

SOILS DESCRIPTION

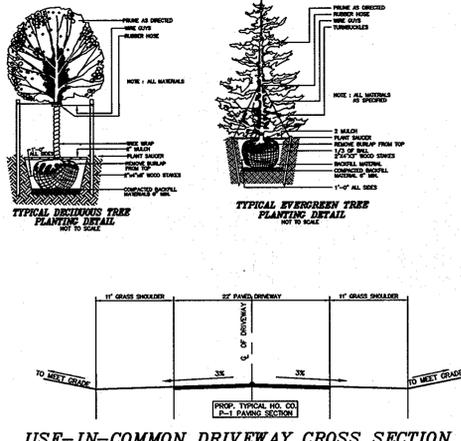
- F₀- (D) FALLSINGTON SANDY LOAM, 0-2% SLOPES.
- R₀B- (C) RUSSETT FINE SANDY LOAM, 2-5% SLOPES.
- R₀C- (C) RUSSETT FINE SANDY LOAM, 5-10% SLOPES.
- R₀C- (C) RUSSETT AND BELTSVILLE SOILS, 5-10% SLOPES.

LEGEND

- FLOODPLAIN
- WETLANDS
- FOREST CONSERVATION EASEMENT
- FOREST CONSERVATION SIGNAGE
- EXISTING TREE LINE
- LIMIT OF DISTURBANCE
- SSP SUPER SILTENCE
- ROOF DRAIN
- RAIN GARDEN

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OWNER / DEVELOPER
 DORSEY FAMILY HOMES, INC.
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 (410)465-7200

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 NATURAL RESOURCE CONSERVATION SERVICE.

SIGNATURE OF ENGINEER: *R. JACOB HIKMAT P.E.* DATE: 9/5/13
 PRINTED NAME OF ENGINEER: R. JACOB HIKMAT P.E.

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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

SIGNATURE OF DEVELOPER: *Robert Dorsey, Jr.* DATE: 9-9-2013
 PRINTED NAME OF DEVELOPER: ROBERT DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.

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

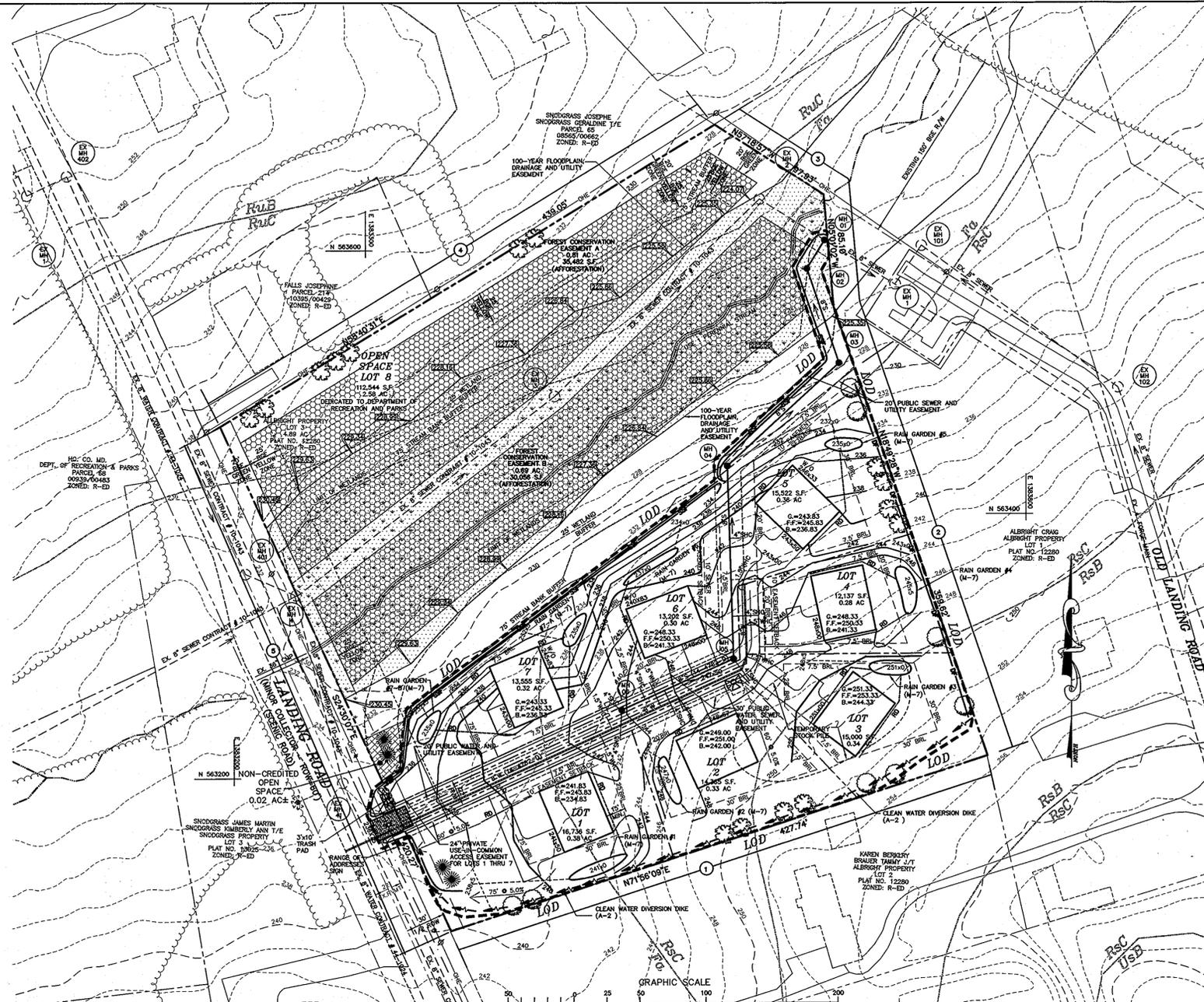
SIGNATURE: *John K. Houston* DATE: 9/19/13
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS
 SIGNATURE: *Howard's* DATE: 9/29/13
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 SIGNATURE: *John K. Houston* DATE: 9/24/13
 CHIEF, ENGINEERING DIVISION
 SIGNATURE: *John K. Houston* DATE: 10/20/13
 CHIEF, DIVISION OF LAND DEVELOPMENT



