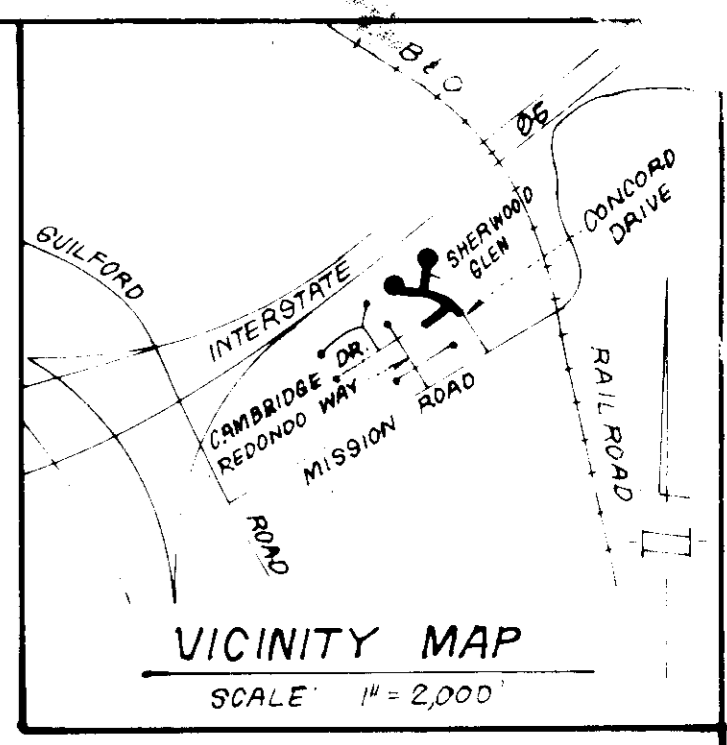
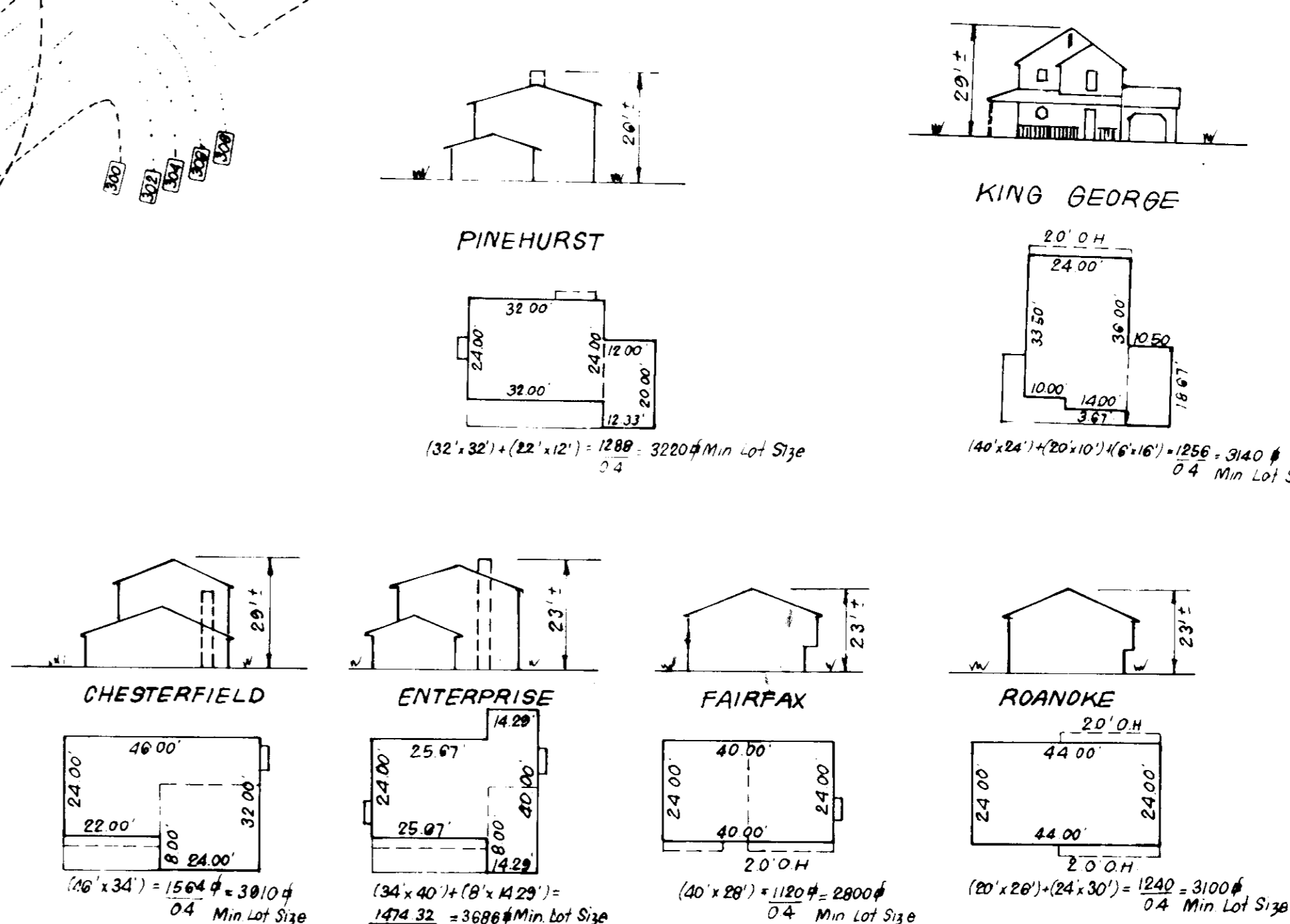
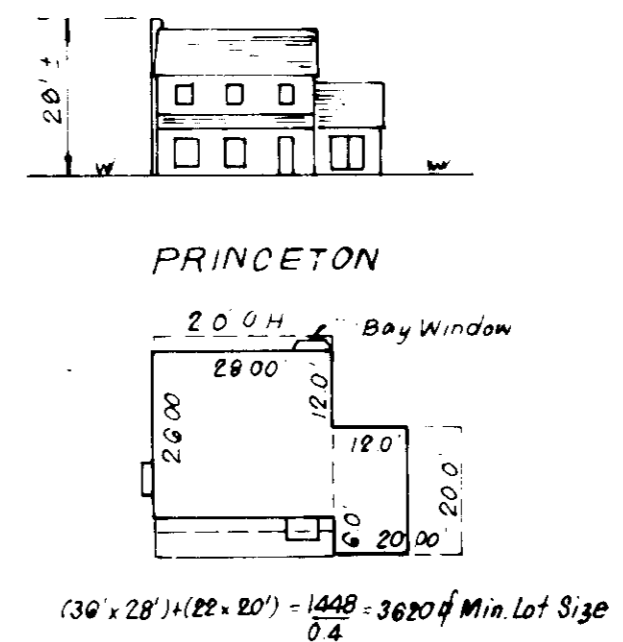


