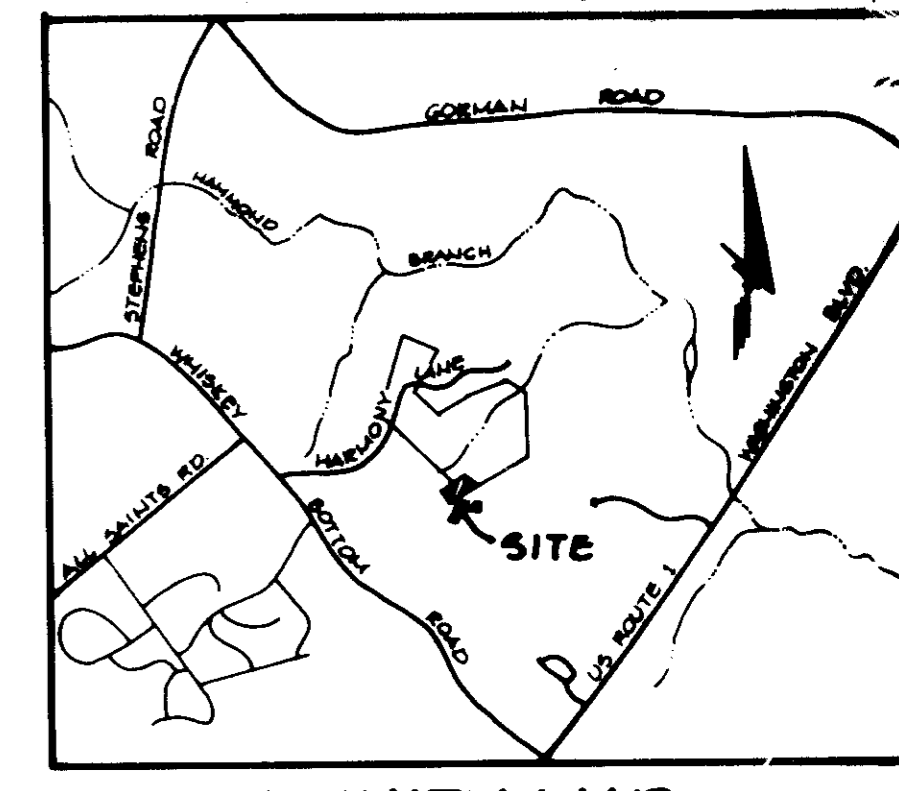


**LEGEND**

Contour Interval	2 ft
Existing Contour	150 160
Proposed Contour	160 170
Spot Elevation	60.8
Direction of Drainage	→
Floodplain Elevation	252.8

