

- GENERAL NOTES:**
- Subject property is zoned NT-SFLD per 10-18-93
 - Comprehensive Zoning Plan # 4102. This submission is 2 OBIAC (30, 65) (5)
 - The total number of lots included in this submission are: 11
 - Improvement to property: SINGLE FAMILY DETACHED
 - The Maximum Lot Coverage permitted is: 30%
 - SIC elevations shown are located at the property line.
 - Department of Planning and Zoning reference file numbers are: S-91-05, F-24-25, F-24-61, F-25-46, 34-3366-D, P-49-01
 - Utilities shown as existing are taken from approved Water and Sewer plan Contract # 34-3366-D and actual field survey. Construction Plans F-25-46
 - Any damage to county owned rights-of-way shall be corrected at the developer's expense.
 - Stormwater Quality Management for this development will be provided by oversized rip-rap outlet protection. Quantity Min/Max under F-25-18.
 - The existing topography shown was taken from Road Construction Plans F-25-46 prepared by Kienner, Mueser & Assoc. Inc.
 - The coordinates shown herein are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monument Nos. 1397001 & 1497002.
 - The contractor shall notify the Department of Public Works/Division of Construction Inspection # (410) 313-1880 at least 48 hours prior to the start of work.
 - The contractor shall notify "This 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 Vol. IV details K-608 & R-605.
 - In accordance with FOP Phase 200, Part III, any 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.
 - No clearing, grading or construction is permitted within the Wetland or Stream Buffers except as determined essential by the Dept of Planning & Zoning in accordance with Section 16.11(a) of the Subdivisions & Land Development Regulations.
 - The 65 dBA Noise Contour Line represents the approx. location of the 65 dBA (decibel) noise exposure level generated by MD 32 traffic in the year 2015 based upon assumptions about actual conditions at that time. This value represents the average sound level during the proposed one-hour period of vehicular traffic during a typical day. This calculation is based on the State Highway Administration's estimate of year 2015 highway traffic volume. The contour line drawn on this plan is advisory; no required by Ho.Co. Design Manual III, Chapter B, rev. Feb. 1992, and cannot be considered to locate exactly the 65 dBA exposure.
 - All Water House Connections are 3/4" Per Water & Sewer Plans.
 - A landscape survey in the amount of \$400.00 will be required as part of the survey for the DRAINAGE & UTILITY DUMP Grading Permit EASEMENT
- 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-25-46 approved Water and Sewer Plans Contract # 34-3366-D
- SHEET INDEX**
- SITE DEVELOPMENT PLAN Sheet 1 of 3
SEEDMENT & EROSION CONTROL PLAN Sheet 2, 3 of 3
- OWNER/DEVELOPER**
HOWARD RESEARCH AND DEVELOPMENT CORP
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DATE: 7/1/95

DATE: 10/10/95

DATE: 10/11/95

DATE:



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

DESIGNED: RMT
DRAWN: MOR
CHECKED: yme
DATE: 7-13-95

SITE DEVELOPMENT PLAN
LOTS 110-120
COLUMBIA
VILLAGE OF RIVER HILL
SECTION 2 AREA 3 PHASE 2
FIFTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1" = 3/8"
DRAWING: 1 of 3
JOB NO.: 94-147
FILE NO.: 94-147X

FOR: THE RYLAND GROUP INC.
1471 YORK ROAD SUITE 705
LUTHERVILLE, MD 21044

SDP 25-104

LEGEND

Existing Contour

Proposed Contour

Contour Interval 2.0'