- LEGEND:**
- 1. Contour Interval 2 FT
  - 2. Existing Contour
  - 3. Proposed Contour
  - 4. Spot Elevation
  - 5. Direction of Drainage
  - 6. Existing Trees to be Retained
  - 7. Walk-Out Basement
  - 8. Existing Spot Elev.



- GENERAL NOTES:**
1. All coordinates are based on Howard County Control Station Control Point Nos. 224 3001-R & 214.2003-R
  2. Total Number of Lots: 28
  3. The total area included in this plan is 4.97 Acres
  4. All roadways are public and existing
  5. Any damage to county owned rights of way shall be corrected at the developer's expense
  6. The contractor or developer shall contact the construction inspection/survey Division, 24 hours in advance of commencement of work at 992-2417 or 992-2418
  7. The maximum Lot coverage is 40% per lot
- 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 and sewer plans Contract N°
- The water & sewer house connections not included in a "Developer's Agreement" shall conform to Howard Co Plumbing Code. The on-site NHC shall be 1" copper and the SHC shall be 4" iron.



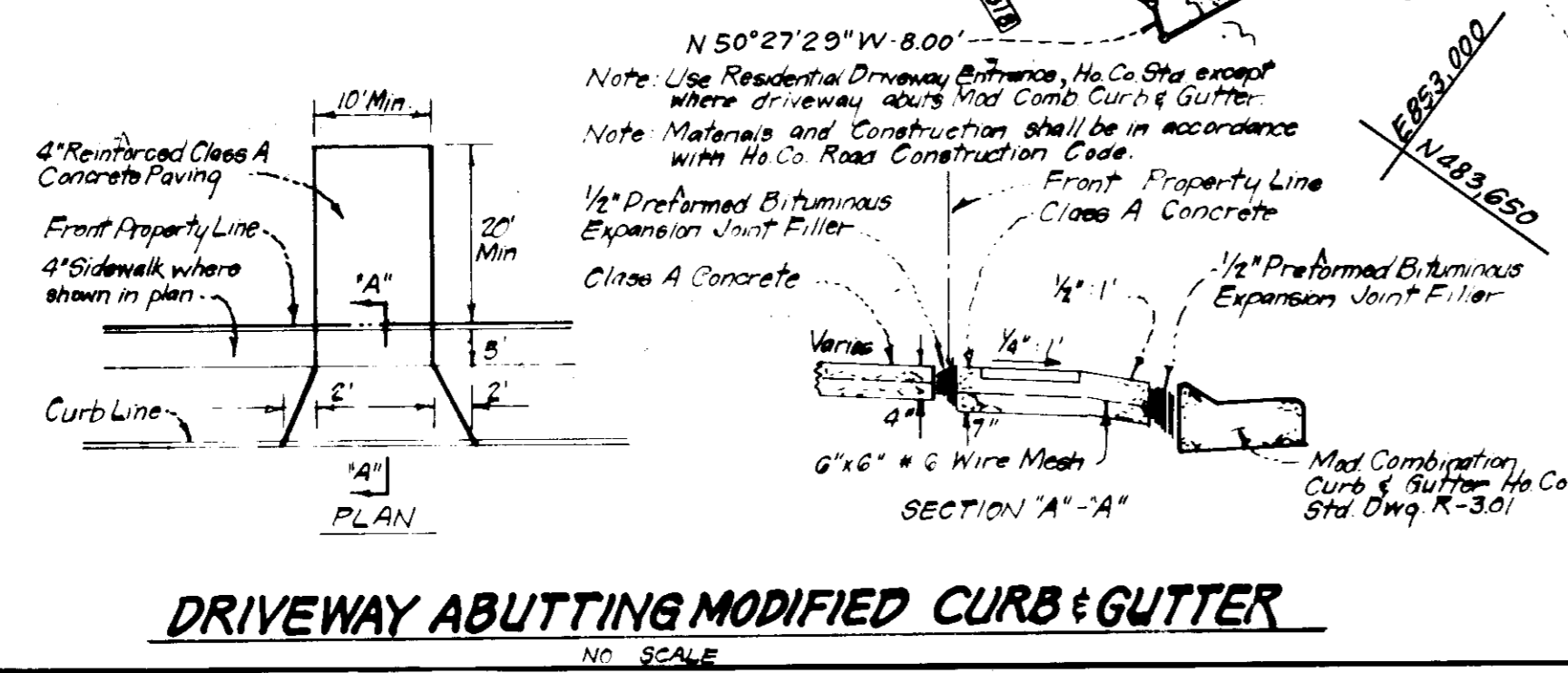
