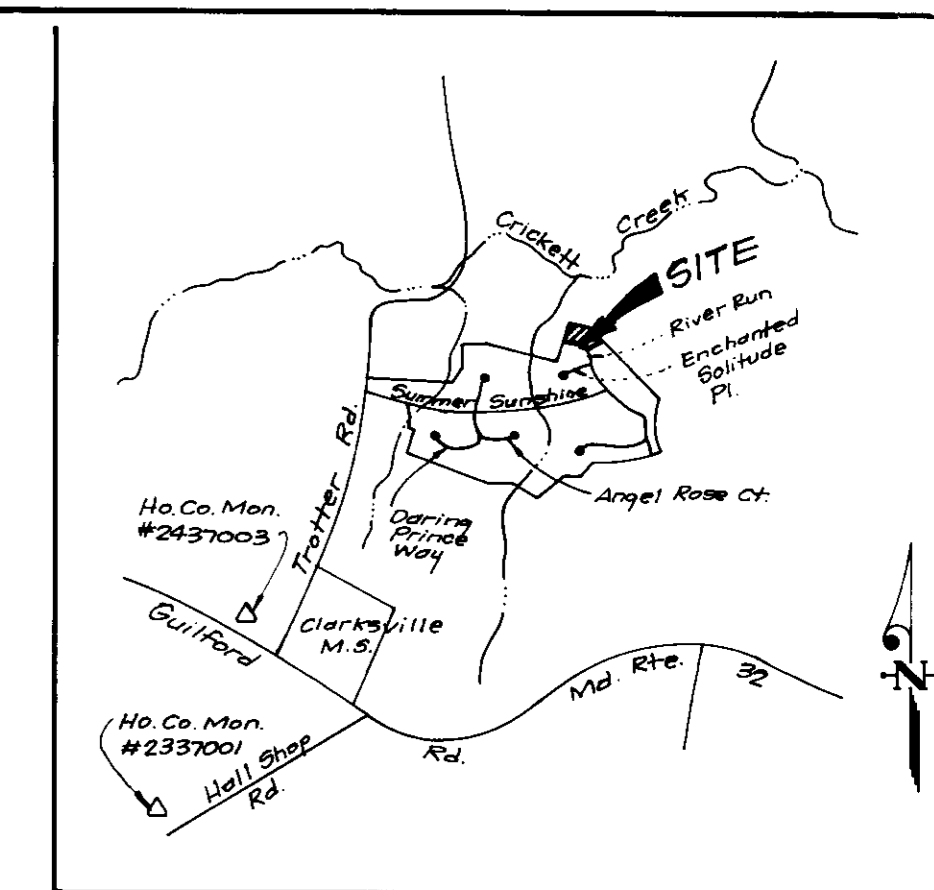
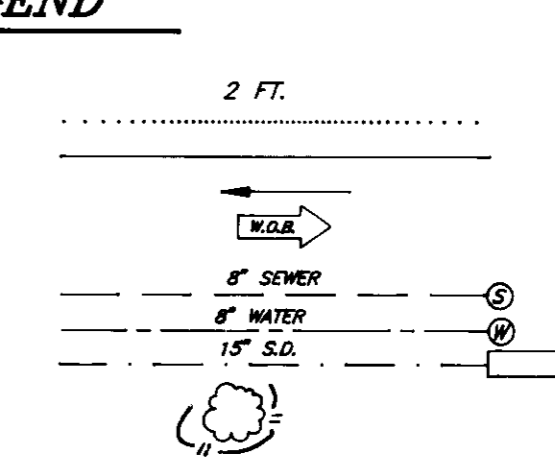


LEGEND

- 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



VICINITY MAP
SCALE: 1"=2000'

BENCHMARK No. 1 - Railroad spike in pole no. 52580 (Traiter Road) Elev. 308.27
N 496697.02 E 822026.81

GENERAL NOTES:

