

PERMANENT SEEDING NOTES
 APPLY PERMANENT SEEDING TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.
 SEED BED PREPARATION: LOOSEN THE UPPER THREE INCHES OF SOIL BY RAKING OR DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF SOIL HAS NOT BEEN PREVIOUSLY LOOSENED, SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING METHODS:
 1. FERTILIZER: APPLY 1 TONS/ACRE OF DIAMONITE LIMESTONE (15 LBS/1000 SF) AND 1000 LBS/ACRE OF FERTILIZER (15 LBS/1000 SF) BEFORE SEEDING SPRING OR INTO UPPER THREE INCHES OF SOIL.
 2. SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 40 LBS PER ACRE (14 LBS/1000 SF) OF KENTUCKY 91 TALL FESCUE AND 2 LBS PER ACRE (200 LBS/1000 SF) OF WINDSOR LAMBERG FOR PERIOD OF OCTOBER 15 THRU FEBRUARY 28. PROTECT THESE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCHING SEED AS SOON AS POSSIBLE IN THE SPRING, OPTION (2) USE SOIL, OPTION (3) SEED WITH 40 LBS PER ACRE KENTUCKY 91 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW.
 3. MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (50 TO 90 LBS/1000 SF) OF UNWEIGHTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING, ANCHOR THE MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 20 GALS PER ACRE (8 GALS/1000 SF) OF BALLASTED ASPHALT ON FLAT AREAS, ON SLOPES 2 FEET OR GREATER, USE 340 GALS PER ACRE (8 GALS/1000 SF) FOR ANCHORS.
 4. MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, RESEEDING AND REPLACEMENTS.

TEMPORARY SEDIMENT CONTROL MEASURES
 A) TEMPORARY SEEDING TO GRADED OR CLEARED AREAS LIKELY TO BE RESTORED BY A SHORT-TERM VEGETATIVE COVER IS NEEDED.
 SEED BED PREPARATION: LOOSEN THE UPPER THREE INCHES OF SOIL BY RAKING OR DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF SOIL HAS NOT BEEN PREVIOUSLY LOOSENED, SOIL AMENDMENTS: APPLY 400 LBS/ACRE 10-10-10 FERTILIZER EQUIVALENT TO (14 LBS/1000 SF).
 1. SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 1 THRU NOVEMBER 15, SEED WITH 2 1/2 TONS/ACRE (84 LBS/1000 SF) OF ANNUAL RYE (12 LBS/1000 SF) FOR PERIOD MAY 1 THRU AUG. 15 SEED WITH 2 LBS/ACRE OF WINDSOR LAMBERG (21 LBS/1000 SF) FOR PERIOD NOVEMBER 15 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOIL.
 2. MULCHING: APPLY 1 1/2 TO 2 TONS/ACRE (50 TO 90 LBS/1000 SF) OF UNWEIGHTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING, ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 20 GALS PER ACRE (8 GALS/1000 SF) OF BALLASTED ASPHALT ON FLAT AREAS, ON SLOPES 2 FT. OR GREATER, USE 340 GALS PER ACRE (8 GALS/1000 SF) FOR ANCHORS.
 3. RETS TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATES AND METHODS NOT STATED HEREIN.

