

PERMIT INFORMATION BLOCK					
SUBDIVISION NAME: PINE ACRES		SECTION/AREA: N/A	PARCEL: 49 & 50		
PLAT NO. 24073-5	BLOCK(S) 5	ZONING R-20	TAX MAP NO. 37	ELECTION DISTRICT FIRST	CENSUS TRACT 601101

**ADDRESS CHART**

LOT #	ADDRESS	LOT #	ADDRESS
1	6203 AUSTIN WAY	12	6240 AUSTIN WAY
2	6207 AUSTIN WAY	13	6236 AUSTIN WAY
3	6211 AUSTIN WAY	14	6232 AUSTIN WAY
4	6215 AUSTIN WAY	15	6228 AUSTIN WAY
5	6219 AUSTIN WAY	16	6224 AUSTIN WAY
6	6223 AUSTIN WAY	17	6220 AUSTIN WAY
7	6227 AUSTIN WAY	18	6216 AUSTIN WAY
8	6231 AUSTIN WAY	19	6212 AUSTIN WAY
9	6235 AUSTIN WAY	20	6208 AUSTIN WAY
10	6239 AUSTIN WAY	21	6204 AUSTIN WAY
11	6244 AUSTIN WAY		

**LEGEND**

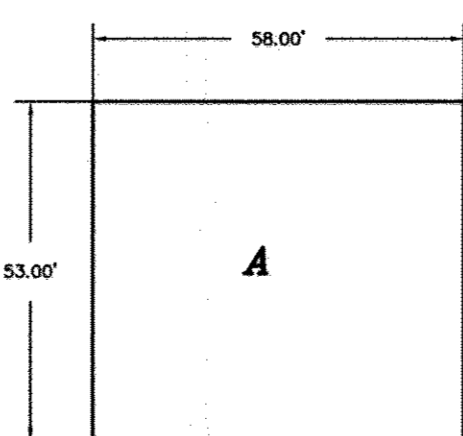
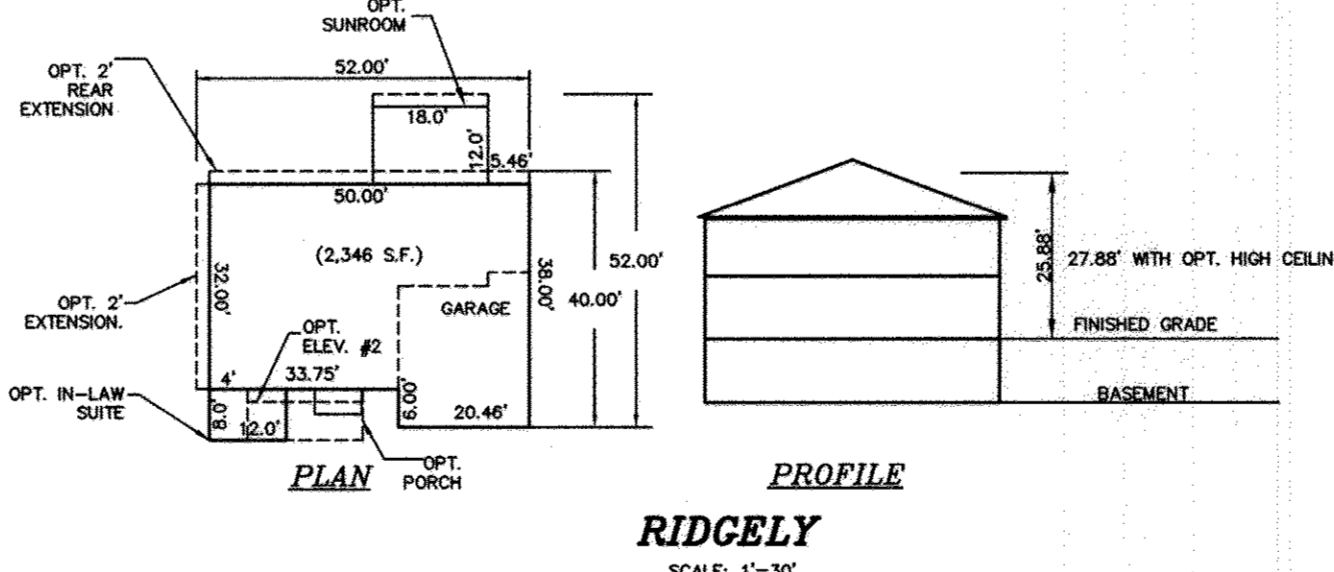
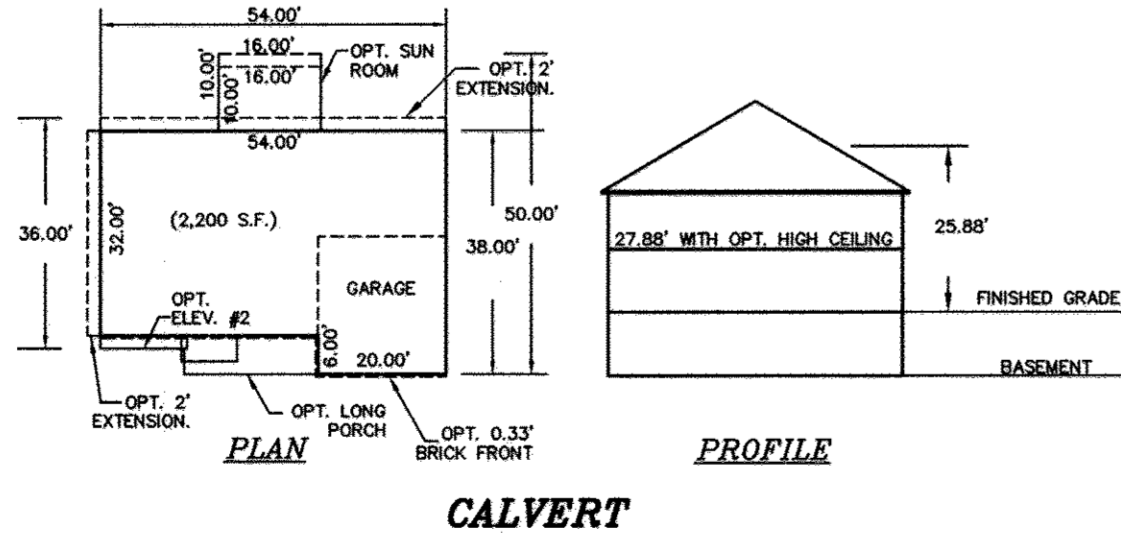
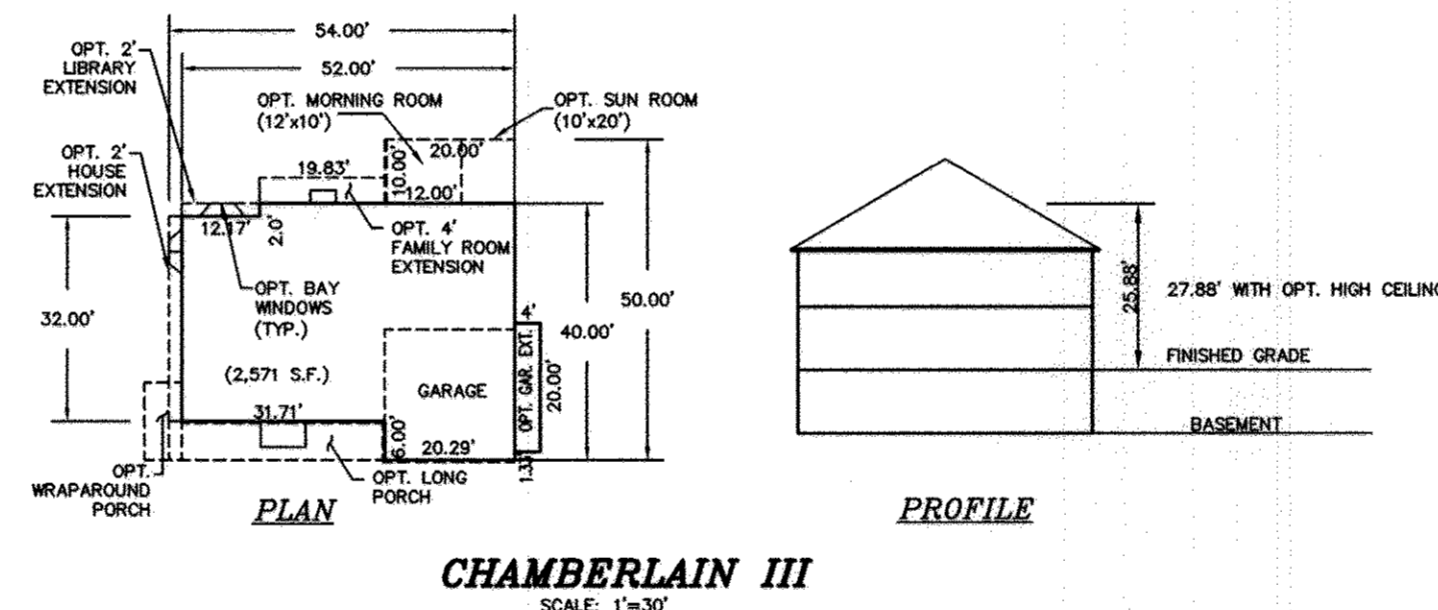
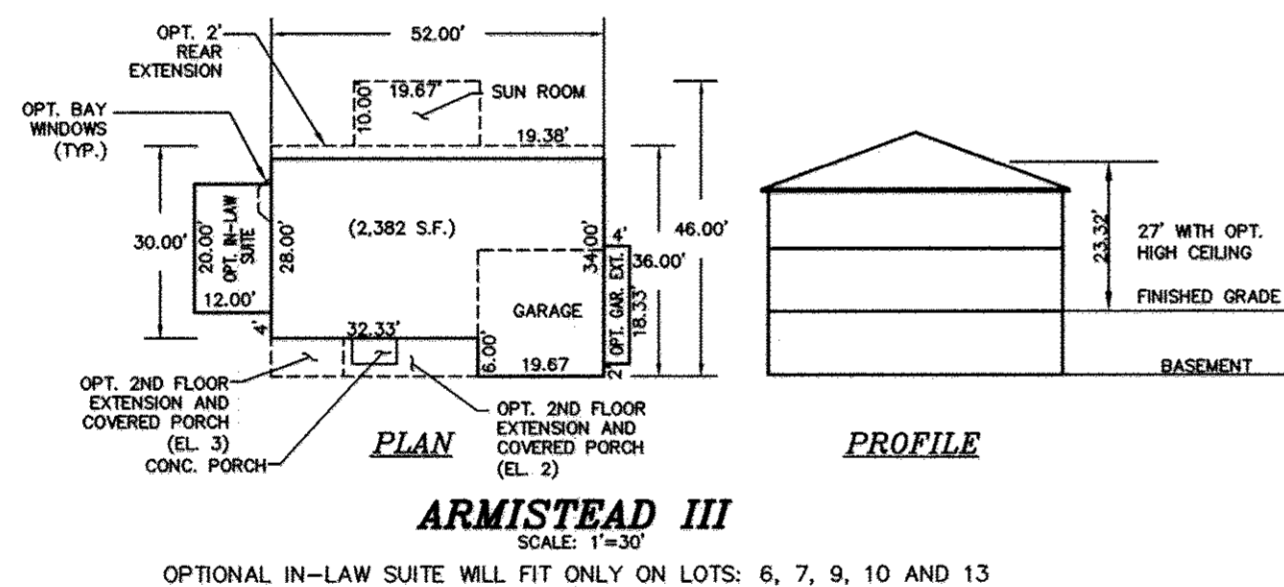
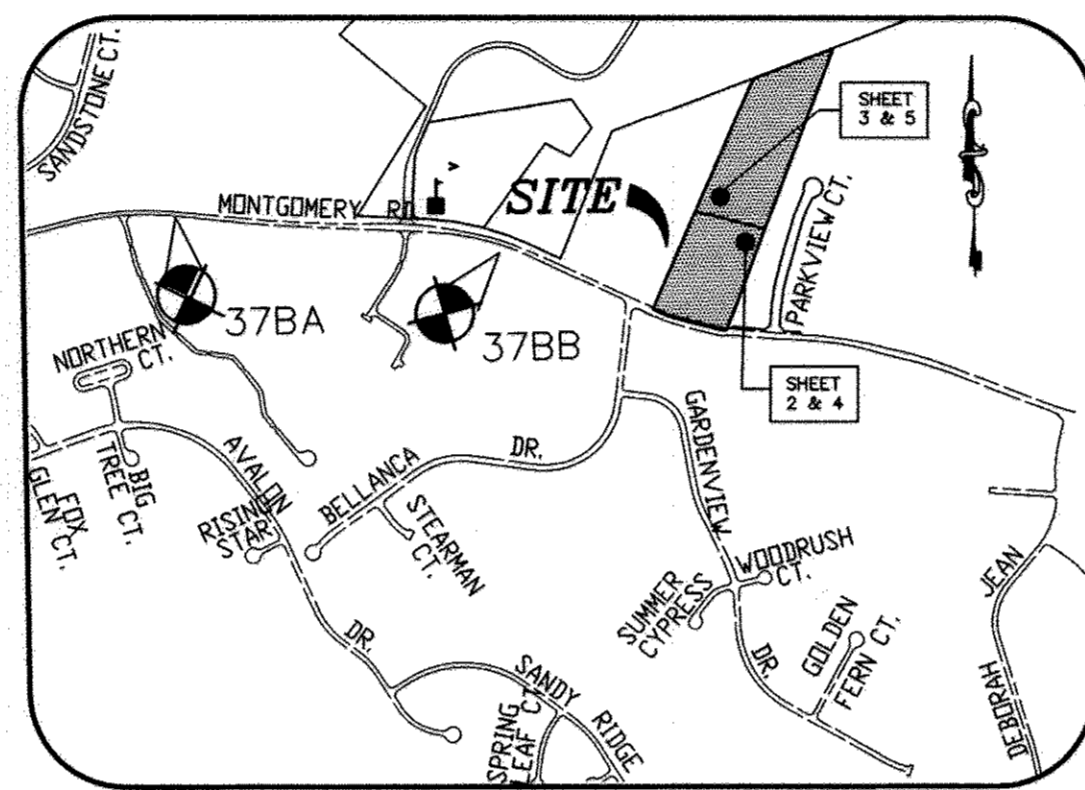
- AREA OF WETLANDS
- FOREST CONSERVATION AREA
- AREA OF PROPOSED PAVEMENT
- AREA OF EXISTING PUBLIC WATER & SEWER EASEMENT
- AREA OF 10' PRIVATE GUARDRAIL & UTILITY EASEMENT
- AREA OF EXISTING PUBLIC WATER, SEWER & UTILITY EASEMENT
- AREA OF RECREATIONAL OPEN SPACE
- AREA OF PRIVATE STORM DRAIN & UTILITY EASEMENT
- AREA OF USE-IN-COMMON ACCESS EASEMENT
- AREA OF PUBLIC 10' SIDEWALK & TREE MAINTENANCE EASEMENT
- AREA OF PRIVATE STORMWATER MANAGEMENT AND UTILITY EASEMENT
- STABILIZED CONSTRUCTION ENTRANCE

