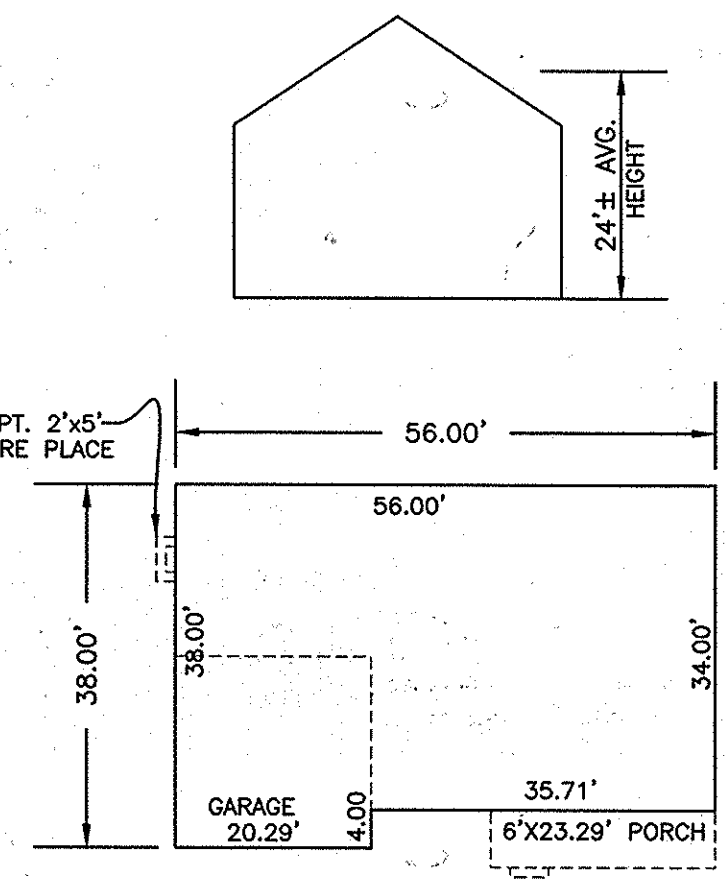


SHEET INDEX	
NO.	DESCRIPTION
1	COVER AND GRADING PLAN
2	SEDIMENT AND EROSION CONTROL PLAN
3	STORMWATER MANAGEMENT NOTES AND DETAILS
4	SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS

GENERAL NOTES

- SUBJECT PROPERTY IS ZONED R-20 PER THE 10-6-2013 COMPREHENSIVE ZONING PLAN.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, DATED OCTOBER 7, 2007.
- PROJECT LIMITS ARE BASED ON FIELD RUN BOUNDARY SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. DATED FEBRUARY, 2015.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PREPARED BY BENCHMARK ENGINEERING, INC. DATED FEBRUARY 2015, AND HOWARD COUNTY 2011 GIS. CONTOUR INTERVAL IS 2'.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS 2488 & 24CA WERE USED FOR THIS PROJECT.
- THERE ARE NO STEEP SLOPES (25% OR GREATER) IN EXCESS OF 20,000 SF ON THIS SITE. THERE ARE 16,358 SF OF MODERATE SLOPES RANGING FROM 15%-24.99% LOCATED ON THIS SITE.
- THERE IS NO NEED FOR A FLOOD STUDY FOR THIS PROJECT. AS NO FLOODPLAIN, STREAM, WETLANDS OR THEIR BUFFERS ARE LOCATED ON-SITE.
- TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THIS SITE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PLAN.
- THIS SITE IS LOCATED WITHIN THE METROPOLITAN DISTRICT AND THE PLANNED SERVICE AREA WATER AND SEWER WILL BE PUBLIC CONNECTIONS PROPOSED TO CONTRACTS 10-W AND 31-S.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION FOR DEVELOPMENT OF LAND WHICH IS LESS THAN 40,000 SF IN SIZE.
- PREVIOUS DPZ FILES: P.B. 3 P. 35, ECP-15-057
- THE DEVELOPMENT IS NOT SUBJECT TO LANDSCAPING REQUIREMENTS BECAUSE OF THE SITE'S LOCATION WITHIN THE INTERIOR OF THE SUBDIVISION.
- ~~DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:~~
 - WIDTH - 12' (15' SERVING MORE THAN ONE RESIDENCE).
 - SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN.)
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45' TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
- MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- IN ACCORDANCE WITH SECTION 128.0 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.
- A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS NOT REQUIRED.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- EXISTING UTILITIES SHOWN ARE BASED ON A FIELD SURVEY, HOWARD COUNTY GIS, AND INFORMATION OF RECORD. ANY REVISION TO THE ELEVATIONS OR LOCATIONS OF THE EXISTING UTILITIES SHALL BE IDENTIFIED AND COMPLETED BY THE CONTRACTOR.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE BUILDER'S EXPENSE.
- SHC ELEVATION SHOWN IS LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6-G.
- STORMWATER MANAGEMENT METHODS WERE DESIGNED BASED ON THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II. TREATMENT IS PROVIDED USING ENVIRONMENTAL SITE DESIGN METHODS, INCLUDING MICRO-BIORETENTION PRACTICES AND NON-ROOFTOP DISCONNECTION. INDIVIDUAL FACILITIES WILL BE OWNED AND MAINTAINED BY LOT OWNER.
- BRL INDICATES ZONING BUILDING RESTRICTION LINE, OTHER RESTRICTIONS MAY APPLY.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY.
- THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTIONS IS RECOMMENDED.



