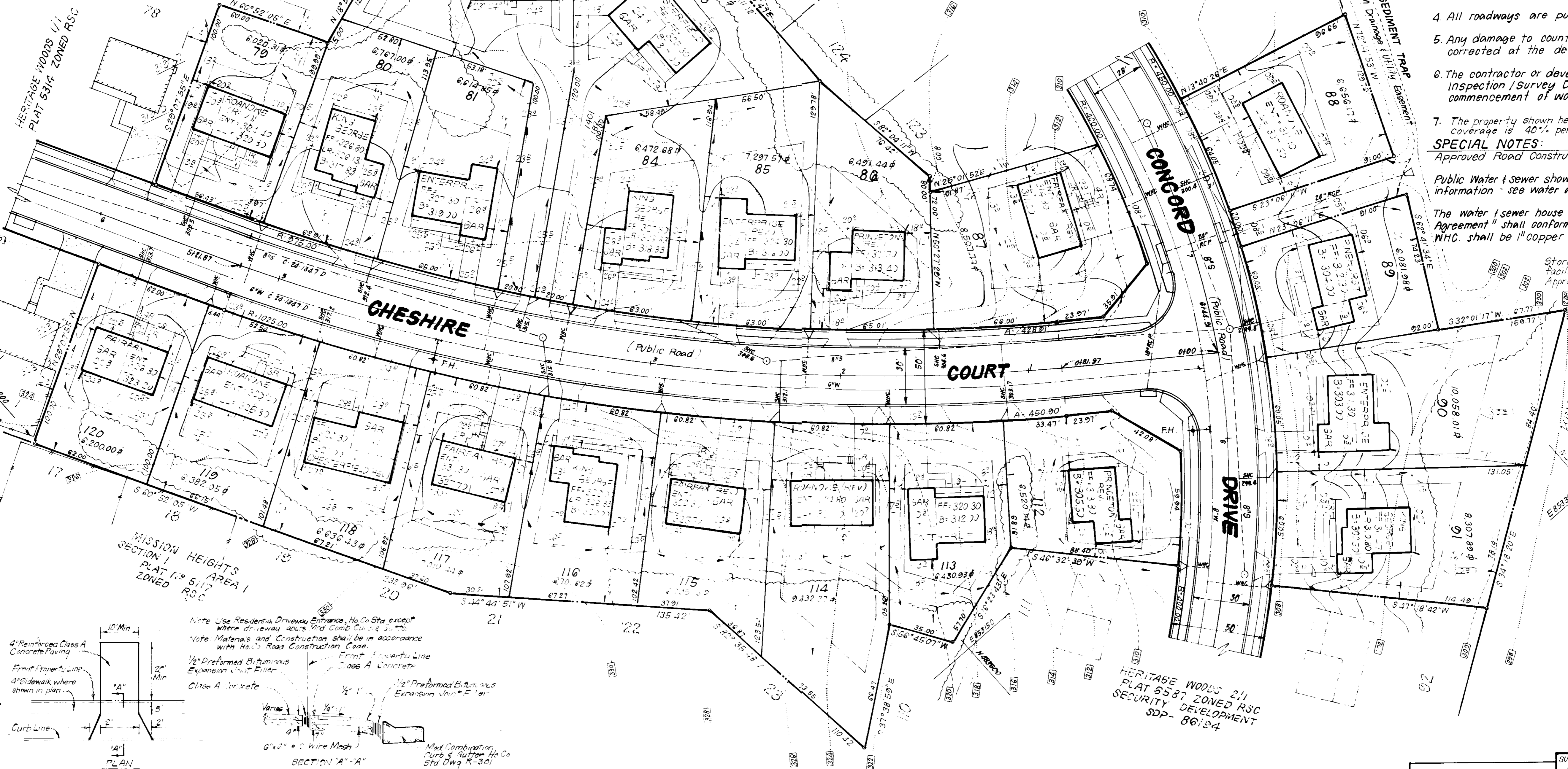
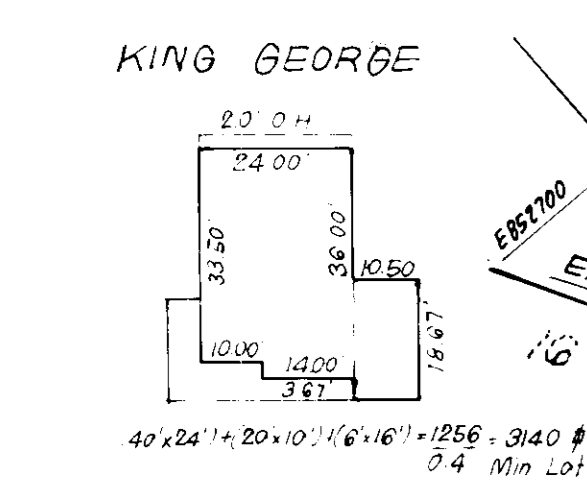
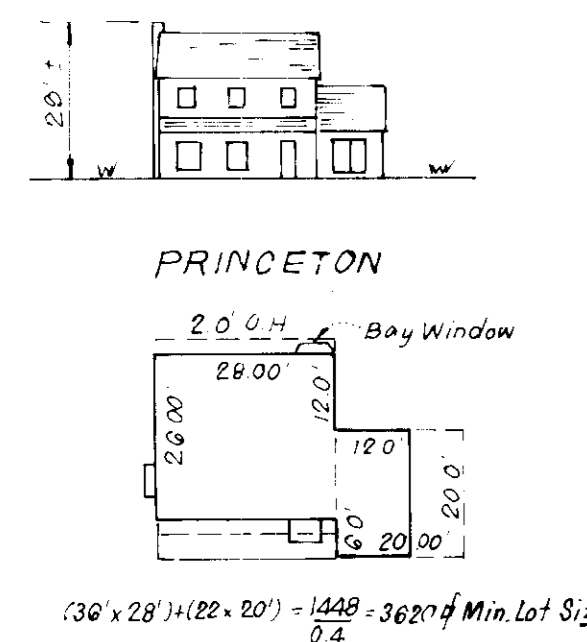