**INDEX OF DRAWINGS**

NO.	DESCRIPTION
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	SITE DEVELOPMENT PLAN
4	GRADING AND SEDIMENT CONTROL PLAN & SOILS MAP
5	GRADING AND SEDIMENT CONTROL PLAN & SOILS MAP
6	SEDIMENT CONTROL NOTES AND DETAILS

- LIMIT OF DISTURBANCE
- EROSION CONTROL MATTING
- SUPER SILT FENCE
- PROPOSED SILT FENCE
- EXISTING SILT FENCE
- M-5, DRY WELL
- EXISTING FIRE HYDRANT
- N-2, NON-ROOFTOP DISCONNECTION
- SHC INV. ELEVATION AT PROPERTY LINE
- EXISTING WATER METER
- EXISTING STREET LIGHT
- SOIL BORINGS

# SITE DEVELOPMENT PLAN PINE ACRES LOTS 1-21 AND OPEN SPACE LOTS 22-25 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND



**STORMWATER MANAGEMENT PRACTICES CHART**

LOT NO.	DRYWELLS (NUMBER)	NON-ROOFTOP DISCONNECTION (Y/N)	LOT NO.	DRYWELLS (NUMBER)	NON-ROOFTOP DISCONNECTION (Y/N)
1	-	N	12	2	Y
2	-	N	13	2	N
3	2	N	14	2	N
4	2	N	15	2	N
5	2	N	16	2	N
6	2	N	17	2	N
7	2	N	18	2	N
8	2	N	19	2	N
9	2	N	20	-	N
10	2	N	21	-	N
11	2	Y			