SITE ANALYSIS DATA CHART

A.) TOTAL PROJECT AREA	0.56 AC.
B.) AREA OF THIS PLAN SUBMISSION	0.56 AC.
C.) APPROXIMATE LIMIT OF DISTURBANCE	0.3 AC.
D.) PRESENT ZONING:	R-20
E.) PROPOSED USE OF SITE:	RESIDENTIAL SINGLE FAMILY DETACHED UNITS
F.) TOTAL NUMBER OF UNITS ALLOWED AS SHOWN ON FINAL P(S)	1
G.) TOTAL NUMBER OF UNITS PROPOSED:	1
H.) REQUIRE PARKING PER SFD UNIT:	2.5 SPACES
I.) PROVIDED PARKING PER UNIT:	4 SPACES (2 GARAGE, 2 DRIVEWAY)
J.) APPLICABLE DPZ FILE REFERENCES:	PLAT BOOK 3, PAGE 35, CONTRACT NO. 10-W, CONTRACT NO. 31-S, ECP-15-057
K.) PROPOSED WATER AND SEWER SYSTEMS:	X PUBLIC PRIVATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWER SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
Barbara M. Morrison 10/23/2015
HOWARD COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chad K. ... 11-3-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION

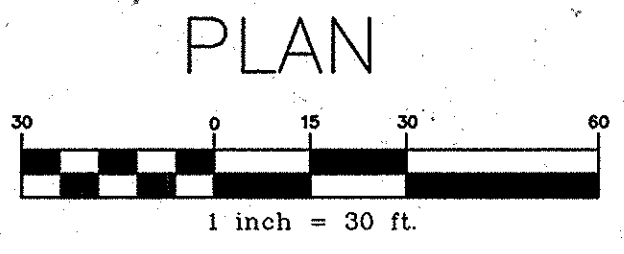
Val ... 11-4-15
CHIEF DIVISION LAND DEVELOPMENT

Val ... 11-4-15
DIRECTOR

SOILS LEGEND

MAP SYMBOL	SOIL TYPE	HYDRIC	MAPPING UNIT	K FACTOR
LoB	B/C	NO	LEGORE-MONTALTO-URBAN LAND COMPLEX; 0 TO 8 PERCENT SLOPES	0.28/0.32
LoC	B/C	NO	LEGORE-MONTALTO-URBAN LAND COMPLEX; 8 TO 15 PERCENT SLOPES	0.28/0.32
LdD	B	NO	LEGORE-RELAY GRAVELLY LOAMS; 15 TO 25 PERCENT SLOPES; VERY STONY	0.28/0.20
WcB	D	YES	WATCHUNG SILT LOAM; 3 TO 8 PERCENT SLOPES; STONY	0.28

USDA - NRCS WEBSITE. SOIL SURVEY MAP PAGE 13.



NOTE: STORMWATER DESIGN COMPUTATIONS MAY BE FOUND IN THE REPORT ASSOCIATED WITH THIS PLAN SUBMISSION. DECLARATIONS OF COVENANTS ARE TO BE FILED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND.

SHC TABLE

LOT NO.	INVERT AT R/W	MCE
30	434.1	438.2

ADDRESS CHART

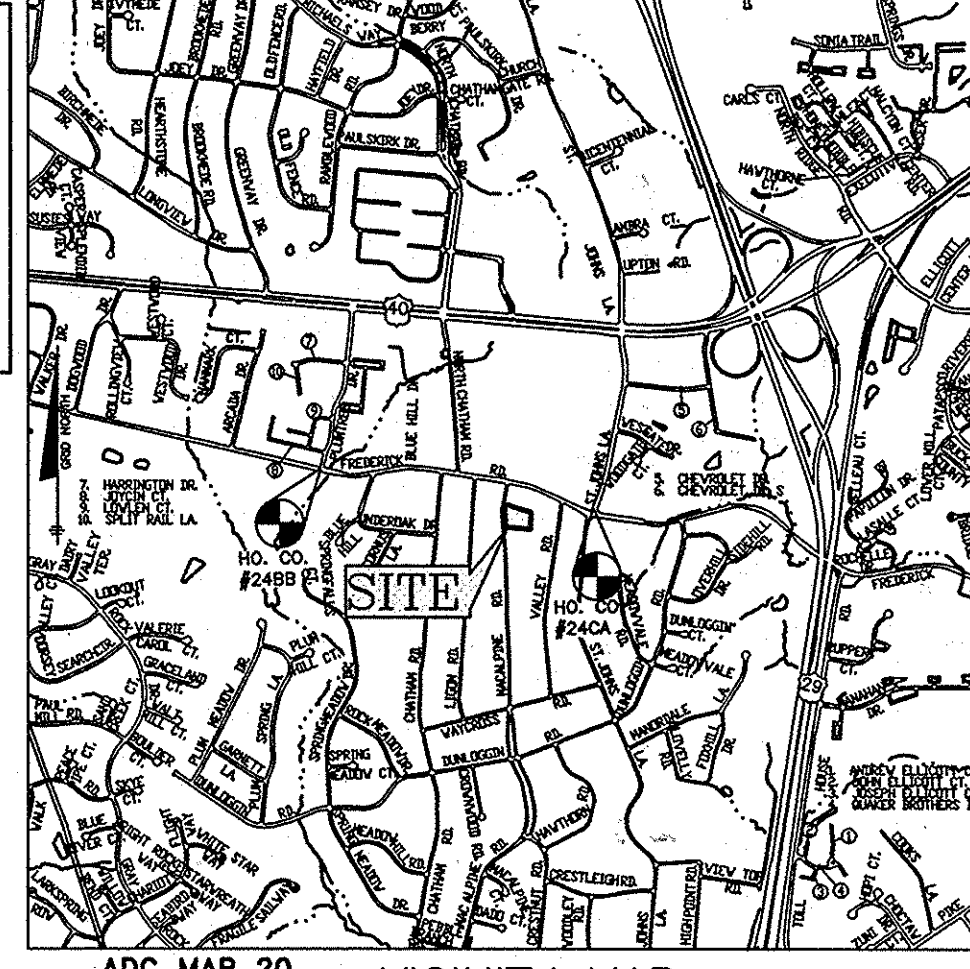
LOT	STREET ADDRESS
30	3609 MACALPINE ROAD

