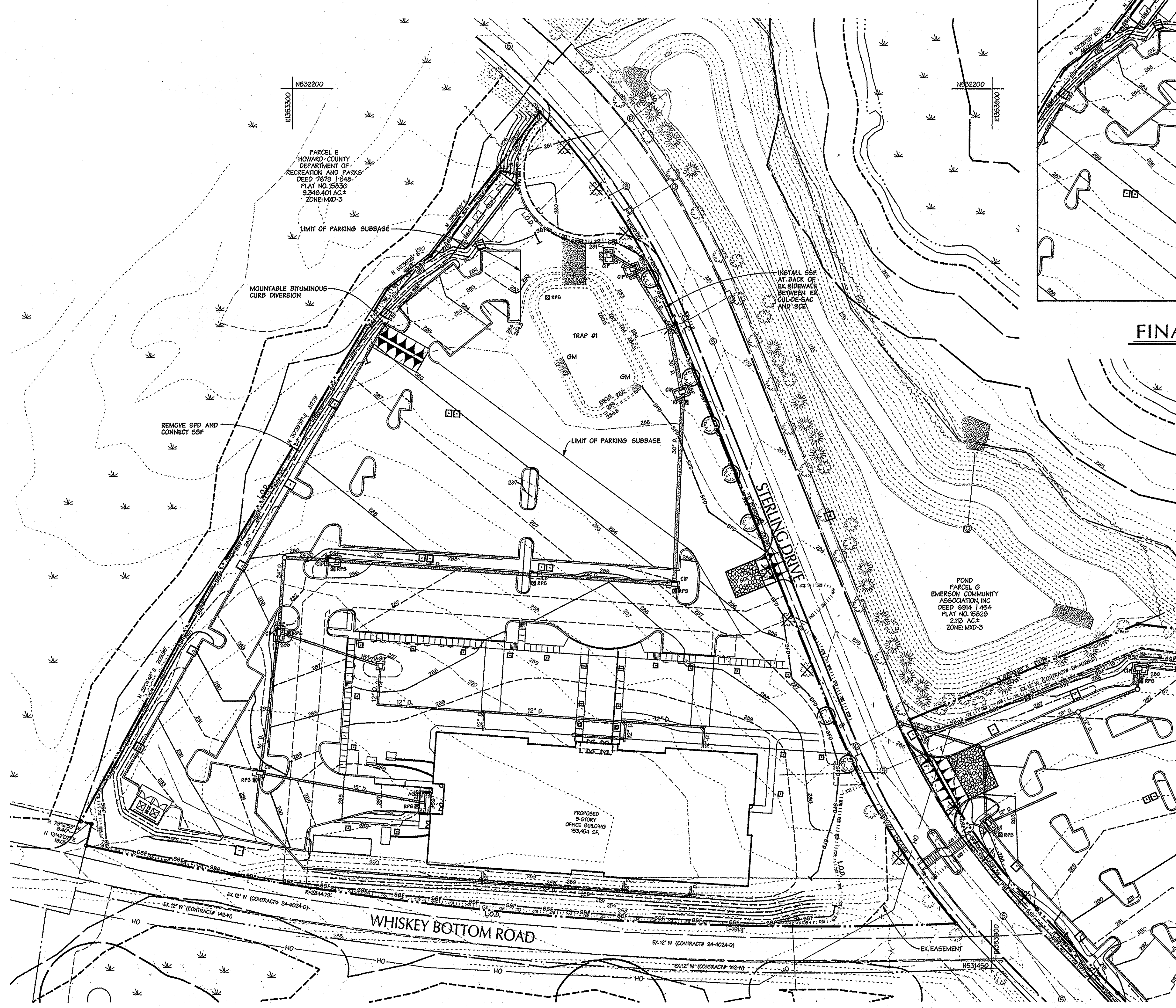
**DMW**  
 DAFT M'CUNE WALKER INC  
 200 EAST PENNSYLVANIA AVENUE • JOHNSON, MD 21286  
 P: 301.295.3333 F: 301.295.4705 WWW.DMW.COM  
 A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS,  
 ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SECTION NAME REVIZ PROPERTY & EMERSON SECTION 3 AREA 1	SECTION # 3	AREA 1	PARCEL # B & E-1 PAR. 105
PLAT OR REF 21277 & 21278	BLOCK # 20	TRACER MAP # 47	TRACER TRACT 6
OWNER CODE 21277	DATE FEB	DATE 47	DATE 6

**PHASE I EROSION & SEDIMENT CONTROL PLAN - PARCEL 'B'**

Des. By LNL	Scale 1"=50'	Proj. No. 95054.6
Dwn. By GMO	Date 10-31-11	10 of 26
Chk. By	Approved	





**FINAL GRADING - TRAP 1**

AS-BUILT NOT REQUIRED  
 SURVEY SERVICES OF MD., LLC.  
 BY: ROBERT MATIS - REG.# 605

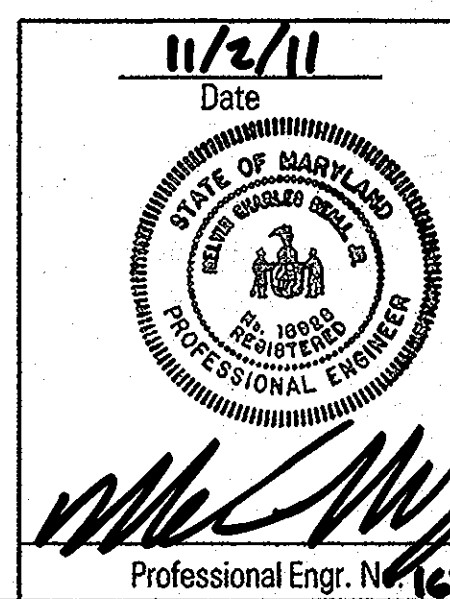


AS-BUILT  
 CERTIFICATION FOR POWN  
 THERE IS NO "AS-BUILT" INFORMATION  
 PROVIDED ON THIS SHEET.

*Paul Hudson*  
 PAUL HUDSON 5-23-13  
 PE#8061



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. 16225, EXPIRATION DATE: 5-13-12



LOD PARCEL 'B' = 265,786 S.F. OR 6.10 Ac.±  
 LOD PARCEL 'E-1' = 200,786 S.F. OR 4.61 Ac.±  
 TOTAL LOD = 466,572 S.F. OR 10.71 Ac.±

DEVELOPER'S CERTIFICATE  
 "I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

*James F. Knou, Jr.*  
 Signature of Developer 11/2/11  
 James F. Knou, Jr.  
 Print Name

ENGINEER'S CERTIFICATE  
 "I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

*Melvin C. Beatty, Jr.*  
 Signature of Engineer 11/2/11  
 Melvin C. Beatty, Jr.  
 Print Name

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
*John A. Adams, III*  
 Howard Soil Conservation District 11/2/11  
 Date

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

<i>Victor Shearman</i>	4-10-12
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Chad Edwards</i>	4-2-12
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Mervin de la Cruz</i>	4/10/11
DIRECTOR	DATE

Date	No.	Revision Description

**EMERSON PARCEL B & E-1**  
 L.E.D. BUILDING  
 5-STORY COMMERCIAL OFFICE BUILDING  
 OWNER/DEVELOPER:  
 PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
 1 TEXAS STATION COURT  
 SUITE 200  
 TIMONIUM, MD 21083  
 TAX MAP #7 GRID 9 PARCEL 1051  
 EMERSON SECTION 3 AREA 1  
 DEED: H47917  
 TAX ACCT # 06-572553  
 PLAT: 15629

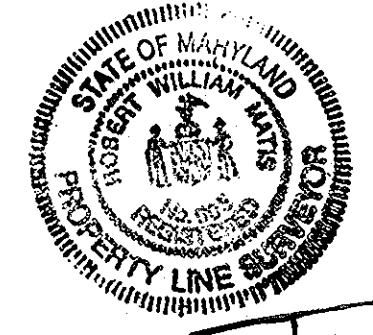
PARCEL 'E-1' - EMERSON DEVELOPMENT I, LLC  
 1 TEXAS STATION COURT  
 SUITE 200  
 TIMONIUM, MD 21083  
 TAX MAP #7 GRID 20 PARCEL 165  
 REVITZ PROPERTY  
 DEED: H0101619  
 TAX ACCT # 06-572227  
 PLAT: 15685

<p><b>DMW</b>          DAFT MCCUNE WALKER INC</p> <p>200 EAST PENNSYLVANIA AVENUE - TOWSON, MD 21286          P - 410-276-3333 F - 410-276-4700 WWW.DMW.COM</p> <p>A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS,          ENGINEERS, SURVEYORS &amp; ENVIRONMENTAL PROFESSIONALS</p>			
<p>CLIENT NAME          REVITZ PROPERTY &amp; EMERSON SECTION 3 AREA 1</p>	<p>SECTION AREA          PARCEL 3 AREA 1</p>	<p>LOT/PARCEL #          PARCEL B &amp; E-1 PAR. 165</p>	<p>DATE          10/31/11</p>
<p>PROJECT #          2177 &amp; 2178</p>	<p>DATE          10/31/11</p>	<p>DATE          10/31/11</p>	<p>DATE          10/31/11</p>
<p>DATE          10/31/11</p>	<p>DATE          10/31/11</p>	<p>DATE          10/31/11</p>	<p>DATE          10/31/11</p>

<p><b>PHASE II          EROSION &amp; SEDIMENT          CONTROL PLAN - PARCEL 'B'</b></p>					
Des. By	LNL	Scale	1"=50'	Proj. No.	95054.6
Drn. By	GMO	Date	10-31-11		
Chk. By	Approved				11 of 26



AS-BUILT NOT REQUIRED  
 SURVEY SERVICES OF MD., LLC.  
 BY: ROBERT MATS - REG. #605



4-30-13

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance as a Department of the Environment approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

*James F. Knott, Jr.* 11/2/11  
 Signature of Developer Date  
 James F. Knott, Jr.  
 Print Name

ENGINEER'S CERTIFICATE

"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

*Malvin C. Beatty, Jr.* 11/2/11  
 Signature of Engineer Date  
 Malvin C. Beatty, Jr.  
 Print Name

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

*John R. Robinson* 11/10/11  
 Howard Soil Conservation District Date  
 Director

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

*Victor S. Salsinger* 4-10-12  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*Chad Edwards* 4-2-12  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*Mark D. Wright* 4/10/12  
 DIRECTOR DATE

Date No. Revision Description

EMERSON PARCEL B & E-1

L.E.E.D. BUILDING

5-STORY COMMERCIAL OFFICE BUILDING

OWNER/DEVELOPER:

PARCEL 'B' - EMERSON DEVELOPMENT II, LLC  
 1 TEXAS STATION COURT  
 SUITE 200  
 TIMONUM, MD 21085  
 TAX MAP 47 GRID 8 PARCEL 1051  
 EMERSON SECTION 3 AREA 1  
 DEED: M47917  
 TAX ACCT # 06-572553  
 PLAT: 15823

PARCEL 'E-1' - EMERSON DEVELOPMENT II, LLC  
 1 TEXAS STATION COURT  
 SUITE 200  
 TIMONUM, MD 21085  
 TAX MAP 47 GRID 20 PARCEL 165  
 KEVIZ PROPERTY  
 DEED: R101019  
 TAX ACCT # 06-572221  
 PLAT: 10685



SECTION NAME SECTION AREA LOT/PARCEL #  
 EROSION PROPERTY & EMERSON SECTION 3 AREA 1 PARCEL B & E-1 PAR. 165  
 PLAT # OR LOT BLOCK # DEED DATE/ZONE MAP DISTRICT GIS/2D TRACT  
 2177 & 2178 20 PEC 47 6 606903  
 WATER CODE SEWER CODE

PHASE I  
 EROSION & SEDIMENT  
 CONTROL PLAN - PARCEL 'E-1'

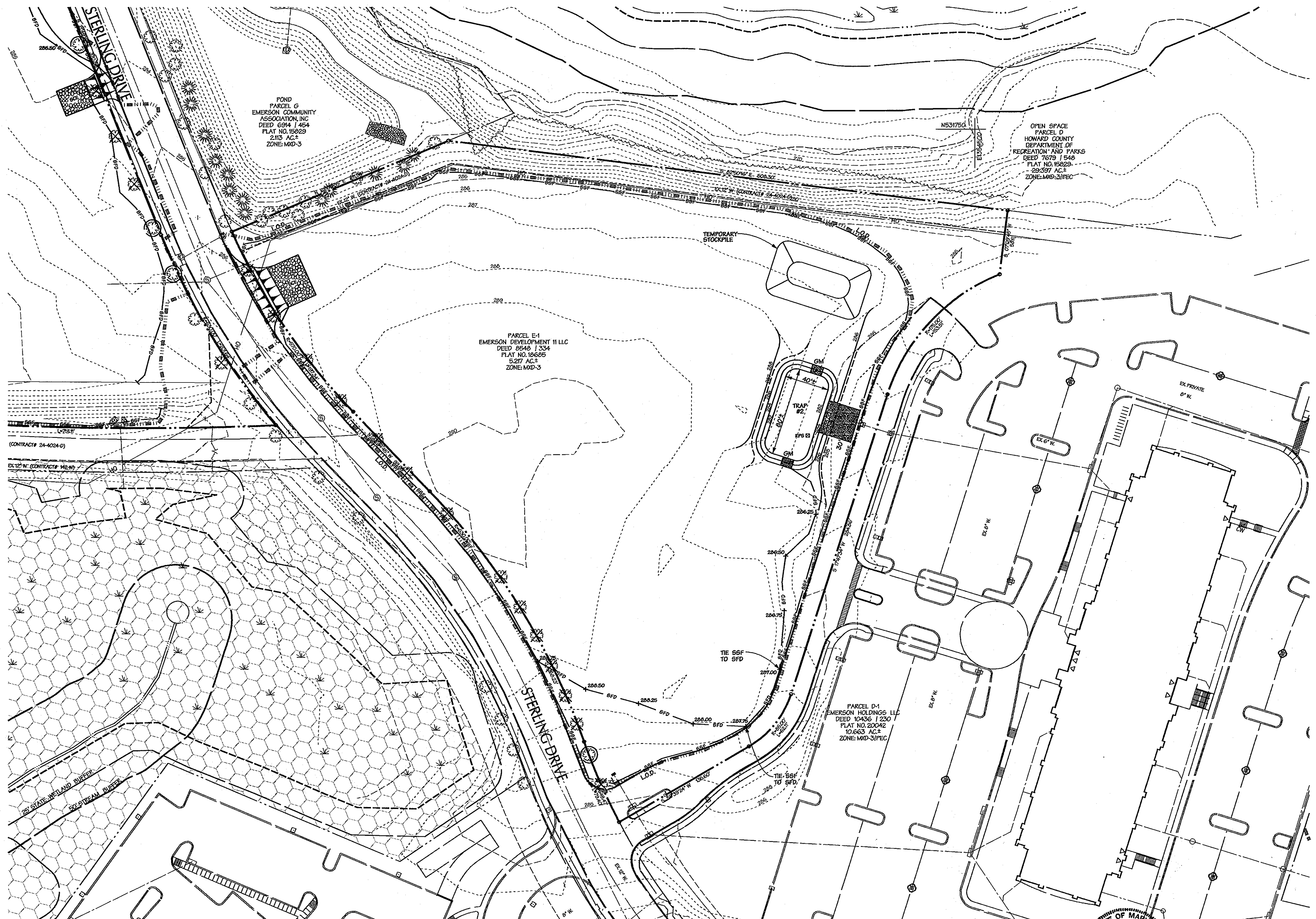
Des. By LNL Scale 1"=50' Proj. No. 95054.6  
 Dm. By GMO Date 10-31-11  
 Chk. By Approved 12 of 26

STONE OUTLET SEDIMENT TRAP (ST II)

	TRAP #2
EXISTING DA	1.70 AC.
PROPOSED DA (MAX)	1.80 AC.
STORAGE REQUIRED	6,480 CF
STORAGE PROVIDED	11,514 CF
WET STORAGE REQUIRED	3,240 CF
WET STORAGE PROVIDED	5,238 CF
WET STORAGE ELEVATION RANGE	282 TO 283.5
DRY STORAGE REQUIRED	3,240 CF
DRY STORAGE PROVIDED	6,276 CF
DRY STORAGE ELEVATION RANGE	283.5 TO 285
WEIR LENGTH	32'
BOTTOM DIMENSION	80' x 40'
TOP EMBANKMENT ELEVATION	285 (MIN)
TOP EMBANKMENT WIDTH	4 FT. (MIN)
CLEANOUT STORAGE REQUIRED	1,620 CF
CLEANOUT STORAGE PROVIDED	1,652 CF
CLEANOUT ELEVATION	282.50
SIDE SLOPES	2:1
BOTTOM ELEVATION	282
MIN. ELEVATION OF EXIST. GROUND	284.5

AS-BUILT  
 CERTIFICATION FOR PSWM  
 THERE IS NO AS-BUILT INFORMATION  
 PROVIDED ON THIS SHEET.  
*Paul Hudson* 5-28-13  
 PAUL HUDSON PE#8061

11/2/11  
 Date  
  
 Professional Engr. No. 16288



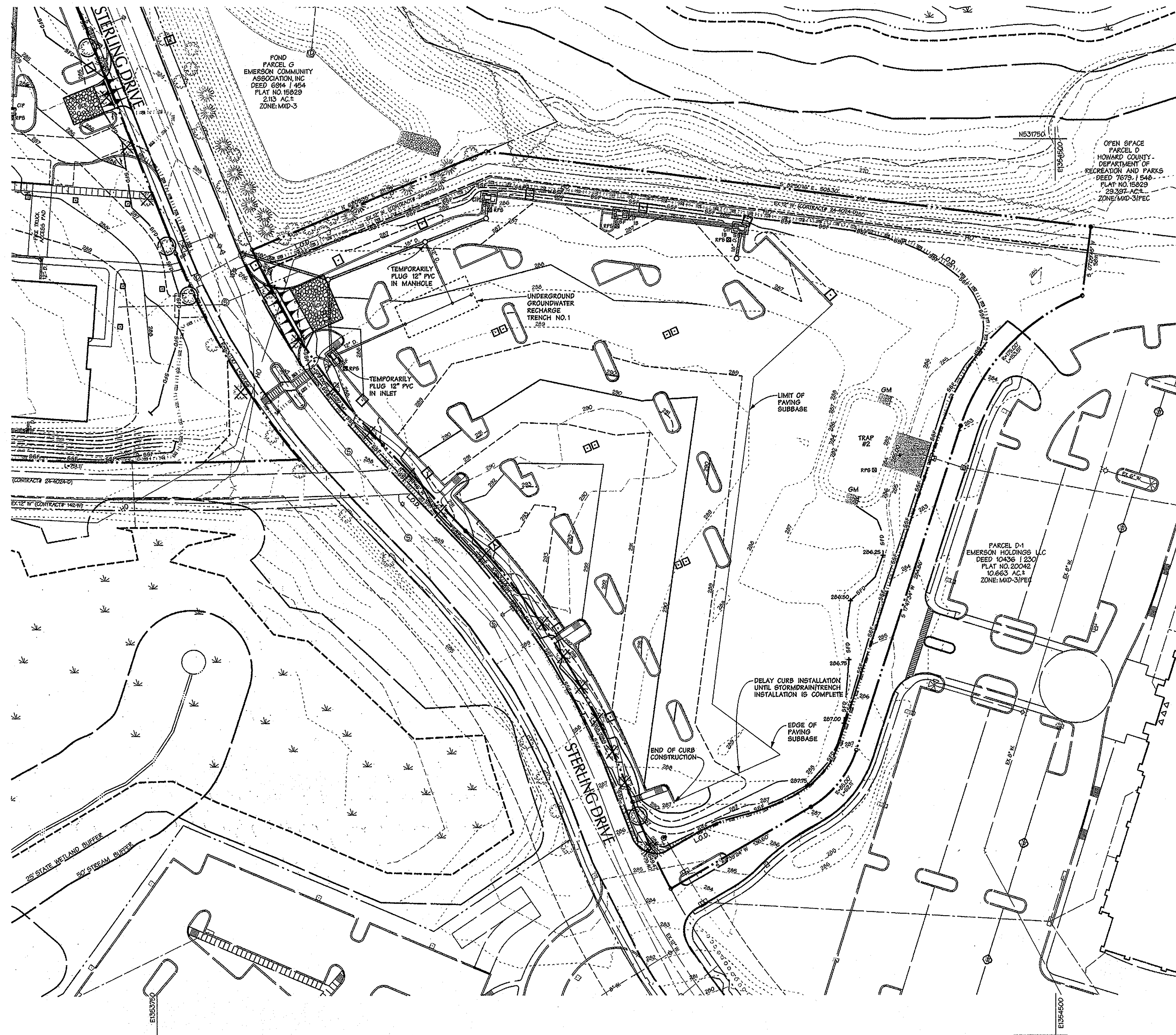
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 LOD PARCEL 'E-1' = 200,786 S.F. OR 4.61 Ac. ±  
 TOTAL LOD = 466,572 S.F. OR 10.71 Ac. ±

- UTILITY CONSTRUCTION OUTSIDE SEDIMENT CONTROL PRACTICES
1. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
  2. IMMEDIATELY FOLLOWING PIPE INSTALLATION THE TRENCH SHALL BE BACKFILLED, COMPACTED AND IMMEDIATELY STABILIZED (PERMANENT SEED AND MULCH) AT THE END OF EACH WORK DAY.
  3. SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY. (SILT FENCE AS PER 603 STANDARD DRAWING - E-15-3)
  4. THE CONTRACTOR SHALL DISTURB AND OPEN TRENCH THE MINIMUM PRACTICAL AREA REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
  5. ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS. ANY EROSION AND SEDIMENT CONTROL PRACTICES DAMAGED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

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. 16288, EXPIRATION DATE: 5-13-12

95054.6/0504.6/ENGR/SDP 01/11/12/02 07/14/02/4 2011





AS-BUILT NOT REQUIRED  
 SURVEY SERVICES OF MD., LLC.  
 BY: ROBERT MATIS - REG. #605



4/10/13

DEVELOPER'S CERTIFICATE  
 "I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance as a Department of the Environment approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

*James F. Knott Jr.* 11/2/11  
 Signature of Developer Date  
**James F. Knott Jr.**  
 Print Name

ENGINEER'S CERTIFICATE  
 "I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

*Melvin C. Beatty Jr.* 11/2/11  
 Signature of Engineer Date  
**Melvin C. Beatty Jr.**  
 Print Name

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
*John P. Robinson /cs* 11/10/11  
 Howard Soil Conservation District Date

**FINAL GRADING - TRAP 2**

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
*Vest Sheehy* 4-10-12  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*Paul Hudson* 4-2-12  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*Harold A. Wright* 4/10/12  
 DIRECTOR DATE

Date	No.	Revision Description

**EMERSON PARCEL B & E-1**  
 L.E.E.D. BUILDING  
 5-STORY COMMERCIAL OFFICE BUILDING  
 OWNER/DEVELOPER:  
 PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
 TEXAS STATION COURT  
 SUITE 200  
 TIMONIA, MD 21083  
 TAX MAP 47-020 & PARCEL 1051  
 EMERSON SECTION 3 AREA 1  
 DEED: 147917  
 TAX ACCT # 06-572553  
 PLAT: 15229

PARCEL 'E-1' - EMERSON DEVELOPMENT II, LLC  
 TEXAS STATION COURT  
 SUITE 200  
 TIMONIA, MD 21083  
 TAX MAP 47-020 PARCEL 105  
 REVITZ PROPERTY  
 DEED: 147918  
 TAX ACCT # 06-572227  
 PLAT: 16265

**DMW**  
 DAFT MCCUNE WALKER INC

200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
 P • 410-259-3333 F • 410-259-4705 WWW.DMW.COM  
 A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS,  
 ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
REVITZ PROPERTY & EMERSON SECTION 3 AREA 1	SECTION 3 AREA 1	PARCEL B & E-1 PAR. 165
PLAT # 21277 & 21278	BLOCK # 20	LOT # 20
WALKER CODE	FEED	GRID
	47	6
		606903

PHASE II EROSION & SEDIMENT CONTROL PLAN - PARCEL 'E-1'			
Des. By	LNL	Scale	1"=50'
Drn. By	GMO	Date	10-31-11
Proj. No.	95054.6		
Chk. By	Approved		
<b>13 of 26</b>			

AS-BUILT  
 CERTIFICATION FOR PSWM  
 THERE IS NO "AS-BUILT" INFORMATION  
 PROVIDED ON THIS SHEET.

