50IL5 LEGEND						
50IL	NAME	CLA55	K FACTOR			
GgA	Glenelg loam, 0 to 3 percent slopes	В	0.20			
GgB	Glenelg loam, 3 to 8 percent slopes	В	0.20			
GgC	Glenelg loam, 8 to 15 percent slopes	В	0.20			
GmB	Glenville silt loam, 3 to 8 percent slopes	С	0.37			

STORMWATER	MANAGEMENT I	PRACTICES	5
ADDRE55	MICRO-BIORETEN M-6 (NUMBER)	NOITH	ION-ROOFTOP ISCONNECTION N-2 (NUMBER)
14290 TRIADELPHIA ROAD	1		1

STORMWATER MANAGEMENT SUMMARY CHART AREA = 1.49 ACRES

RCN = 55TARGET PE = 1.6°

DESIGN NARRATIVE

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

14290 Triadelphia Road is being renovated for use as an interior design business. The property is zoned RC-DEO and has an approved conditional use under BA-14-004C&V to utilize the existing structure as an interior design business. The property is located on Tax Map 21, Grid 18, Parcel Nos. 104 & 135 of the Howard County, Maryland Tax Map Database System. The property is made up of two existing parcels of ground located at the northwest corner of Sharp Road and Triadelphia Road. The existing structure will utilize a private well and septic system. The property is located in the Glenelg area of Howard County draining to an off-site unnamed tributary of the Brighton Dam - Patuxent River watershed (02131100). This property is relatively trapizoidal in shape and majority of runoff on—site is mainly from north to south, along Triadelphia Road. The site is not forested and contains no wetlands, wetland buffers, stream, stream buffers, steep slopes, or 100 year floodplain, per a field inspection conducted by Eco-Science Professionals (ESP) dated August, 2014. The Web Soil Survey shows soils on the site consist of Glenelg loam (GgB), Type "B" soils which exist throughout the site. The site is improved by an old church building and a gravel parking / driveway area. Gravel area is proposed to be somewhat reconfigured and improved with top paving. The runoff from the majority of the driveway and parking area is to be directed overland to a micro-bioretention facility near the intersection of Sharp Road and Triadelphia Road. A portion of the remaining existing / proposed driveway not flowing to the micro-bioretention will utilize non-rooftop disconnection (N-2). Since stormwater management for a small portion of this driveway access onto Triadelphia Road cannot be provided due to the slope of the access drive and closed proximity to the existing well, we feel ESD to the MEP has been provided. Also, due to the fact that the property is already improved, treatment is not required for the existing structure.

- Environmentally sensitive areas do not exist on—site (steep slopes, wetlands, wetland buffer, floodplain, stream, or stream buffer), therefore no special effort to protect natural resources is
- II. Maintenance of Natural Flow Patterns: It is the intent of the proposed design to discharge runoff similar to the characteristics and direction of this site prior to any of the proposed improvements.
- III. Reduction of impervious areas through better site design, alternative surfaces and Nonstructural The design of this project utilizes access driveways on both Sharp Road and Triadelphia Road with an on-site parking area. Non-Structural practices as permitted in Chapter 5, one (1) Micro-Bioretention Area (M-6) and Non-Rooftop Disconnection (N-2) will be used to address ESD to the MEP requirements.

FOREST CONSERVATION WORKSHEET

version 1.0

 $0.15\% \times 0 =$

 $0.15\% \times 0 =$

0.09

BASIC SITE DATA:

A. TOTAL TRACT AREA.

C. NET TRACT AREA.

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)

ARA MOR IDA HOR MPD CIA

F. EXISTING FOREST COVER WITHIN NET TRACT AREA ..

G. AREA OF FOREST ABOVE CONSERVATION THRESHOLD: .

H. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION

L. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD...

M. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD..

*NOTE: FOREST CONSERVATION OBLIGATION FOR THE PROPOSED IMPROVEMENTS HAS

BEEN CALCULATED IN ACCORDANCE WITH DPZ POLICY MEMO DATED 9/15/06.

THE LOD IN ACCORDANCE WITH THE POLICY. FUTURE DEVELOPMENT OF THIS

THOSE PLANS, THE LOD RELATIVE TO THE 40,000 SQUARE FOOT THRESHOLD

APPLICANT HAS ELECTED TO BASE THE FOREST CONSERVATION CALCULATIONS ON

SITE EITHER THROUGH A SERIES OF SITE DEVELOPMENT PLANS OR REDLINES TO

THE PROPOSED LIMIT OF DISTURBANCE IS LESS THAN 40,000 AND THE

N. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD.

R. TOTAL REFORESTATION AND AFFORESTATION REQUIRED.

INFORMATION FOR CALCULATIONS

E. FOREST CONSERVATION THRESHOLD

I. CLEARING PERMITTED WITHOUT MITIGATION ..

J. TOTAL AREA OF FOREST TO BE CLEARED

K. TOTAL AREA OF FOREST TO BE RETAINED ...

PROPOSED FOREST CLEARING:

PLANTING REQUIREMENTS:

P. TOTAL REFORESTATION REQUIRED.

Q. TOTAL AFORESTION REQUIRED

5. EXCESS FOREST CREDIT

D. AFFORESTATION THRESHOLD

EXISTING FOREST COVER:

BREAK EVEN POINT:

B. DEDUCTIONS ...

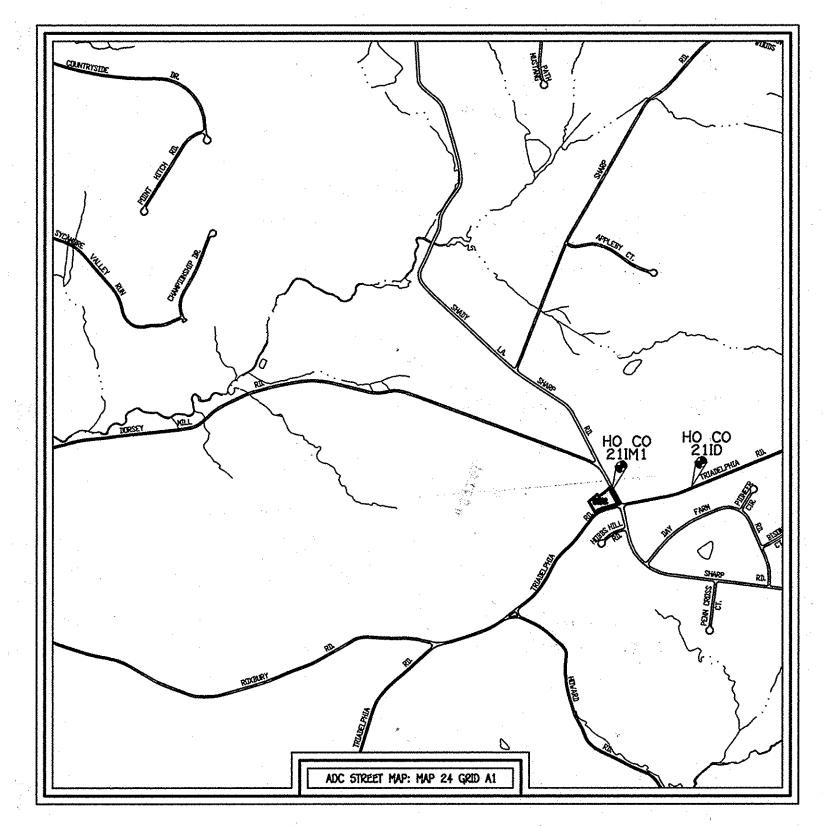
- IV. Integration of Erosion and Sediment Controls into Stormwater Strategy: The majority of the site runoff sheet flows from north to south to Triadelphia Road. Silt fence. super silt fence, and erosion control matting will be utilized for erosion & sediment control. There is no direct discharge of runoff directly to a stream. All site runoff will discharge to the existing ground prior to entering a distant off-site stream channel and eventually to Brighton Dam - Patuxent River. No drainage & utility easements will be required. It is anticipated that all cut will be utilized on-site for construction at time of Site Development Plan.
- V. Implementation of ESD Planning Techniques and practices to the Maximum Extent Practicable ESD to the MEP has been provided. Stormwater management for a small portion of this driveway access onto Triadelphia Road cannot be provided due to the slope of the access drive and closed proximity to the existing well. Also, due to the fact that the property is already improved, treatment is not required for the existing structure, therefore the full required ESD volume has not been provided.
- VI. Request for a Design Manual Waiver: No Waivers related to stormwater management are being requested in this project.