PERMIT INFORMATION CHART

SUBDIVISION NAME:		SECTION/AREA:		LOT/PARCEL #	
MACALPINE		BLOCK "B"		LOT 30 PARCEL 205	
PLAT No.	GRID No.	ZONE	TAX MAP	ELECTION DISTRICT	CENSUS TRACT
PB 3, P. 35	11	R-20	24	2nd	602306

BENCH MARKS NAD '83

HO. CO. 24CA	ELEV. 398.285
STAMPED DISC ON CONCRETE MONUMENT. INTERSECTION OF ST. JOHNS LANE AND FREDERICK ROAD	
N 586,506.228	E 1,361,634.273
HO. CO. 248B	ELEV. 396.145
STAMPED DISC ON CONCRETE MONUMENT. INTERSECTION OF PLUMTREE DRIVE AND FREDERICK ROAD	
N 586,791.217	E 1,359,181.180



ADC MAP 20, GRID EB VICINITY MAP SCALE: 1"=2000'

LEGEND

SOILS CLASSIFICATION	GnB
SOILS DELINEATION	(Symbol)
EXISTING CONTOURS	(Symbol)
PROPOSED CONTOURS	(Symbol)
EXISTING WOODS LINE	(Symbol)
PROPOSED WOODS LINE	(Symbol)
PROPOSED STRUCTURE	(Symbol)
NON-ROOFTOP DISCONNECTION	(Symbol)
EFFECTIVE SITE AREA	(Symbol)
DRAINAGE AREA	(Symbol)
BORING LOCATION	B-1 (Symbol)
15% TO 25% SLOPES	(Symbol)
25% AND GREATER	(Symbol)

NO.	DATE	REVISION

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 45377, Expiration Date: 06-08-16.

BENCHMARK ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6100 (F) 301-710-5686
(F) 410-465-6644
WWW.BE-CVLENGINEERING.COM

John ...
PROFESSIONAL ENGINEER

OWNER/DEVELOPER:
PLEASANT LIVING HOMES, LLC
474 OLD ORCHARD CIRCLE
MILLERSVILLE, MD 21108
C/O TOM BRANDT
410-280-1001

BUILDER:
CARRIGAN HOMES, INC.
9812 CAITLINS COURT
ELLICOTT CITY, MD 21042
410-465-7755

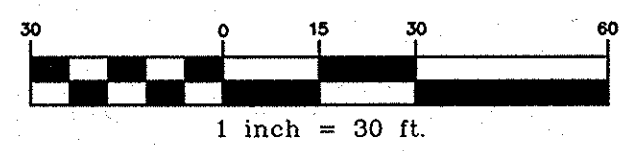
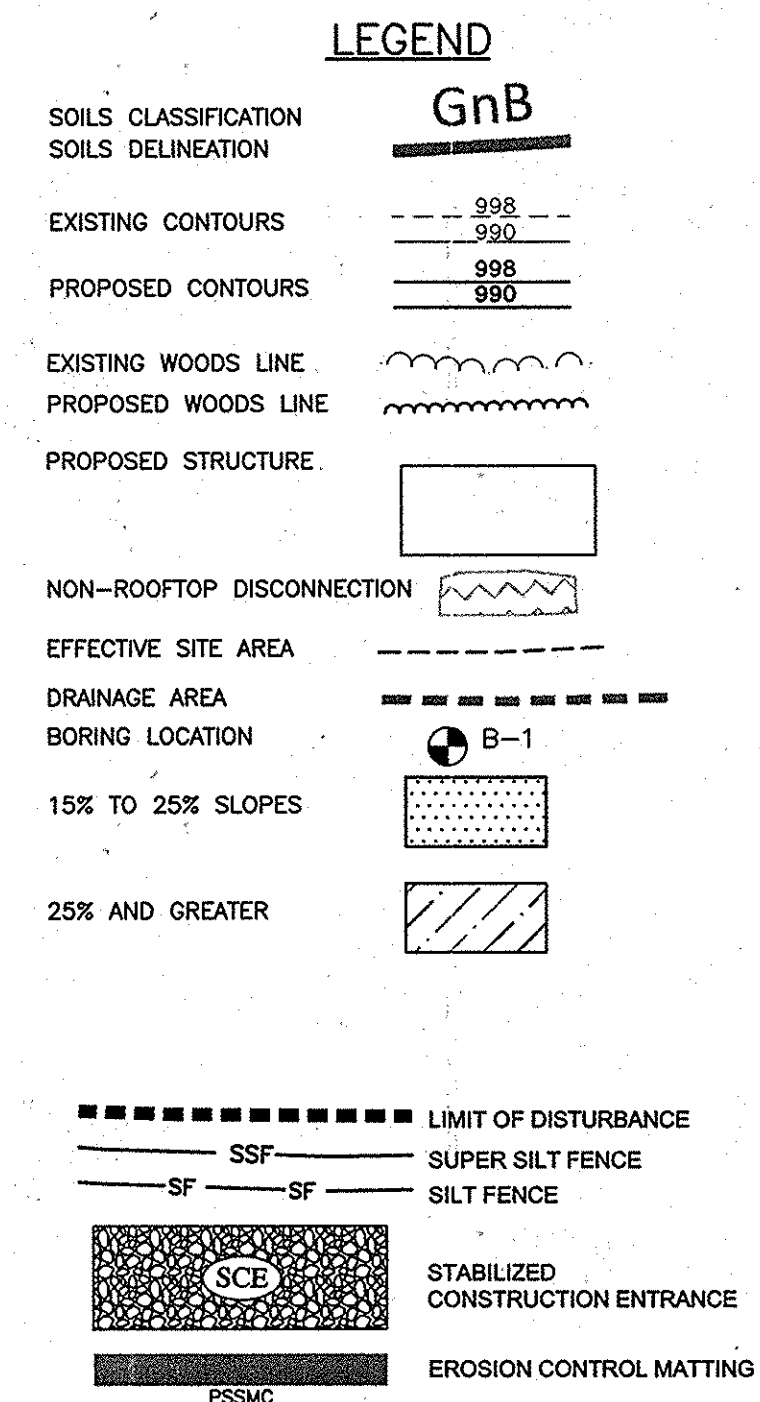
PROJECT: **MACALPINE BLOCK "B", LOT 30**