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 9/3/14.
 SIGNATURE: *R. JACOB HIKMAT P.E.* DATE: 9/5/13



STORMWATER MANAGEMENT PRACTICES

LOT #	ADDRESS	GREEN ROOF PAVEMENTS	PERMEABLE PAVEMENTS	REINFORCED TURF	DISCONNECTION OF ROOFTOP RUNOFF	DISCONNECTION OF NON-ROOFTOP RUNOFF	SHEETFLOW TO CONSERVATION AREAS	RAINWATER HARVESTING	SUBMERGED GRAVEL WETLANDS	LANDSCAPE INFILTRATION	INFILTRATION BERMS	DRY WELLS	MICRO-BIOTENTION	RAIN GARDENS	SWALES	ENHANCED FILTERS	
		A-1 (Y/N)	A-2 (Y/N)	A-3 (Y/N)	N-1 (NUMBER)	N-2 (NUMBER)	N-3 (Y/N)	M-1 (NUMBER)	M-2 (NUMBER)	M-3 (NUMBER)	M-4 (NUMBER)	M-5 (NUMBER)	M-6 (NUMBER)	M-7 (NUMBER)	M-8 (NUMBER)	M-9 (NUMBER)	
1	5765 LANDING ROAD	N	N	N	2	Y	N	0	0	0	0	0	0	0	1	0	0
2	5761 LANDING ROAD	N	N	N	1	Y	N	0	0	0	0	0	0	0	1	0	0
3	5757 LANDING ROAD	N	N	N	0	Y	N	0	0	0	0	0	0	0	1	0	0
4	5753 LANDING ROAD	N	N	N	0	Y	N	0	0	0	0	0	0	0	1	0	0
5	5749 LANDING ROAD	N	N	N	0	Y	N	0	0	0	0	0	0	0	1	0	0
6	5745 LANDING ROAD	N	N	N	0	Y	N	0	0	0	0	0	0	0	1	0	0
7	5741 LANDING ROAD	N	N	N	0	Y	N	0	0	0	0	0	0	0	2	0	0
TOTAL																	

LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
8		ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
15		PRUNUS SARGENTI	SARGENT CHERRY	2 1/2" - 3" CAL.
4		PINUS THUNBERGIANA	JAPANESE BLACK PINE	6"-8" HEIGHT
TOTAL				

SCHEDULE A - PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES					TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	B (PERIMETER 5)**	
LANDSCAPE TYPE	427.74 LF	310.31 LF	280.39 LF	439.05 LF	420.27 LF	
LINEAR FEET OF PERIMETER						
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	NO	NO	N/A	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO	N/A	
NUMBER OF PLANTS PROVIDED	7 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	5 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	4 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	7 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	23 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	7 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	9 SHADE TREE* 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREE* 0 EVERGREEN TREES 0 SHRUBS	7 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	23 SHADE TREES 4 EVERGREEN TREES 0 SHRUBS

NOTE* - REQUIRED PERIMETER #3 TREES HAS BEEN RELOCATED TO PERIMETER #2 PER DPZ RECOMMENDATION.
 NOTE** - LANDSCAPING IS REQUIRED PER SCENIC ROAD EXHIBIT.