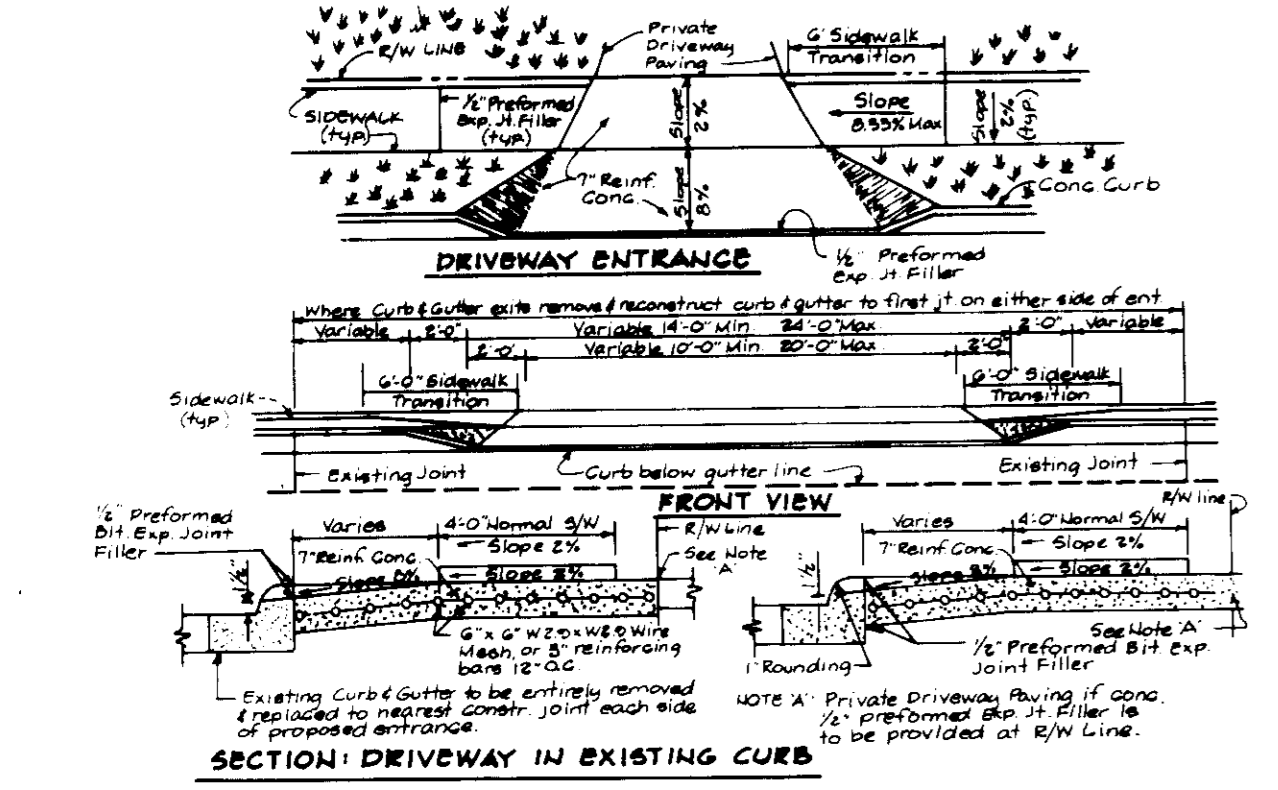


**GENERAL NOTES**

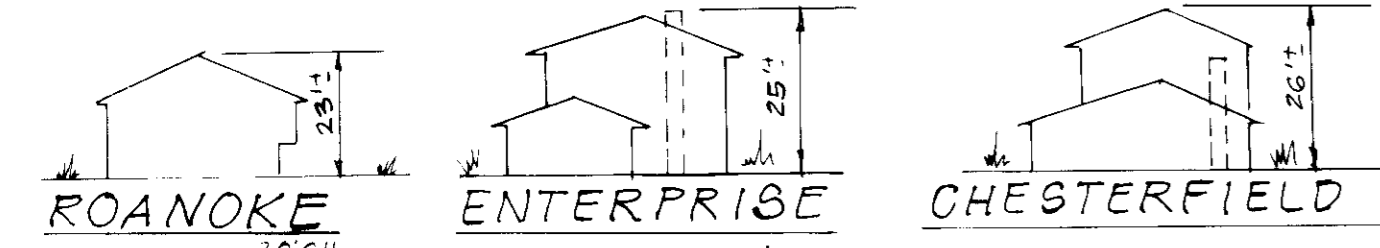
- The land included in this plan is zoned R-5C per B-2-85 Comprehensive Zoning Plan.
- All coordinates shown hereon are based on the Maryland State Grid System - Howard County Geodetic Control Point Nos 1841004 & 1941001.
- The area covered in this plan is located on tax map 47.
- The total area included in this plan is 1.448 Acres.
- All roadways are public and existing.
- Any damage to County owned rights of way shall be corrected at the Developer's expense.
- The total number of lots included in this plan is 9.
- Maximum building coverage is 40%.
- The Contractor or Developer shall contact the Construction Inspection/Survey Division 24 hours in advance of commencement of work at 792-2630.
- Office of Planning and Zoning file numbers: F-89-149, S-89-28, WF-89-42.
- Improvements to Property: Single Family Detached Units.
- Ex. Ego taken from plans prepared by Tracy, Shultz & Assoc., Inc.

**SPECIAL NOTES**

- Approved Road Construction Plans shall be used for all public utilities.
- Public water & sewer shown for reference only. For more detailed information, see water & sewer plans - No. 24-1891-D.
- The water & sewer house connections not included in a Developer's Agreement shall conform to Howard Co plumbing code. The on-site WHC shall be 1" copper and the SHC shall be 4" iron.
- Stormwater management provided by: Kings Woods II, F 87-207.
- Storm porches may project into the front building restriction line up to 10 feet as per Section 128 of the Howard County Zoning Regulation. (Lots 135 & 136).
- The wetland buffer indicated on this Site Development Plan does not effect the initial construction of a residential unit on any lot. It does prohibit subsequent clearing, grading or construction in the buffer area. Maintenance of residences, landscaping and utilities is permitted.



