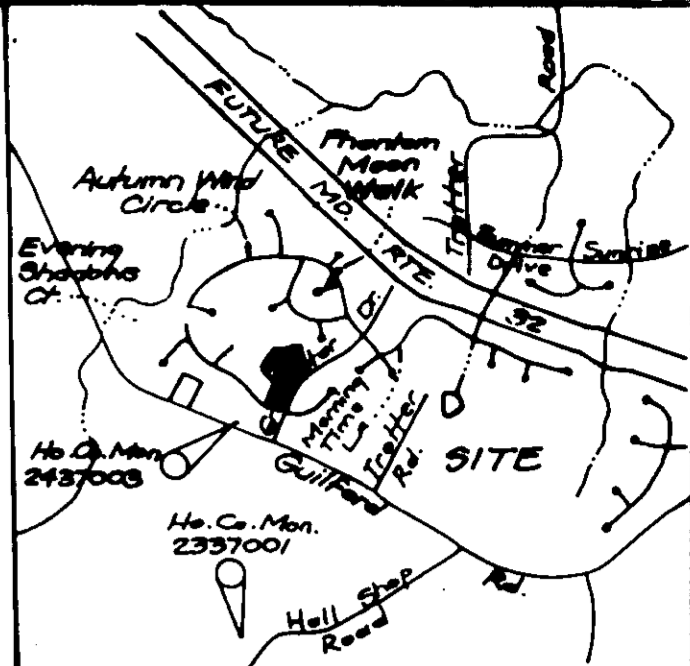


LEGEND

- Contour Interval: 2 FT
- Existing Contour: ---
- Proposed Contour: - - - -
- Spot Elevation: 410
- Direction of Drainage: 110°
- Walk out to Basement
- Trees to be Saved: (Symbol)
- Tree Protection Fence
- Minimum Cellar Elevation: MCE

STREET ADDRESS CHART

LOT	ADDRESS
117	6500 Autumn Wind Circle
118	6305 Enchanted Key Circle
119	6301
120	6309
121	6313
122	6312
123	6308
124	6304
125	6300



HOWARD COUNTY MONUMENTS

N# 2337001 - Elev 436.055, 34' Reinforcing Rod, 0.8' Below Surface
 N# 43612.385 - E 819527.783
 N# 2437003 - Elev 477.122, Concrete Mon., 0.25' Below Surface
 N# 43425.251 - E 820365.943

- GENERAL NOTES:**
- Subject property is zoned: NTSFLD per 10-18-93 Comprehensive Zoning Plan.
 - The total area included in this submission is: 126,815 sq ft or 3.12 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%
 - SHC elevations shown are located at the property line.
 - Department of Planning and Zoning reference file numbers are: 0-21-03, P-24-01, F-24-10B, 34-3556-D, 24-6192-B, P24-15
 - Utilities shown as existing are taken from approved Water and Sewer plan Contract # 34-3556-D approved Road Construction Plans F-24-10B and actual field survey.
 - Any damage to county owned rights-of-way shall be corrected by the developer's expense.
 - Stormwater Management is provided per Extended Detention/Shallow Marsh
 - All roadways are public and existing.
 - The existing topography shown was taken from Road Construction Plans F-24-10B prepared by Riener, Muegge & Assoc., 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 Monument Nos.: 2337001 & 2437003
 - The contractor shall notify the Department of Public Works/Division of Construction Inspection - (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 No.Co. Design manual Volume IV details: R-603
 - In accordance with FDP Phase 200, Part IX 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 5 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 16.116(c) of the Subdivision and Land Development Regulations.

- 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-24-10B and/or approved Water and Sewer Plans Contract # 34-3556-D

