

**PERMANENT SEEDING NOTES**

APPLY PERMANENT SEEDING TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LOW-LIVED VEGETATIVE COVER IS NEEDED.

SEED AND PREPARATION LAYERS UPPER THREE INCHES OF SOIL BY RAKING OR DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. Fertilizer F-30S HAS NOT BEEN PREVIOUSLY APPLIED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING METHODS:

1. PREFERRED METHOD: APPLY 2 TONS/ACRE OF DELOMITE LIMESTONE (20 LBS/1000 SF) AND 100 LBS/ACRE OF 16-40 FERTILIZER (20 LBS/1000 SF) BEFORE SEEDING. HARROW OR TIE IN THESE THREE INCHES OF SOIL.

2. FOR PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 40 LBS PER ACRE (40 LBS/1000 SF) OF KENTUCKY 91 TALL FESCUE AND 3 LBS PER ACRE (30 LBS/1000 SF) OF INTERMEDIATE WHEATGRASS THROUGH OCTOBER 15 THROUGH FEBRUARY 28. TREAT THESE BY: OPTION (1) 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOIL OR 200 GALS PER ACRE (20 GALS/1000 SF) OF FERTILIZER F-30S AND 100 GALS PER ACRE (10 GALS/1000 SF) OF DELOMITE LIMESTONE. TREAT THESE BY: OPTION (1) 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH SEED AS SOON AS POSSIBLE IN THE SPRING. OR USE SOIL.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (15 TO 20 LBS/1000 SF) OF UNROTATED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORS TOZL OR 200 GALS PER ACRE (20 GALS/1000 SF) OF CHALKED ASPHALT ON FLAT AREAS, ON SLOPES 3 FT. OR HIGHER USE 50 GALS PER ACRE (5 GALS/1000 SF) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, RESEEDING AND RE-ANCHORING.

**TEMPORARY SEDIMENT CONTROL MEASURES**

APPLY TEMPORARY SEEDING TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEED AND PREPARATION LAYERS UPPER THREE INCHES OF SOIL BY RAKING OR DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. Fertilizer F-30S HAS NOT BEEN PREVIOUSLY APPLIED.

SOIL AMENDMENTS: APPLY 100 LBS/ACRE 16-40 FERTILIZER EQUIVALENT TO (4 LBS/1000 SF) SEEDING FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 1 THROUGH NOVEMBER 15. SEED WITH 2 1/2 TONS PER ACRE (25 LBS/1000 SF) OF PERIOD MAY 1 THROUGH JULY 15 SEED WITH 3 LBS/ACRE OF WHEATGRASS, (3 LBS/1000 SF) FOR THE PERIOD NOVEMBER 15 THROUGH FEBRUARY 28. TREAT THESE BY: OPTION (1) 2 TONS PER ACRE OF WELL-ANCHORED STRAW MULCH SEED AS SOON AS POSSIBLE IN THE SPRING. OR USE SOIL.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (15 TO 20 LBS/1000 SF) OF UNROTATED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORS TOZL OR 200 GALS PER ACRE (20 GALS/1000 SF) OF CHALKED ASPHALT ON FLAT AREAS, ON SLOPES 3 FT. OR HIGHER USE 50 GALS PER ACRE (5 GALS/1000 SF) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATES AND METHODS NOT COVERED HEREIN.

- REQUIRED SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT. (1-DAY)
  - CLEAR AND GRAD FOR INSTALLATION OF TEMPORARY SEDIMENT CONTROL MEASURES, SILT FENCE AND STONE CONSTRUCTION ENTRANCE. (1-DAY)
  - INSTALL TEMPORARY SEDIMENT CONTROL MEASURES.
  - UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR CLEAR AND GRAD (2-DAY) SITE FOR CONSTRUCTION OF DWELLINGS, DRIVEWAY AND SIDEWALKS.
  - GRADE SITE AND CONSTRUCT DWELLINGS, DRIVEWAY AND SIDEWALKS (3-MONTHS) PER THE PLAN.
  - CONSTRUCT RAIN GARDENS AS PER PLAN AND DETAILS.
  - STABILIZE ALL DISTURBED AREAS WITH SEED AND MULCH PER SCS (2-DAY) STANDARD NOTES.
  - UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR REMOVE ALL (1-DAY) TEMPORARY SEDIMENT CONTROL MEASURES AND STABILIZE ALL DISTURBED AREAS AS PER PERMANENT SEEDING NOTES (TOTAL TIME 6-MONTHS MAX)

