

LEGEND
 CONTOUR INTERVAL
 EXISTING CONTOUR
 PROPOSED CONTOUR
 DIRECTION OF DRAINAGE
 WALK OUT BASEMENT
 EXISTING SEWER MAIN
 EXISTING WATER MAIN
 EXISTING STORM DRAIN
 EXISTING TREES TO REMAIN
 TREE PROTECTION FENCE
 25% STEEP SLOPE

- GENERAL NOTES:**
- Subject property is zoned: NTSFLD per 8-2-85 Comprehensive Zoning Plan and FDP Phase 200 part One.
 - The total area included in this submission is 2.32 Ac.
 - The total number of lots included in this submission are: 9
 - Improvement to property: Single family detached
 - The maximum lot coverage permitted is: 30%
 - Department of Planning and Zoning reference file numbers are: S-91-03, P-92-13, WP-92-13, F-93-18, WP-92-13 to allow Utilities to be installed in front yard.
 - Utilities shown as existing are taken from approved water and sewer plan Contract # 34-3204-D, approved road construction plans F-93-18, and actual field survey.
 - Any damage to county owned rights-of-way shall be corrected at the developer's expense.
 - Stormwater Management for this development will be detention facilities created by road fills. Water quality is provided by extended detention basins. All roadways are public and existing.
 - The existing topography shown was taken from plans prepared by Riener, Muegge and Associates, Inc. F-93-18.
 - 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, 2337002, and 2437003.
 - The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (410) 313-1870 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.
 - Fences, decks, open or enclosed, may project no more than three (3) feet into the front or rear setback.
 - For driveway entrance details, refer to Ho Co. Design Manual Volume III and Details R-6-03 and R-6-05.

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 F-93-18 and/or approved Water and Sewer Plans Contract #C-34-3204-D. The SMC elevation shown is located at the property line.

SHEET INDEX:

SHEET 1 SITE DEVELOPMENT PLAN
 SHEETS 2 & 3 SEDIMENT & EROSION CONTROL PLAN

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
19	6401 ENCHANTED SOLITUDE PLACE
20	6405 " " " "
21	6409 " " " "
26	6416 " " " "
27	6412 " " " "
28	6408 " " " "
29	6404 " " " "
30	6400 " " " "
31	6408 RIVER RUN

SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF RIVER HILL	2/1	19-21, 26-31
PLAT NO.	BLOCK NO.	ZONE
10863-10868	15	NTSFLD
TAX MAP NO.	ELECTION DIST.	CENSUS TRACT
	5TH	6055
WATER CODE	I-12	SEWER CODE
		6252500

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 7-13-93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 DIRECTOR: [Signature] DATE: 7/16/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 7/9/93

CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 7/6/93

No.	REVISIONS	Date
4	Rev. hse. & grad. lot 27	7-19-94
3	Rev. Retaining Wall lot 26 & 27, Add maint. easmt.	7-7-94
2	Add hse. types F and D II	2-10-94
1	Rev. hse. & grad. lot 26	12-6-93

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS

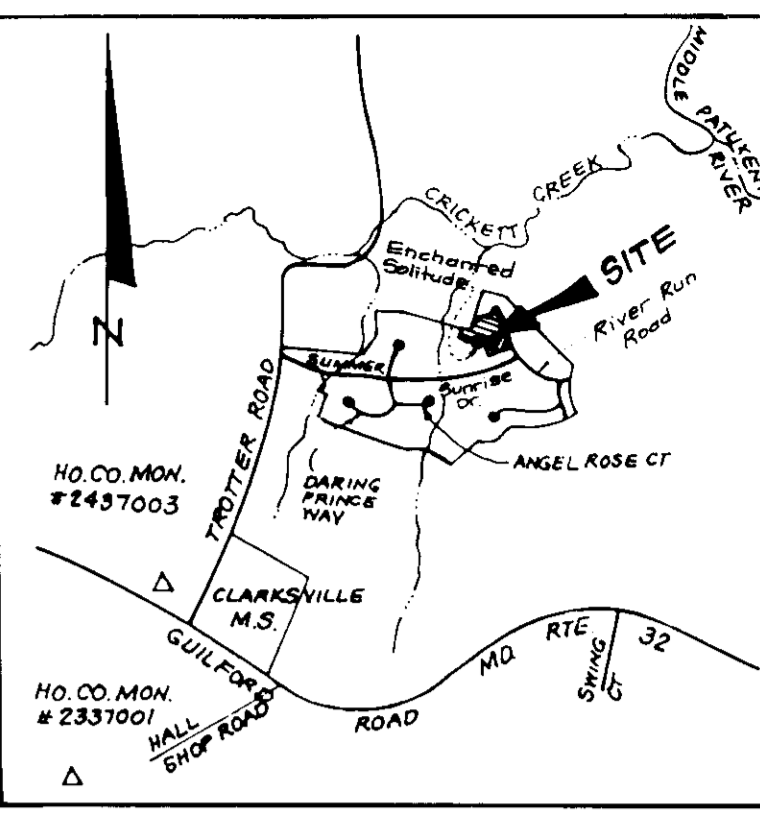
DESIGNED: VLP
 DRAWN: BAL
 CHECKED: VLP
 DATE: 4/93