LOT	STREET ADDRESS
123	8641 CONCORD DRIVE
124	8645 " "
125	8640 " "
126	8653 " "
127	8657 " "
128	8661 " "
129	8665 " "
130	8669 " "
131	8673 " "
132	8677 " "
133	8680 " "
134	8676 " "
135	8672 " "
136	8668 " "
137	8664 " "
138	8665 SHERWOOD GLEN
139	8669 " "
140	8673 " "
141	8677 " "
142	8681 " "
143	8684 " "
144	8680 " "
145	8676 " "
146	8672 " "
147	8668 " "
148	8664 " "
149	8660 " "
150	8652 CONCORD DRIVE

APPROVED  
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 8-18-86

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
DATE 9/19/86

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING  
DATE 9-22-86

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DATE 9-22-86



TYPICAL HOUSES  
NO SCALE  
(NOTE: All units have approx. 1" roof over front & rear)

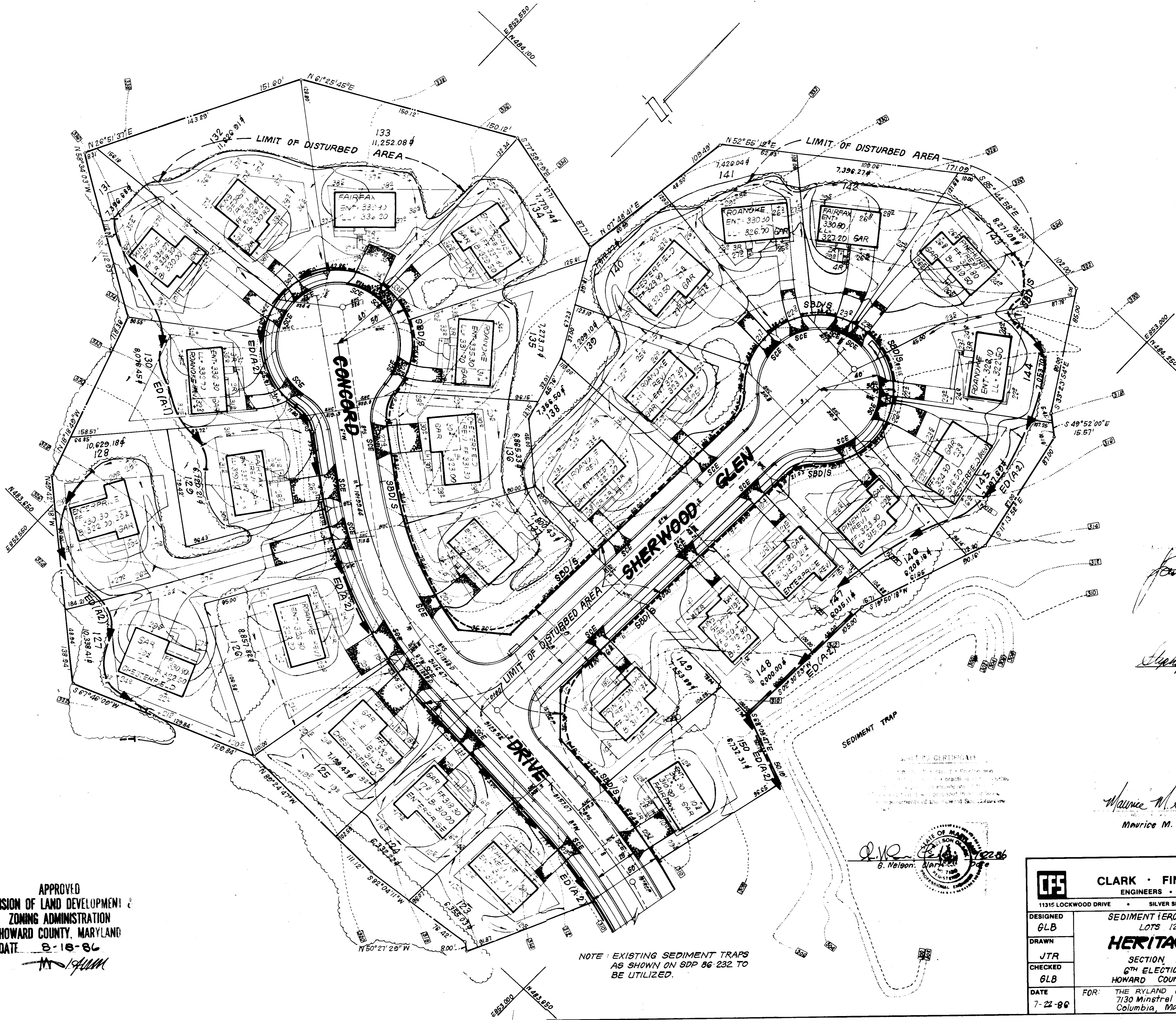
OWNER: Security Development P.O. Box 417 Ellicott City, Maryland 21043	SUBDIVISION NAME: HERITAGE WOODS	SECT. AREA: 2 / 2	LOT/PARCEL #: 123-150
	PLAT #: G830	BLOCK #: 18	TAX ZONE MAP/ELEC. DIST. CENSUS TR. 42 6TH 6004
	WATER CODE: E 14	SEWER CODE: 4400300	