LOCATION: 3609 MACALPINE RD ELLICOTT CITY, MD 21042 TAX MAP 24, GRID 11, P/O PARCEL 205 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **SITE DEVELOPMENT PLAN COVER AND GRADING PLAN**

DATE: SEPTEMBER, 2015 PROJECT NO. 2666

DESIGN: JMC DRAFT: JC SCALE: 1" = 30' DRAWING 1 OF 4



ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

[Signature] 10/1/15
ENGINEER DATE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION 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.

[Signature] 10/1/15
DEVELOPER DATE

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

[Signature] 10/1/15
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 11-3-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 11-4-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 11-4-15
DIRECTOR DATE

SOILS LEGEND				
MAP SYMBOL	SOIL TYPE	HYDRIC	MAPPING UNIT	K FACTOR
LoB	B/C	NO	LEGOORE-MONTALTO-URBAN LAND COMPLEX; 0 TO 8 PERCENT SLOPES	0.28/0.32
LoC	B/C	NO	LEGOORE-MONTALTO-URBAN LAND COMPLEX; 8 TO 15 PERCENT SLOPES	0.28/0.32
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WcB	D	YES	WATCHUNG SILT LOAM; 3 TO 8 PERCENT SLOPES; STONY	0.28

USDA - NRCS WEBSITE. SOIL SURVEY MAP PAGE 13.

NO.	DATE	REVISION
<p>BENCHMARK ENGINEERING, INC. ENGINEERS & LAND SURVEYORS & PLANNERS 8480 BALTIMORE NATIONAL PIKE & SUITE 315.4 ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6544 WWW.BE-ONLINEENGINEERING.COM</p>		<p>Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 45577, Expiration Date: 06-08-16.</p> <p><i>[Signature]</i> PROFESSIONAL ENGINEER</p>
<p>OWNER/DEVELOPER: PLEASANT LIVING HOMES, LLC 474 OLD ORCHARD CIRCLE MILLERSVILLE, MD 21108 C/O TOM BRANDT 410-280-1001</p>		<p>PROJECT: MACALPINE BLOCK "B", LOT 30</p>
<p>BUILDER: CARRIGAN HOMES, INC. 9812 CAITLINS COURT ELLICOTT CITY, MD 21042 410-465-7755</p>		<p>LOCATION: 3608 MACALPINE RD ELLICOTT CITY, MD 21043 TAX MAP 24, GRID 11, P/O PARCEL 205 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>
<p>TITLE: SITE DEVELOPMENT PLAN SEDIMENT AND EROSION CONTROL PLAN</p>		<p>DATE: SEPTEMBER, 2015 BEI PROJECT NO. 2666</p>
<p>SCALE: 1" = 30'</p>		<p>SHEET 2 OF 4</p>