**DRIVEWAY ABUTTING CLOSED SECTION WITH STD. 7" COMB. CURB & GUTTER & SIDEWALK SET BACK FROM CURB.**



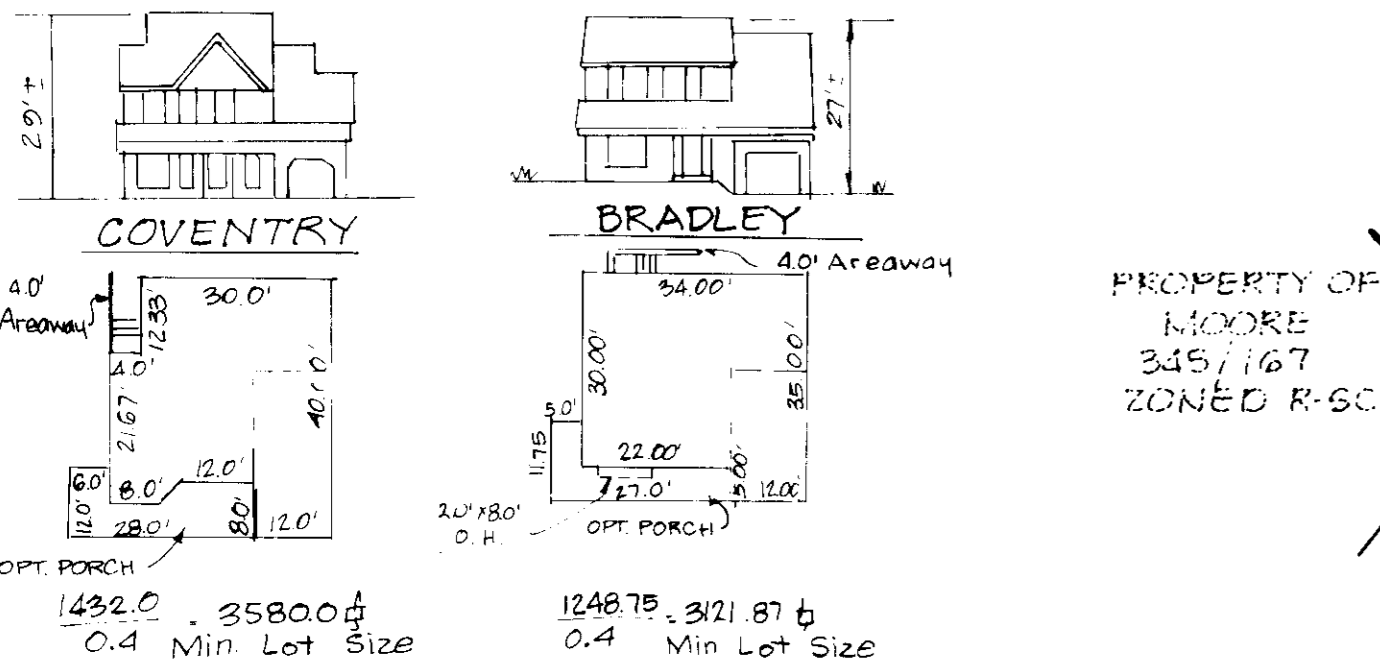
ROANOKE: 1152 - 2,880 sq ft Min Lot Size, 0.4. 2 car 1485.74 - 3714.35 sq ft Min Lot Size, 0.4.

ENTERPRISE: 1518 - 3795 sq ft Min Lot Size, 0.4.

CHESTERFIELD: 1365.74 - 3414.35 sq ft Min Lot Size, 0.4.

COVENTRY: 1432.0 - 3580.0 sq ft Min Lot Size, 0.4.

BRADLEY: 1248.75 - 3121.87 sq ft Min Lot Size, 0.4.



**TYPICAL HOUSES**  
Scale: 1" = 30'  
\*Note: All units have 1" roof eaves front and rear.

B-3-89  
CWA

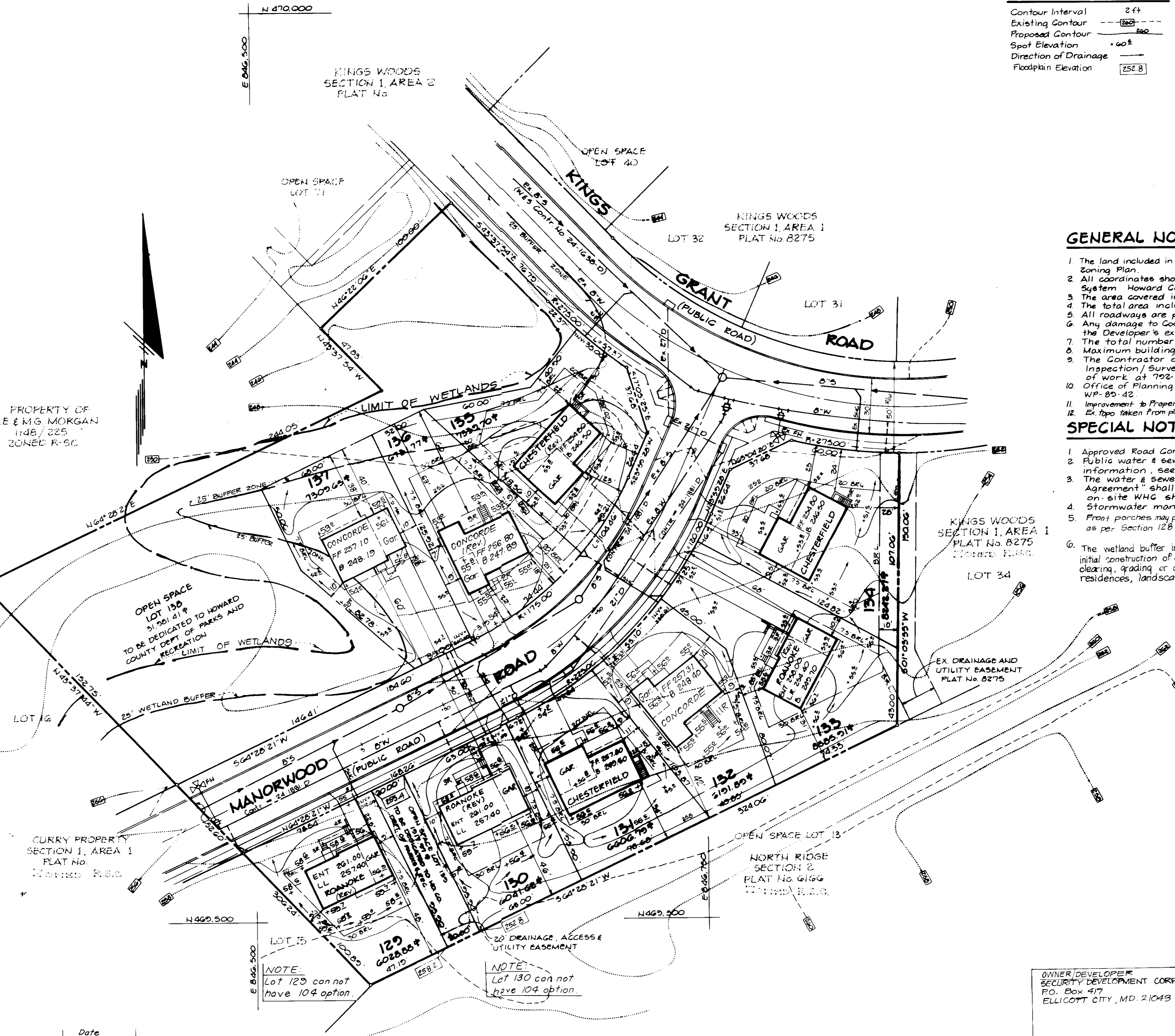
**APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.**  
HOWARD COUNTY HEALTH DEPARTMENT  
COUNTY HEALTH OFFICER: [Signature] DATE: 10/24/89

**APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING**  
[Signature] DATE: 11/6/89

**APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS**  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DIRECTOR: [Signature] DATE: 10/23/89

**CHIEF BUREAU OF ENGINEERING**  
[Signature] DATE: 10-23-89

No.	Revision	Date
1.	Rev. Hse & Grd on lot 130, Rev. Grd by lowering Hses on lots 129, 130 as per SWM Pond	9-20-89
2.	Rev. hse & grd lot 136 from Coventry to Concorde	5-3-91
3.	Rev. hse & grd. lot 132	6-20-91
4.	Rev. hse. & grd. lot 137	8-19-91



**ADDRESS CHART**

LOT #	STREET ADDRESS
129	9039 Manorwood Road
130	9035 "
131	9031 "
132	9027 "
133	9023 "
134	9029 "
135	9038 "
136	9032 "
137	9046 "

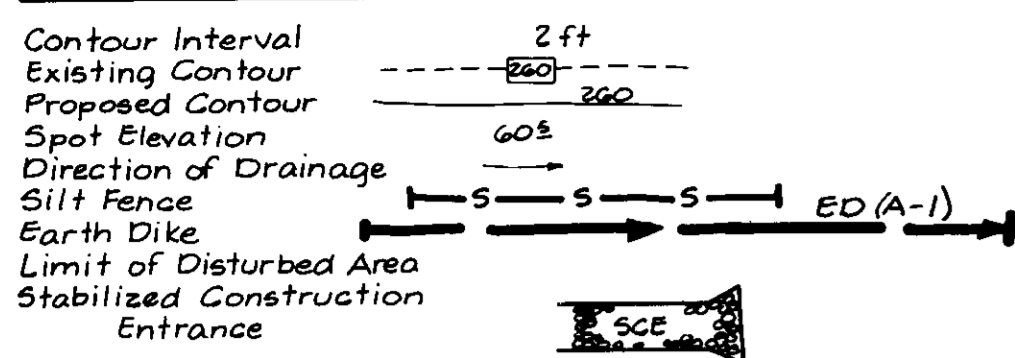
OWNER/DEVELOPER: SECURITY DEVELOPMENT CORP. P.O. Box 417, ELLICOTT CITY, MD. 21043	SUBDIVISION: KING WOODS	SECT./AREA: 1/4	LOTS: 129-137
PLAT # 283/	BLOCK # 22	ZONING: R-5C	TAX MAP # 47
WATER CODE: C03	SEWER CODE: 7270000	ELEC. DIST: G 1"	CENSUS TR. 6A'

**CLARK • FINEROCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS  
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BFLTD • (301) 821-8100 - WASH.