**GENERAL NOTES:**

- SUBJECT PROPERTY ZONED "R-20" PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.
- TOPOGRAPHY WITHIN 50' OF SITE BOUNDARY SHOWN HEREON IS BASED ON FIELD RUN SURVEY PERFORMED BY MILDENBERG, BOENDER & ASSOC., INC. ON OR ABOUT MARCH 2014. OTHER TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS.
- SITE ANALYSIS DATA:  
LOCATION: TAX MAP: 37 PARCEL: 49, 50 GRID: 5  
ELECTION DISTRICT: FIRST  
RECORD PLAT#: 24073-5  
TOTAL AREA: 7.36 AC.±  
AREA OF PLAN SUBMISSION: 7.36 AC.±  
LIMIT OF DISTURBED AREA: 7.31 AC.±  
OPEN SPACE REQUIRED UNDER F-16-024: 3.61 AC.±  
OPEN SPACE PROVIDED UNDER F-16-024: 3.89 AC.±  
RECREATIONAL OPEN SPACE REQUIRED UNDER F-16-024: 4,200 SF.±  
RECREATIONAL OPEN SPACE PROVIDED UNDER F-16-024: 4,200 SF.±  
ZONING: R-20  
PROPOSED USE FOR SITE: RESIDENTIAL  
TOTAL NUMBER OF UNITS: 21  
TYPE OF PROPOSED UNIT: SFU  
NUMBER OF PARKING SPACES REQUIRED: 2.5 SPACES X 21 UNITS = 53 SPACES  
NUMBER OF PARKING SPACES PROVIDED: 4 SPACES (2 SPACES IN GARAGE, 2 SPACES IN DRIVEWAY) X 21 UNITS = 84 SPACES  
DPZ FILE NO: ECP-15-001, SP-15-011, WP-15-079, F-16-024
- COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NG: 378A AND NO. 378B.  
STA. No. 378A N 563928.5559, E 1,373109.1034  
STA. No. 378B N 563663.415, E 1378040.471
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK. (SUNROOM AND ROOM EXTENSIONS FOR R-20 LOTS MAY EXTEND 10' INTO A REAR SETBACK).
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:  
- WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).  
- SURFACE - 8 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" HIGH MINIMUM).  
- GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT TURNING RADIUS.  
- STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)  
- DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.  
- MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS PRIOR TO EXCAVATION WORK BEING DONE.  
MISS UTILITY (800)-257-7777  
VERIZON TELEPHONE COMPANY (410) 725-9976  
HOWARD COUNTY BUREAU OF UTILITIES (410) 313-4900  
AT&T CABLE LOCATION DIVISION (410) 393-3533  
BALTIMORE GAS & ELECTRIC (410) 685-0123  
STATE HIGHWAY ADMINISTRATION (410) 531-5533
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- EXISTING UTILITIES ARE BASED ON ACTUAL FIELD LOCATIONS, IN COMBINATION WITH EXISTING WATER AND SEWER CONTRACTS AND FINAL PLAN F-16-024.
- ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- SEWER HOUSE CONNECTION ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE OR EASEMENT LINE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.03.
- NO CEMETERIES EXIST ON SITE.
- NO HISTORIC STRUCTURE EXISTS ON SITE.
- SITE IS NOT ADJACENT TO A DESIGNATED SCENIC ROAD.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT # 14-4904-0.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION HAVE BEEN FULFILLED BY ON-SITE RETENTION OF 2.74 ACRES ON EASEMENT "A" AND A PAYMENT OF FEE-IN-LIEU FOR 0.39 ACRES (16,988.40 SQ. FT.) OF REFORESTATION IN THE AMOUNT OF \$12,741.30 UNDER F-16-024. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL UNDER F-16-024.
- FINANCIAL SURETY IN THE AMOUNT OF \$17,100, FOR THE REQUIRED LANDSCAPING (35 SHADE TREES) AND ADDITIONAL (22 SHADE TREES) PROVIDED IN LIEU OF REMOVING 11 SPECIMEN TREES (AS A CONDITION OF APPROVED WAIVER WP-15-079) WAS POSTED AS PART OF THE DEVELOPER'S AGREEMENT UNDER F-16-024.
- STORMWATER MANAGEMENT IS PROVIDED BY N-2 NON-ROOFTOP DISCONNECTIONS, M-6 MICRO-BIORETENTION FACILITIES, AND M-5 DRYWELLS IN ACCORDANCE WITH THE 2007 MARYLAND STORMWATER DESIGN MANUAL AND APPROVED UNDER F-16-024. NON-ROOFTOP DISCONNECTIONS (N-2) AND DRYWELLS (M-5) WILL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNERS. MICRO-BIORETENTION FACILITIES (M-6) WILL BE JOINTLY OWNED BY HOWARD COUNTY, MD, AND WILL BE MAINTAINED BY THE HOA.
- APFO ROAD TEST PREPARED BY MARS GROUP IN MAY 2014 AND WAS APPROVED UNDER SP-15-011.
- NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON JANUARY 10, 2015 AT 6:00 PM AT THE ELKRIDGE LIBRARY.
- FLAG AND PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.
- ALL LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO THE MIHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.
- THIS PLAN IS SUBJECT TO WP-15-079, WAIVING SECTIONS 16.1205(a)(9) AND 16.1205(a)(10) WHICH REQUIRES THE RETENTION OF SPECIMEN TREES (30" dbh OR GREATER) THAT ARE NOT CONTAINED WITHIN OTHER PRIORITY FOREST RETENTION AREAS AS OUTLINED IN SECTION 16.1205(a)(1-10). WAIVER WAS APPROVED ON FEBRUARY 2, 2015 SUBJECT TO THE FOLLOWING CONDITIONS:  
1. WAIVER APPROVAL IS LIMITED TO THE REMOVAL OF SPECIMEN TREES 1-11 AS DEPICTED ON THE WAIVER EXHIBIT.  
ANY PROPOSAL TO REMOVE ADDITIONAL SPECIMEN TREES WILL REQUIRE A NEW WAIVER REQUEST OR AN AMENDMENT TO THIS WAIVER REQUEST.  
2. A MINIMUM OF 22 ADDITIONAL, NATIVE 2-3" CALIPER TREES SHALL BE PROVIDED ON SITE AS PART OF THE MITIGATION FOR THE SPECIMEN TREE REMOVAL. THIS MITIGATION WILL BE ADDRESSED WITH THE PROJECT KNOWN AS "PINE ACRES" AND WILL BE IN ADDITION TO ANY REQUIRED LANDSCAPE OR FOREST CONSERVATION PLANTINGS. THE MITIGATION WILL BE SHOWN ON THE ASSOCIATED LANDSCAPE PLAN AND SURETY FOR THESE ADDITIONAL TREES WILL BE REQUIRED AS PART OF THE FINAL PLAN.  
3. SOME OR ALL OF THE MITIGATION PLANTINGS SHOULD BE PLACED WITHIN THE REAR YARDS OF THE PROPOSED LOTS AFTER GRADING AND FILL OCCURS BUT PRIOR TO SALE OF INDIVIDUAL LOTS.
- 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.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- THERE IS NO AREA OF 100-YEAR FLOODPLAIN WITHIN THE LOD OF THIS SDP.
- NO STEEP SLOPES OVER 20,000 SQ. FT. IN AREA EXIST ON SITE.
- WETLANDS DO NOT OCCUR WITHIN THE LOD. WETLAND CERTIFICATION WAS PROVIDED UNDER F-16-024.
- A GEOTECHNICAL REPORT WAS SUBMITTED AND APPROVED UNDER F-16-024.

PLEASE NOTE THAT ALL LOTS IN THIS SUBDIVISION ARE SUBJECT TO THE MODERATE INCOME HOUSING UNIT (MIHU) FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.

**PROPERTY OWNER**

DORSEY FAMILY HOMES, INC.  
10717 BIRMINGHAM WAY  
WOODSTOCK, MARYLAND 21163  
(410)465-5739

**DEVELOPERS CERTIFICATE**

I 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 INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER: *Robert L. Dorsey* DATE: 5-8-17  
PRINTED NAME OF DEVELOPER: Robert L. Dorsey

**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 COUNTY SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER: *R. Jacob Hikmat P.E.* DATE: 5/5/17  
PRINTED NAME OF ENGINEER: R. JACOB HIKMAT P.E.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

SIGNATURE OF DISTRICT: *John R. Hester* DATE: 5/16/17  
HOWARD COUNTY SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

SIGNATURE OF CHIEF: *W. J. Schuler* DATE: 5-26-17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
SIGNATURE OF CHIEF: *W. J. Schuler* DATE: 5-31-17  
CHIEF, DIVISION OF LAND DEVELOPMENT  
SIGNATURE OF DIRECTOR: *W. J. Schuler* DATE: 5-31-17  
DIRECTOR

**NOTES:**

- HOUSE AREA SHOWN INCLUDES ALL OPTIONS.
- IF THE FOOTPRINT AREA OF ANY OF THE SELECTED HOUSE MODELS WITH THEIR CHOSEN OPTIONS EXCEED 2,500 SQUARE FEET, THE STORMWATER MANAGEMENT FOR THAT PARTICULAR LOT WILL BE REDESIGNED.

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. 17942, EXP DATE 09/03/18

SIGNATURE OF ENGINEER: *R. Jacob Hikmat P.E.* DATE: 5/5/17  
R. JACOB HIKMAT P.E.



**GENERIC BOX**

SCALE: 1"=30'  
CALVERT - ALL OPTIONS  
ARMISTEAD III - NO OPTIONAL IN-LAW SUITE  
CHAMBERLAIN III - ALL OPTIONS  
RIDGELY - ALL OPTIONS

date	MAY 2017
project	14-013
illustration	TNB
scale	1"=90'
approval	RJH



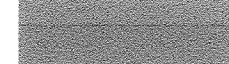

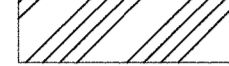
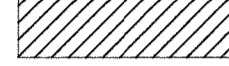
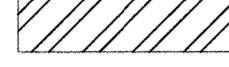
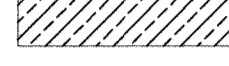
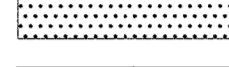
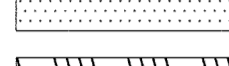
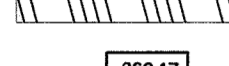

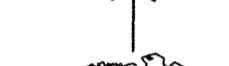


date	
description	
revisions	

COVER SHEET  
PINE ACRES  
LOTS 1 THRU 21 & OPEN SPACE LOTS 22 THRU 25  
SINGLE FAMILY DETACHED UNITS  
1ST ELECTION DISTRICT, TAX MAP 37, PARCELS 49 AND 50, GRID 5, ZONED: R-20

MILDENBERG, BOENDER & ASSOC., INC.  
Engineers Planners Surveyors  
7950-B Grace Drive, Columbia, Maryland 21044  
(410) 997-0298 Fax  
(410) 997-0296 Tel.



