PERMANENT SEEDING NOTES

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

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

1) Preferred–Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.)
2) Acceptable–Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs/1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.)

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT AND EROSION CONTROL NOTES

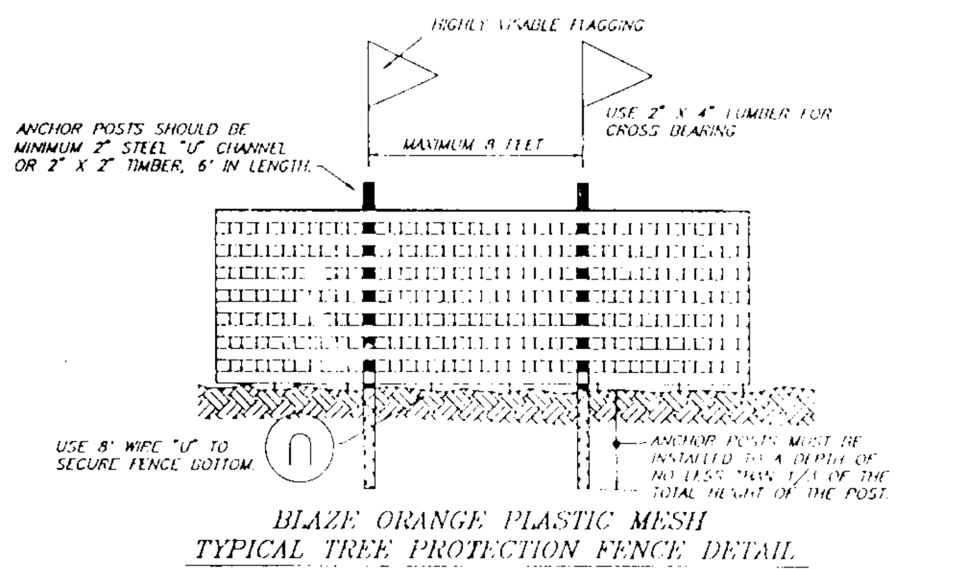
1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (313-1855).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within:
   a) 7 calendar days for all perimeter sediment control stuctures, dikes, perimeter slopes and all slopes greater than 3:1
   b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above, in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51), sod (Sec. 54), temporary seedings (Sec. 50) and mulching (Sec 52). Temporary stabilization with mulch alone can only be done when 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 operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. SITE ANALYSIS:

Total Area of Site:	1.24 AC
Area Disturbed:	0.79 AC
Area to be roofed or paved:	0.24 AC
Area to be vegetatively stabilized:	0.55 AC
Total Cut:	2850 CY
Total Fill:	269 CY
Offsite Waste/Borrow Area Location:	*