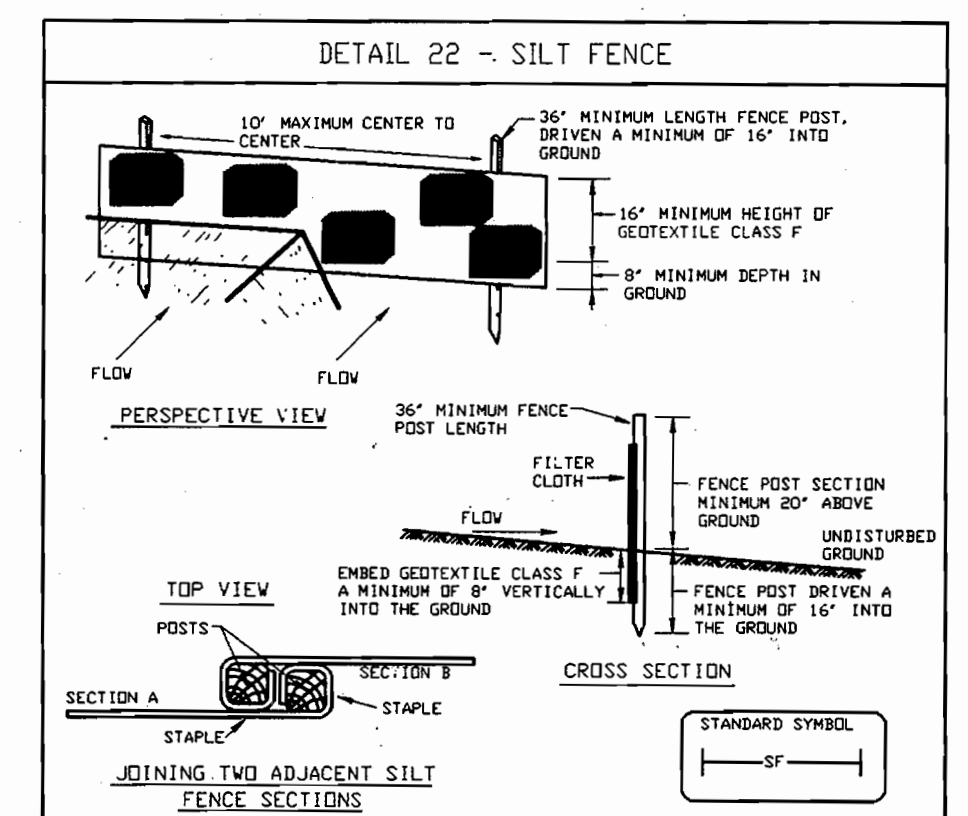
REQUIRED SEQUENCE OF CONSTRUCTION
 1. OBTAIN GRADING PERMIT.
 2. CLEAR AND GRIP FOR INSTALLATION OF TEMPORARY SEDIMENT CONTROL MEASURES, SILT FENCE AND STONE CONSTRUCTION ENTRANCE.
 3. INSTALL TEMPORARY SEDIMENT CONTROL MEASURES.
 4. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR CLEAR AND GRIP SITE FOR CONSTRUCTION OF DWELLING, DRIVEWAY AND SIDEWALKS.
 5. GRADE SITE AND CONSTRUCT: P. FILLING, DRIVEWAY AND SIDEWALKS PER THE PLAN.
 6. STABILIZE ALL DISTURBED AREAS WITH SEED AND MULCH PER SOG STANDARD NOTES.
 7. UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR REMOVE ALL TEMPORARY SEDIMENT CONTROL MEASURES AND STABILIZE ALL DISTURBED AREAS AS PER PERMANENT SEEDING NOTES.

GENERAL NOTES FOR SEDIMENT CONTROL
 1. 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) 324-2497.
 2. VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF SECTION 6 AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES INCLUDING DRAIN PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3% BY 1/4" DAY AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE.
 4. ALL EXISTING TAPES/DAMNS SHOWN MUST BE REMOVED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH 3.1.1, CHAP. 18 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED IN 3.2.1.1 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 3. PERMANENT SEEDING SECTION 4. SOG 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.
 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIONAL CONDITION UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED PER THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY CONSTRUCTION ACTIVITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
 8. ADDITIONAL SEDIMENT CONTROL MEASURES MUST BE PROVIDED, IF DEEMED NECESSARY BY HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 9. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 10 ACRES APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED PRIOR TO THE INSTALLATION OF PERIMETER SEDIMENT CONTROL AND SEDIMENT CONTROL MEASURES AND BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS IN PLACE.
 10. SITE ANALYSES:
 TOTAL AREA OF SITE = 144 ACRES (72,250 SF)
 AREA DISTURBED = 616 ACRES (3,080 SF)
 AREA TO BE REVEGETATED OR PAVED = 616 ACRES (3,080 SF)
 TOTAL W. V. E. OF FILL = 616 ACRES (3,080 SF)
 TOTAL W. V. E. OF FILL = 616 ACRES (3,080 SF)
 OFFSITE WASTE/DRAINAGE AREA LOCATION = N/A

ENGINEER'S STATEMENT
 I, CHARLES R. CROCKEN, PE, REGISTERED PROFESSIONAL ENGINEER, STATE OF MARYLAND, LICENSE NO. 17803, HEREBY CERTIFY THAT THIS PLAN OF SEDIMENT AND EROSION CONTROL REPRESENTS A TRUE AND CORRECT STATEMENT OF THE DESIGN AND CONSTRUCTION OF THE SITE SOIL AND IS BASED ON MY PERSONAL KNOWLEDGE OF THE REQUIREMENTS OF THE HOWARD COUNTY CONSERVATION DISTRICT.
 CHARLES R. CROCKEN PE RES. NO. 17803 DATE 1/16/03