**CLARK · FINEFROCK & SACKETT**  
ENGINEERS · PLANNERS · SURVEYORS  
11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

DESIGNED BAF	SITE DEVELOPMENT PLAN LOTS 123 THRU 150	SCALE 1" = 30'
DRAWN JTR	<b>HERITAGE WOODS</b>	DRAWING 10F3
CHECKED BAF	SECTION 2 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 85-140
DATE 7-22-86	FOR THE RYLAND GROUP (Columbia Division) 7130 Minstrel Way Suite 215 Columbia, Maryland 21045	FILE NO. 85-140-X

SDP-87-16



Howard  
*Charles M. Stein* 8-10-86  
 Approved Date

*Maurice M. Simpkins* 7-21-86  
 Maurice M. Simpkins

STATE OF MARYLAND  
 PROFESSIONAL SURVEYORS  
 B. Nelson  
 7-22-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT  
*John M. Boyd* 8/12/86  
 COUNTY HEALTH OFFICER DATE

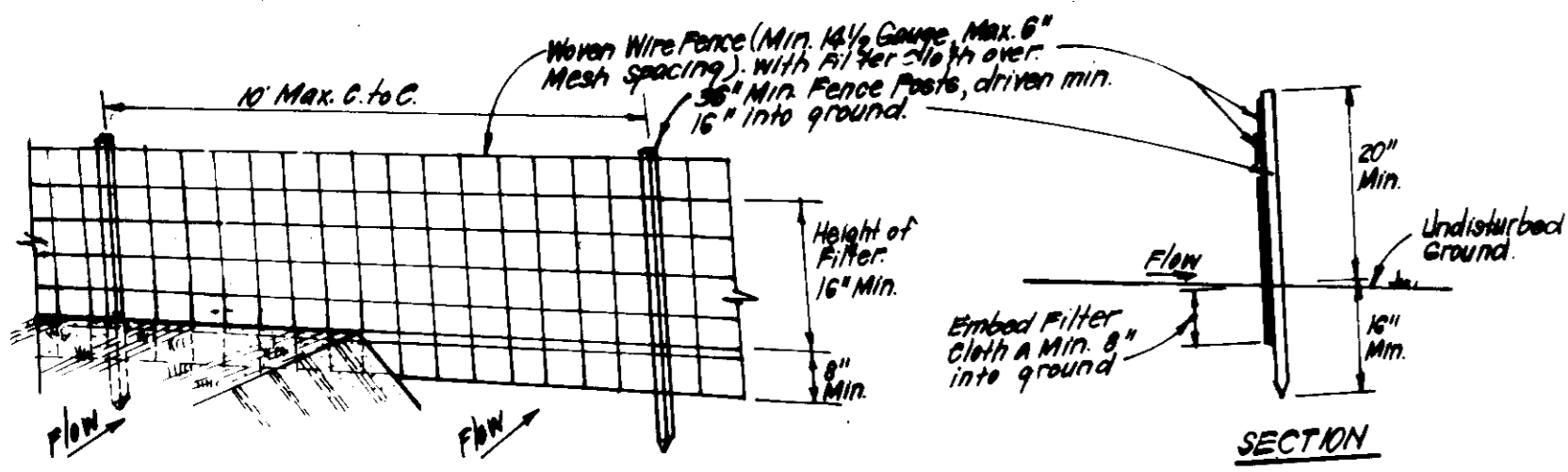
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING  
 PLANNING DIRECTOR  
*John M. Williams* 7-22-86  
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,  
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DIRECTOR  
*John M. Williams* 7-22-86  
 CHIEF BUREAU OF ENGINEERING DATE

APPROVED  
 DIVISION OF LAND DEVELOPMENT &  
 ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE 8-18-86  
*M. Williams*

NOTE: EXISTING SEDIMENT TRAPS  
 AS SHOWN ON SDP 86-232 TO  
 BE UTILIZED.