SITE ANALYSIS DATA CHART

- TOTAL AREA OF THIS SUBMISSION = 1.49 AC.+. LIMIT OF DISTURBED AREA = 0.62 Ac. ±
- PRESENT ZONING DESIGNATION = RC-DEO (PER 10/06/2013 COMPREHENSIVE ZONING PLAN) PROPOSED USE: COMMERCIAL - INTERIOR DESIGN BUSINESS (APPROVED WITH BA-14-004C&V)
- E. RELATED DPZ FILE #5: HISTORIC SITE HO-209, CEMETERY SITE 21-1; BA-82-22E (PREVIOUS CRAFT 5HOP USE): BA-14-004C&V; ECP-15-010; WP-15-032.
- TOTAL AREA OF FLOODPLAIN LOCATED ON SITE = 0.00 AC± TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.00 AC+
- TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC. ± TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0.00 AC. \$\delta\$
- TOTAL AREA OF EXISTING FOREST = 0.00 AC= TOTAL AREA OF FOREST TO BE RETAINED = 0.00 AC+
- TOTAL AREA OF LOTS / BUILDABLE PARCELS = 1.49 AC+
- TOTAL GREEN OPEN AREA = 1.13 AC*
- TOTAL IMPERVIOUS AREA = 0.36 AC+ (INCLUDING EXISTING STRUCTURE) TOTAL AREA OF ERODIBLE SOILS = 0.00 AC.+

SITE DEVELOPMENT PLAN HOMEWOOD PROPERTIES PARCEL A

TAX MAP No. 21 GRID No. 18 PARCEL NO. 135 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



В	ENCHMARK INFORMATION
B.M.#1	- Howard County Control Station #211M1 - Horizontal - NAD '03) (Located Along Sharp Road, 200 feet north of the intersection with triadelphia road) N 580,489.534 E 1,309,698.018 ELEVATION = 580.72 - VERTICAL - (NAVD '86)
B.M.#2	- Howard county control station #2110 - Horizontal - (NAD '03) (Located along triadelphia road approximately 900 feet east of the intersection with sharp road N 500,541.470 E 1,310,693.627 ELEVATION = 503.44 - VERTICAL - (NAVD '00)