1. Subject property is zoned: NTSFLD per B-2-85 Comprehensive Zoning Plan and FDP Phase 200 Part I
2. The total area included in this submission is: 70,136 sq. ft. / 1.61 Ac.
3. The total number of lots included in this submission are: 5
4. Improvement to property: Single family detached
5. The maximum lot coverage permitted is: 30%
6. Department of Planning and Zoning reference file numbers are: S-91-03, P-92-13, WFD-88-17, WFD-89-19 to 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.
8. Any damage to county owned rights-of-way shall be corrected at the developer's expense.
9. Storm water management is provided per F-93-18 Detention
10. All roadways are public and existing.
11. The existing topography was taken from plans prepared by Riemer Musge and Assoc., Inc. dated Dec. 1992.
12. 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 2337003.
13. The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (410) 915-1870 at least five (5) working days prior to the start of work.
14. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
15. Porches, decks and/or enclosed may project not more than three (3) feet into the front or rear setback.
16. For driveway entrance details refer to Howard County Design Manual Volume II Srd details K-6.05 and R-6.01.

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 # 34-3204-D.
SHC invert elevations shown on plan are taken to the property line.

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
32	6404 RIVER RUN
33	6401 RIVER RUN
34	6400 RIVER RUN
35	6405 RIVER RUN
36	6400 RIVER RUN

SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF RIVER HILL	2/1	32 THRU 36
FLAT NO. 10845	BLOCK NO. 14	ZONE NTSFLD
TAX MAP NO. 35	ELECTION DIST. 5TH	CENSUS TRACT 6055
WATER CODE I-12	SEWER CODE 6652500	

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



CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO. • (301) 621-8100 • WASH.

DESIGNED	SCALE
VLP	1" = 30'
DRAWN	DRAWING
BAL	1 OF 2
CHECKED	JOB NO.
JME	93-052
DATE	FILE NO.
APRIL, 1993	93-052X

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: *[Signature]* DATE: 7-27-93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DIRECTOR: *[Signature]* DATE: 7/30/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE.
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *[Signature]* DATE: 7/22/93

NO.	REVISIONS	DATE
4	Rev. use of grad. lot 36, Add Use Typical	8-31-94
3	Rev. use of grad. lot 36, Add Use Typical	7-5-94
2	Add house typical H-F	3-7-94
1	Add house typical H-D	10-28-93
N/S		

SEDIMENT AND EROSION CONTROL NOTES

- 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. (102) 513-1010
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to conform with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redisturbance, 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.
- All sediment traps/basins 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.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (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.
- 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.
- SITE ANALYSIS:**

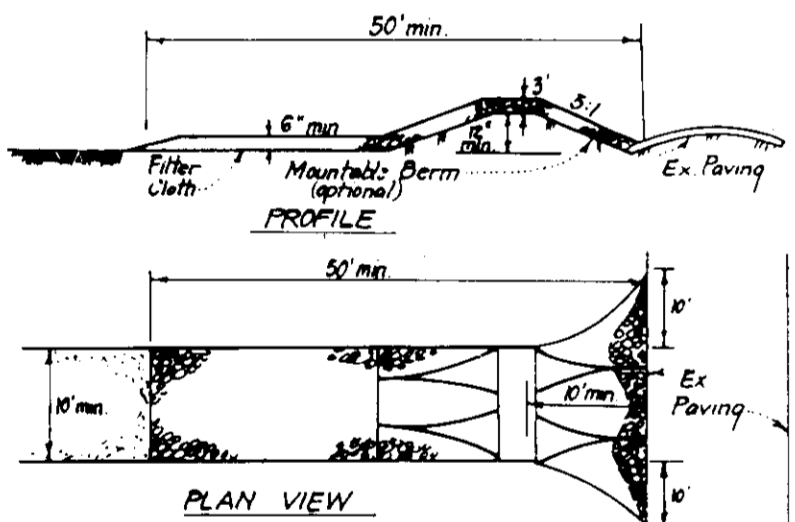
Total Area of Site:	1.01 AC.
Area Disturbed:	0.5 AC.
Area to be seeded or paved:	0.5 AC.
Area to be vegetatively stabilized:	0.58 AC.
Total Cut:	408 CY.
Total Fill:	1912 CY.
Offsite Waste/Borrow Area Location:	
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DEPT. Sediment Control Inspector. 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.
- If houses are to be constructed on an "as sold" basis, at random, Single Family Sediment Control, as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail sheet).
- The total amount of silt fence = 102 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 its grading permit number at the time of construction.