TYPICAL HOUSES

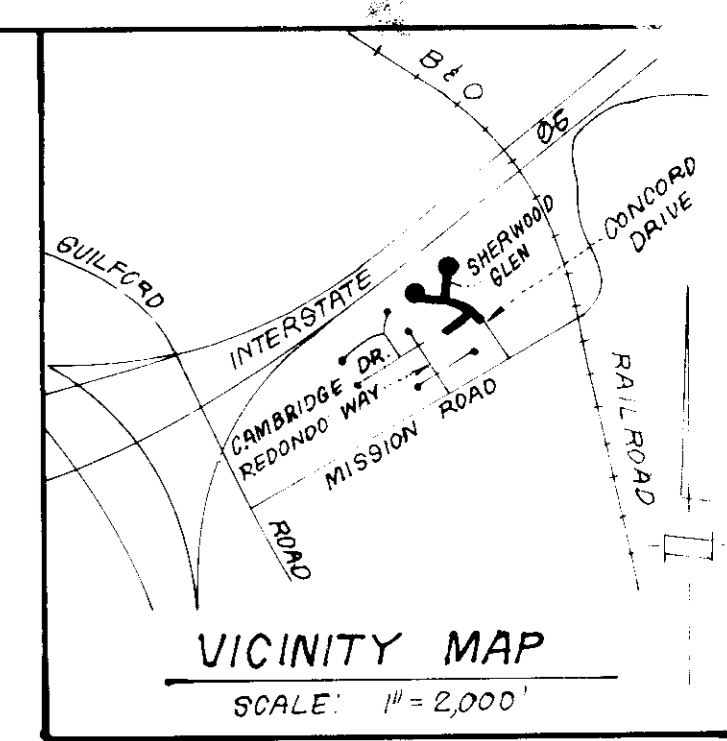
NO SCALE
(NOTE: All units have approx. roof over front & rear)



NOTE: Houses on Lots 82 & 83 do not sewer by gravity.

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: 22
3. The total area included in this plan is 3.8372 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 property shown herein is zoned RSC. Maximum building coverage is 40% per lot.