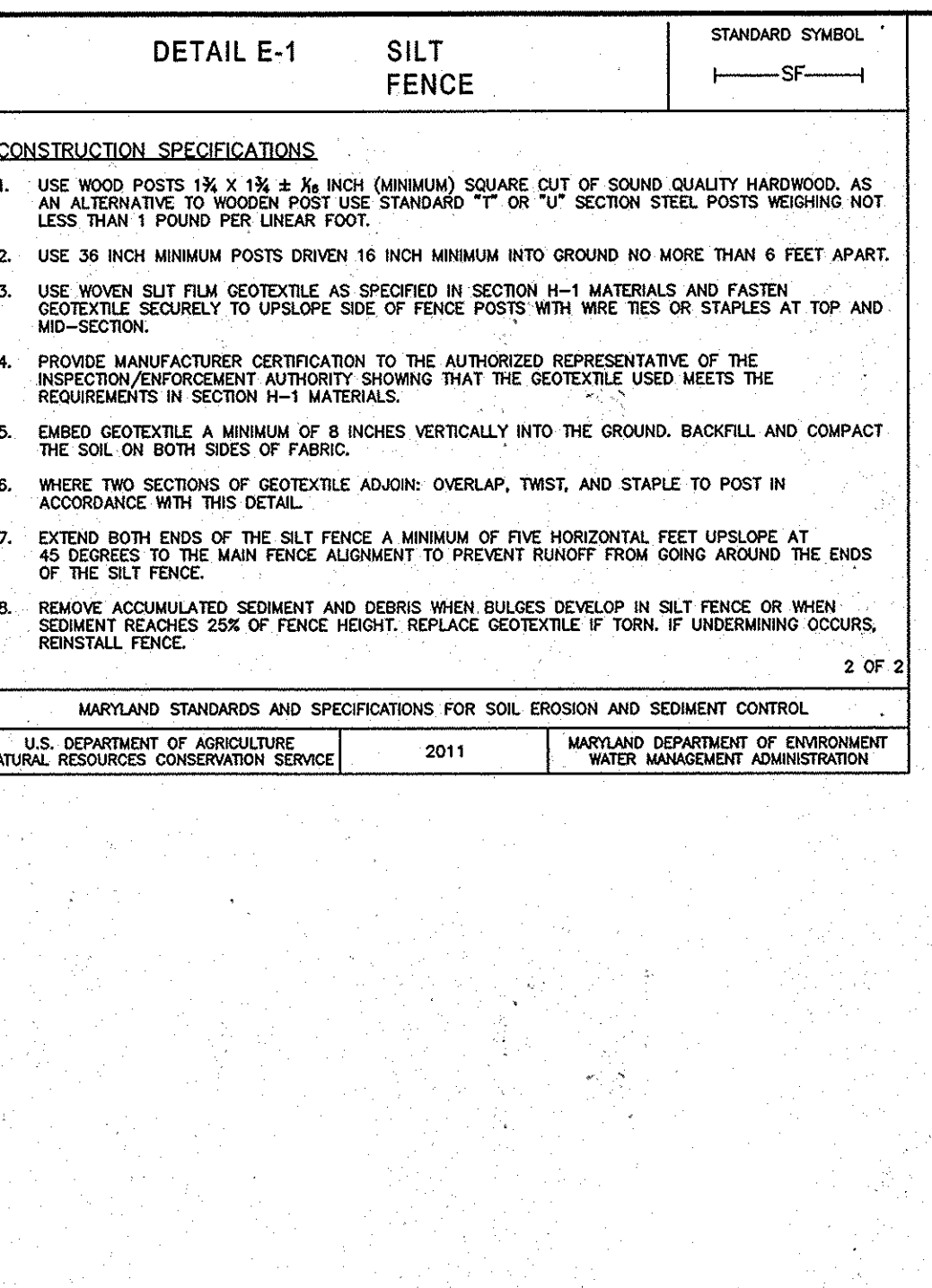
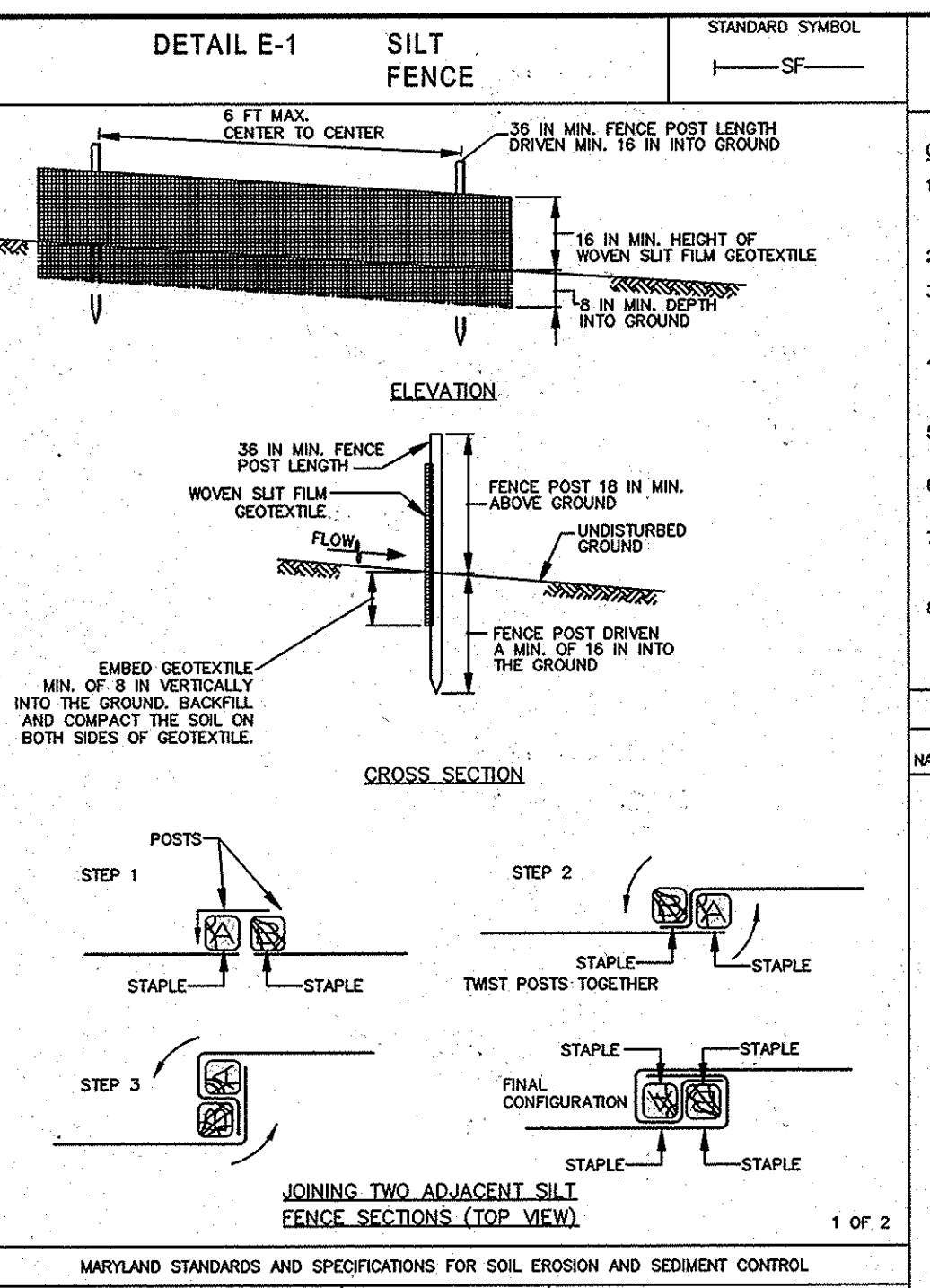