Spot Elevation

Drainage Flow

Walk-Out Basement

Ex. Trees to Remain

Tree Protection Fence

Limit of Disturbance

Ex. Silt Fence

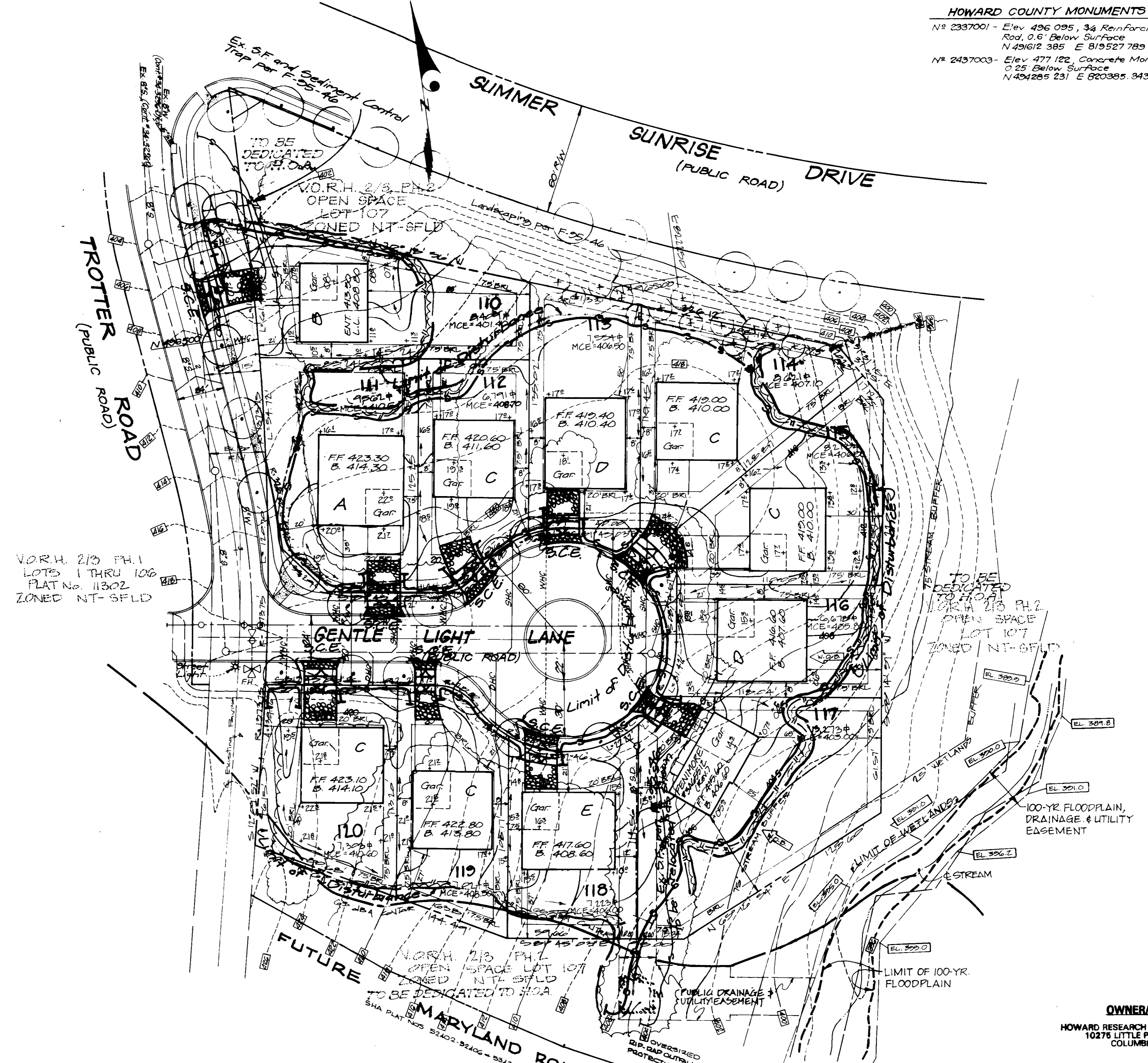
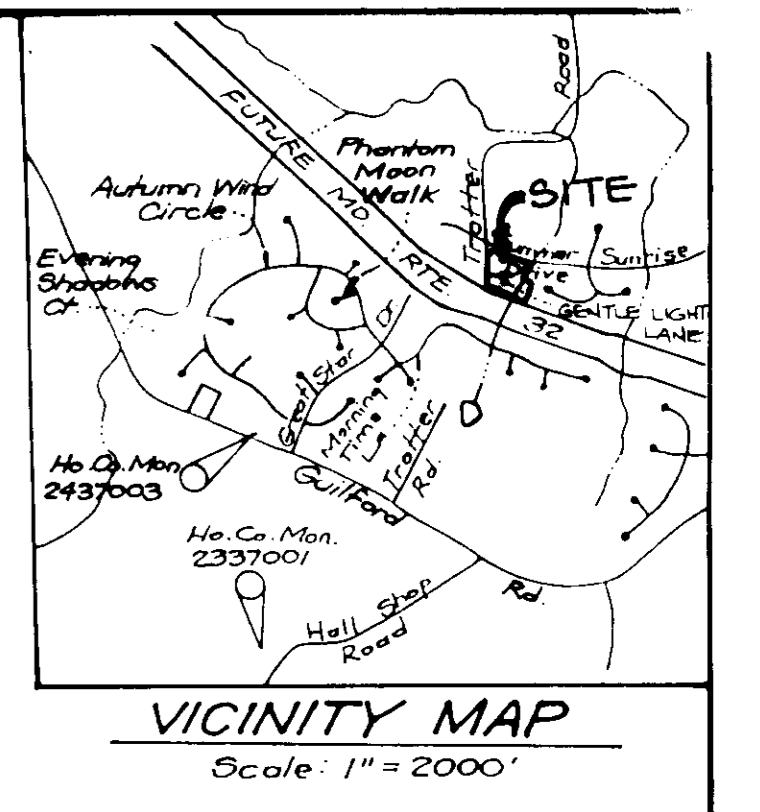
Silt Fence

