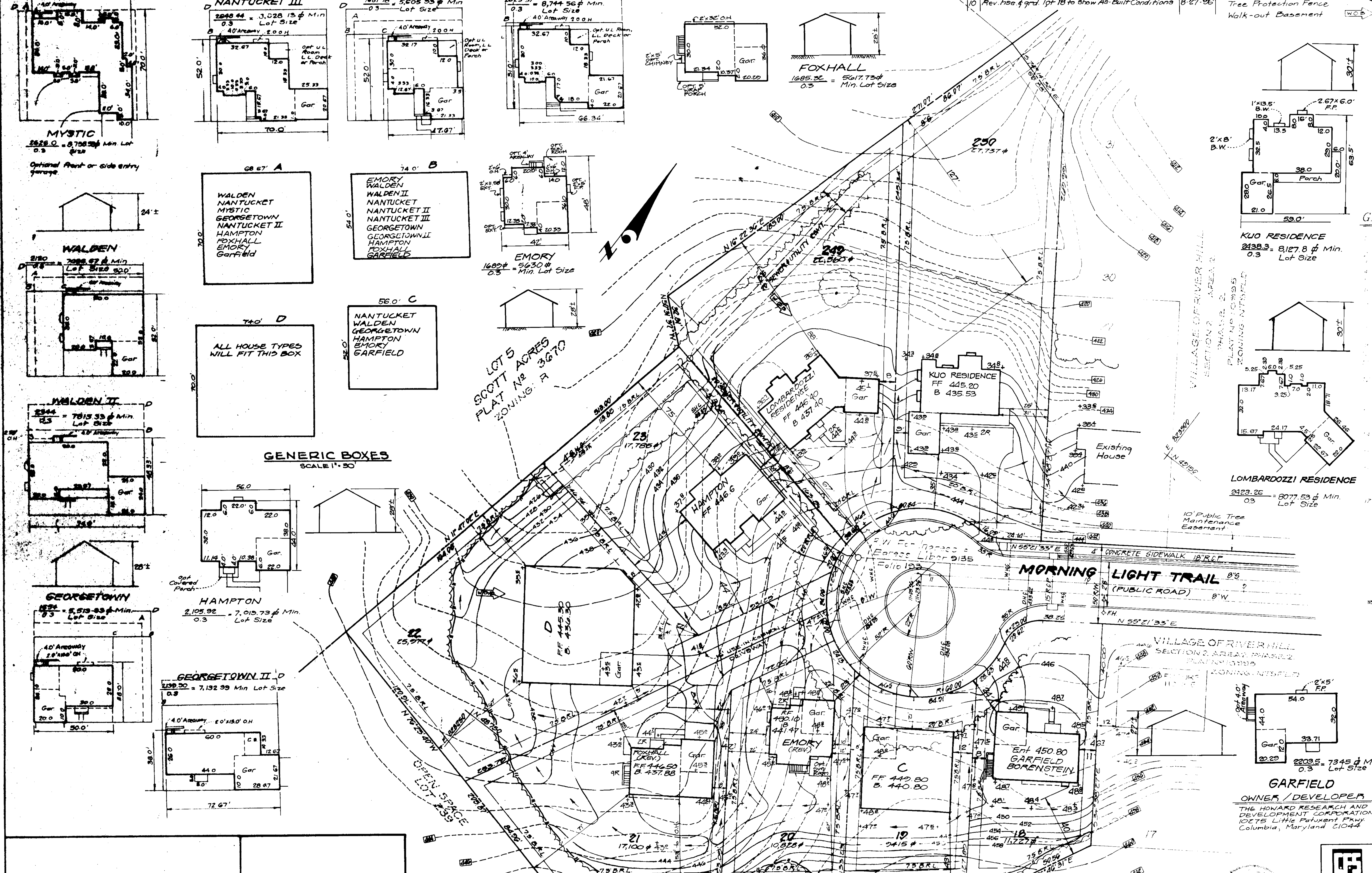
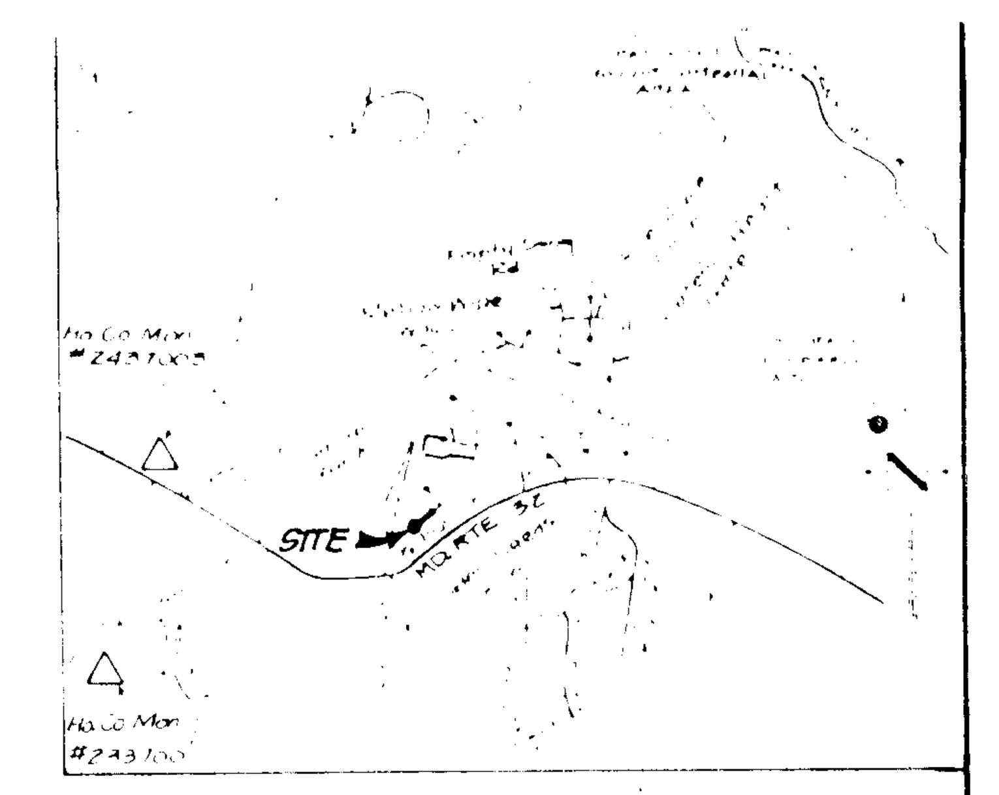
ADDRESS CHART	
LOT NO.	STREET ADDRESS
18	7149 MORNING LIGHT TRAIL
19	7153 " " "
20	7157 " " "
21	7161 " " "
22	7165 " " "
23	7160 " " "
249	7152 " " "
250	7148 " " "