CONSTRUCTION SEQUENCE:

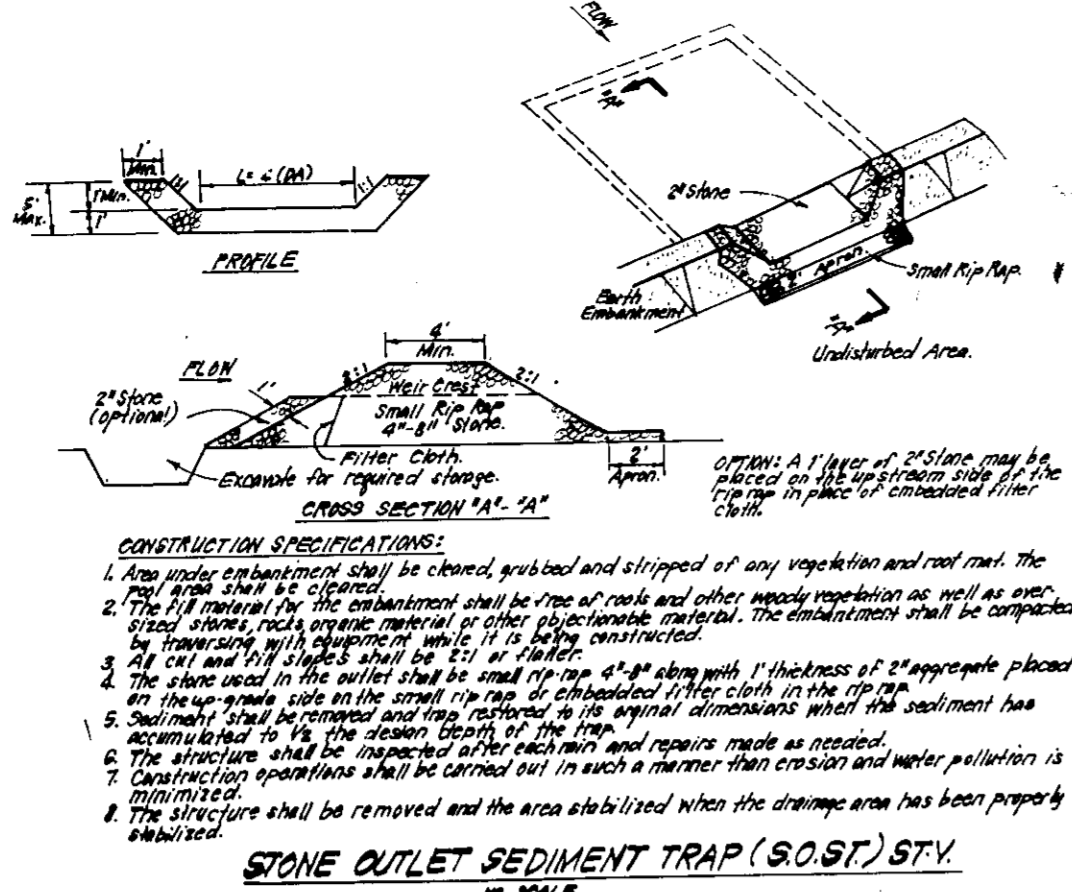
CONSTRUCTION SEQUENCE	NO. OF DAYS
A. Obtain grading permit	7
B. Install tree protection fence	7
C. Install sediment and erosion control devices and stabilize	14
D. Excavate for foundations, rough grade and temporarily stabilize	30
E. Construct structures, sidewalks and driveways	60
F. Final grade and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

* DEMO CONSTRUCTION OF HOUSE ON LOT 34 - SEE SINGLE LOT DETAIL THIS SHEET AND PROVIDE 30' MIN. DISTANCE FOR FILLING IN TRAP AND EXTENDED GRADING FOR LOT 34 BEYOND TRAP.