Stabilized Construction Entrance

HOWARD COUNTY MONUMENTS

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

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



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 7/21/95 DATE

CHIEF DEVELOPMENT ENGINEERING DIVISION

[Signature] 10/10/95 DATE

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH

[Signature] 10/10/95 DATE

DIRECTOR

Reviewed for HOWARD S.C.D. meets Technical Requirements

[Signature] 7/13/95 DATE

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] 7/13/95 DATE

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."

[Signature] 7-13-95 DATE

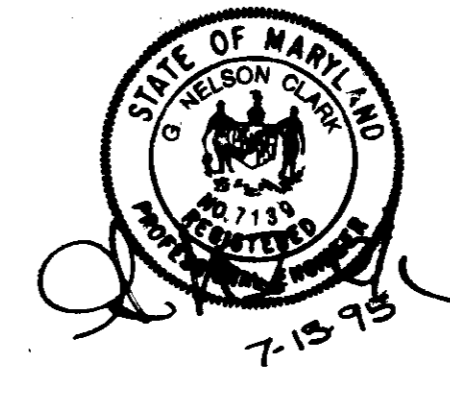
NAME DEREK A. MCDANIELS

ENGINEER'S CERTIFICATE

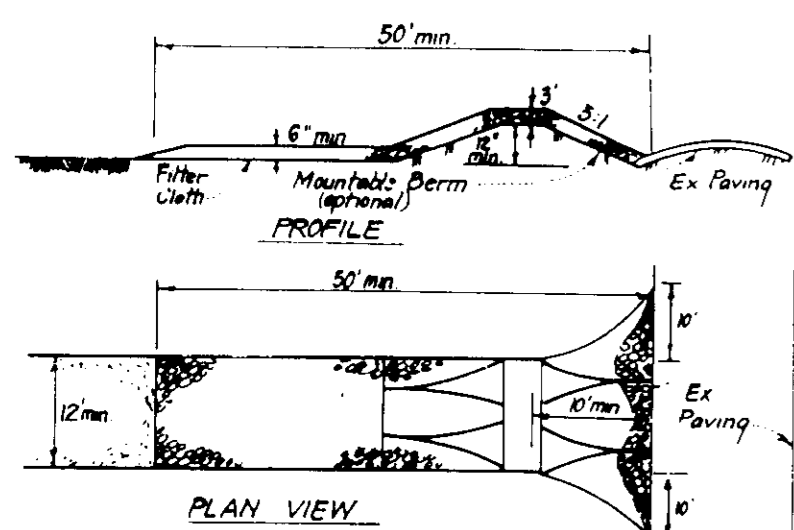
I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