**LEGEND**

-  AREA OF WETLANDS
-  FOREST CONSERVATION AREA
-  AREA OF PROPOSED PAVEMENT
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-  SHC INV. ELEVATION AT PROPERTY LINE
-  EXISTING WATER METER
-  EXISTING FIRE HYDRANT
-  EXISTING LANDSCAPING PER F-16-024

**PROPERTY OWNER**

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*Robert L. Dorsey* 5-5-17  
SIGNATURE OF DEVELOPER DATE  
ROBERT L. DORSEY  
PRINTED NAME OF DEVELOPER

**ENGINEER'S CERTIFICATE**

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*R. Jacob Hikmat* 5/5/17  
SIGNATURE OF ENGINEER DATE  
R. JACOB HIKMAT P.E.  
PRINTED NAME OF ENGINEER

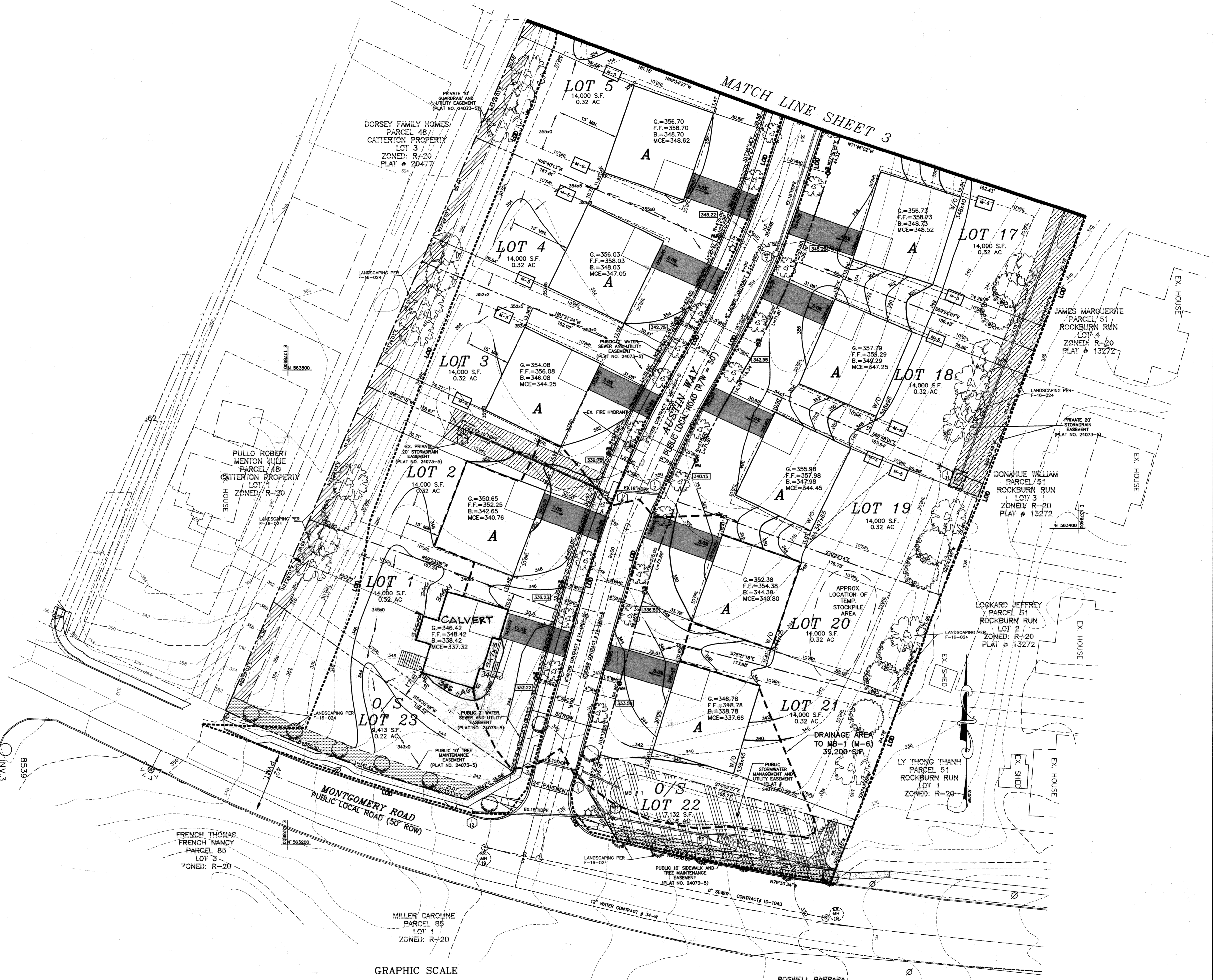
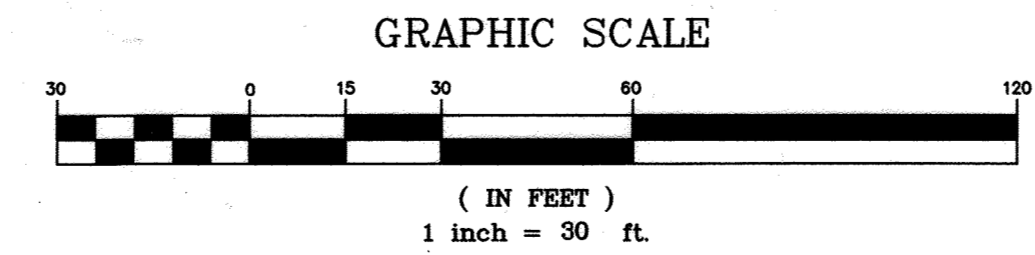
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Howard Soil Conservation District* 5/11/17  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Chad...* 5-26-17 DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*...* 5-31-17 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT  
*...* 5-31-17 DATE  
DIRECTOR



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. 17942, EXP DATE 09/03/18  
R. JACOB HIKMAT P.E. 5/5/17 DATE



date	MAY 2017	engineering	MM	approval	RH
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date	5/13/17	revision	1
date	5/11/20	revision	2

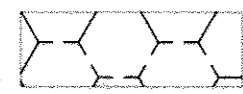




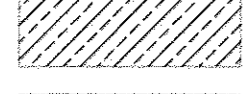
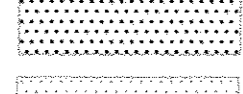
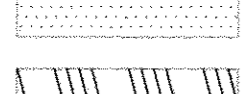






MINOR GRADE REV. LOT 1  
REV. ORD. # USE, LOT 1

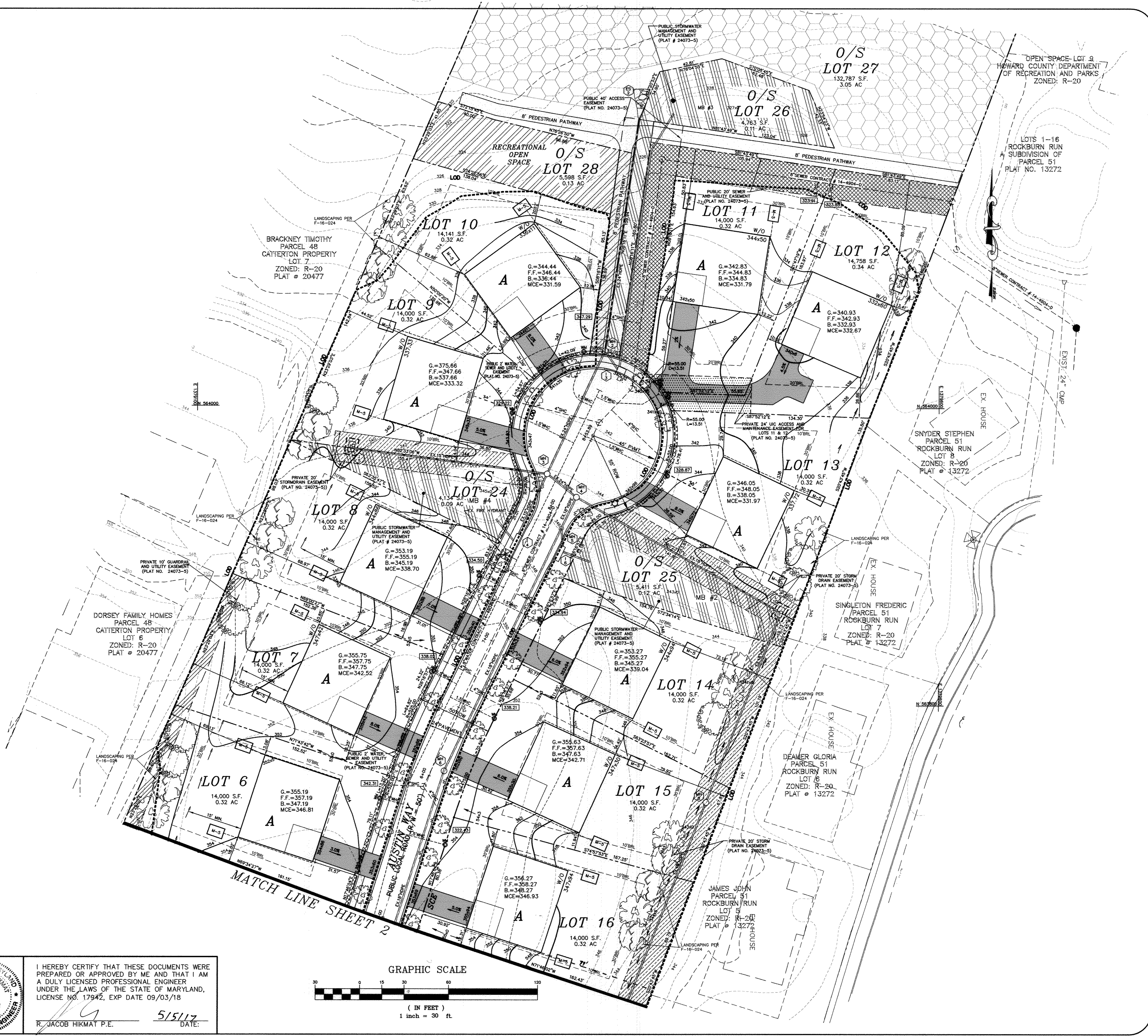
**PINE ACRES**  
LOTS 1 THRU 21 & OPEN SPACE LOTS 22 THRU 25  
SINGLE FAMILY DETACHED UNITS  
1ST ELECTION DISTRICT, TAX MAP 37, PARCELS 48 AND 50, GRID 5, ZONED: R-20  
**SITE DEVELOPMENT PLAN**

**MILDENBERG & ASSOC., INC.**  
Engineers Planners Surveyors  
7850-B Grace Drive, Columbia, Maryland 21044  
(410) 997-0296 Tel. (410) 997-0288 Fax.