No.	REVISIONS	Date
1	Add Hampton Hse. Typical	8-24-94
2.	Rev. hse. & grd. Lot 21; Add hse. typ.	10-20-94
3	Rev. hse. & grd. Lot 249, Add hse type	11-3-94
4	Rev. Generic Box C lots 18, 19 & 20	3-28-95
5	Rev. hse. & grd. lot 250, Add hse. type	5-8-95
6	Rev. hse. & grd. Lot 20; Add hse. typical	6-28-95
7	Rev. Ex. Grd. to show As-Built Conditions Lots 249 & 250	9-11-95
8	Add Garfield hse. type	3-28-96
9	Rev. hse. & grd lot 23 to show As-Built Conditions	8-16-96
10	Rev. hse. & grd. lot 18 to show As-Built Conditions	8-27-96

LEGEND

Contour Interval 2 Ft
Existing Contour
Proposed Contour
Spot Elevation
Direction of Drainage
Existing Trees to be Saved
Tree Protection Fence
Walk-out Basement WOB





VICINITY MAP

SCALE 1"=2000'

Howard County Monument #2337001 Elev = 496.095
North-491612.385 East-819527.789
3/4" Reinforcing Rod, 0.6 Below Surface

Howard County Monument #2437003 Elev = 472.122
North-494285.231 East-820385.343
Concrete Monument, 0.25 Below Surface

GENERAL NOTES:

10-18-93

143,129 ¢ or 3.286 AC

F-94-85, FDP Phase 209 Pt. II

chimneys and bay windows less than 10 feet in width may project 4 feet into setback area

17 The 65 dBA Noise Contour Line represents the approximate location of the 65dBA (decibal) noise exposure level generated by Md. Rte 32 traffic in the year 2015 based upon assumptions about actual conditions at that time. This value represents the average sound level during the single noisiest one hour period of vehicular traffic during a typical day. This calculation is based on the SHA's estimate of year 2015 highway traffic volume. The contour line drawn on this plan is advisory as required by How. Co. Design Manual, Vol III Chapter 5, revised Feb. 1992 and cannot be considerd to locate exactly the 65dBA exposure.