**GENERAL NOTES FOR SEDIMENT CONTROL**

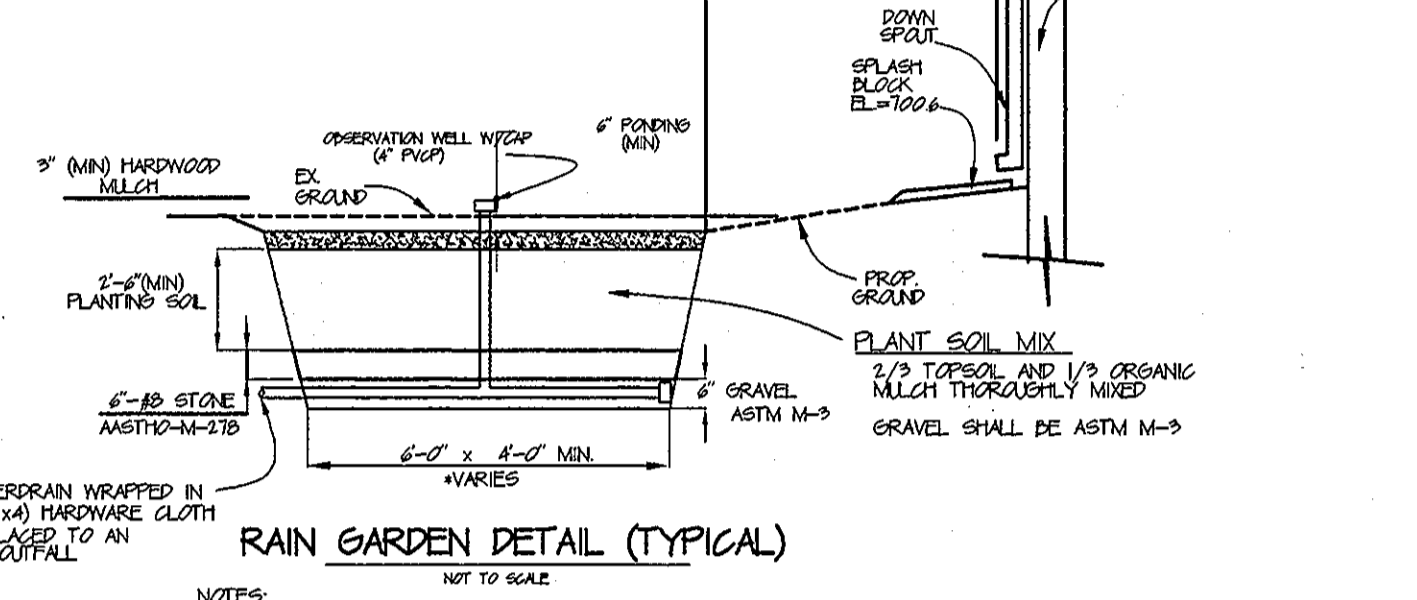
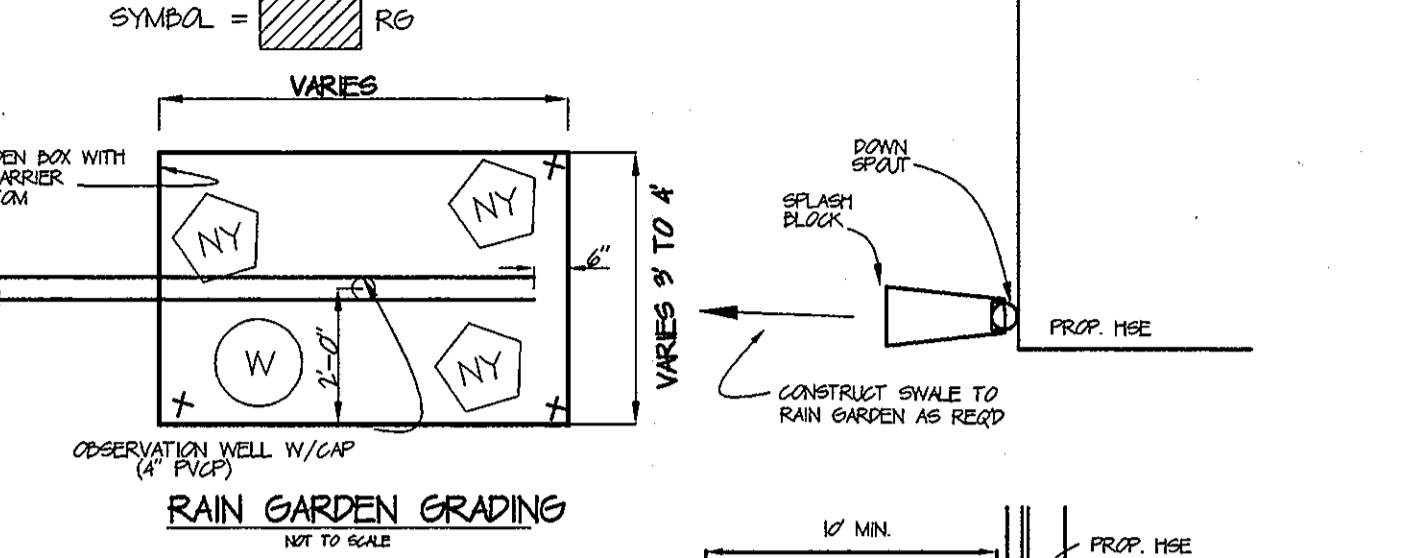
- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION TELEPHONE: (410) 332-2491.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE MAINTAINED WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (7) CALENDAR DAYS FOR ALL PERMETER SEDIMENT CONTROL STRUCTURES INCLUDING PERMETER SLOPES AND ALL SLOPES GREATER THAN 3%, SO IN DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT PRACTICES/DESIGNS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERMETER IN ACCORDANCE WITH VOL. 1, CHAP. 10, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. SECTION 6 - VEGETATIVE PRACTICES FOR METHODS AND MATERIALS SECTION 1, TEMPORARY SEEDING SECTION 1, PERMANENT SEEDING SECTION 1, SCS SECTION 1, TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN THE RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL 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.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY CONSTRUCTION UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MEASURES MUST BE PROVIDED, IF DEEMED NECESSARY BY HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 10 ACRES APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF THE INSTALLATION OF PERMETER SEDIMENT AND SEDIMENT CONTROLS, AND BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- SITE ANALYSIS:
  - TOTAL AREA OF SITE = 92,850 SF
  - AREA DISTURBED = 32,650 SF
  - AREA TO BE REGRADED OR PAVED = 12,000 SF
  - AREA TO BE VEGETATIVELY STABILIZED = 25,000 SF
  - TOTAL VOLUME OF FILL = 84 CY
  - TOTAL VOLUME OF EXCAVATION = 250 CY
  - OFFSITE WASTE/DISSON AREA LOCATION = N/A