REFUSE COLLECTION PLAN SCREENING DETAIL

SCREEN CALCULATIONS

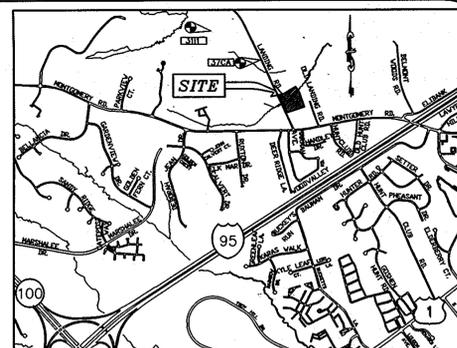
TRASH PAD - 16 LF - TYPE C BUFFER
 1 EVERGREENS REQUIRED
 10 SHRUBS PROVIDED
 NOTE - EVERGREEN SHRUBS HAVE BEEN PROPOSED TO BUFFER THE TRASH PAD AREA.

SCREEN PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
10		ILEX ATTENUATA 'FOSTER'	FOSTER HOLLY	5'-6"

GENERAL NOTES

- SITE ANALYSIS DATA:
 LOCATION TAX MAP: 37 PARCEL 66 LOT: 3
 ELECTION DISTRICT: FIRST
 ZONING: R-ED
 GROSS AREA: 4.89 AC±
 AREA OF LOD: 2.40 AC±
 AREA OF FLOODPLAIN: 1.37 AC±
 AREA OF STEEP SLOPES: 0 AC±
 NET AREA: 3.52 AC±
 NO. OF BUILDABLE LOTS ALLOWED (NET AREA/2): 7
 NO. OF BUILDABLE LOTS PROPOSED: 7
 AREA OF OPEN SPACE REQUIRED (50%): 2.45 AC±
 AREA OF OPEN SPACE PROPOSED: 2.58 AC±
 PROPOSED USE FOR SITE: RESIDENTIAL
 TYPE OF PROPOSED UNIT: SFD
 DEED REFERENCE: 14429/281
 DPZ FILE NO: F-95-169, F-96-178, ECP-13-031
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROVIDED FROM HOWARD COUNTY CONTROL STATIONS NO. 3111 & 37CA
 STA. NO. 3111 N 565,004.73252 E 1,381,586.8997 EL. 305.94
 STA. NO. 37CA N 564,231.6873 E 1,382,742.8184 EL. 256.87
- SUBJECT PROPERTY ZONED R-ED AS PER THE 02/02/04 COMPREHENSIVE ZONING PLAN AND THE COMP-LITE ZONING AMENDMENTS DATED 7/28/06.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION OR BUILDING/GRADING PERMIT.
- APPROVAL OF A SITE DEVELOPMENT PLAN BY THE DEPARTMENT OF PLANNING AND ZONING AND HOWARD COUNTY PLANNING BOARD IS REQUIRED FOR THE DEVELOPMENT OF ALL RESIDENTIAL LOTS WITHIN THIS SUBDIVISION PRIOR TO ISSUANCE OF ANY GRADING OR BUILDING PERMITS IN ACCORDANCE WITH SECTION 16.155 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND SECTION 107.F OF THE ZONING REGULATIONS.
- PROJECT BOUNDARY IS BASED ON A FIELD RUN SURVEY PERFORMED IN SEPTEMBER 2012 BY MILDENBERG, BOENDER AND ASSOCIATES, INC.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED IN SEPTEMBER 2012 BY MILDENBERG, BOENDER AND ASSOCIATES, INC.
- THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT. HOWEVER, FOREST MANAGEMENT PRACTICES AS DENIED IN THE DEED OF FOREST CONSERVATION ARE ALLOWED. FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1202 OF THE CODE AND FOREST CONSERVATION MANUAL AND IN ACCORDANCE WITH PLAT # 12280 WILL BE FULFILLED BY ON-SITE AFFORESTATION OF 1.5 ACRES INTO FOREST CONSERVATION EASEMENT A (0.81 AC) AND B (0.69 AC). SURETY IN THE AMOUNT OF \$32,670.00 WILL BE POSTED WITH A DEVELOPER'S AGREEMENT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM, OR ITS REQUIRED BUFFER, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS. NO DISTURBANCES ARE PROPOSED UNDER THIS SUBDIVISION PLAN EXCEPT FOR EXISTING LOT LINE CONNECTION AT THE SOUTHEAST CORNER OF THE ENVIRONMENTAL FEATURES IN ACCORDANCE WITH SECTION 16.116(C) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- THIS SITE IS NOT WITHIN A HISTORIC DISTRICT, NOR ARE THERE ANY HISTORIC STRUCTURES ON-SITE.
- LANDING ROAD IS DESIGNATED AS A SCENIC ROAD. THE SUBDIVISION PLAN MEETS THE REQUIREMENTS OF SECTION 16.125 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS FOR PROTECTION OF SCENIC ROADS.