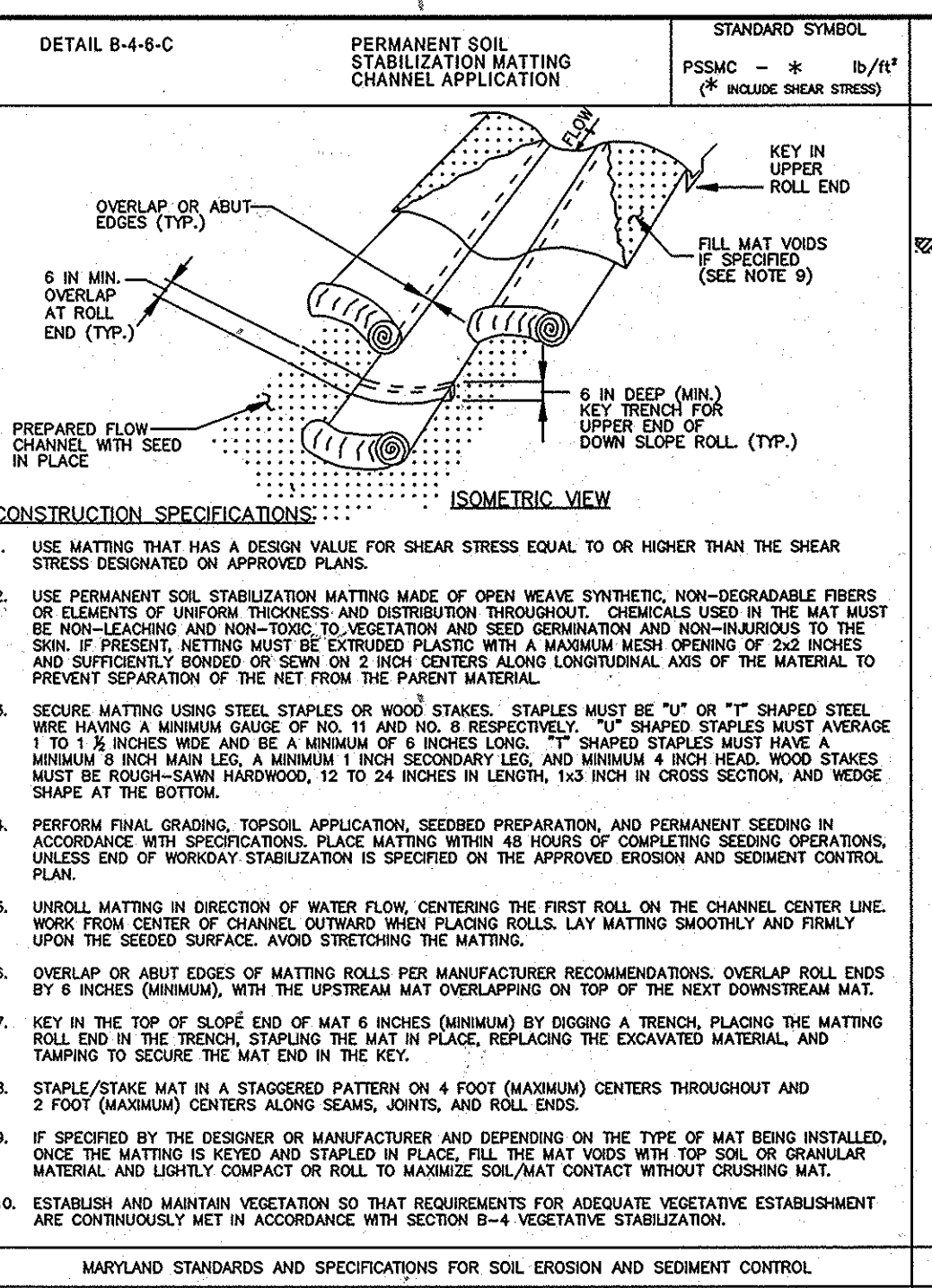