18 Sewer House connection elevations are taken to Property Line

SHEET INDEX

SITE DEVELOPMENT PLAN	Sheet 1 of 3
SEDIMENT & EROSION CONTROL PLAN	Sheets 2,3 of 3

SPECIAL NOTES:

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way of this S.D.P. are not to be used for construction. For construction see approved Road Construction Plans F-93-81 and/or approved Water and Sewer Plans Contract # 34-3210-D.

18 thru 23, 249, 250
10995 3055
B01 2153000

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 Little Patuxent Pkwy.
Columbia, Maryland 21044

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DIRECTOR — DATE 6/3/94
CHIEF DIVISION OF DEVELOPMENT AND RESEARCH — DATE 6/3/94

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

DIRECTOR — DATE 5/31/94
CHIEF BUREAU OF ENGINEERING — DATE 5/27/94

5-19-94

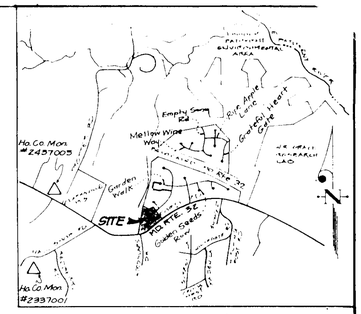
CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

DESIGNED RMT	SITE DEVELOPMENT PLAN LOTS 18 THRU 23, 249, 250 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 2 PHASE 2 FIFTH ELECTION DISTRICT HOWARD COUNTY MARYLAND	SCALE 1"=30'
DRAWN ZAH		DRAWING 1 of 3
CHECKED JME		JOB NO 94-014
DATE 5 APRIL 1994	FOR: JOHN McDONOUGH BUILDERS, INC. 6310 STEVENS FOREST ROAD #104 COLUMBIA MARYLAND 21046	FILE NO 94-014

SDP-94-122

LEGEND

Contour Interval	2 Ft
Existing Contour	456
Proposed Contour	456
Spot Elevation	+ 563
Direction of Drainage	
Existing Trees to be saved	
Tree Protection Fence	
Walk-out Basement	W.O.B.
Silt Fence	S S
Earth Dike	E.D. A-1
Limit of Disturbance	
Stabilized Construction Entrance	S.C.E.



VICINITY MAP

SCALE: 1"=2000'

Howard County Monument #2337001 Elev. = 496.095
North - 491612.385 East - 819527.780
3/4" Reinforcing Rod, 0.6' Below Surface

Howard County Monument #2437003 Elev. = 472.122
North - 494285.231 East - 820385.343
Concrete Monument, 0.25' Below Surface

TRAP No.1 S.C.S.T. ST V

Drainage Area = 1.4 Ac.
Storage Req. = 1.4 × 1800 = 2520 c.f.
Storage Provided = 2570 c.f.
Depth = 4'
Top of Stone Crest = 427.0
Bottom Elev. = 422.0
Cleanout Elev. = 424.0
Bottom Dim. =
1:1 Side Slopes in cut
L = 6'

NOTE:
SILT FENCE IS TO BE STAKED AT 3' - 5' INTERVALS.

Reviewed for HOWARD S.C.D.
Name
Appl. meets technical requirements
Signature — Date 5/24/94
US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson 5/24/94
Approved

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 F. McDonough III — 4-5-94
Signature — Date
JOHN F. McDONOUGH III, PRESIDENT

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.