- NO BURIAL GROUNDS OR CEMETERIES EXIST ON SITE.
- NO STEEP SLOPES THAT AVERAGE 25% OR GREATER OVER 10 VERTICAL FEET WITH A 20,000 SF OR GREATER ON-SITE AND OFF-SITE CONTIGUOUS AREA ARE LOCATED ON THIS SITE.
- APFO ROAD TEST WAS PREPARED BY THE TRAFFIC GROUP, DATED OCTOBER 2012.
- WETLAND STUDY AND FOREST STAND DELINEATION WERE PERFORMED BY ECO-SCIENCE, INC. IN SEPTEMBER, 2012.
- 100-YEAR FLOODPLAIN DELINEATION WAS PERFORMED BY MILDENBERG, BOENDER AND ASSOC. IN SEPTEMBER 2012.
- STORMWATER MANAGEMENT IS PROVIDED VIA RAIN GARDEN FACILITIES (M-7), ROOFTOP DISCONNECTIONS (N-1) AND NON-ROOFTOP DISCONNECTIONS (N-2) IN ACCORDANCE WITH THE 2000 MDE STORMWATER DESIGN MANUAL. ALL ESD PRACTICES WILL BE PRIVATELY OWNED AND MAINTAINED.
- HORIZONTAL GEOMETRY OF THE MICRO-BIOTENTION FACILITIES MAY BE MODIFIED WHILE MAINTAINING SURFACE AREA.
- THIS PLAN IS IN COMPLIANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED PERIMETER LANDSCAPING (23 SHADE TREES, 4 EVERGREEN TREES AND 10 SHRUBS) WILL BE BONDED WITH THE DEVELOPER'S AGREEMENT FOR THIS PLAT IN THE AMOUNT OF \$7,800.00.
- WATER AND SEWER IS PUBLIC. CONTRACT NO. 14-4783-D WILL BE UTILIZED.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 A) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE, A WIDER WIDTH MAY BE REQUIRED IN CERTAIN CASES).
 B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2").
 C) GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. OF 45 FOOT TURNING RADIUS.
 D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD PLAN WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE.
 F) STRUCTURE CLEARANCES - MINIMUM 12 INCHES
 G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- IN ACCORDANCE WITH SECTION 16.102(d) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, THIS SUBDIVISION IS EXEMPT FROM THE SKETCH PLAN AND PRELIMINARY PLAN PROCEDURES BECAUSE THERE ARE NO PUBLIC ROAD IMPROVEMENTS REQUIRED AND THERE IS NO ADDITION TO THE AREA PREVIOUSLY RECORDED.
- OPEN SPACE LOT 8 IS TO BE OWNED AND MAINTAINED BY THE HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS.
- FOR FLAG OR 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.
- THIS SUBDIVISION IS SUBJECT TO A DESIGN MANUAL WAIVER TO ALLOW TOTAL OF SEVEN LOTS TO USE THE USE-IN-COMMON DRIVEWAY. THE WAIVER WAS APPROVED ON MARCH 7, 2013, WITH THE CONDITION THAT THE USE-IN-COMMON DRIVEWAY WILL BE BUILT TO A PUBLIC ROAD STANDARD: 22" PAVING WITH A P-1 PAVING SECTION.
- NOISE STUDY IS NOT REQUIRED.
- A PRIVATE RANGE OF ADDRESS SIGN SHALL BE FABRICATED AND INSTALLED BY THE HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATE.
- ANY GRADED AREA MUST RECEIVE EITHER TEMPORARY OR PERMANENT SEEDING IMMEDIATELY AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
- MOE TRACKING NO. 13-NI-3148, 2013-60728
- A USE-IN-COMMON DRIVEWAY ACCESS MAINTENANCE AGREEMENT SHALL BE RECORDED SIMULTANEOUSLY WITH THIS PLAT IN THE LAND RECORD OF HOWARD COUNTY, MARYLAND.