*Paul Hudson* 5-25-13  
 PAUL HUDSON PE #8061

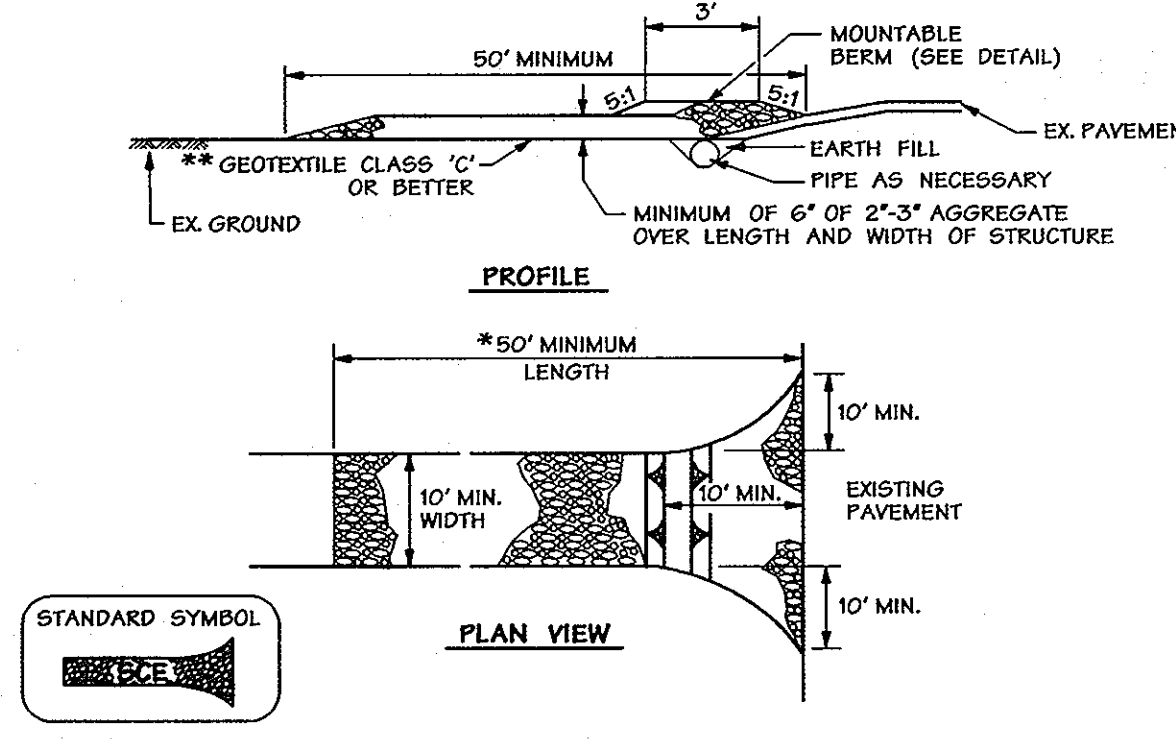


PROFESSIONAL CERTIFICATION  
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- UTILITY CONSTRUCTION OUTSIDE SEDIMENT CONTROL PRACTICES**
- EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
  - IMMEDIATELY FOLLOWING PIPE INSTALLATION, THE TRENCH SHALL BE BACKFILLED, COMPACTED AND IMMEDIATELY STABILIZED (PERMANENT SEED AND MULCH) AT THE END OF EACH WORK DAY.
  - SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY. (SILT FENCE AS PER SCS STANDARD DRAWING - E-15-3)
  - THE CONTRACTOR SHALL DISTURB AND OPEN TRENCH THE MINIMUM PRACTICAL AREA REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
  - ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS. ANY EROSION AND SEDIMENT CONTROL PRACTICES DAMAGED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

LOD PARCEL 'B' = 265,786 S.F. OR 6.10 Ac.±  
 LOD PARCEL 'E-1' = 200,786 S.F. OR 4.61 Ac.±  
 TOTAL LOD = 466,572 S.F. OR 10.71 Ac.±



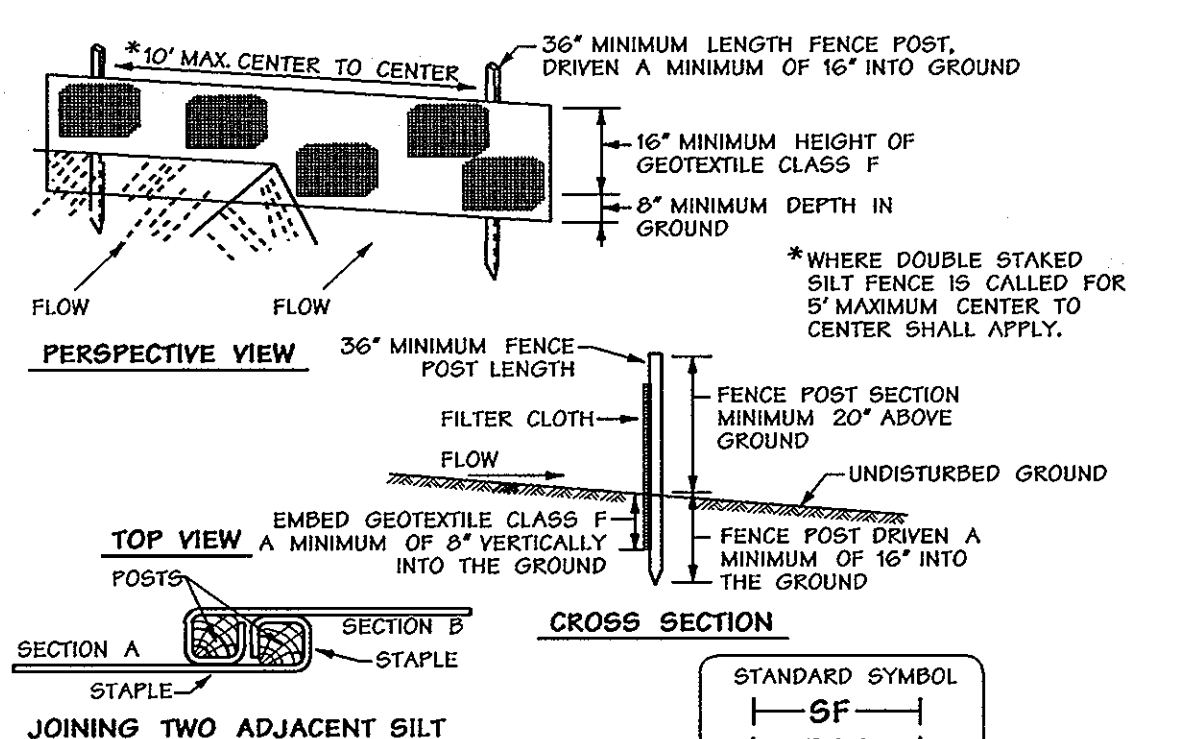


**CONSTRUCTION SPECIFICATIONS**

- LENGTH - MINIMUM OF 50' (30' FOR SINGLE RESIDENCE LOT).
- WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- GEOTEXTILE FABRIC CLASS C (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE - THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
- STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
- SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE MAINTAINED MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE WHEN THE SILENT IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.
- LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE F-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Stabilized Construction Entrance** Not To Scale



**CONSTRUCTION SPECIFICATIONS**

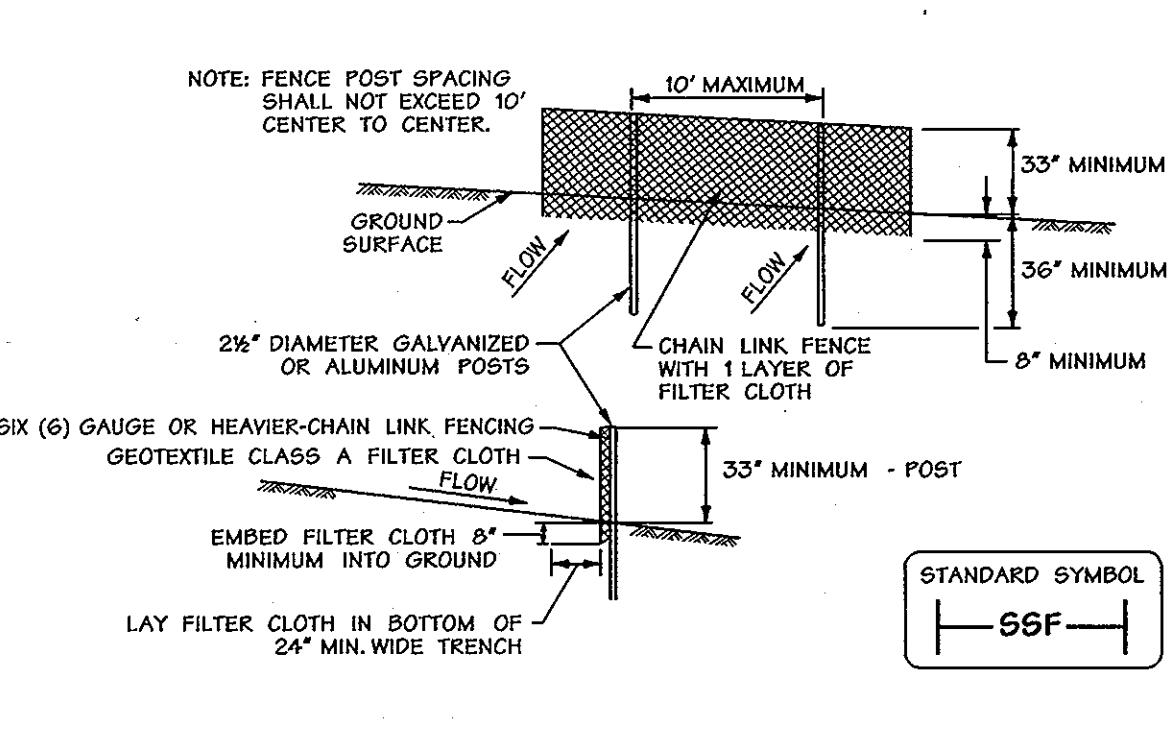
- FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1 1/2" DIA. SQUARE (MINIMUM) CUT OR 1 1/2" DIA. DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 100 POUND PER LINEAR FOOT.
- GEOTEXTILE SHALL BE FASTENED TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:

TENSILE STRENGTH	50 LBS./IN. (MIN.)	TEST: MSMT 509
TENSILE MODULUS	20 LBS./IN. (MIN.)	TEST: MSMT 509
TENSILE MODULUS (MAX.)	0.5 GAL./IN. (MAX.)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN.)	TEST: MSMT322

- WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM PASSING THROUGH.
- SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHED 50% OF THE FABRIC HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E-15-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Silt Fence** Not To Scale

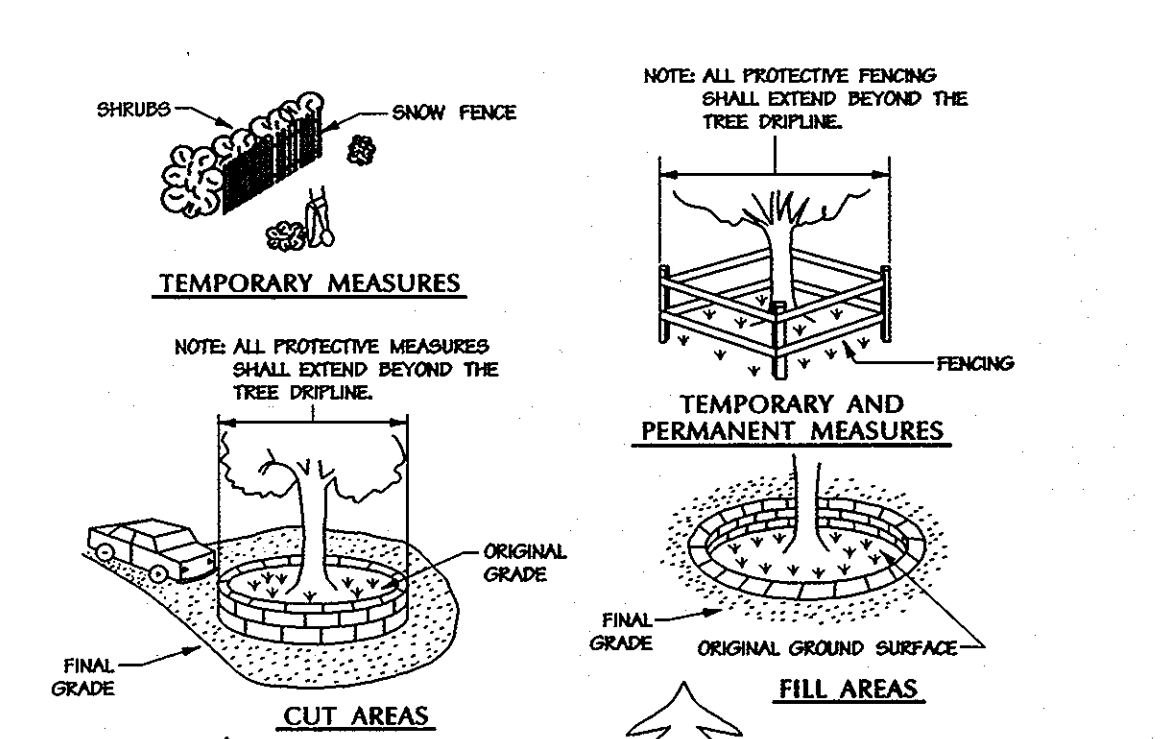


**CONSTRUCTION SPECIFICATIONS**

- FENCING SHALL BE 42 INCHES IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY (SHA) DETAILS FOR CHAIN LINK FENCING. THE SHA SPECIFICATIONS FOR A 6 FOOT FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6 FOOT LENGTH POSTS.
- THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
- CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES. THE LOWER TENSION WIRE BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE. THE CHAIN LINK FENCING SHALL BE SIX (6) GAUGE OR HEAVIER CHAIN LINK FENCING WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
- FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND.
- WHEN TWO SECTIONS OF GEOTEXTILE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BULGES REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Super Silt Fence** Not To Scale



**TEMPORARY MEASURES**

NOTE: ALL PROTECTIVE FENCING SHALL EXTEND BEYOND THE TREE DRIPLINE.

**TEMPORARY AND PERMANENT MEASURES**

NOTE: ALL PROTECTIVE MEASURES SHALL EXTEND BEYOND THE TREE DRIPLINE.

**CUT AREAS**

**FILL AREAS**

**IMPROPER PROCEDURE**

**PROPER PROCEDURE**

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE G-25-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Tree Protection** Not To Scale

**21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL**

**DEFINITION**  
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

**PURPOSE**  
To provide a suitable soil medium for vegetative growth of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

**CONDITION WHERE PRACTICE APPLIES**

- This practice is limited to areas having 2:1 or flatter slopes where:
  - The texture of the exposed subsoil material is not adequate to produce vegetative growth.
  - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
  - The original soil to be vegetated contains material toxic to plant growth.
  - The soil is so acidic that treatment with lime is not feasible.
- For the purpose of these standards and specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

**CONSTRUCTION AND MATERIAL SPECIFICATIONS**

- Topsoil salvaged from the existing site may be used provided that it meets the standard as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil section in the soil survey published by the USDA-NRCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil specifications - soil to be used as topsoil must meet the following:
  - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand, or other appropriate approval authority. Regardless, topsoil shall be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of clinkers, stones, slag, coarse fragments, gravel, sticks, roots, trash or other material larger than 1/8" in diameter.
  - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnson grass, nutgrass, or any other weed species.
  - Where the subsoil is either highly acidic or composed of heavy clay, organic limestone shall be spread at the rate of 4:0 bushels per 1,000 square feet (or 100 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For areas having disturbed areas under 5 acres:
  - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
  - On site testing (soil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
    - PH for topsoil shall be between 5.0 and 6.5. If the tested soil demonstrates a PH of less than 5.0, sufficient lime shall be prescribed to raise the PH to 6.5 or higher.
    - Organic content of topsoil shall be less than 15 percent by weight.
    - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
    - No seed or seed soil which has been treated with soil fumigants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
  - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- For areas having disturbed areas over 5 acres:
  - When spreading, maintain neat erosion and sediment control practices such as diversion, grade stabilization structures, earth dikes, slope silt fence and sediment traps and basins.
  - Grades on the areas to be topsoiled, which have been previously established, shall be maintained about 2" - 3" higher in elevation.
  - Topsoil shall be uniformly distributed in a 4" - 6" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that spreading or compacting is done with a minimum of additional preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
  - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedling preparation.
- Alternative for permanent seeding - Instead of applying the full amount of lime and commercial fertilizer, composted sludge and amendment is may be applied as specified below.
  - Composted sludge material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
    - Composted sludge shall be supplied by or originated from a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 08.04.06.
    - Composted sludge shall contain at least 1 percent nitrogen, 15 percent phosphorus, and 0.2 percent potassium and have a PH of 7.0 to 8.0 if compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
    - Composted sludge shall be applied at a rate of 11,000/1,000 square feet.
    - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb./1,000 square feet and 1/3 the normal lime application.
  - Reference Guidelines Specifications, Soil Preparation and Seeding, MD-VA Pub. 31, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute, Revised 1973.

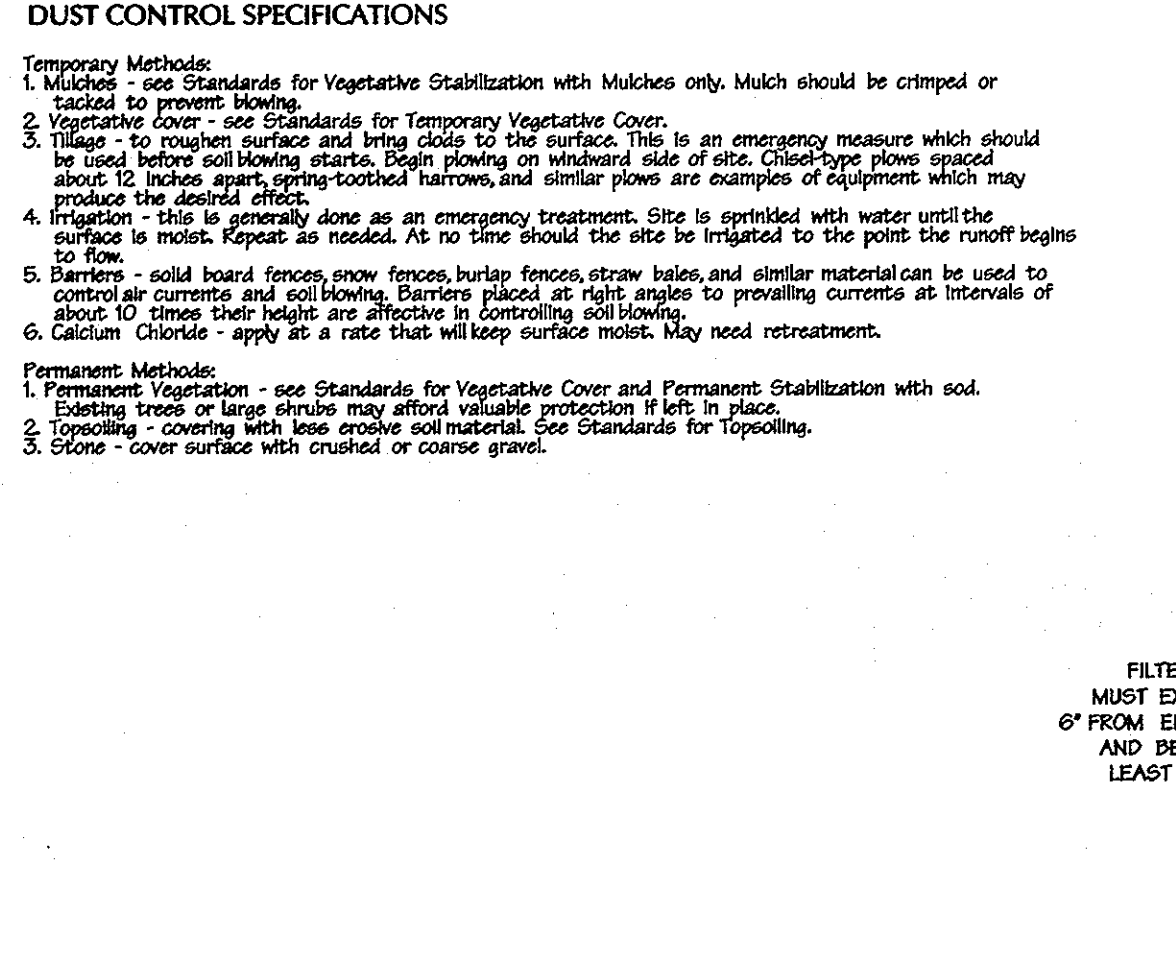
**DUST CONTROL SPECIFICATIONS**

**Temporary Methods:**

- Mulching - see Standards for Vegetative Stabilization with Mulches only. Mulch should be crimped or tacked to prevent blowing.
- Vegetative cover - see Standards for Temporary Vegetative Cover.
- Use of rough surface and bring grade to the surface. This is an emergency measure which should be used before soil blowing starts. Begin blowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
- Irrigation - this is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point the runoff begins to flow.
- Barriers - solid board fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
- Calcium Chloride - apply at a rate that will keep surface moist. May need reapplication.

**Permanent Methods:**

- Permanent Vegetation - see Standards for Vegetative Cover and Permanent Stabilization with sod.
- Existing trees or large shrubs may afford valuable protection if left in place.
- Topsoiling - covering with loose erodible soil material. See Standards for Topsoiling.
- Grass - cover surface with crushed or coarse grass.



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE F-19-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Rock Outlet Protection II** Not To Scale

**PERMANENT / TEMPORARY SEEDING NOTES**

**Permanent Seeding Notes**  
Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long lived vegetative cover is needed.

**Seeded Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**Soil Amendments:** In lieu of soil test recommendations, use one of the following schedule:

- Preferred - apply 2 tons per acre dolomite limestone (92 lbs./1,000 square feet) and disk into upper three inches of soil. At the same time, apply 400 lbs. per acre 30-0-0 ureamform fertilizer (9 lbs./1,000 square feet).
- Acceptable - apply 2 tons per acre dolomite limestone (92 lbs./1,000 square feet) and 1,000 lbs. per acre 10-0-10 fertilizer (25 lbs./1,000 square feet) before seeding. Harrow or disk into upper three inches of soil.

**Seeding - for the period March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (14 lbs./1,000 square feet) of Kentucky 31 Tall Fescue. For the period of May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.5 lbs./1,000 square feet) of Weeping Lovegrass. During the period of October 16 thru February 29, protect site by Option (1) - 2 tons per acre of well-anchored straw. Mulch and seed as soon as possible in the spring. Option (2) - use sod. Option (3) - seed with 60 lbs. Kentucky 31 Tall Fescue and mulch with 2 tons/acre well-anchored straw.**

**Mulching - apply 1 1/2 to 2 tons per acre (70 - 90 lbs./1,000 square feet) of unrotted weed-free, small-grain straw immediately after seeding. Anchor mulch immediately after application using much anchoring tool or 200 gal. per acre (5 gal./1,000 square feet) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 349 gal. per acre (6 gal./1,000 square feet) for anchoring.**

**Maintenance -** Inspect all seeding areas and make needed repairs, replacements and reseedings.

**TEMPORARY SEEDING NOTES**

Apply to graded or cleared areas likely to be reseeded where a short-term vegetative cover is needed.

**Seeded preparation -** loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

**Soil Amendments -** apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1,000 square feet).

**Seeding - for the period March 1 thru April 30, and August 1 thru October 15, seed with 2 1/2 bushels per acre of annual ryegrass (32 lbs./1,000 square feet) and May 1 thru August 14, seed with 3 lbs. per acre Weeping Lovegrass (27 lbs./1,000 square feet). For the period November 1 thru February 29, protect site by applying 2 tons per acre of well-anchored straw. Mulch and seed as soon as possible in the spring, or use sod.**

**Mulching - apply 1 1/2 to 2 tons per acre (70 - 90 lbs./1,000 square feet) of unrotted weed-free, small-grain straw immediately after seeding. Anchor mulch immediately after application using much anchoring tool or 200 gal. per acre (5 gal./1,000 square feet) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 349 gal. per acre (6 gal./1,000 square feet) for anchoring.**

**Refer to the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control** for additional notes and methods not covered.

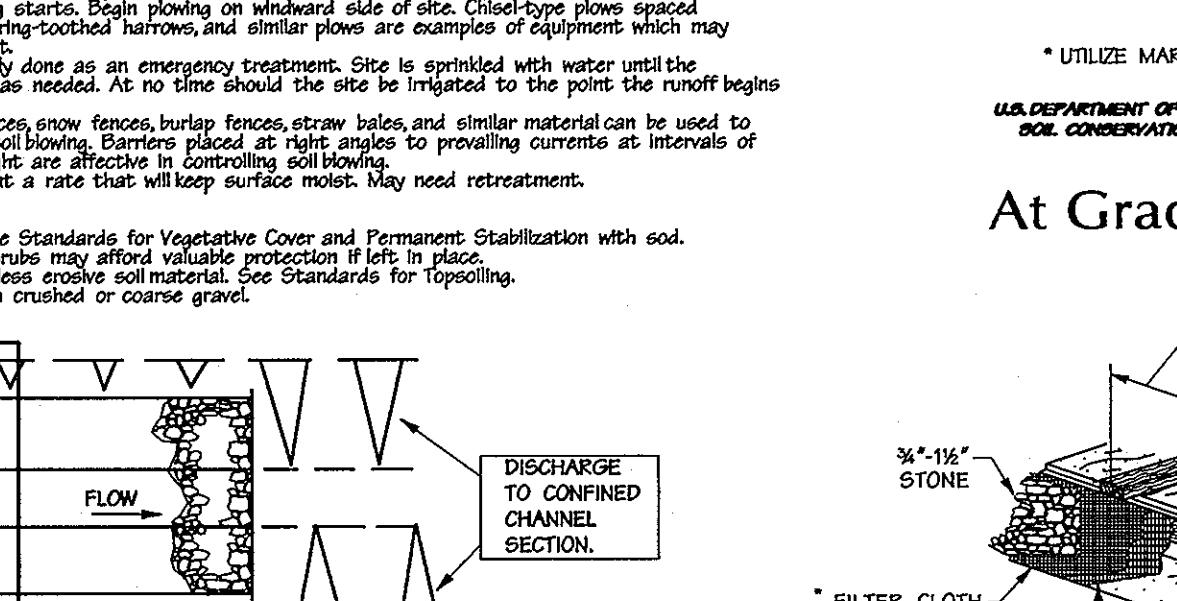
**Temporary Methods:**

- Mulches - see Standards for Vegetative Stabilization with Mulches only. Mulch should be crimped or tacked to prevent blowing.
- Vegetative cover - see Standards for Temporary Vegetative Cover.
- Flags - to roughen surface and bring grade to the surface. This is an emergency measure which should be used before soil blowing starts. Begin blowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
- Irrigation - this is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point the runoff begins to flow.
- Barriers - solid board fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
- Calcium Chloride - apply at a rate that will keep surface moist. May need reapplication.

**Permanent Methods:**

- Permanent Vegetation - see Standards for Vegetative Cover and Permanent Stabilization with sod.
- Existing trees or large shrubs may afford valuable protection if left in place.
- Topsoiling - covering with loose erodible soil material. See Standards for Topsoiling.
- Grass - cover surface with crushed or coarse grass.

**At Grade Inlet Protection** Not To Scale



**CONSTRUCTION SPECIFICATIONS**

- LIFT GRATE AND WRAP WITH GEOTEXTILE CLASS E TO COMPLETELY COVER ALL OPENINGS. THEN SET GRATE BACK IN PLACE.
- PLACE 3/4" TO 1 1/2" STONE, 4"-6" THICK ON THE GRATE TO SECURE THE FABRIC AND PROVIDE ADDITIONAL FILTRATION.