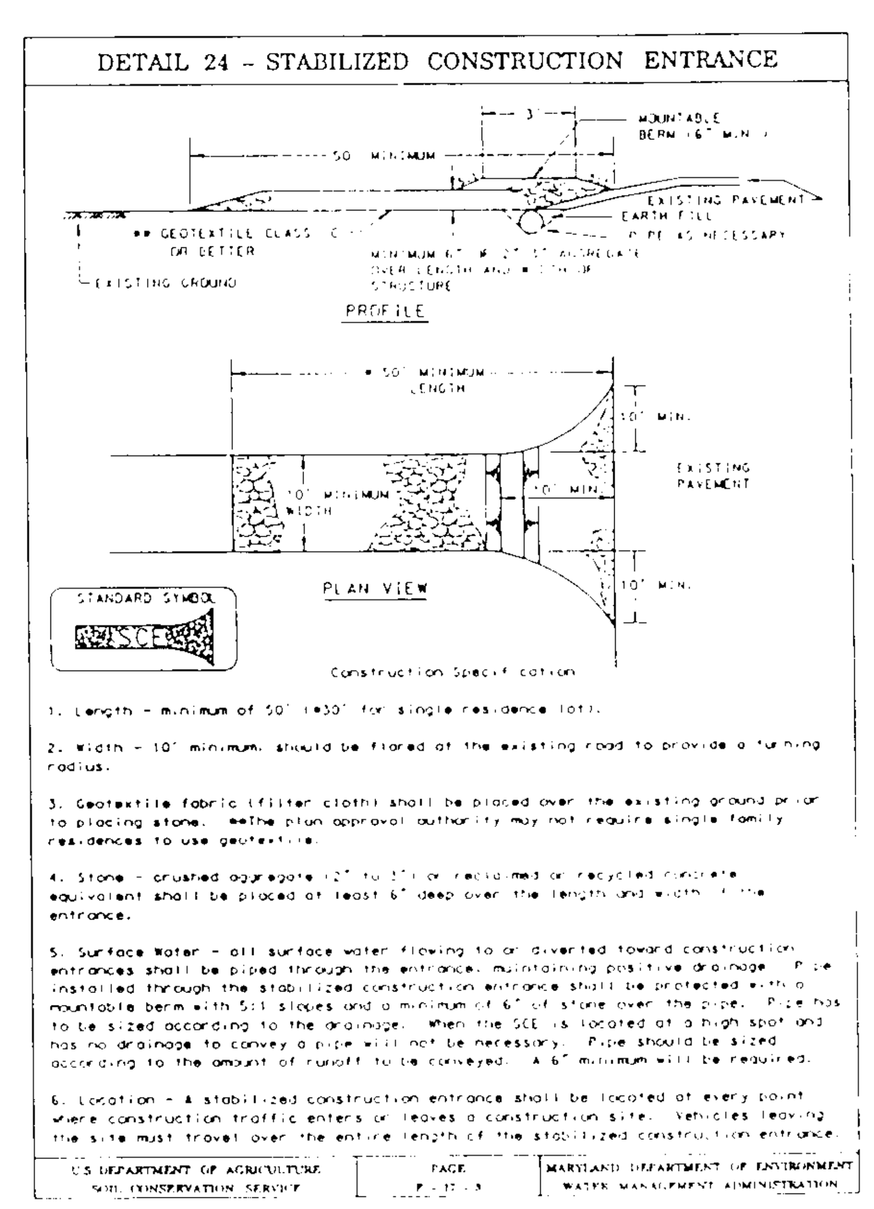
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but 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.
