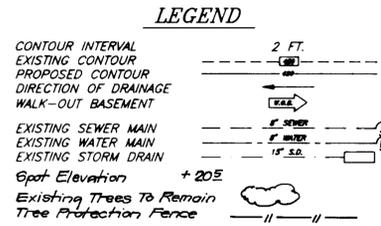


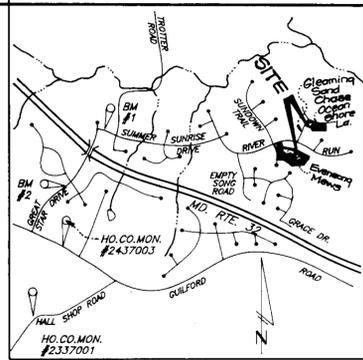
No	REVISIONS	Date
1	Rev. hse & grd. to reflect As-Built Cond. lot 122	10/24/97

SCHEDULE A PERIMETER LANDSCAPE EDGE				
Category	Adjacent to Roadways	Each Lot		
		124	167	168 179
Landscape Type	B			
Frontage/Perimeter	341'	86'	82'	83' 90'
Number of Plants Required				
Shade Trees	8 (1/50)	2	2	2 2
Evergreen Trees	8 (1/40)	2	2	2 2
Shrubs				
Number of Plants Provided				
Shade Trees	.			
Evergreen trees	.			
Surety Required	\$1,600	\$400	\$400	\$400 \$400

Comments: * Planting will be provided per the New Town Alternative Compliance Method. (See General Note #19)



ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
121	6512 OCEAN SHORE LANE
122	6508 OCEAN SHORE LANE
123	6504 OCEAN SHORE LANE
124	6612 Gleaming Sand Chase
166	6506 River Run
167	6502 River Run
168	6501 EVENSONG MEWS
169	6503 EVENSONG MEWS
170	6509 EVENSONG MEWS
171	6513 EVENSONG MEWS
172	6517 EVENSONG MEWS
173	6521 EVENSONG MEWS
174	6525 EVENSONG MEWS
175	6516 EVENSONG MEWS
176	6512 EVENSONG MEWS
177	6508 EVENSONG MEWS
178	6504 EVENSONG MEWS
179	6500 EVENSONG MEWS



VICINITY MAP
Scale: 1"=200'

- BENCHMARKS**
- BM #1 Railroad Spike In Pole #525880
Trailer Road Elev. 398.27
N 496637.02 E 822026.81
 - BM #2 Railroad Spike In Poplar
Elev. 439.32
N 495551.90 E 820727.80

- GENERAL NOTES:**
- Subject property is zoned: NTSFMD per 10-18-93 Comprehensive Zoning Plan.
 - The total area included in this submission is: 235,736 SF or 5.41 AC.
 - The total number of lots included in this submission is: 18.
 - 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-34-01, F-56-03, F-56-138, F-56-17.
 - Utilities shown as existing are taken from approved Water and Sewer plans Contract # 34-3561-D, approved Road Construction plans F-56-138, and actual field survey.
 - Any damage to county owned rights-of-way shall be corrected at the developer's expense.
 - All roadways are public and existing.
 - The existing topography was taken from Road Construction plans F-56-138 prepared by Riemer Muegge & Associates, Inc.
 - The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Control stations: 2237001 and 2237003.
 - 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.
 - The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
 - For driveway entrance details, refer to Ho. Co. Design Manual Volume IV details # 6.03 and # 6.05.
 - In accordance with FOP Phase 200, Part VI 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.
 - Stormwater Management is provided per: F-56-138 Stormwater Management. Quantity Control is provided by the Mid Point 30 Storm Crossings. Water Quality is provided by Publicly Owned Bio Retention Areas.
 - No clearing, grading or construction is permitted within wetlands and stream buffers or forest conservation easement.
 - SNC elevations shown are located at the property line.
 - This plan has been prepared in accordance with provision of Section 16-12d of the Howard County Code and the Landscape Manual. Financial surty for the required 16 landscape trees in the amount of \$1,600 is part of the builders grading permit application. (If separate permits, see schedule A for separate surty amounts.)