\* UTILIZE MARAF1212 OR EQUIVALENT IMPERVIOUS FABRIC WHEN PLAN CALLS FOR INLET BLOCKING

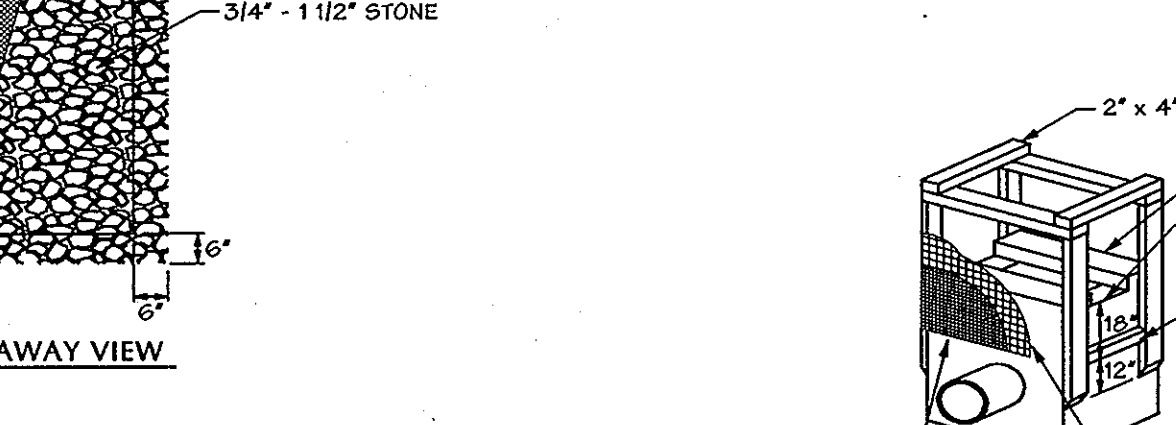
**CONSTRUCTION SPECIFICATIONS**

- ATTACH A CONTINUOUS PIECE OF 3/4" X 3/4" WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4") TO THE 2" X 4" WEIR (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
- PLACE A CONTINUOUS PIECE OF GEOTEXTILE CLASS E THE SAME DIMENSIONS AS THE WIRE MESH OVER THE FACE MESH AND SECURELY ATTACH IT TO THE 2" X 4" WEIR.
- SECURELY NAIL THE 2" X 4" WEIR TO A 9" LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAX 4" APART).
- PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2" LENGTHS OF 2" X 4" TO THE TOP OF THE WEIR AT SPACER LOCATIONS). THESE 2" X 4" ANCHORS SHALL EXTEND ACROSS THE INLET TUB AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
- FROM THE 3/4" X 3/4" WIRE MESH AND THE GEOTEXTILE FABRIC TO THE CONCRETE GUTTER, DRIVE TWO (2) 1/2" X 1/2" WIRE MESH AND SECURELY ATTACH IT TO THE 2" X 4" WEIR.
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U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E-16-5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Curb Inlet Protection (COG or COS Inlets)** Not To Scale

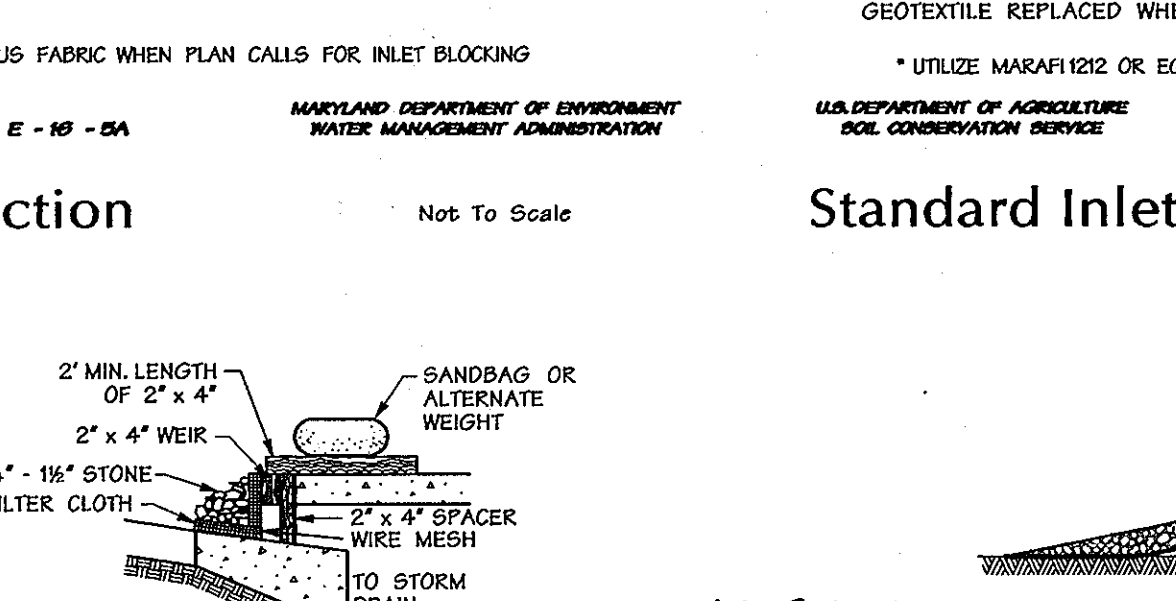
**Standard Inlet Protection** Not To Scale



**CONSTRUCTION SPECIFICATIONS**

- EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18" BELOW THE NOTCH ELEVATION.
- DRIVE THE 2" X 4" CONSTRUCTION GRADE LUMBER POSTS INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2" X 4" FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL. THE TOP OF THE FRAME (WEIR) MUST BE 6" BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
- STRETCH THE 3/4" X 3/4" WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
- STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 18" BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED DOWN.
- BACKFILL AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
- IF THE INLET IS NOT IN A SUMP, CONSTRUCT A COMPACTED EARTH DIKE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DIKE SHOULD BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.
- THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

**At Grade Inlet Protection** Not To Scale



**CONSTRUCTION SPECIFICATIONS**

- ATTACH A CONTINUOUS PIECE OF 3/4" X 3/4" WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4") TO THE 2" X 4" WEIR (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
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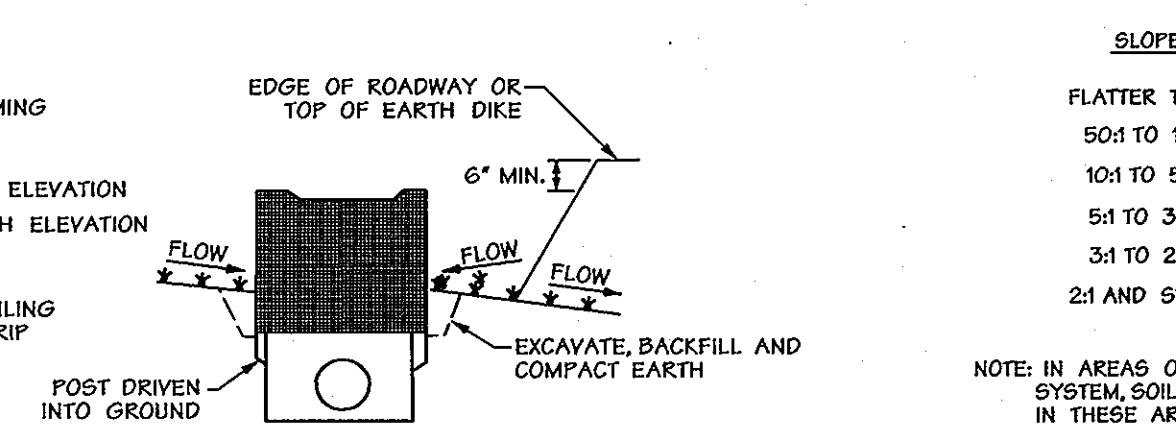
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U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E-16-5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Curb Inlet Protection (COG or COS Inlets)** Not To Scale

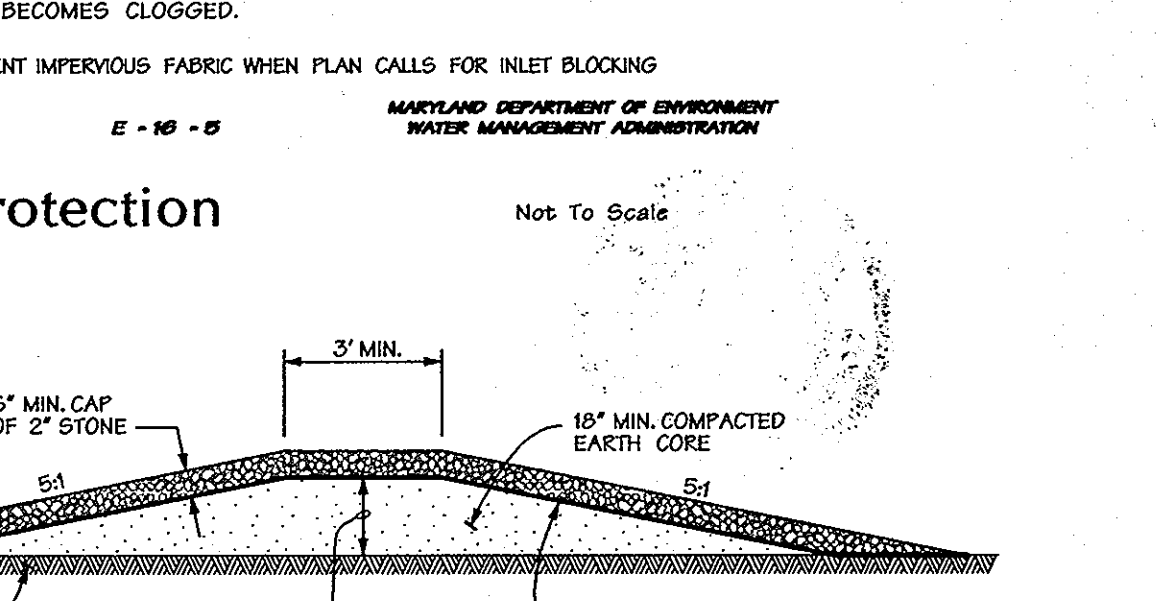
**Standard Inlet Protection** Not To Scale



**CONSTRUCTION SPECIFICATIONS**

- EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18" BELOW THE NOTCH ELEVATION.
- DRIVE THE 2" X 4" CONSTRUCTION GRADE LUMBER POSTS INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2" X 4" FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL. THE TOP OF THE FRAME (WEIR) MUST BE 6" BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
- STRETCH THE 3/4" X 3/4" WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
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- BACKFILL AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
- IF THE INLET IS NOT IN A SUMP, CONSTRUCT A COMPACTED EARTH DIKE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DIKE SHOULD BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.
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**Standard Inlet Protection** Not To Scale



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**CONSTRUCTION SPECIFICATIONS**

- EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18" BELOW THE NOTCH ELEVATION.
- DRIVE THE 2" X 4" CONSTRUCTION GRADE LUMBER POSTS INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2" X 4" FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL. THE TOP OF THE FRAME (WEIR) MUST BE 6" BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
- STRETCH THE 3/4" X 3/4" WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
- STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 18" BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED DOWN.
- BACKFILL AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
- IF THE INLET IS NOT IN A SUMP, CONSTRUCT A COMPACTED EARTH DIKE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DIKE SHOULD BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.
- THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E-16-5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

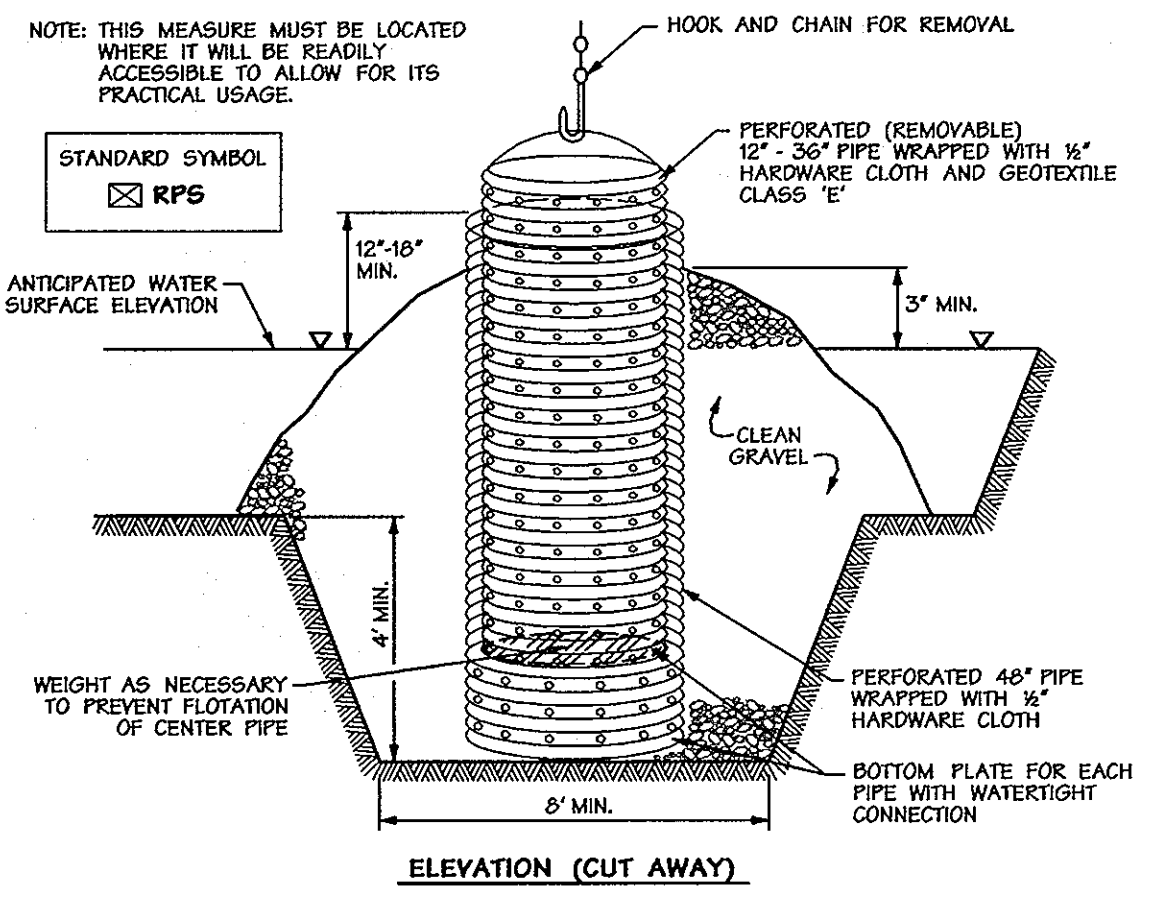
**Curb Inlet Protection (COG or COS Inlets)** Not To Scale

**SILT FENCE DESIGN CRITERIA**

SLOPE STEEPNESS	(MAXIMUM) SLOPE LENGTH	(MAXIMUM) SILT FENCE LENGTH
FLATTER THAN 50:1 (2%)	UNLIMITED	UNLIMITED
50:1 TO 10:1 (2-10%)	125 FEET	1,000 FEET
10:1 TO 5:1 (20-30%)	100 FEET	750 FEET
5:1 TO 3:1 (20-30%)	60 FEET	500 FEET
3:1 TO 2:1 (33-50%)	40 FEET	250 FEET
2:1 AND STEEPER (> 50%)	20 FEET	125 FEET

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIM





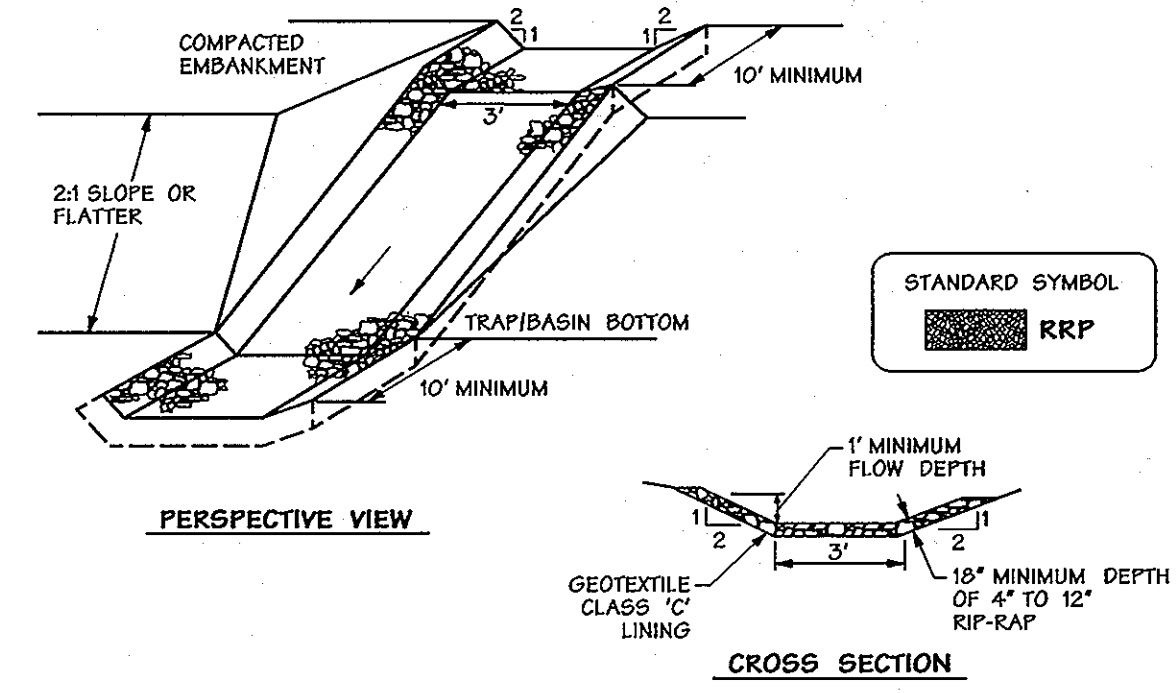
**CONSTRUCTION SPECIFICATIONS**

1. THE OUTER PIPE SHOULD BE 48\"/>
- 2. AFTER INSTALLING THE OUTER PIPE, BACKFILL AROUND OUTER PIPE WITH 2\"/>
- 3. THE INSIDE STAND PIPE (CENTER PIPE) SHOULD BE CONSTRUCTED BY PERFORATING A CORRUGATED OR PVC PIPE BETWEEN 12\"/>
- 4. THE CENTER PIPE SHOULD EXTEND 12\"/>

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Removable Pumping Station**

Not To Scale



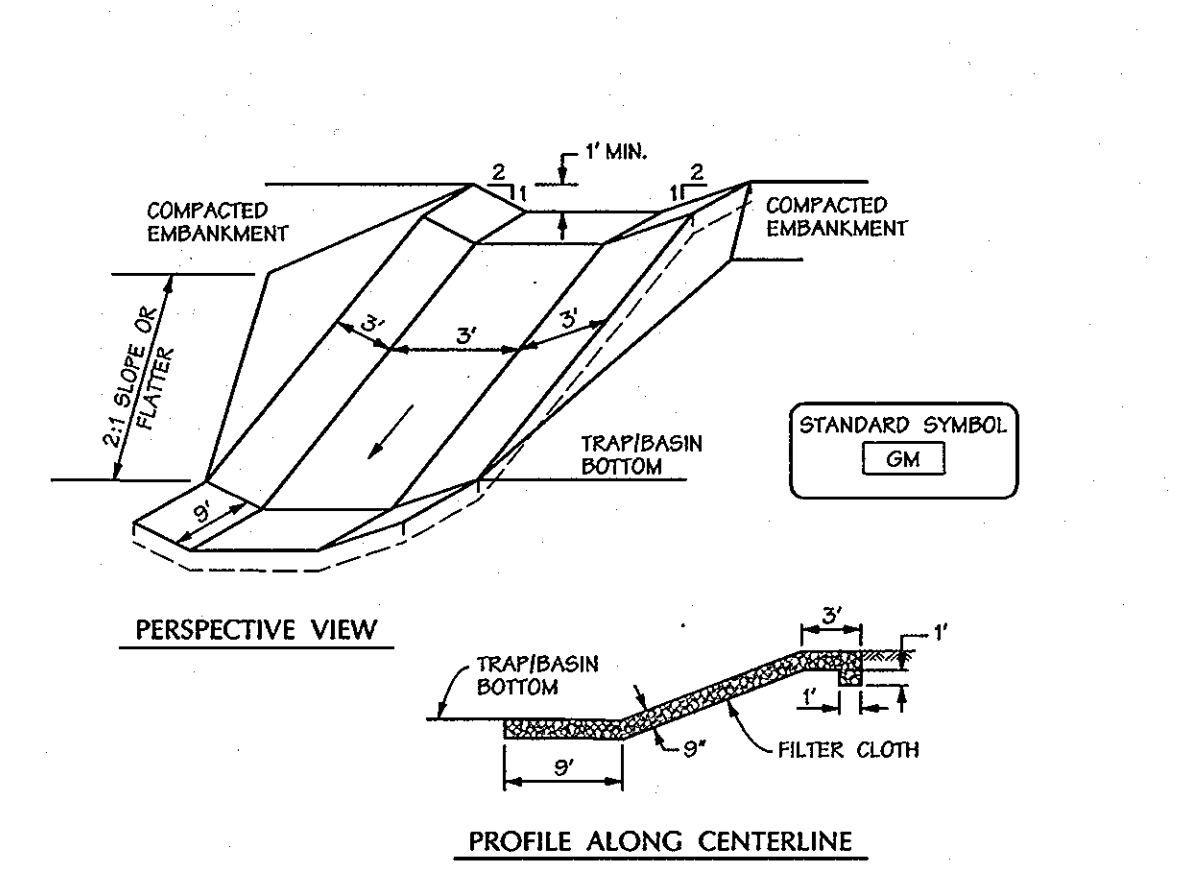
**CONSTRUCTION SPECIFICATIONS**

1. RIP-RAP LINED INFLOW CHANNELS SHALL BE 1\"/>
- 2. FILTER CLOTH SHALL BE INSTALLED UNDER ALL RIP-RAP. FILTER CLOTH SHALL BE GEOTEXTILE CLASS C.
- 3. ENTRANCE AND EXIT SECTIONS SHALL BE INSTALLED AS SHOWN ON THE DETAIL SECTION.
- 4. RIP-RAP USED FOR THE LINING MAY BE RECYCLED FOR PERMANENT OUTLET PROTECTION IF THE BASIN IS TO BE CONVERTED TO A STORMWATER MANAGEMENT FACILITY.
- 5. GABION INFLOW PROTECTION MAY BE USED IN LIEU OF RIP-RAP INFLOW PROTECTION.
- 6. RIP-RAP SHOULD BLEND INTO EXISTING GROUND.
- 7. RIP-RAP INFLOW PROTECTION SHALL BE USED WHERE THE SLOPE IS BETWEEN 4:1 AND 10:1, FOR SLOPES FLATTER THAN 10:1 USE EARTH DIKE OR TEMPORARY SWALE LINING CRITERIA.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**RipRap Inflow Protection**

Not To Scale



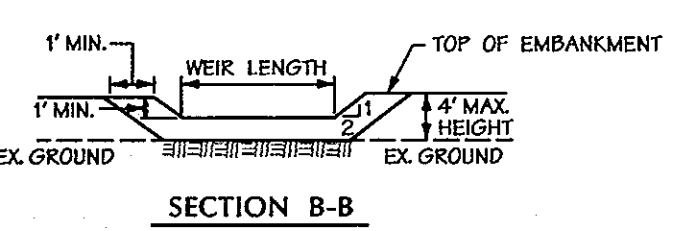
**CONSTRUCTION SPECIFICATIONS**

1. GABION INFLOW PROTECTION SHALL BE CONSTRUCTED OF 9\"/>
- 2. GEOTEXTILE CLASS C SHALL BE INSTALLED UNDER ALL GABION BASKETS.
- 3. THE STONE USED TO FILL THE GABION BASKETS SHALL BE 4\"/>
- 4. GABIONS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 5. GABION INFLOW PROTECTION SHALL BE USED WHERE CONCENTRATED FLOW IS PRESENT ON SLOPES STEEPER THAN 4:1.

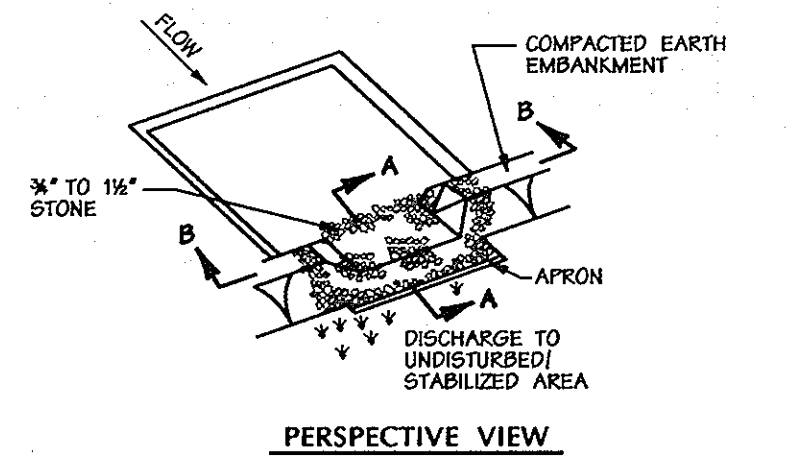
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Gabion Inflow Protection**

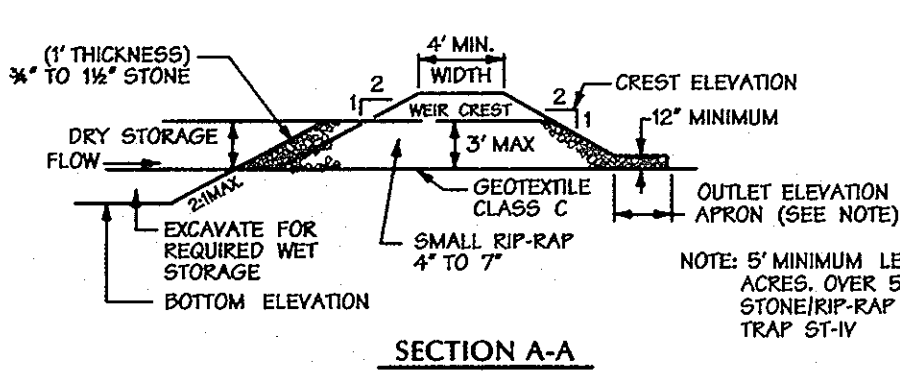
NOT TO SCALE



**SECTION B-B**



**PERSPECTIVE VIEW**



**SECTION A-A**

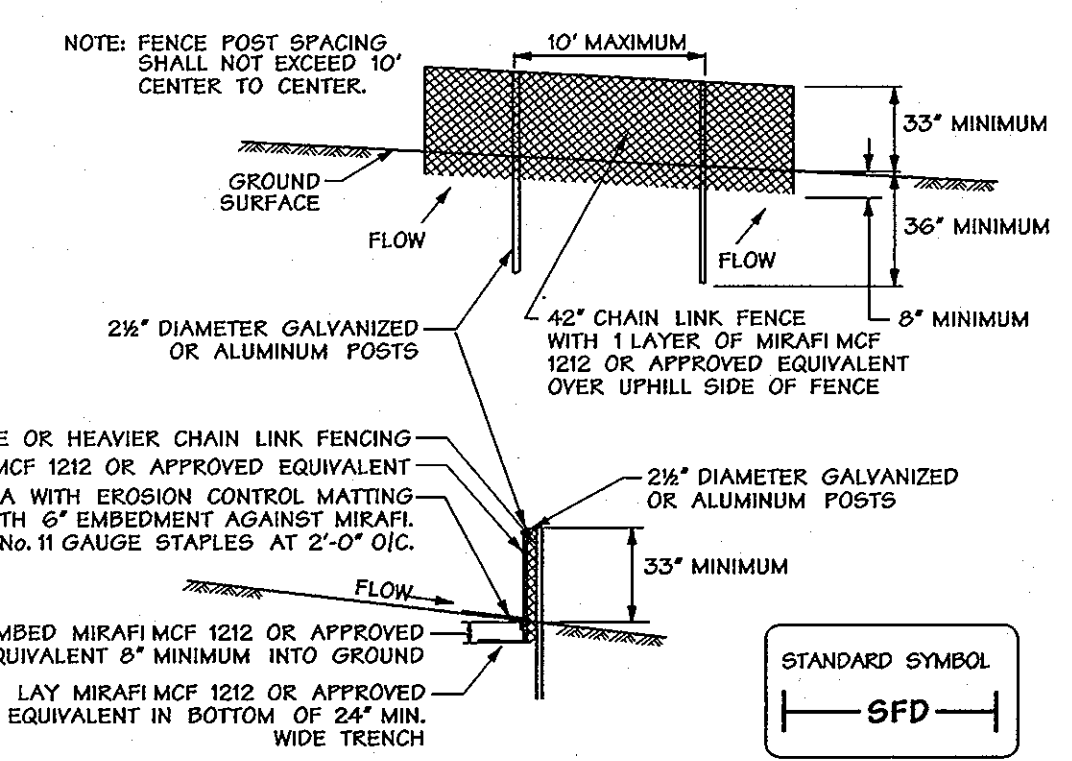
**CONSTRUCTION SPECIFICATIONS**

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE STONE USED IN THE OUTLET SHALL BE SMALL RIP-RAP 4\"/>
- 5. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF OF THE WET STORAGE DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- 6. THE STRUCTURE SHALL BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
- 7. CONSTRUCTION OF TRAPS SHALL BE CARRIED OUT IN SUCH A MANNER THAT SEDIMENT POLLUTION IS ABATED, ONCE CONSTRUCTED THE TOP AND OUTSIDE FACE OF THE EMBANKMENT SHALL BE STABILIZED WITH SEED AND MULCH. POINTS OF CONCENTRATION INFLOW SHALL BE PROTECTED IN ACCORDANCE WITH GRADE STABILIZATION STRUCTURE CRITERIA. THE REMAINDER OF THE INTERIOR SLOPES SHOULD BE STABILIZED (ONE TIME) WITH SEED AND MULCH UPON TRAP COMPLETION AND MONITORED AND MAINTAINED EROSION FREE DURING THE LIFE OF THE TRAP.
- 8. THE STRUCTURE SHALL BE DEWATERED BY APPROVED METHODS, REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
- 9. REFER TO SECTION D FOR SPECIFICATIONS CONCERNING TRAP DEWATERING.
- 10. MINIMUM TRAP DEPTH SHALL BE MEASURED FROM THE WEIR ELEVATION.
- 11. THE ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO THE TRAP MUST EQUAL OR EXCEED THE ELEVATION OF THE TRAP EMBANKMENT.
- 12. GEOTEXTILE CLASS C SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO THE PLACEMENT OF STONE SECTIONS OR FILTER CLOTH MUST OVERLAP AT LEAST 1\"/>
- 13. OUTLET - AN OUTLET SHALL BE PROVIDED, INCLUDING A MEANS OF CONVEYING THE DISCHARGE IN AN EROSION FREE MANNER TO AN EXISTING STABLE CHANNEL.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Stone Outlet Sediment Trap - ST II**

Not To Scale



**CONSTRUCTION SPECIFICATIONS**

1. FENCING SHALL BE 42 INCHES IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY (SHA) DETAILS FOR CHAIN LINK FENCING. THE SPECIFICATION FOR A 6\"/>
- 2. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
- 3. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES. THE LOWER TENSION WIRE, BRACE OR TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE. THE CHAIN LINK FENCING SHALL BE SIX (6) GAUGE OR HEAVIER.
- 4. MIRAFI MCF 1212 OR APPROVED EQUIVALENT SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24\"/>
- 5. MIRAFI MCF 1212 OR APPROVED EQUIVALENT SHALL BE EMBEDDED A MINIMUM OF 8\"/>
- 6. WHEN TWO SECTIONS OF MIRAFI MCF 1212 OR APPROVED EQUIVALENT ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6\"/>
- 7. MAINTENANCE SHALL BE PERFORMED AS NEEDED.
- 8. MAXIMUM FLOW SLOPE 10:1.
- 9. MAXIMUM DRAINAGE AREA 5 ACRES.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**Super Fence Diversion**

Not To Scale

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

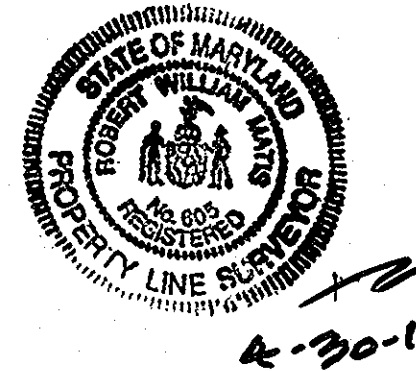
*John A. Robinson, Jr.*  
Howard Soil Conservation District  
Date

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	4-10-12
<i>Kent Sheehan</i> CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Paul Hudson</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	4-2-12
<i>David J. Longtin</i> DIRECTOR	4/10/12
DATE	DATE

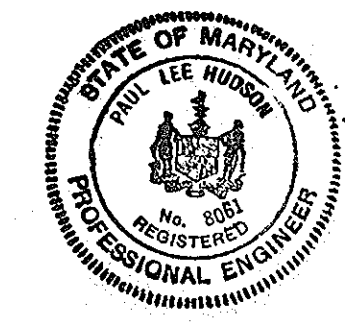
Date	No.	Revision Description

**EMERSON PARCEL B & E-1**  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING  
OWNER/DEVELOPER:  
PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
1 TEXAS STATION COURT  
SUITE 200  
TIMONUM, MD 21085  
TAX MAP 47 GRID 8 PARCEL 1051  
EMERSON SECTION 3 AREA 1  
DEED: M97917  
TAX ACCT # 06-572553  
PLAT: 16263

PARCEL 'E-1' - EMERSON DEVELOPMENT II, LLC  
1 TEXAS STATION COURT  
SUITE 200  
TIMONUM, MD 21085  
TAX MAP 47 GRID 20 PARCEL 165  
RENTZ PROPERTY  
DEED: M97917  
TAX ACCT # 06-572221  
PLAT: 16265



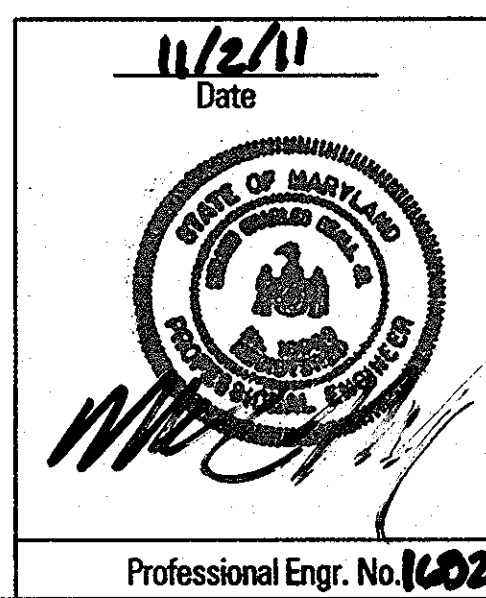
AS-BUILT NOT REQUIRED  
SURVEY SERVICES OF MD, LLC.  
BY: ROBERT MATIS - REG # 605



AS-BUILT  
CERTIFICATION FOR PSWM  
THERE IS NO "AS-BUILT" INFORMATION  
PRESENT ON THIS SHEET.