DEVELOPER'S CERTIFICATE
 I, JOHN R. KALONIS, HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THE PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENTION FROM A DEPT. OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 JOHN R. KALONIS DATE 1/16/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 1/24/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 1/24/03
 DIRECTOR OF PLANNING AND ZONING DATE 1/24/03



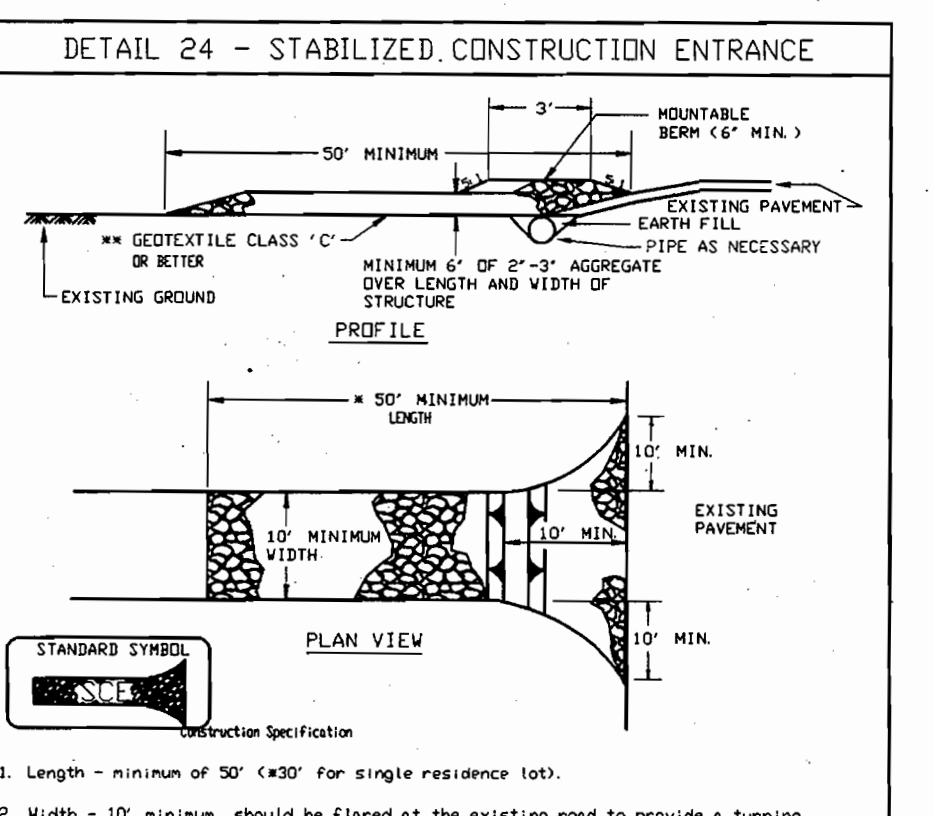
Construction Specifications

- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section as lighting not less than 1.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class 2:
 Tensile Strength: 50 lbs/in (min.) Test: MHT 509
 Tensile Modulus: 20 lbs/in (min.) Test: MHT 509
 Flow Rate: 0.2 gal ft² / minute (max.) Test: MHT 322
 Filtering Efficiency: 75% (min.) Test: MHT 322
- Where ends of geotextile fabric cone together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabric height.

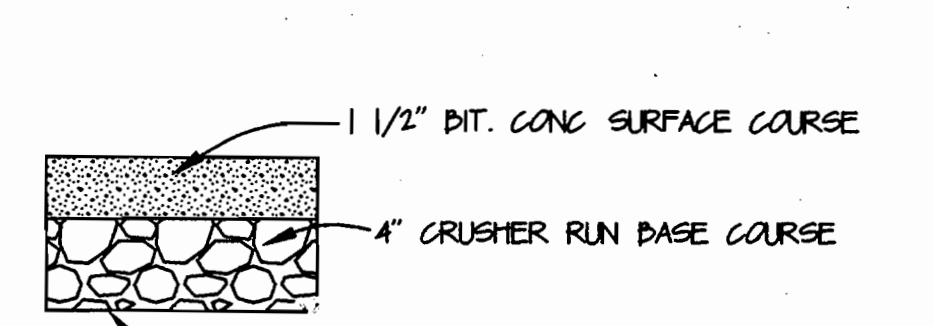
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE DATE 1-18-03 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SOILS LEGEND