[Signature] 7-13-95 DATE

G. NELSON CLARK

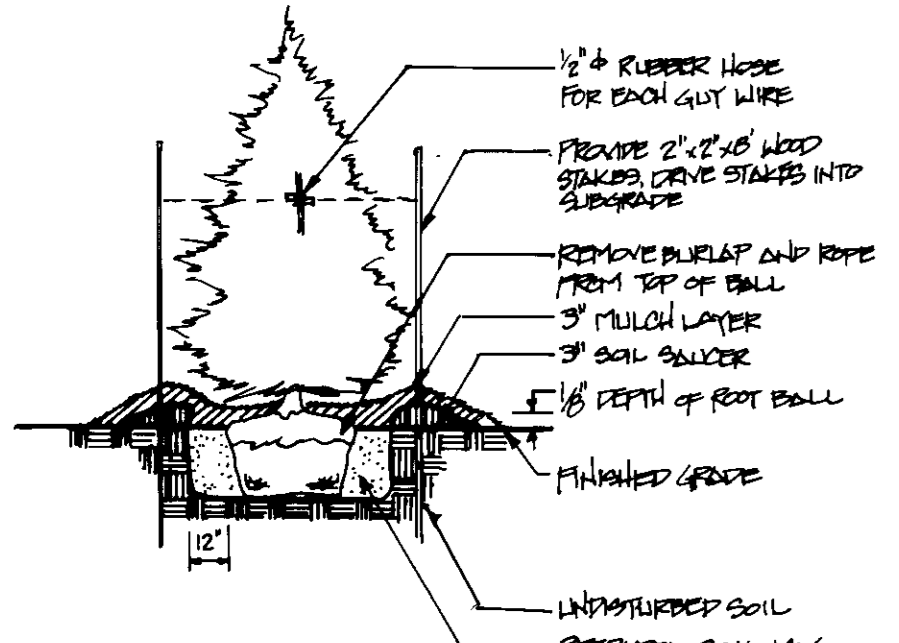


<p>CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS</p> <p>1001 MONTELEONE BLVD. • COLUMBIA, MD 21045 • (410) 381-7500 BALTO • (301) 621-8100 WASH</p>		
DESIGNED	ZAL	SCALE 1" = 30'
DRAWN	MCR	DRAWING 2 of 3
CHECKED	WOB	JOB NO 94-147
DATE	7-13-95	FILE NO 94-147E
<p>FOR: THE RYLAND GROUP, INC. 1447 YORK ROAD SUITE 705 LUTHERVILLE, MD 21044</p>		



- CONSTRUCTION SPECIFICATIONS:**
- Stone size - Use 2" stone or equivalent in rounded concrete equivalent.
 - Length - As required, but not less than 50 feet (exception 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 of points where ingress or egress occurs.
 - 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.
 - Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mounded side berm with 3" slopes will be permitted.
 - 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 cleanup of any repairs used to this equipment. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 - 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.
 - Periodic inspection and needed maintenance shall be provided after each rain.

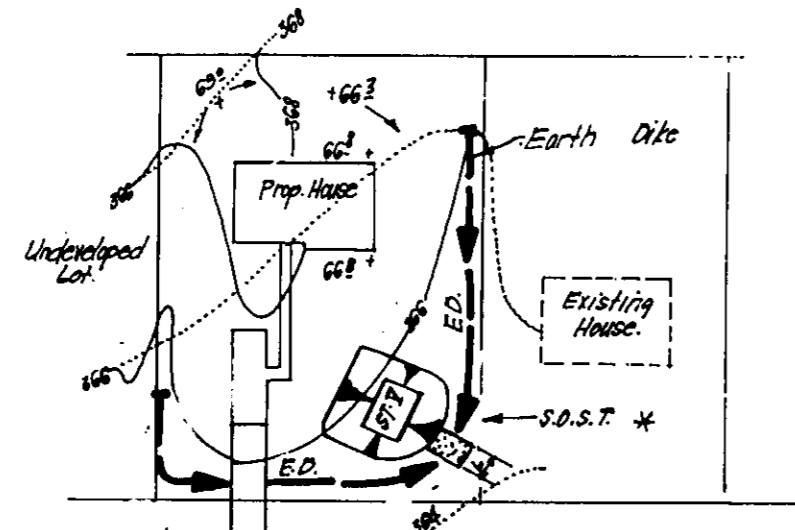
STABILIZED CONSTRUCTION ENTRANCE (SCE)