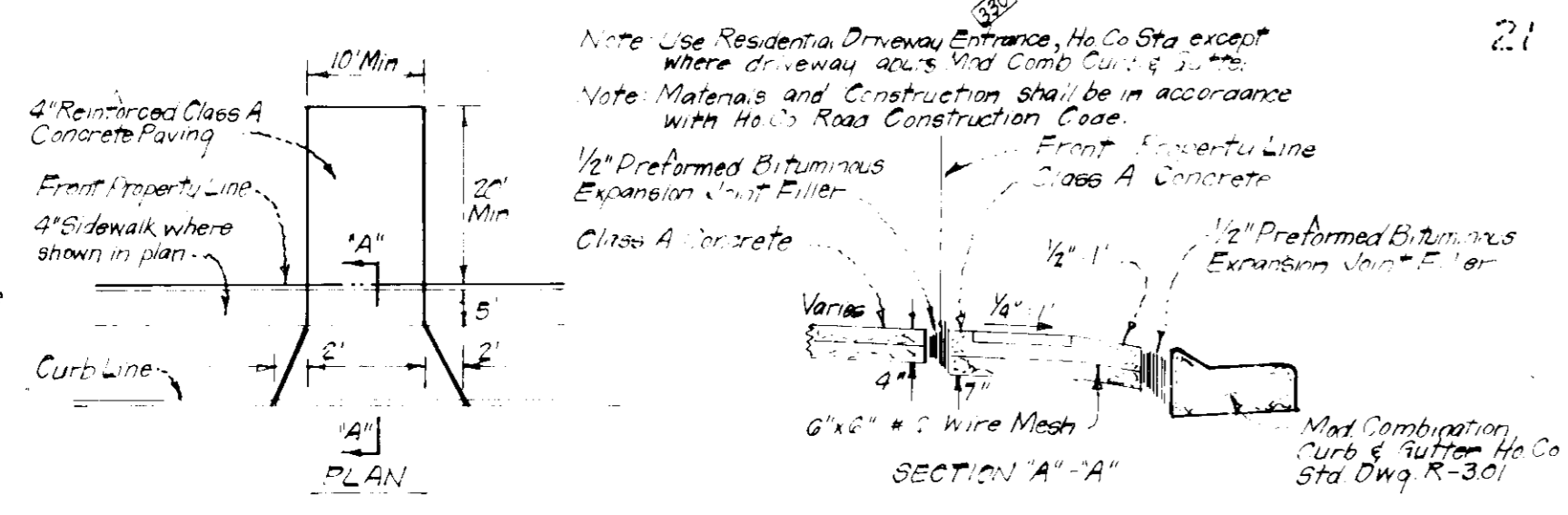
SPECIAL NOTES:

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 onsite P.H.C. shall be 1" copper and the S.H.C. shall be 4" iron.

Stormwater Management provided for in central Facility located in Heritage Woods Section 2 Area. Approved plans # - 86-75.

LOT	STREET ADDRESS
79	8652 CHESHIRE COURT
80	8648 " "
81	8644 " "
82	8640 " "
83	8636 " "
84	8632 " "
85	8628 " "
86	8624 " "
87	8620 CONCORD DRIVE
88	8616 " "
89	8612 " "
90	8608 " "
91	8604 " "
92	8600 " "
93	8596 " "
94	8592 " "
95	8588 " "
96	8584 " "
97	8580 " "
98	8576 " "
99	8572 " "
100	8568 " "
101	8564 " "
102	8560 " "
103	8556 " "
104	8552 " "
105	8548 " "
106	8544 " "
107	8540 " "
108	8536 " "
109	8532 " "
110	8528 " "
111	8524 " "
112	8520 " "
113	8516 " "
114	8512 " "
115	8508 " "
116	8504 " "
117	8500 " "
118	8496 " "
119	8492 " "
120	8488 " "

DRIVEWAY ABUTTING MODIFIED CURB & GUTTER



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 7-23-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE: 7-23-86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE.
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 7-16-86

5-16-86



Owner: Security Development, P.O. Box 417, Ellicott City, Maryland 21043

DESIGNED: BAF
DRAWN: JTR
CHECKED: BAF
DATE: 7-23-86

CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
1131E LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