SYMBOL	NAME/DESCRIPTION	SOIL GROUP
GB2	GLDVILLE SILT LOAM, 2% TO 8% SLOPES	C
MB2	MANOR LOAM, 8% TO 12% SLOPES	D



- Standard Symbol: SILE
- Length - minimum of 50' (40' for single residence lots).
 - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
 - Geotextile Fabric (Filter cloth) shall be placed over the existing ground prior to placing stone. Where plan approval authority may not require single family residences to use geotextile.
 - Stone - crushed aggregate 1/2" to 3/4" or reclaimed or recycled concrete equivalent shall be placed at least 5" deep over the length and sixth of the entrance.
 - Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a roundabout berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
 - Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE DATE 1-18-03 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

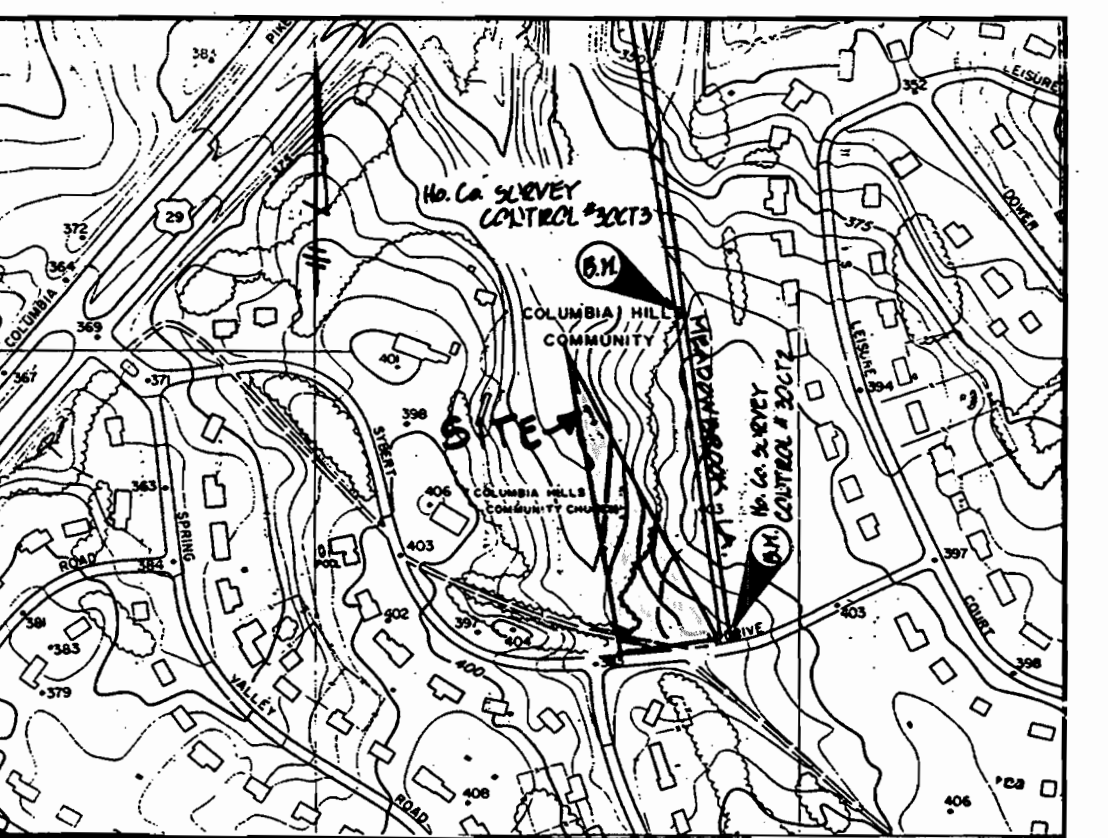
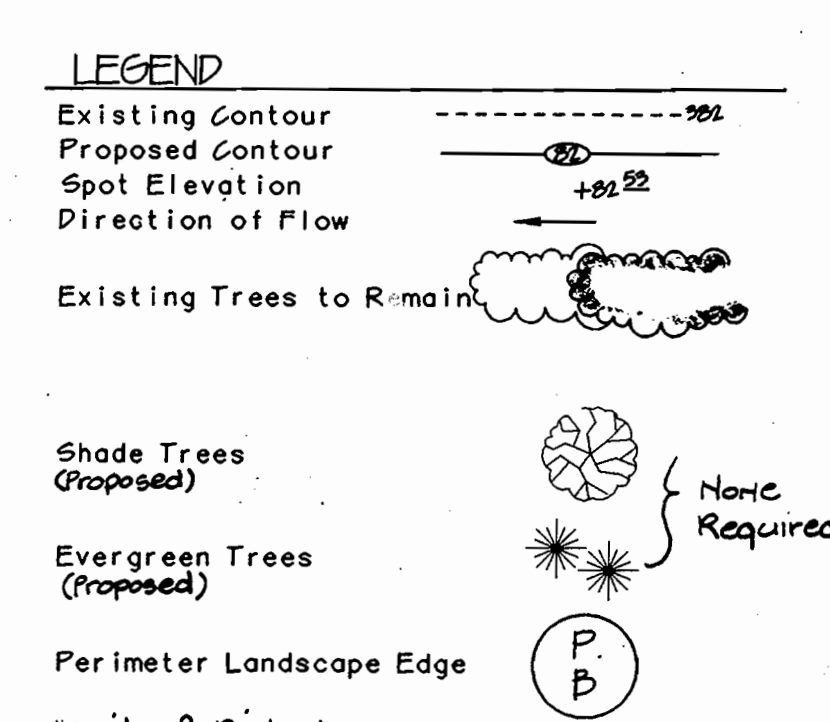


SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES	
	A	B	A	B
Perimeter/Frontage Designation	N/A	N/A	N/A	N/A
Frontage/Type	222	400	34	412
Linear Feet of Roadway				
Grass for Existing Vegetation (Yes, No, Linear Feet)	N/A	Y65	Y65	Y65
Describe below if needed				
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)	N/A	Y99	No	No
Describe below if needed				
Number of Plants Required	N/A	150	140	140
Shade Trees	-	17	-	-
Evergreen Trees	-	-	-	-
Number of Plants Provided	N/A	*	*	(See Note)
Shade Trees	-	-	-	-
Evergreen Trees	-	-	-	-
Other Trees (if Substitution)	-	-	-	-
Shrubs (if Substitution)	-	-	-	-
Describe Plant Substitution Credits Below if needed				

* Existing Woods to Remain

SITE DATA:
 1. TOTAL AREA PROJECT = 144 ACRES = 72,250 SF
 2. AREA OF DISTURBANCE = 616 ACRES = 3,080 SF
 3. LIMIT OF DISTURBANCE = 0.1 ACRES = 15,400 SF
 4. EXISTING ZONING = R-20
 5. PROPOSED USE = SINGLE FAMILY RESIDENCE
 6. NUMBER OF UNITS ALLOWED = 144 ACRES x 2.0/AC. = 288 UNITS
 7. NUMBER OF UNITS PROPOSED = 1 (C-14)
 8. PARKING SPACES REQUIRED = 288 / 0.160 = 1,800 SPACES
 9. PARKING SPACES PROVIDED = 2
 10. OPEN SPACE ON SITE = N/A
 11. AREA OF RECREATION OPEN SPACE = N/A
 12. AREA REQUIRED = N/A PERCENT OF GROSS AREA N/A
 13. 1972 FILE REFERENCE: F-70-85 AND F-99-160