**LEGEND**

-  FOREST CONSERVATION AREA
-  AREA OF PROPOSED PAVEMENT
-  AREA OF EXISTING PUBLIC WATER & SEWER EASEMENT
-  10' PRIVATE GUARDRAIL & UTILITY EASEMENT
-  AREA OF RECREATIONAL OPEN SPACE
-  AREA OF PRIVATE STORM DRAIN & UTILITY EASEMENT
-  USE-IN-COMMON ACCESS EASEMENT
-  PUBLIC 10' SIDEWALK & TREE MAINTENANCE EASEMENT
-  AREA OF PRIVATE STORMWATER MANAGEMENT AND UTILITY EASEMENT
-  SHC INV. ELEVATION AT PROPERTY LINE
-  EXISTING WATER METER
-  EXISTING STREET LIGHT
-  EXISTING FIRE HYDRANT
-  EXISTING LANDSCAPING PER F-16-024



**PROPERTY OWNER**

DORSEY FAMILY HOMES, INC.  
10717 BIRMINGHAM WAY  
WOODSTOCK, MARYLAND 21163  
(410)465-5739

**DEVELOPERS CERTIFICATE**

I 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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John S. J...* 5-5-17  
SIGNATURE OF DEVELOPER DATE

PRINTED NAME OF DEVELOPER

**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.

*R. Jacob Hikmat P.E.* 5/5/17  
SIGNATURE OF ENGINEER DATE

R. JACOB HIKMAT P.E.  
PRINTED NAME OF ENGINEER

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

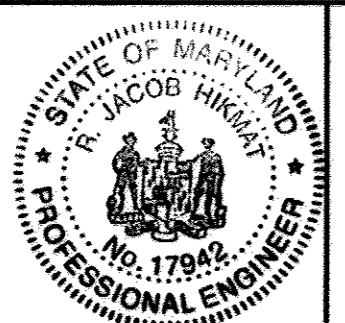
*John R. Blanton* 5/6/17  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*R. J. ...* 5-26-17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

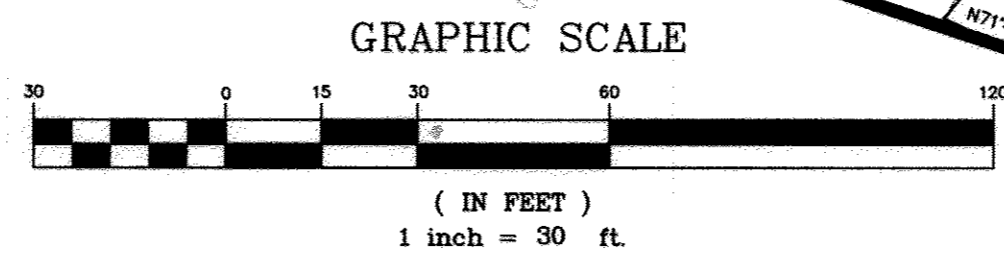
*Verstlo D. ...* 5-31-17  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*...* 5-31-17  
DIRECTOR DATE



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. 17942, EXP DATE 09/03/18.

*R. Jacob Hikmat P.E.* 5/5/17  
R. JACOB HIKMAT P.E. DATE



project	date	description	revision
15-015	MAY 2017	engineering	MM
illustration		TNB	MM
scale		1"=30'	

no.	date	description	revisions

**PINE ACRES**  
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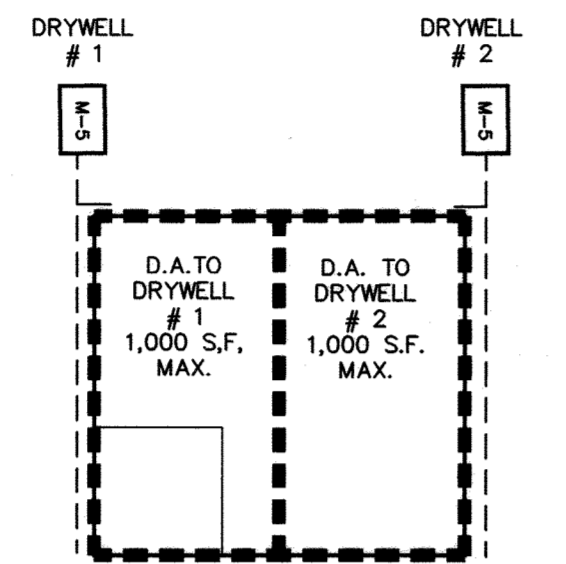


**LEGEND**

- FOREST CONSERVATION AREA
- AREA OF PROPOSED PAVEMENT
- EROSION CONTROL MATTING
- LIMIT OF DISTURBANCE
- PROPOSED SILT FENCE
- EXISTING SILT FENCE
- SUPER SILT FENCE
- M-5, DRY WELL
- STABILIZED CONSTRUCTION ENTRANCE
- N-2, NON-ROOFTOP DISCONNECTION
- SHC INV. ELEVATION AT PROPERTY LINE
- EXISTING WATER METER
- EXISTING STREET LIGHT
- SOIL BORINGS
- EXISTING FIRE HYDRANT

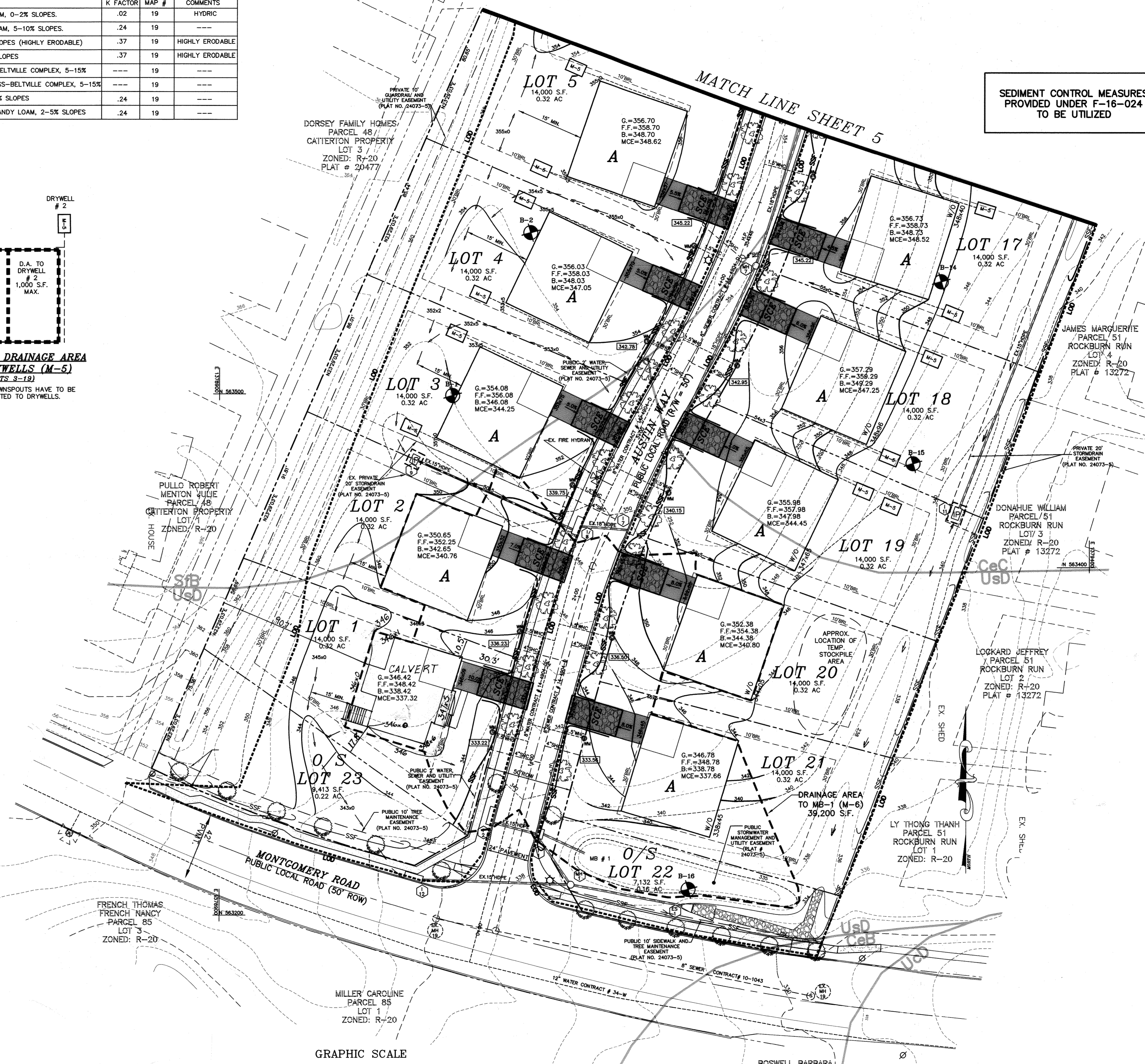
**SOILS TABLE**

SYMBOL	RATING	NAME	K FACTOR	MAP #	COMMENTS
Fo	(D)	FALLSINGTON SANDY LOAM, 0-2% SLOPES.	.02	19	HYDRIC
RcC	(C)	RUSSETT FINE SANDY LOAM, 5-10% SLOPES.	.24	19	----
CeB	(B)	CHILLUM LOAM, 2-5% SLOPES (HIGHLY ERODABLE)	.37	19	HIGHLY ERODABLE
CeC	(B)	CHILLUM LOAM, 5-10% SLOPES	.37	19	HIGHLY ERODABLE
UcD	(D)	URBAN LAND-CHILLUM-BELTVILLE COMPLEX, 5-15%	----	19	----
UsD	(D)	URBAN LAND-SASSAFRASS-BELTVILLE COMPLEX, 5-15%	----	19	----
SoC	(B)	SASSAFRAS LOAM, 5-10% SLOPES	.24	19	----
SIB	(B)	SASSAFRAS GRAVELLY SANDY LOAM, 2-5% SLOPES	.24	19	----



**SCHEMATIC DRAINAGE AREA FOR DRYWELLS (M-5) (LOTS 3-19)**

NOTE: ALL DOWNSPOUTS HAVE TO BE CONNECTED TO DRYWELLS.