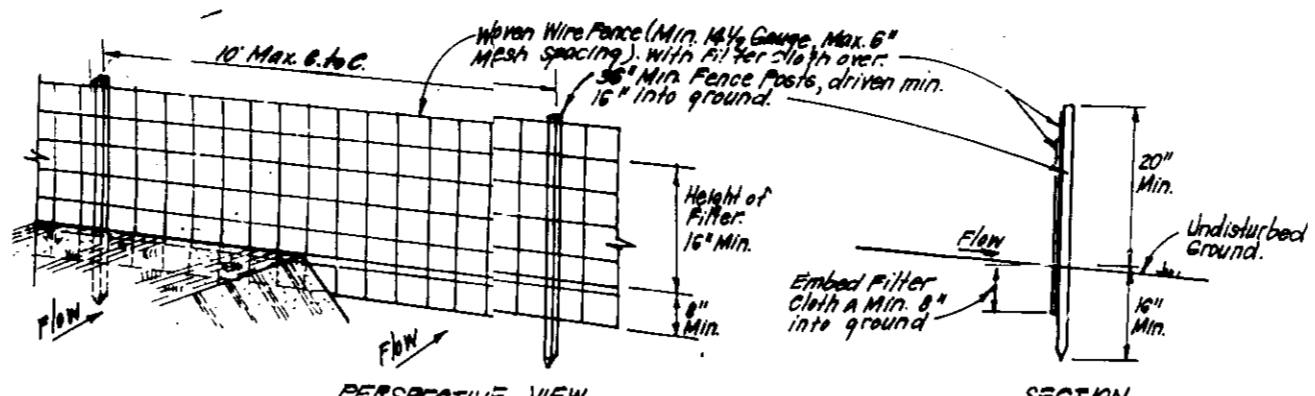


- CONSTRUCTION SPECIFICATIONS:**
- Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 - Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Ten (10) feet minimum, but not less than the full width at points where ingress or egress occurs.
 - Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be removed on a single family residence lot.
 - Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mound of earth with 3:1 slope will be provided.
 - Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment into public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment applied, trapped, washed or tracked onto public rights-of-way must be removed immediately.
 - Warning - Wheels shall be cleaned to remove sediment prior to entrance into public rights-of-way. When washing is required, it shall be done on an area stabilized with stone, and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain.

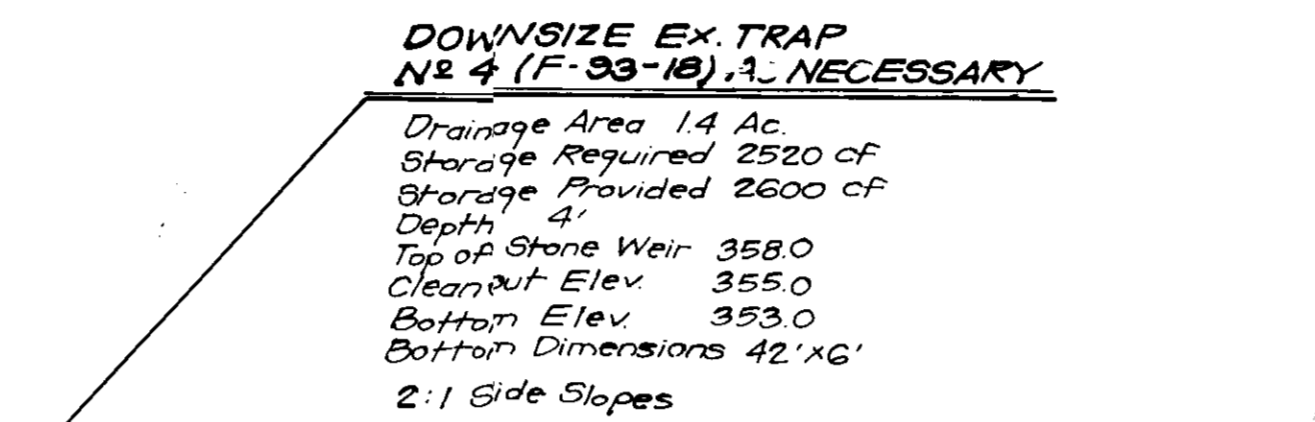
STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