SHEET INDEX

DESCRIPTION	SHEET NO.
SITE DEVELOPMENT PLAN	1 of 3
SEDIMENT and EROSION CONTROL PLAN	2, 3 of 3

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

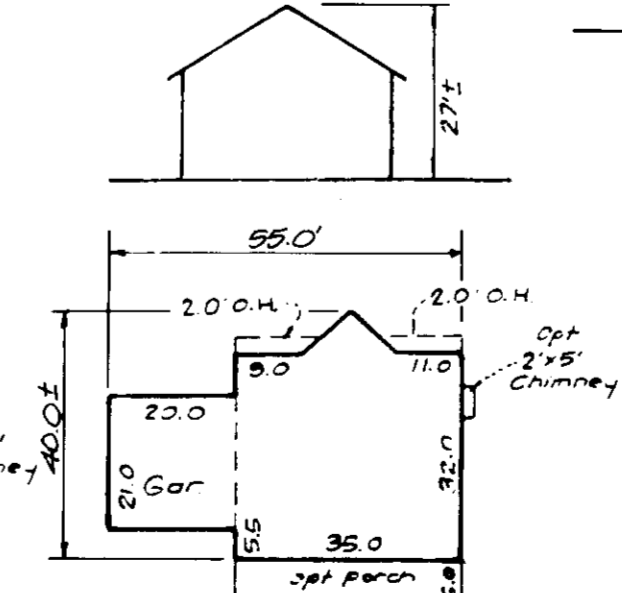
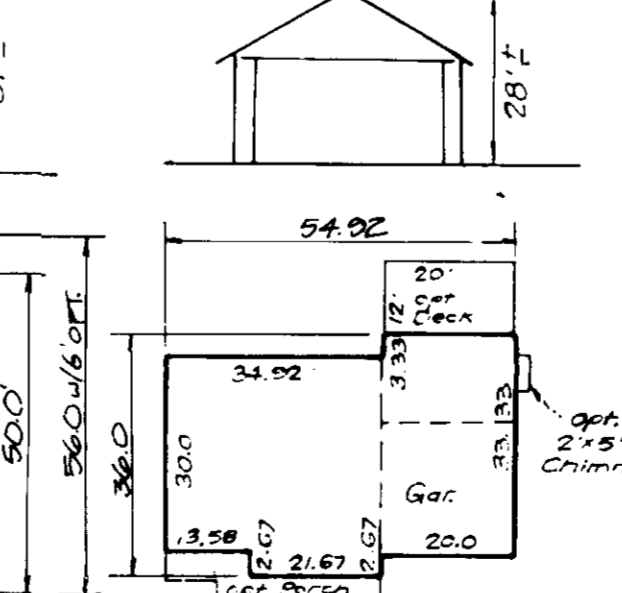
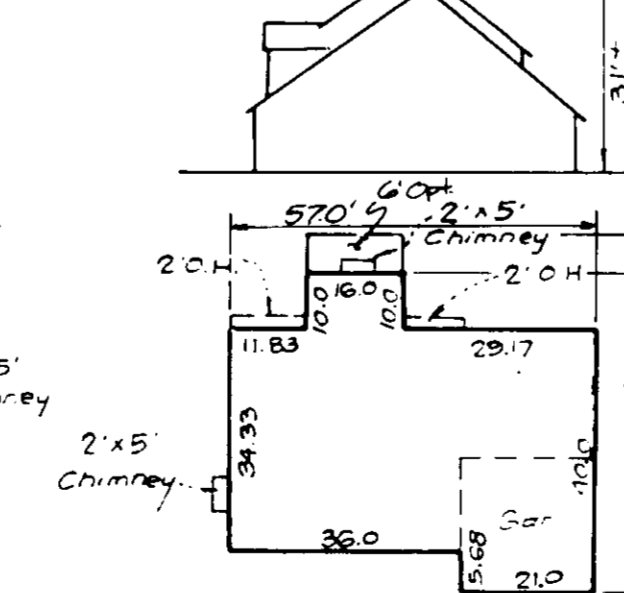