4-5-94
Signature — Date

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 Little Patuxent Pkwy.
Columbia, Maryland 21044

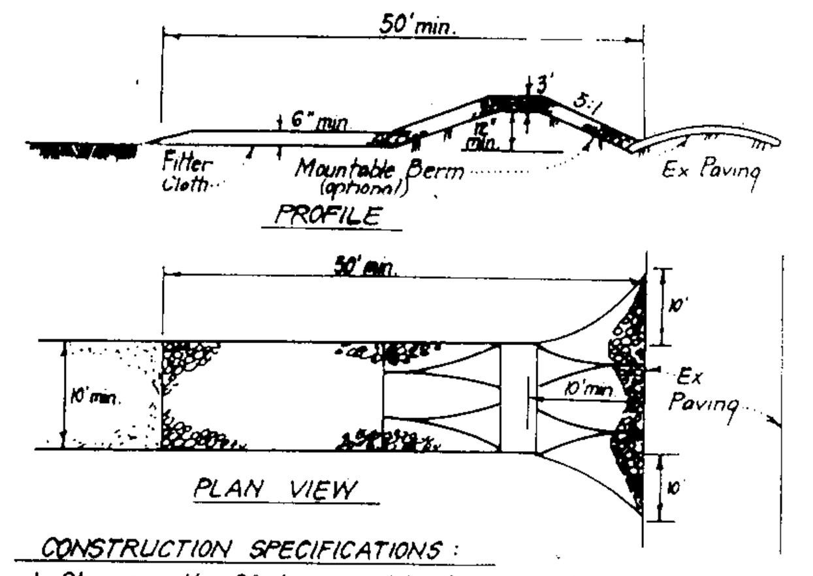
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DIRECTOR — DATE 6/3/94
CHIEF DIVISION OF DEVELOPMENT AND RESEARCH — DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 5/27/94
CHIEF BUREAU OF ENGINEERING

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

DESIGNED JLS	SEDIMENT AND EROSION CONTROL PLAN	SCALE 1"=30'
DRAWN MCR	LOTS 18 THRU 23, 249, 250	DRAWING 2 of 3
CHECKED JLS	COLUMBIA	JOB NO. 94-014
DATE 5 APRIL 1994	VILLAGE OF RIVER HILL	FILE NO. 94-014 SE
	SECTION 2 AREA 2 PHASE 2	
	FIFTH ELECTION DISTRICT	
	HOWARD COUNTY MARYLAND	
	FOR: JOHN McDONOUGH BUILDERS, INC.	
	2310 STEVENS FOREST ROAD #104	
	COLUMBIA, MARYLAND 21046	

SDP-94-108

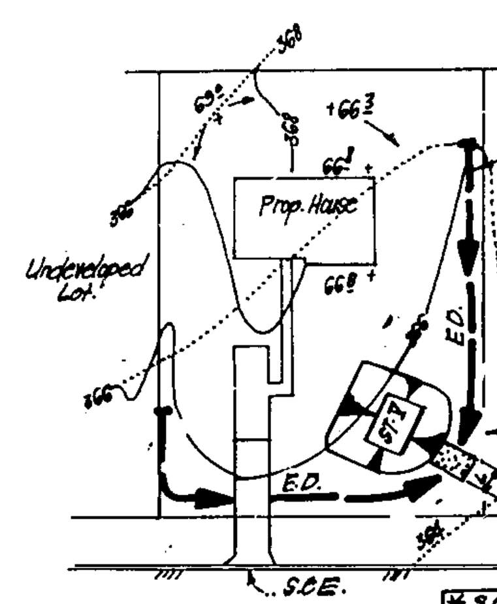


CONSTRUCTION SPECIFICATIONS:

1. Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply.
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto 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 spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto 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.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