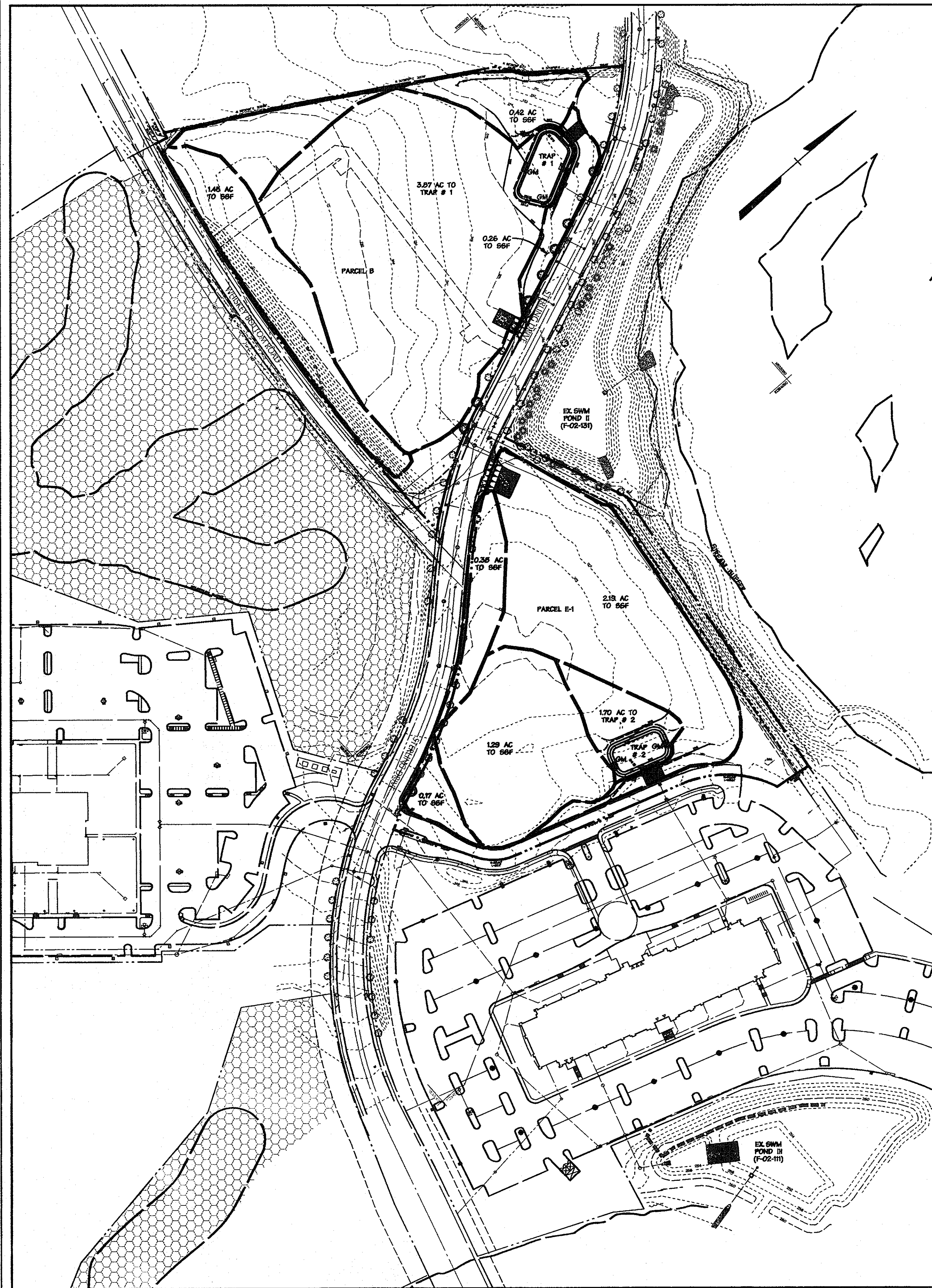
*Paul Hudson* 5-28-13  
PAUL HUDSON PE # BOG1

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. 16028 EXPIRATION DATE: 5-13-12



DATE	11/2/11
SUBMISSION NAME	EROSION & SEDIMENT CONTROL DETAILS
SECTION/AREA	SECTION 3 AREA 1
LOT/PARCEL #	LOT/PARCEL B & E-1 PAR. 165
PLAT OR LOT	2177 & 2178
BOOK #	20
DEED #	PEC
NO. SHEETS	47
SHEET NO.	6
GEN. ENG. TRAC.	606903
DATE	
TITLE	EROSION & SEDIMENT CONTROL DETAILS
Des. By	LNL
Scale	AS NOTED
Proj. No.	95054.6
Dim. By	GMO
Date	10-31-11
Approved	15 of 26
Professional Engr. No. 16028	Chk. By

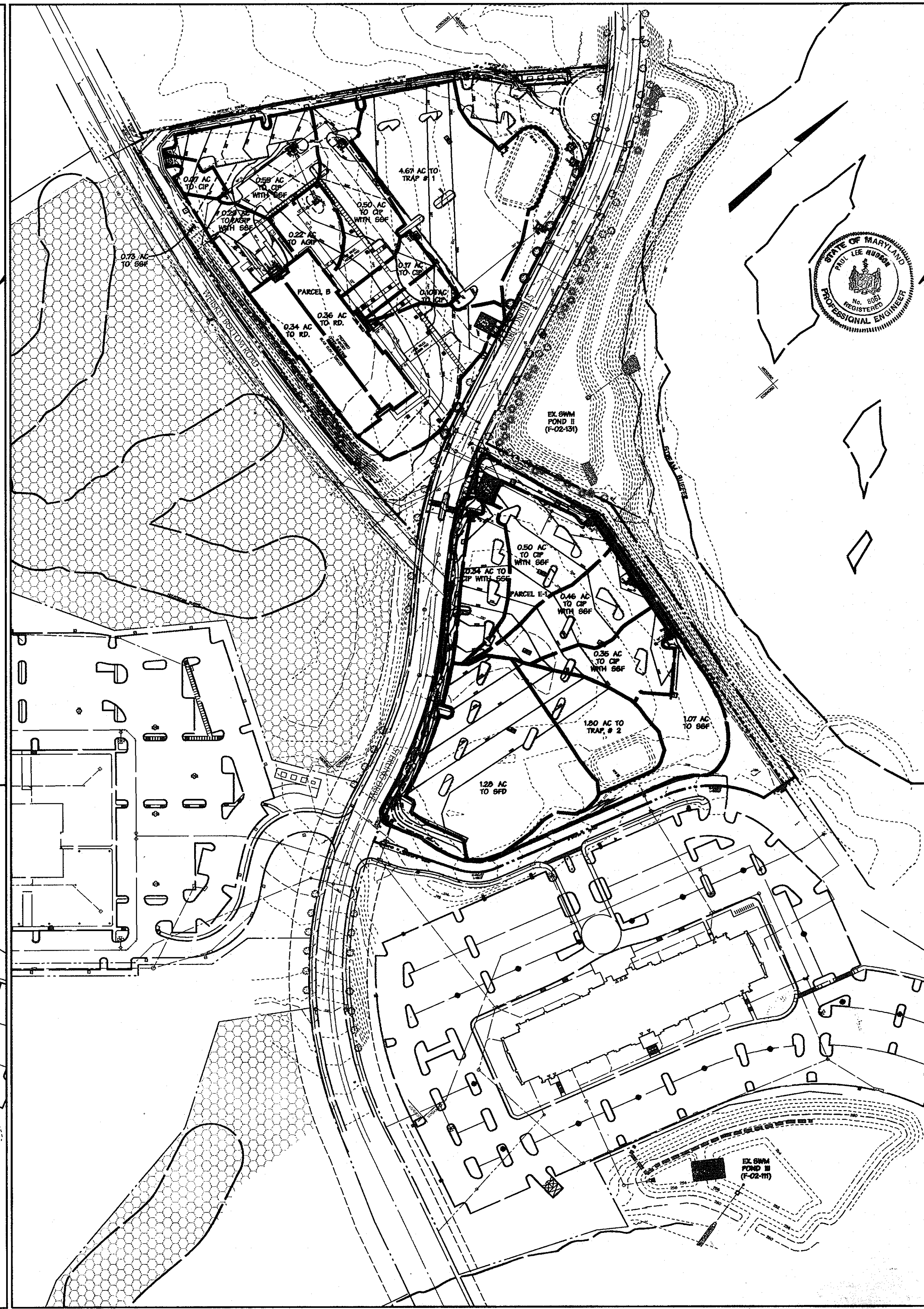




**EXISTING DRAINAGE AREA MAP**

SCALE: 1"=100'

LOD PARCEL 'B' = 265,786 S.F. OR 6.10 Ac.±  
 LOD PARCEL 'E-1' = 200,786 S.F. OR 4.61 Ac.±  
 TOTAL LOD = 466,572 S.F. OR 10.71 Ac.±



**PROPOSED DRAINAGE AREA MAP**

SCALE: 1"=100'

ADJUNCT NOT REQUIRED  
 SURVEY SERVICES OF MD., LLC.  
 BY: ROBERT MATS - REG.#605



AS-BUILT  
 CERTIFICATION FOR PSWM  
 THERE IS NO AS-BUILT INFORMATION PROVIDED  
 ON THIS SHEET  
 Paul Hudson 5-28-12  
 PAUL HUDSON PE# 8001



**UTILITY CONSTRUCTION OUTSIDE SEDIMENT CONTROL PRACTICES**

1. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSTREAM SIDE OF TRENCH.
2. IMMEDIATELY FOLLOWING PIPE INSTALLATION THE TRENCH SHALL BE BACKFILLED, COMPACTED AND IMMEDIATELY STABILIZED (PERMANENT SEED AND MULCH) AT THE END OF EACH WORK DAY.
3. SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY. (SILT FENCE AS PER SCS STANDARD DRAWING - E-10-3)
4. THE CONTRACTOR SHALL DISTURB AND OPEN TRENCH THE MINIMUM PRACTICAL AREA REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
5. ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS. ANY EROSION AND SEDIMENT CONTROL PRACTICES DAMAGED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

**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. \_\_\_\_\_, EXPIRATION DATE: \_\_\_\_\_

11/2/11  
 Date  
  
 Professional Engr. No. 16928

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.  
 John A. Robertson / 103 11/10/11  
 Howard Soil Conservation District Date

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS

CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Chief, Division of Land Development 4-10-12 DATE

Chief, Development Engineering Division 4-2-12 DATE

Director 4/10/12 DATE

Date	No.	Revision Description

**EMERSON PARCEL B & E-1**

L.E.E.D. BUILDING

5-STORY COMMERCIAL OFFICE BUILDING

OWNER/DEVELOPER:

PARCEL 'B' - EMERSON DEVELOPMENT V, LLC 1 TEXAS STATION COURT SUITE 200 TIMONUM, MD 21085 TAX MAP #7 GRID 8 PARCEL 1051 EMERSON SECTION 3 AREA 1 DEED #4787917 TAX ACCT # 06-572253 PLAT: 158229	PARCEL 'E-1' - EMERSON DEVELOPMENT II, LLC 1 TEXAS STATION COURT SUITE 200 TIMONUM, MD 21085 TAX MAP #7 GRID 20 PARCEL 165 RENTZ PROPERTY DEED #1006919 TAX ACCT # 06-572221 PLAT: 126685
--	---

SECTION NAME	SECTION / AREA	LOT / TRACT
RENTZ PROPERTY & EMERSON 311	SECTION 3 AREA 1	PARCEL B & E-1 / PAR. 165
PLAT # OF LOT 21277 & 21278	BLOCK # 20	SECTION 3
OWNER	PEC	47
OWNER CODE		6
		606903

**EROSION & SEDIMENT CONTROL DRAINAGE AREA MAP & DETAILS - 'B' & 'E-1'**

Des. By LNL	Scale 1"=100'	Proj. No. 95054.6
Drn. By GMO	Date 10-31-11	16 of 26
Chk. By Approved		

95054.6(2)4-01(ENGR)SDP - Sheets 18204-6(ENGR)SDP 07/27/10 2211



**LEGEND**

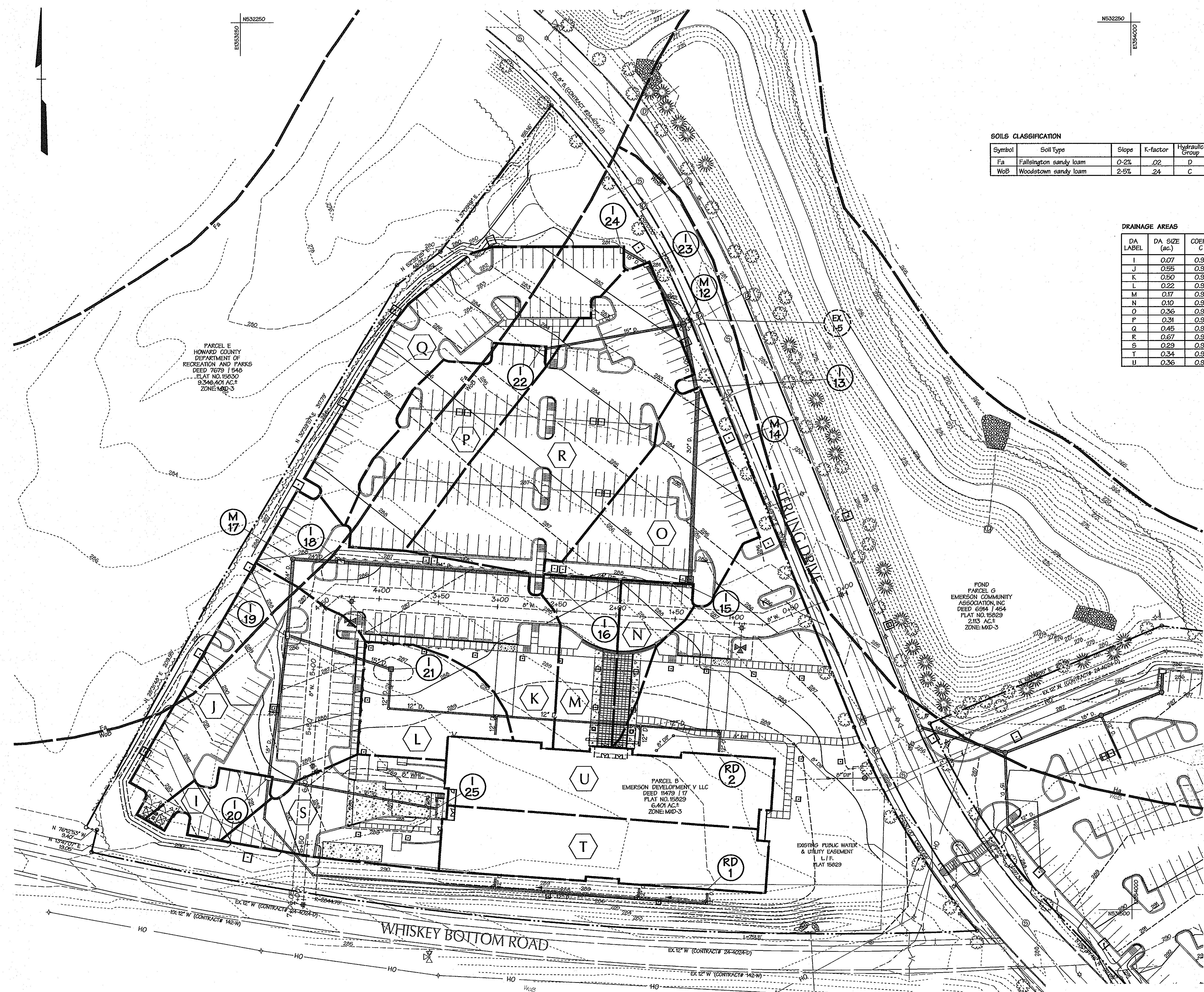
- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX. EASEMENT
- EX. ROADS AND WALKS
- 250 --- EX. MAJOR CONTOUR
- 250 --- EX. MINOR CONTOUR
- FCE --- FOREST CONSERVATION EASEMENT
- ⊙ EX. STREET TREE
- ⊗ EX. STREET TREE TO BE REMOVED
- ⊕ EX. STREET LIGHT
- ⊖ EX. STORMDRAIN
- ⊙ EX. SANITARY SEWER
- ⊗ EX. WATER
- ⊕ OH --- EX. OVERHEAD ELECTRIC
- PROP. BUILDING
- PROP. CURB / EDGE OF PAVING
- PROP. DEPRESSED CURB
- PROP. REVERSE CURB
- ⊕ PROP. GROUP LIGHT (BY OTHERS)
- ⊙ PROP. SINGLE LIGHT (BY OTHERS)
- ⊕ PROP. LIGHT (BY OTHERS)
- 24" D. --- LIMIT OF DISTURBANCE
- 8" PVC --- PROP. STORMDRAIN
- 8" W. --- PROP. SANITARY SEWER
- 8" W. --- PROP. WATER
- PROP. DRAINAGE DIVIDES
- SOIL LIMITS
- A --- DRAINAGE AREA LABEL

**SOILS CLASSIFICATION**

Symbol	Soil Type	Slope	K-factor	Hydraulic Group	Comments
Fa	Fallsington sandy loam	0-2%	.02	D	Hydric
WoB	Woodstown sandy loam	2-5%	.24	C	Hydric

**DRAINAGE AREAS**

DA LABEL	DA SIZE (ac.)	COEFF. C	IMP. (%)
I	0.07	0.91	95%
J	0.55	0.91	95%
K	0.50	0.91	95%
L	0.22	0.91	95%
M	0.17	0.91	95%
N	0.10	0.91	95%
O	0.36	0.91	95%
P	0.31	0.91	95%
Q	0.45	0.91	95%
R	0.67	0.91	95%
S	0.29	0.91	95%
T	0.34	0.91	95%
U	0.36	0.91	95%



PARCEL E  
HOWARD COUNTY  
DEPARTMENT OF  
RECREATION AND PARKS  
DEED 7679 / 1548  
PLAT NO. 158320  
3.348 AC.±  
ZONE-MD-3

POND  
PARCEL G  
EMERSON COMMUNITY  
ASSOCIATION, INC.  
DEED 6914 / 454  
PLAT NO. 158229  
2.13 AC.±  
ZONE-MD-3

PARCEL B  
EMERSON DEVELOPMENT V LLC  
DEED 11479 / 117  
PLAT NO. 158229  
6.401 AC.±  
ZONE-MD-3

**AS-BUILT  
CERTIFICATION FOR PSWM**  
THERE IS NO "AS-BUILT" INFORMATION  
PROVIDED ON THIS SHEET.  
*Paul Hudson* 5-23-13  
PAUL HUDSON PE#8061



AS-BUILT NOT REQUIRED  
SURVEY SERVICES OF MD, LLC.  
BY: ROBERT MATS-REG#605

APPROVED:	HOWARD COUNTY DEPT. OF PLANNING AND ZONING
<i>Robert Mats</i>	CHIEF, DIVISION OF LAND DEVELOPMENT
<i>Paul Hudson</i>	CHIEF, DEVELOPMENT ENGINEERING DIVISION
<i>David A. Wyle</i>	DIRECTOR

Date	No.	Revision Description

**EMERSON PARCEL B & E-1**  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING  
OWNER/DEVELOPER:  
PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
1 TEXAS STATION COURT  
SUITE 200  
TIMONIA, MD 21083  
TAX MAP 47 GRID 3 PARCEL 1051  
EMERSON SECTION 3 AREA 1  
DEED: 11479/117  
TAX ACCT # 06-572553  
PLAT: 158229



**DMW**  
DAFT M'CUNE WALKER INC.  
200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
P: 410.296.6555 F: 410.296.4795 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SUBDIVISION NAME	RENTZ PROPERTY & EMERSON SECTION 3 AREA 1	LOT/PARCEL #	PARCEL B & E-1
GROUP OR LOT	20	SECTION	3
BLOCK #	20	PLAT	158229
WATER CODE		SEWER CODE	606903

12/10/11  
Date

Professional Engr. No. 16228

**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. 16228 EXPIRATION DATE: 5/13/12

TITLE	Des. By	Scale	Proj. No.
<b>STORM DRAIN DRAINAGE AREA &amp; SOILS MAP - 'B'</b>	JBS	1"=40'	95054.6
	JSS	Date	12-13-11
	MCB/JDF	Approved	17 of 26



**LEGEND**

- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX. EASEMENT
- EX. ROADS AND WALKS
- 280 --- EX. MAJOR CONTOUR
- --- EX. MINOR CONTOUR
- [Symbol] FOREST CONSERVATION EASEMENT
- [Symbol] EX. STREET TREE
- [Symbol] EX. STREET TREE TO BE REMOVED
- [Symbol] EX. STREET LIGHT
- [Symbol] EX. STORMDRAIN
- [Symbol] EX. SANITARY SEWER
- [Symbol] EX. WATER
- [Symbol] EX. OVERHEAD ELECTRIC
- [Symbol] PROP. BUILDING
- [Symbol] PROP. CURB / EDGE OF PAVING
- [Symbol] PROP. DEPRESSED CURB
- [Symbol] PROP. REVERSE CURB
- [Symbol] PROP. GROUP LIGHT (BY OTHERS)
- [Symbol] PROP. SINGLE LIGHT (BY OTHERS)
- [Symbol] PROP. LIGHT (BY OTHERS)
- [Symbol] LIMIT OF DISTURBANCE
- [Symbol] PROP. STORMDRAIN
- [Symbol] PROP. SANITARY SEWER
- [Symbol] PROP. WATER
- [Symbol] PROP. DRAINAGE DIVIDES
- [Symbol] SOIL LIMITS
- [Symbol] DRAINAGE AREA LABEL

**SOILS CLASSIFICATION**

Symbol	Soil Type	Slope	K-factor	Hydraulic Group	Comments
Ha	Hatboro-Codorus Silt Loam	0-3%	.37	D	Hydric
WoB	Woodstown sandy loam	2-5%	.24	C	Hydric
SaC	Sassafras loam	5-10%	.24	B	

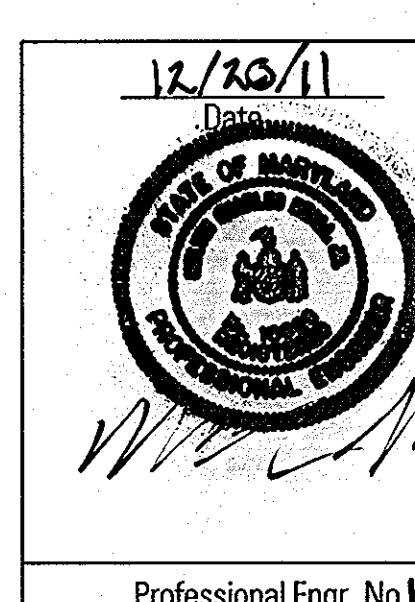
**DRAINAGE AREAS**

DA LABEL	DA SIZE (ac.)	COEFF. C	IMP. (%)
A	0.24	0.91	95%
B	0.52	0.91	95%
C	0.42	0.91	95%
D	0.60	0.91	95%
E	0.35	0.91	95%
F	0.46	0.91	95%
G	0.50	0.91	95%
H	0.34	0.91	95%

AS-BUILT NOT REQUIRED  
SURVEY SERVICES OF MD., LLC.  
BY: ROBERT MATIS-REG#605

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
*Robert Matis* 4/10/12  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*Paul Hudson* 4/12/12  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*David S. Wylie* 4/11/12  
 DIRECTOR DATE

Date No. Revision Description  
**EMERSON PARCEL B & E-1**  
 L.E.E.D. BUILDING  
 5-STORY COMMERCIAL OFFICE BUILDING  
 OWNER/DEVELOPER:  
 PARCEL "B" - EMERSON DEVELOPMENT V, LLC  
 112045 STATION COURT  
 SUITE 200  
 TIMONUM, MD 21085  
 TAX MAP #7 GRID 3D PARCEL 1091  
 EMERSON SECTION 3 AREA 1  
 DEED: 18/27/11  
 TAX ACCT # 06-572953  
 PLAT: 15829  
 PARCEL "E-1" - EMERSON DEVELOPMENT II, LLC  
 112045 STATION COURT  
 SUITE 200  
 TIMONUM, MD 21085  
 TAX MAP #7 GRID 3D PARCEL 165  
 REVIZ PROPERTY  
 DEED: 11/01/10  
 TAX ACCT # 06-572227  
 PLAT: 15665



**DMW**  
DAFT MCCUNE WALKER INC

200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
 P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SUBDIVISION NAME	EMERSON SECTION 3 AREA 1	SECTION/AREA	PARCEL B & E-1
PLAT OR LOT	15829 & 15665	BLOCK #	20
PLAT OR LOT	15829 & 15665	SECTION	47
WATER CODE		TAX/ZONE MAP	6
		GENRES TRACT	606903