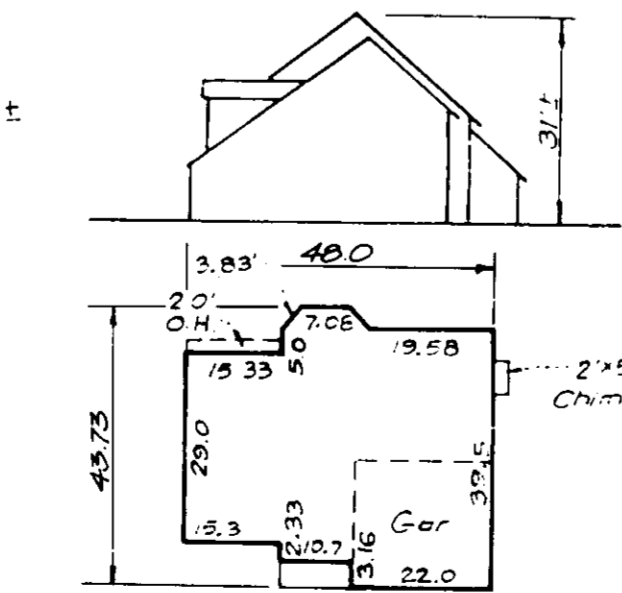
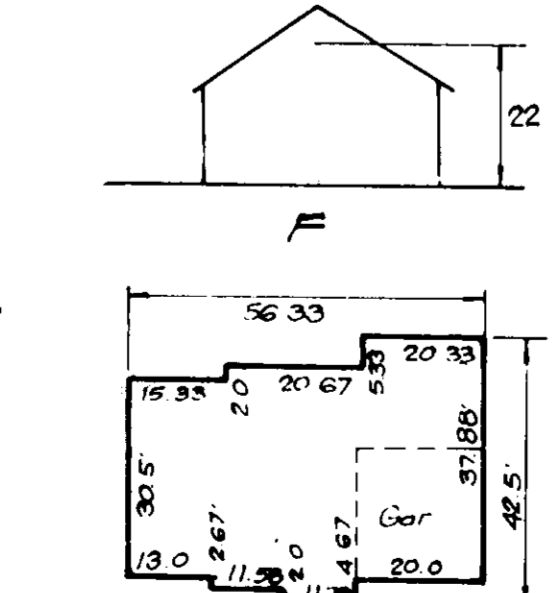
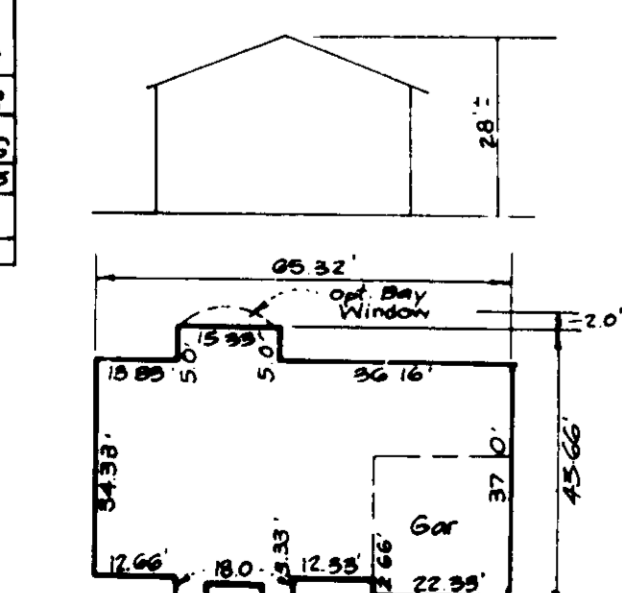
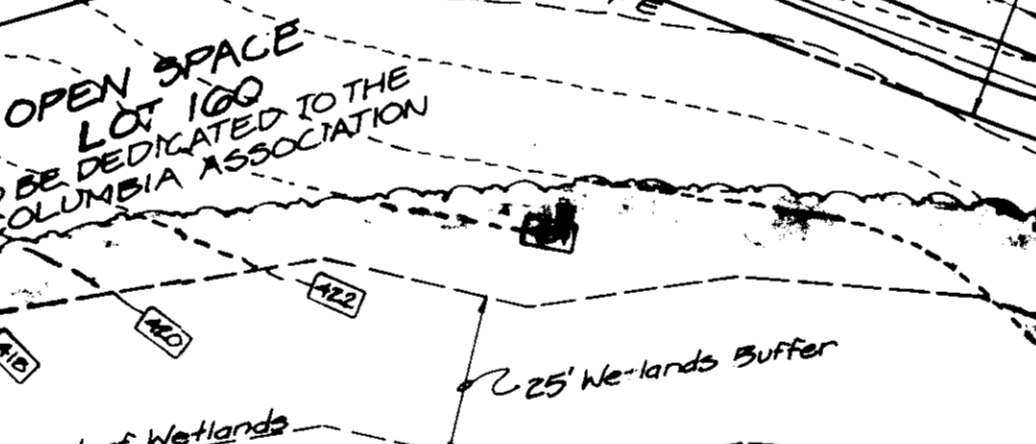
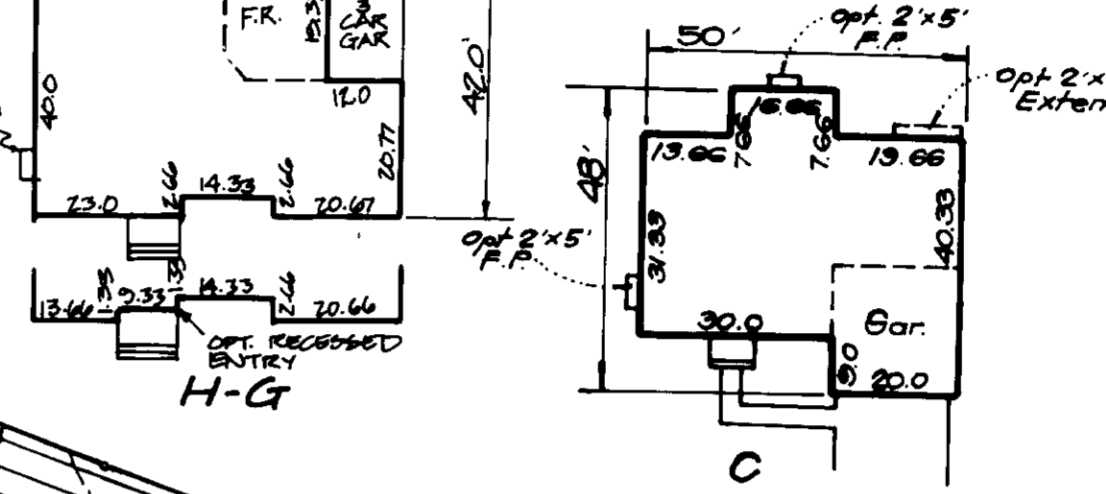
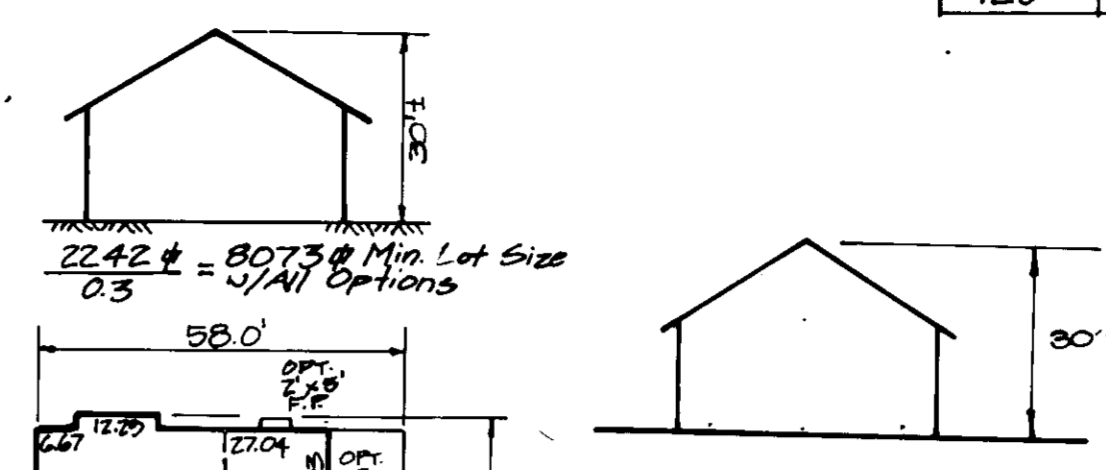
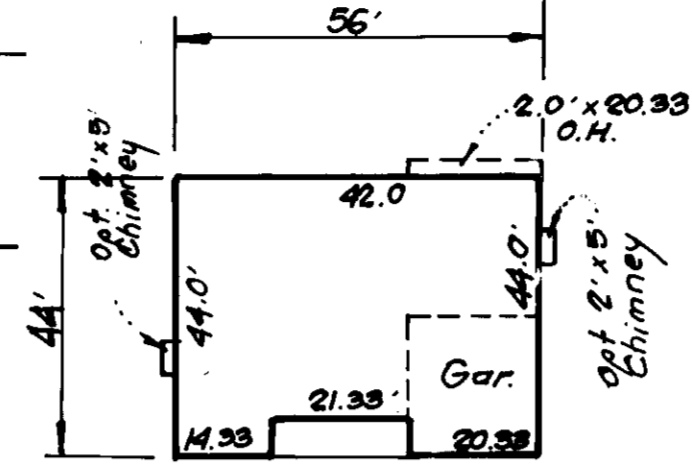