SITE DEVELOPMENT PLAN
 LOTS 19-21 AND 26-31
 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 1
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: HALLMARK BUILDERS
 P.O. Box 1018
 Columbia, Md 21044

SCALE: 1" = 30'
 DRAWING: 1 OF 3
 JOB NO: 93-050
 FILE NO: 93-050X

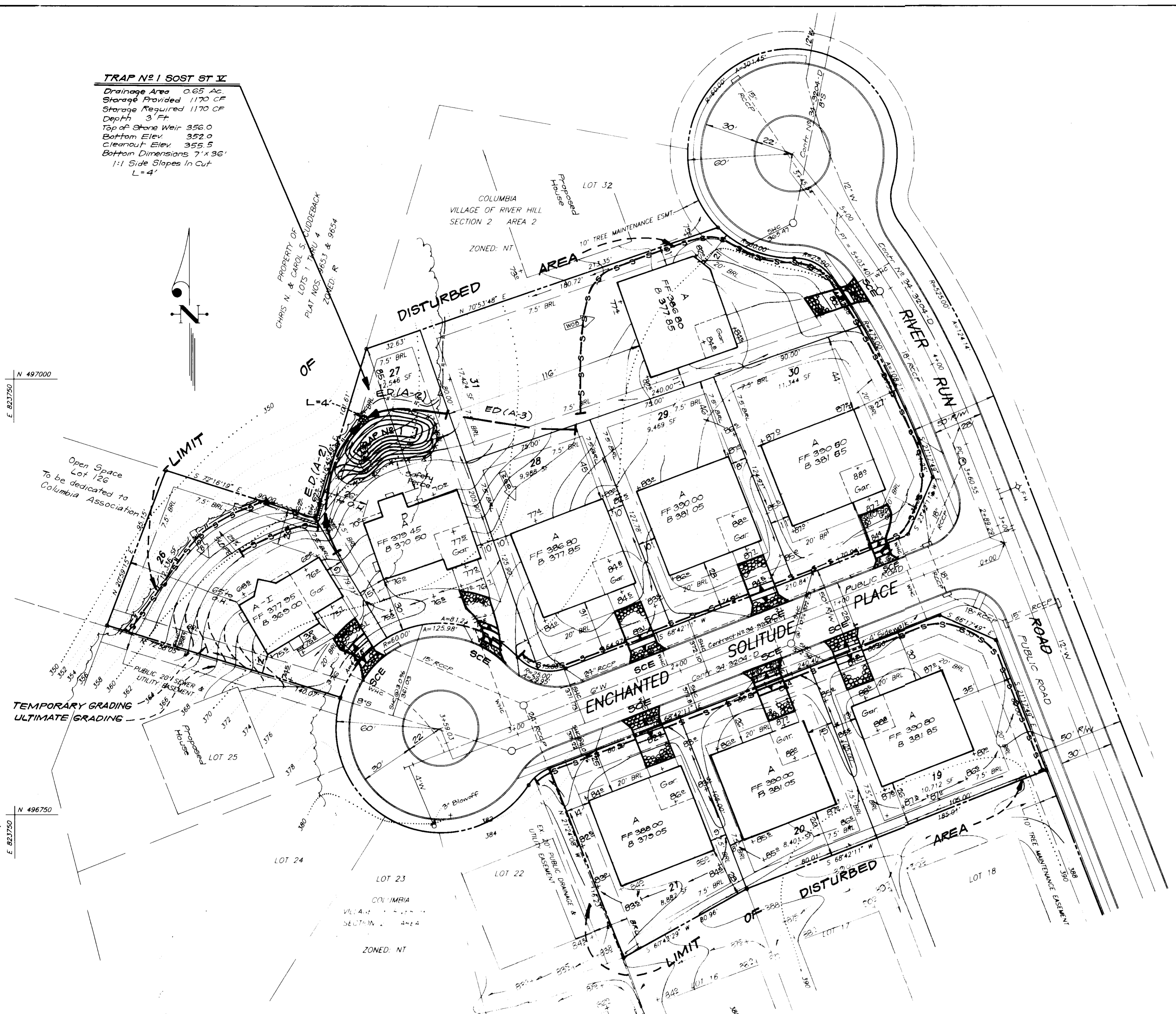
TRAP NO. 1 SOST ST IV
 Drainage Area 0.65 AC
 Storage Provided 1170 CF
 Storage Required 1170 CF
 Depth 3 Ft
 Top of Stone Weir 356.0
 Bottom Elev. 352.0
 Cleanout Elev. 355.5
 Bottom Dimensions 7' x 36'
 1:1 Side Slopes in Cut
 L=4'