OWNER / DEVELOPER THE HOWARD RESEARCH AND DEVELOPMENT CORP 10275 Little Parkwood Parkway Columbia, Md. 21044	SHEET INDEX Sheets 1 & 2 Site Development Plan Sheets 3-5 Sediment & Erosion Control Plan
--	--

SPECIAL NOTES:

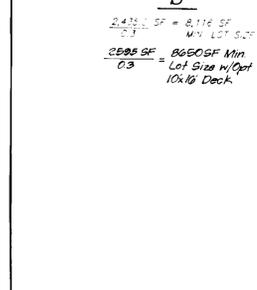
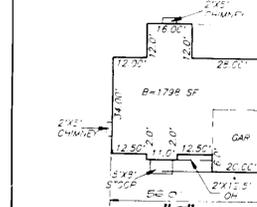
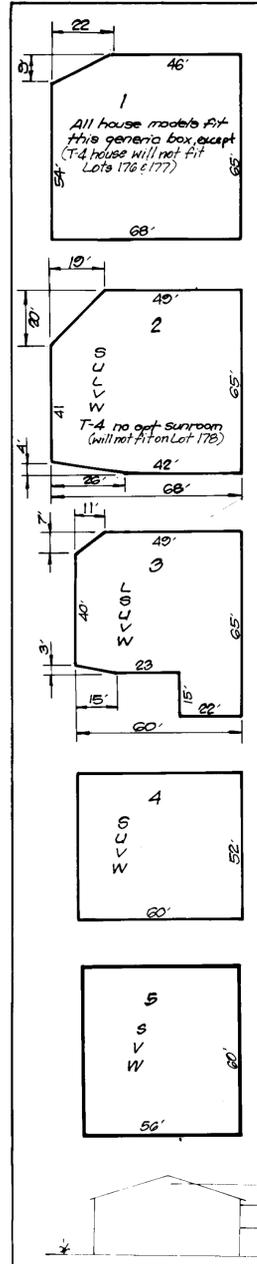
This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-56-138 and/or approved Water and Sewer Plans Contract # 34-3561-D.

SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
VILLAGE OF RIVER HILL	TWO/SIX	121-124 & 166-179
PLAT NO. 12417	BLOCK NO. 15	TAX MAP NO. 37
12419	NTSFLD	ELECTION DIST. 6TH
		CENSUS TRACT 6055
WATER CODE I-12	SEWER CODE 6652500	

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA MD 21045 • (410) 381-7500 • BA10 • (301) 627-6100 • FAX



DESIGNED: BAL	SITE DEVELOPMENT PLAN LOTS 121-124 & 166-179 COLUMBIA VILLAGE OF RIVERHILL SECTION 2 AREA 6 PHASE 2 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE: 1"=30'
DRAWN: ZAH, BAL		DRAWING: 1 of 5
CHECKED: jme		JOB NO: 97-037
DATE: 5-1-97		FILE NO: 97-037-X
FOR: COLUMBIA BUILDERS P.O. BOX 398 COLUMBIA, MARYLAND 21044		