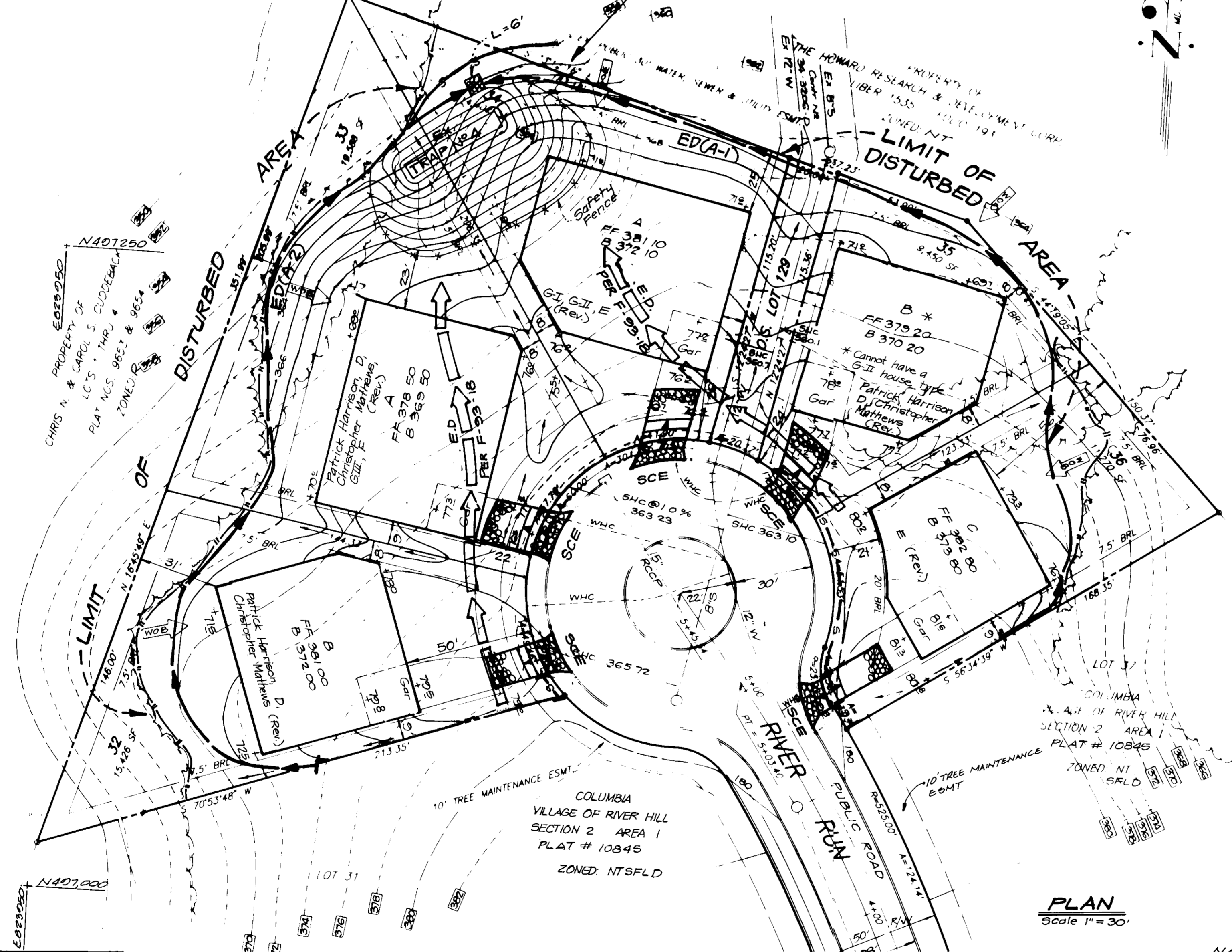
STONE OUTLET SEDIMENT TRAP (S.O.S.T.)
NO SCALE