NOTE: THE WATER QUALITY FACILITIES SHOWN HEREON SHALL BE CONSTRUCTED AND MAINTAINED BY THE OWNER

**RAIN GARDEN PLANT LIST**

SYMBOL	QUANTITY	BOTANICAL / COMMON NAME	SIZE
(W)	6 / 1 EA	LEX VERTICILLATA - WINTERBERRY	1-GAL CONTAINER
(NY)	10 / 3 EA	VERNONIA NOBILIPERENSIS - NEW YORK IRONWOOD	1-GAL CONTAINER

NOTE: LOCATION SEE 50 SCALE DWG THIS SHEET  
AREA = 50 SQ-FT PER 1000 SQ-FT OF ROOF



**RAIN GARDEN SCHEDULE**

NO.	DIMENSIONS WxL	TOP/GRD ELEV.	INV. OUT.
A	3'-0" x 4'-4"	469.50	465.25
B	3'-0" x 5'-6"	469.00	464.75
C/D	4' PVC	-	464.25
RIP-RAP	4' PVC	-	464.00

**OPERATION AND MAINTENANCE SCHEDULE FOR RAIN GARDENS**

A. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL AND DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.

B. SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.

C. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.

D. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

NOTE: RIP-RAP APRON SHALL BE CLASS 0 STONE PLACED ON FILTER CLOTH. W=1'-6", L=2'-6", X.D=8" NO ROCK OR GRAVEL WATER WAS ENCOUNTERED AT BORING LOCATION SHOWN HEREON.