SEDIMENT CONTROL MEASURES PROVIDED UNDER F-16-024 TO BE UTILIZED

**PROPERTY OWNER**

DORSEY FAMILY HOMES, INC.  
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WOODSTOCK, MARYLAND 21163  
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*[Signature]* 5-5-17  
DATE  
KERRY L. DORSEY JR.  
PRINTED NAME OF DEVELOPER

**ENGINEER'S CERTIFICATE**

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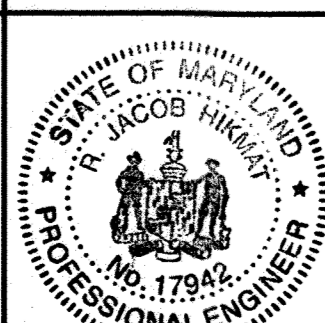
*[Signature]* 5/5/17  
DATE  
R. JACOB HIKMAT P.E.  
PRINTED NAME OF ENGINEER

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*[Signature]* 5/4/17  
DATE  
HOWARD SOIL CONSERVATION DISTRICT

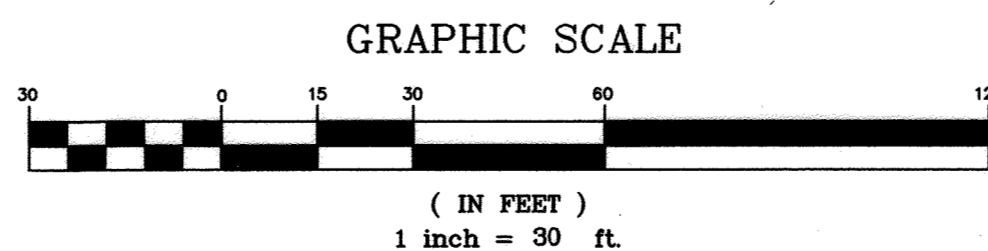
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 5/26/17  
DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION NY  
*[Signature]* 5-31-17  
DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT  
*[Signature]* 5-31-17  
DATE  
DIRECTOR



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*[Signature]* 5/5/17  
DATE  
R. JACOB HIKMAT P.E.



F:\2004\14-13\DWG\SDP\14-013-SDP-2009-RECOVER002.DWG

project	14-013	date	MAY 2017
illustration	TNB	engineering	MMM
scale	1"=30'	approval	RJH

date	5/15/17
description	REV GRADES & HOUSE MODEL LOT 1 TO REFLECT AS-BUILT CONDITIONS
revisions	

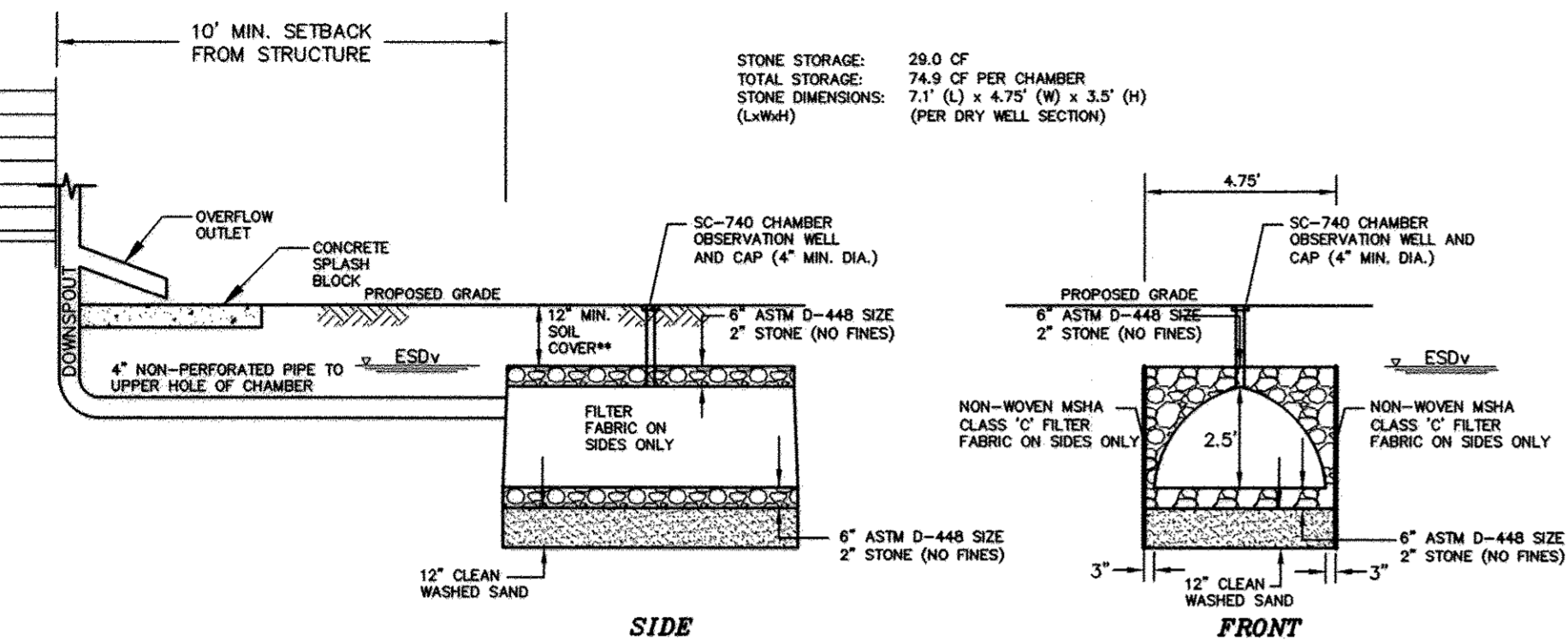
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GRADING AND SEDIMENT CONTROL PLAN & SOILS MAP

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7350-B Crace Drive, Columbia, Maryland, 21044  
(410) 997-0296 Tel. (410) 997-0288 Fax.

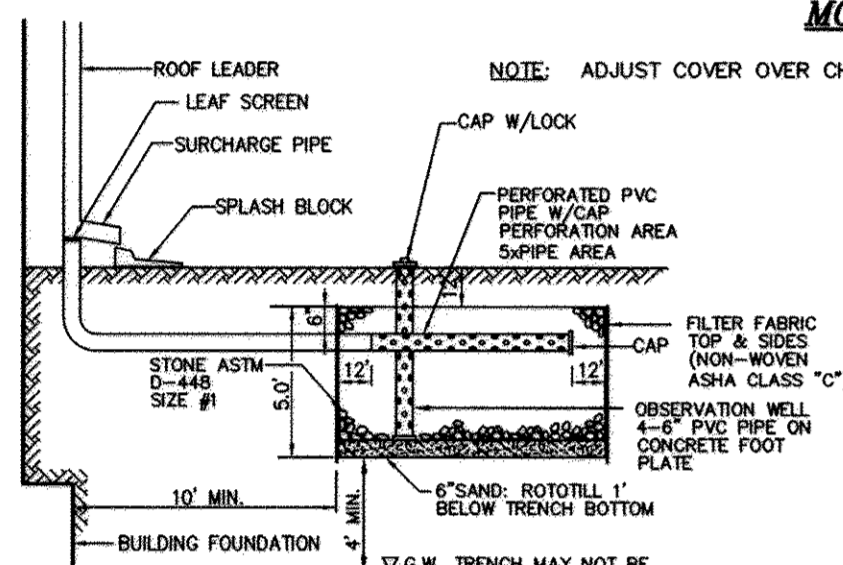


**SOILS TABLE**

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CaB	(B)	CHILLUM LOAM, 2-5% SLOPES (HIGHLY ERODABLE)	.37	19	HIGHLY ERODABLE
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SoC	(B)	SASSAFRAS LOAM, 5-10% SLOPES	.24	19	----
SfB	(B)	SASSAFRAS GRAVELLY SANDY LOAM, 2-5% SLOPES	.24	19	----



**MODIFIED DRYWELL (M-5) DETAIL**  
NOT TO SCALE



**DRYWELL TYP. DETAIL**  
NTS

1 STANDARD DRYWELL CAN BE REPLACED WITH MOD. DRYWELLS (SC-740 STORMTECH CHAMBERS)

**DRYWELL REPLACEMENT SCHEDULE**

LOT #	SIZE OF STANDARD DRYWELL	NO. OF DRYWELLS	VOLUME IN STANDARD DRYWELLS	NO. OF SC-740	VOLUME IN STANDARD DRYWELLS
3	11.5'x7.5'x5.0'	2	345.0 C.F.	5	374.5 C.F.
4-11	10.5'x7.0'x5.0'	2	294.0 C.F.	4	299.6 C.F.
12	13.0'x8.5'x5.0'	2	442.0 C.F.	6	449.4 C.F.
13-18	10.5'x7.0'x5.0'	2	294.0 C.F.	4	299.6 C.F.
19	12.0'x7.0'x5.0'	2	336.0 C.F.	5	374.5 C.F.

**OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRYWELLS (M-5)**

- THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.
- THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO ENSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

**PROPERTY OWNER**

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*[Signature]*  
SIGNATURE OF DEVELOPER  
ROBERT L. DORSEY  
PRINTED NAME OF DEVELOPER  
5-5-17 DATE

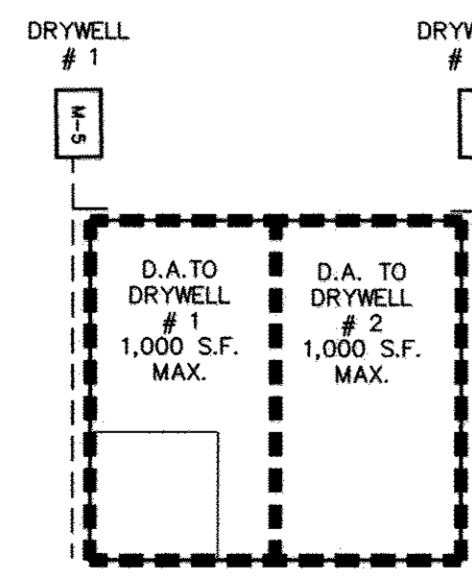
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*[Signature]*  
SIGNATURE OF ENGINEER  
R. JACOB HIKMAT P.E.  
PRINTED NAME OF ENGINEER  
5/5/17 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*[Signature]*  
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
5-26-17 DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION NY  
5-31-17 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT  
5-31-17 DATE  
DIRECTOR



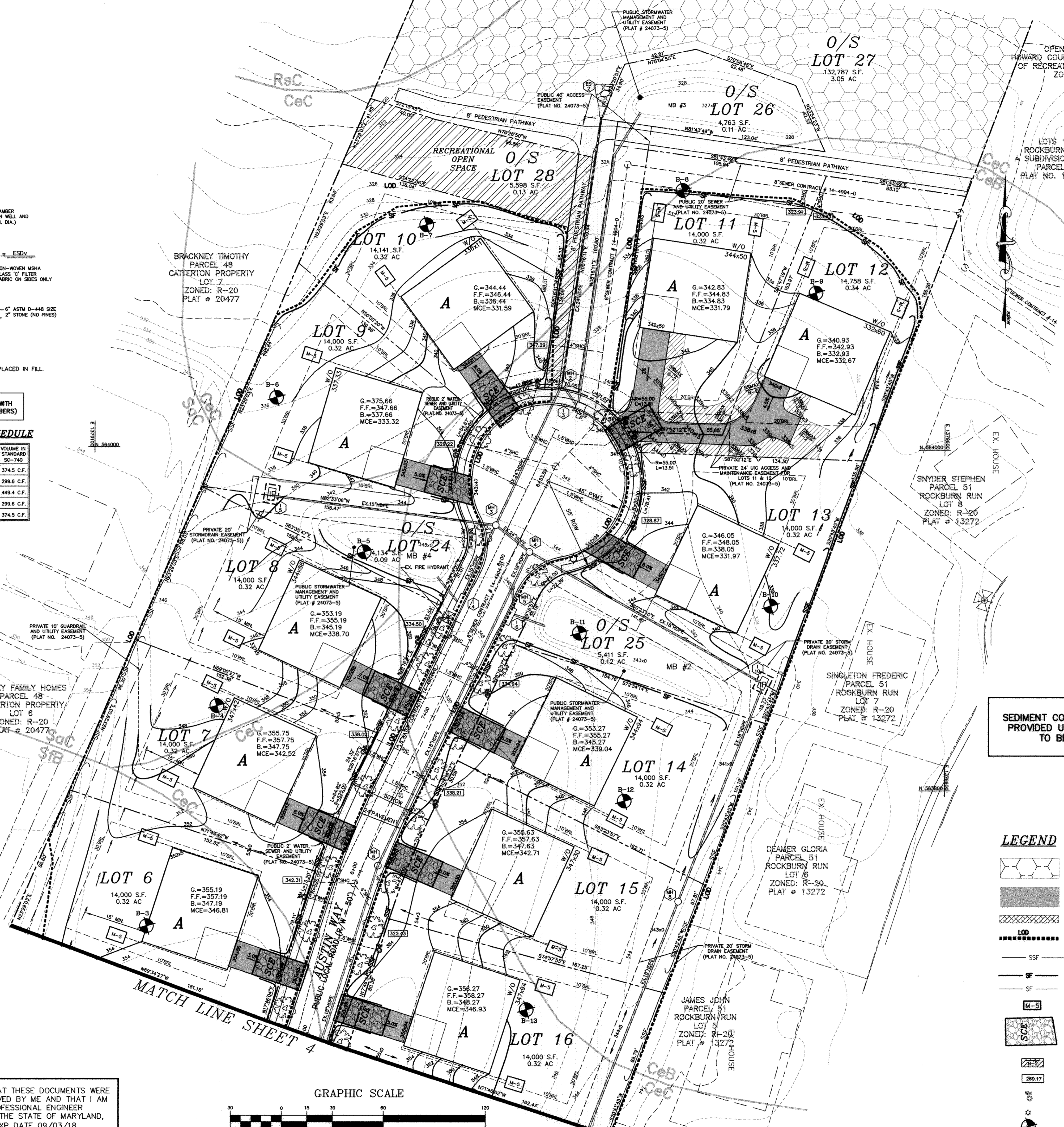
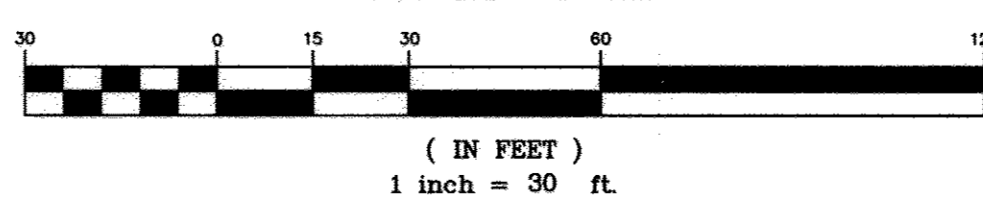
**SCHEMATIC DRAINAGE AREA FOR DRYWELLS (M-5) (LOTS 3-19)**

NOTE: ALL DOWNSPOUTS HAVE TO BE CONNECTED TO DRYWELLS.

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*[Signature]*  
R. JACOB HIKMAT P.E.  
5/5/17 DATE

**GRAPHIC SCALE**



SEDIMENT CONTROL MEASURES PROVIDED UNDER F-16-024 TO BE UTILIZED

**LEGEND**

	FOREST CONSERVATION AREA
	AREA OF PROPOSED PAVEMENT
	EROSION CONTROL MATTING
	LIMIT OF DISTURBANCE
	SUPER SILT FENCE
	PROPOSED SILT FENCE
	EXISTING SILT FENCE
	M-5, DRYWELL
	STABILIZED CONSTRUCTION ENTRANCE
	N-2, NON-ROOFTOP DISCONNECTION
	SHC INV. ELEVATION AT PROPERTY LINE
	EXISTING WATER METER
	EXISTING STREET LIGHT
	SOIL BORINGS
	EXISTING FIRE HYDRANT

project	15-015
date	MAY 2017
illustration	engineering
scale	TMB
revision	MM
approval	MM
date	1-30

description	no.
revisions	

**PINE ACRES**  
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SINGLE FAMILY DETACHED UNITS  
1ST ELECTION DISTRICT, TAX MAP 37, PARCELS 49 AND 50, GRID 5, ZONED: R-20  
GRADING AND SEDIMENT CONTROL PLAN & SOILS MAP

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**STANDARD SEDIMENT CONTROL NOTES**

- A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:
  - PRIOR TO THE START OF EARTH DISTURBANCE.
  - PRIOR TO THE START OF PERIMETER EROSION AND SEDIMENT CONTROLS.
  - PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT.
  - PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES.
- OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-3), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-5). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE USED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET, ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6).
- 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 CID.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE:	7.36	ACRES
AREA TO BE ROOFED OR PAVED:	1.22	ACRES
AREA TO BE VEGETATED/STABILIZED:	6.09	ACRES
TOTAL CUT:	8,000	CU. YDS.
TOTAL FILL:	8,000	CU. YDS.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID, THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY, AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:
  - INSPECTION DATE
  - INSPECTION TIME (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT)
  - NAME AND TITLE OF INSPECTOR
  - WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
  - BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
  - EVIDENCE OF SEDIMENT DISCHARGES
  - IDENTIFICATION OF PLAN DEFICIENCIES
  - IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
  - IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS
  - COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
  - PHOTOGRAPHS
  - MONITORING/SAMPLING
  - MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
  - OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPD65, MDE).
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
- ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE CID PRIOR TO CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES.
- DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. 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 PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.
- WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
- TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION UNTIL FINAL GRADE.
- ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBERICATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2" IN ELEVATION.
- STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUDES):
  - USE I AND II: MARCH 1 - JUNE 15
  - USE III AND III: OCTOBER 1 - APRIL 30
  - USE IV: MARCH 1 - MAY 31
- A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.