<b>CLARK • FINFROCK &amp; SACKETT</b> ENGINEERS • PLANNERS • SURVEYORS 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400		SCALE
		1"=30'
DESIGNED	<b>SEDIMENT EROSION CONTROL PLAN</b> LOTS 123 THRU 150	DRAWING
GLB	<b>HERITAGE WOODS</b>	20F3
DRAWN	SECTION 2 AREA 2	JOB NO.
JTR	6TH ELECTION DISTRICT	85-140
CHECKED	HOWARD COUNTY, MARYLAND	FILE NO.
GLB	FOR: THE RYLAND GROUP (Columbia Division) 7130 Minstrel Way Suite 215 Columbia, Maryland 21045	85-140 SE
DATE	7-22-86	SDP-87-16



**PERSPECTIVE VIEW**

**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 36" 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.

**SECTION**

POSTS: Steel, either T or U Type or 2" Hard Wood

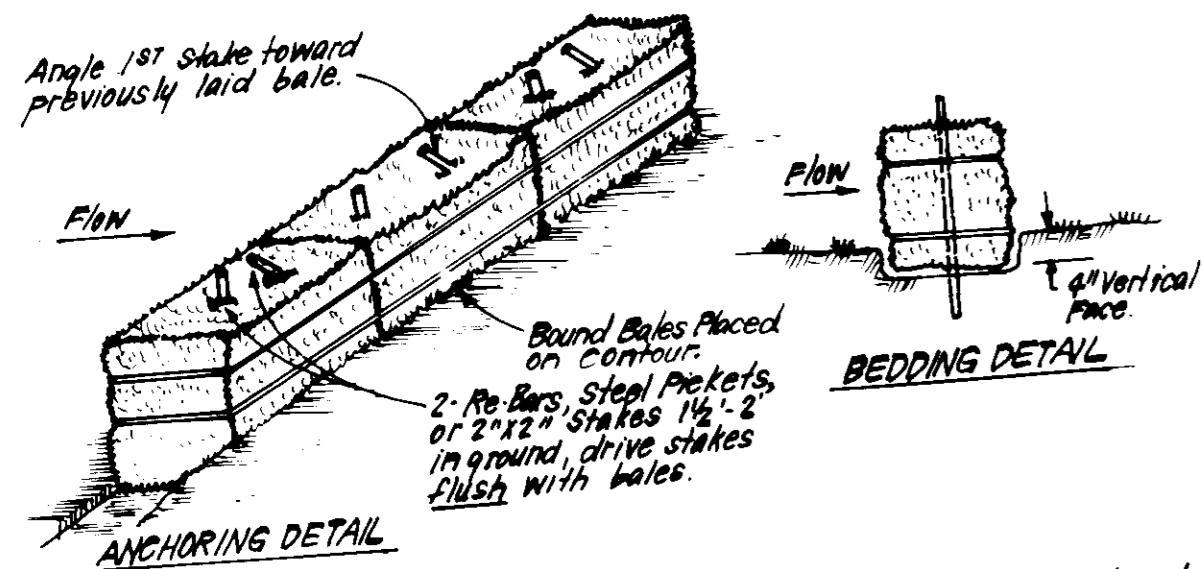
FENCE: Woven Wire, 14 1/2 Gauge, Max. Mesh Opening