EVERGREEN TREE PLANTING DETAIL

PLANTING SCHEDULE

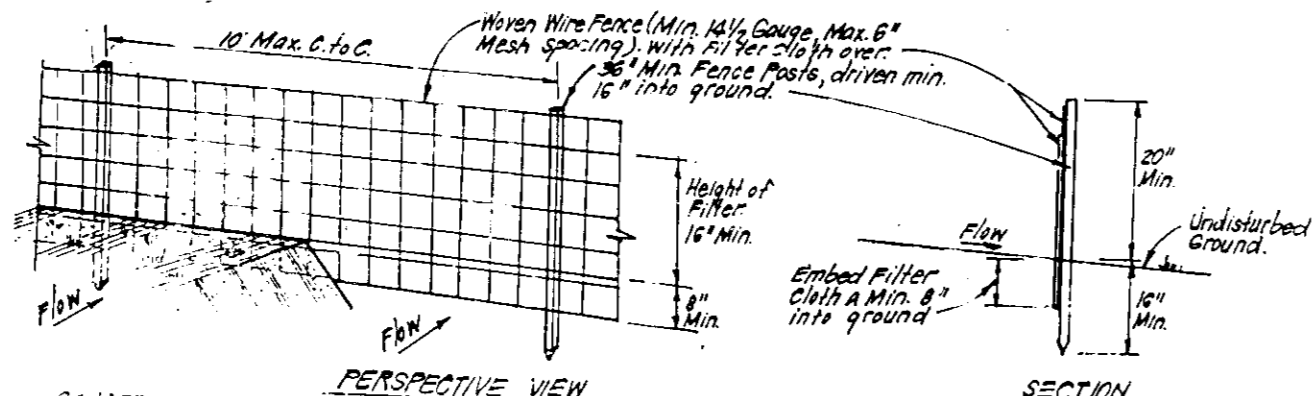
KEY	QTY.	PLANT NAME	SIZE	REMARKS
FB	4	PINUS STROBUS	6" BHT.	B & D
		WHITE PINE		



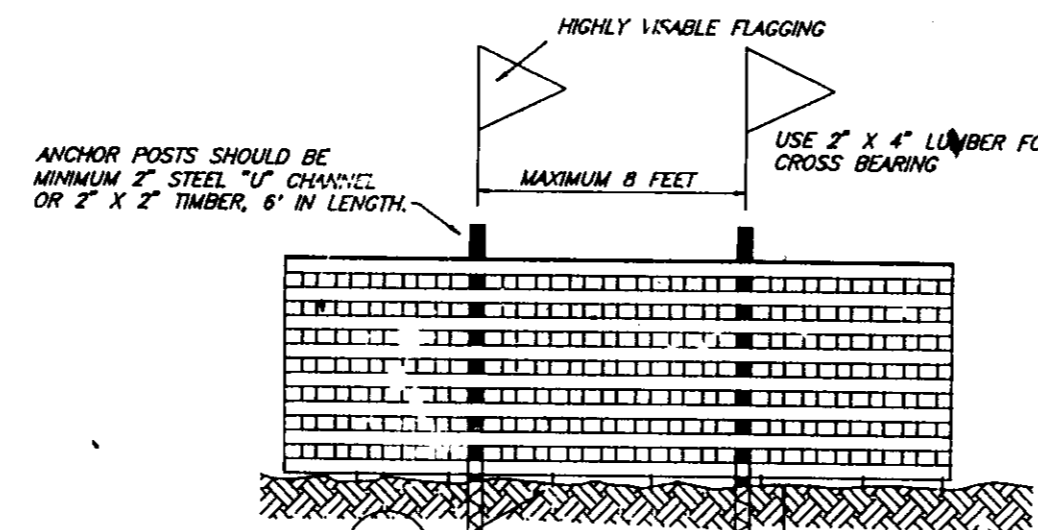
SINGLE LOT SEDIMENT CONTROL PLAN

* 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.