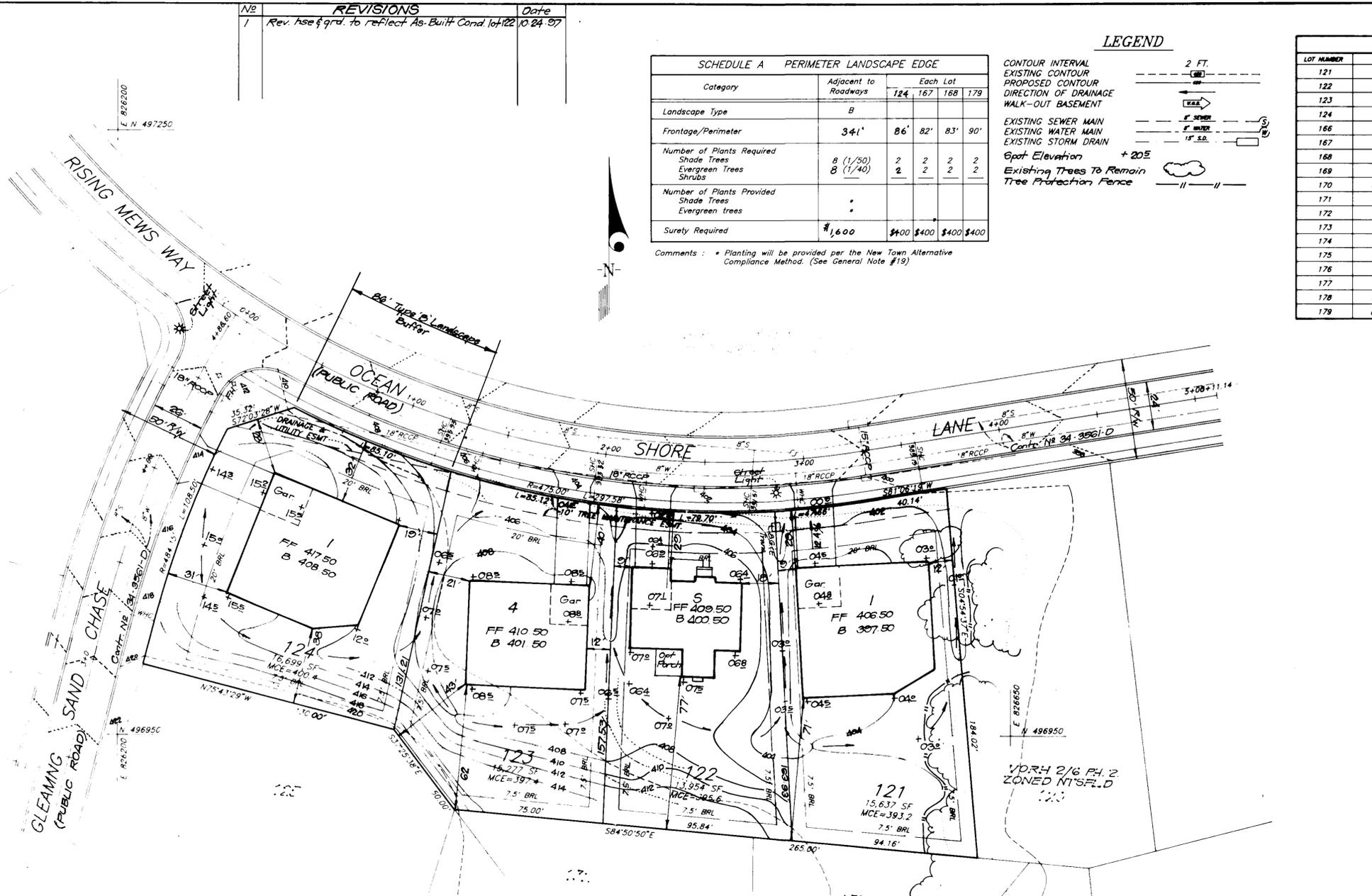


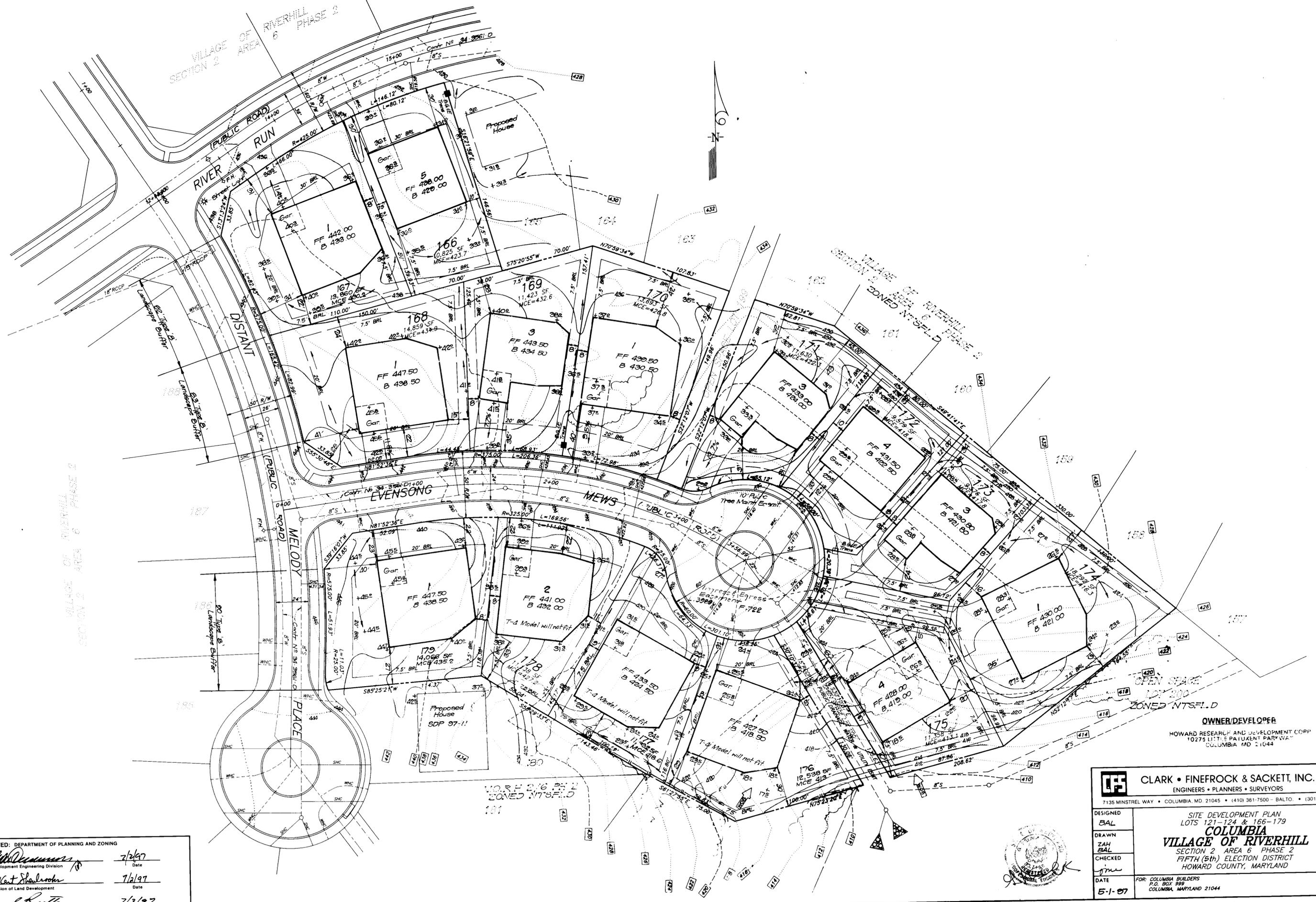
APPROVED DEPARTMENT OF PLANNING AND ZONING