VICINITY MAP
 Scale: 1" = 2000'

LEGEND

- CONTOUR INTERVAL
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF DRAINAGE
- WALK OUT BASEMENT
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORM DRAIN
- EXISTING TREES TO REMAIN
- TRIPLE PROTECTION FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- LIMIT OF DISTURBED AREA
- Earth Dike



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* 7-13-93
 DATE: 7/13/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 CHIEF DIVISION OF DEVELOPMENT AND RESEARCH
[Signature] 7/16/93
 DATE: 7/16/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE.
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* 7/19/93
 DATE: 7/19/93

CHIEF BUREAU OF ENGINEERING
[Signature] 7/16/93
 DATE: 7/16/93

Reviewed for HOWARD S.C.D.
 Name: *[Signature]*
 Signature: *[Signature]* 6/23/93
 Date: 6/23/93
 US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Approved: *[Signature]* 6/23/93
 Date: 6/23/93

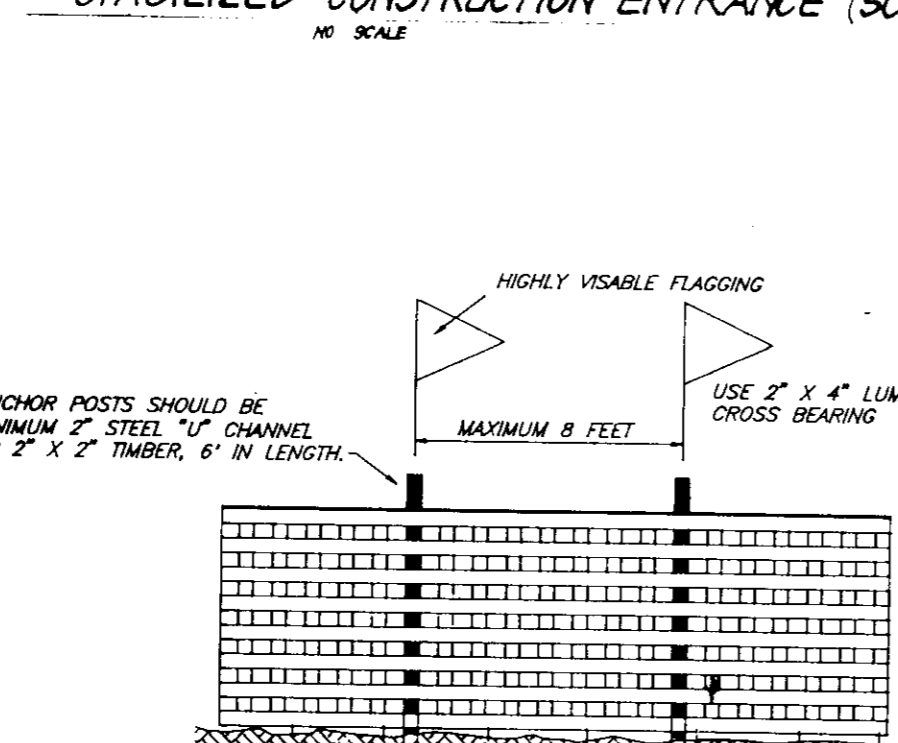
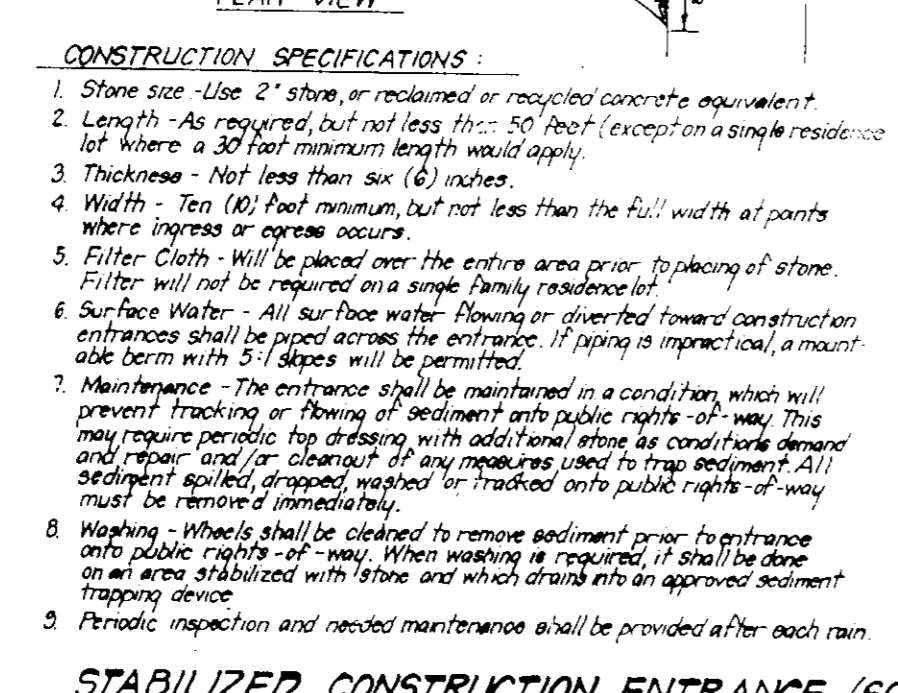
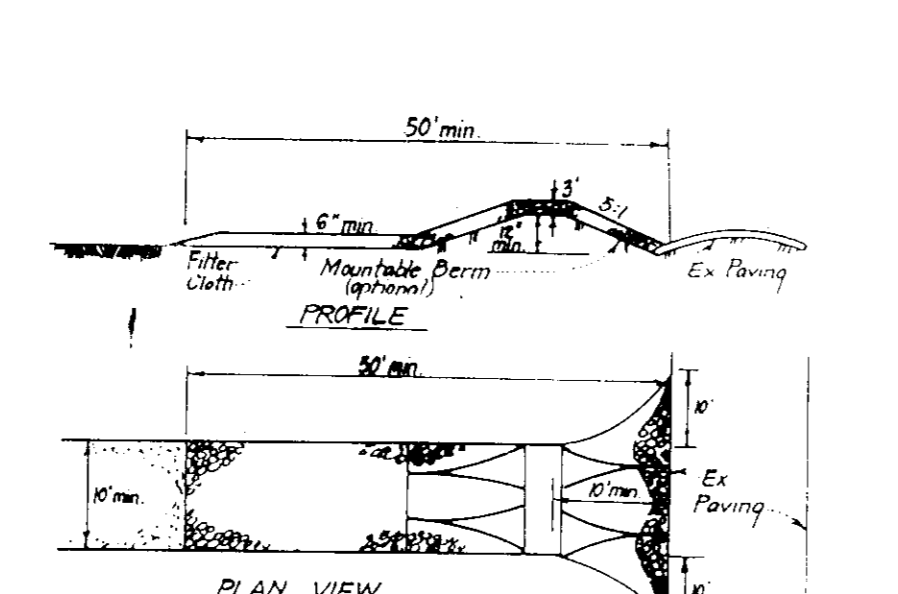
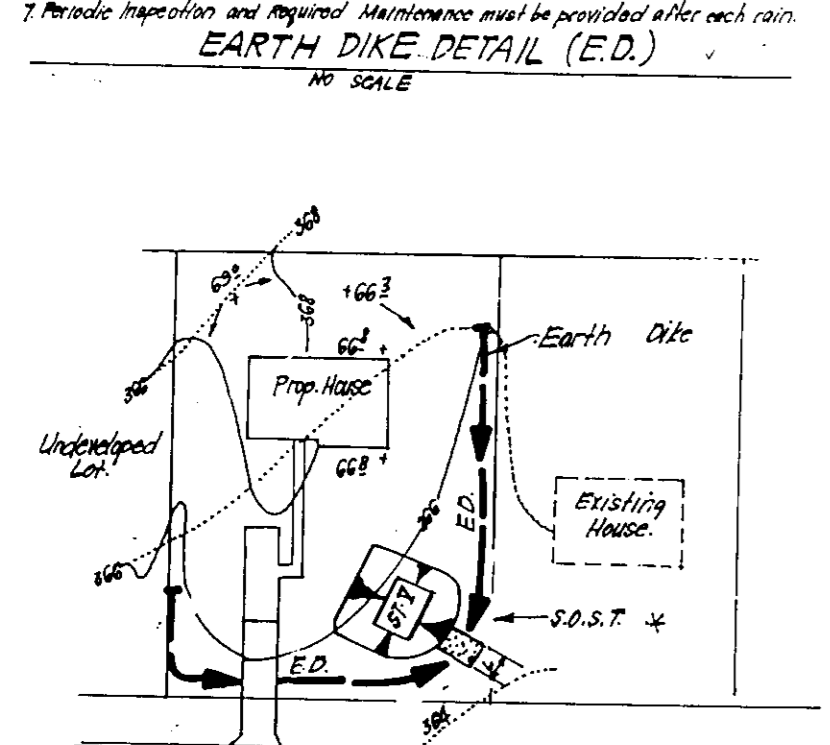
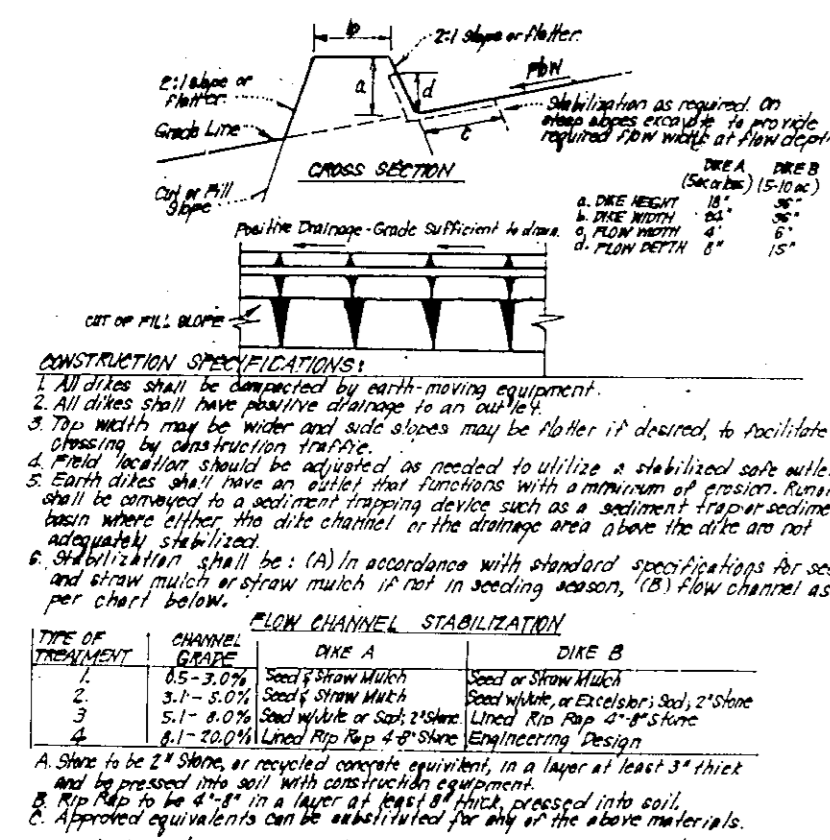
DEVELOPER'S/BUILDER'S CERTIFICATE
 I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department 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.
 Signature: *[Signature]* 4-23-93
 Date: 4-23-93