**TITLE**  
**STORM DRAIN DRAINAGE AREA & SOILS MAP - 'E-1'**

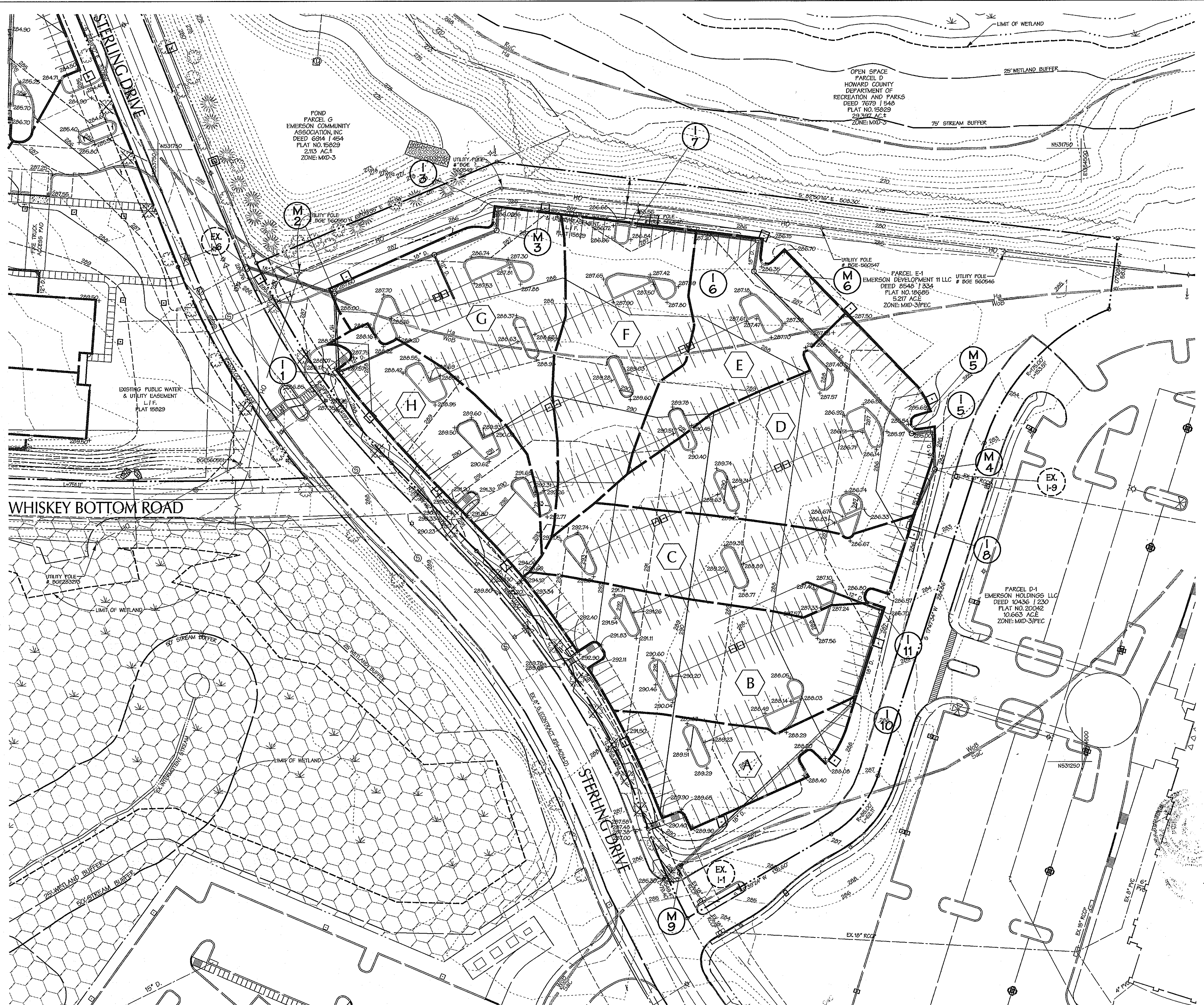
Des. By	JBS	Scale	1"=40'	Proj. No.	95054.6
Dm. By	JSS	Date	12-13-11		
Chk. By	MCBJ/JDF	Approved			

Professional Engr. No. 6028



AS-BUILT CERTIFICATION FOR PSWM  
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.  
*Paul Hudson* 5-23-13  
 PAUL HUDSON PE# 6061

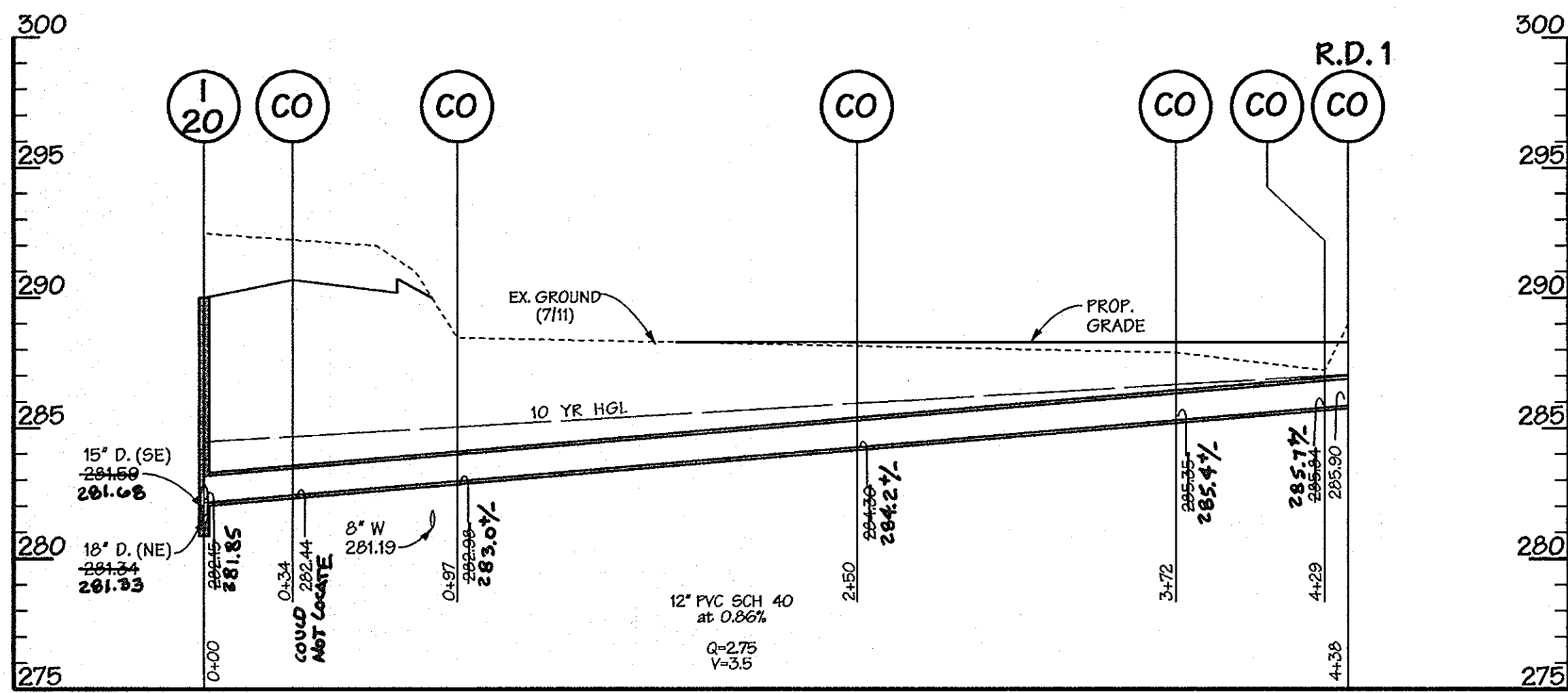
PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 6028, EXPIRATION DATE: 5/13/12







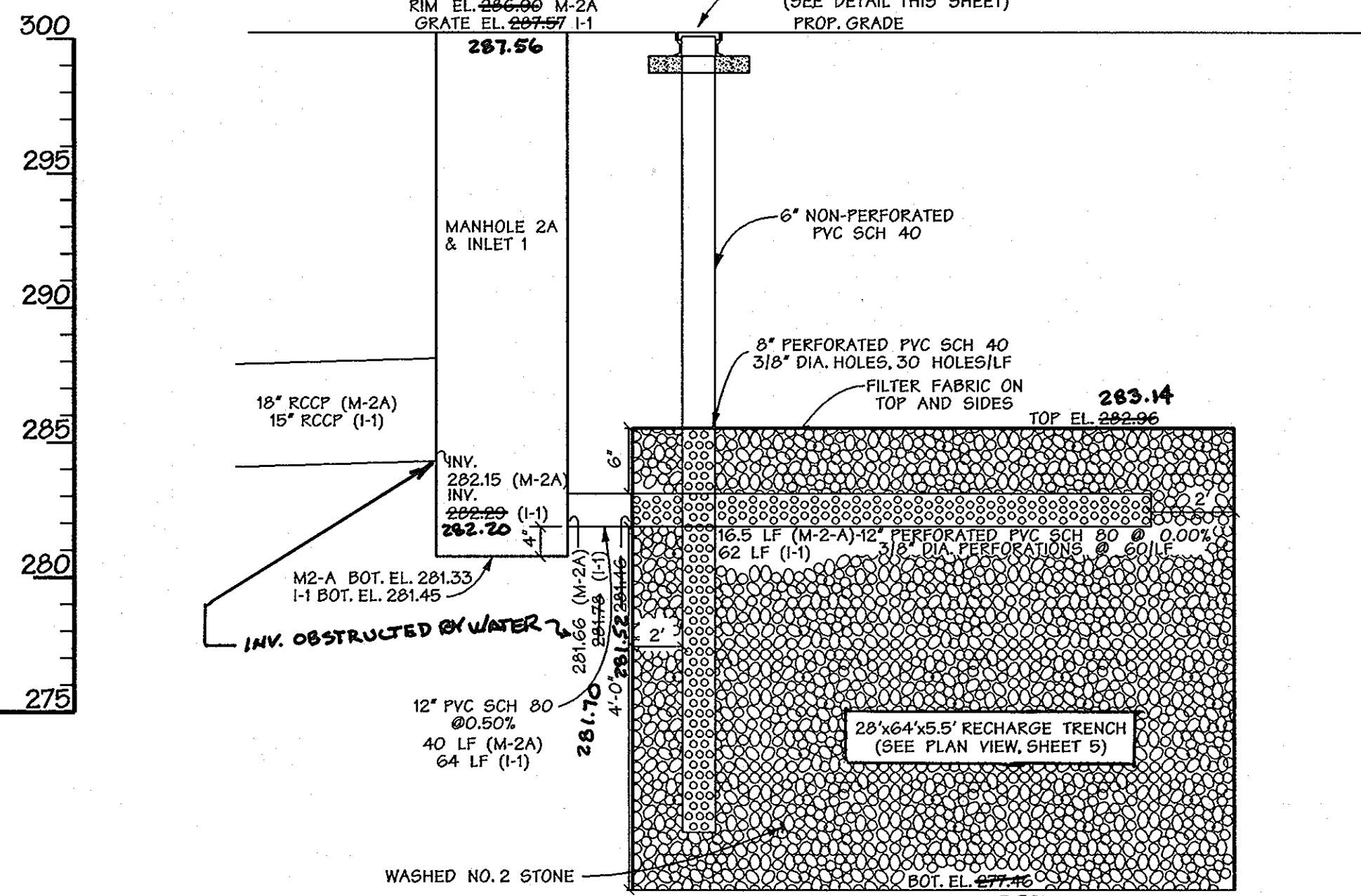




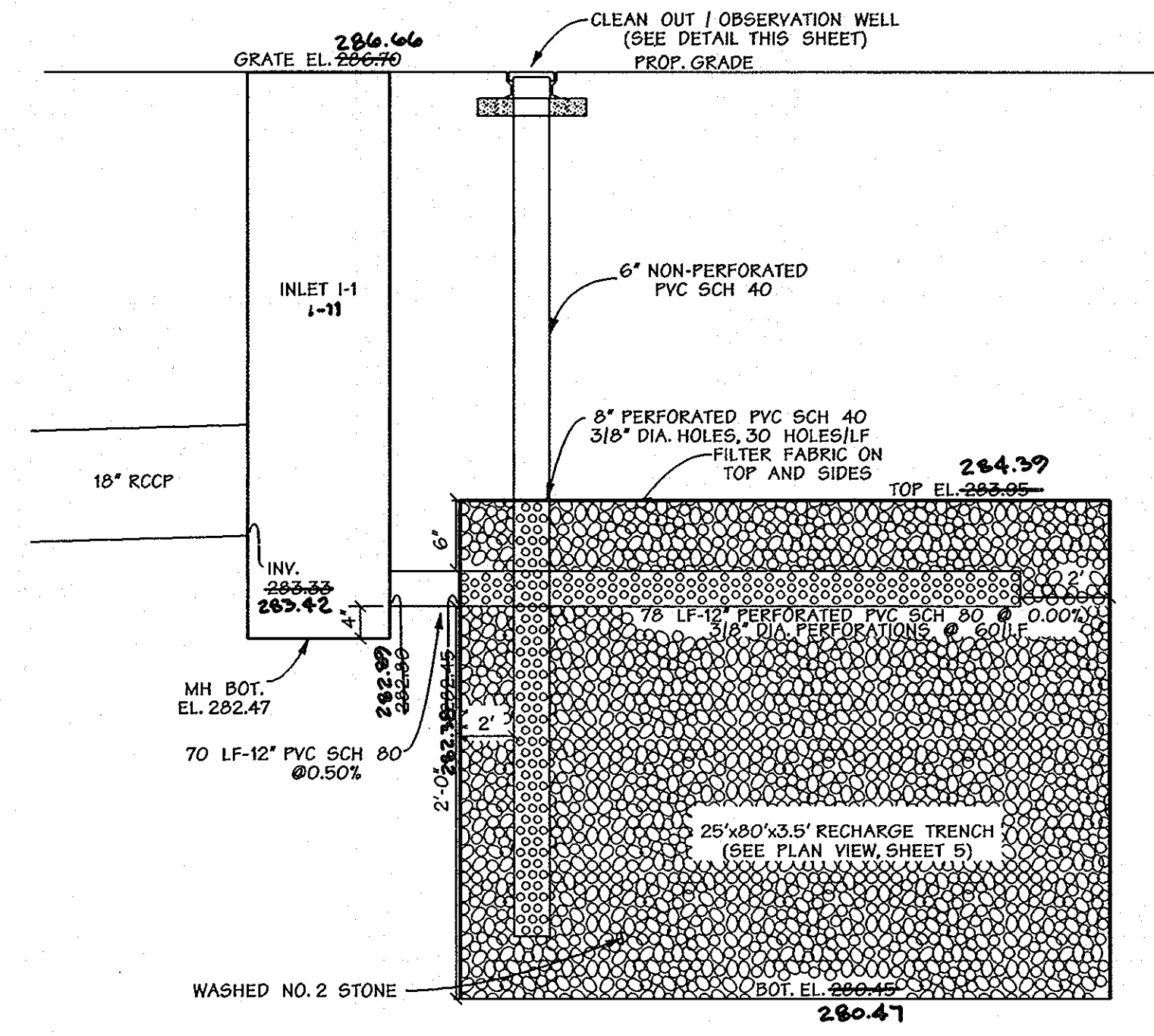
**PIPE SCHEDULE**

SIZE	TYPE	LENGTH
12"	PVC SCH 40	769 LF
15"	RCCP, CL IV	471 LF
18"	RCCP, CL IV	1017 LF
24"	RCCP, CL IV	460 LF
30"	RCCP, CL IV	225 LF

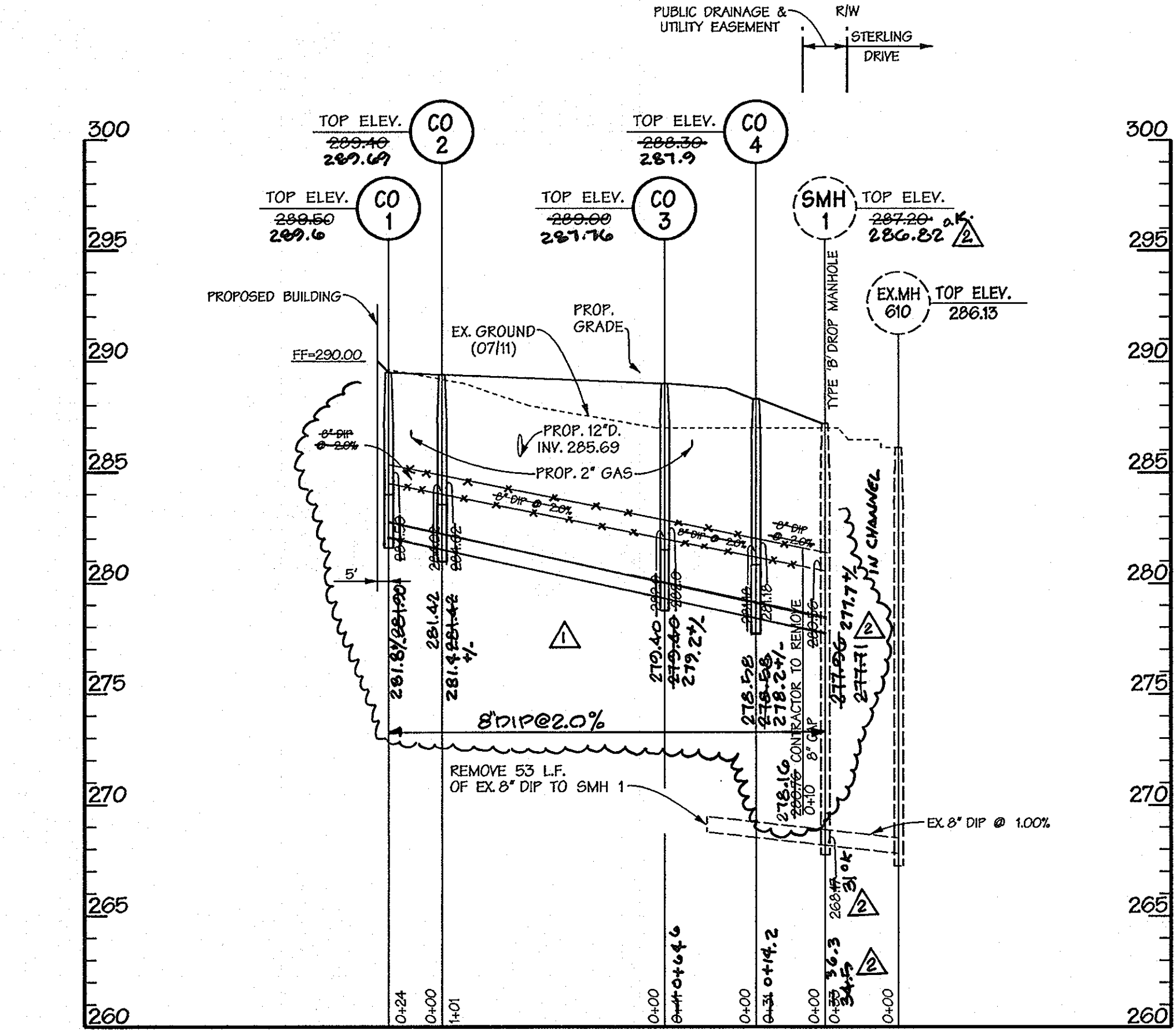
**SOUTHERN ROOF DRAIN**  
SCALE: HORIZ. 1"=50'  
VERT. 1"=5'



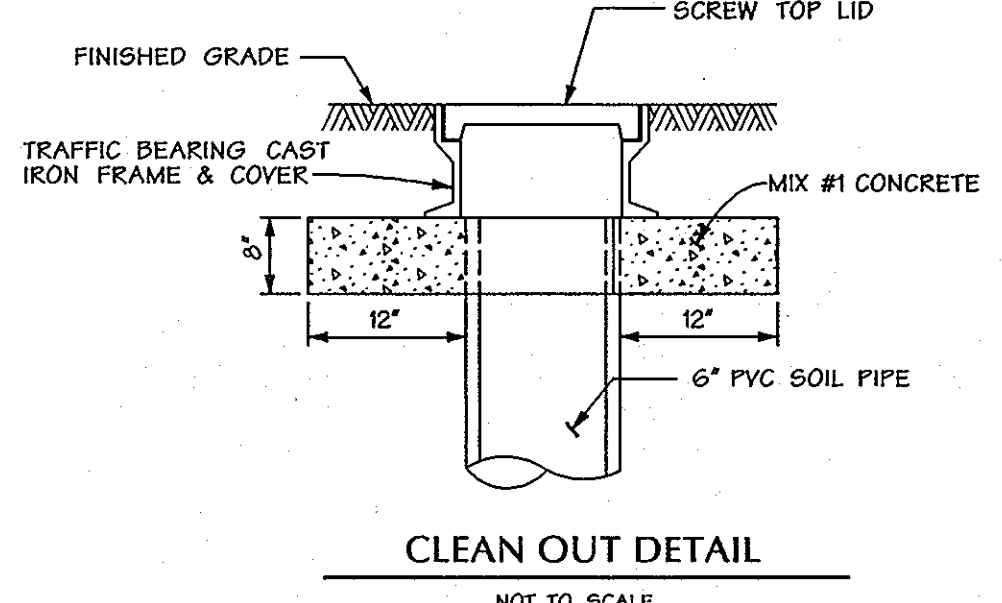
**PARCEL E-1 RECHARGE TRENCH #1 DETAIL**  
N.T.S.



**PARCEL E-1 RECHARGE TRENCH #2 DETAIL**  
N.T.S.



- OPERATION AND MAINTENANCE SCHEDULE FOR RECHARGE FACILITY**
- RECHARGE FACILITY SHALL BE INSPECTED ANNUALLY AND BE REPAIRED OR CLEANED AS NEEDED.
  - REMOVE SEDIMENT AND TRASH FROM SEDIMENT TRAPPING INLET AS NEEDED AND CLEAN OPENING AT INLET BOTTOM.
  - INSPECT FACILITY EVERY OTHER MONTH AND AFTER LARGE STORM EVENTS TO OBSERVE WATER ELEVATIONS. IF STANDING WATER IS OBSERVED IN THE FACILITY RE-INSPECT AFTER 72 HOURS AND REPAIR AS NECESSARY.

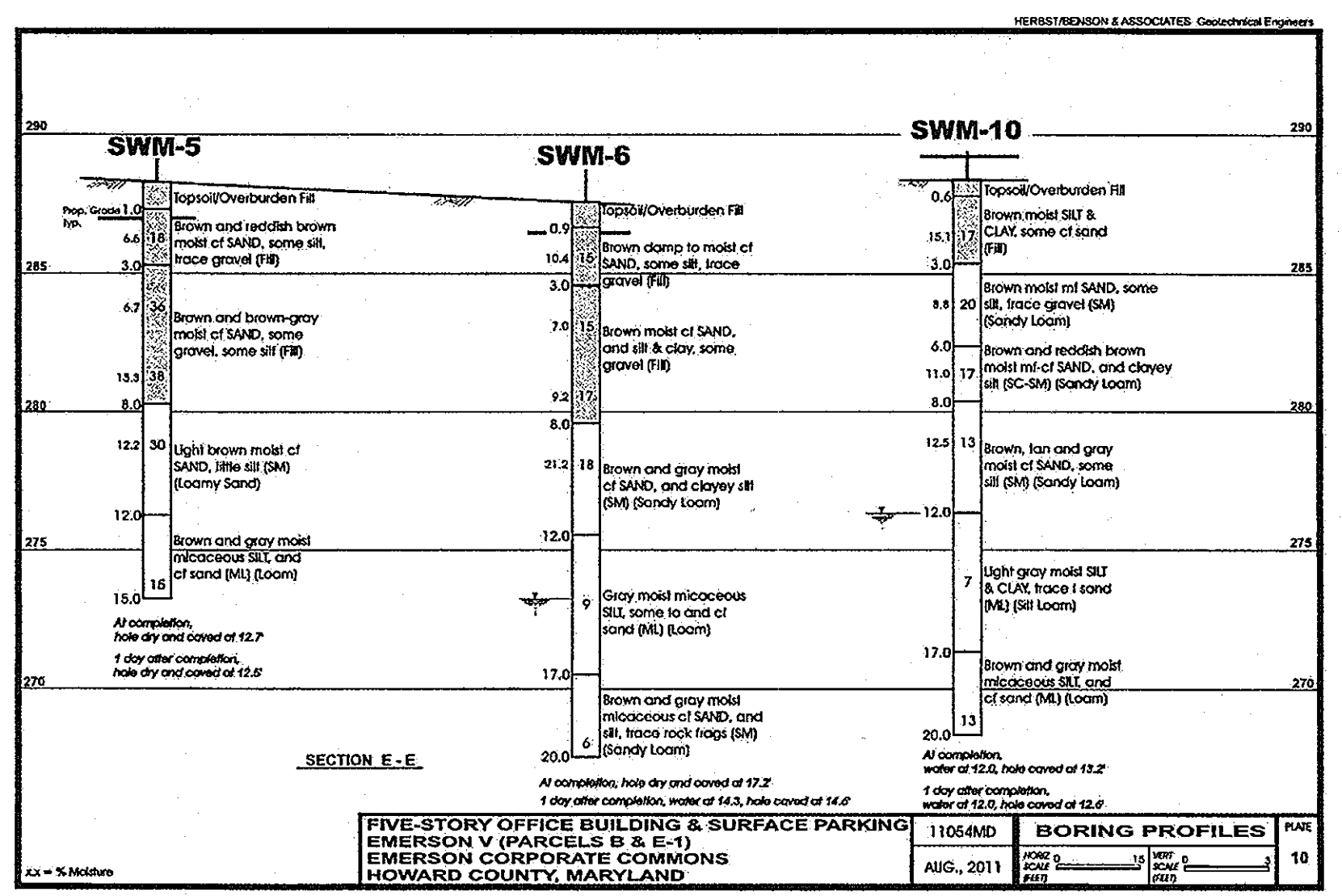


- EACH CLEANOUT SHALL INCLUDE THE FOLLOWING**
- FOR AN UNDERGROUND FLUSH MOUNTED CLEANOUT, PROVIDE A TUBE MADE OF NON-CORROSIVE MATERIAL, SCHEDULE 40 PVC OR EQUAL AT LEAST 3-FEET LONG WITH AN INSIDE DIAMETER OF AT LEAST 6-INCHES.
  - THE TUBE SHALL HAVE A FACTORY ATTACHED CAST IRON OR HIGH IMPACT PLASTIC COLLAR WITH RIBS TO PREVENT ROTATION WHEN REMOVING SCREW TOP LID. THE SCREW TOP LID SHALL BE CAST IRON OR HIGH IMPACT PLASTIC THAT WILL WITHSTAND ULTRA-VIOLET RAYS.

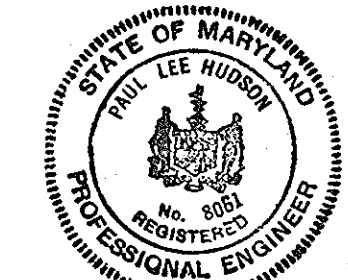
**AS-BUILT CERTIFICATION FOR P&WM**

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SWM FACILITY.