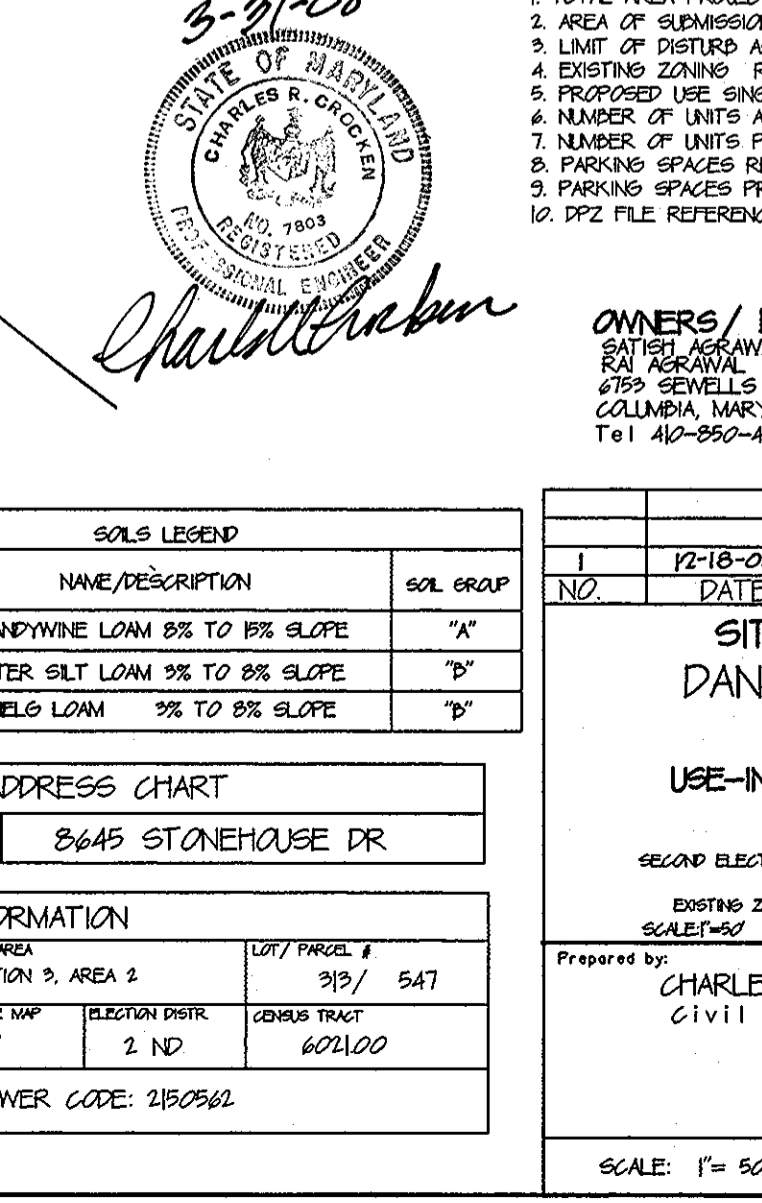
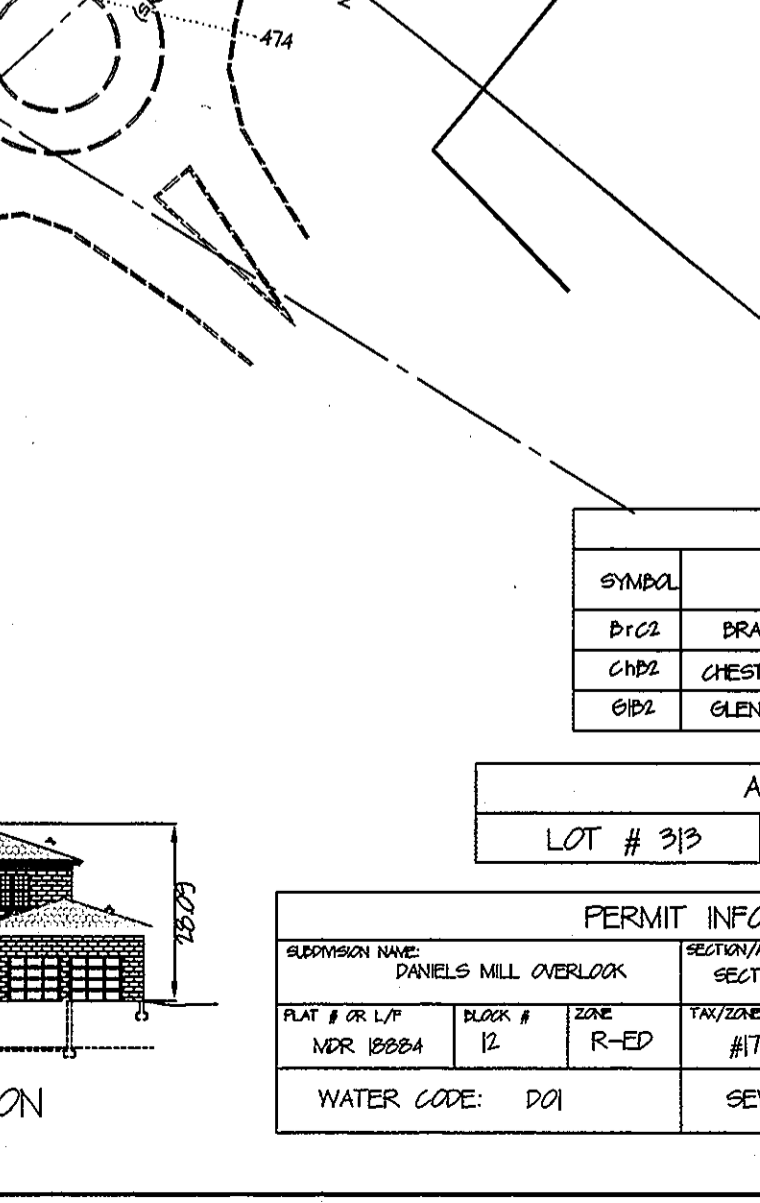