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.
 Signature: *[Signature]* 4-26-93
 Date: 4-26-93
 G. NELSON CLARK



OWNER:
 HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 715 MINISTERS WAY • COLUMBIA, MD. 21044 • (410) 739-7000 • FAX (410) 739-7001 • WASH.		
DESIGNED KIWM	SEDIMENT & EROSION CONTROL PLAN LOTS 18-21 AND 26-31 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: HALLMARK BUILDERS P.O. Box 1018 Columbia, Md 21044	SCALE 1" = 30'
DRAWN BAL		DRAWING 20F3
CHECKED KIWM	JOB NO 93-050	FILE NO 93-050-5E
DATE 4/93		



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, disking or other acceptable means before seeding, if not previously loosened.

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

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq ft.) before seeding, 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 urea-form fertilizer (9 lbs./1000 sq ft.)
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq ft.) and 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 (0.5 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) 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 unrattled small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (9 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.

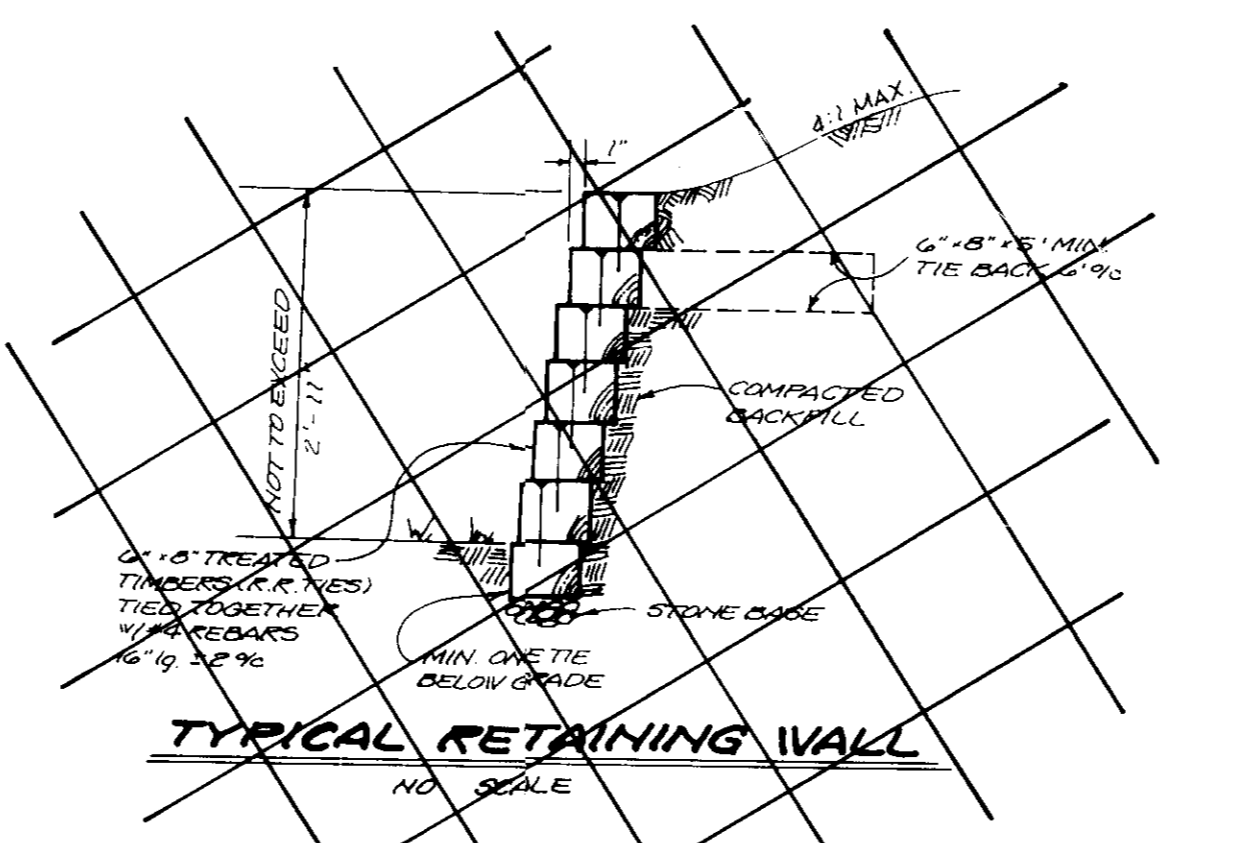
TEMPORARY SEEDING NOTES

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

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 ryegrass (3.2 lbs./1000 sq ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (0.7 lbs./1000 sq ft.). For the period November 16 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 unrattled small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (9 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. (410) 313-1810

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.

3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, 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. I, 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 stabilization with (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:	2.92 Ac.
Area Disturbed:	1.10 Ac.
Area to be roofed or paved:	1.00 Ac.
Area to be vegetatively stabilized:	1.10 Ac.
Total Cut:	4270 cu yd.
Total Fill:	4270 cu yd.
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.