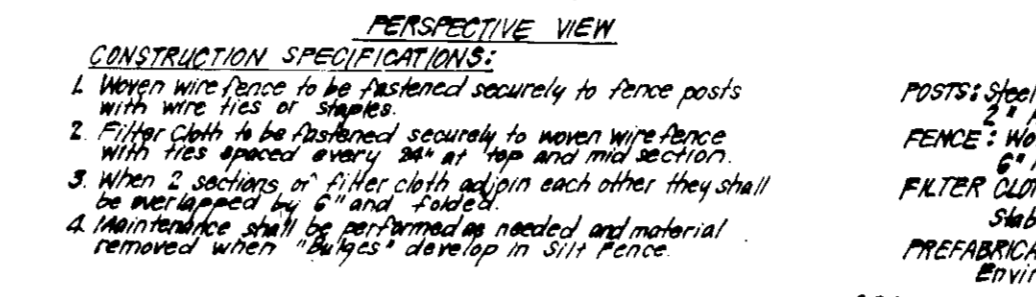
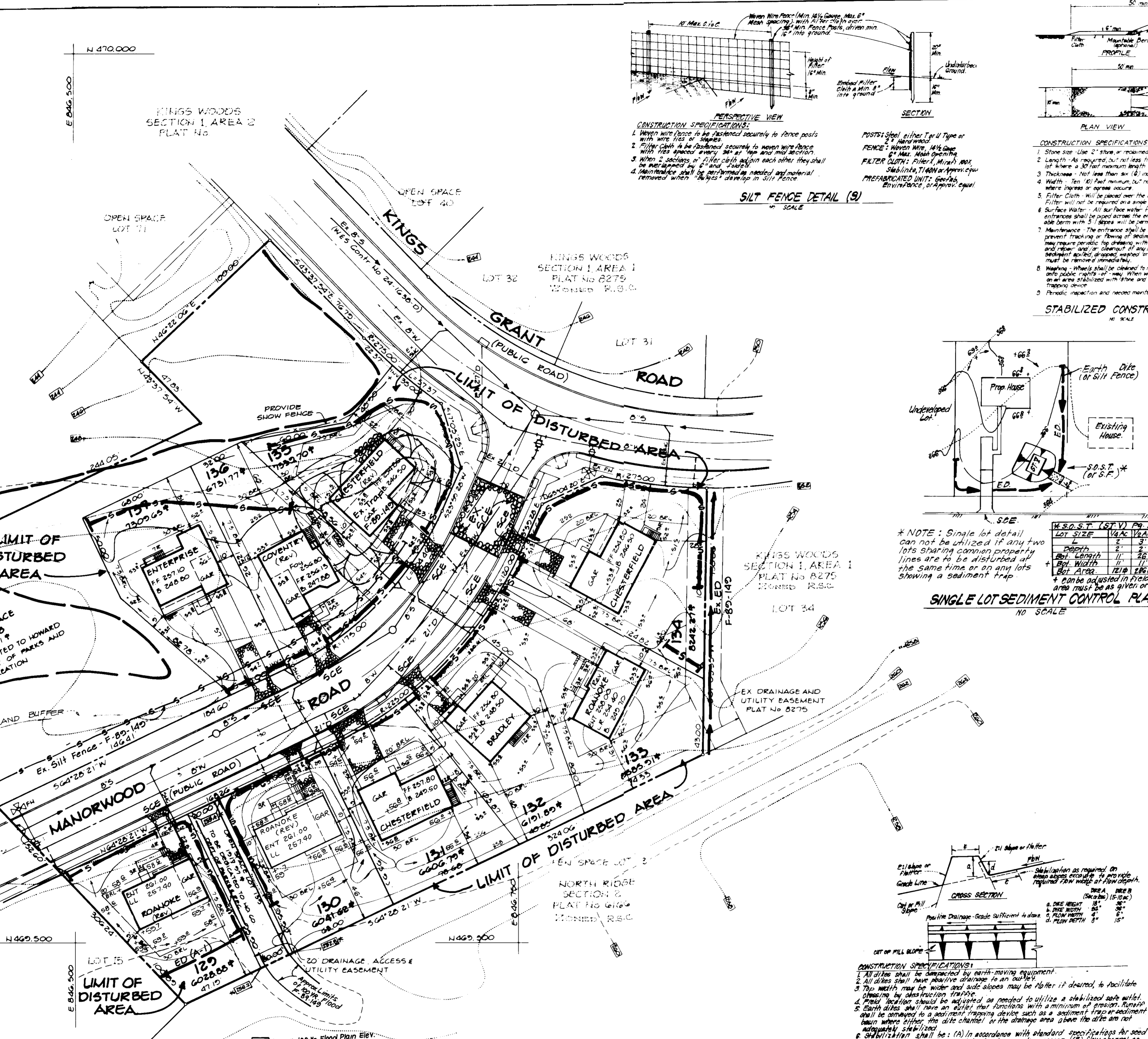
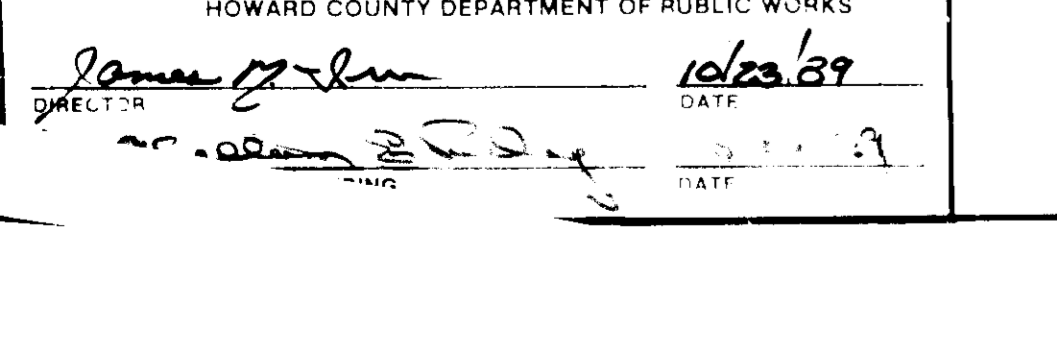
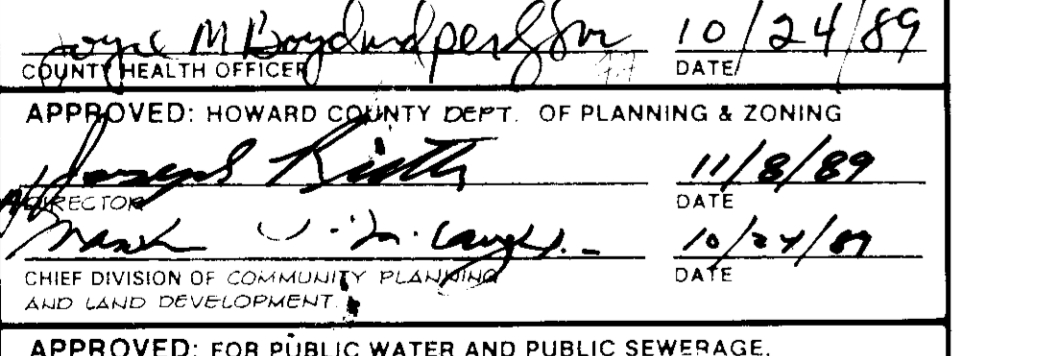
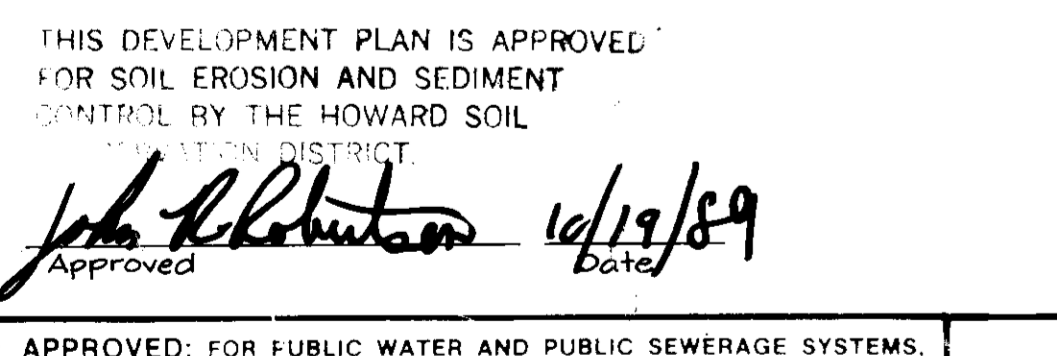
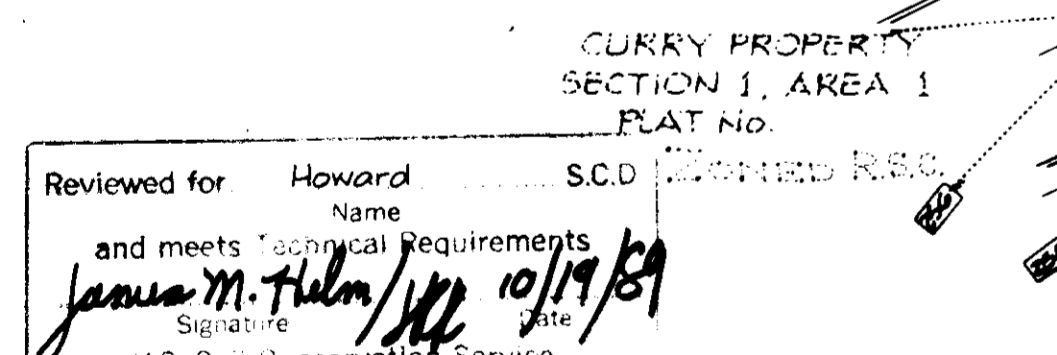
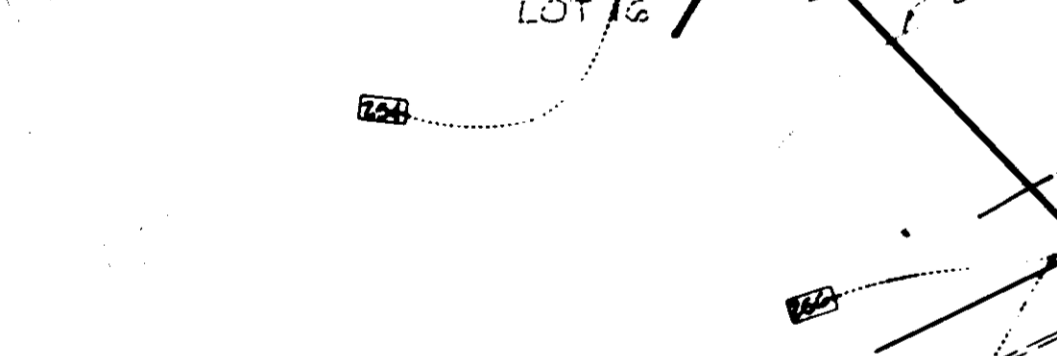
DESIGNED: VHL	SITE DEVELOPMENT PLAN	SCALE: 1"=50'
DRAWN: PBR	LOTS 129-137	DRAWING: 1 of 2
CHECKED: JME	KINGS WOODS SECTION 1, AREA 4	JOB NO.: 89-100
DATE: 7-6-89	TAX MAP 47, 6th ELECTION DISTRICT, PARCELS 775-1761 HOWARD COUNTY, MARYLAND	FILE NO.: 89-100 X