*Paul Hudson* 3-23-13 PE#8001  
PAUL HUDSON  
AS-BUILT DATE: 4-30-13



4-30-13  
"RED LINE" AS BUILT  
SURVEY SERVICES OF MD., LLC  
408 ALLEGHENY AVE  
TOWSON, MD. 21284  
410-321-8692  
410-321-8693



For Revision 1 & 2 Only  
3/22/13  
Date

Professional Engr. No. 16928  
Date 12/20/11

Professional Engr. No. 16928  
Date 12-13-11

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

<i>Keith Steinhilber</i>	4-10-12
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Paul Hudson</i>	4-2-12
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Paul Hudson</i>	4/10/12
DIRECTOR	DATE

Date	No.	Revision Description
10-29-12	1	As-Built Elev. SMH 1
0-4-12	2	Lower San. Sewer SMH 1 to CO 1

**EMERSON PARCEL B & E-1**  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING

OWNER/DEVELOPER:  
PARCEL 'B' - EMERSON DEVELOPMENT I, LLC  
1 TEXAS STATION COURT  
SUITE 200  
TIMONUM, MD 21083  
TAX MAP 47 GRID 20 PARCEL 1051  
EMERSON SECTION 3 AREA 1  
DEED: 147917  
TAX ACCT # 06-972563  
PLAT: 184262

PARCEL 'E-1' - EMERSON DEVELOPMENT I, LLC  
1 TEXAS STATION COURT  
SUITE 200  
TIMONUM, MD 21083  
TAX MAP 47 GRID 20 PARCEL 1051  
REDEV. PROPERTY  
DEED: 11010619  
TAX ACCT # 06-972221  
PLAT: 184262

**DMW**  
DAFT MCCUNE WALKER INC

230 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21284  
P: 410.236.3883 F: 410.208.8795 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

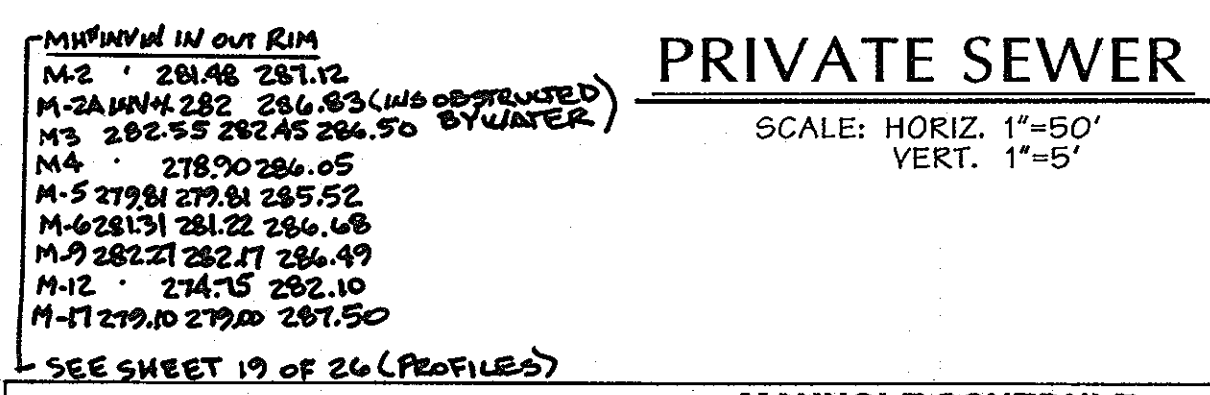
SECTION NAME	SECTION/AREA	SHEET NO.	TOTAL SHEETS
RECHARGE FACILITY & EMERSON SWM	SECTION 3 AREA 1	47	6
2277 & 2278	20	47	6

DATE: 12/20/11

PROJECT: SDP-12-010

DATE: 12-13-11

NO. 20 OF 26



**PRIVATE SEWER**  
SCALE: HORIZ. 1"=50'  
VERT. 1"=5'

**MANHOLE SCHEDULE**

MH #	TYPE	INTERNAL DIAMETER	INV. IN	INV. OUT	RIM ELEV.	REMARKS
M-2	STD. MANHOLE	48"	281.77	281.61	287.70	HOWARD CO. STD. DETAIL PLATE G-5-12
M-2A	STD. MANHOLE	48"	282.25	282.15 / 281.66	286.90	HOWARD CO. STD. DETAIL PLATE G-5-12 - FLOW SPLITTER
M-3	SHALLOW MANHOLE	48"	282.62	282.52	286.40	HOWARD CO. STD. DETAIL PLATE G-5-12
M-4	STD. MANHOLE	48"	279.38	279.26	285.40	HOWARD CO. STD. DETAIL PLATE G-5-12
M-5	STD. MANHOLE	48"	279.91	279.81	285.45	HOWARD CO. STD. DETAIL PLATE G-5-12
M-6	STD. MANHOLE	48"	281.30	281.20	286.70	HOWARD CO. STD. DETAIL PLATE G-5-12
M-9	STD. MANHOLE	48"	281.87	281.77	286.50	HOWARD CO. STD. DETAIL PLATE G-5-12
M-12	STD. MANHOLE	60"	275.16	275.06	282.45	HOWARD CO. STD. DETAIL PLATE G-5-13
M-17	STD. MANHOLE	48"	279.48	279.38	287.90	HOWARD CO. STD. DETAIL PLATE G-5-12

**INLET SCHEDULE**

Inlet #	TYPE	INV. IN	INV. OUT	GRATE ELEV.	REMARKS
I-1	DBL 'S' COMB.	-	282.29	287.57	MDSHA STD. DETAIL 374.71 - FLOW SPLITTER - 12" PVC INV. 281.78
I-3	DBL 'S' COMB.	-	282.71	285.00	MDSHA STD. DETAIL 374.71
I-5	DBL 'S' COMB.	279.69	279.59	285.00	MDSHA STD. DETAIL 374.71
I-6	DBL 'S' COMB.	281.73	281.48	286.15	MDSHA STD. DETAIL 374.71
I-7	DBL 'S' COMB.	-	282.44	286.56	MDSHA STD. DETAIL 374.71
I-8	DBL 'S' COMB.	-	282.00	285.88	MDSHA STD. DETAIL 374.71
I-10	DBL 'S' COMB.	282.94	282.84	287.54	MDSHA STD. DETAIL 374.71
I-20	DBL 'S' COMB.	-	283.33	286.70	MDSHA STD. DETAIL 374.71 - FLOW SPLITTER - 12" PVC INV. 282.80
I-13	DBL 'S' COMB.	278.61	278.51	282.57	MDSHA STD. DETAIL 374.71
I-15	DBL 'S' COMB.	277.22	276.77	286.70	MDSHA STD. DETAIL 374.71
I-16	DBL 'S' COMB.	278.20	278.10	287.17	MDSHA STD. DETAIL 374.71
I-18	DBL 'S' COMB.	279.17	279.07	285.45	MDSHA STD. DETAIL 374.71
I-19	DBL 'S' COMB.	280.31	280.21	285.70	MDSHA STD. DETAIL 374.71
I-21	DBL 'S' COMB.	281.59	281.44	290.00	MDSHA STD. DETAIL 374.71
I-21	YARD	281.27	281.02	286.70	ADS DRAINTECH 24" SQUARE BASIN W/ GRATE
I-22	DBL 'S' COMB.	-	279.61	283.86	MDSHA STD. DETAIL 374.71
I-23	DBL 'S' COMB.	276.52	276.02	280.93	MDSHA STD. DETAIL 374.71
I-24	DBL 'S' COMB.	-	276.66	280.93	MDSHA STD. DETAIL 374.71
I-25	TRENCH DRAIN	-	282.50	285.83	ACO DRAIN-POWER S300K (SLOTTED DUCTILE IRON-CLASS F)

**INLET DWV INVERT GRATE**

Inlet #	TYPE	INV. IN	INV. OUT	GRATE ELEV.	REMARKS
I-1	DBL 'S' COMB.	-	282.29	287.57	MDSHA STD. DETAIL 374.71 - FLOW SPLITTER - 12" PVC INV. 281.78
I-3	DBL 'S' COMB.	-	282.71	285.00	MDSHA STD. DETAIL 374.71
I-5	DBL 'S' COMB.	279.69	279.59	285.00	MDSHA STD. DETAIL 374.71
I-6	DBL 'S' COMB.	281.73	281.48	286.15	MDSHA STD. DETAIL 374.71
I-7	DBL 'S' COMB.	-	282.44	286.56	MDSHA STD. DETAIL 374.71
I-8	DBL 'S' COMB.	-	282.00	285.88	MDSHA STD. DETAIL 374.71
I-10	DBL 'S' COMB.	282.94	282.84	287.54	MDSHA STD. DETAIL 374.71
I-20	DBL 'S' COMB.	-	283.33	286.70	MDSHA STD. DETAIL 374.71 - FLOW SPLITTER - 12" PVC INV. 282.80
I-13	DBL 'S' COMB.	278.61	278.51	282.57	MDSHA STD. DETAIL 374.71
I-15	DBL 'S' COMB.	277.22	276.77	286.70	MDSHA STD. DETAIL 374.71
I-16	DBL 'S' COMB.	278.20	278.10	287.17	MDSHA STD. DETAIL 374.71
I-18	DBL 'S' COMB.	279.17	279.07	285.45	MDSHA STD. DETAIL 374.71
I-19	DBL 'S' COMB.	280.31	280.21	285.70	MDSHA STD. DETAIL 374.71
I-21	DBL 'S' COMB.	281.59	281.44	290.00	MDSHA STD. DETAIL 374.71
I-21	YARD	281.27	281.02	286.70	ADS DRAINTECH 24" SQUARE BASIN W/ GRATE
I-22	DBL 'S' COMB.	-	279.61	283.86	MDSHA STD. DETAIL 374.71
I-23	DBL 'S' COMB.	276.52	276.02	280.93	MDSHA STD. DETAIL 374.71
I-24	DBL 'S' COMB.	-	276.66	280.93	MDSHA STD. DETAIL 374.71
I-25	TRENCH DRAIN	-	282.50	285.83	ACO DRAIN-POWER S300K (SLOTTED DUCTILE IRON-CLASS F)

NOTE: THE INTERIOR WIDTH OF ALL DBL 'S' COMBINATION INLETS IS 3'-5" AS PER MDSHA STD. DETAIL 374.71

**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. 16722, EXPIRATION DATE: 5/12/12

Professional Engr. No. 16928  
Date 12-13-11



**LEGEND**

- PROPERTY BOUNDARY
- EX. RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- EX. EASEMENT
- EX. ROADS AND WALKS
- 280 --- EX. MAJOR CONTOUR
- --- EX. MINOR CONTOUR
- [Symbol] FOREST CONSERVATION EASEMENT
- [Symbol] EX. STREET TREE
- [Symbol] EX. STREET TREE TO BE REMOVED
- [Symbol] EX. STREET LIGHT
- [Symbol] EX. STORM DRAIN
- [Symbol] EX. SANITARY SEWER
- [Symbol] EX. WATER
- [Symbol] EX. OVERHEAD ELECTRIC
- [Symbol] PROP. BUILDING
- [Symbol] PROP. CURB / EDGE OF PAVING
- [Symbol] PROP. DEPRESSED CURB
- [Symbol] PROP. REVERSE CURB
- [Symbol] PROP. GROUP LIGHT (BY OTHERS)
- [Symbol] PROP. SINGLE LIGHT (BY OTHERS)
- [Symbol] PROP. LIGHT (BY OTHERS)
- [Symbol] LIMIT OF DISTURBANCE
- [Symbol] PROP. STORM DRAIN
- [Symbol] PROP. SANITARY SEWER
- [Symbol] PROP. WATER
- [Symbol] PROP. DECIDUOUS SHADE TREE
- [Symbol] PROP. EVERGREEN TREE
- [Symbol] PROP. SHRUBS
- [Symbol] DESIGNATED STREET TREE
- [Symbol] HOWARD COUNTY REQUIRED TREE

**PLANT LIST**

QTY.	SYM.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
<b>SHADE TREES</b>					
7	AR	Acer rubrum 'October Glory'	October Glory Red Maple	2 1/2" - 3" Cal., 12'-14' Ht.	B & B, Full head
5	LS	Liquidambar styraciflua 'Rotundiloba'	Seedless Sweetgum	2 1/2" - 3" Cal., 12'-14' Ht.	B & B, Full head
7	NS	Nyssa sylvatica	Black Gum	2 1/2" - 3" Cal., 12'-14' Ht.	B & B, Full head
7	PA	Platanus x acerifolia 'Bloodgood'	Bloodgood London Plane Tree	2 1/2" - 3" Cal., 12'-14' Ht.	B & B, Full head
9	QP	Quercus palustris	Pin Oak	2 1/2" - 3" Cal., 12'-14' Ht.	B & B, Full head
<b>Flowering Trees</b>					
2	CV	Crataegus viridis 'Winter King'	'Winter King' Hawthorn	2" - 2 1/2" cal. - 8' Ht.	B&B Single Leader
<b>Evergreen Trees</b>					
3	IO	Ilex opaca	American Holly	6' - 7' Ht.	B&B Single Leader
26	TP	Thuja plicata 'Green Giant'	Green Giant Arborvitae	6' - 7' Ht.	Cont. or B&B Single Leader
<b>SHRUBS</b>					
27	ca	Clethra alnifolia	Summersweet Clethra	2 1/2" - 3" Ht.	Cont. or B&B
40	tb	Taxus baccata 'Repandens'	Spreading English Yew	18" - 24" Spread	Cont. or B&B
35	vd	Viburnum dentatum	Arrowwood Viburnum	2 1/2" - 3" Ht.	Cont. or B&B

SEEDING IS REQUIRED FOR ALL OPEN AREAS. SEE NOTE 5.

\* DESIGNATED STREET TREE

THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.

**NOTES:**

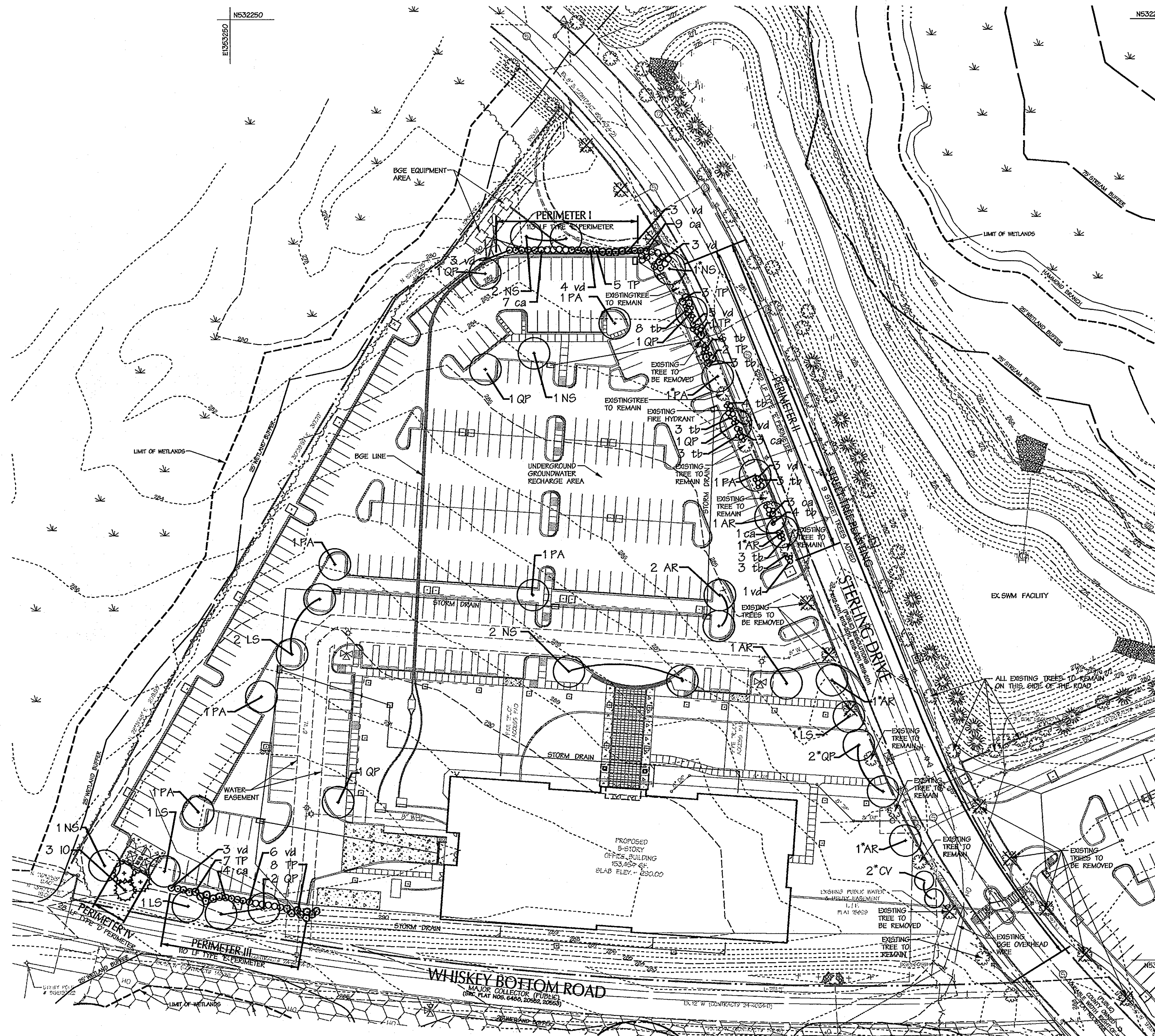
- AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELAXATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL LANDSCAPE SURETY FOR PARCEL B, IN THE AMOUNT OF \$13,020 IS TO BE POSTED FOR 30 SHADE TREES (B&B), 5 EVERGREEN TREES, AND 110 SHRUBS. THE TOTAL FINANCIAL LANDSCAPE SURETY FOR BOTH PARCELS B AND E-1 IS \$33,650. SURETY MUST BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT.
- EMERSON IS GOVERNED BY COVENANTS WHICH REQUIRE ADDITIONAL PLANT MATERIAL AND APPROVAL FROM THE HOWARD HUGHES ARCHITECTURAL REVIEW COMMITTEE. PLEASE REFER TO PLAN APPROVAL LETTER FROM HOWARD HUGHES.
- ALL PROPERTY PERIMETERS, EXCEPT STERLING DRIVE AND WHISKEY BOTTOM ROAD, ARE EXEMPT FROM LANDSCAPING REQUIREMENTS. SINCE THIS PARCEL IS INTERNAL TO THE EMERSON (REVITZ PROPERTY) SUBDIVISION.
- SEEDING IS REQUIRED FOR ALL OPEN AREAS. PROVIDE A MINIMUM OF 4 INCHES OF TOPSOIL. WHERE SEEDING IS PLAZED, USE TALL FESCUE STATE CERTIFIED GRASS SEED.

SCHEDULE B  
"PER HOWARD COUNTY LANDSCAPE MANUAL"  
PARKING LOT INTERNAL LANDSCAPING

Number of Surface Parking Spaces	337
Number of Trees Required (1 sh/20 sp.)	17
Number of Trees Provided	17
Shade Trees	
Other Trees (2:1 substitution)	

STREET TREE LANDSCAPING (FOR SHEET 21 OF 26)

Street trees along Sterling Drive affected	35	
Number of street trees in cut-de-sac	-5	
Number of street trees in BGE Green Zone	-1	
Number of street trees saved	-11	
Total number of street trees to be replaced	18	TREE VALUE
Number of street trees replaced in Parcel B	9	
Shade Trees provided	2	1
Other Trees (2:1 substitution)	7	
Number of street trees replaced in Parcel E-1	9	
Shade Trees provided	0	
Evergreen Trees (2:1 substitution)	0	
Other Trees (2:1 substitution)	9	
		9

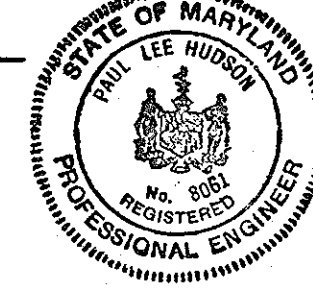


SCHEDULE A "PER HOWARD COUNTY LANDSCAPE MANUAL" PERIMETER LANDSCAPE EDGE

Category	Perimeter I Parking Adjacent to Roadway	Perimeter II Parking Adjacent to Roadway	Perimeter III Parking Adjacent to Roadway	Perimeter IV Screen Adjacent to Roadway
Landscape Type	E	E	E	D
Linear Feet of Roadway Frontage/Perimeter	113 LF.	252 LF.	110 LF.	28 LF.
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NO	NO	NO	NO
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NO	NO	NO	NO
Number of Plants Required				
Shade Trees	113/40 = 3	252/40 = 6	110/40 = 3	28/60 = 1
Evergreen Trees	0	0	0	28/10 = 3
Shrubs	113/4 = 28	252/4 = 63	110/4 = 28	0
Number of Plants Provided				
Shade Trees	2	4	3	1
Evergreen Trees	5	6	15	3
Other Trees (2:1 substitution)	0	0	0	0
Shrubs (10:1 substitution)	26	63	15	0

**AS-BUILT  
CERTIFICATION FOR PDMA**  
THERE IS NO "AS-BUILT" INFORMATION  
PROVIDED ON THIS SHEET.

Paul Hudson 5-28-13  
PAUL HUDSON PE# 8061



**AS-BUILT NOT REQUIRED**  
SURVEY SERVICES OF MD., LLC.  
BY: ROBERT MATIS - REG. # 605



Landscape Plans  
1 of 3  
12/20/11  
Date

DAFT MCCUNE WALKER INC  
230 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
P: 410 296 3333 F: 410 296 4705 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

PROJECT NAME: EMERSON DEVELOPMENT V, LLC SECTION/AREA: PARCEL B & E-1 PAR. 165  
SITE # OR LOT: 21077 & 21278 BLOCK # 20 PLOT # 47 TRACT # 6 CROSS TRACT # 608903  
DATE: 12/20/11

TITLE: **LANDSCAPE PLAN  
PARCEL B'**

Des. By: TPC Scale: 1" = 50' Proj. No.: 950546  
Dm. By: TPC Date: 12-13-11  
Chk. By: THRJDF Approved: **21 of 26**

Landscape Architect

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
Kurt Shulman 4-10-12  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chad Edmund 4-2-12  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Michael J. Gault 8/1/12  
DIRECTOR DATE

EMERSON PARCEL B & E-1  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING

OWNER/DEVELOPER:  
PARCEL B - EMERSON DEVELOPMENT V, LLC 112045 STATION COURT SUITE 200 TIMONIA, MD 21083 TAX MAP 47 GRID 8 PARCEL 1051 EMERSON SECTION 3 AREA 1 DEED: 14794717 TAX ACCT # 06-572553 PLAT: 162829  
PARCEL E-1 - EMERSON DEVELOPMENT II, LLC 112045 STATION COURT SUITE 200 TIMONIA, MD 21083 TAX MAP 47 GRID 20 PARCEL 165 REVITZ PROPERTY DEED: 14794619 TAX ACCT # 06-572221 PLAT: 162826



STATE OF MARYLAND  
DAFT MCCUNE WALKER INC  
12/20/11



**LEGEND**

- PROPERTY BOUNDARY
- - - EX RIGHT OF WAY
- - - ADJACENT PROPERTY BOUNDARY
- - - EX EASEMENT
- - - EX ROADS AND WALKS
- - - EX MAJOR CONTOUR
- - - EX MINOR CONTOUR
- 280 ---
- 280 ---
- FOREST CONSERVATION EASEMENT
- ⊙ EX STREET TREE
- ⊗ EX STREET TREE TO BE REMOVED
- ⊕ EX STREET LIGHT
- ⊖ EX STORM DRAIN
- ⊙ EX SANITARY SEWER
- ⊗ EX WATER
- ⊕ OH EX OVERHEAD ELECTRIC
- ▭ PROP. BUILDING
- ▭ PROP. CURB / EDGE OF PAVING
- ▭ PROP. DEPRESSED CURB
- ▭ PROP. REVERSE CURB
- ⊕ PROP. GROUP LIGHT (BY OTHERS)
- ⊕ PROP. SINGLE LIGHT (BY OTHERS)
- ⊕ PROP. LIGHT (BY OTHERS)
- ▭ LIMIT OF DISTURBANCE
- ▭ PROP. STORM DRAIN
- ▭ PROP. SANITARY SEWER
- ⊕ PROP. WATER
- ⊕ PROP. DECIDUOUS SHADE TREE
- ⊕ PROP. EVERGREEN TREE
- ⊕ PROP. SHRUBS
- ⊕ DESIGNATED STREET TREE
- ⊕ 1 NS HOWARD COUNTY REQUIRED TREE

**PLANT LIST**

QTY.	SYM.	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
<b>SHADE TREES</b>					
11	AR	Acer rubrum 'October Glory'	October Glory Red Maple	2 1/2" - 3" Cal, 12'-14" Ht.	B & B, Full head
4	LS	Liquidambar styraciflua 'Rotundiloba'	Seedless Sweetgum	2 1/2" - 3" Cal, 12'-14" Ht.	B & B, Full head
9	NS	Nyssa sylvatica	Black Gum	2 1/2" - 3" Cal, 12'-14" Ht.	B & B, Full head
8	PA	Platanus x acerifolia 'Bloodgood'	Bloodgood London Plane Tree	2 1/2" - 3" Cal, 12'-14" Ht.	B & B, Full head
8	QP	Quercus palustris	Pin Oak	2 1/2" - 3" Cal, 12'-14" Ht.	B & B, Full head
<b>SHADE TREES</b>					
8	MZ	Malus x zumi 'Calocarpa'	Zumi Crabapple	2" - 2 1/2" Cal, 8'-10" Ht.	B & B, Full head
4	PY	Prunus x yedoensis	Yoshino Cherry	2" - 2 1/2" Cal, 8'-10" Ht.	B & B, Full head
<b>Evergreen Trees</b>					
6	IN	Ilex x 'Nelle R. Stevens'	'Nelle R. Stevens' Holly	6' - 7' Ht.	B&B Single Leader
2	IO	Ilex opaca	American Holly	6' - 7' Ht.	B&B Single Leader
6	TP	Thuja plicata 'Green Giant'	Green Giant Arborvitae	6' - 7' Ht.	B&B Single Leader
<b>SHRUBS</b>					
45	ca	Clethra alnifolia	Summersweet Clethra	2 1/2" - 3" Ht.	Cont. or B&B
16	mp	Myrica pensylvanica	Northern Bayberry	2' - 2 1/2" Ht.	Cont. or B&B
49	rc	Rhododendron catalpiense 'Roseum Elegans'	'Roseum Elegans' Catawba Rhododendron	2' - 2 1/2" Ht.	Cont. or B&B
22	rp	Rhododendron 'PJM'	PJM Rhododendron	2' - 2 1/2" Ht.	Cont. or B&B
39	tb	Taxus baccata 'Repandens'	Spreading English Yew	18" - 24" Spread	Cont. or B&B
48	vd	Viburnum dentatum	Arrowwood Viburnum	2 1/2" - 3" Ht.	Cont. or B&B

SEEDING IS REQUIRED FOR ALL OPEN AREAS. SEE NOTE 5.  
\* DESIGNATED STREET TREE

THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

**NOTES:**

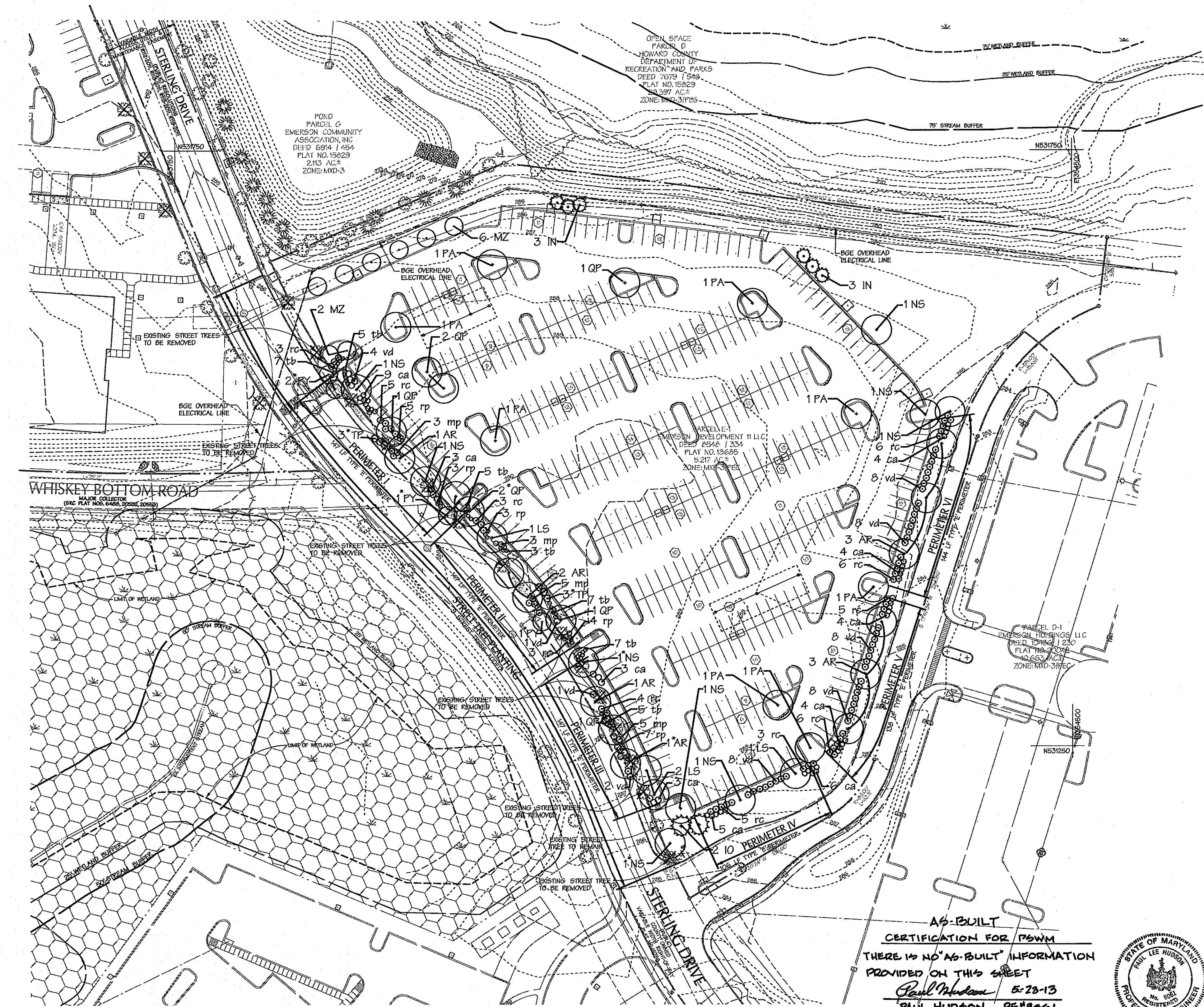
- AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.024 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL LANDSCAPE SURETY FOR PARCEL E-1 IN THE AMOUNT OF \$19,750 IS TO BE POSTED FOR 43 SHADE TREES (28300 each) AND 209 SHRUBS. THE TOTAL FINANCIAL SURETY FOR BOTH PARCELS B AND E-1 IS \$28,000. SURETY MUST BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT.
- EMERSON IS GOVERNED BY COVENANTS WHICH REQUIRE ADDITIONAL PLANT MATERIAL AND APPROVAL FROM THE HOWARD HUGHES ARCHITECTURAL REVIEW COMMITTEE. PLEASE REFER TO PLAN APPROVAL LETTER FROM HOWARD HUGHES.
- ALL PROPERTY PERIMETERS, EXCEPT STERLING DRIVE AND WHISKEY BOTTOM ROAD, ARE EXEMPT FROM LANDSCAPING REQUIREMENTS SINCE THIS PARCEL IS INTERNAL TO THE EMERSON (REVITZ PROPERTY) SUBDIVISION.
- SEEDING IS REQUIRED FOR ALL OPEN AREAS. PROVIDE A MINIMUM OF 4 INCHES OF TOPSOIL. WHERE SEEDING IS PLACED, USE TALL FESCUE STATE CERTIFIED GRASS SEED.