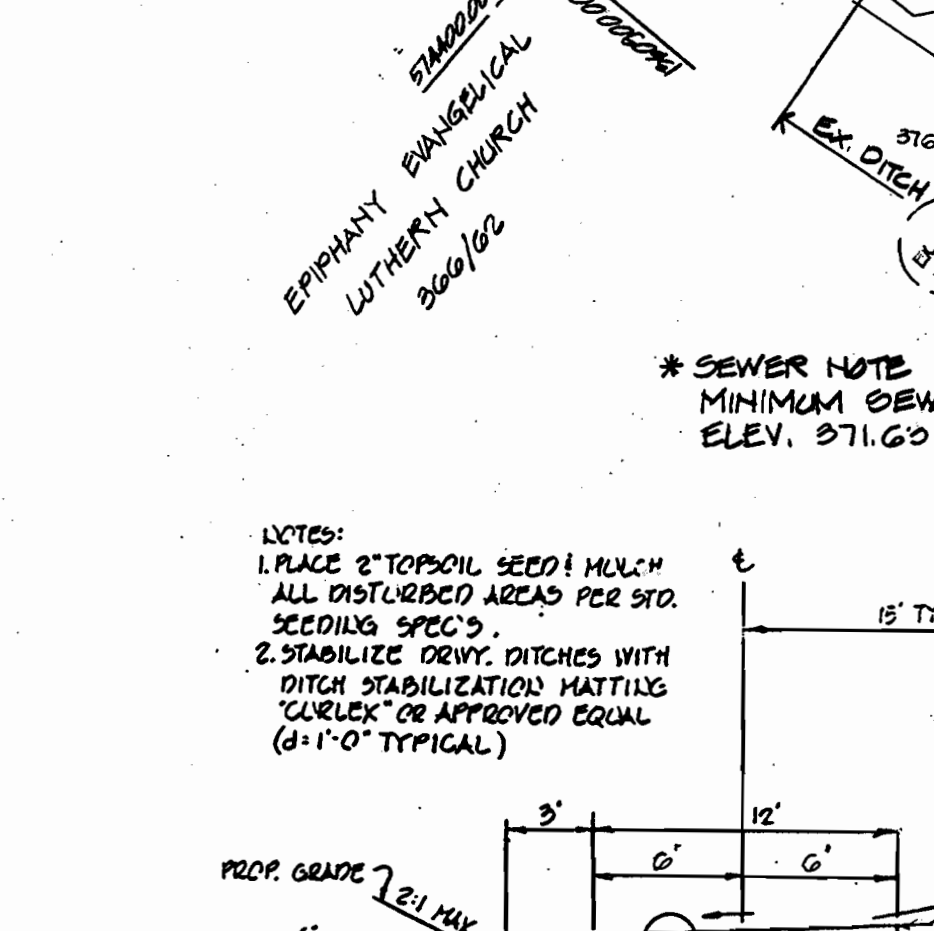
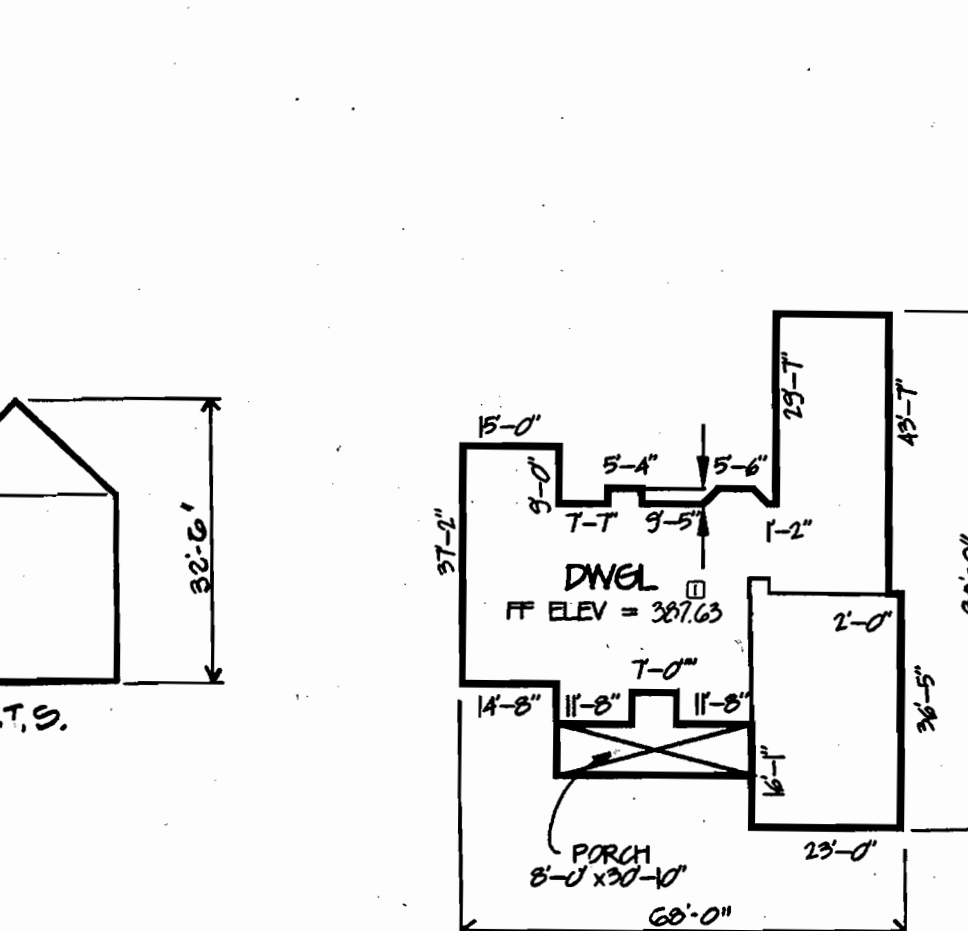