SILT FENCE DETAIL (S)
NO SCALE



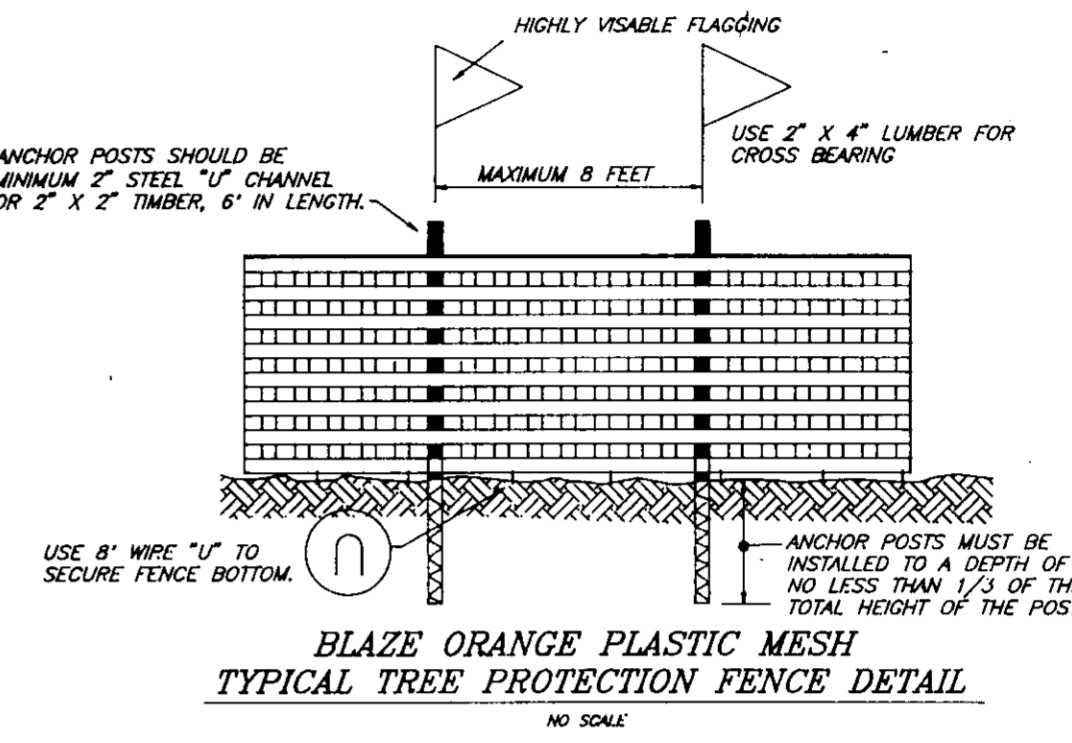
DOWNSIZE EX. TRAP
N# 4 (F-33-18) 1. NECESSARY



PLAN
Scale 1" = 30'