**(B-4-2) STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS**

**DEFINITION**  
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

**PURPOSE**  
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

**CONDITIONS WHERE PRACTICE APPLIES**  
WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

**CRITERIA**

- TEMPORARY STABILIZATION**
  - SEEDING 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.
  - APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
  - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- PERMANENT STABILIZATION**
  - A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
    - SOIL PH BETWEEN 6.0 AND 7.0.
    - SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
    - 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.
    - SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
    - SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
  - APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
  - 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.
  - APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF SOIL TESTS.
  - MIX SOIL AMENDMENTS TO 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. SOILS WITH 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.

**B. TOPSOILING**

- 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.
- TOPSOIL, SALVAGED FROM AN EXISTING SITE, MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. THE DEPTH OF TOPSOIL TO FACILITATE VEGETATIVE GROWTH IS THE DEPTH OF THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
- TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
  - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT 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 LIMESTONE IS NOT FEASIBLE.
  - AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.
- TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:
  - TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILTY LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY A SOIL SCIENTIST 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 CHISELS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2 INCHES IN DIAMETER.
  - TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERBERIS GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
  - 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.
- TOPSOIL APPLICATION: A TRACKER DRUM 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 MULCH AS MULCH MUST BE APPLIED AT 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 WATER.
- ANCHORING:
  - 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:
    - A MULCH ANCHORING TOOL IS A TRACKER DRUM 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 MULCH MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
    - SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TACK II, TERRA TACK AIR, 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 STRICTLY PROHIBITED.
    - LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

**(B-4-4) STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION**

**DEFINITION**  
TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS.

**PURPOSE**  
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURB SOIL.

**CONDITIONS WHERE PRACTICE APPLIES**  
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF THE PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

**CRITERIA**

- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY 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 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 B-3 LAND GRADING.
- FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
- WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.1A, AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

NO.	SPECIES	APPLICATION RATE (LB./AC)	SEEDING DATES	SEEDING DEPTHS	FERTILIZER RATE (10-20-20)			LIME RATE
					N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	
1	TALL FESCUE	100	MARCH 1-MAY 15 15-10-15	1/4"-1/2"	45 LBS. PER ACRE (1 LB./1000 SF)	90 LBS. PER ACRE (2 LB./1000 SF)	90 LBS. PER ACRE (2 LB./1000 SF)	2 TONS / ACRE (90 LBS / 1000 SF)

PLANT SPECIES	SEEDING RATE LB./AC	SEEDING DEPTH (INCHES)	RECOMMENDED SEEDING DATED BY PLANT HARDNESS ZONE			
			5B AND 6A	6B	7A AND 7B	8
<b>COOL SEASON GRASSES</b>						
ANNUAL RYEGRASS (LULIUM PERENNIS SSP. MULTIFLORUM)	40	1.0	MAR 15 TO MAY 31; AUG 1 TO SEP 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APR 30; AUG 15 TO NOV 30	
(HOREDEUM VULGARE)	96	2.2	MAR 15 TO MAY 31; AUG 1 TO SEP 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APR 30; AUG 15 TO NOV 30	
OVENS (Avena SATIVA)	72	1.7	MAR 15 TO MAY 31; AUG 1 TO SEP 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APR 30; AUG 15 TO NOV 30	
WHEAT (TRITICUM AESTIVUM)	120	2.8	MAR 15 TO MAY 31; AUG 1 TO SEP 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APR 30; AUG 15 TO NOV 30	
CEREAL RYE (SECALE SATIVA)	112	2.8	MAR 15 TO MAY 31; AUG 1 TO OCT 31	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APR 30; AUG 15 TO DEC 15	
<b>WARM SEASON GRASSES</b>						
FOXTAIL MILLET (SETARIA ITALICA)	30	0.7	JUN 1 TO JUL 31	MAY 16 TO JUL 31	MAY 1 TO AUG 14	
PEARL MILLET (Pennisetum GLAUCUM)	20	0.5	JUN 1 TO JUL 31	MAY 16 TO JUL 31	MAY 1 TO AUG 14	

**DEVELOPERS CERTIFICATE**

I 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 BEGINSING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DATE: 5-5-17

SIGNATURE OF DEVELOPER: *Robert L. Dorshner*

PRINTED NAME OF DEVELOPER: ROBERT L. DORSHNER

**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.

DATE: 5/5/17

SIGNATURE OF ENGINEER: *R. JACOB HIKMAT P.E.*

PRINTED NAME OF ENGINEER: R. JACOB HIKMAT P.E.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

DATE: 5-31-17

SIGNATURE OF DIRECTOR: *Howard Soil Conservation District*

DATE: 5-31-17

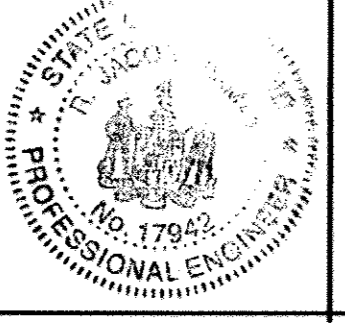
DIRECTOR: R. JACOB HIKMAT P.E.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 5/26/17

DATE: 5-31-17

DATE: 5-31-17



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. 17942, EXP DATE 09/03/18

DATE: 5/5/17

SIGNATURE: *R. JACOB HIKMAT P.E.*

DATE: 5/5/17

PROPERTY OWNER: DORSEY FAMILY HOMES, INC. 10717 BIRMINGHAM WAY WOODSTOCK, MARYLAND 21163 (410)465-5739

**(B-4-3) STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING**

**DEFINITION**  
THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

**PURPOSE**  
TO PREVENT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

**CONDITIONS WHERE PRACTICE APPLIES**  
TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

**CRITERIA**

- SEEDING**
  - SEEDS MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B-1 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
  - 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 THAW'S.
  - 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 AND FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.
  - 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 DISAPPEARANCE OF PHYTO-TOXIC MATERIALS.
- MULCHING**
  - MULCH MATERIALS (IN ORDER OF PREFERENCE)
    - STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS 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.
    - WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
      - WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE THE UNIFORM SPREAD SLURRY.
      - WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
      - WCFM MATERIALS, SITE TO MANUFACTURER AND PROCESSOR. WCFM MUST BE APPLIED TO THE WOOD CELLULOSE FIBER MULCH WILL 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 GLOTTER-LIKE GROUND COVER ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
      - WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.
      - 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 90 PERCENT MINIMUM.
  - APPLICATION
    - APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.
    - 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.
    - WOOD CELLULOSE FIBER MULCH AS MULCH MUST BE APPLIED AT 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 WATER.
  - ANCHORING:
    - 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:
      - A MULCH ANCHORING TOOL IS A TRACKER DRUM 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 MULCH MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
      - SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TACK II, TERRA TACK AIR, 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 STRICTLY PROHIBITED.
      - LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

**(B-4-8) STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA**

**DEFINITION**  
A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES.

**PURPOSE**  
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.

**CRITERIA**

- THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.
- THE FOOTPRINT OF 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.
- RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.
- ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.
- CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVISE SUCH AS AN EARTH DICH, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER.
- WHERE RUNOFF CONCENTRATES ALONG THE TIE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE.
- STOCKPILE MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION.
- IF THE STOCKPILE IS LOCATED ON AN IMPROVED SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILE CONTAINING CONTAMINATED MATERIAL MUST COVERED WITH IMPERMEABLE SHEETING.

**MAINTENANCE**

SELECT AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN 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 B-3 LAND GRADING.

**(B-4-5) STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION**

**DEFINITION**  
TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION.

**PURPOSE**  
TO USE LONG-LEIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

**CONDITIONS WHERE PRACTICE APPLIES**  
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

**CRITERIA**

- SEED MIXTURES**
  - GENERAL USE
    - SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDNESS ZONE (FROM FIGURE B.3) AND BASED IN THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY.
    - ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DICES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD GUIDE, SECTION 342-CRITICAL AREA PLANTING.
    - FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
    - FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FROM FERTILIZED (40-0-0) AT 3 1/2 POUNDS PER 1000 S.F. (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.
  - TURFGRASS MIXTURES
    - AREAS WHERE TURFGRASS MAY BE DESIRE INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
    - SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY.
      - 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 SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 S.F. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
      - KENTUCKY BLUEGRASS/PERNIAL 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 PERNIAL RYEGRASS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 S.F. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
      - TALL FESCUE/KENTUCKY BLUEGRASS: FULL MIXTURE: FOR USE IN DROUGHT AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 65 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 PERCENT PER 1000 S.F. ONE OR MORE CULTIVARS MAY BE BLENDED.
      - 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 CERTIFIES FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATES 1 1/2 TO 3 POUNDS PER 1000 S.F.
- IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURE
  - WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDNESS ZONE: 5B,6A)
  - CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 6B)
  - SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDNESS ZONE: 7A, 7B)
- TILL AREAS 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 STONE AND DEBRIS OVER 1.5 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASS WILL BE NO DIFFICULTY.
- IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH 0.5 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 SEASON, OR ON ADVERSE SITES.

**STANDARD STABILIZATION NOTE**

- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
  - THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND
  - SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

**SEQUENCE OF CONSTRUCTION**

- OBTAIN GRADING PERMIT. (1 DAY)
- REPAIR IF NECESSARY SEDIMENT CONTROL DEVEISD INSTALLED UNDER P-16-024 (2 DAYS)
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT LOCATIONS SHOWN (2 DAYS)
- GRADE SITE PER PLAN (6 DAYS)
- CONSTRUCT HOUSES AND STORMWATER MANAGEMENT FACILITIES (90 - 120 DAYS PER HOUSE)
- COMPLETE FINE GRADING OF SITE TO GRADES INDICATED.