. AC	DRESS CHART
PARCEL NO.	STREET ADDRESS
104 & 135	14290 TRIADELPHIA ROAD

	LEGEND				
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION		
`~492"	EXISTING 2' CONTOURS	102	PROPOSED CONTOUR		
490	EXISTING 10' CONTOURS	+362.5	SPOT ELEVATION		
<u>G</u> g8_ Gm8	SOILS LINES AND TYPE	LOD	LIMITS OF DISTURBANCE		
~~~~	existing treeline		DRAINAGE AREA OMOE		
<b>⊕5T1</b>	SPECIMEN TREE		PROPOSED PAVING		
<b>O</b> 36	BORING (PERC) TEST HOLE	—- TP ——	TREE PROTECTION		
	NON-ROOFTOP, DISCONNECTION (N-2)	—-5F—	SILT FENCE		
	existing landscaping	ECM	EROSION CONTROL MATTING		
		55#	SUPER SILT FENCE		
<b>A</b> A	LOW VOLTAGE OUTDOOR LED LANDSCAPE LIGHTING FIXTURES		STABILIZES CONSTRUCTION ENTRANCE		
Δ	LOW VOLTAGE LED MOON LIGHTING FIXTURES	JASSAL.			
*	existing grave stones	•	existing grave isle markers		
	existing gravel drive to be removed		EXISTING GRAVEL DRIVE TO REMAIN		
x	EXISTING WHITE VINYL FENCE	TBA	TO BE ABANDONED		

GENERA	LI	NOT	TES

SUBJECT PROPERTY IS ZONED RC-DEO PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN. TOTAL PROJECT AREA = 1.49 AC.*
AREA OF PLAN SUBMISSION =1.49 AC.*
LIMIT OF DISTURBED AREA = 0.62 AC.*

EXISTING USE = EXISTING (VACANT) CHURCH
PROPOSED USE = INTERIOR DESIGN BUSINESS (BA-14-004C&V)
NUMBER OF PARKING SPACES REQUIRED = 3,203 SQ.FT. X 3.3 SPACES PER 1,000 SQ.FT. = 11 SPACES
NUMBER OF PARKING SPACES PROVIDED = 11 SPACES (INCLUDES 1 HANDICAP ACCESSIBLE SPACE).
DEED REFERENCE: LIBER 14715, FOLIO 33 & LIBER 15791, FOLIO 469.
LOCATION: 14290 TRIADELPHIA ROAD, GLENELG, MARYLAND 21737.
RELATED DPZ FILE NUMBERS: BA-14-004C&V; HISTORIC SITE HO-209; CEMETERY SITE 21-1; BA-02-22E (PREVIOUS CRAFT SHOP USE); ECP-15-010;
WP-15-032; F-15-037.

THE PROPERTY IS NOT WITHIN THE METROPOLITAN DISTRICT.

THIS PROPERTY IS NOT WITHIN THE METROPOLITAN DISTRICT.
THIS PROPERTY IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT SHALL NOT BE NECESSARY.

SOIL BOUNDARIES ARE BASED ON NRCS WEBSOIL SURVEY. Boundary shown Hereon is based on a field run survey performed by NJR & Associates, LLC in January 2013.

Topography shown Hereon is based on a topographic surveys performed by fisher, collins & carter, inc. dated august 2014, NJR & Associates, LLC in January 2013, and supplemented with Howard county GIS topography at 5' contour interval interpolated for 2' contour interval and FIELD LOCATIONS BY FISHER, COLLINS & CARTER, INC. IN DECEMBER 2013.

9. THERE ARE NO PLOODPLANS, WETLANDS, STREAMS, OR THEIR BUFFERS, STEEP SLOPES, OR CEMETERIES ON THIS SITE. A CEMETERY IS LOCATED ADJACENT T

9. THERE ARE NO PLOODPLAINS, WEIGHNES, STREAMS, OR THEIR BUPPERS, STEEP SLOPES, OR CEMETERIES ON THIS SITE. A CEMETERY IS LOCATED ADJACENT TO THE PROPERTY (TO THE NORTH).

10. NO WEILANDS OR FOREST STANDS EXIST PER FIELD INVESTIGATION BY ECO-SCIENCE PROFESSIONALS DATED AUGUST 2014.

11. THE EXISTING STRUCTURE, FORMERLY THE M.E.C.S. CHURCH, IS LISTED ON THE HISTORIC SITES INVENTORY AS HO-209. THE EXISTING STRUCTURE DATES TO 1809. AND WENT BEFORE THE HISTORIC COMMISSION ON FEBRUARY 6, 2014. THE COMMISSION DETERMINED THE CHANGES TO THE STRUCTURE WERE ARCHITECTURALLY COMPATIBLE WITH THE HISTORIC NATURE OF THE BUILDING. THE CEMETERY ISSUES WERE NOT PART OF THE APPLICATION TO THE HDC.

12. EXISTING STRUCTURE TO REMAIN AND EXISTING GRAVEL ACCESS DRIVE & PARKING TO BE RECONFIGURED AND PAYED.

13. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE BURGES.

410.850.4620 .800.257.77 COLONIAL PIPELINE COMPANY 110,795,1390 HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES HOWARD COUNTY HEALTH DEPARTMENT 1.800.743.0033/410.224.9210

14. THE CONTRACTOR SHALL NOTIFY MESS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
15. ANY DAMAGE TO PUBLIC RIGHT-OF WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
16. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
17. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND

19. EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS, AND MISS UTILITY MARKINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED

20. ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
21. ALL TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL

22. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE

SINCE THIS IS AN ALREADY BUILT SITE, THE LIMIT OF DISTURBANCE IS BEING UTILIZED AS THE NET TRACT AREA TO DETERMINE FOREST CONSERVATION REQUIREMENTS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT. THIS PLAN COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY PAYMENT OF A FEE-IN-LIEU OF AFFORESTATION IN THE

REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY PAYMENT OF A FEE-IN-LIEU OF AFFORESTATION IN THE AMOUNT OF \$3,724.38 (3,920.4 SQ.FT. X \$0.95/5Q.FT.) FOR 0.09 ACRES (3,920.4 SQ.FT.) OF AFFORESTATION.