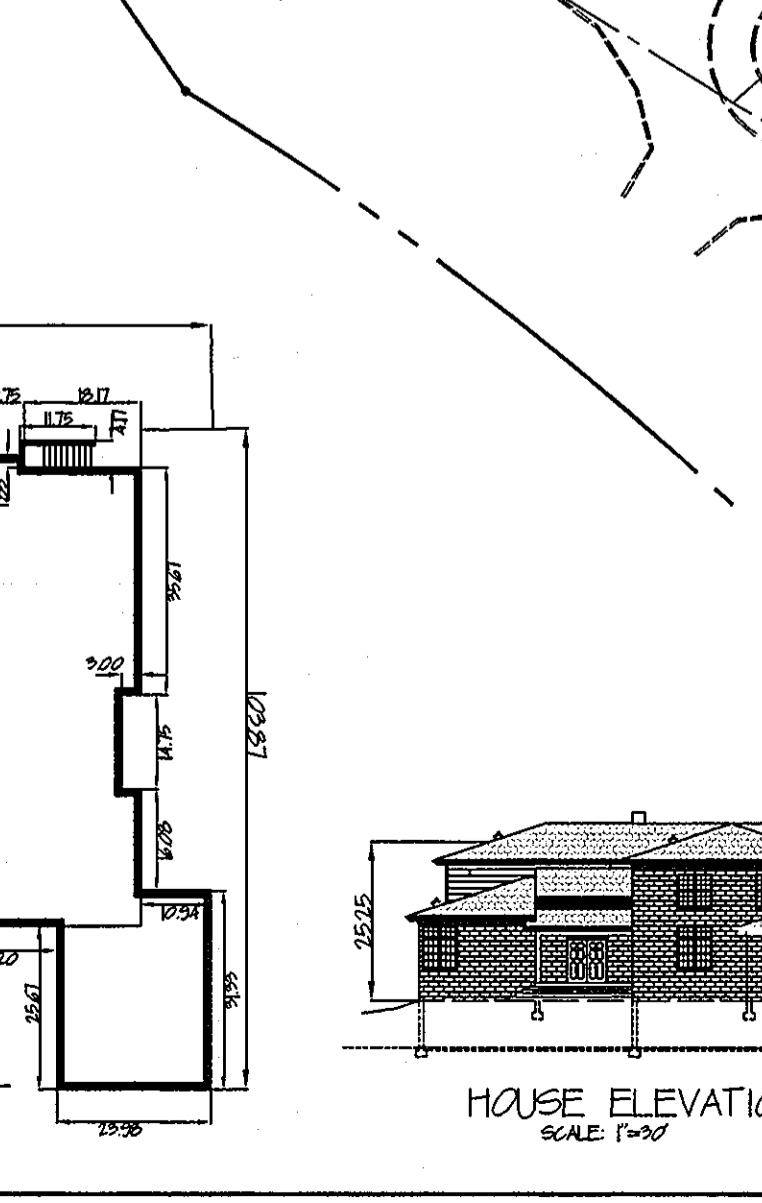
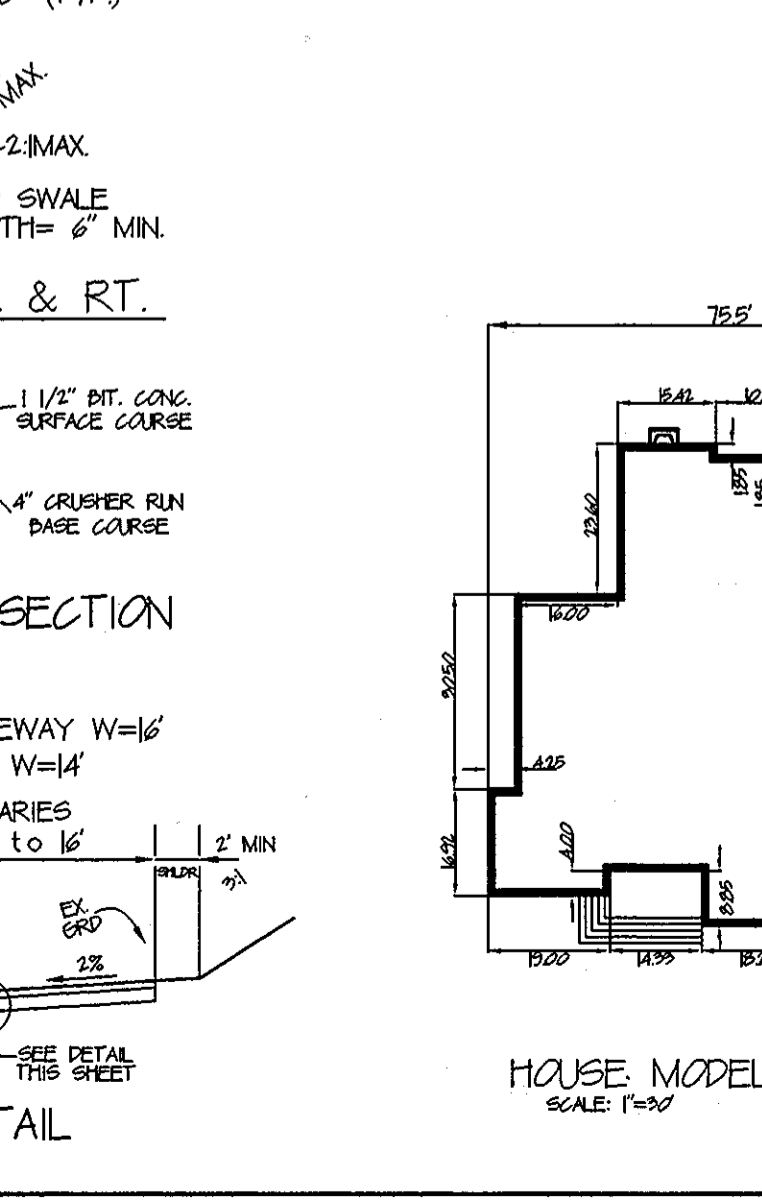