11. The total amount of silt fence = 355 LF

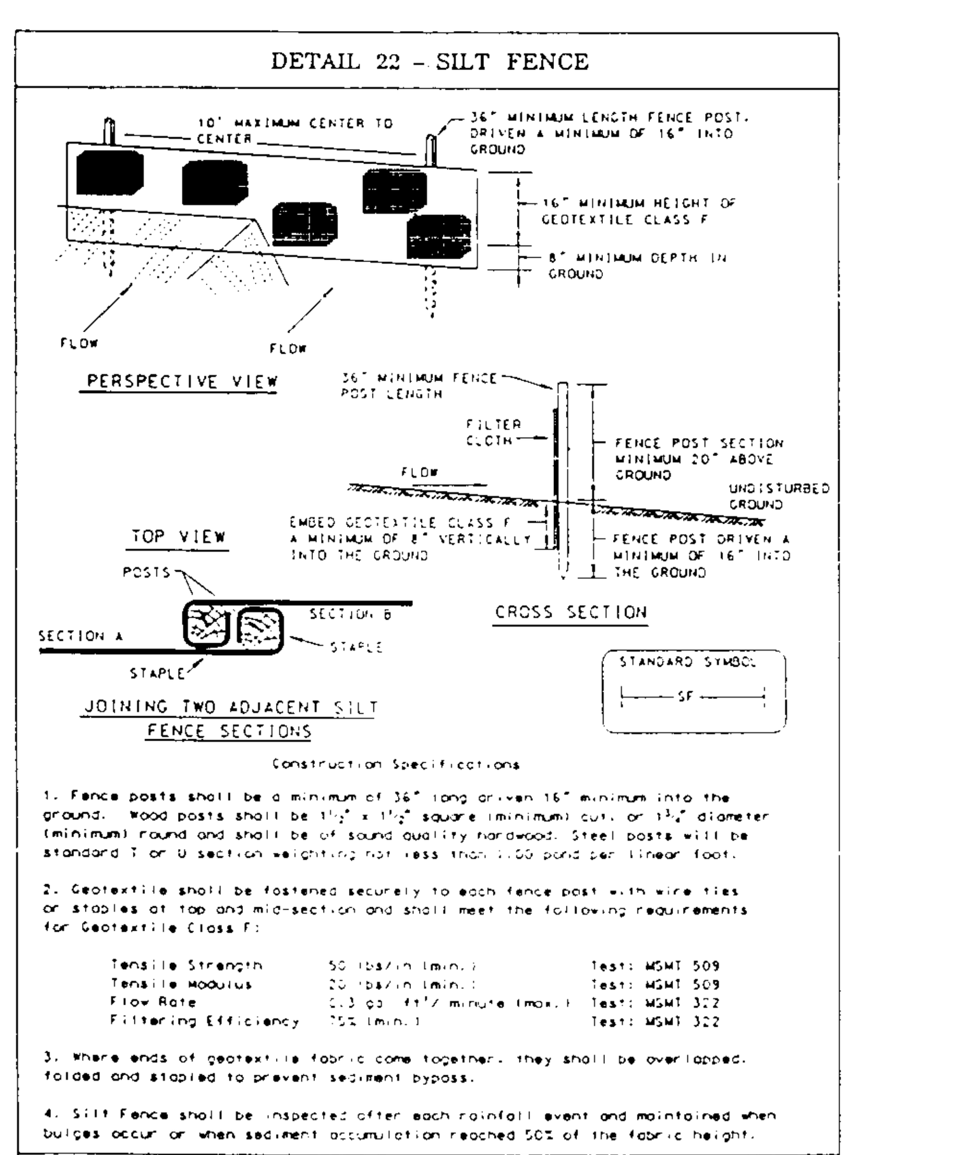
* It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