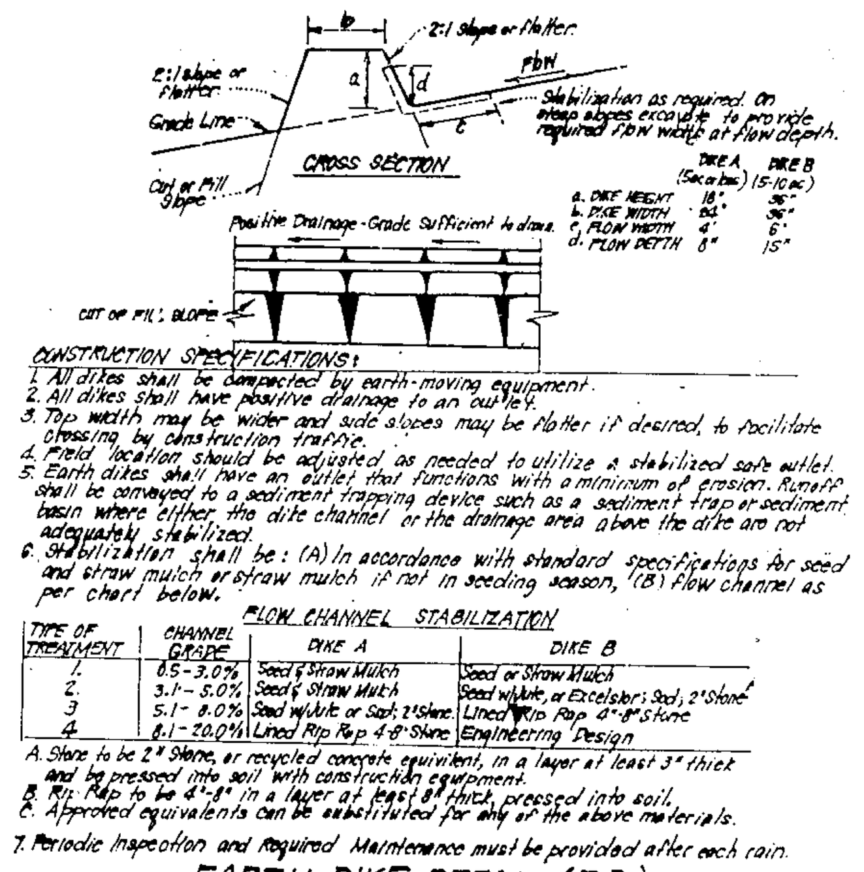
NO SCALE



NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap.