Chief Development Engineering Director: *[Signature]* 7/2/97

Division of Land Development: *[Signature]* 7/2/97

Director: *[Signature]* 7/2/97





APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/2/97
 Chief, Development Engineering Division Date

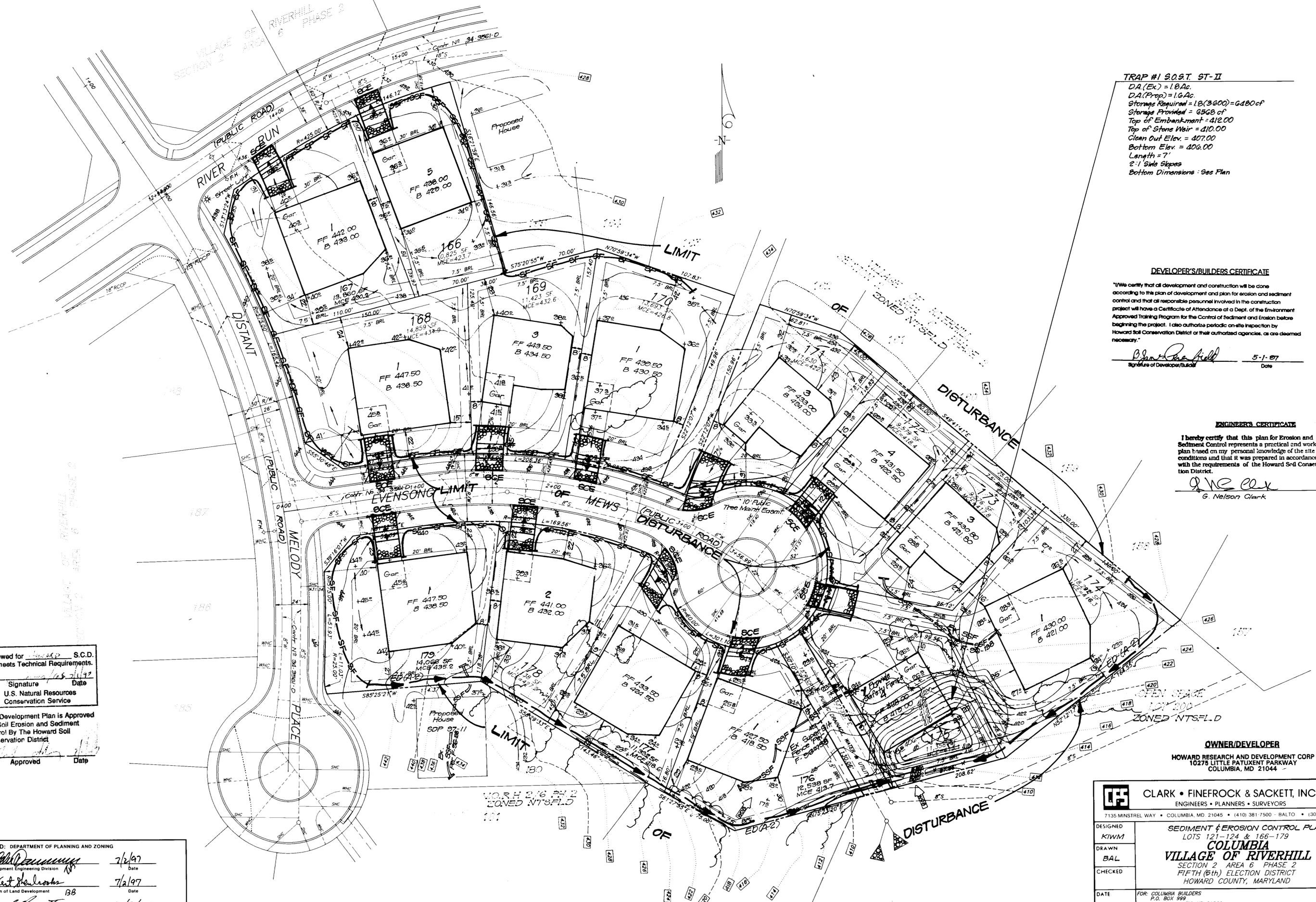
[Signature] 7/2/97
 Chief, Division of Land Development Date