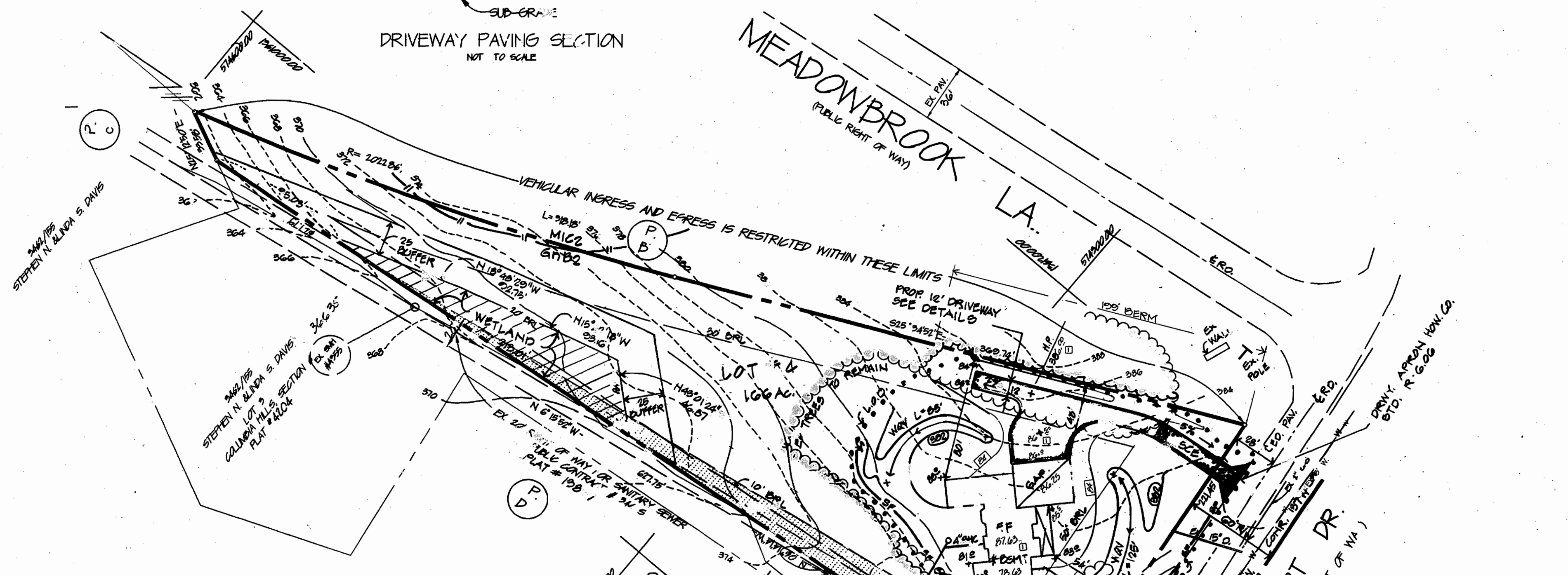
VICINITY MAP
 Scale: 1" = 400'