VICINITY MAP

SCALE: 1"=2000'
 ADC MAP 35, GRID B-1

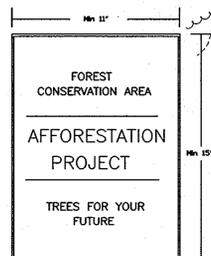
Project	12-024	date	SEP. 2013
illustration	MMM	engineering	MMM
scale	1"=50'	approval	MMM
description		revisions	

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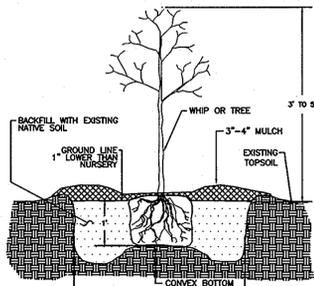
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LEGEND

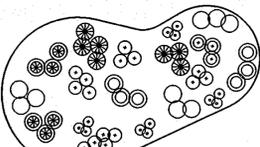
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- WETLANDS
- FOREST CONSERVATION EASEMENT
- FOREST CONSERVATION SIGNAGE
- EXISTING TREE LINE
- LIMIT OF DISTURBANCE
- SSP SUPER SILT FENCE
- RD ROOF DRAIN
- 247-0 RAIN GARDEN



SIGNAGE DETAILS
NOT TO SCALE



TREE PLANTING DETAIL
CONTAINER GROWN



TYPICAL TREE PLANTING PLAN
NOT TO SCALE

OWNER / DEVELOPER

DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 9/2/13
CHIEF, BUREAU OF HIGHWAYS
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 9/2/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

[Signature] 10/28/13
CHIEF, DIVISION OF LAND DEVELOPMENT
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 9/3/14.

[Signature] 9/5/13
R. JACOB HIKMAT P.E. DATE

AFFORESTATION FOREST CONSERVATION EASEMENTS

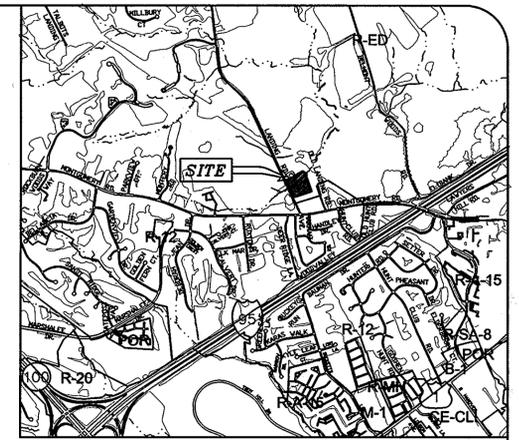
FCE A	ACRES	TREES REQUIRED (ALTERNATIVE 1)		TREES REQUIRED (ALTERNATIVE 2)	
		WHIP	TREE	WHIP	TREE
0.51	AC	102	TREES REQUIRED	179	TREES REQUIRED
0.30	AC (BGE YELLOW ZONE)	60	TREES REQUIRED	105	TREES REQUIRED
0.65	AC	130	TREES REQUIRED	228	TREES REQUIRED
0.04	AC (BGE YELLOW ZONE)	8	TREES REQUIRED	14	TREES REQUIRED
TOTAL	1.50 AC	300	TREES REQUIRED	526	TREES REQUIRED