27. FOREST CONSERVATION OBLIGATION FOR THE PROPOSED IMPROVEMENTS HAS BEEN CALCULATED IN ACCORDANCE WITH DPZ POLICY MEMO DATED 9/15/06. THE PROPOSED LIMIT OF DISTURBANCE IS LESS THAN 40,000 AND THE APPLICANT HAS ELECTED TO BASE THE FOREST CONSERVATION CALCULATIONS ON THE LOD IN ACCORDANCE WITH THE POLICY. FUTURE DEVELOPMENT OF THIS SITE EITHER THROUGH A SERIES OF SITE DEVELOPMENT PLANS OR REDLINES TO THOSE PLANS, THE LOD RELATIVE TO THE 40,000 SQUARE FOOT THRESHOLD WILL BE TRACKED CUMULATIVELY. ONCE THE CUMULATIVE LOD EQUALS OR EXCEEDS 40,000 SQUARE FLET IN AREA, THE ENTIRETY OF THE SITE (LESS ANY APPLICABLE DEDUCTIONS SUCH AS 100-YEAR FLOODPLAIN) MUST BE USED AS THE NET TRACT AREA (NTA).

20. EXISTING WELL WILL BE UTILIZED. EXISTING SEPTIC SYSTEM MUST BE ABANDONED AND REPLACED WITH NEW SEPTIC SYSTEM UTILIZING A BAT UNIT AND A LOW PRESSURE DOSED DISTRIBUTION SYSTEM. ALL INITIAL AND REPLACEMENT SEPTIC LATERALS AND TRENCHES LOCATED UNDER PAVEMENT MUST BE INSTALLED DURING THAT AND REPLACEMENT SEPTIC LATERALS AND TRENCHES LOCATED UNDER PAVEMENT MUST BE INSTALLED DURING THAT AND REPLACEMENT SEPTIC LATERALS AND TRENCHES LOCATED UNDER PAVEMENT MUST BE INSTALLED DURING

INITIAL INSTALLATION. SEPTIC SYSTEM MUST BE REPLACED PRIOR TO HEALTH SIGNATURE OF A BUILDING PERMIT.

29. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL, SINCE EXISTING STRUCTURE IS TO REMAIN AND ONLY A PARKING AREA / ACCESS DRIVE IS BEING CREATED, ONLY LANDSCAPING TO BUFFER THE PARKING AREA HAS BEEN PROVIDED. FINANCIAL SURETY IN THE AMOUNT OF \$2,790 FOR 3 SHADE TREES, 3 EVERGREENS, AND 40 SHRUBS WILL BE POSTED AS PART OF THE DPW

DEVELOPERS AGREEMENT.

30. 95% COMPACTION IN FILL AREAS SHALL BE IN ACCORDANCE WITH AASTHO T-180 STANDARDS.

31. UNDER BA-14-004C&V, A CONDITIONAL USE PETITION HAS BEEN APPROVED FOR THE INTERIOR DESIGN BUSINESS USE ALONG WITH A VARIANCE TO REDUCE THE REAR SETBACK FROM 30 FEET TO 9.0 FEET FOR A DECK AND TO REDUCE THE REAR SETBACK FROM 30 FEET TO 21.9 FEET FOR THE EXISTING BUILDING HAS BEEN APPROVED (SEE DIMENSIONS WITH ASTERISKS (*) ON THE PLAN). DECISION & ORDER DATED MAY 20, 2014 AND RECONSIDERATION REMOVING PREVIOUS

CONDITION OF APPROVAL #3 DATED JUNE 4, 2014. JUNE 4, 2014 APPROVAL WAS GRANTED WITH THE FOLLOWING CONDITIONS:

(1) THE CONDITIONAL USE SHALL BE CONDUCTED IN CONFORMANCE WITH AND SHALL APPLY ONLY TO THE CONDITIONAL USE FOR AN HISTORIC BUILDING TO BE USED AS AN INTERIOR DESIGN BUSINESS WITH LIMITED PRIVATE SHOWROOM SALES AS AN ACCESSORY USE, AS DESCRIBED IN THE PETITION AND PLAN SUBMITTED ON FEBRUARY 24, 2014, AND NOT TO ANY OTHER ACTIVITIES, USES, OR STRUCTURES ON THE PROPERTY. NO PUBLICLY ADVERTISED RETAIL SALES ARE PERMITTED. PETITIONER SHALL OBTAIN A WAIVER FROM THE LAND DEVELOPMENT AND SUBDIVISION REGULATIONS SECTION 16.118(c). WHICH PROHIBITS GRADING AND

CONSTRUCTION WITHIN 30 FEET OF A CEMETERY AND 10 FEET OF INDIVIDUAL GRAVESITES.
PETITIONER SHALL DEMONSTRATE TO THE SATISFACTION OF THE DEPARTMENT OF PLANNING AND ZONING THAT IT HAS OBTAINED TITLE TO THE TRIANGULAR PORTION OF LAND IDENTIFIED BY THE DEPARTMENT AS PARCEL 104 PRIOR TO MAKING ANY CHANGES TO THE LAND AREA AT ISSUE OR COMMENCING USE of this area. Petitioner shall record a plat or obtain a waiver and record an adjoiner deed to combine the two parcels.

(5) PETITIONER SHALL COMPLY WITH ALL AGENCY COMMENTS.

32. NO EXPANSION OF THE EXISTING STRUCTURE IS PROPOSED, THEREFORE A COMMUNITY MEETING WAS NOT REQUIRED.

33. THERE ARE NO KNOWN CEMETERIES OR BURIAL GROUNDS LOCATED ON—SITE WITHIN THE LIMITS OF THIS PARCEL. HOWEVER, UPON DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPER WILL BE SUBJECT TO SECTION 16.1305 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. BURIAL GROUNDS WILL NOT BE DISTURBED EXCEPT AS PERMITTED BY STATE LAW. 34. NINE (9) SPECIMEN TREES EXIST ON-SITE, ALL OF WHICH ARE TO BE RETAINED.

34. NINE (9) SPECIMEN TREES EXIST ON-SITE, ALL OF WHICH ARE TO BE RETAINED.

35. PORTIONS OF THE EXISTING STRUCTURE WHICH ARE LOCATED WITHIN THE BUILDING RESTRICTION LINES (BRLS) ARE NON-CONFORMING WITH RESPECT TO THE BRLS
AS SET FORTH UNDER SECTION 104.0 OF THE ZONING REGULATIONS AND THAT THEY EXISTED PRIOR TO THIS SITE DEVELOPMENT PLAN; AND THAT, NO NEW
BUILDINGS, EXTENSIONS, OR ADDITIONS TO THE EXISTING STRUCTURE ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS REQUIRE.

36. UNDER BA-14-004C&V, A REAR SETBACK REDUCTION FOR THE DECK AT THE CLOSEST POINT FROM THE REAR PROPERTY LINE WAS APPROVED TO BE 9.0 FEET;
HOWEVER, THE DECK HAS BEEN CONSTRUCTED TO BE 9.5 FEET FROM THE REAR PROPERTY LINE. DPZ AGREES THAT THE TRIANGULAR POINT OF THE DECK
EXTENDING 0.3 FEET (3.6 INCHES) INTO THE ALLOWED SETBACK ALLOWABLE SINCE THAT PORTION OF THE DECK IS CONSIDERED TO BE FOR ARCHITECTURAL AFFECT

ONLY AND NON-USEABLE; AND, THE USABLE DECK AREA (INSIDE OF THE RAILING OF THE DECK) SATISFIES THE 9.0 FOOT DISTANCE FROM THE REAR PROPERTY LINE AND IS IN ACCORDANCE WITH THE 8A-14-004C&V DECISION AND ORDER.

37. WP-15-032 WAS APPROVED ON NOVEMBER 4, 2014 WAVING SECTION 16.110(c) WHICH REQUIRES THAT NO GRADING OR CONSTRUCTION SHALL BE PERMITTED WITHIN 30 FEET OF A CEMETERY BOUNDARY OR WITHIN 10 FEET OF INDIVIDUAL GRAVES. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