NOTE: ALL HORIZONTAL CONTROLS ARE BASED ON MD STATE COORDINATES. (NORTH AMERICAN DATUM OF 1983 AND '83 VERTICAL CONTROLS ARE BASED ON NAVD 83 PER HOWARD COUNTY BENCHMARKS:
 *30C73 1257482.725 E1361173.247 ELEV. 266.419
 *30C72 12574174.232 E1361312.723 ELEV. 260.732

*** LANDSCAPE NOTE:**
 THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE ALTERNATIVE COMPLIANCE PROVISIONS OF SECTION 14.2 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. NO ADDITIONAL TREES REQUIRED THIS PLAN.
 RAY RACHDA 1/16/03 DATE

GENERAL NOTES:

- THE SUBJECT PROPERTY IS ZONED R-20 PER 10-18-99 COMPREHENSIVE ZONING PLAN.
- IN ACCORDANCE WITH SECTION 18.0 OF THE HOWARD COUNTY REGULATIONS, DAY WINDOWS, CORNERS OR EXTERIOR STAIRWAYS NOT MORE THAN 18 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SIDEWALKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED WETLANDS, STREAMS OR OTHER BUFFERS AND FOREST CONSERVATION EASEMENT AREAS.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 A. WIDTH = 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCE)
 B. SURFACE OF COMPACTED CRUSHER RUN BASE WITH AND CHIP COATING (1/2" MIN.)
 C. MAX. 2% GRADE MAX. 10% GRADE CHANGE MIN. 40' TURNING RADIUS
 D. COLLECTORS AND DROPPERS CAPABLE OF PASSING 140 TON FLOOD WITH 10 MORE THAN 1 FOOT DEPTH OF 6" DRIVEWAY SURFACE
 E. MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERS / CONSTRUCTION INSPECTION DIVISION AT (410) 324 8860 AT LEAST (6) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-251-7771 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE EXISTING TOPOGRAPHY IS FIELD RUN PREPARED BY CHARLES R. CROCKEN BASED ON THE TOWN FROM FIELD RUN SURVEY DATED 6-4-92 WITH 2 FT. CORRECTIONS.
- THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY PLANNING DEPT. 3025 AND 3025 YEARS USED FOR THIS PROJECT.
- SHAW AS PER HOWARD COUNTY DESIGN MANUAL VOLUME 1 STORM DRAINAGE OF PLOT 1 AND THE MARYLAND STORMWATER DESIGN MANUAL VOLUME 1 CHAPTER 5, OPEN VEGETATED CHANNELS.
- EXISTING UTILITIES ARE PLOTTED FROM HOWARD COUNTY UTILITY DRAWINGS AND FIELD LOCATED WHERE POSSIBLE.
- ANY DAMAGE DUE TO THE CONTRACTOR'S ACTIVITIES DUE TO COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- EXISTING ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD DETAIL R-204.
- THERE ARE NO STREAMS OR 100 YEAR FLOOD PLANE ON THE SUBJECT THERE ARE WETLANDS ON THE PROPERTY LOCATED AS SHOWN BASED UPON FIELD OBSERVATIONS.
- BEST MANAGEMENT PRACTICES FOR THIS SITE IS DESIPT BY DECLARATION OF INTENT FOR A SINGLE LOT CLEARING LESS THAN 40,000 SF. IN ACCORDANCE WITH SECTION 14.0(D)(1) OF THE HOWARD COUNTY CODE.
- WATER QUALITY MANAGEMENT PROVIDED BY DISCONNECTED RUNOFF BY MEANS OF GRASS WATERWAYS SHOWN HEREON.



ADDRESS CHART

LOT #	STREET ADDRESS
4	3110 SYBERT AVENUE

PERMIT INFORMATION

BLDG. OR USE	SECTION	SECTION #	DATE	REVISION
COLUMBIA HILLS	SECTION 6	4/367		
PLAT # OR L.P.	BLK #	ZONE	TAX/ZONE MAP	ELECTION DISTRICT
6904/530	5	R-20	#30	2ND
WATER CODE:	DU	SEWER CODE:	210562	

REVISIONS:
 REVISION 1: 12-15-02 PER COMMENTS
 REVISION 2: 12-15-02 PER COMMENTS

SITE DEVELOPMENT PLAN
COLUMBIA HILLS
 SECTION 6, LOT 4
 RESUBDIVISION OF F/D PARCEL 367
 2ND ELECTION DISTRICT TAX MAP #30, GRID 05
 HOWARD COUNTY, MARYLAND

Prepared by:
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 Civil Engineering - Land Planning
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 Westminster, MD 21157
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 Fax: (410) 543-2025

OWNER: JOHN & CATHY THOMAS
 344 BUTTERFIELD GARTH
 COLUMBIA, MARYLAND 21046

SCALE: 1" = 50' DATE: 1/16/03 SHEET 1 OF 1
 SDP-03-034