FILTER CLOTH: Filter X, Miraflex 100X, Stabilink, T100N or Approx. equal

FILTER FABRIC: T100N or Approx. equal

PREFABRICATED UNIT: Geotex, Envirofence, or Approx. equal

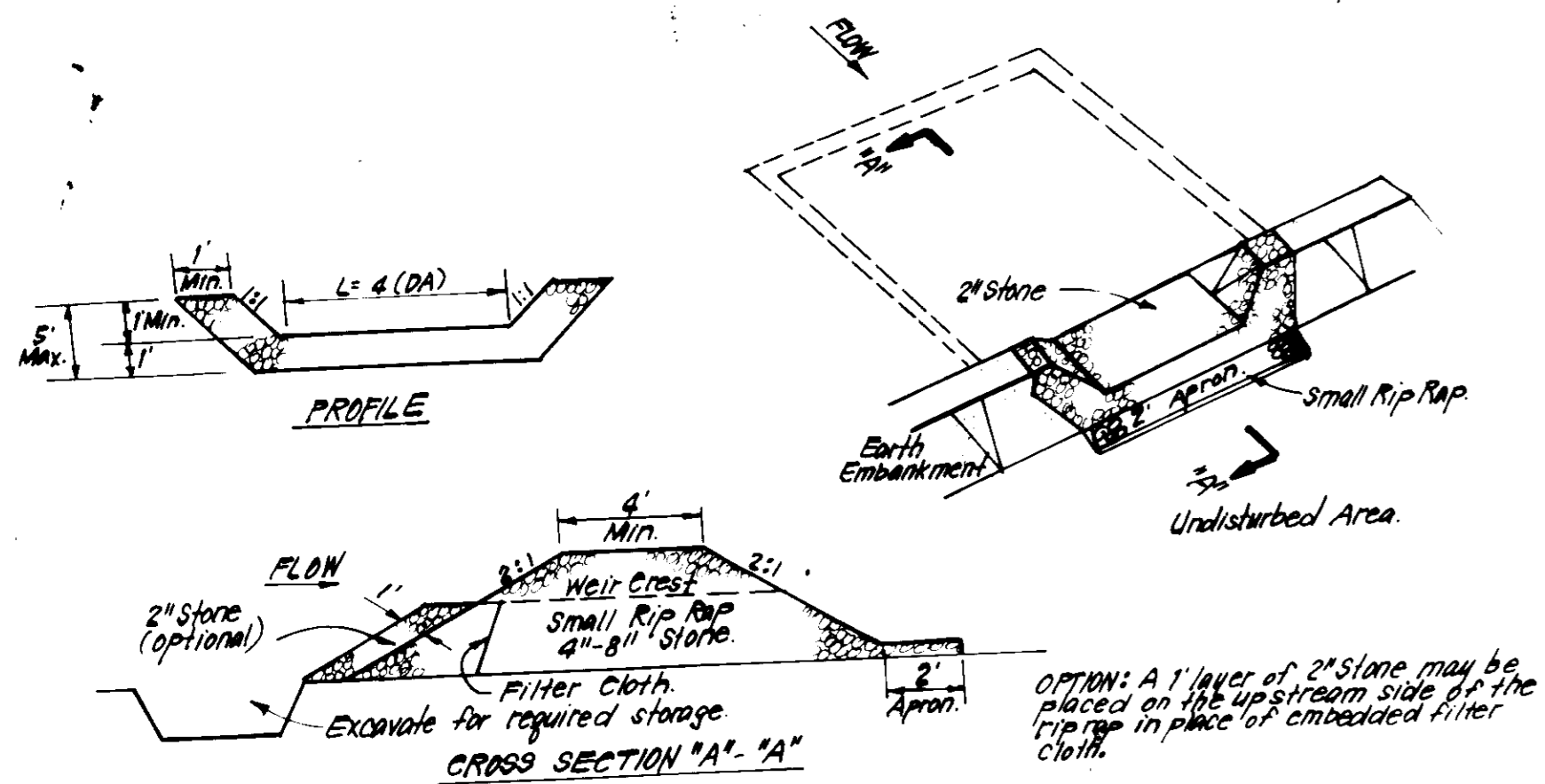
**SILT FENCE DETAIL (S)**  
NO SCALE



**CONSTRUCTION SPECIFICATIONS:**

1. Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
3. Bales shall be securely anchored in place by either 2 stakes or re-bar driven thru the bale. The 1st stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven flush with the bale.
4. Inspection shall be frequent and repair replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

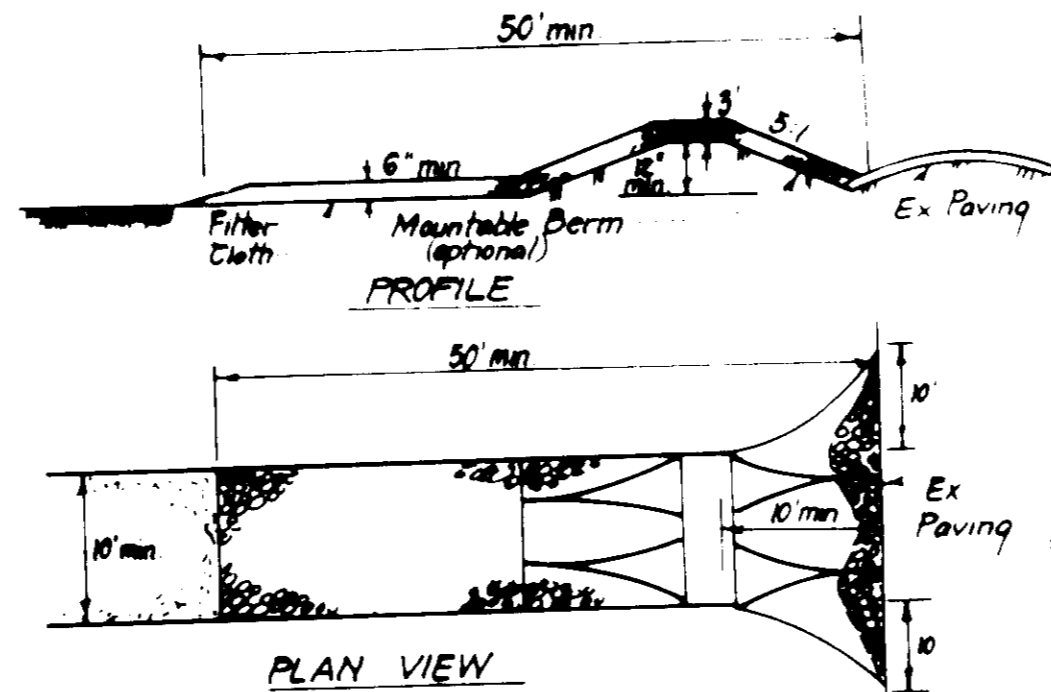
**STRAW BALE DIKE DETAIL (SBD)**  
NO SCALE