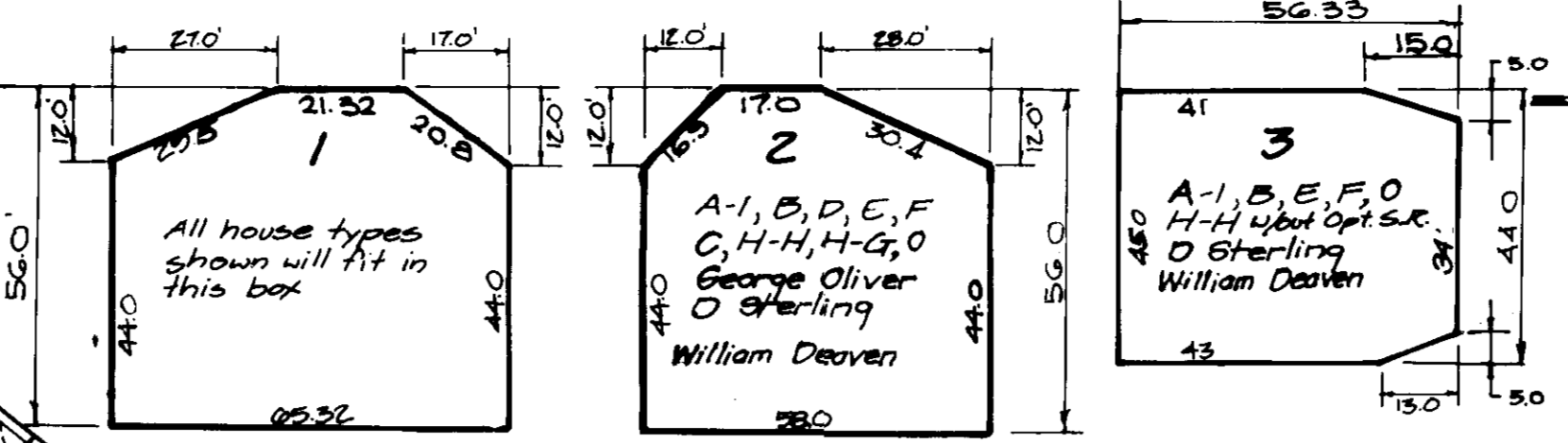
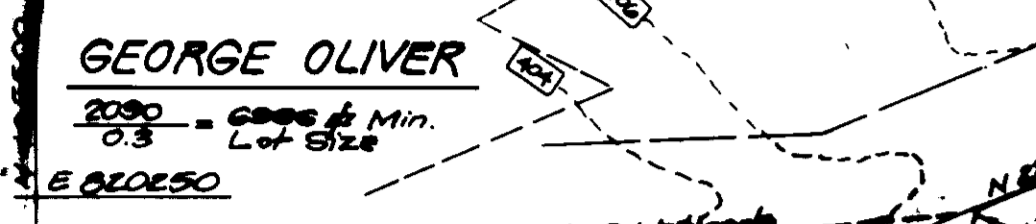
SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF RIVER HILL	2/4	117 thru 125
PLAT NO. 11873	TAX MAP NO. 35	ELECTION DIST. 5TH
11873 THRU 11875	13 & 19	NTSFLD
WATER CODE	I-11	SEWER CODE 6650000