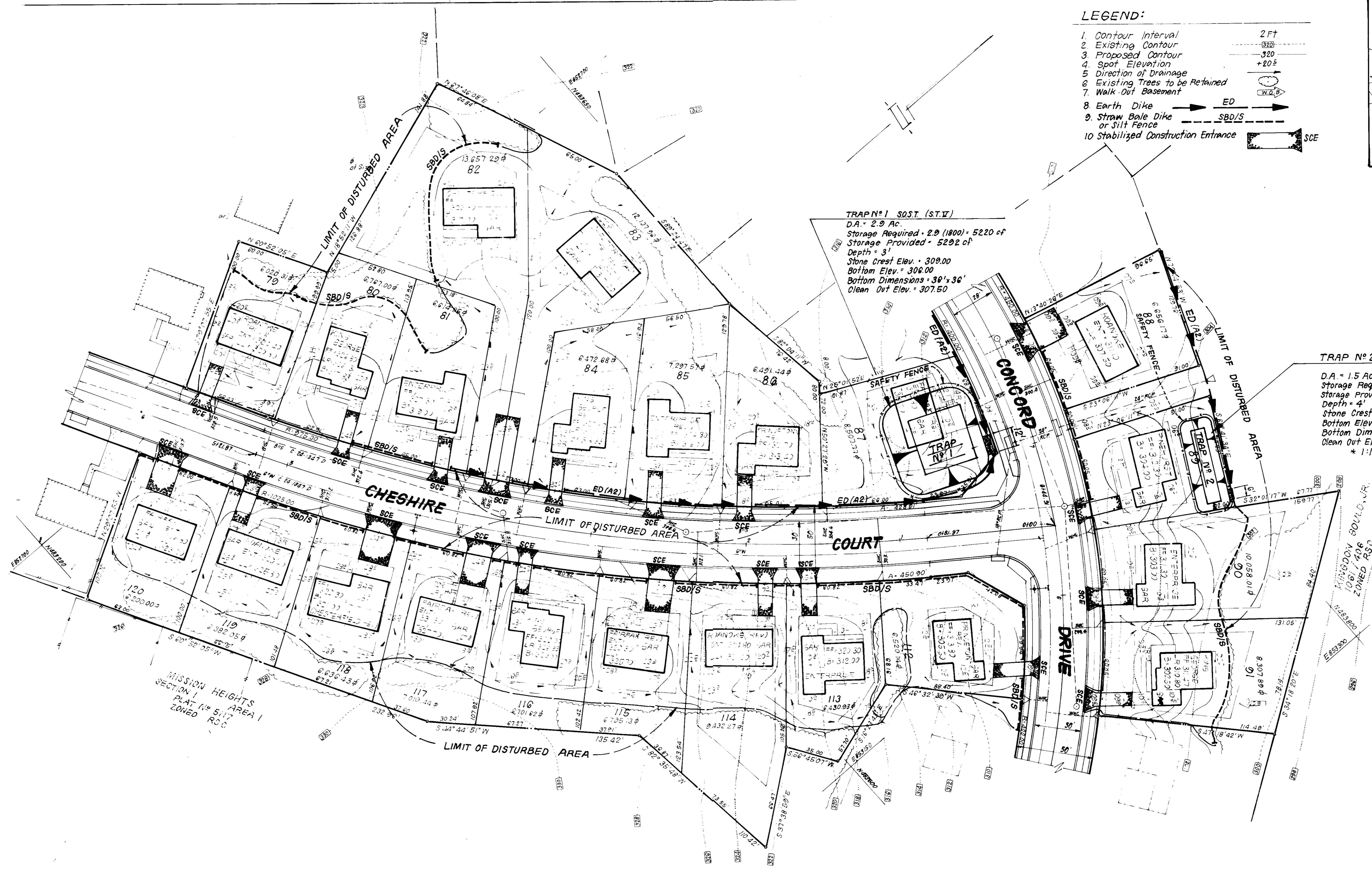
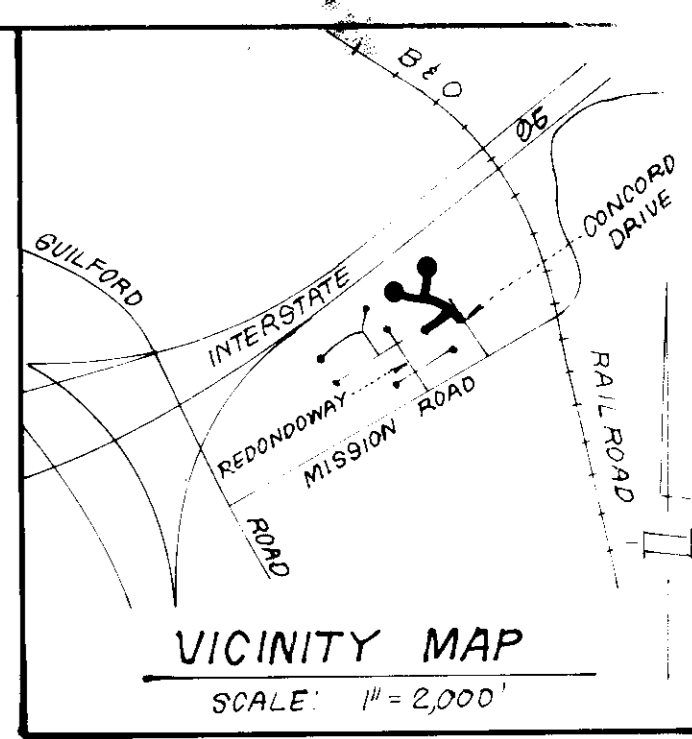
SITE DEVELOPMENT PLAN
LOTS 79 thru 91 & 112 thru 120
HERITAGE WOODS
SECTION 2 AREA 1
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1" = 30'
DRAWING: 10F.3
JOB NO: 85-140
FILE NO: 85-140-X