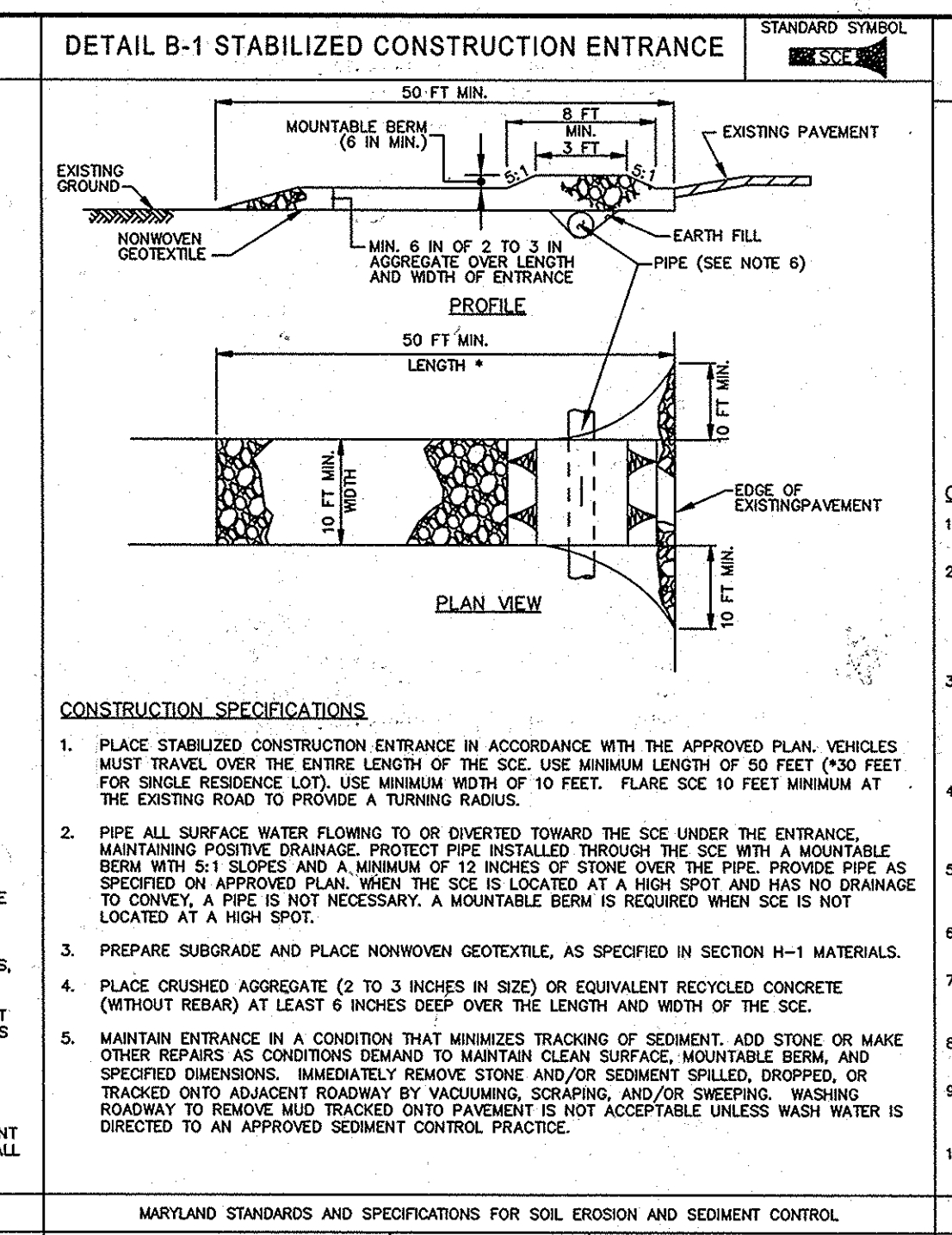
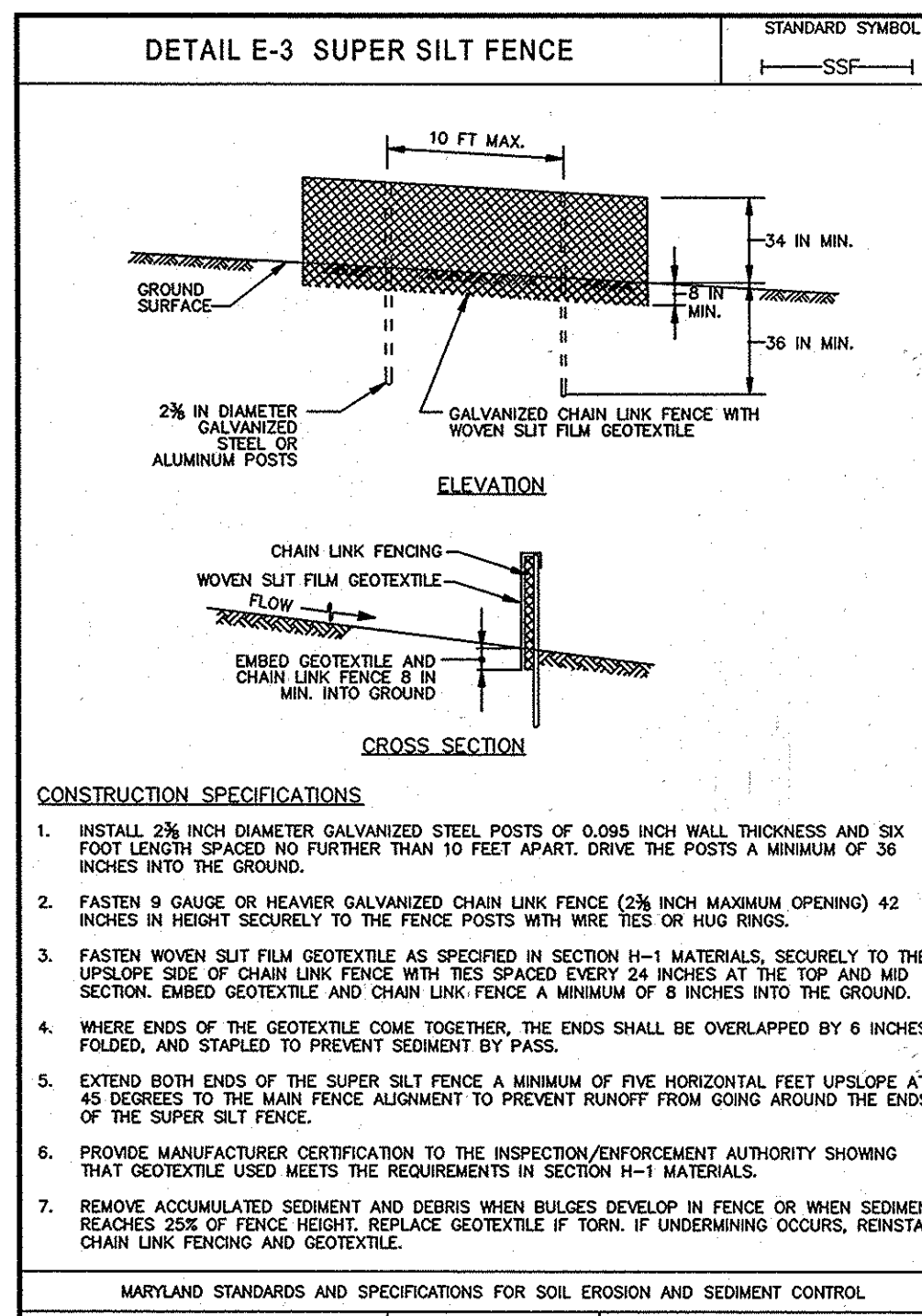