THE KYLAND GROUP, INC.  
7130 MINSTREL WAY, SUITE 215  
COLUMBIA, MARYLAND 21045  
SDP 90-12

**LEGEND**



**LEGEND**

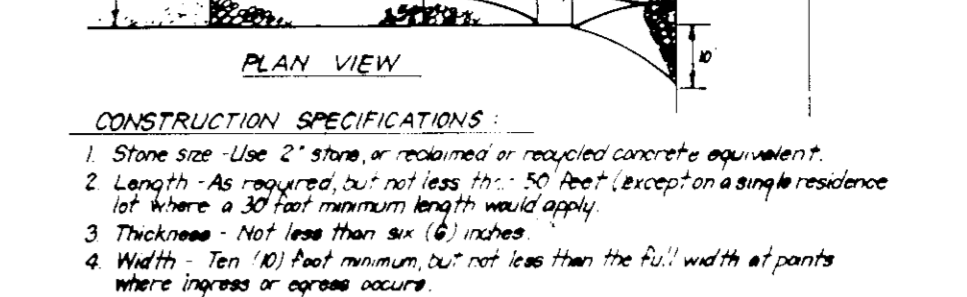


**SILT FENCE DETAIL (S)**  
NO SCALE

**CONSTRUCTION SPECIFICATIONS:**

1. Woven wire fence to be fastened securely to fence posts with wire ties at 4' spacing.
2. Filter cloth to be distributed securely to never wire fence with ties spaced every 30" at top and mid section.
3. When 2 sections of filter cloth overlap each other they shall be overlapped by 6" and secured with staples.
4. Maintenance shall be performed as needed and material removed when debris develops in silt fence.

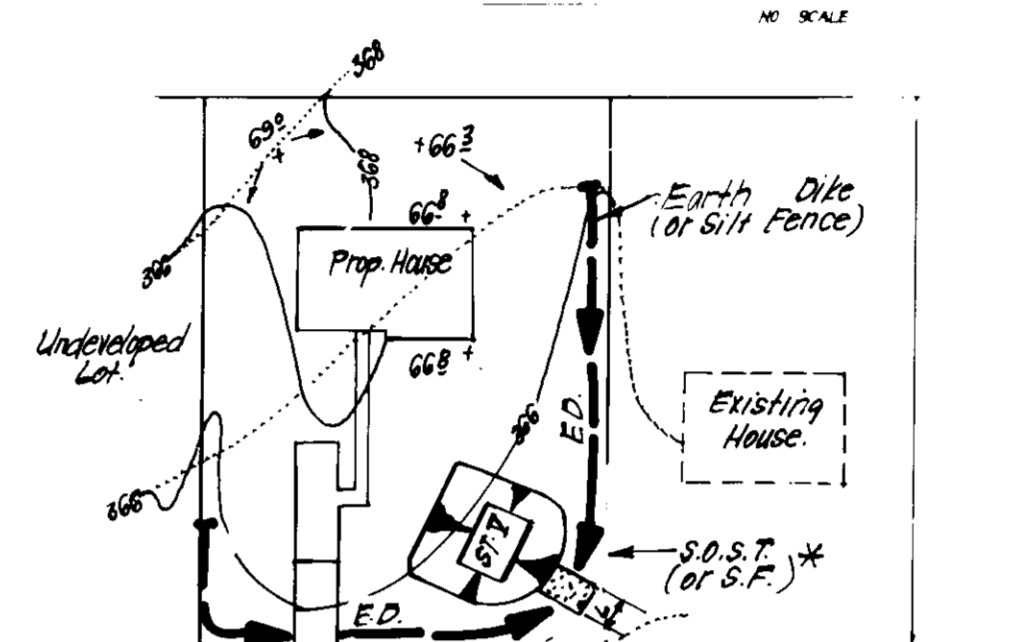
**POSTS:** Steel either T or U Type or 4" Hardwood  
**FENCE:** Woven Wire, 1/4" Gauge  
**FILTER CLOTH:** Filter Cloth, 100% Polypropylene, 100 Mesh  
**STAPLES:** 1/4" x 1/4" or Approved Equivalent  
**ENVIRONMENT:** or Approved Equivalent



**CONSTRUCTION SPECIFICATIONS:**

1. Stone Size - Use 2" stone or rounded or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet, except on a single residence where a 30 foot minimum length would apply.
3. Thickness - Not less than 6" inches.
4. Width - Top 6" feet minimum, but not less than full width of points where top edge or corner occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter cloth will not be required on a single family residential lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be passed across the entrance. If doing an impractical, a masonry side berm with 5' slope will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or blowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone. If top dressing is required, it shall be done prior to the start of any new work. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Vehicles shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done in a designated area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and record maintenance shall be provided after each rain.

**STABILIZED CONSTRUCTION ENTRANCE (SCE)**  
NO SCALE



**SINGLE LOT SEDIMENT CONTROL PLAN**  
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.

LOT SIZE	WATER VOLUME (GAL)	WATER VOLUME (AC)
1/4 AC	1,000	1
1/2 AC	2,000	2
3/4 AC	3,000	3
1 AC	4,000	4
1 1/4 AC	5,000	5
1 1/2 AC	6,000	6
1 3/4 AC	7,000	7
2 AC	8,000	8
2 1/4 AC	9,000	9
2 1/2 AC	10,000	10
2 3/4 AC	11,000	11
3 AC	12,000	12



**EARTH DIKE DETAIL (E.D.)**  
NO SCALE

**CONSTRUCTION SPECIFICATIONS:**

1. All dikes shall be constructed by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate driving by construction traffic.
4. Filter location shall be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that discharges with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. Stabilization shall be: (A) In accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) Flow channel as per chart below.