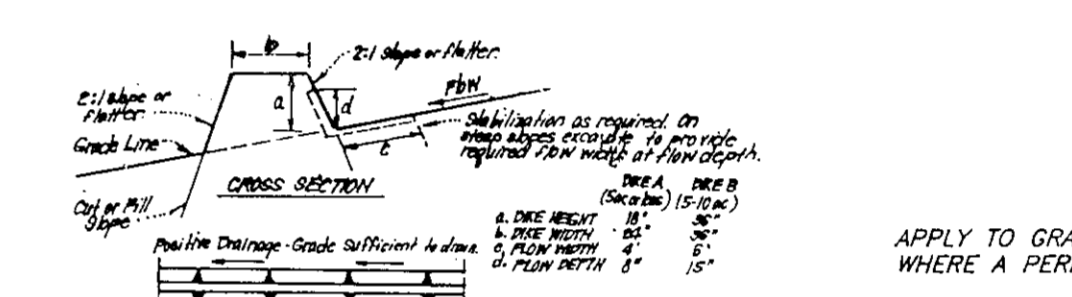
LEGEND

- CONTOUR INTERVAL: 2 FT.
- EXISTING CONTOUR: Dashed line
- PROPOSED CONTOUR: Solid line
- DIRECTION OF DRAINAGE: Arrow
- WALK OUT BASEMENT: Arrow
- EXISTING SEWER MAIN: Line with 'S'
- EXISTING WATER MAIN: Line with 'W'
- EXISTING STORM DRAIN: Line with 'SD'
- EXISTING TREES TO REMAIN: Circle with 'T'
- STABILIZED CONSTRUCTION ENTRANCE: SCE symbol
- SILT FENCE: S-S-S-S
- LIMIT OF DISTURBED AREA: ED (A-1) arrow
- Earth Dike: ED (A-1) arrow
- Existing Earth Dike: Ex. E.D. arrow