MD DNR QUALIFIED PROFESSIONAL

[Signature] MASHID TRINGA

PLANTING SPECIFICATIONS AND NOTES

- SITE PREPARATION AND SOILS**
- PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS. SEE PLAN FOR LOCATIONS.
 - DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 9 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
 - SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
 - SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
 - ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.
- PLANT STORAGE AND INSPECTION**
- FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
 - FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
 - PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, MOOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
 - UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.
- PLANT INSTALLATION**
- THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
 - PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
 - CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
 - CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL. IF THE ROOTS ENCLOSE THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED. J-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
 - FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN REEL BACK BURLAP TO BACK OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
 - FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
 - AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
 - NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOSS OF EXCESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.
- FERTILIZING**
- DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
 - NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
 - AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.
- AFFORESTATION PLANT LIST**
- | ALTERNATIVE 1 | QTY. | SPECIES | SHADE TOL. | MOIST. REGIME | WET. STATUS | MIN.O.C. | SIZE & SPACING | REMARKS |
|---------------|--|---------|------------|---------------|-------------|---------------------------------|----------------|---------|
| 20 | Acer rubrum Red Maple | VT | D-W | FAC | 15' | CONT/B & B 1" CALIPER | | |
| 60 | Liquidambar styraciflua American Sweet Gum | I | M-W | FAC | 15' | CONT/B & B 1" CALIPER | | |
| 60 | Liriodendron tulipifera Tuliptree | MT | D-M | FAC | 15' | CONT/B & B 1" CALIPER | | |
| 60 | Nyssa sylvatica Black Gum | T | M-W | FAC | 15' | CONT/B & B 1" CALIPER | | |
| 32 | Prunus serotina Wild Black Cherry | I | M | FAW- | 15' | CONT/B & B 3'-5" HEIGHT | | |
| 20 | Acer buergerianum Trident Maple | T | M-W | FAC | 15' | CONT/B & B 1" CALIPER | | |
| 20 | Acer palmatum Japanese Red Maple | T | M-W | FAC | 15' | CONT/B & B 1" CALIPER | | |
| 28 | Acer griseum PAPERBARK MAPLE | T | M-W | FAC | 15' | CONT/B & B 1" CALIPER | | |
| TOTAL | 300 TREES | | | | | | | |
| ** | TREES TO BE PLANTED WITHIN BGE YELLOW ZONE. REFER TO AFFORESTATION FOREST CONSERVATION EASEMENTS TABLE FOR NUMBER OF TREES TO BE PLANTED WITHIN BGE YELLOW ZONE. | | | | | | | |
| ALTERNATIVE 2 | QTY. | SPECIES | SHADE TOL. | MOIST. REGIME | WET. STATUS | MIN.O.C. | SIZE & SPACING | REMARKS |
| 20 | Acer rubrum Red Maple | VT | D-W | FAC | 11' | SEEDLING/WHIP WITH TREE SHELTER | | |
| 100 | Liquidambar styraciflua American Sweet Gum | I | M-W | FAC | 11' | SEEDLING/WHIP WITH TREE SHELTER | | |
| 107 | Liriodendron tulipifera Tuliptree | MT | D-M | FAC | 11' | SEEDLING/WHIP WITH TREE SHELTER | | |
| 110 | Nyssa sylvatica Black Gum | T | M-W | FAC | 11' | SEEDLING/WHIP WITH TREE SHELTER | | |
| 70 | Prunus serotina Wild Black Cherry | I | M | FACU | 11' | SEEDLING/WHIP WITH TREE SHELTER | | |
| 40 | Acer buergerianum Trident Maple | T | M-W | FAC | 11' | SEEDLING/WHIP WITH TREE SHELTER | | |
| 39 | Acer palmatum Japanese Red Maple | T | M-W | FAC | 11' | SEEDLING/WHIP WITH TREE SHELTER | | |
| 40 | Acer griseum PAPERBARK MAPLE | T | M-W | FAC | 11' | SEEDLING/WHIP WITH TREE SHELTER | | |
| TOTAL | 526 WHIPS WITH TREE SHELTERS | | | | | | | |
| ** | TREES TO BE PLANTED WITHIN BGE YELLOW ZONE. REFER TO AFFORESTATION FOREST CONSERVATION EASEMENTS TABLE FOR NUMBER OF TREES TO BE PLANTED WITHIN BGE YELLOW ZONE. | | | | | | | |



VICINITY MAP

SCALE: 1"=200'
ADC MAP 35, GRID B-1

POST CONSTRUCTION PERIOD PROTECTION AND MANAGEMENT PROGRAM

- ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD.
 - ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
 - VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY AFFECTING THE PLANTED STOCK.
 - REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
 - REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
 - A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.
- SUPERVISION**
- ALL FOREST CONSERVATION ACTIVITIES SHALL BE DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER "QUALIFIED PROFESSIONAL" AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.19.06.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION.
- STANDARD SPECIMEN TREE NON-DISTURBANCE NOTE:**
- "THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, SOIL COMPACTION OR EXCAVATION, INTRODUCTION OF TOXIC CHEMICALS OR OTHER DISTURBANCES DETRIMENTAL TO THE LIVE SPECIMEN TREES OR CRITICAL ROOT ZONES FOR THESE TREES EXCEPT AS PERMITTED BY HOWARD COUNTY"

CONSTRUCTION PERIOD PROTECTION AND MANAGEMENT PROGRAM

- ALL FOREST RETENTION AREAS AND ISOLATED POTENTIAL SPECIMEN TREES SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC MESH FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY AND AROUND ISOLATED POTENTIAL SPECIMEN TREES PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING.
- SUPER SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLAN. BLAZE ORANGE PLASTIC MESH FENCING SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY WHERE THERE IS NO SUPER SILT FENCE PROPOSED AFTER THE PLANTING OF THE TREES.
- THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES. IT IS UNDERSTOOD THAT THE INSTALLATION OF THE FENCING IN THIS MANNER WILL CREATE AN IRREGULAR EDGE.
- ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
- ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THE PROTECTED AREAS.
- INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
- THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCKPIILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL FORESTED AREAS. PLEASE REFER TO ROOT PRUNING DETAIL THIS SHEET.