**FLOW CHANNEL STABILIZATION**

TYPE OF CHANNEL	DIKE A	DIKE B
1. 0.5 - 2.0% Slope	Seed & Straw Mulch	Seed or Straw Mulch
2. 2.0 - 5.0% Slope	Seed & Straw Mulch	Seed & Straw Mulch
3. 5.0 - 10.0% Slope	Seed & Straw Mulch	Seed & Straw Mulch
4. 10.0 - 20.0% Slope	Seed & Straw Mulch	Seed & Straw Mulch

A dike to be 2' high, or recycled concrete equivalent, in a layer at least 3" thick and be placed into soil with construction equipment.

B. Top Ratio to be 4:1 (10:1 on upper slope) 8:1 (10:1 on lower slope).

C. Approved equivalents can be substituted for any of the above materials.

7. Periodic inspection and record maintenance shall be provided after each rain.

Reviewed for Howard S.C.D. and meets Technical Requirements  
*James M. Hahn* 10/19/89  
Signature  
U.S. Soil Conservation Service

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
*James M. Hahn* 10/24/89  
DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING  
*James M. Hahn* 11/8/89  
DATE

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
*James M. Hahn* 10/24/89  
DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James M. Hahn* 10/22/89  
DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
*James M. Hahn* 10/24/89  
DATE

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APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James M. Hahn* 10/22/89  
DATE

**ENGINEER'S CERTIFICATE**

I hereby certify that this plan for Erosion and Sediment Control represents a practical and sound method of controlling erosion and sedimentation on the site and is in accordance with the provisions of the Maryland Erosion and Sediment Control Act, Chapter 29, Subchapter 10, of the Code of Maryland Annotated Regulations, and the provisions of the Maryland Erosion and Sediment Control Act, Chapter 29, Subchapter 10, of the Code of Maryland Annotated Regulations, and the provisions of the Maryland Erosion and Sediment Control Act, Chapter 29, Subchapter 10, of the Code of Maryland Annotated Regulations.

*Richard J. Stepp* 7/1/89  
Signature of Developer/Builder

**DEVELOPER'S/BUILDER'S CERTIFICATE**

I hereby certify that all development and construction will be done in accordance with the plan for Erosion and Sediment Control and that all responsible personnel involved in the construction of the project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion. I also authorize periodic on-site inspections by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.

*James M. Hahn* 7/1/89  
Signature of Developer/Builder

**PERMANENT SEEDING NOTES**

1. Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
2. Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously done.
3. 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.
  - 2) Alternative - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (28 lbs/1000 sq ft) before seeding.
  - 3) Alternative - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (28 lbs/1000 sq ft) before seeding.
4. Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (3.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru August 15, 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 of 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.
5. Mulching - Apply 15 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 slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.
6. Inspect all seeded areas and make needed repairs, replacements and reseeding.

**TEMPORARY SEEDING NOTES**

1. Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
2. Seeded Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously done.
3. Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).
4. Seeding: For periods March 1 thru April 30 and August 15 thru November 15, seed with 25 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 15, 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.
5. Mulching: Apply 15 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 slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.
6. Inspect all seeded areas and make needed repairs, replacements and reseeding.

**CONSTRUCTION SEQUENCE**

Activity	Days
A. Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize	7
B. Excavate for Foundations, Rough Grade and Temp Stabilize	20
C. Construct Structures, Sidewalks & Driveways	30
D. Final Grade and Stabilize in accordance with Stds. & Specs.	30
E. Upon approval of the Sediment Control Inspector, remove Sediment and Erosion Controls and Stabilize	7

**OWNER/DEVELOPER**  
SECURITY DEVELOPMENT CORP.  
P.O. Box 417  
ELLICOTT CITY, MD. 21042

**CLARK • FINEFROCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS  
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO. • (301) 611-8900 • WASH.

**DESIGNED** KIWM  
**DRAWN** PER  
**CHECKED** KIWM  
**DATE** 7-6-89

**SEDIMENT & EROSION CONTROL PLAN**  
LOTS 129 - 137  
**KINGS WOODS SECTION 1, AREA 4**  
TAX MAP 47, 4TH ELECTION DISTRICT, PARCELS 775 & 781 HOWARD COUNTY, MARYLAND

**THE RYLAND GROUP, INC.**  
7130 MINSTREL WAY, SUITE 215  
COLUMBIA, MD 21045

**SCALE** 1" = 30'  
**DRAWING** 2 of 2  
**JOB NO.** 89-100  
**FILE NO.** 89-1005E

**APPROVED:** FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
*James M. Hahn* 10/24/89  
DATE

**APPROVED:** HOWARD COUNTY DEPT. OF PLANNING & ZONING  
*James M. Hahn* 11/8/89  
DATE

**CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT**  
*James M. Hahn* 10/24/89  
DATE

**APPROVED:** FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*James M. Hahn* 10/22/89  
DATE