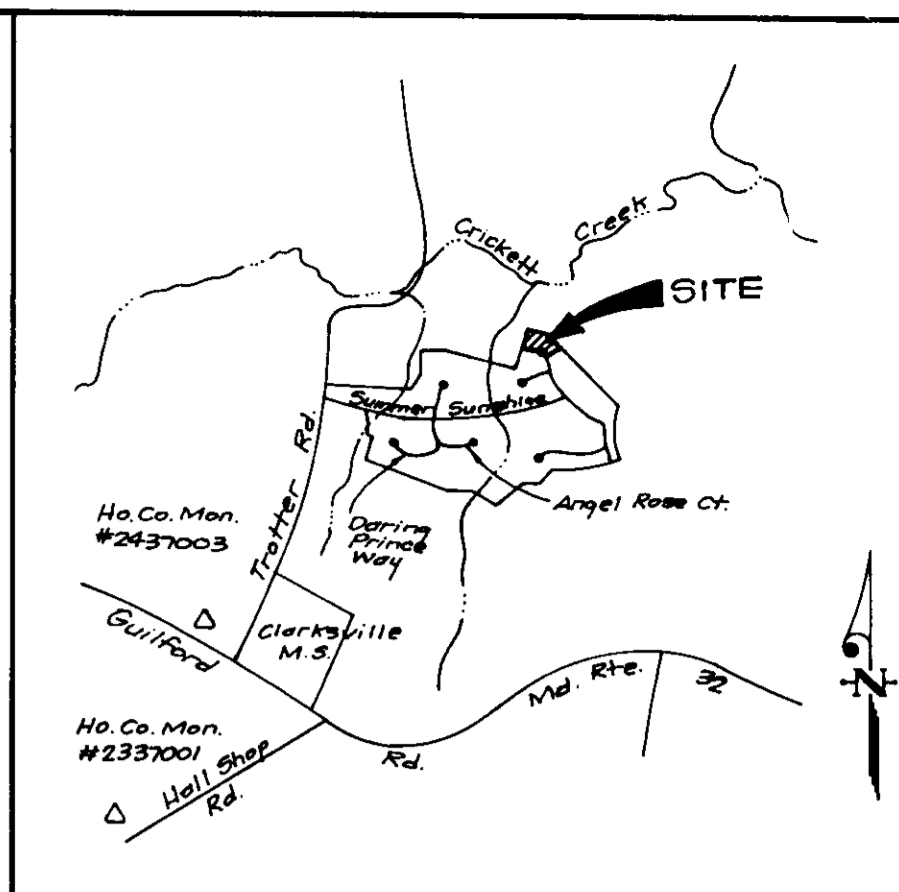


TYPICAL TREE PROTECTION FENCE DETAIL
NO SCALE

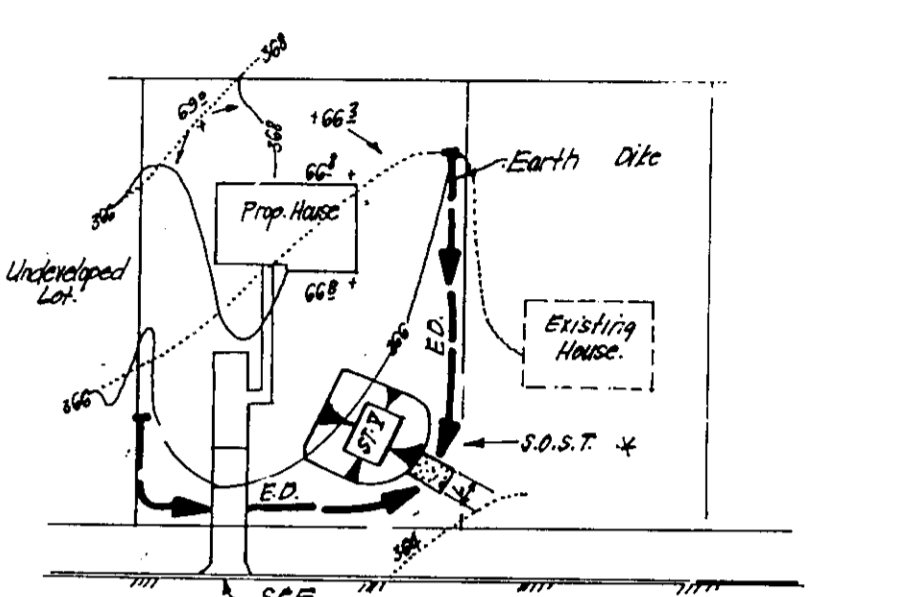
- NOTES:**
- Forest protection device only.
 - Retention area will be set on part of the review process.
 - Boundaries of retention area should be staked and flagged prior to installing device.
 - Rock damage should be avoided.
 - Retention signage may also be used.
 - Device should be maintained throughout construction.



EARTH DIKE DETAIL (E.D.)
NO SCALE



VICINITY MAP
SCALE: 1" = 2000'



SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

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:
- 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 ureamorph fertilizer (9 lbs./1000 sq ft.)
 - 2) 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 creeping 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 unrattled 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, disking, 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 1 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 creeping 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 (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.

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

Signature: [Signature] DATE: 7-27-93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Signature: [Signature] DATE: 7/30/93

Signature: [Signature] DATE: 7/28/93

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

Signature: [Signature] DATE: 7-22-93

Signature: [Signature] DATE: 7/22/93

APPROVED FOR HOWARD COUNTY S.C.D.

Signature: [Signature] DATE: 7/18/93

Signature: [Signature] DATE: 7/13/93

DEVELOPER'S/BUILDER'S CERTIFICATE

"I, the undersigned, 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, also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

Signature: [Signature] DATE: 6/24/93

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] DATE: 4-19-93

OWNER: HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10235 Little Patuxent Parkway
Columbia, Maryland 21044

Signature: [Signature] DATE: 4-19-93

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

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

DESIGNED	KTW	SCALE	AS SHOWN
DRAWN	BAL	DRAWING	2 OF 2
CHECKED	KTW	JOB NO.	93-052
DATE	April 1993	FILE NO.	93-052e

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