(1) REVIEW AND APPROVAL OF A GRAVE LOCATION SURVEY IS REQUIRED WITH THE SUBDIVISION PLAT, F-15-037. THIS SURVEY IS REQUIRE TO INSURE THAT

REVIEW AND APPROVAL OF A GRAVE LOCATION SURVEY IS REQUIRED WITH THE SUBDIVISION PLAT, F-15-037. THIS SURVEY IS REQUIRE TO INSURE THAT THE CEMETERY LIMITS AND NO INDMIDUAL GRAVE(S) EXIST ON THIS SITE. IF THE FINDINGS OF THE GRAVE LOCATION SURVEY SHOW THAT ANY PORTION OF THE CEMETERY OR ANY INDIVIDUAL GRAVE(S) EXIST WITHIN THIS SITE, THEN THE SUBDIVISION PLAT SHALL BE DESIGNED TO BE IN ACCORDANCE WITH THE CEMETERY PRESERVATION REQUIREMENTS AS OUTLINED IN SECTION 16.1304 OF THE SUBDIVISION AND LAND DEVELOPMENT REQULATIONS AND PLANNING BOARD APPROVAL WILL BE REQUIRED.

WAVER APPROVAL FOR CONSTRUCTION WITHIN 30-FEET OF THE CEMETERY BOUNDARY IS TO COINCIDE WITH THE LIMIT OF DISTURBANCE (LOD) AS APPROVED UNDER SDP-15-010. THE LOD FOR THE PROPOSED IMPROVEMENTS SHALL COINCIDE WITH THE LIMITS OF THE PREVIOUS DISTURBED AREA FOR THE EXISTING GRAVEL DRIVE AND PARKING AREAS WHICH ARE SHOWN ON THE WAVER PETITION EXHIBIT TO BE LOCATED APPROXIMATELY 22-FEET FROM

THE EXISTING GRAVEL DRIVE AND PARKING AREAS WHICH ARE SHOWN ON THE WAVER PETITION EXHIBIT TO BE LOCATED APPROXIMATELY 22-FEET FROM THE FENCE AND BOUNDARY OF THE OFF-SITE CEMETERY AT THE CLOSEST POINT.

GRADING OR CONSTRUCTION WITHIN 10-FEET OF AN INDIVIDUAL GRAVE(5) HAS NOT BEEN APPROVED UNDER THIS WAVER PETITION REQUEST.

BASED ON THE PROPOSED LOD SHOWN ON THE SOP AND WAIVER PETITION EXHIBIT, NO GRADING OR CONSTRUCTION TO THE AREA BETWEEN THE REAR OF THE EXISTING CHURCH STRUCTURE AND THE CEMETERY IS APPROVED UNDER THIS WAIVER PETITION REQUEST.

UNDER DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPER WILL BE SUBJECT TO SECTION 16.1305 OF THE HOWARD COUNTY SUBDIMISION AND LAND DEVELOPMENT REQUILITIONS. BURIAL GROUNDS SHALL NOT BE DISTURBED EXCEPT AS PERMITTED BY STATE LAW.

WILL BE TRACKED CUMULATIVELY. ONCE THE CUMULATIVE LOD EQUALS OR EXCEEDS 40,000 SQUARE FEET IN AREA, THE ENTIRETY OF THE SITE (LESS ANY APPLICABLE DEDUCTIONS SUCH AS 100-YEAR FLOODPLAIN) MUST BE USED AS PARKING SPACES REQUIRED = 3,203 SQ.FT. X 3.3 SPACES PER 1,000 SQ.FT. = 11 SPACES THE NET TRACT AREA (NTA). PARKING SPACES PROVIDED = 11 SPACES (INCLUDES 1 HANDICAP ACCESSIBLE SPACE) DESIGN BY: SJT PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AN DRAWN BY: AF/5JT CHECKED BY: HAT I AM A DULY LICENSED PROFESSION engineer under the laws of the state of maryland, license no. 38386, XPERATION DATE: 01/12/2016. FISHER. COLLINS & CARTER. INC. <u>IVIL ENGINEERING CONSULTANTS & LAND SÜRVEYOR</u> SOUARE OFFICE PARK -- 10272 BALTIMORE NATIONAL PR NO.

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT OWNERS HOMEWOOD PROPERTIES, LLC 14290 TRIADELPHIA ROAD GLENELG, MD 21737

approved: department of planning and zoning 8-10-15 8.5-15 PARCEL NO. HOMEWOOD INTERIORS, PARCEL A N/A ELEC. DIST. CENSUS TR. PLAT REF. BLOCK NO. ZONE TAX/ZONE 604002 FOURTH RC-DEO 23287

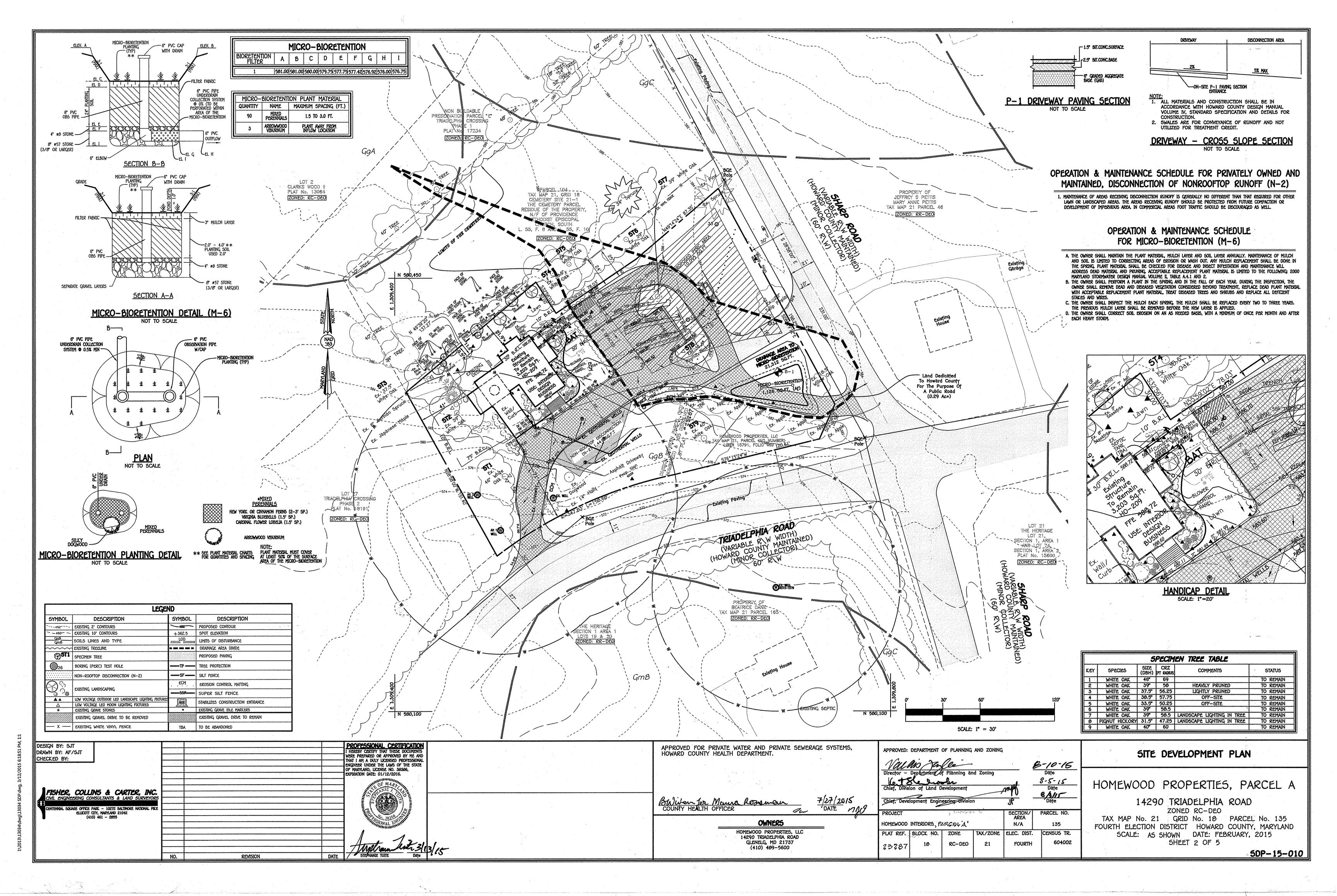
TITLE SHEET

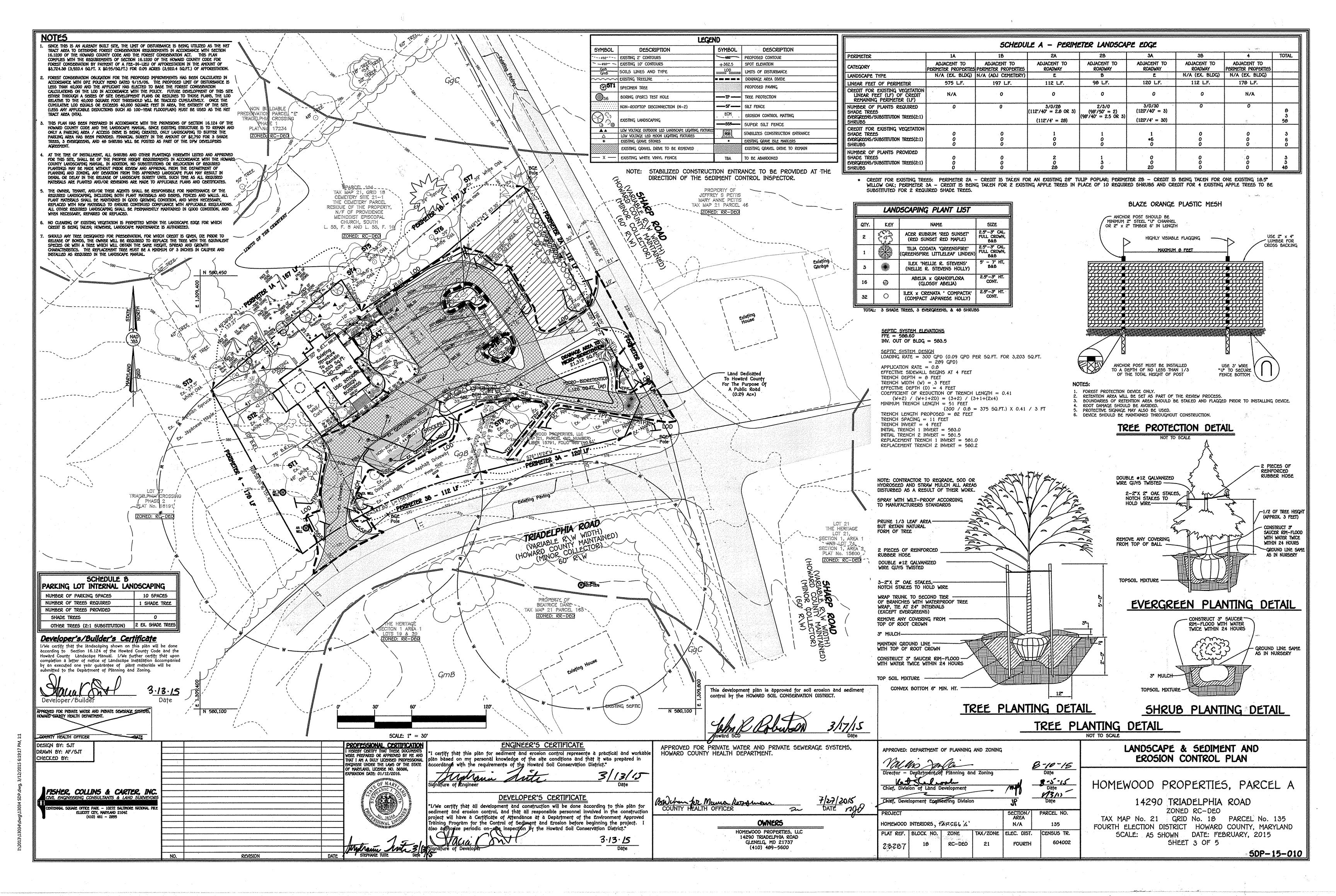
HOMEWOOD PROPERTIES, PARCEL A

14290 TRIADELPHIA ROAD

ZONED RC-DEO TAX MAP No. 21 GRID No. 18 PARCEL No. 135 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: FEBRUARY, 2015

> SHEET 1 OF 5 5DP-15-010





#### SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

#### A. Soil Preparation

 Temporary Stabilization a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.

b. Apply fertilizer and lime as prescribed on the plans.

c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.

a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:

i. Soil pH between 6.0 and 7.0. Soluble salts less than 500 parts per million (ppm).

iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.

v. Soil contains 1.5 percent minimum organic matter by weight. Soil contains sufficient pore space to permit adequate root penetration

b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions. c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.

d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test. e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to

3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

2. Topsoil salvaged from an existing site may be used provided it meets the standards 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 profile section in the Soil Survey published by USDA-NRCS.

3. Topsoiling is limited to areas having 2:1 or flatter slopes where:

a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.

b. 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.

c. The original soil to be vegetated contains material toxic to plant growth. d. The soil is so acidic that treatment with limestone is not feasible.

4. Areas having slopes steeper than 2:1 require special consideration and design.

used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.

b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nu sedge, poison iv, thistle, or others as specified. c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