**SCHEDULE B PARKING LOT INTERNAL LANDSCAPING**

	TREE VALUE
Number of Surface Parking Spaces	426
Number of Trees Required (1 sh120 sp.)	21
Number of Trees Provided	
Shade Trees	14
Ornamental Trees (21 substitution)	4
Evergreen Trees (21 substitution)	3
Shrubs (101 substitution)	1
<b>Per Howard County Landscape Manual</b>	<b>22</b>

**STREET TREE LANDSCAPING (FOR SHEET 22 OF 26)**

	TREE VALUE
Street trees along Sterling Drive affected	35
Number of street trees in cul-de-sac	-5
Number of street trees in BGE Green Zone	-1
Number of street trees saved	-11
<b>Total number of street trees to be replaced</b>	<b>18</b>
Number of street trees to replace in Parcel B	9
Shade Trees provided	5
Other Trees (21 substitution)	4
Number of street trees to replace in Parcel E-1	9
Shade Trees provided	5
Evergreen Trees (21 substitution)	3
Other Trees (21 substitution)	2
<b>Total</b>	<b>10</b>

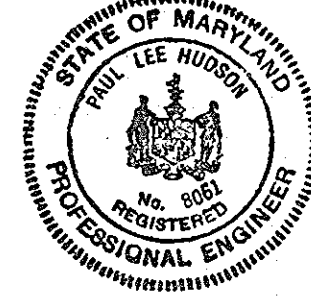


AS-BUILT NOT REQUIRED  
SURVEY SERVICES OF MD, LLC.  
BY: ROBERT MATIS - REG. #605

**SCHEDULE A PERIMETER LANDSCAPE EDGE - Per Howard County Landscape Manual**

Category	Perimeter I Parking Adjacent to Roadway	Perimeter II Parking Adjacent to Roadway	Perimeter III Parking Adjacent to Roadway	Perimeter IV Parking Adjacent to Roadway	Perimeter V Parking Adjacent to Roadway	Perimeter VI Parking Adjacent to Roadway
Landscape Type	E	E	E	E	E	E
Linear Feet of Roadway Frontage/Perimeter	147 LF.	147 LF.	147 LF.	106 LF.	138 LF.	144 LF.
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NO	NO	NO	NO	NO	NO
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NO	NO	NO	NO	NO	NO
Number of Plants Required						
Shade Trees	147/40 = 4	147/40 = 4	147/40 = 4	106/40 = 3	138/40 = 3	144/40 = 4
Evergreen Trees	0	0	0	0	0	0
Shrubs	147/4 = 37	147/4 = 37	147/4 = 37	106/4 = 27	138/4 = 35	144/4 = 36
Number of Plants Provided						
Shade Trees	4	4	4	3	3	4
Evergreen Trees	0	0	0	2	0	0
Other Trees (21 substitution)	0	0	0	2	0	0
Shrubs (101 substitution)	37	37	37	27	35	36

AS-BUILT CERTIFICATION FOR P&WM  
THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET  
Paul Hudson 5-23-13  
PAUL HUDSON PE#8061



4-30-13

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
Kest Stankovich 4-10-12  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
Paul Edmondson 4-2-12  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
Mark Douglas 4/10/12  
DIRECTOR DATE

EMERSON PARCEL B & E-1  
L.E.E.D. BUILDING  
5-STORY COMMERCIAL OFFICE BUILDING  
OWNER/DEVELOPER:  
PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
11724S STATION COURT  
SUITE 200  
TOWSON, MD 21286  
TAX MAP # 47 GRID 8 PARCEL 1051  
EMERSON SECTION 3 AREA 1  
DEED:1470517  
TAX ACCT # 06-572553  
PLAT:15829  
PARCEL 'E-1' - EMERSON DEVELOPMENT II, LLC  
11724S STATION COURT  
SUITE 200  
TOWSON, MD 21286  
TAX MAP # 47 GRID 20 PARCEL 165  
REVITZ PROPERTY  
DEED:1000519  
TAX ACCT # 06-572227  
PLAT:16685

Landscape Plans  
2 of 3  
12/20/11  
Date  
Landscape Architect

**DMW**  
DAFT MCCUNE WALKER INC  
200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
P: 410.296.8333 F: 410.296.3795 WWW.DMW.COM  
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SECTION NAME: REVITZ PROPERTY & EMERSON SUBDIVISION SECTION 3 AREA 1  
PLAT OR L.P. NO.: 21277 & 21278  
BLOCK # 20  
TAX MAP # 47  
SHEET NO.: 6  
DATE: 12/20/11  
JOB NO.: 606903

TITLE: **LANDSCAPE PLAN PARCEL 'E-1'**

Des. By: TPC Scale: 1" = 50' Proj. No.: 95054.6  
Dm. By: TPC Date: 12-13-11  
Chk. By: THR/JDF Approved  
**22 of 26**



**PLANTING SPECIFICATIONS**

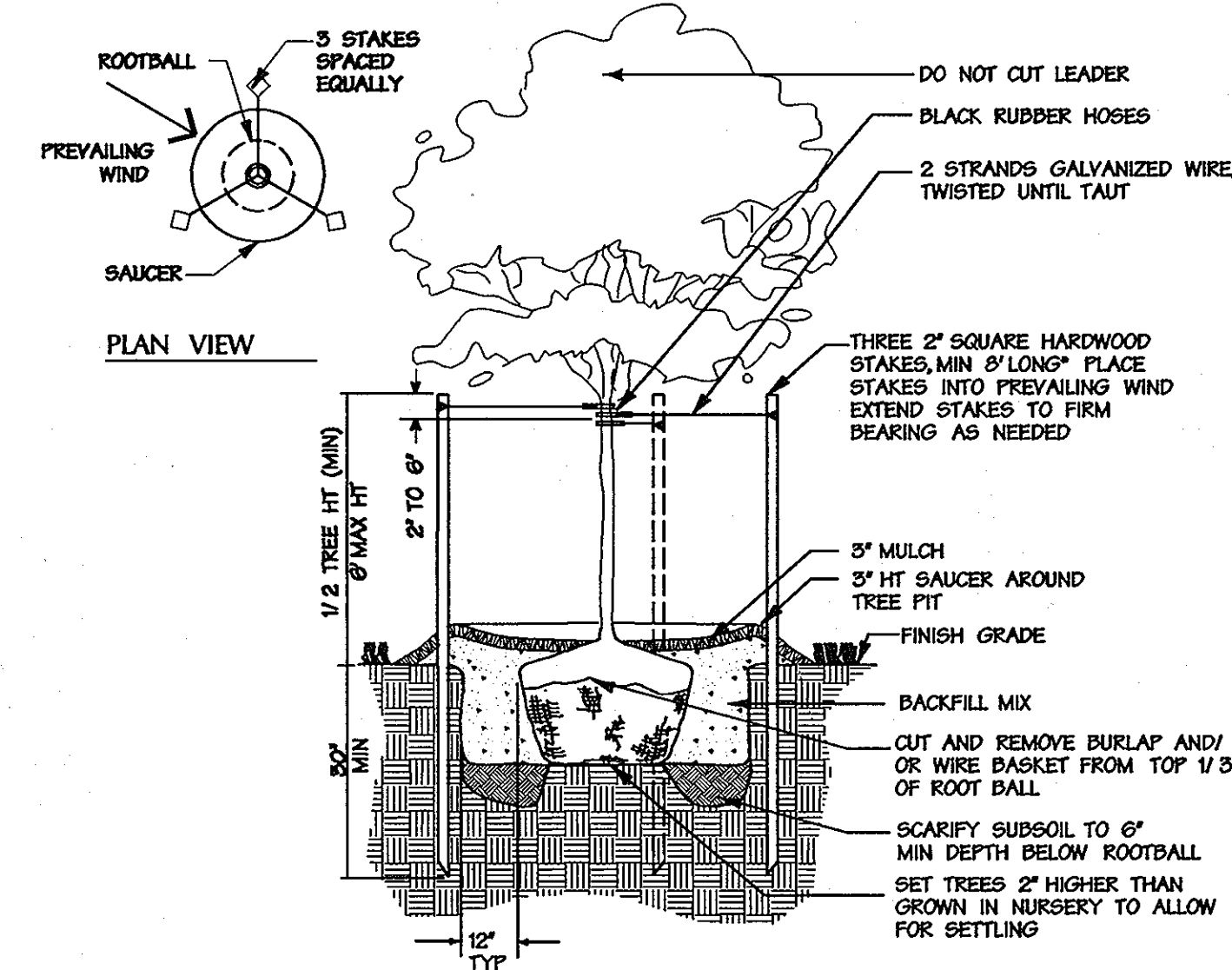
- MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT OR OWNER.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY (800-257-7777) A MINIMUM OF THREE WORKING DAYS PRIOR TO PLANTING AND CONSTRUCTION.
- THE CONTRACTOR IS ADVISED OF THE EXISTENCE OF UNDERGROUND UTILITIES ON THE SITE. THEIR EXACT LOCATION SHALL BE VERIFIED IN THE FIELD WITH THE OWNER OR GENERAL CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY DIGGING OPERATIONS. IN THE EVENT THEY ARE UNCOVERED, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO UTILITIES AND SUCH DAMAGE SHALL NOT RESULT IN ANY ADDITIONAL EXPENSES TO THE OWNER.
- IF UTILITY LINES ARE ENCOUNTERED IN EXCAVATION OF TREE FITS, OTHER LOCATIONS FOR TREES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL COMPENSATION. NO CHANGES OF LOCATION SHALL BE MADE WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- PLANT MATERIAL SUBSTITUTIONS WILL NOT BE ACCEPTED WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT.
- PLANT QUANTITIES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES PRIOR TO THE COMMENCEMENT OF WORK. SOO QUANTITY TAKE-OFFS ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING. THE CONTRACTOR SHALL FURNISH PLANT MATERIAL IN SIZES AS SPECIFIED IN PLANT LIST.
- PLANT MATERIAL SUBSTITUTIONS WILL NOT BE ACCEPTED WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT.
- ALL PLANTS (B&B OR CONTAINER) SHALL BE PROPERLY IDENTIFIED BY WEATHER-PROOF LABELS SECURELY ATTACHED THERETO BEFORE DELIVERY TO PROJECT SITE. LABELS SHALL IDENTIFY PLANTS BY NAME, SPECIES, AND SIZE. LABELS SHALL NOT BE REMOVED UNTIL THE FINAL INSPECTION BY THE LANDSCAPE ARCHITECT OR AGENT IN CHARGE.
- ANY MATERIAL AND/OR WORK MAY BE REJECTED BY THE LANDSCAPE ARCHITECT IF IT DOES NOT MEET THE REQUIREMENTS OF THE SPECIFICATIONS. ALL REJECTED MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- THE LANDSCAPE CONTRACTOR SHALL STAKE ALL MATERIAL LOCATED ON THE SITE FOR REVIEW AND POSSIBLE ADJUSTMENTS BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. ALL LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT BEFORE EXCAVATION.
- THE LANDSCAPE ARCHITECT OR OWNER SHALL HAVE THE RIGHT, AT ANY STAGE OF THE OPERATIONS, TO REJECT ANY AND ALL WORK AND MATERIAL WHICH IN HIS OPINION DOES NOT MEET THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR STABILITY AND CONDITIONS OF ALL TREES AND SHRUBS AND SHALL BE LEGALLY LIABLE FOR ANY DAMAGE CAUSED BY INSTABILITY OF ANY PLANT MATERIALS.
- ALL PROPOSED TREES TO BE INSTALLED EITHER ENTIRELY IN OR ENTIRELY OUT OF PLANTING BEDS. PLANTING BED LINES ARE NOT TO BE OBSTRUCTED. ALL SHRUBS AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PREPARED BED AND TOP DRESSED WITH 3-INCH SHREDDED HARDWOOD MULCH. MULCH SHALL HAVE BEEN SHREDDED WITHIN THE LAST SIX MONTHS.
- ALL PLANTING BEDS ADJACENT TO LAWN, SOO, OR SEEDED AREAS SHALL BE SPADE EDGED.
- ALL SOO SHALL BE OBTAINED FROM AREAS HAVING GROWING CONDITIONS FAMILIAR TO AREAS TO BE COVERED. AREAS TO BE SOOED SHALL BE RAKED OF STONES AND DEBRIS. DEBRIS AND STONES OVER 1 INCH IN DIAMETER SHALL BE REMOVED FROM THE SITE. ALL DAMAGED SOO WILL BE REJECTED. ALL SOO MUST BE PLACED WITH STAGGERED JOINTS, TIGHTLY BUTTED, WITH NO INEQUALITIES IN GRADE. PLACE ALL SOO IN ROWS AT RIGHT ANGLES TO SLOPES (WHERE APPLICABLE).
- MAINTENANCE SHALL BEGIN AFTER EACH PLANT HAS BEEN INSTALLED AND SHALL CONTINUE UNTIL 90 DAYS AFTER FINAL ACCEPTANCE BY THE ARCHITECT OR OWNER. REPRESENTATIVE MAINTENANCE INCLUDES MOWING OF TURF, WATERING, PRUNING, WEEDING, FERTILIZING, MULCHING, REPLACEMENT OF SICK OR DEAD PLANTS, AND ANY OTHER CARE NECESSARY FOR THE PROPER GROWTH OF THE PLANT MATERIAL. THE CONTRACTOR MUST BE ABLE TO PROVIDE CONTINUED MAINTENANCE IF REQUESTED BY THE OWNER.
- UPON COMPLETION OF ALL LANDSCAPING AN ACCEPTANCE OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR OWNER FOR SCHEDULING THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
- THE LIFE AND ROBUST HEALTH OF ALL TREES, SHRUBS AND GROUND COVER SHALL BE GUARANTEED FOR 12 MONTHS FROM THE DATE OF ACCEPTANCE.
- MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT OR OWNER.
- THE CONTRACTOR SHALL INSURE THAT HIS WORK DOES NOT INTERRUPT ESTABLISHED OR PROTECTED DRAINAGE PATTERNS.
- THE CONTRACTOR SHALL INSURE ADEQUATE VERTICAL DRAINAGE IN ALL PLANT BEDS AND PLANTERS.
- THE CONTRACTOR SHALL REVIEW ARCHITECTURAL/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH GRADING AND SURFACE UTILITIES.
- ALL EQUIPMENT AND TOOLS SHALL BE PLACED SO AS NOT TO INTERFERE OR HINDER THE PEDESTRIAN AND VEHICULAR TRAFFIC FLOW.
- THE CONTRACTOR SHALL COORDINATE WITH LIGHTING AND IRRIGATION CONTRACTORS REGARDING TIMING OF INSTALLATION OF PLANT MATERIAL.
- DURING PLANTING OPERATIONS, EXCESS WASTE MATERIALS SHALL BE PROMPTLY AND FREQUENTLY REMOVED FROM THE SITE.
- THE CONTRACTOR SHALL DISPOSE OF STUMPS AND MAJOR ROOTS OF ALL PLANTS TO BE REMOVED. ANY DEPRESSIONS CAUSED BY REMOVAL OPERATIONS SHALL BE REEFILLED WITH FERTILE, FRIABLE SOO PLACED AND COMPACTED SO AS TO REESTABLISH PROPER GRADE FOR NEW PLANTING AND/OR LAWN AREAS.
- ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTINGS AND MULCH SHALL BE FINE GRADED AND SEEDED IN ACCORDANCE WITH PLANTING AND CONSTRUCTION SPECIFICATIONS.
- EVERY POSSIBLE SAFEGUARD SHALL BE TAKEN TO PROTECT BUILDING SURFACES, EQUIPMENT, AND FURNISHING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY WHICH MAY OCCUR AS A RESULT OF HIS NEGLIGENCE IN THE EXECUTION OF THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR TESTING PROJECT SOO. THE CONTRACTOR IS TO PROVIDE A CERTIFIED SOO REPORT TO THE OWNER. THE CONTRACTOR SHALL VERIFY THAT THE SOO ON SITE ARE ACCEPTABLE FOR THE PROPER GROWTH OF THE PROPOSED PLANT MATERIAL. SHOULD THE CONTRACTOR FIND POOR SOO CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE SOO AMENDMENTS AS NECESSARY. THESE AMENDMENTS SHALL INCLUDE, BUT NOT BE LIMITED TO, FERTILIZERS, LIME, AND TOPSOO. PROPER PLANTING SOO MUST BE VERIFIED PRIOR TO PLANTING OF MATERIALS.
- PLANTING MIX:
  - PLANTING MIX SHALL BE PREPARED AT APPROVED ON-SITE STAGING AREA USING APPROVED ON-SITE EXISTING SOO. MIX MINIMUM QUANTITIES OF 20 CUBIC YARDS OR SUFFICIENT MIX FOR ENTIRE JOB IF LESS THAN 20 CUBIC YARDS IS REQUIRED.
  - THOROUGHLY MIXED IN THE FOLLOWING PROPORTIONS FOR TREE AND SHRUB PLANTING MIX:
    - 5 CY EXISTING SOO
    - 2 CY SHARP SAND
    - 3 CY WOOD RESIDUALS
    - 4.5 LBS TREBLE SUPERPHOSPHATE
    - 5 LBS DOLMONTITE LIMESTONE (ELIMINATE FOR ACID LOVING PLANTS)
  - FOR BED PLANTING SHRUBS AND GROUNDCOVER SPACES 24 INCHES OR CLOSER, INCORPORATE THE FOLLOWING INGREDIENTS PER 20 SF AND INCORPORATE INTO TOP 8 INCHES OF EXISTING SOO BY ROTOTILLING OR SIMILAR METHOD OF INCORPORATION:
    - 2 CY SHARP SAND
    - 3 CY ORGANIC MATERIAL
    - 4.5 LBS TREBLE SUPERPHOSPHATE
    - 5 LBS DOLMONTITE LIMESTONE (ELIMINATE FOR ACID LOVING PLANTS)
- PLANTS SHALL CONFORM TO CURRENT "AMERICAN STANDARDS FOR NURSERY STOCK" BY AMERICAN ASSOCIATION OF NURSERMEN (AAN), PARTICULARLY WITH REGARD TO SIZE, GROWTH, SIZE OF BALL, AND DENSITY OF BRANCH STRUCTURE. PLANT MATERIAL SHALL BE TAGGED AT THE SOURCE BY THE LANDSCAPE ARCHITECT UNLESS THIS REQUIREMENT IS SPECIFICALLY WAIVED.
- ALL PLANTING PROCEDURES SHALL CONFORM TO LANDSCAPE CONTRACTORS ASSOCIATION (LCA) SPECIFICATION GUIDELINES FOR BALTIMORE / WASHINGTON METROPOLITAN AREA (LATEST EDITION), LCA LANDSCAPE SPECIFICATION GUIDELINES (4TH ED) SECTION 116, REPLACEMENT AND CONDITIONS. "ITEM F. PLANT LOSSES DUE TO ABNORMAL WEATHER" DOES NOT APPLY.
- ALL PLANTING PROCEDURES SHALL CONFORM TO DAFT MACHINE WALKER INC. SPECIFICATIONS.
- PLANTING RECOMMENDATIONS DELINEATED IN DMW'S STANDARD SPECIFICATIONS AND PLANTING DETAILS, WHICH ARE INCLUDED OR REFERENCED IN THESE DRAWINGS, ARE INTENDED AS A GENERAL GUIDE. THESE RECOMMENDATIONS ARE NOT BASED UPON A COMPREHENSIVE SOO TEST OR AN EVALUATION OF THE POST-CONSTRUCTION CONDITIONS IN WHICH THE LANDSCAPE CONTRACTOR WILL BE EXPECTED TO WORK.
 

IN ORDER FOR PLANT MATERIAL TO THRIVE, A SOO TEST MAY BE NECESSARY. SOO TESTING SHOULD ADDRESS MICRO- AND MACRO- NUTRIENT LEVELS, SOO PH, AND A USDA SOO TEXTURE CLASSIFICATION. FURTHER UNDERSTANDING SOO CONDITIONS IN AREAS THAT HAVE BEEN DISTURBED BY CONSTRUCTION MAY CONTAIN COMPRESSED AND POORLY DRAINED SOO, AND THEY MAY LACK ORGANIC MATERIAL OR MICRO-ORGANISMS NECESSARY FOR SUCCESSFUL PLANT GROWTH.

IF THESE CONDITIONS APPEAR TO THE CONTRACTOR TO BE A LIMITATION TO PLANT GROWTH, THE CONTRACTOR IS ENCOURAGED TO MAKE RECOMMENDATIONS FOR A SOO AMENDMENT PROGRAM SUBJECT TO THE APPROVAL OF THE OWNER AND THE LANDSCAPE ARCHITECT.

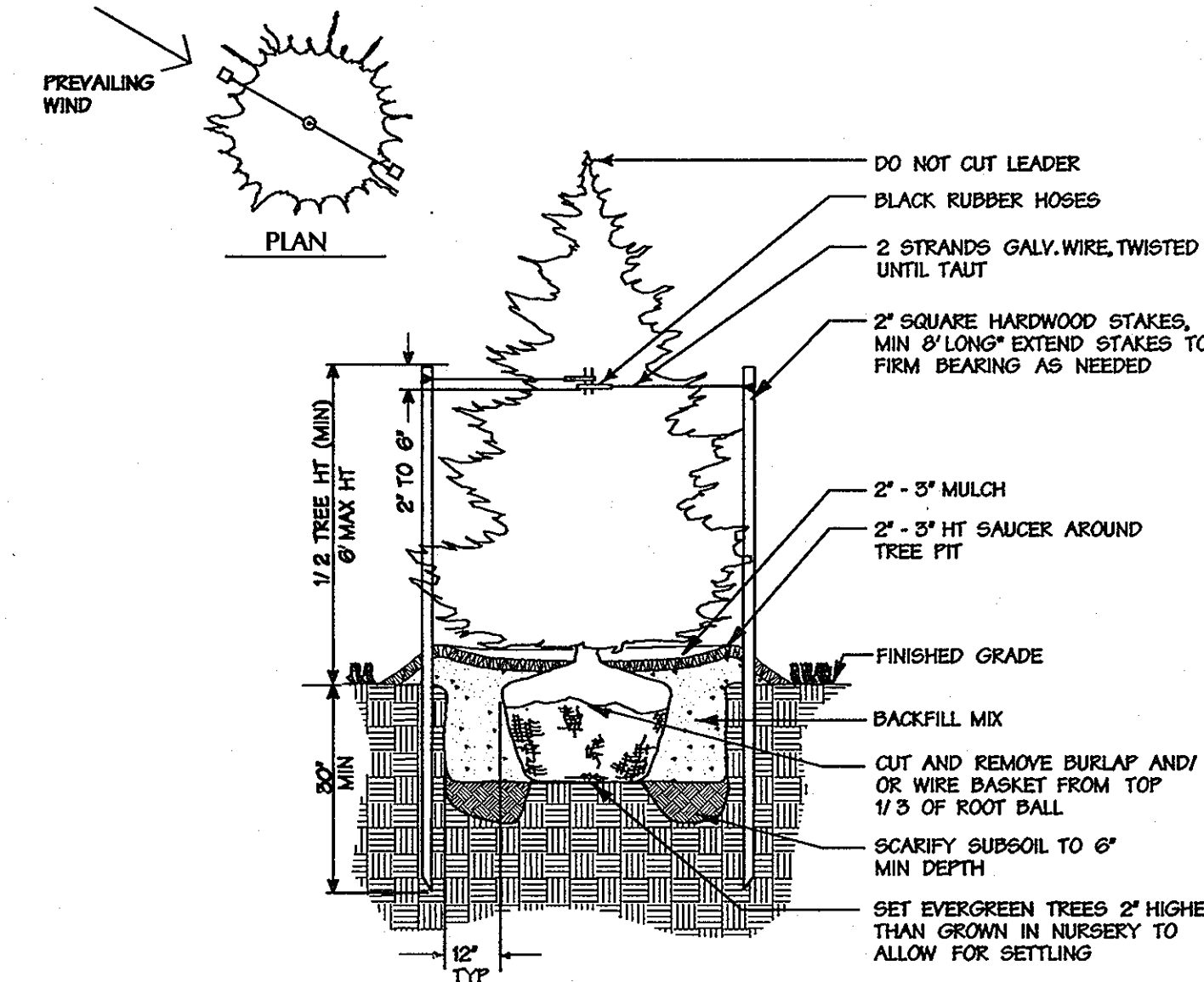
SUCCESS OF THE LANDSCAPE PLANTING WILL DEPEND UPON A COMBINATION OF NATURAL RAINFALL AND SUPPLEMENTAL IRRIGATION. IT SHOULD BE NOTED THAT IRRIGATION SHOULD BE APPLIED CAUTIOUSLY, AS NEW PLANTINGS ARE PARTICULARLY VULNERABLE TO OVER-WATERING. WATER CONDITIONS SHOULD BE MONITORED SIX INCHES BELOW THE SURFACE, AND POCKET PLANTED PLANT MATERIAL SHOULD BE CAREFULLY INVESTIGATED FOR ACCUMULATION OF WATER IN THE PLANTING FITS.

ANOTHER KEY INGREDIENT TO SUCCESSFUL PLANTING IS THE USE OF PLANT MATERIAL THAT HAS BEEN GROWN IN SIMILAR LIGHT AND WATER CONDITIONS TO THOSE PROPOSED. IN PARTICULAR, GROUNDCOVERS, ANNUALS, AND PERENNIALS -- WHICH MAY HAVE BEEN GROWN UNDER PROTECTED SHADING OR COVER AND ARE THEN SUBJECTED TO FULL WEATHER CONDITIONS -- MAY NEED CONDITIONING PRIOR TO INSTALLATION.