[Signature] 7/3/97
 Director Date

OWNER/DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP
 10275 LITTLE PATUKENT PARKWAY
 COLUMBIA MD 21044

CLARK • FINROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH.		SCALE 1" = 30' DRAWING 2 OF 5 JOB NO. 97-037 FILE NO. 97-037-K
DESIGNED BAL DRAWN ZAH CHECKED JMK DATE 5-1-97	SITE DEVELOPMENT PLAN LOTS 121-124 & 166-179 COLUMBIA VILLAGE OF RIVERHILL SECTION 2 AREA 6 PHASE 2 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FOR: COLUMBIA BUILDERS P.O. BOX 999 COLUMBIA, MARYLAND 21044

SDP 97-139



TRAP #1 S.O.S.T. ST-II
 D.A.(Ex) = 1.8Ac.
 D.A.(Prop) = 1.6Ac.
 Storage Required = 18(3600) = 64800cf
 Storage Provided = 6568cf
 Top of Embankment = 412.00
 Top of Stone Weir = 410.00
 Clean Out Elev. = 407.00
 Bottom Elev. = 406.00
 Length = 7'
 2:1 Side Slopes
 Bottom Dimensions : See Plan

DEVELOPER'S/BUILDERS CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at 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 inspection by Howard Soil Conservation District or their authorized agencies, as are deemed necessary."

Blair R. Field 5-1-97
 Signature of Developer/Builder Date

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment 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 5-1-97
 G. Nelson Clark Date