SDP-86-232

LEGEND:

- 1. Contour Interval 2 Ft
- 2. Existing Contour
- 3. Proposed Contour
- 4. Spot Elevation +20±
- 5. Direction of Drainage
- 6. Existing Trees to be Retained
- 7. Walk-Out Basement
- 8. Earth Dike
- 9. Straw Bale Dike or Silt Fence
- 10. Stabilized Construction Entrance



TRAP N°1 S.O.S.T. (ST.V)
 D.A. = 2.9 Ac.
 Storage Required = 2.9 (1800) = 5220 cf
 Storage Provided = 5202 cf
 Depth = 3'
 Stone Crest Elev. = 309.00
 Bottom Elev. = 306.00
 Bottom Dimensions = 30' x 36'
 Clean Out Elev. = 307.50

TRAP N°2 S.O.S.T. (ST.V)*
 D.A. = 1.5 Ac.
 Storage Required = (1.5)(1800) = 2700 cf
 Storage Provided = 2704 cf
 Depth = 4'
 Stone Crest Elev. = 303.5
 Bottom Elev. = 298.5
 Bottom Dimensions = 48' x 0'
 Clean Out Elev. = 301.5
 * 1:1 Slopes

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 7-22-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: *[Signature]* DATE: 7-23-86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 7-14-86
 CHIEF BUREAU OF ENGINEERING

5-16-86
[Signature]

Howard
[Signature] 7-10-86

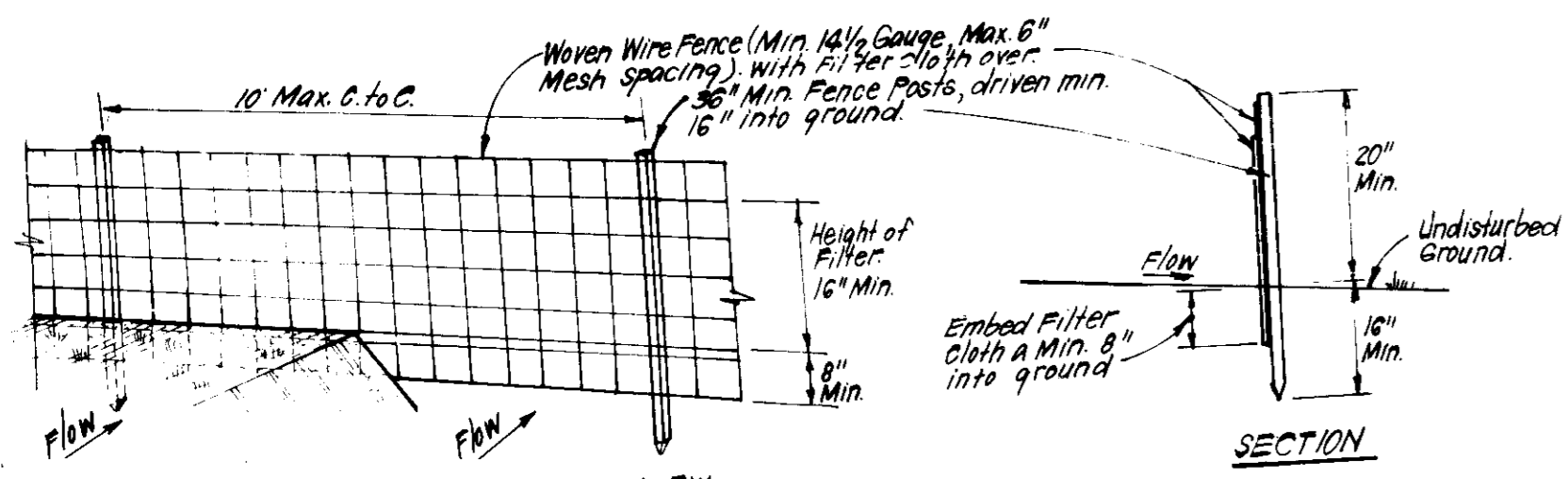
[Signature] 4-21-86
 Maurice M. Simpkins