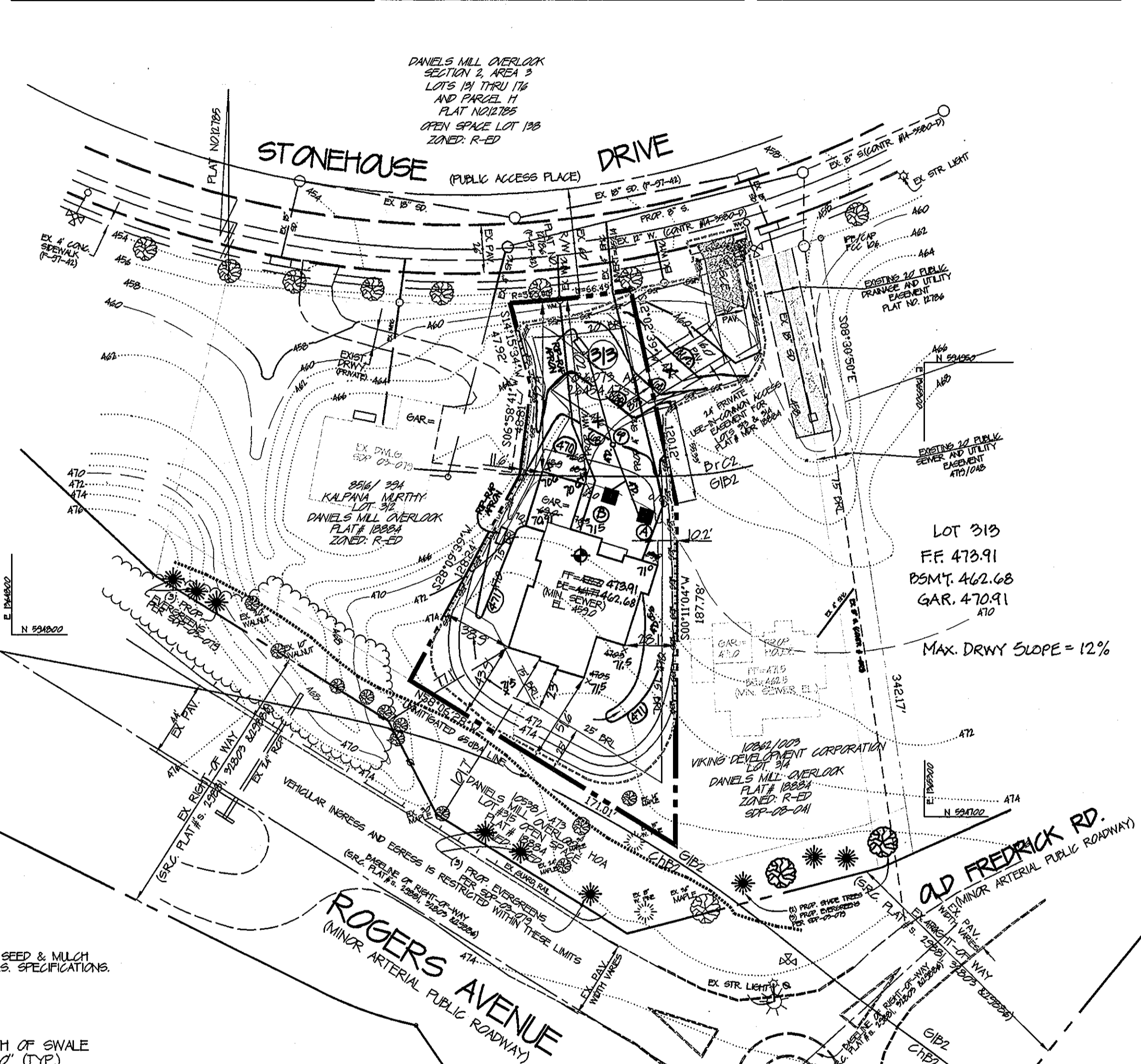
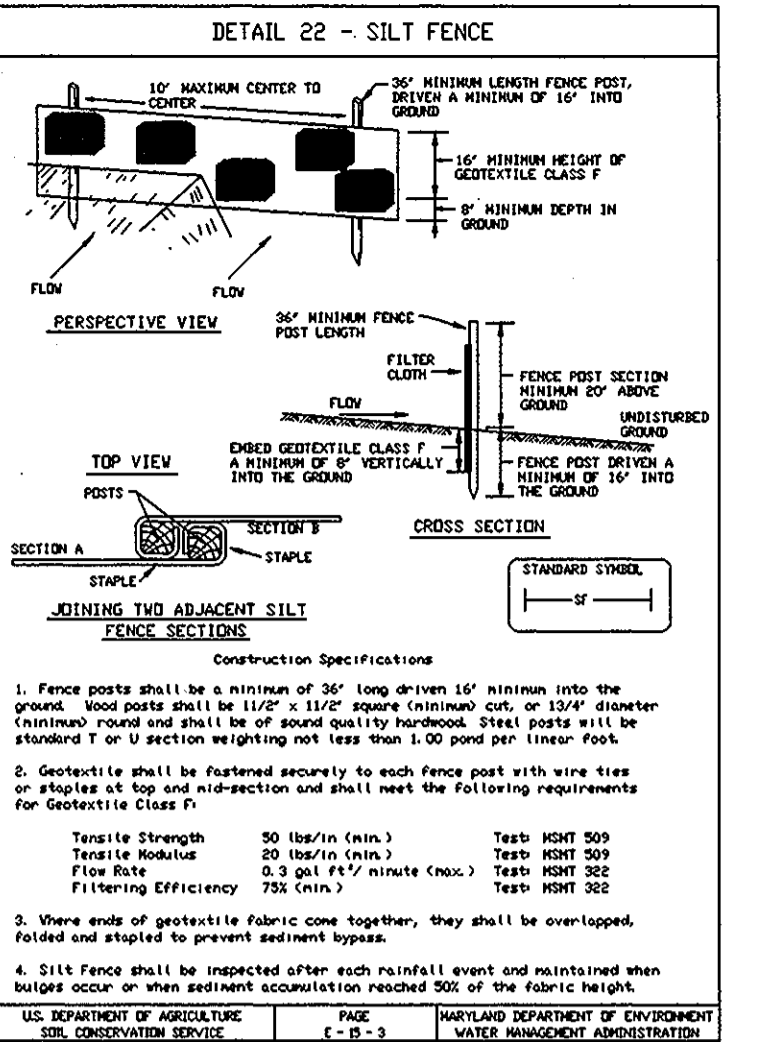
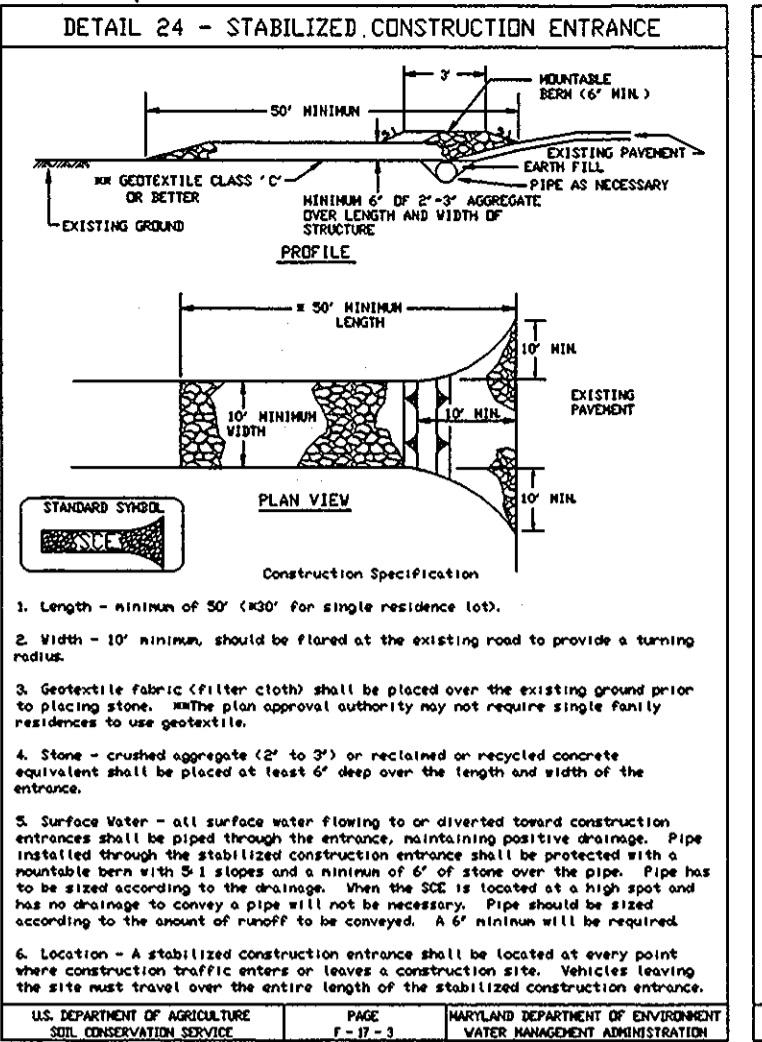