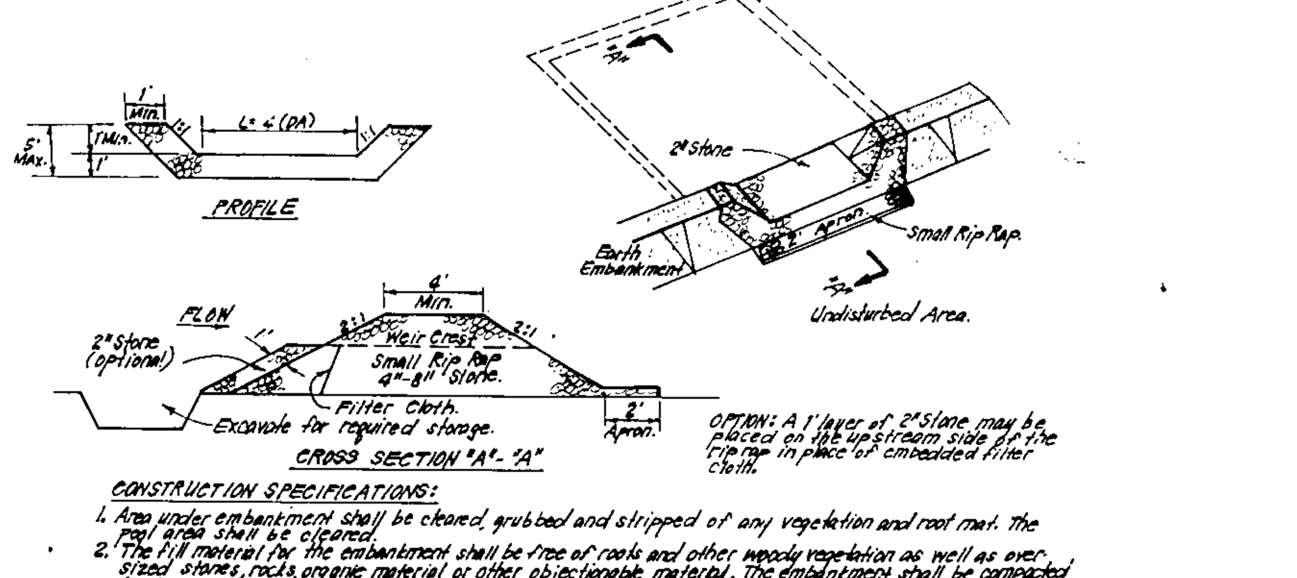
SINGLE LOT SEDIMENT CONTROL PLAN

NO SCALE



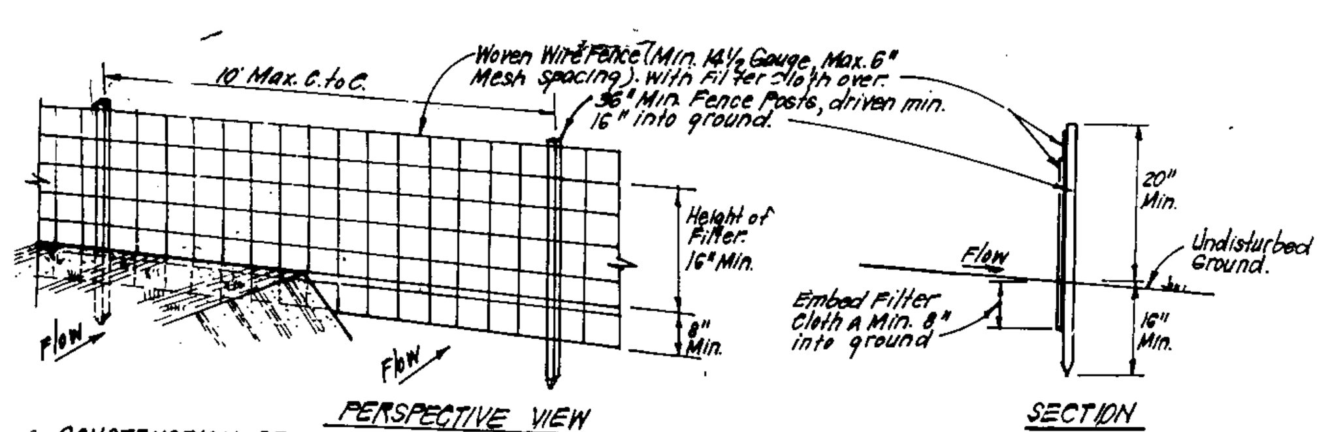
EARTH DIKE DETAIL (E.D.)

NO SCALE



STONE OUTLET SEDIMENT TRAP (S.O.S.T.) STV.

NO SCALE



CONSTRUCTION SPECIFICATIONS:

1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter Cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and folded.
4. Maintenance shall be performed as needed and material removed when "Bulges" develop in Silt Fence.

POSTS: Steel either T or U Type or 2" Hardwood.
FENCE: Woven Wire, 14 1/2 Gage 6" Max. Mesh Opening.
FILTER CLOTH: FilterX, Mirafi 100X, Stablinka, T140N or Approv. equal.
PREFABRICATED UNIT: Geofab, Envirofence, or Approv. equal.

SILT FENCE DETAIL (9)

NO SCALE

NOTE: SILT FENCE IS TO BE STAKED AT 3'-5' INTERVALS.

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/100 sgft.) 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 dolomatic limestone (92 lbs/1000 sg ft.) and 1000 lbs. per acre 10–10–10– fertilizer (23 lbs./1000 sg 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 60lbs 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, repalcements and reseedings.

TEMPORARY SEEDING NOTES

SEEDBED PREPARARTION: 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 (14lbs/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 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 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 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.
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: 3.28 Ac
   - Area Disturbed: 2.64 Ac
   - Area to be roofed or paved: 0.78 Ac.
   - Area to be vegetatively stabilized.: 1.86 Ac.
   - Total Cut: 7300 CY
   - Total Fill: 14,000 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. All pipes to be blocked at the end of each day (see detail this sheet).
12. The total amount of silt fence= 705 l.f.

* 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.	30
7. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	30

*Delay construction of houses on lot : 23 See single lot sediment control detail, this sheet.

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 Little Patuxent Pkwy.
Columbia, Maryland 21044

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DIRECTOR	DATE 6/2/94
CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH	DATE 6/3/94

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

DIRECTOR	DATE 5.31.94
CHIEF BUREAU OF ENGINEERING	DATE 5/27/94

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Signature Date 5/26/94
US Soil Conservation Service

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

Approved 5/26/94

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".

DATE 4-5-94

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 condtions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

4/5/94

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

DESIGNED JLS	SEDIMENT & EROSION CONTROL DETAILS LOTS 18 thru 23, 249, 250 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 2 PHASE 2 FIFTH ELECTION DISTRICT HOWARD COUNTY MARYLAND	SCALE AS NOTED
DRAWN MCR		DRAWING 3 OF 3
CHECKED JLS		JOB NO. 94-014
DATE 5 APRIL 1994	FOR: JOHN McDONOUGH BUILDERS, INC. 6310 STEVENS FOREST ROAD, #104 COLUMBIA, MARYLAND 21046	FILE NO. 94-014SE

SDP-94-108