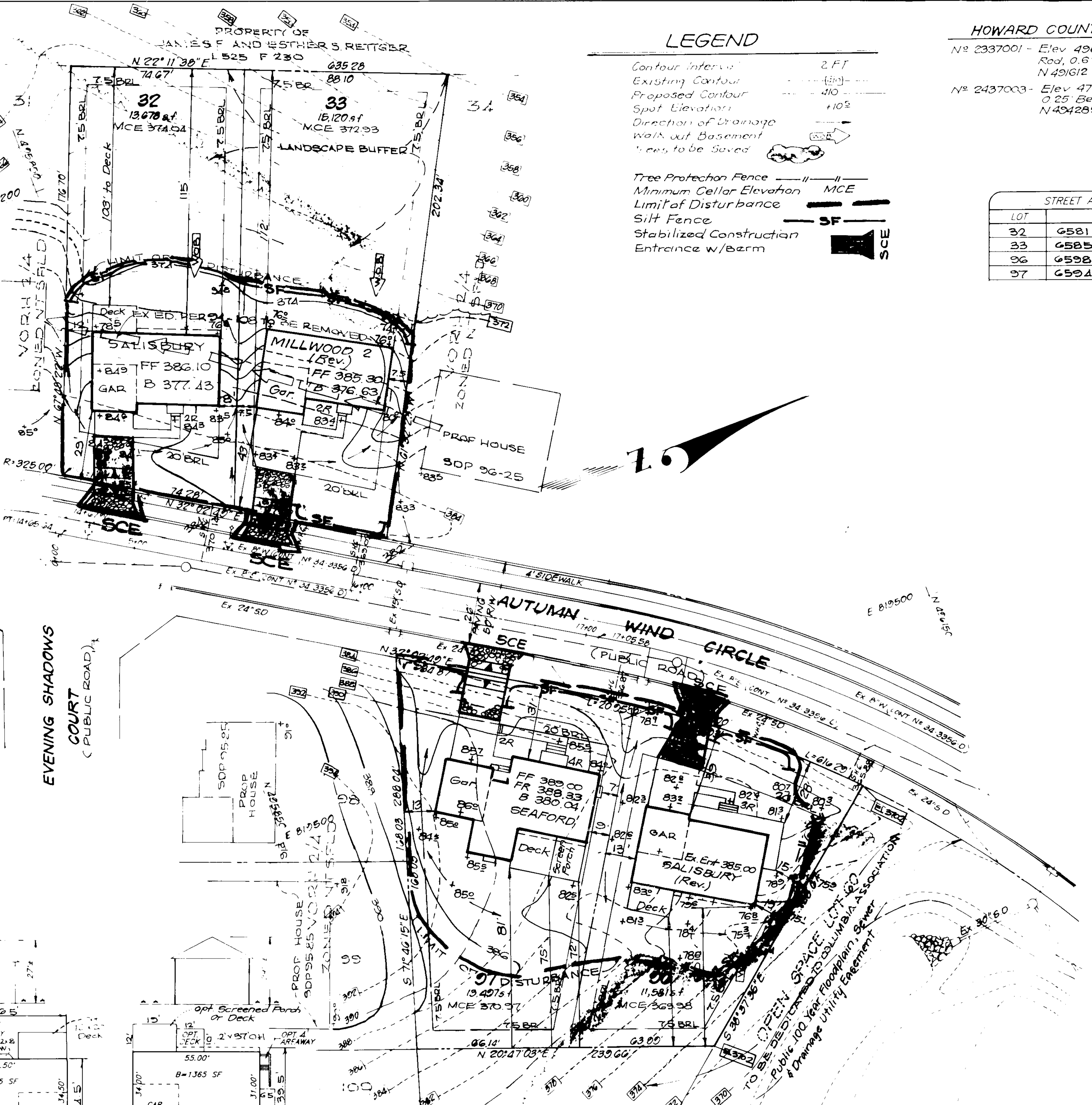
CONSTRUCTION SEQUENCE:	NO. OF DAYS
1 Obtain grading permit	7
2 Install tree protection fence	7
3 Install sediment and erosion control devices and stabilize	14
4 Excavate for foundations, rough grade and temporarily stabilize	30
5 Construct structures, sidewalks and driveways	60
6 Final grade and stabilize in accordance with Stds. and Specs.	14
7 Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize	7