**CONSTRUCTION SPECIFICATIONS:**

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil area shall be compacted.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by reversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip rap 4"-8" along with 1" thickness of 2" aggregate placed on the up-grade side on the small rip rap or embedded filter cloth in the rip rap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

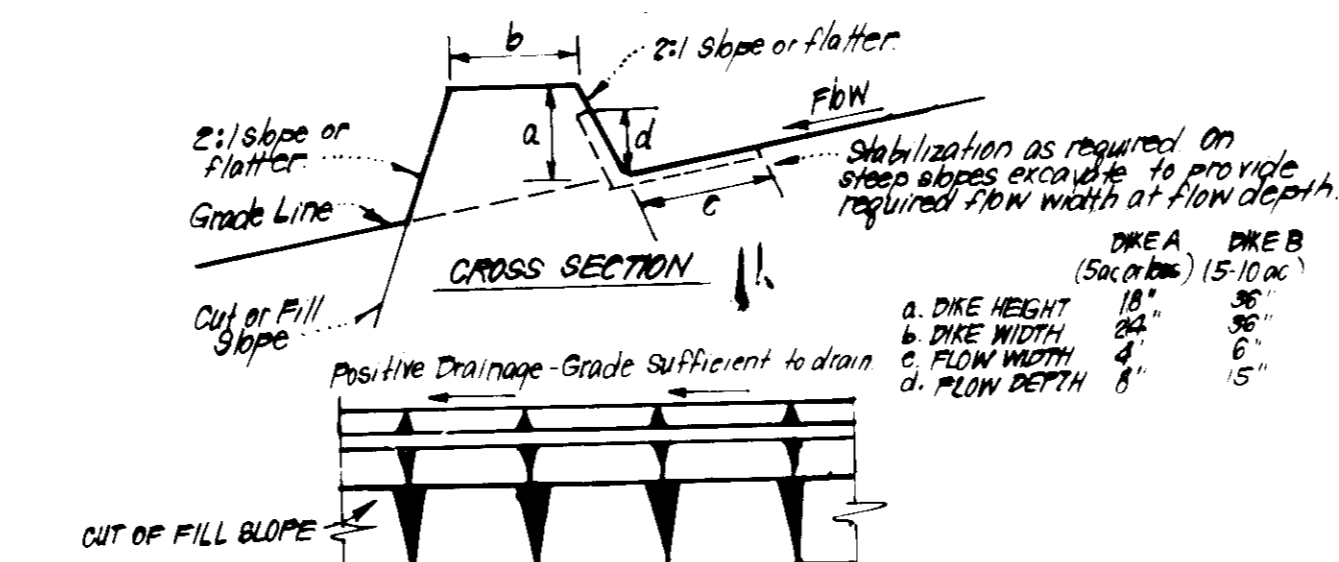
**STONE OUTLET SEDIMENT TRAP (S.O.S.T.) STY.**  
NO SCALE



**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 mounded berm with 3:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent backing 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



**CONSTRUCTION SPECIFICATIONS:**

1. All dikes shall be compacted 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 crossing by construction traffic.
4. Field location should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or settlement 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.

TYPE OF TREATMENT	FLOW CHANNEL STABILIZATION	
	CHANNEL GRADE	DIKE A
1	0.5 - 3.0%	Seed & Straw Mulch
2	3.1 - 5.0%	Seed & Straw Mulch
3	5.1 - 8.0%	Seed & Straw Mulch or Seed & 2" Stone
4	8.1 - 20.0%	Lined Rip Rap 4"-8" Stone

DIKE B  
Seed & Straw Mulch  
Seed & Straw Mulch  
Seed & Straw Mulch or Excelsior Seed, 2" Stone  
Lined Rip Rap 4"-8" Stone  
Engineering Design

A Stone to be 2" Stone, or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.  
B Rip Rap to be 4"-8" in a layer at least 8" thick, pressed into soil.  
C Approved equivalents can be substituted for any of the above materials.

7. Periodic inspection and required maintenance must be provided after each rain.

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

**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.

**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) before seeding, and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) at 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 50 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 (.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.

**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.

- Inspect all seeded areas and make needed repairs, replacements and reseedings.