a. Erosion and sediment control practices must be maintained when applying topsoil.

b. Uniformly distribute topsoil in a 5 to 0 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.

c. Topsoil must not be placed if 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 seedbed preparation.

#### C. Soil Amendments (Fertilizer and Lime Specifications)

1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses. appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws

and must bear the name, trade name or trademark and warranty of the producer 3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through

4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means. 5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

#### B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

Conditions Where Practice Applies To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

a. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon est to the inspector to verify type of seed and seeding rate.

b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws. c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cook as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective. d. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control

until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table 8.1, Permanent Seeding Table 8.3, or site-specific seeding summaries.

ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with weighted roller to provide good seed to soil contact.

b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

 Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering.
 Seedbed must be firm after planting.
 Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. c. Hydroseeding: Apply seed uniformly with hydroseeder (sturry includes seed and fertilizer).
i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100

pounds per acre total of soluble nitrogen; P 0 (phosphorus), 200 pounds per acre; K 0 (potassium), 200 pounds per

ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 iii. Mix seed and fertilizer on site and seed immediately and without interruption.
 iv. When hydroseeding do not incorporate seed into the soil.

Mulch Materials (in order of preference) a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of grass is desired.

b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.

i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry. ii. WCFM, including dye, must contain no germination or growth inhibiting factors. iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch wi

remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter—like ground cover, on application, having moisture obsorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.

iv. WCFM material must not contain elements or compounds at concentration levels that will by phyto-toxic.

v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of

 a. Apply mulch to all seeded areas immediately after seeding.
 b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.

c. Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of

a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard: i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds pe acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of

iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4-15 feet wide and 300 to 3,000 feet long.

#### TEMPORARY SEEDING NOTES (B-4-4)

To stabilize disturbed soils with vegetation for up to 6 months.

testing agency. Soil tests are not required for Temporary Seeding.

To use fast growing vegetation that provides cover on disturbed soils. Conditions Where Practice Applies

Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

2. For sites having soil tests performed, use and show the recommended rates by the

1. Select one or more of the species or seed mixtures listed in Table 8.1 for the appropriate Plant Hardiness Zone (from Figure 8.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.

3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section 8-4-3.A.1.b and maintain until the next seeding season.

Temporary Seeding Summary						
Hardiness Zor Seed Mixture	tardiness Zone (from Figure B.3): <u>6b</u> Seed Mixture (from Table B.1):				Lime Rate	
Species	Application Rate (lb/ac)	Seeding Dațes	Seeding Depths	s. A		
BARLEY	96	3/1 - 5/15,	1"	436 lb/ac	2 tons/ac	
OAT5	72	8/15 - 10/15	i*	(10 lb/ 1000 sf)	(90 lb/ 1000 sf)	
RYE ·	112		i"			

#### PERMANENT SEEDING NOTES (B-4-5)

A. Seed Mixtures General Use

a. Select one or more of the species or mixtures listed in Table 8.3 for the appropriate Plant Hardiness Zone (from Figure 8.3) and based on the site condition or purpose found on Table 8.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan. b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.

c. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency. d. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary

#### 2. Turfordss Mixtures

a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.