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINISTREL WAY • COLUMBIA, MD 21045 • (301) 361-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED: JIME
DRAWN: MCR
CHECKED: jmc
DATE: 6-6-95

SCALE: 1" = 30'
DRAWING: 1 of 3
JOB NO.: 95-059
FILE NO.: 95-059X

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



REVISIONS

NO.	DESCRIPTION	DATE
1	Add William Deaven house typical	4-9-96
2	Rev. base of grad. lots 120, 121. Add house typicals	12-27-96
3	Rev. base of grad. lot 124. Add base typical	8-20-96
4	Add H-G & H-H house typicals	7-12-96
5	Rev. base of grad. lots 118-120 per HSD comments	6-5-95

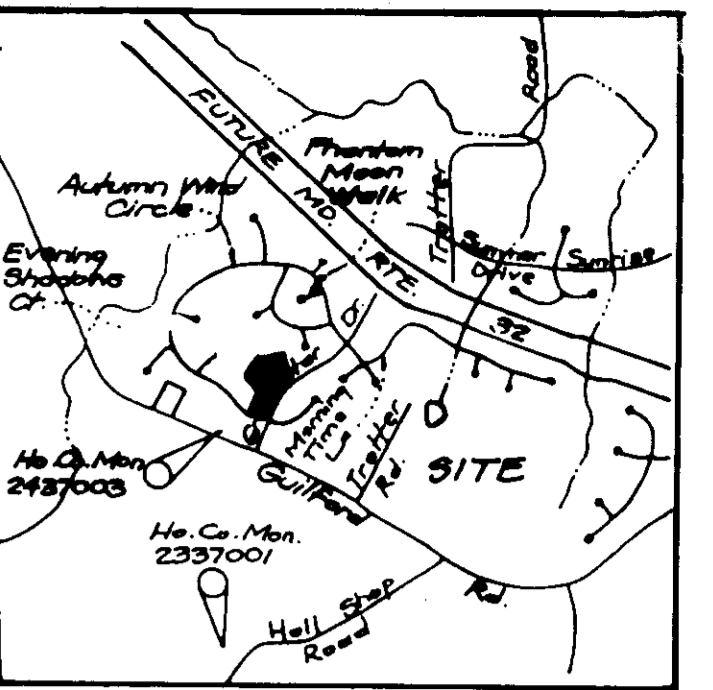
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Director: [Signature] DATE: 6/22/95
 Chief Division of Land Development and Research: [Signature] DATE: 6/13/95

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 Director: [Signature] DATE: 6/13/95
 Chief Bureau of Engineering: [Signature] DATE: 6/13/95

Temp. Trap No. 8 to be removed prior to House Construction on Lot 1 per F-24-108

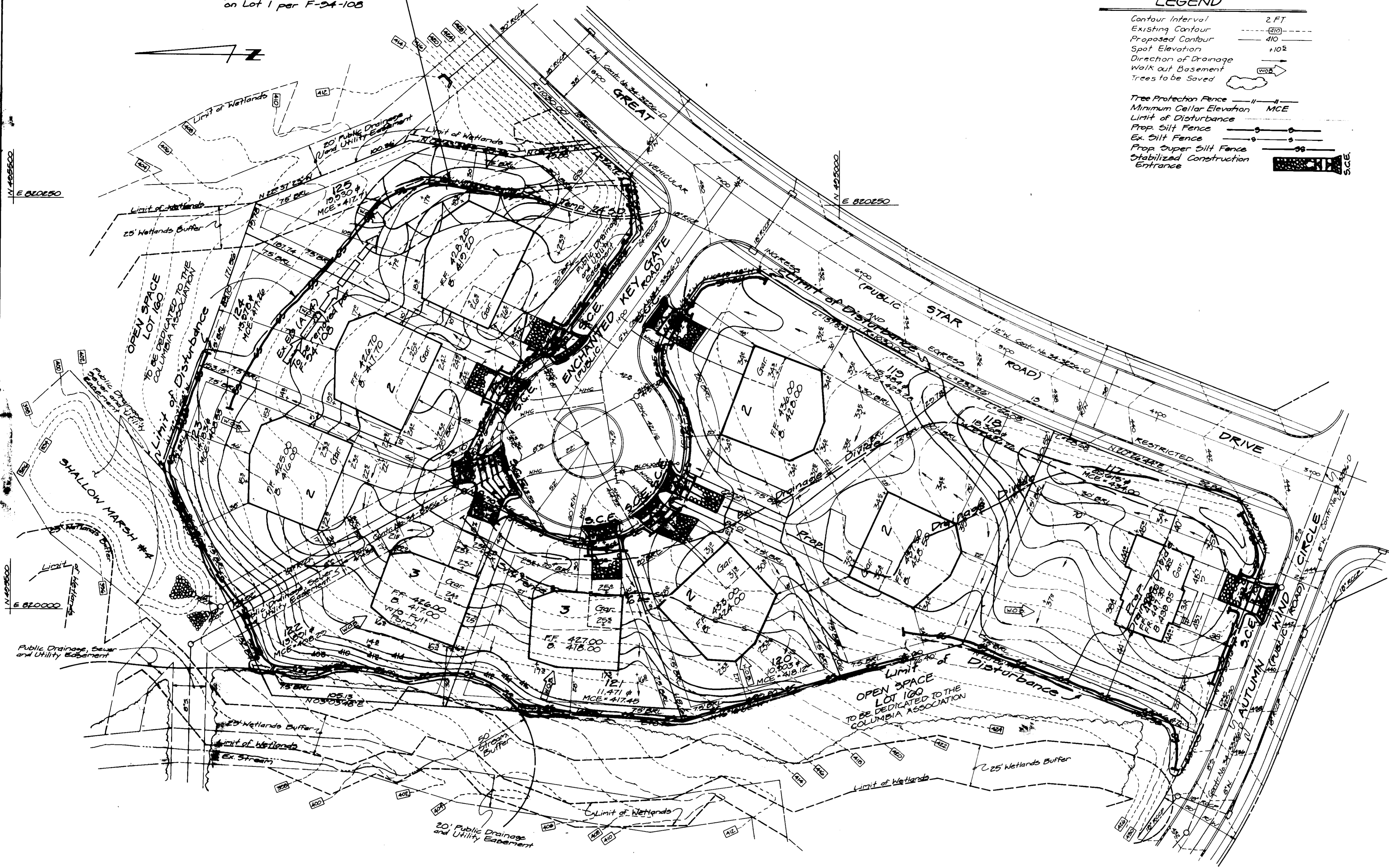
LEGEND

- Contour Interval 2 FT
- Existing Contour (---) 410
- Proposed Contour (---) 410
- Spot Elevation (+) 102
- Direction of Drainage (--->)
- Walk out Basement
- Trees to be Saved (---)
- Tree Protection Fence (---)
- Minimum Cellar Elevation MCE
- Limit of Disturbance (---)
- Prop. Silt Fence (---)
- Ex. Silt Fence (---)
- Prop. Super Silt Fence (---)
- Stabilized Construction Entrance (---)