OWNER/DEVELOPER

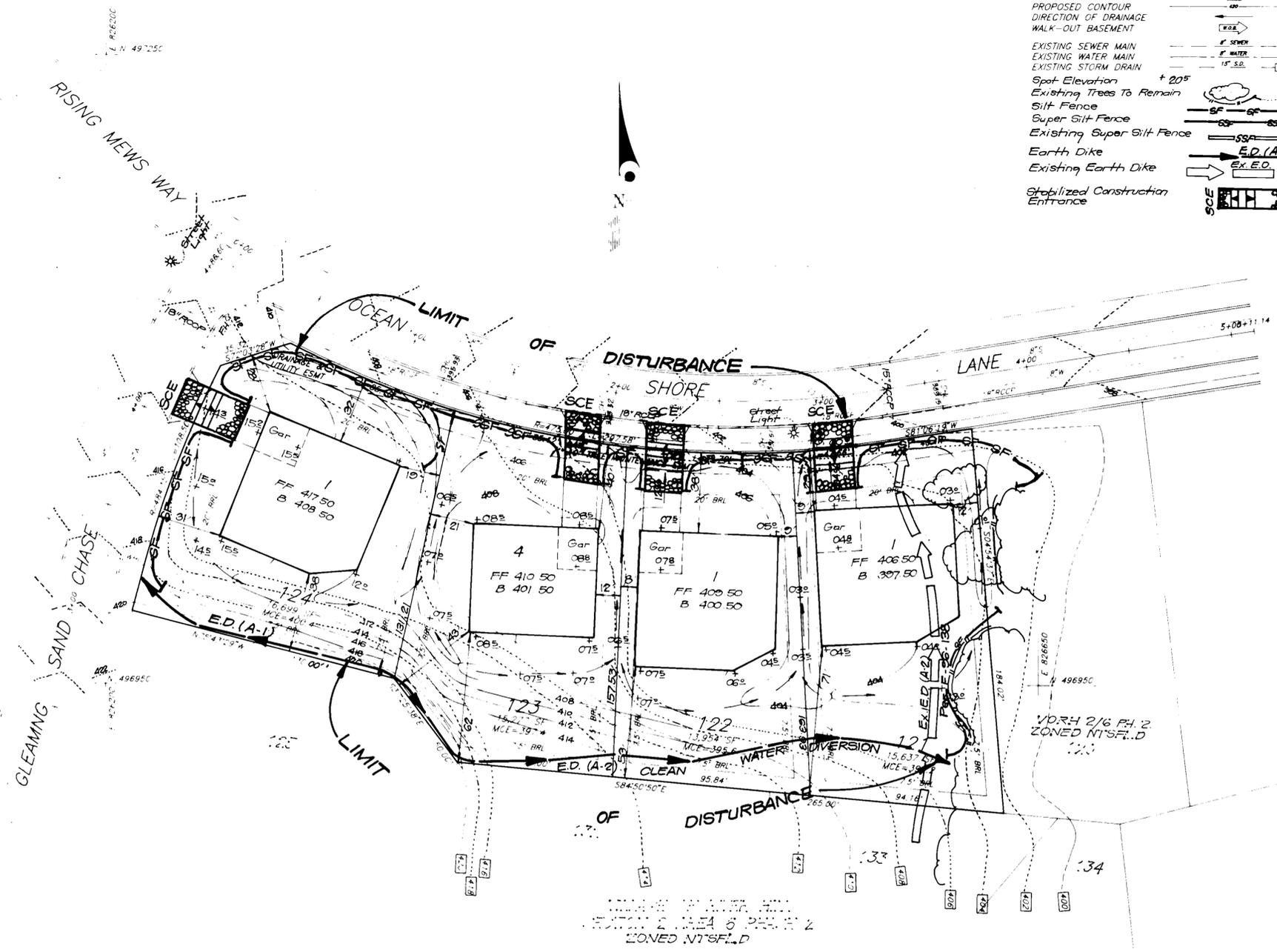
HOWARD RESEARCH AND DEVELOPMENT CORP
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044

Reviewed for S.C.D. and meets Technical Requirements.
 Signature Date
 U.S. Natural Resources Conservation Service

This Development Plan is Approved For Soil Erosion and Sediment Control By The Howard Soil Conservation District
 Approved Date

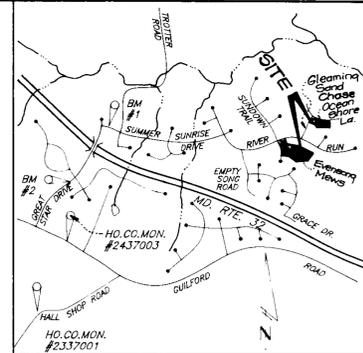
APPROVED: DEPARTMENT OF PLANNING AND ZONING
John Deane 7/2/97
 Chief, Development Engineering Division Date
L. Kent Shearman 7/2/97
 Division of Land Development BB Date
Joseph J. Sutter 7/2/97
 Director Date

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DESIGNED KIWM DRAWN BAL CHECKED	SEDIMENT & EROSION CONTROL PLAN LOTS 121-124 & 166-179 COLUMBIA VILLAGE OF RIVERHILL SECTION 2 AREA 6 PHASE 2 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
DATE 5-1-97	FOR: COLUMBIA BUILDERS P.O. BOX 999 COLUMBIA, MARYLAND 21044	



LEGEND

- CONTOUR INTERVAL 2 FT.
- EXISTING CONTOUR (---)
- PROPOSED CONTOUR (---)
- DIRECTION OF DRAINAGE (--->)
- WALK-OUT BASEMENT (---)
- EXISTING SEWER MAIN (---)
- EXISTING WATER MAIN (---)
- EXISTING STORM DRAIN (---)
- Spot Elevation (+ 20')
- Existing Trees To Remain (---)
- Silt Fence (---)
- Super Silt Fence (---)
- Existing Super Silt Fence (---)
- Earth Dike (---)
- Existing Earth Dike (---)
- Stabilized Construction Entrance (---)



VICINITY MAP

Scale: 1"=2000'

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORP.
 10275 Little Patuxent Parkway
 Columbia, Md. 21044

Reviewed for S.C.D.
 and meets Technical Requirements.
 Signature Date
 U.S. Natural Resources
 Conservation Service

This Development Plan is Approved
 For Soil Erosion and Sediment
 Control By The Howard Soil
 Conservation District
 Signature Date
 Approved Date

DEVELOPER'S/BUILDERS CERTIFICATE

"We certify that all development and construction will be done according to the plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at 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 inspection by Howard Soil Conservation District or their authorized agencies, as are deemed necessary."