- PRE-CONSTRUCTION MEETING**
- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
 - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
 - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
 - MAKE ALL NECESSARY ADJUSTMENTS;
 - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.
- CONSTRUCTION MONITORING**
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
 - THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

MILDENBERG & ASSOC., INC.
Engineers Planners Surveyors
6800 Deerpath Road, Suite 150, Elkridge, Maryland 21075
(410) 997-0296 Fax

project: 12-024
date: AUG. 2013
illustration: MMW
scale: 1"=50'
approval: MMW
revision: R/H

description: LANDING MEADOW
lots 1 THRU 7 AND OPEN SPACE LOT 8
A RESUBDIVISION OF ALBRIGHT PROPERTY, LOT 3, PLAN # 12280
1ST ELECTION DISTRICT, TAX MAP 37, PARCEL 66, LOT 3, HOWARD COUNTY, MD

2 OF 3
F-13-056

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
 TO AREAS WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

- CRITERIA**
- A. SOIL PREPARATION**
 - 1. TEMPORARY STABILIZATION - B-4.4**
 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.
 - 2. PERMANENT STABILIZATION - B-4.5**
 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.
 II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
 III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT THROUGH 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) MAY BE ACCEPTABLE.

APPLICATION

- 1. SOIL PREPARATION**
 SOIL PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH THE ABOVE CRITERIA.

TOPSOILING

- 1. TOPSOIL**
 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 AND IS SALVAGED FROM 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 CONTINUOUS SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
 c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 d. THE SOIL IS SO AODIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

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 QUALIFIED LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.

- 2. FERTILIZERS** MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY 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 A #20 MESH SIEVE.
- 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 AODIC 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.

STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

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

PURPOSE
 TO PROTECT DISTURBED SOIL 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**
- A. SEEDING**
 - 1. SPECIFICATIONS**
 ALL 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.4 FOR SPECIFICATIONS FOR SEEDING MIXTURES. SEEDING MIXTURES SHALL BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
 - 2. MULCH**
 MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE WILL BE APPLIED WITHIN THE GROUND THAW.
 - 3. INOCULANTS**
 INOCULANTS 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 FOR AREAS RECEIVING LOW MAINTENANCE. APPLY UREA FROM SHOWZERS (40-0-01) 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.
 - 4. SOIL PREPARATION**
 SOIL PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH THE ABOVE CRITERIA.

APPLICATION

- 1. SEEDING**
 SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE ABOVE CRITERIA.

MULCHING

- 1. 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 WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLLY, 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.
 c. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL CHECKING OF THE UNIFORMITY OF SPREAD SLURRY.
 d. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
 e. WCFM MATERIALS MUST BE MANUFACTURED AND PROCESSED TO PREVENT 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 BE APPLIED TO A BLOTTER-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.
 f. WCFM MATERIALS MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.
 g. 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.

- 2. APPLICATION**
 a. APPLY MULCH TO ALL SEEDING AREAS IMMEDIATELY AFTER SEEDING.
 b. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDING 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 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

- 1. 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. A MULCH ANCHORING TOOL IS A TRACTOR MOUNTED 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.
 b. WOOD CELLULOSE FIBER 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.
 c. SYNTHETIC BINDERS SUCH AS ACRYLIC LAKE (AGRO-TACK), DCA-70, PETROSEK, TERRA TACK, IBERA TACK OR OTHER APPROVED EQUIPMENT ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

- 2. ANALYSES**
 a. TOTAL AREA OF SITE: 4.89 ACRES
 b. DISTURBED AREA: 0.85 ACRES
 c. AREA TO BE ROOFED OR PAVED: 0.75 ACRES
 d. AREA TO BE VEGETATIVELY STABILIZED: 3.39 ACRES
 e. TOTAL CUT: 3,000 CU. YDS.
 f. TOTAL FILL: 3,000 CU. YDS.
 g. OFFSITE/WATER BORROW AREA LOCATION: 10717-B BIRMINGHAM WAY, WOODSTOCK, MARYLAND 21163

STANDARD SEDIMENT CONTROL NOTES

- 1. A MINIMUM OF 48 HOURS NOTICE** MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION, (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 REDISTURBANCE**, 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 TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 c. 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-B-4-1-1), TEMPORARY SEEDING (SEC-B-4-1-2), AND MULCHING (SEC-B-4-1-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 4. SEDIMENT CONTROL STRUCTURES** ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 5. ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION** MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCESSING WITH CONSTRUCTION.
- 6. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM GRADE OF 20 PERCENT GRAVITY) 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 ENFORCEMENT AUTHORITY. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION
 TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION.

PURPOSE
 TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED SOIL.