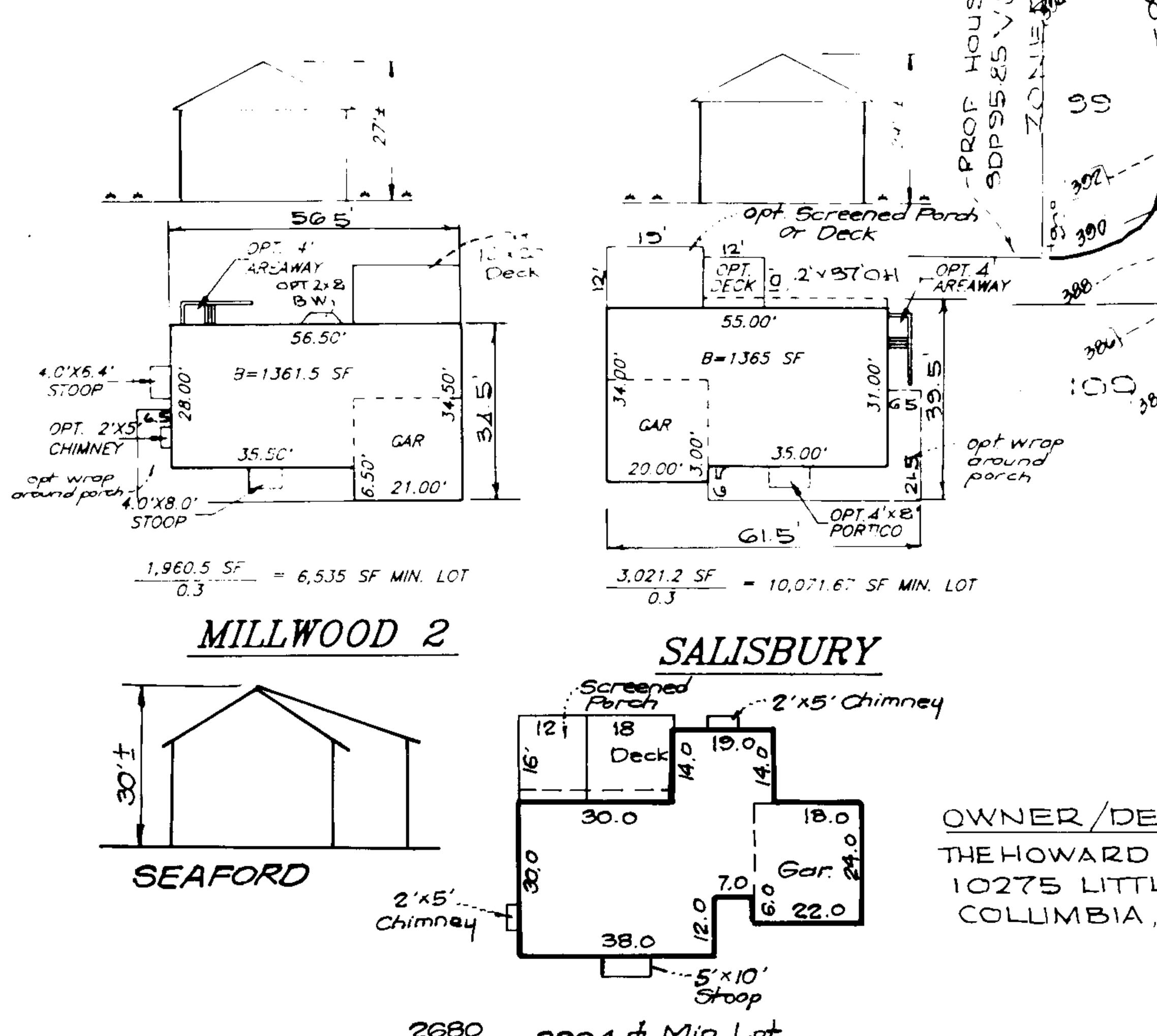


BLAZE ORANGE PLASTIC MESH
TYPICAL TREE PROTECTION FENCE DETAIL









LEGEND

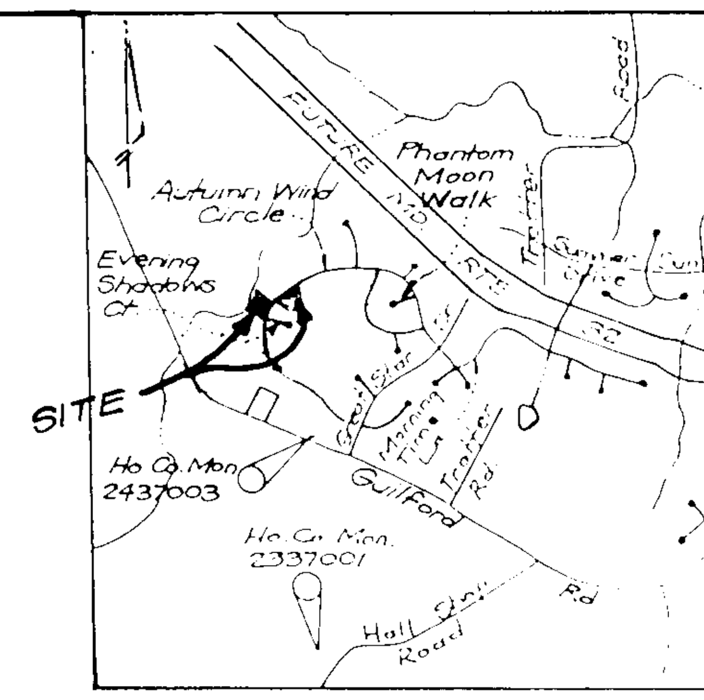
Contour Interval	2 FT
Existing Contour	410
Proposed Contour	410
Spot Elevation	+10.5
Direction of Drainage	
Walk out Basement	WOB
Trees to be Saved	
Tree Protection Fence	
Minimum Cellar Elevation	MCE
Limit of Disturbance	
Silt Fence	SF
Stabilized Construction Entrance w/Berm	SCE

HOWARD COUNTY MONUMENTS

Nº 2337001 - Elev 496.095, 3/4 Reinforcing Rod, 0.6' Below Surface N 491612.385 E 819527.789

Nº 2437003 - Elev 477.122, Concrete Mon, 0.25' Below Surface N 494285.231 E 820385.343

STREET ADDRESS CHART	
LOT	ADDRESS
32	6581 AUTUMN WIND CIRCLE
33	6585 AUTUMN WIND CIRCLE
96	6598 AUTUMN WIND CIRCLE
97	6594 AUTUMN WIND CIRCLE