VICINITY MAP
Scale: 1" = 2000'

HOWARD COUNTY MONUMENTS
 NR 2337001 - Elev 496.095, 3/4 Reinforcing Rod, 0.6' Below Surface
 N 491612 385 E 815527.783
 NR 2437003 - Elev 477.122, Concrete Mon., 0.25' Below Surface
 N 401285 231 E 820385.343



OWNER/DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

SUBDIVISION NAME	COLUMBIA VILLAGE OF RIVER HILL	SECTION/AREA	2/4	LOTS/PARCELS	117 thru 125
PLAT NO.	11466 thru 11473	BLOCK NO.	NT 35	ELECTION DIST.	5TH
WATER CODE	I-11	SEWER CODE	6650000		

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Director: *[Signature]* DATE: 6/18/95
 Chief Division of Land Development and Research: *[Signature]* DATE: 6/18/95
 Approved for Public Water and Public Sewerage, Storm Drainage Systems and Public Roads: *[Signature]* DATE: 6/18/95
 Chief Bureau of Engineering: *[Signature]* DATE: 6/18/95

Reviewed for: HOWARD S.C.D. and meets Technical Requirements
[Signature] DATE: 6/19/95
 Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] DATE: 6/19/95

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 their authorized agents, as are deemed necessary."
[Signature] DATE: 6/18/95

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.
[Signature] DATE: 6/18/95
 G. NELSON CLARK

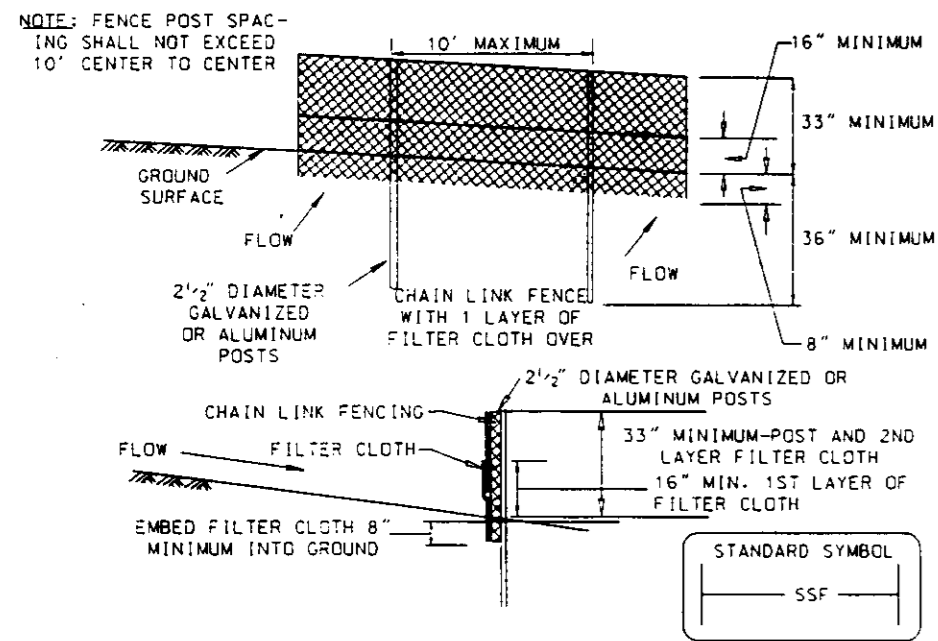


CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH

DESIGNED	KJWM	SCALE	1" = 30'
DRAWN	MCR	DRAWING	2 OF 3
CHECKED	KJW	JOB NO.	95-050
DATE	6-6-95	FILE NO.	95-050

SEDIMENT & EROSION CONTROL PLAN
 LOTS 117 thru 125
COLUMBIA VILLAGE OF RIVER HILL
 SECTION 2 AREA 4
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 FOR: HALLMARK BUILDERS, INC.
 P.O. Box 1018
 Columbia, Maryland 21044

DETAIL 33 - SUPER SILT FENCE

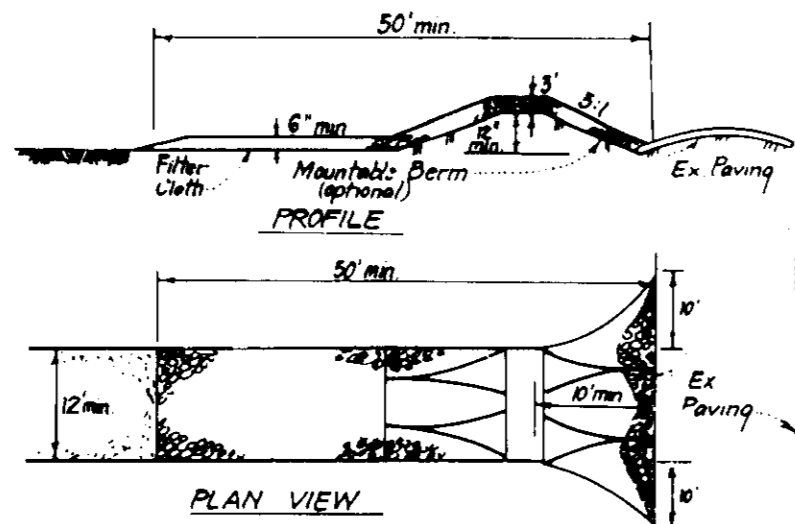


Construction Specifications

Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6 foot fence shall be used substituting 42 inch fabric and 6 foot posts.