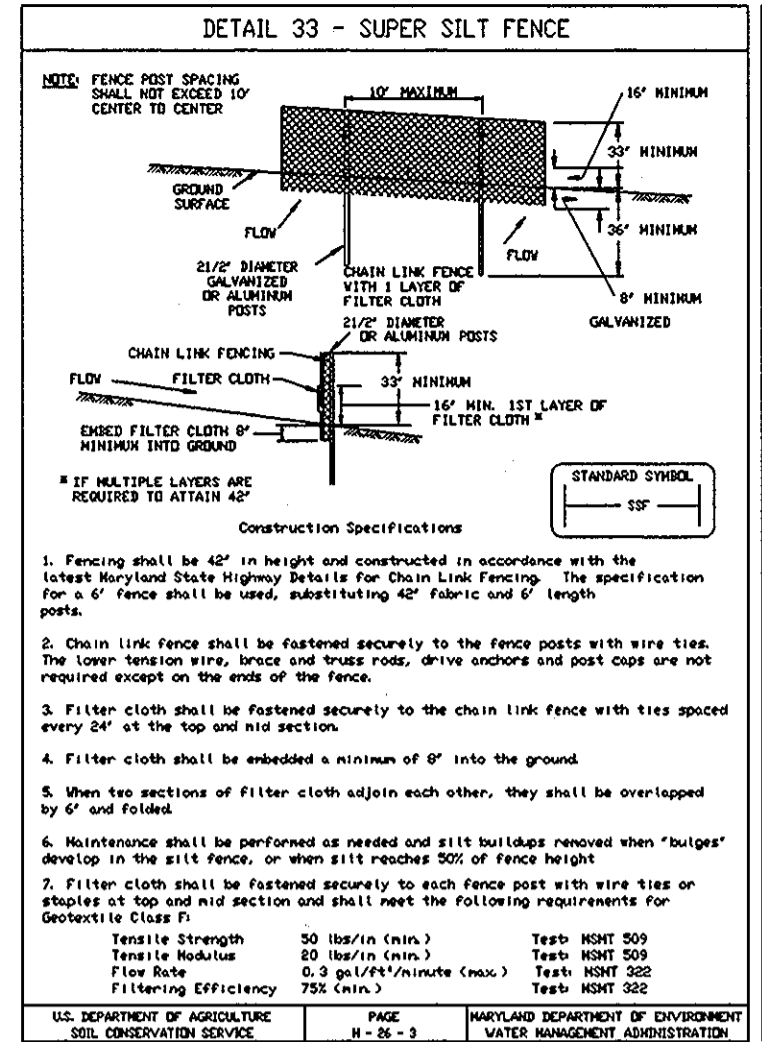
**SWM DATA \* (SEE NOTE)**