VICINITY MAP
Scale: 1" = 2000'

GENERAL NOTES:

1. Subject property is zoned: NT SFLD per 10-18-93 Comprehensive Zoning Plan.
2. The total area included in this submission is : 1.24 AC. The total area of buildable lots is : 43.90 AC
3. The total number of lots included in this submission is: 4. The total number of buildable lots : 158
4. Improvement to property : Single Family Detached.
5. Department of Planning and Zoning reference file numbers are: S-91-03, P94-01, F94-108, 34-3356-D
6. Utilities shown as existing are taken from approved Water and Sewer plan Contract # 34-3356-D, approved Road Construction plans F-94-108 and actual field survey.
7. Any damage to county owned rights-of-way shall be corrected at the developer's expense.
8. All roadways are public and existing.
9. The existing topography was taken from Road Construction plans F94-108 prepared by Reimer Muegge & Assocs.
10. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System -- Howard County Monument Nos.: 2337001 & 2437003
11. The contractor shall notify the Department of Public Works/Division of Construction Inspection at (410) 313-1880 at least twenty-four (24) hours prior to the start of work.
12. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
13. For driveway entrance details, refer to Ho. Co. Design manual Volume IV details. R-6.03 & R-6.05
14. In accordance with FDP Phase 209 Part IV Bay windows or chimneys not more than 10 feet in width may project not more than 4 feet into any setbacks; porches and decks may project not more than 3 feet into the front or rear setbacks.
15. Stormwater Management is provided per: F 94-108
17. The maximum lot coverage permitted is: 30%
18. Sewer House Connections shown are taken to Property Line

SPECIAL NOTES:

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F94-108 and/or approved Water and Sewer Plans Contract #34-3356-D

SHEET INDEX.

SITE DEVELOPMENT, SEDIMENT AND EROSION CONTROL PLAN — 1 OF 1

NOTE:

THIS PLAN IS IN ACCORDANCE WITH THE ALTERNATIVE COMPLIANCE LANDSCAPE PROVISION FOR RETENTION OF EXISTING TREES ALONG LOTS 32 & 33 ON THE PROJECT BOUNDARY, PER SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

SUBDIVISION NAME: COLUMBIA VILLAGE OF RIVER HILL		SECTION/AREA: 2/4		LOTS/PARCELS: 32, 33, 96 & 97	
PLAT NO.: 11466-11473	BLOCK NO.: 13	ZONE: NT SFLD	TAX MAP NO.: 35	ELECTION DIST.: 5TH	CENSUS TRACT: 6055
WATER CODE: I 11			SEWER CODE: 6650000		

OWNER/DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND, 21044

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and 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 or their authorized agents, as are deemed necessary".

HARRY A. BOWIE, PRESIDENT — 12/5/95 DATE

ENGINEER'S CERTIFICATE

I hereby 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.

G. NELSON CLARK — 12-5-95 DATE

Reviewed for HOWARD S.C.D. and meets Technical Requirements
Signature — 12/12/95 Date
Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved 12/12/95

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — 12/14/95 Date
Chief, Division of Land Development and Research — 12/15/95 Date
Director — 12/15/95 Date

Nº	REVISIONS	Date
3	Rev. hse. & grd. lot 33	7-26-96
2	Rev. hse & grd. lot 97 Add hse. typical	4-12-96
1	Rev. grd. to show As-Built Conditions lot 96	4-9-96

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045

SITE DEVELOPMENT, SEDIMENT AND EROSION CONTROL PLAN
LOTS 32, 33, 96 AND 97
COLUMBIA
VILLAGE OF RIVER HILL
SECTION 2 AREA 4
FIFTH (5th) ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: NU-HOMES INC.
9891 BROKEN LAND PARKWAY SUITE 401
COLUMBIA, MARYLAND 21046-1165

DESIGNED	R.M.T.
DRAWN	ZH RMT
CHECKED	jme
DATE	12-5-95
SCALE	1"=30'
DRAWING	1 OF 1
JOB NO	95-012
FILE NO	95-012X

SDP-96-50