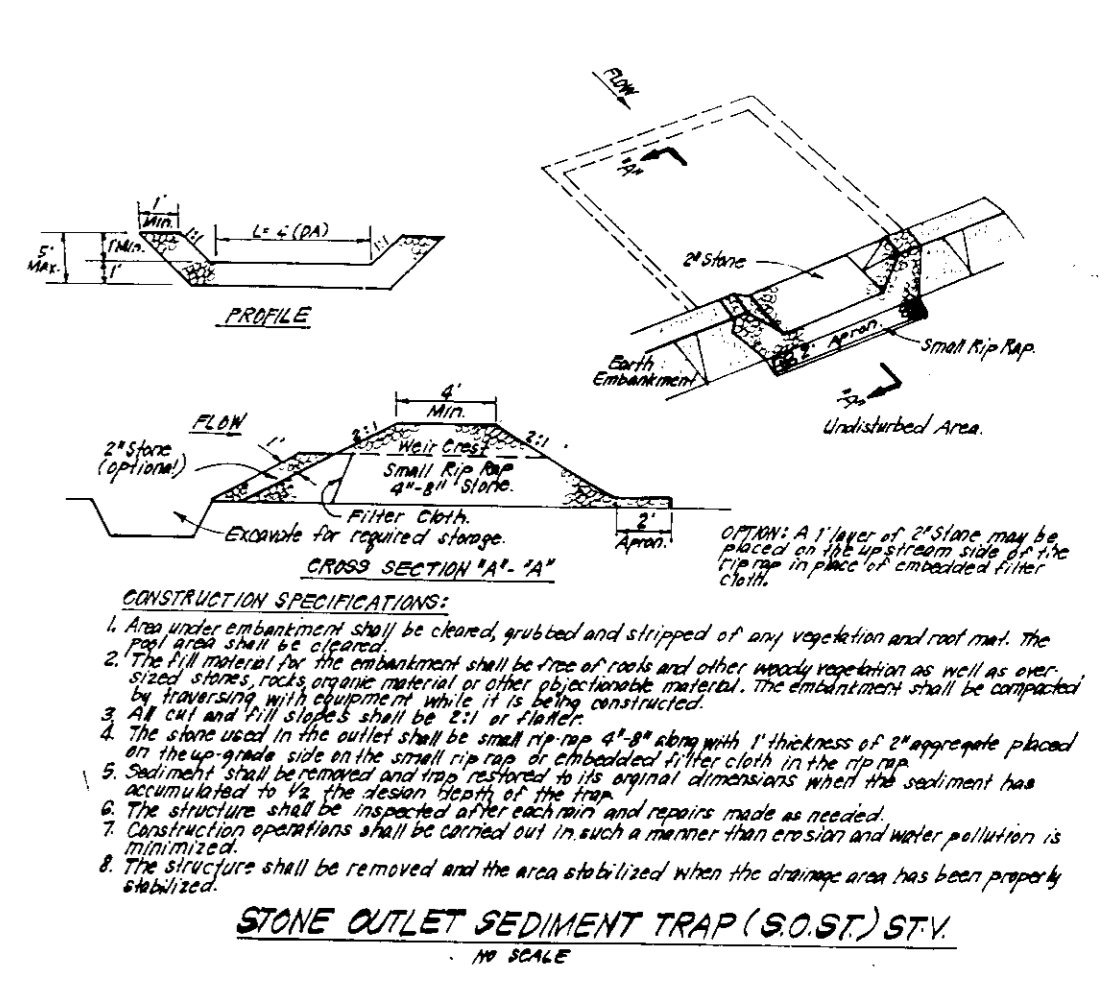
9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.

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. If houses are to be constructed on an "as sold" basis, at random, Single Family Sediment Control, as shown below shall be implemented.