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

- CRITERIA**
- A. SEED MIXTURES**
 - 1. 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.
 - 2. ADDITIONAL PLANTING SPECIFICATIONS** FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DINES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USNRCS TECHNICAL FIELD GUIDE, SECTION 342-CRITICAL AREA PLANTING.
 - 3. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES**, USE AND SHOW RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
 - 4. FOR AREAS RECEIVING LOW MAINTENANCE**, APPLY UREA FROM FERTIZERS (40-0-01) 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.

APPLICATION

- 1. AREAS WHERE TURFGRASS** MAY BE DESIRE INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.

TEMPORARY STABILIZATION

- 1. 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.
- 2. 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/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.
- 3. 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.
- 4. 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 RATES 1 1/2 TO 3 POUNDS PER 1000 S.F.

IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES

- WESTERN MD, MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1** (HARDNESS ZONE: 5B, 6A)
- CENTRAL MD, MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15** (HARDNESS ZONE: 6B)
- SOUTHERN MD, EASTERN SHORE, MARCH 15 TO MAY 15, AUGUST 15 TO OCTOBER 15** (HARDNESS ZONE: 6B)

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 THE AREAS WILL BE WITHOUT PROBLEM.

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.

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 TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

- CRITERIA**
- 1. 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 FORTRELIZER AND LIME RATES MUST BE PUT ON THE PLAN.
 - 2. FOR SITES HAVING SOIL TESTING PERFORMED**, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
 - 3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON**, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-3-A.1.1, AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. (1 DAY)
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN (1 DAY)
3. INSTALL DIVERSION FENCE, EARTH DIKE AND SILT FENCE AT LOCATIONS SHOWN. (2 DAYS)
4. CONSTRUCT UTILITIES. (15 DAYS)
5. CONSTRUCT USE IN COMMON DRIVEWAY (15 DAYS)
6. GRADE SITE PER PLAN (5 DAYS)
7. SEED AND MULCH ALL REMAINING DISTURBED AREAS. (1 DAY PER)
8. WHEN ALL CONSTRUCTING DRAINAGE AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED, AND WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES FROM FOREST CONSERVATION AREA AND STABILIZE REMAINING DISTURBED AREAS (1 DAY).
9. SEDIMENT CONTROL DEVICES SHOULD REMAIN IN PLACE TO BE UTILIZED DURING THE NEXT CONSTRUCTION STAGE (SDP)

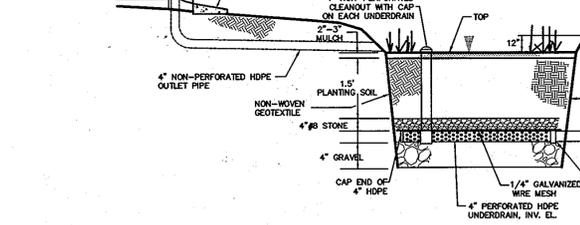
RAIN GARDEN PLANT LIST

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
42	○	ILEX GLABRA	INK BERRY	2" - 3" HT.
252	○	LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	1 GAL. CONTAINER
168	○	ONOCLEA SENSIBILIS	SENSITIVE FERN	1 GAL. CONTAINER
126	○	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER
TOTAL: 546 PERENNIALS, 42 SHRUB				

RAINGARDENS SCHEDULE

NO	SIZE	TOP EL.	TOP OF BERM	INV. IN	INV. OUT
1	3'10" S.F.	241.00	241.75	238.83	238.50
2	2'75" S.F.	247.00	247.75	244.83	244.50
3	2'65" S.F.	251.00	251.75	248.83	248.50
4	3'80" S.F.	245.50	246.25	243.33	243.00
5	1'50" S.F.	235.00	236.00	232.83	232.00
6	2'45" S.F.	237.00	238.00	234.83	234.00
7	2'40" S.F.	235.00	235.75	232.83	232.50
7-B	2'40" S.F.	235.00	235.75	232.83	232.50

TYP. RAIN GARDEN DETAIL



TYPICAL RAIN GARDEN PROFILE

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKING PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

7/6/13
 DATE

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

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 EARTH DISTURBANCE AND EROSION BEFORE BEGINNING THE PROJECT. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTIONS.

7-6-13
 DATE

ROBERT DORSEY, JR., PRESIDENT, DORSEY FAMILY HOMES, INC.
 PRINTED NAME OF DEVELOPER

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

9/19/13
 DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: DEPARTMENT OF ENVIRONMENTAL ENGINEERING DIVISION

APPROVED: DEPARTMENT OF LAND DEVELOPMENT

OWNER / DEVELOPER
 DORSEY FAMILY HOMES, INC.
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 (410) 465-7200

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: DEPARTMENT OF ENVIRONMENTAL ENGINEERING DIVISION

APPROVED: DEPARTMENT OF LAND DEVELOPMENT

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. 17892, EXP. DATE 9/3/14.

7/6/13
 DATE

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