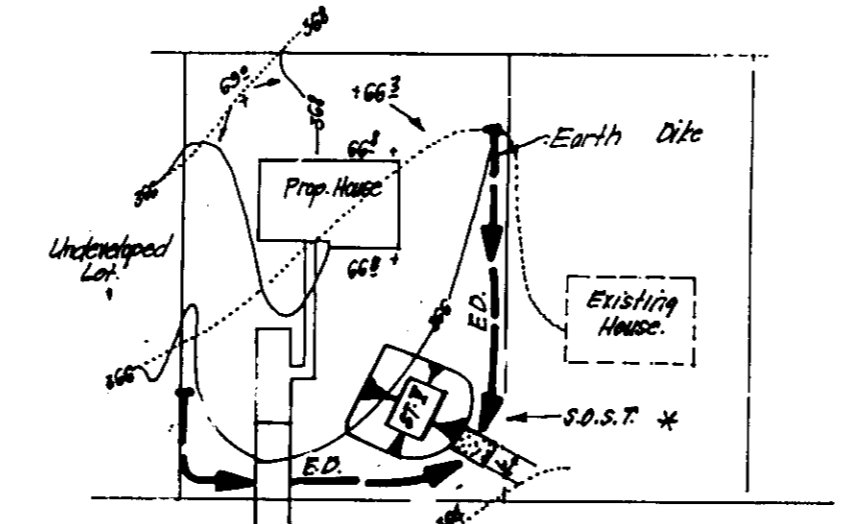
1. The poles do not need to set in concrete.
2. Chain link fence shall be fastened securely to the fence posts with wire ties or staples.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "balds" develop in the silt fence.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 11-28-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

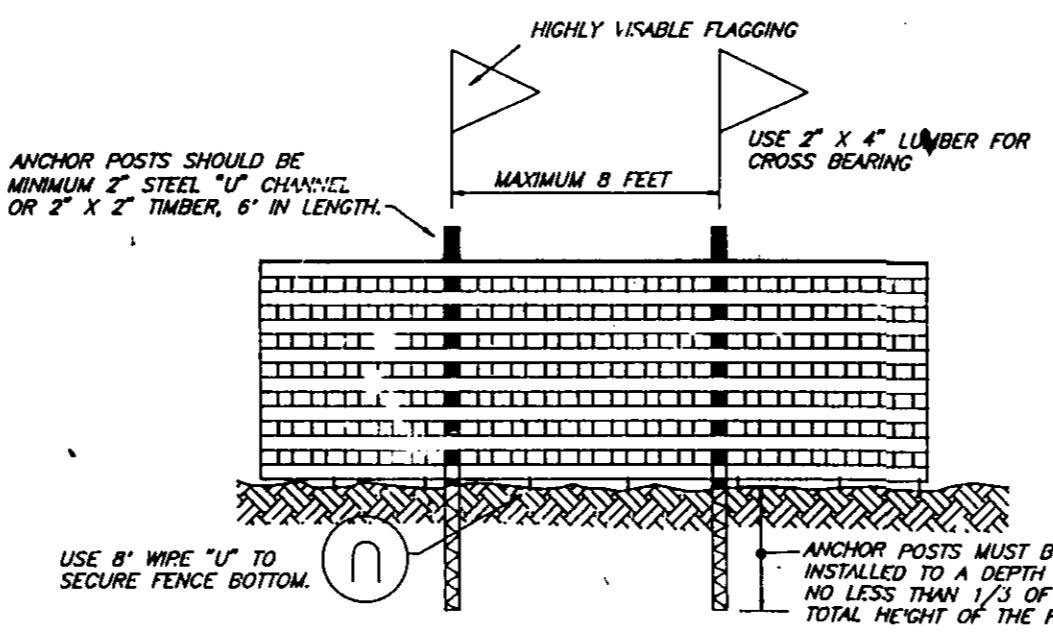


- CONSTRUCTION SPECIFICATIONS:**
1. Stone size - Use 2" stone or reclaimed or recycled concrete equivalent.
 2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
 3. Thickness - Not less than six (6) inches.
 4. Width - Ten (10) foot minimum, but not less than the full width of 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 mounted side 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/or use of any measures used to trap sediment. All sediment applied, trapped, 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)