SITE	EXIST. CONDITIONS				DEVELOPED CONDITIONS				
	TC	RA	QA	Q10	TC	RA	QA	Q10	
AREA	2.14	93	2.66	0.09	0.10	1.78	0.16	54	2.66
REV	0.03	0.10	1.78	0.03	0.10	1.78	0.03	0.10	1.78

DEVELOPED CONDITIONS Q10 = 0.07 CHS CHANNEL PROTECTION NOT REQD. NO SIGNIFICANT INCREASE IN RUNOFF Q10 AND Q100 STORMS. STORM WATER MANAGEMENT NOT REQD.

WATER QUALITY MANAGEMENT SATISFIED BY TAKING CREDIT 5 FOR DISCONNECTED RUNOFF PER MCE 2000 VOL. 1, SEC. 9.3 & SEC. 9.5

GROUNDWATER RECHARGE SATISFIED BY THE PERCENT AREA METHOD AS PER MCE 200 VOL. 1, SEC. 2.2



3-31-08  
STATE OF MARYLAND  
COUNTY OF HOWARD  
REGISTERED PROFESSIONAL ENGINEER  
CHARLES R. CROCKEN

**OWNERS/DEVELOPERS**

DAVID PERKINS  
6711 SHELLEN ORCHARD DR.  
GLENMOUNT, MARYLAND 20885  
Tel: 410-350-1566

**PERMIT INFORMATION**

REVISION NO.	DATE	DESCRIPTION	BY	DATE
1	12-18-08	REV. ERELEV & GRADINGS	CRC	
2				
3				
4				
5				
6				
7				
8				
9				
10				

**PERMIT INFORMATION**

PROJECT NAME	REVISION NO.	SECTION	DATE	BY	DATE
DANIELS MILL OVERLOOK	12	SECTION 2, AREA 2	12/18/08	CRC	
LOT # 313					
DRIVEWAY W/ DRIVEWAY ONTO LOT 313					
USE-IN-COMMON DRIVEWAY ONTO LOT 313					
FORMERLY PLAT # 10004					
SECOND ELECTION DISTRICT, TAX MAP #1, GRP 12, P/O PARCEL 547					
HOWARD COUNTY, MARYLAND					
ENGINEER: CHARLES R. CROCKEN					
REGISTERED PROFESSIONAL ENGINEER					
NO. 10004					
DATE: 3-31-08					