Signature of Developer/Builder Date

ENGINEER'S CERTIFICATE

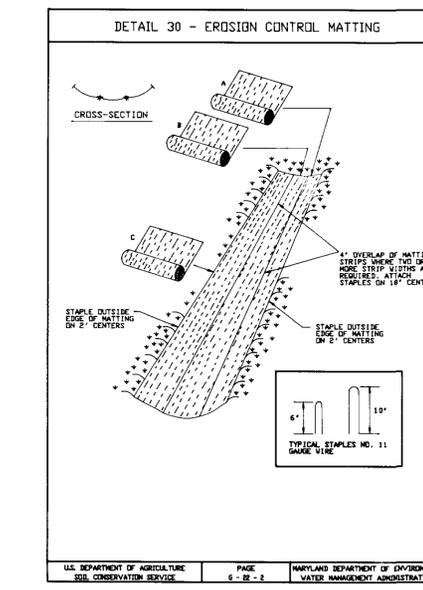
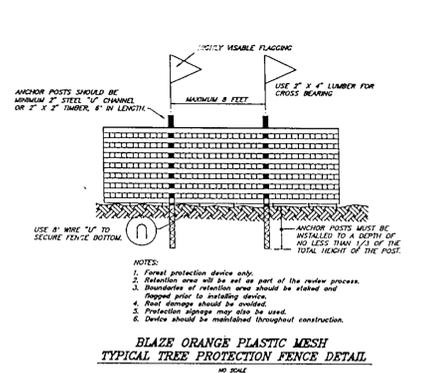
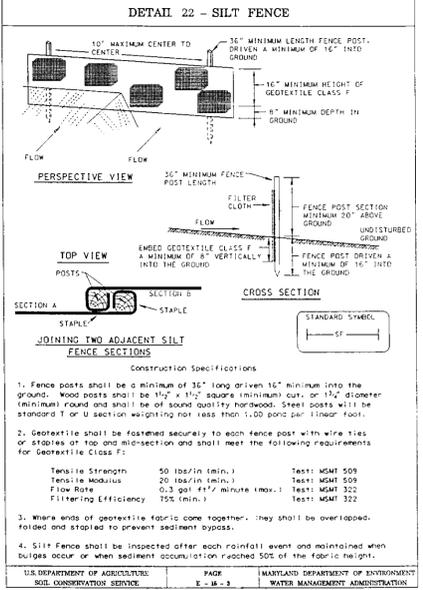
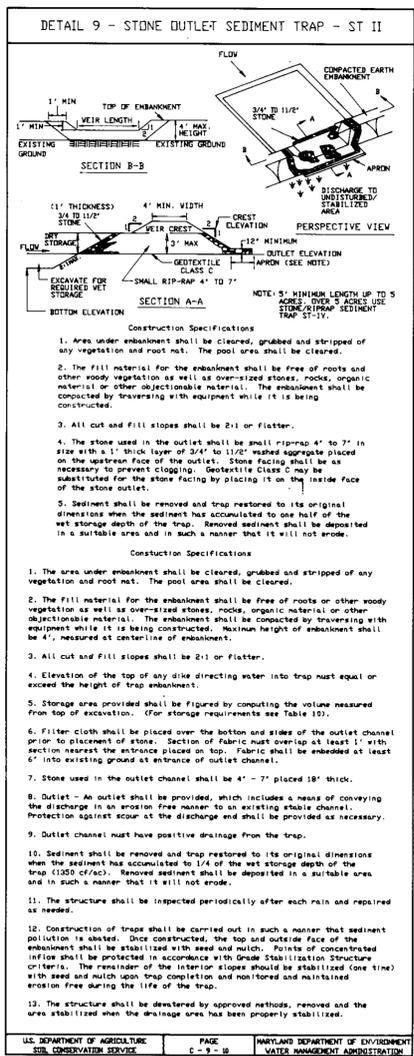
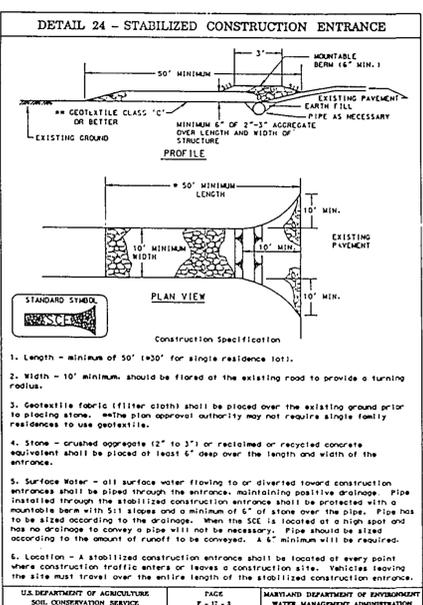
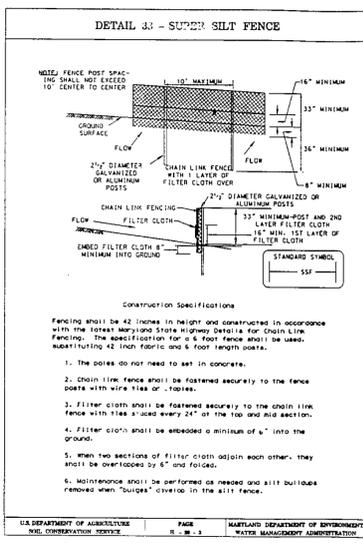
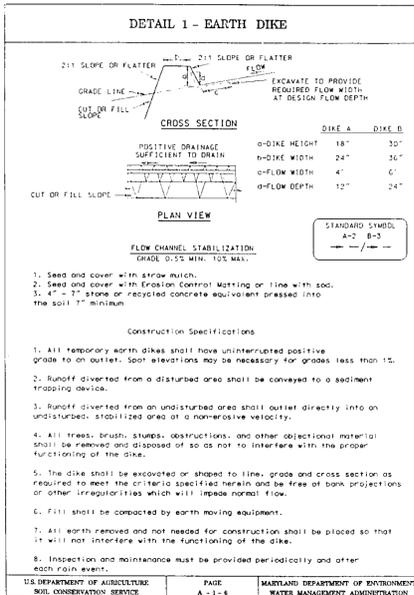
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature Date
 G. Nelson Clark