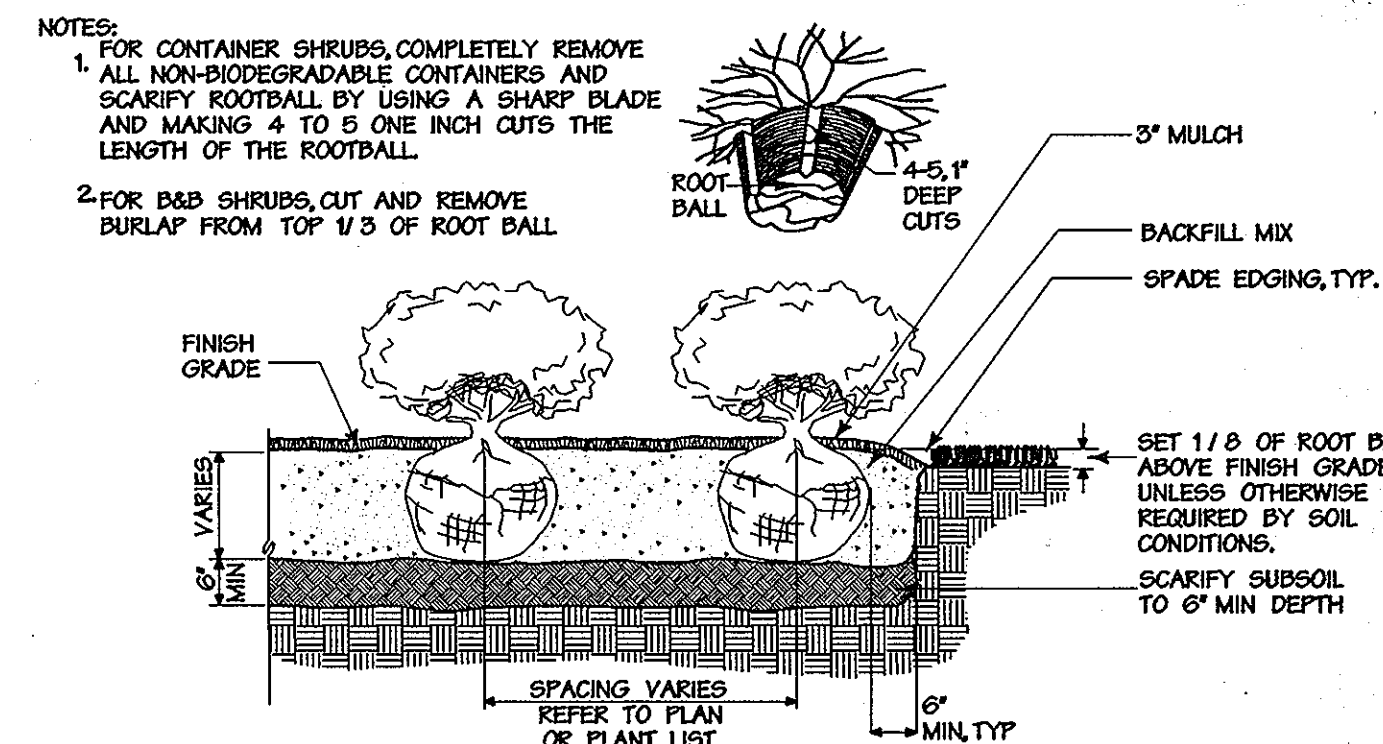
**Deciduous Tree Planting Detail**

Not to Scale



**Evergreen Tree Planting Detail**

Not to Scale



**Continuous Bed Shrub Planting Detail**

Not to Scale

**DEVELOPER'S / BUILDER'S CERTIFICATE**

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.

I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: *Paul Hudson* DATE: 12/16/11

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL."

PROVIDE THE FOLLOWING NOTE ON THE LANDSCAPE PLAN:

THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

AS-BUILT NOT REQUIRED  
SURVEY SERVICES OF MD, LLC.  
BY: ROBERT MATIS - REG. #605



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	4-10-12
<i>Paul Hudson</i> CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Paul Hudson</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	4-2-12
<i>Paul Hudson</i> DIRECTOR	4/1/12
DATE	DATE

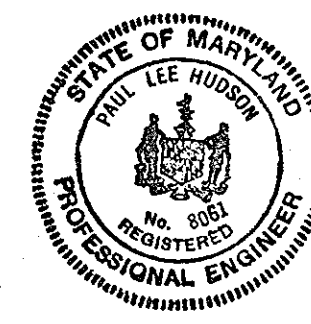
Date	No.	Revision Description
<b>EMERSON PARCEL B &amp; E-1</b>		
L.E.E.D. BUILDING		
5-STORY COMMERCIAL OFFICE BUILDING		
OWNER/DEVELOPER:		
PARCEL 'B' - EMERSON DEVELOPMENT LLC 1 TEXAS STATION COURT SUITE 200 TIMONIUM, MD 21085 TAX MAP 47 GRID 3 PARCEL 1051 EMERSON SECTION 3 AREA 1 DEED: 147917 TAX ACCT # 06-572253 PLAT: 16263	PARCEL 'E-1' - EMERSON DEVELOPMENT LLC 1 TEXAS STATION COURT SUITE 200 TIMONIUM, MD 21085 TAX MAP 47 GRID 20 PARCEL 965 RENTZ PROPERTY DEED: 1010619 TAX ACCT # 06-572221 PLAT: 16265	

<b>DMW</b> DAFT M'CVUNE WALKER INC.			
210 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286 P - 410.294.8333 F - 410.299.8706 WWW.DMW.COM			
A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS			
SUBDIVISION NAME RENTZ PROPERTY & EMERSON 3A	SECTION/AREA SECTION 3 AREA 1	LOT/PARCEL # PARCEL B & E-1 / PAR. 165	DATE 12/16/11
PLAT OR LOT 2107 & 2120	BLK # 20	TRCL # 47	SEWER CODE 606903
TITLE <b>LANDSCAPE DETAILS</b>			
Des. By TPC	Scale NTS	Proj. No. 950546	
Dm. By TPC	Date 12-13-11		
Chk. By THR/JDF	Approved		<b>23 of 26</b>

LANDSCAPE ARCHITECT			
SDP-12-010			

AS-BUILT  
CERTIFICATION FOR PSWM  
THERE IS NO "AS-BUILT" INFORMATION  
PROVIDED ON THIS SHEET.

*Paul Hudson* 5-28-13  
PAUL HUDSON PE#8061



Landscape Plans  
3 of 3  
12/16/11  
Date

LANDSCAPE ARCHITECT

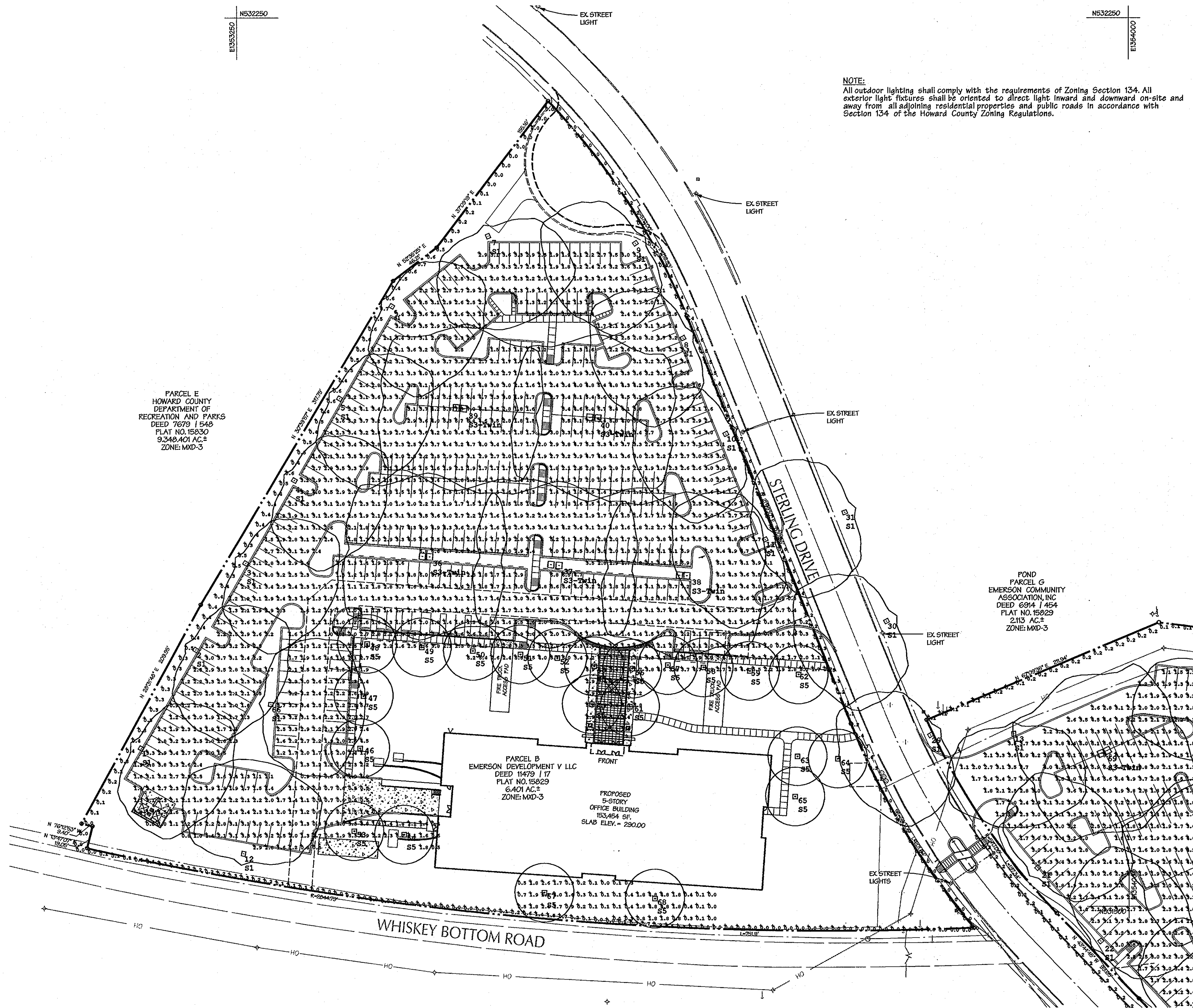


Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
Back of Building	Illuminance	Fc	1.14	4.9	0.0	N.A.
Boundary Lot 1	Illuminance	Fc	0.26	1.5	0.0	N.A.
Boundary Lot 2	Illuminance	Fc	0.09	0.3	0.0	N.A.
Parking Lot 1	Illuminance	Fc	2.63	7.5	0.2	13.15
Parking Lot 2	Illuminance	Fc	2.77	8.0	0.8	3.46

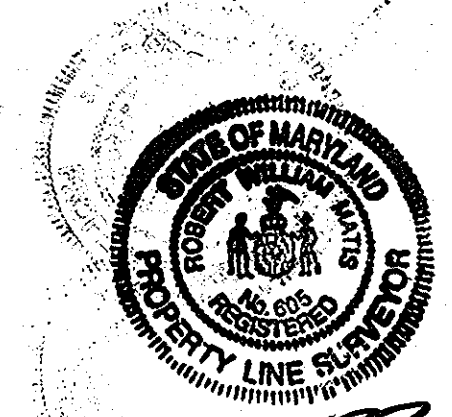
Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Lumens	LF	Description
□	22	S5	SINGLE	6700	0.880	SAC-45-140706
□	11	S3-Twin	GROUP	N.A.	0.800	(2) MPR-350-MF-MF-4S COOPER TRIBUTE TWIN ASSEMBLY
□	31	S1	SINGLE	33000	0.800	MFR-350-MF-XX-SL COOPER TRIBUTE SINGLE WITH SPILL LIGHT CONTROL

Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	TR
1	S1	1134	1288	30	330.396	0
2	S1	1180	1341	30	330.396	0
3	S1	1222	1414	30	330.396	0
4	S1	1263	1484	30	330.396	0
5	S1	1301	1553	30	330.396	0
6	S1	1345	1631	30	330.396	0
7	S1	1426	1690	30	292.109	0
8	S1	1590	1604	30	205.907	0
9	S1	1550	1684	30	213.69	0
10	S1	1626	1523	30	205.907	0
11	S1	1659	1434	30	205.907	0
12	S1	1230	1169	30	79.995	0
13	S1	1858	1270	30	273.356	0
15	S1	2030	1326	30	263.991	0
16	S1	2118	1316	30	262.876	0
17	S1	2207	1303	30	241.477	0
18	S1	2276	1242	30	220.601	0
19	S1	2342	1169	30	205.201	0
20	S1	2327	1060	30	162.951	0
21	S1	1888	1157	30	45	0
22	S1	1941	1095	30	39.805	0
23	S1	1998	1035	30	39.094	0
24	S1	2051	965	30	35.838	0
25	S1	2094	891	30	21.801	0
26	S1	2171	827	30	106.59	0
27	S1	2252	876	30	144.211	0
28	S1	2258	972	30	160.498	0
29	S1	1798	1269	30	211.608	0
30	S1	1761	1365	30	207.051	0
31	S1	1726	1457	30	200.265	0
36	S3-Twin	1372	1420	30	60.828	0
37	S3-Twin	1462	1413	30	60.828	0
38	S3-Twin	1590	1404	30	60.828	0
39	S3-Twin	1408	1545	30	229.399	0
40	S3-Twin	1514	1537	30	60.828	0
41	S3-Twin	2035	1165	30	79.992	0
42	S3-Twin	2122	1072	30	76.43	0
43	S3-Twin	2143	1211	30	257.9	0
44	S3-Twin	2221	1117	30	81.469	0
45	S3-Twin	2182	957	30	263.047	0
46	S5	1318	1288	12	0	0
47	S5	1321	1302	12	0	0
48	S5	1324	1346	12	0	0
49	S5	1370	1348	12	0	0
50	S5	1413	1340	12	0	0
51	S5	1453	1337	12	0	0
52	S5	1484	1334	12	0	0
53	S5	1515	1188	12	0	0
54	S5	1355	1185	12	0	0
55	S5	1515	1327	12	0	0
56	S5	1547	1325	12	0	0
57	S5	1577	1328	12	0	0
58	S5	1607	1326	12	0	0
59	S5	1646	1323	12	0	0
60	S5	1513	1295	12	0	0
61	S5	1545	1293	12	0	0
62	S5	1687	1320	12	0	0
63	S5	1686	1251	12	0	0
64	S5	1720	1249	12	0	0
65	S5	1684	1217	12	0	0
66	S1	1243	1295	30	356.186	0
67	S5	1473	1136	12	0	0
68	S5	1556	1131	12	0	0
69	S3-Twin	1943	1253	30	79.992	0

NOTE:  
All outdoor lighting shall comply with the requirements of Zoning Section 13.4. All exterior light fixtures shall be oriented to direct light inward and downward on-site and away from all adjoining residential properties and public roads in accordance with Section 13.4 of the Howard County Zoning Regulations.

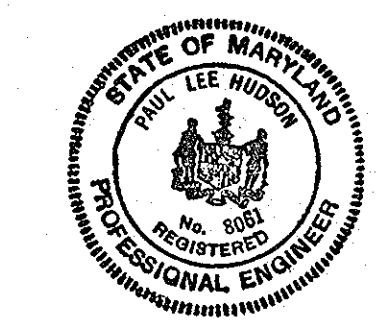


AS-BUILT NOT REQUIRED  
SURVEY SERVICES OF MD., LLC.  
BY: ROBERT MATIS - REG.# 005



AS-BUILT  
CERTIFICATION FOR PSMM  
THERE IS NO "AS-BUILT" INFORMATION  
PROVIDED ON THIS SHEET.

Paul Hudson 9-28-13  
PAUL HUDSON PE# 8061



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>Robert Matis</i> CHIEF, DIVISION OF LAND DEVELOPMENT	4-10-12 DATE
<i>Paul Hudson</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	4-2-12 DATE
<i>Mark L. Wright</i> DIRECTOR	4/10/12 DATE

Date	No.	Revision Description
<b>EMERSON PARCEL B &amp; E-1</b> L.E.E.D. BUILDING 5-STORY COMMERCIAL OFFICE BUILDING OWNER/DEVELOPER: PARCEL 'B' - EMERSON DEVELOPMENT V, LLC 1 TEXAS STATION COURT SUITE 200 TIMONUM, MD 21085 TAX MAP 47 GRID 9 PARCEL 1051 EMERSON SECTION 3 AREA 1 DEED: 1847917 TAX ACCT # 06-572553 PLAT: 15829		

**DMW**  
DAFT MCCUNE WALKER INC

230 EAST PENNSYLVANIA AVENUE • THURSDAY, MD 21296  
F: 410.296.8338 F: 410.296.4705 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS, ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SECTION NAME RENTZ PROPERTY & EMERSON 21077 & 21278	SECTION/AREA SECTION 3 AREA 1 BLOCK # 20 TAX/ZONE MAP 47	LOT/PARCEL # PARCEL B & E-1 PAR. 105 ELECT. DISTRICT 6	GENERIC TRACT 606903
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TITLE  
**LIGHTING PLAN - 'B'**

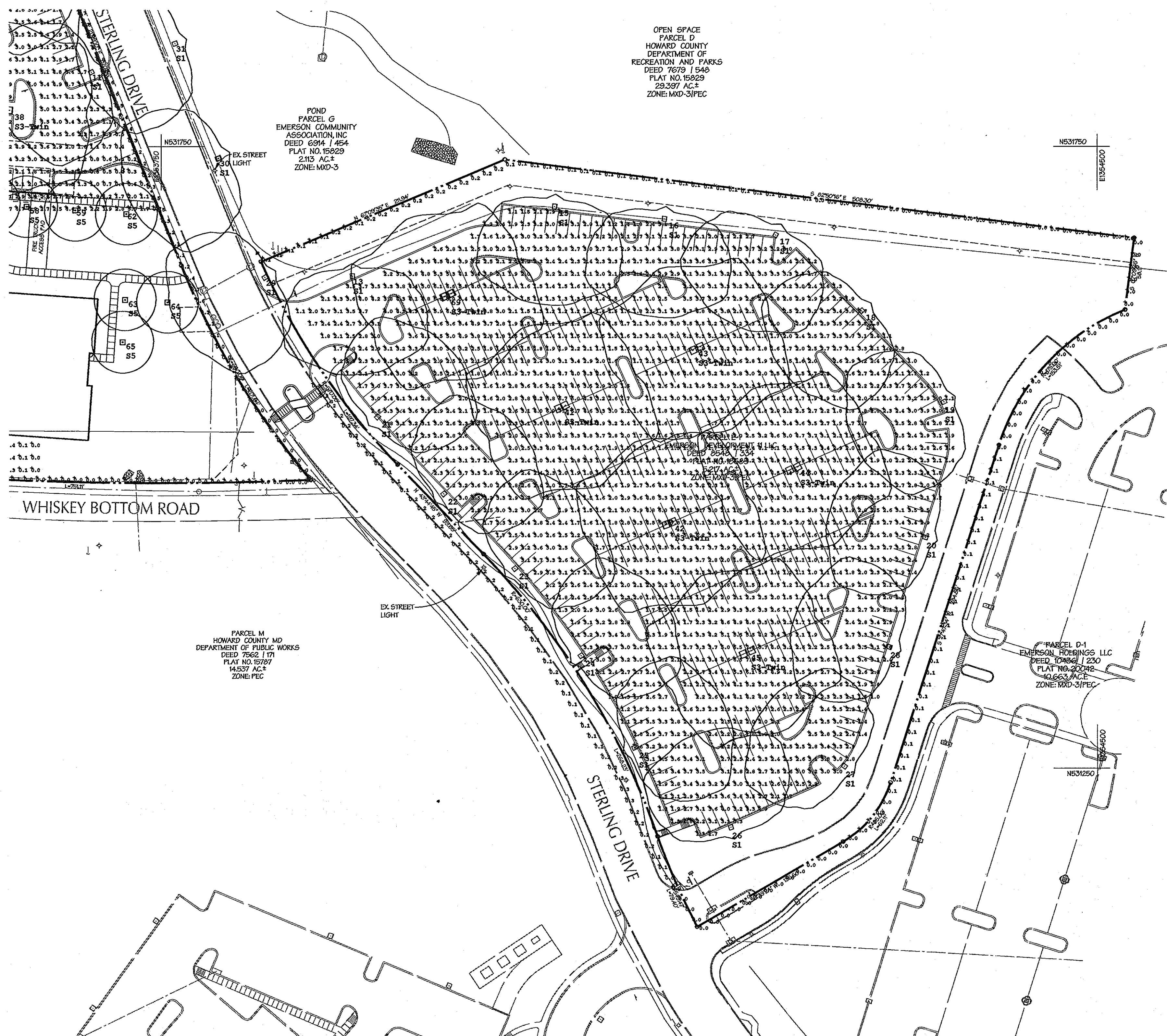
Des. By JBG	Scale 1" = 50'	Proj. No. 950546
Dim. By JSS	Date 12-13-11	<b>24 of 26</b>
Chk. By MCBJDF	Approved	



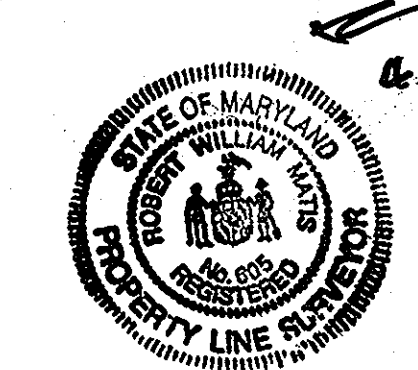
Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Max/Min
Back of Building	Illuminance	Fc	1.14	4.8	0.0	N.A.
Boundary Lot 1	Illuminance	Fc	0.26	1.5	0.0	N.A.
Boundary Lot 2	Illuminance	Fc	0.09	0.3	0.0	N.A.
Parking Lot 1	Illuminance	Fc	2.43	7.5	0.2	13.15
Parking Lot 2	Illuminance	Fc	2.77	8.0	0.8	3.46
						10.00

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Lumens	LF	Description
□	22	S5	SINGLE	2700	0.800	SAC-RS-147076
□	11	S5-Twin	GROUP	N.A.	0.800	MFTR-350-WP-ME-4S COOPER TRIBUTE TWIN ASSEMBLY
□	91	S1	SINGLE	33000	0.800	MFTR-350-WP-3X-4L COOPER TRIBUTE SINGLE WITH SPILL LIGHT CONTROL

Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	TIP
1	S1	1134	1288	30	330.396	0
2	S1	1180	1341	30	330.396	0
3	S1	1222	1414	30	330.396	0
4	S1	1263	1484	30	330.396	0
5	S1	1301	1553	30	330.396	0
6	S1	1345	1631	30	330.396	0
7	S1	1423	1690	30	292.109	0
8	S1	1590	1604	30	205.907	0
9	S1	1650	1684	30	213.69	0
10	S1	1626	1628	30	205.907	0
11	S1	1659	1434	30	205.907	0
12	S1	1220	1169	30	79.295	0
13	S1	1668	1290	30	275.345	0
14	S1	2030	1326	30	263.991	0
15	S1	2118	1316	30	262.875	0
16	S1	2207	1300	30	241.477	0
17	S1	2276	1242	30	220.601	0
18	S1	2342	1169	30	205.201	0
19	S1	2327	1080	30	162.951	0
20	S1	1888	1157	30	45	0
21	S1	1941	1095	30	39.806	0
22	S1	1998	1035	30	39.094	0
23	S1	2051	965	30	35.538	0
24	S1	2094	891	30	31.801	0
25	S1	2171	827	30	106.39	0
26	S1	2262	875	30	144.211	0
27	S1	2298	972	30	160.498	0
28	S1	1798	1289	30	211.608	0
29	S1	1761	1365	30	207.051	0
30	S1	1726	1457	30	200.266	0
31	S1	1372	1420	30	50.528	0
32	S5-Twin	1482	1413	30	50.528	0
33	S5-Twin	1390	1464	30	50.528	0
34	S5-Twin	1403	1545	30	229.359	0
35	S5-Twin	1514	1537	30	50.528	0
36	S5-Twin	2035	1165	30	79.992	0
37	S5-Twin	2122	1092	30	76.43	0
38	S5-Twin	2143	1211	30	257.8	0
39	S5-Twin	2221	1117	30	81.469	0
40	S5-Twin	2162	967	30	263.047	0
41	S5	1318	1298	12	0	0
42	S5	1321	1302	12	0	0
43	S5	1324	1346	12	0	0
44	S5	1370	1343	12	0	0
45	S5	1413	1340	12	0	0
46	S5	1453	1337	12	0	0
47	S5	1454	1334	12	0	0
48	S5	1313	1188	12	0	0
49	S5	1355	1185	12	0	0
50	S5	1515	1327	12	0	0
51	S5	1547	1325	12	0	0
52	S5	1577	1328	12	0	0
53	S5	1607	1326	12	0	0
54	S5	1646	1323	12	0	0
55	S5	1513	1295	12	0	0
56	S5	1545	1293	12	0	0
57	S5	1687	1320	12	0	0
58	S5	1686	1251	12	0	0
59	S5	1720	1249	12	0	0
60	S5	1684	1217	12	0	0
61	S1	1243	1295	30	355.186	0
62	S5	1473	1136	12	0	0
63	S5	1566	1131	12	0	0
64	S5-Twin	1943	1283	30	79.992	0



AS BUILT NOT REQUIRED  
 SURVEY SERVICES OF MD., LLC.  
 BY: ROBERT MATIS - REG.# 605



AS-BUILT  
 CERTIFICATION FOR PSWM  
 THERE IS NO "AS-BUILT" INFORMATION  
 PROVIDED ON THIS SHEET.  
 Paul Hudson 6-23-13  
 PAUL HUDSON PE#8061



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Robert Matis 4-10-12  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul Hudson 4-2-12  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Paul K. Leight 4/6/12  
 DIRECTOR DATE

Date No. Revision Description

**EMERSON PARCEL B & E-1**  
 L.E.E.D. BUILDING  
 5-STORY COMMERCIAL OFFICE BUILDING

OWNER/DEVELOPER:  
 PARCEL 'B' - EMERSON DEVELOPMENT V, LLC  
 1 TEXAS STATION COURT SUITE 200  
 TIMONIA, MD 21083  
 TAX MAP 47 GRID 8 PARCEL 1051  
 EMERSON SECTION 3 AREA 1  
 DEED: H47917  
 TAX ACCT # 06-572253  
 PLAT: 16623

PARCEL 'E-1' - EMERSON DEVELOPMENT II, LLC  
 1 TEXAS STATION COURT SUITE 200  
 TIMONIA, MD 21083  
 TAX MAP 47 GRID 20 PARCEL 165  
 REMITZ PROPERTY  
 DEED: H010619  
 TAX ACCT # 06-572221  
 PLAT: 16685

**DMW**  
 DAFT M'CUNE WALKER INC.  
 200 EAST PENNSYLVANIA AVENUE • TOWSON, MD 21286  
 P: 410 299 3323 F: 410 299 4795 WWW.DMW.COM

A TEAM OF LAND PLANNERS, LANDSCAPE ARCHITECTS,  
 ENGINEERS, SURVEYORS & ENVIRONMENTAL PROFESSIONALS

SUBDIVISION NAME: EMERSON SECTION 3 AREA 1  
 SECTION/AREA: PARCEL B & E-1  
 LOT/PARCEL #: PAR. 165

PLAT# OR LOT: 2177 & 2178  
 BLOCK #: 20  
 DEED: 16623  
 SAV/ZONE MAP: 47  
 TRACT/DISTRICT: 6  
 CROSS TRACT: 606903

WATER CODE: SEWER CODE:

TITLE: **LIGHTING PLAN - 'E-1'**

Des. By: JBS Scale: 1" = 50' Proj. No. 95054.6  
 Dm. By: JSS Date: 12-13-11  
 Chk. By: MCB/JDF Approved

**25 of 26**

SDP-12-010