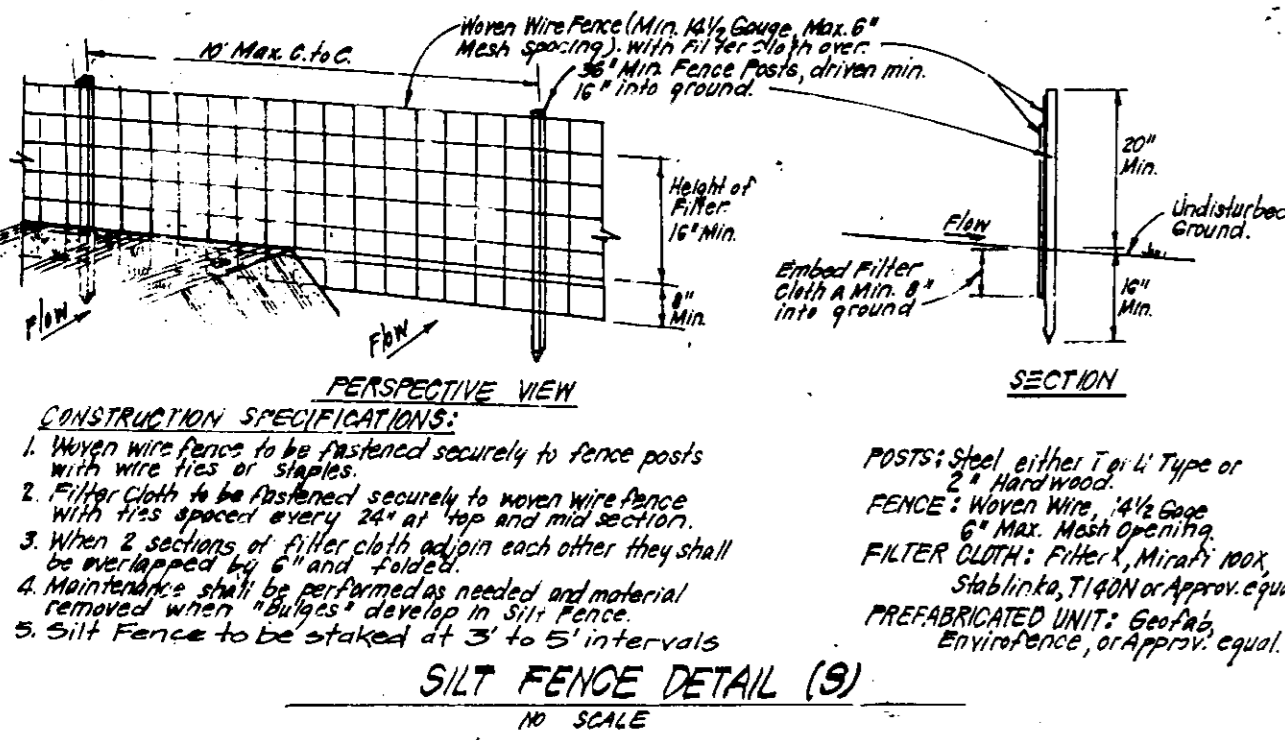


- * NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or any lots showing a sediment trap.
- SINGLE LOT SEDIMENT CONTROL PLAN**
NO SCALE



BLAZE ORANGE PLASTIC MESH TYPICAL TREE PROTECTION FENCE DETAIL

- ANCHOR POSTS SHOULD BE MINIMUM 2" STEEL 1/2" DIA. OR 2" X 2" TIMBER, 6' IN LENGTH.
- USE 2" X 4" LUMBER FOR CROSS BEARING.
- ANCHOR POSTS MUST BE INSTALLED TO A DEPTH OF NO LESS THAN 1/3 OF THE TOTAL HEIGHT OF THE POST.
- USE 8" WIRE 1/2" TO SECURE FENCE BOTTOM.
- NOTES:
1. Forest protection device only.
 2. Retention area will be set as part of the review process.
 3. Boundaries of retention area should be stated and flagged prior to installing device.
 4. Root damage should be avoided.
 5. Protection signage may also be used.
 6. Device should be maintained throughout construction.



SILT FENCE DETAIL (9)

- CONSTRUCTION SPECIFICATIONS:**
1. When wire fence is fastened securely to fence posts with wire ties or staples.
 2. Filter cloth to be fastened securely to when 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 "balds" develop in silt fence.
 5. Silt fence to be stabilized at 28' to 51' intervals.
- POSTS: Steel either 1/2" I Type or 2" dia. wood.
- FENCE: Nylon Wire, 42" dia. 6" Max. Mesh opening.
- FILTER CLOTH: Filter Cloth, 18" dia. 16" Min. Layer of Filter Cloth.
- PREFABRICATED UNIT: Geotext. 20' interference, or approx. equal.

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./100 sq ft.) and 800 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 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 10 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 50 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, replacements and reseeding.

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 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 (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 Permitting prior to the start of any construction. (SIS-1885).
 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 disturbance, 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. 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 sod 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: 3.18 AC
Area Disturbed: 2.25 AC
Area to be roofed or paved: 0.25 AC
Area to be vegetatively stabilized: 1.68 AC
Total Cut: 782.24
Offsite Waste/Borrow Area Location: 8'
 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 = 560 LF.
The total amount of Super Silt Fence = 1140 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.	DESCRIPTION	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

OWNER/DEVELOPER

HOWARD RESEARCH AND DEVELOPMENT CORP.
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
KIWM	1" = 30'
DRAWN	
MGR	
CHECKED	
K7M	
DATE	
6-6-95	

SEDIMENT & EROSION CONTROL DETAILS
LOTS 117 THRU 125
COLUMBIA
VILLAGE OF RIVER HILL
SECTION 2 AREA 4
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOR: HALLMARK BUILDERS, INC.
PO Box 1018
Columbia, Maryland 21044

DRAWING	SCALE
3 OF 3	
JOB NO.	
95-059	
FILE NO.	
95-059	

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Director: [Signature] DATE: 6/18/95

Chief Division of Land Development and Research: [Signature] DATE: 6/18/95

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

Director: [Signature] DATE: 6/18/95

Chief Bureau of Engineering: [Signature] DATE: 6/18/95

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

Signature: [Signature] DATE: 6/18/95

Natural Resources 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."

NAME: [Signature] DATE: 6-19-95

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.

Signature: [Signature] DATE: 6/18/95

O. NELSON CLARK

STATE OF MARYLAND
O. NELSON CLARK
6-18-95