b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.

i. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight. ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet.

Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the

total mixture by weight. iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes; Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended. iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For

establishment in high quality, intensively managed turf area. Mixture includes; Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 Select turfgrass varieties from those listed in the most current University of Maryland

Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland" Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture. Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line

c. Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b) Southern MD. Eastern Shore: March 1 to May 15, August 15 to October 15 d. Till dreas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 1/2 inches in diameter The resulting seedbed must be in such condition that future moving of grasses will pose no difficulty.

engineer under the laws of the state of Maryland, license no. 30306, EXPIRATION DATE: 01/12/2016.

e. If soil moisture is deficient, supply new seedings with adequate water for plant growth ( 1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites. ENGINEER'S CERTIFICATE PROFESSIONAL CERTIFICATION

#### Permanent Seeding Summary Fertilizer Rate (10-20-20) Lime Rate Hardiness Zone (from Figure 8.3): __6b____ Seed Mixture (from Table 8.3): (lb/ac) Dates Mar. 1-May 15 1/4-1/2 45 lbs. 90 lb/ac Aug. 15-Oct. 15 in. per acre (2 lb/ 8 TALL FESCUE 100 (2 lb/ 1000 sf) | 1000 sf) | 1000 sf)

### B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter)

a. Class of turforass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and

b. Sod must be machine cut at a uniform soil thickness to 34 inch, plus or minus 14 inch, at the time of cutting Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be

c. Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.

d. 5od must not be harvested or transplanted when moisture content (excessively dry of wet) may adversely affect its survival. e. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.

a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.

b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other.

Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots. Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping, and irrigating for any piece of sod within eight hours.

a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting. b. After the first week, sod watering is required as necessary to maintain adequate moisture conter

c. Do not mow until the sod is firmly rooted. No more than % of the grass leaf must be removed by the initial cutting of subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREAS <u>Definition</u>

A mound or pile of soil protected by appropriately designed erosion and sediment control measures

To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

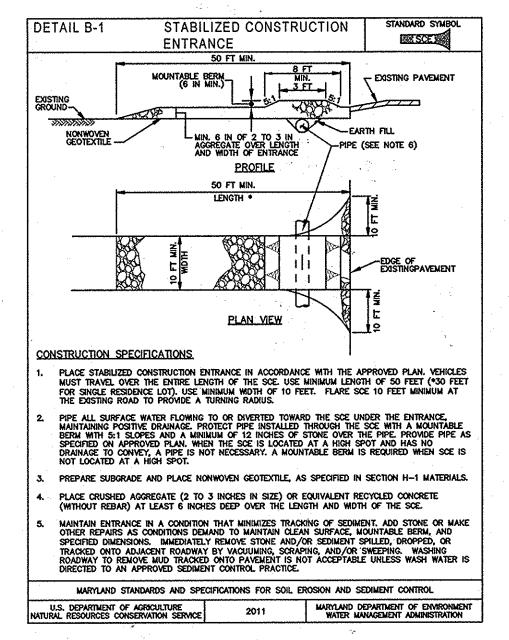
Conditions Where Practice Applies Stockpile areas are utilized when it is necessary to salvage and store soil for later use

. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan. 2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading. 3. Runoff from the stockpile area must drain to a suitable sediment control practice. 4. Access the stockpile area from the upgrade side.

5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.

6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to 7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard 8-4-4 Temporary Stabilization. 8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpile: containing contaminated material must be covered with impermeable sheeting.

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section 8-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section 8-3 Land Grading.



This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

1/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction

### HOWARD SOIL CONSERVATION DISTRICT

STANDARD SEDIMENT CONTROL NOTES 1) A MINIMUM OF 40 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS,

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) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND

STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 8-4-5),
TEMPORARY SEEDING (SEC. 8-4-4) AND MULCHING (SEC. 8-4-9). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE
DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

5) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL

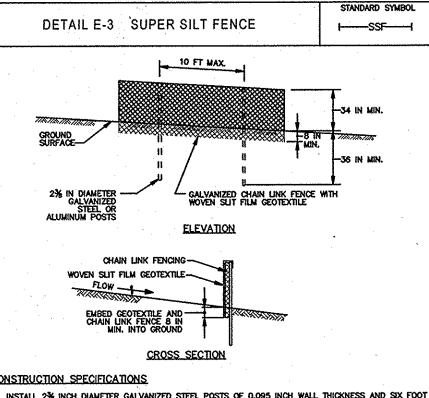
5) SITE ANALYSIS: TOTAL AREA OF SITE 0.34 ACRES 0.11 ACRES 0.23 ACRES 250 CU.YDS 250 CU.YDS AREA DISTURBED
AREA TO BE ROOFED OR PAVED OFFSITE WASTE / BORROW AREA LOCATION

7) ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON 3) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL 9) 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.

10) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND 11) ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

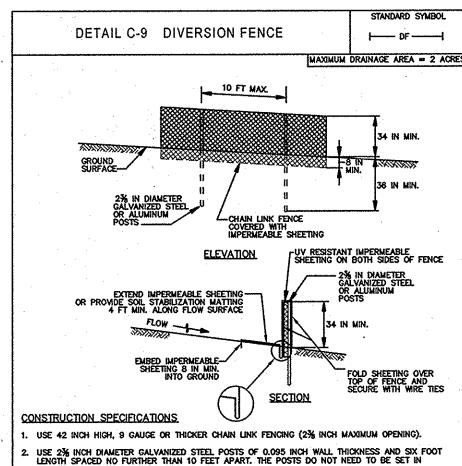
12) A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRE PER GRADING UNIT) AT A TIME WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PROCEEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY. inless otherwise specified and approved by the approval authority, no more than 30 acres cumulatively may be DISTURBED AT A GIVEN TIME.



FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION 2011

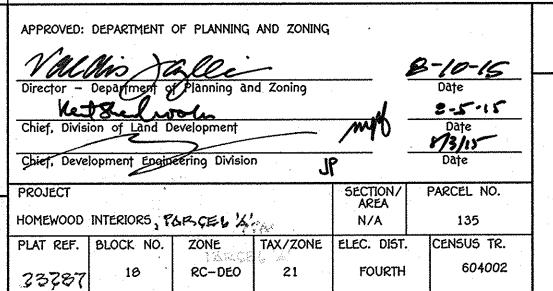


. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.

SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION, AND BELOW GROUND SURFACE. EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 8 INCHES INTO GROUND, SOIL STABILIZATION MATTING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG FLOW SURFACE.

WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 8 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE TURAL RESOURCES CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION



DETAIL E-1 SILT FENCE ——SF—— 6 FT MAX. CENTER TO CENTER ELEVATION EMBED GEOTEXTILE
MIN. OF 8 IN VERTICALLY
INTO THE GROUND, BACKFILL
AND COMPACT THE SOIL ON
BOTH SIDES OF GEOTEXTILE CROSS SECTION WIST POSTS TOGETHER STAPLE ----JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW) CONSTRUCTION SPECIFICATIONS

PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENT IN SECTION H-1 MATERIALS. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.

REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

DETAIL B-4-6-C PERMANENT SOIL STABILIZATION MATTING PSSMC - * Ib/ (* Include Shear Stress) CHANNEL APPLICATION

CONSTRUCTION SPECIFICATIONS::

USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OF ELEMENTS OF UNFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VECETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL

5. SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "I" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1 ½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "I" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE BOTTOM.

PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS, PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE. WORK FROM CENTER OF CHANNEL OUTWARD WEEN PLACEDS ROLLS. LAY MATTING SMOOTHLY AND FIRMLY UPCITIES EEDED SURFACE. AVOID STRETCHING THE MATTING. OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.

KEY IN THE TOP OF SLOPE END OF MAT 8 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPIN TO SECURE THE MAT END IN THE KEY. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.

IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED, ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT CRUSHING MAT. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE WARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION 2011

#### SEQUENCE OF CONSTRUCTION

OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WFFKS) NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT

1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/ INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, SUPER-SILT FENCE, TREE

PROTECTIVE FENCING, AND DIVERSION FENCING (AS NECESSARY). (2 DAYS) REMOVE TREES IDENTIFIED AS TO BE REMOVED (TBR). (1 DAY) ROUGH GRADE AS NECESSARY, LAY OR RE-LAY STONE BASE OF ACCESS DRIVE / PARKING AREA IN AREAS SHOWN THEN TOP PAVE ENTIRE ACCESS DRIVE / PARKING AREA. (1 WEEK) FINE GRADE SITE, INSTALL EROSION CONTROL MATTING, INSTALL LIGHTING, CONSTRUCT

MICRO-BIORETENTION AREA, AND INSTALL PERMANENT SEEDING. (5 DAYS) ALL FINAL GRADES AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF CONTROLS. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. (3 DAYS)

NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE EACH RAINFALL AND ON A DAILY BASIS.

SEDIMENT & EROSION CONTROL NOTES & DETAILS

# HOMEWOOD PROPERTIES, PARCEL A

## 14290 TRIADELPHIA ROAD

ZONED RC-DEO TAX MAP No. 21 GRID No. 18 PARCEL No. 135 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: NOT TO SCALE DATE: FEBRUARY, 2015 SHEET 4 OF 5

50P-15-010

DESIGN BY: SJT

CHECKED BY:

DRAWN BY: AF/SJT

FISHER, COLLINS & CARTER, INC

ML ENGINEERING CONSULTANTS & LAND SURVEYORS

ELLICOTT CITY, MARYLAND 21042

SOUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE

3.13.15 GLENELG, MD 21737 (410) 489-5600 NO. REVISION

Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on—ste inspection by the Howard Soil Conservation District."

certify that this plan for sediment and erosion control represents a practical and workable

DEVELOPER'S CERTIFICATE

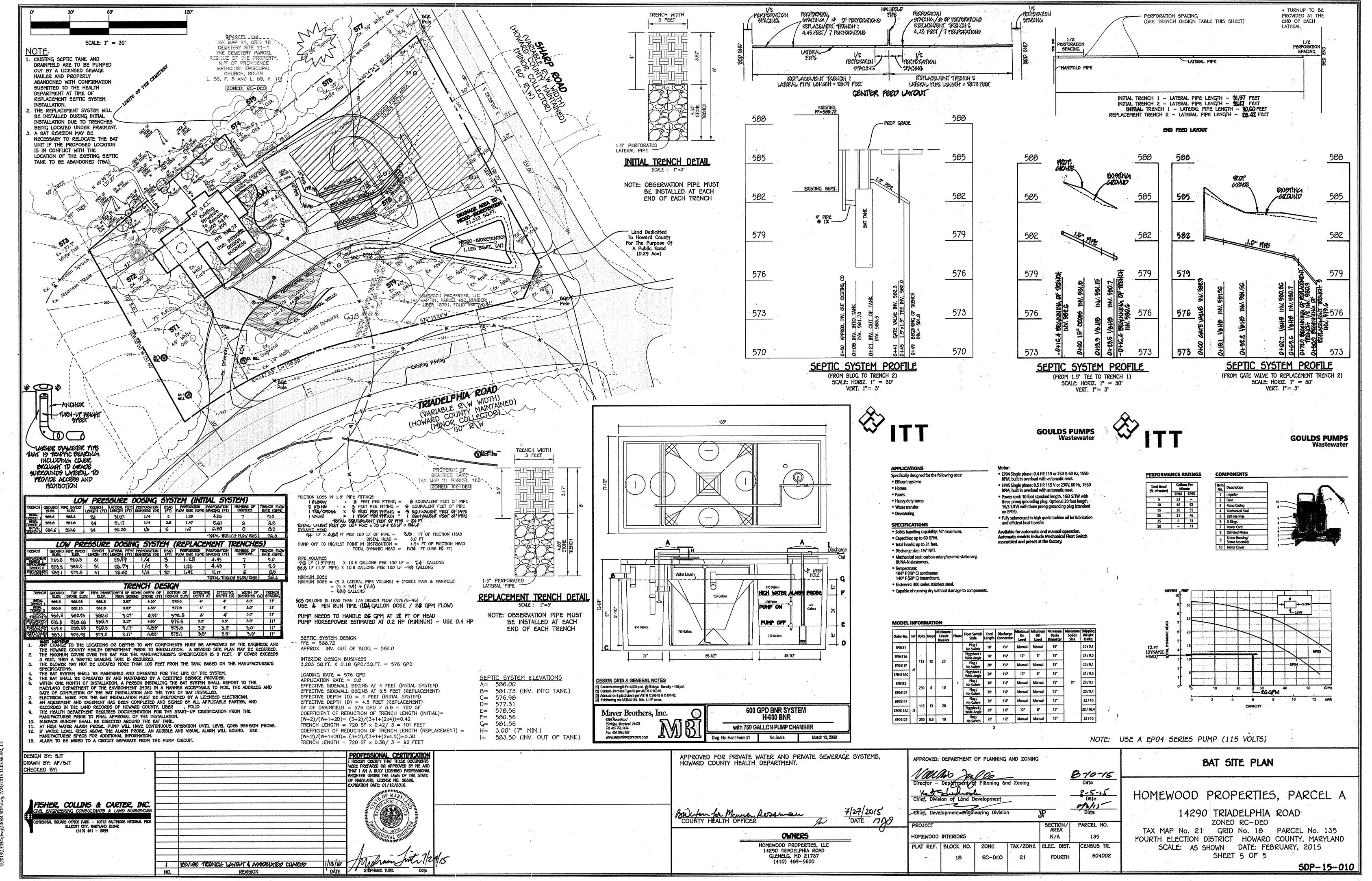
project will have a Certificate of Attendance at a Department of the Environment Approved

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."

14290 TRIADELPHIA ROAD

OWNERS HOMEWOOD PROPERTIES, LLC



1/2013/13034/dwq/13034 SDP dwg. 7/24/2015 11:03:56