**TEMPORARY SEEDING NOTES**

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

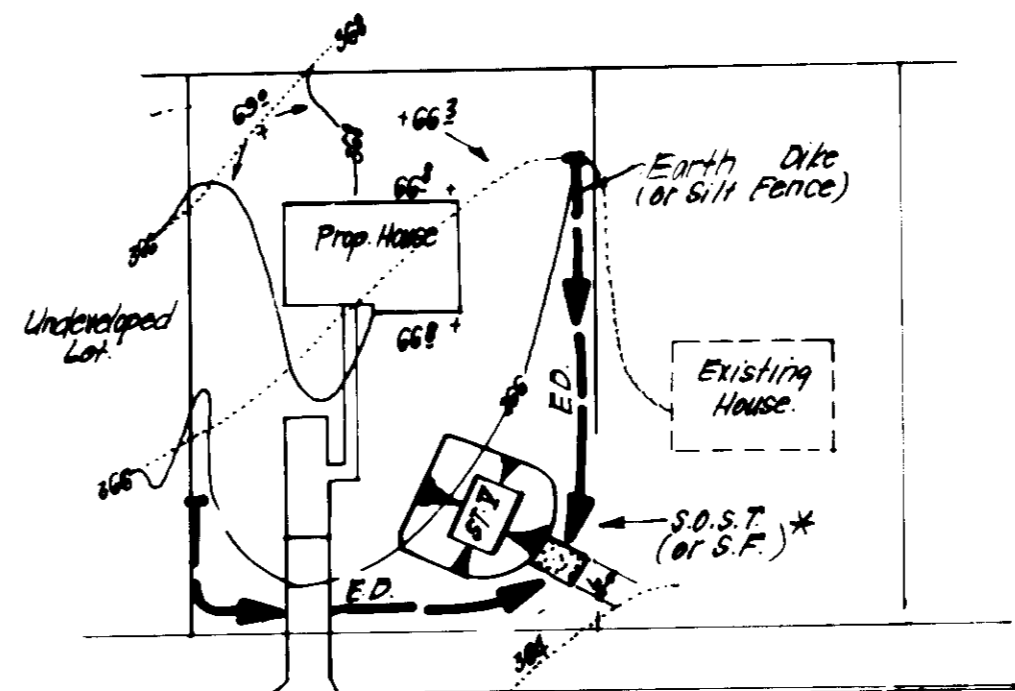
**Seedbed Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

**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 25 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 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal 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.



S.O.S.T. (S.V.)	NO. OF LOTS	AREA	PERCENTAGE
1	1	1.0	100%
2	1	1.0	100%
3	1	1.0	100%
4	1	1.0	100%
5	1	1.0	100%
6	1	1.0	100%
7	1	1.0	100%
8	1	1.0	100%
9	1	1.0	100%
10	1	1.0	100%

\* 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

**SEDIMENT 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. (992-2437)
- 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 SPECIFICATIONS 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 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 perimeter 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	4.974 Acres
Area Disturbed	3.861 Acres
Area to be seeded or paved	2.060 Acres
Area to be vegetatively stabilized	1.801 Acres
Total Cut	4855 Cu. yds
Total Fill	3980 Cu. yds
Offsite waste/borrow area location	N/A
- 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 DEW 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) If houses are to be constructed on an "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
- 12) All pipes to be blocked at the end of each bay (see detail below). N/A
- 13) The total amount of straw bale dikes/silt fence equals 345 L.F.

**CONSTRUCTION SEQUENCE: No. of Days**

1. Obtain Grading Permit	2
2. Clear & Grub for installation of Sediment Control Devices	1
3. Install Sediment Control Devices & Stabilize	10
4. Clear, Grub & Rough Grade remainder of site and Temporarily Stabilize	30
5. Construct Structures, Driveways & Walkways	32.5
6. Fine Grade & Stabilize in accordance with Standards and Specifications	2.0
7. Upon Approval of the Sediment Control Inspector, remove Sediment and Erosion Controls and Stabilize	5

NOTE: Sediment & Erosion Controls to be coordinated with previously approved SDP 86-232.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

DATE: 9/12/86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DATE: 9-22-86

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

DATE: 9/22/86

HOWARD COUNTY

APPROVED

DATE: 9/22/86

APPROVED

DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION

HOWARD COUNTY, MARYLAND

DATE: 8-18-86

MAURICE SIMPKINS

DATE: 7-22-86

G. NELSON CLARK

DATE: 7-22-86

CLARK · FINEFROCK & SACKETT

ENGINEERS · PLANNERS · SURVEYORS

11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

DESIGNED: GLB

DRAWN: JTR

CHECKED: GLB

DATE: 7-22-86

SEDIMENT EROSION CONTROL PLAN

LOTS 123 THRU 150

HERITAGE WOODS

SECTION 2 AREA 2

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

FOR: THE RYLAND GROUP, Columbia Division, 7130 Minstrel Way, Suite 215, Columbia, Maryland 21045

SCALE: As shown

DRAWING: 3 of 3

JOB NO.: 85-140

FILE NO.: 85-140-5E

SDP-87-16