APPROVED DEPARTMENT OF PLANNING AND ZONING
 Chief Development Engineering Division 7/2/97
 Division of Land Development 7/2/97
 Director 7/3/97

CLARK • FINEROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA MD 21045 • (410) 381-7500 • BALTO. • (301) 621-1111 • WASH.		
DESIGNED	SEDIMENT & EROSION CONTROL PLAN LOTS 121-124 & 166-179 COLUMBIA VILLAGE OF RIVERHILL SECTION 2 AREA 6 PH:SE 2 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN		DRAWING 3 of 5
CHECKED		JOB NO 97.037
DATE	FOR: COLUMBIA BUILDERS P.O. BOX 989 COLUMBIA, MARYLAND 21044	FILE NO 97.037.5E
5-1-97		



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 (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) 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 untreated 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 the 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 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 untreated 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 1994 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 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division 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 1994 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
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 7, 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec. 6). Temporary stabilization with mulch alone can only be done when recommended seedings 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:	5.42 AC.
Area Disturbed:	5.38 AC.
Area to be roofed or paved:	1.98 AC.
Area to be vegetatively stabilized:	4.14 AC.
Total Fill:	1282.0 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. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
12. The total amount of Super Silt Fence = 300LF
The total amount of Earth Dike = 1060LF

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

NO.	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

NOTE: Delay construction of house on lot 175 until Trap #1 has been removed and area draining to it has been stabilized.

NOTE: Swales shall receive Erosion Control Matting, see Detail this sheet.

OWNER/DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP
10275 PATUXENT PARKWAY
COLUMBIA, MD 21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINISTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALTO • (301) 621-8100 WASH

DESIGNED: KJWM
DRAWN: BAL
CHECKED: [Signature]
DATE: 5-1-97

SEDIMENT & EROSION CONTROL DETAILS
LOTS 121-124 & 166-179
COLUMBIA
VILLAGE OF RIVERHILL
SECTION 2 AREA 6 PHASE 2
FIFTH (5th) ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1"=30'
DRAWING: 5 OF 5
JOB NO: 97-037
FILE NO: 97-037 SE

FOR: COLUMBIA BUILDERS
P.O. BOX 999
COLUMBIA, MARYLAND 21044

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature]
Chief, Development Engineering Division
[Signature]
[Signature]
[Signature]

2/2/97
2/2/97
2/3/97

Reviewed for HOWARD S.C.D.
and meets Technical Requirements
[Signature]
[Signature]
Natural Resources Conservation Service

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

[Signature]
[Signature]

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]
NAME: B. James O'Neil
DATE: 5-1-97

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]
NAME: G. Nelson Clark
DATE: 5-1-97