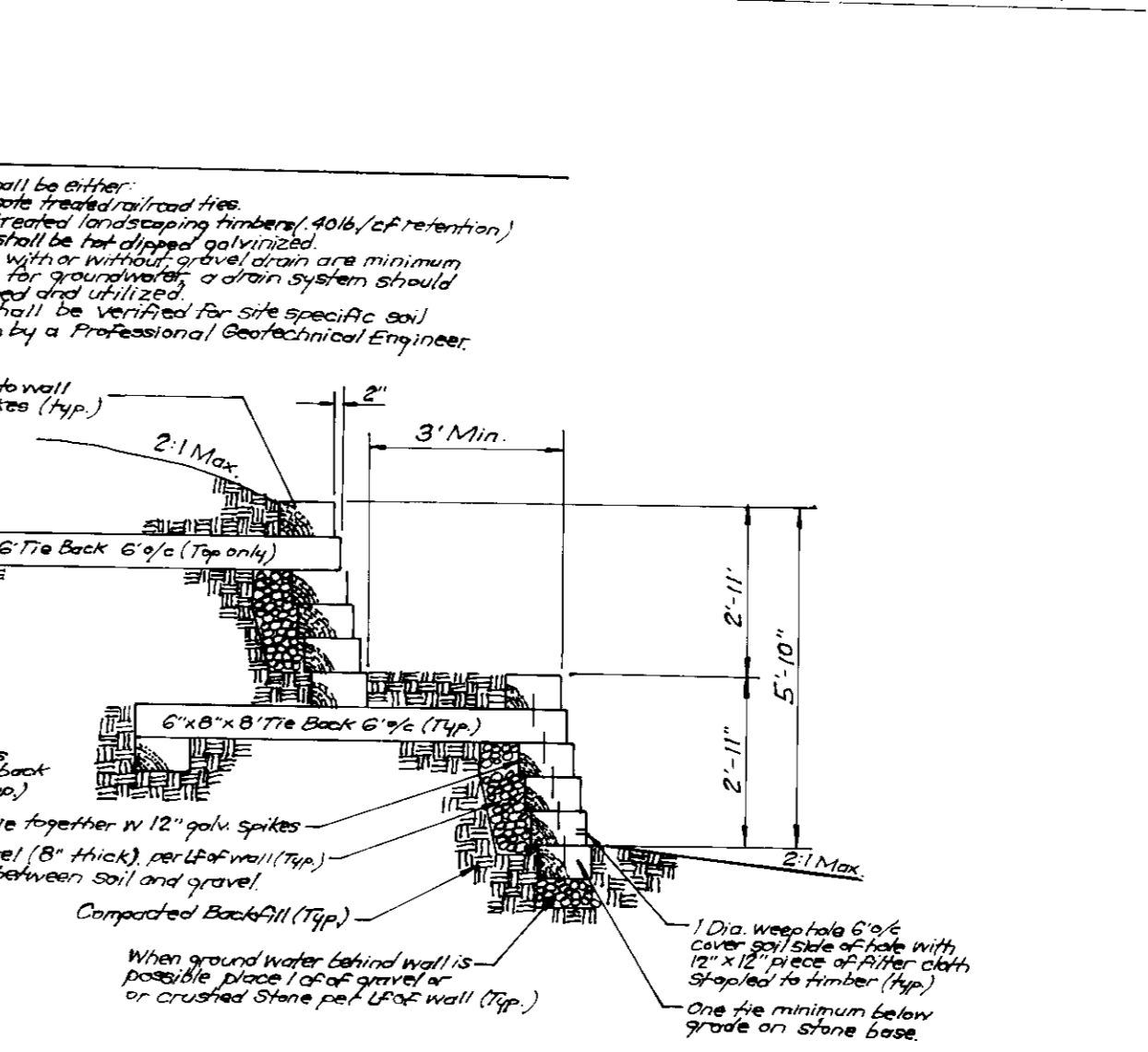
12. All pipes to be blocked at the end of each day (see detail this sheet).

13. The total amount of silt fence = 1030 LF.



CONSTRUCTION SEQUENCE:

NO.	DESCRIPTION	NO. OF DAYS
A.	Obtain grading permit	7
B.	Install tree protection fence	7
C.	Install sediment and erosion control devices and stabilize	14
D.	Excavate for foundations, rough grade and temporarily stabilize	30
E.	Construct structures, sidewalks and driveways	60
F.	Final grade and stabilize in accordance with Stds. and Specs.	14
G.	Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize	7



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT

John E. Gorman 7-3-93
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John E. Gorman 7/16/93
DIRECTOR DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS,
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John E. Gorman 7/16/93
DIRECTOR DATE

Paul J. Brown 7/16/93
CHIEF BUREAU OF ENGINEERING DATE

Approved for HOWARD COUNTY S.C.D.
Name: *John E. Gorman*
Signature: *John E. Gorman*
Date: 7/16/93
US Soil Conservation Service

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."

John E. Gorman 4-23-93
Signature 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 4-26-93
Signature Date

CLARK • FINEROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

7135 MINISTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO • (301) 621-8100 • WASH.

DESIGNED: KIWM
DRAWN: BAL
CHECKED: KIWM
DATE: 4/93

SEDIMENT & EROSION CONTROL PLAN
LOTS 19 - 21 AND 26 - 31

SCALE: AS SHOWN
DRAWING: 3 OF 3
JOB NO.: 93-050
FILE NO.: 93-050

COLUMBIA
VILLAGE OF RIVER HILL
SECTION 2 AREA 1
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: HALLMARK BUILDERS
P.O. Box 1018
Columbia, Md 21044