SILT FENCE DETAIL (3)



- CONSTRUCTION SPECIFICATIONS:**
- When wire fence to be fastened securely to fence posts with wire ties or staples.
 - Filter cloth to be fastened securely to woven wire fence with wire staples every 36" at top and mid section.
 - When 2 sections of filter cloth are used they shall be overlapped by 6" and stapled.
 - Maintenance shall be performed as needed and material removed when "bulges" develop in silt fence.
 - Silt fence to be staked at 3' to 5' intervals.



- BLAZE ORANGE PLASTIC MESH TYPICAL TREE PROTECTION FENCE DETAIL**
- ANCHOR POSTS SHOULD BE MINIMUM 2" STEEL "U" CHANNEL OR 2" X 2" TIMBER, 6' IN LENGTH.
- ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF THE POST.
- USE 6" WIRE "U" TO SECURE FENCE BOTTOM.
- ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF THE POST.
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- NOTES:**
- Forest protection device only.
 - Retention area will be set as part of the review process.
 - Boundaries of retention area should be staked and flagged prior to installing device.
 - Root damage should be avoided.
 - Protection signs may also be used.
 - Device should be maintained throughout construction.

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:
- Preferred - Apply 2 tons per acre dolomitic limestone (82 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 ureaform fertilizer (9 lbs/1000 sq ft.)
 - Acceptable - Apply 2 tons per acre dolomitic limestone (82 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 (14 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 30 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, 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 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.

SEDIMENT AND EROSION CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permit prior to the start of any construction. (913-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1982 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, ditches, 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 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.
- 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 sod 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:	2.02A
Area to be roofed or paved:	1.72A
Area to be vegetatively stabilized:	0.30A
Total Cut:	3200Y
Total Fill:	1100Y
- 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 DPW 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.

ii. The total amount of silt fence = 1440 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 Excavate for foundations, rough grade and temporarily stabilize.	14
4 Construct structures, sidewalks and driveways.	30
5 Final grade and stabilize in accordance with Stds. and Specs.	60
6 Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	7

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

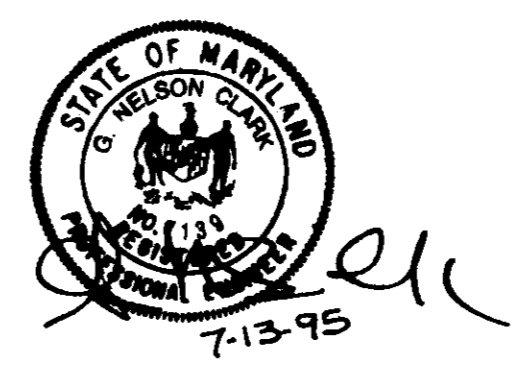
OWNER/DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP
 10275 LITTLE PATRICK PARKWAY
 COLUMBIA, MARYLAND 21044

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief Development Engineering Division
 Date: 7/14/95
 Chief Division of Land Development and Research
 Date: 7/14/95

Reviewed for: HOWARD S.G.D.
 and meets Technical Requirements
 Signature: [Signature]
 Natural Resources Conservation Service
 Date: 7/14/95

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 its authorized agents, as are deemed necessary.
 Name: DEBBIE A. MCDANIELS
 Date: 4/24/95

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
 Date: 7-13-95



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 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 - BALTO • (301) 621-8100 - WASH

DESIGNED	ZAL	SCALE	AS NOTED
DRAWN	MOR	DRAWING	3-13
CHECKED	DOB	JOB NO	94-147
DATE	7-13-95	FILE NO	94-147E

FOR: THE RYLAND GROUP INC.
 1447 YORK ROAD SUITE 708
 LUTHERVILLE, MD 21044

SDP-95-104