Table B.1: Temporary Seeding for Site Stabilization. Table with columns for Plant Species, Seeding Rate (lb/acre), Seeding Depth (inches), Recommended Seeding Dates by Plant Hardiness Zone (5b and 6a, 6b, 7a and 7b). Lists species like Annual Ryegrass, Barley, Oats, Wheat, Cereal Rye, Foxtail Millet, and Pearl Millet with their respective seeding rates and dates.

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION. Definition: Using vegetation as cover to protect exposed soil from erosion. Purpose: To promote the establishment of vegetation on exposed soil. Conditions Where Practice Applies: On all disturbed areas not stabilized by other means... Includes sections on soil preparation, mulching, and topsoiling.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS. Definition: The process of preparing the soil to support vegetative stabilization. Purpose: To provide a suitable soil medium for vegetative growth. Includes sections on soil preparation, mulching, and topsoiling.

B-4-4 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING. Definition: The application of seed and mulch to establish vegetative cover. Purpose: To protect disturbed soils from erosion during and at the end of construction. Includes sections on seeding and mulching.

B-4-5 STANDARDS AND SPECIFICATIONS FOR STOCKPILE EROSION AND SEDIMENT CONTROL MEASURES. Definition: Controlling the suspension of dust particles from construction activities. Purpose: To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage... Includes sections on stockpile erosion and sediment control measures.

B-4-6 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 protective barrier for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns... Includes sections on stockpile area standards and specifications.

Table B.3: Recommended Planting Dates for Permanent Cover in Maryland. Table with columns for Type of Plant Material and Plant Hardiness Zones (5b and 6a, 6b, 7a and 7b). Lists materials like Seeds - Cool-Season Grasses, Warm-Season Grasses, and Sod - Cool-Season Grasses with their recommended planting dates.

ENGINEER'S CERTIFICATE. I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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. Includes signature of John M. Cuy and date 10/1/15.

DEVELOPER'S CERTIFICATE. I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION 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. Includes signature of Nancy R. Brandt and date 10/1/15.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Includes signature of Chad Cleaver and date 11-3-15. Also includes signature of Ned Steinhilber and date 11-4-15, and signature of Vaidis Jelicic and date 11-4-15.

Table B.3 Notes: 1. The planting dates listed are averages for each zone... 2. When planted during the growing season, most of these materials must be purchased and kept in a dormant condition until planting... 3. Additional planting dates during which supplemental watering may be needed to ensure plant establishment...

SEQUENCE OF CONSTRUCTION - INDIVIDUAL HOUSE. DAY 1: OBTAIN GRADING PERMIT AND HOLD A PRE-CONSTRUCTION MEETING. STEP DURATION 1 DAY. DAY 2: THE CONTRACTOR(S) IS TO IDENTIFY AND MARK ANY HAZARDOUS CONDITIONS THAT MAY EXIST ON-SITE... DAY 3-4: CLEAR AND GRUB AS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS. DAY 4-10: CLEAR AND GRUB REMAINDER OF SITE WITHIN INSTALLED PERIMETER CONTROLS. DAY 11: INSTALL EROSION CONTROL MATTING IN THE DITCHES AND SWALES. DAY 12-60: CONSTRUCT HOUSE, INSTALL DRIVEWAY AND UTILITIES. DAY 61-63: INSTALL LANDSCAPING, FINE GRADE AND STABILIZE ANY REMAINING DISTURBED AREAS. DAY 64-66: INSTALL DOWNSPOUTS, ROOF LEADERS AND STORMWATER MANAGEMENT MEASURES. DAY 67-68: UPON APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES. STEP DURATION 2 DAYS.

BENCHMARK ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043. Includes logo, contact information, and a professional seal for John M. Cuy, a Professional Engineer in Maryland.