[Signature] 7/10/86
 Approved Date

[Signature] 7-21-86
 Nelson Clark



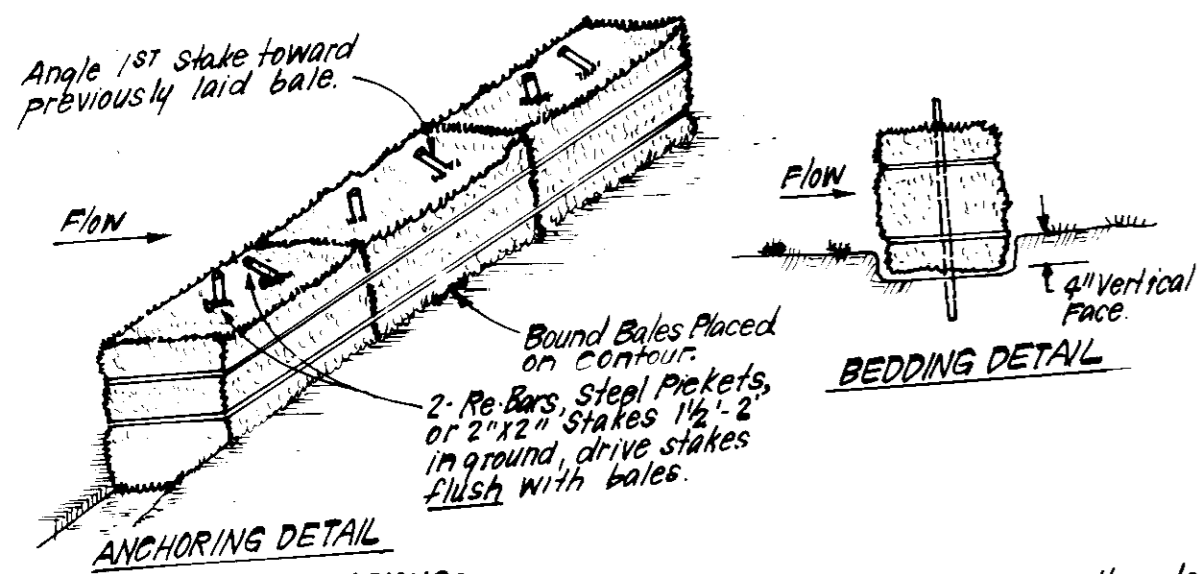
<p>CLARK · FINEFROCK & SACKETT ENGINEERS · PLANNERS · SURVEYORS 11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400</p>		DESIGNED	SCALE
		6LB	1" = 30'
SEDIMENT AND EROSION CONTROL PLAN LOTS 79 THRU 91 & LOTS 112 THRU 120 HERITAGE WOODS SECTION 2 AREA 1 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		DRAWN	DRAWING
		JTR	2 OF 3
FOR: THE RYLAND GROUP (Columbia Division) 7130 Minstrel Way Suite 215 Columbia, Maryland 21045		CHECKED	JOB NO.
		6LB	85-140
DATE: 4-22-86		DATE	FILE NO.
		4-22-86	85-140-SE



- CONSTRUCTION SPECIFICATIONS:**
- Woven 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 ties spaced every 24" at top and mid section.
 - When 2 sections of filter cloth meet, they shall be overlapped by 6" and secured.
 - Maintenance shall be performed as needed and material removed when "bulges" develop in silt fence.

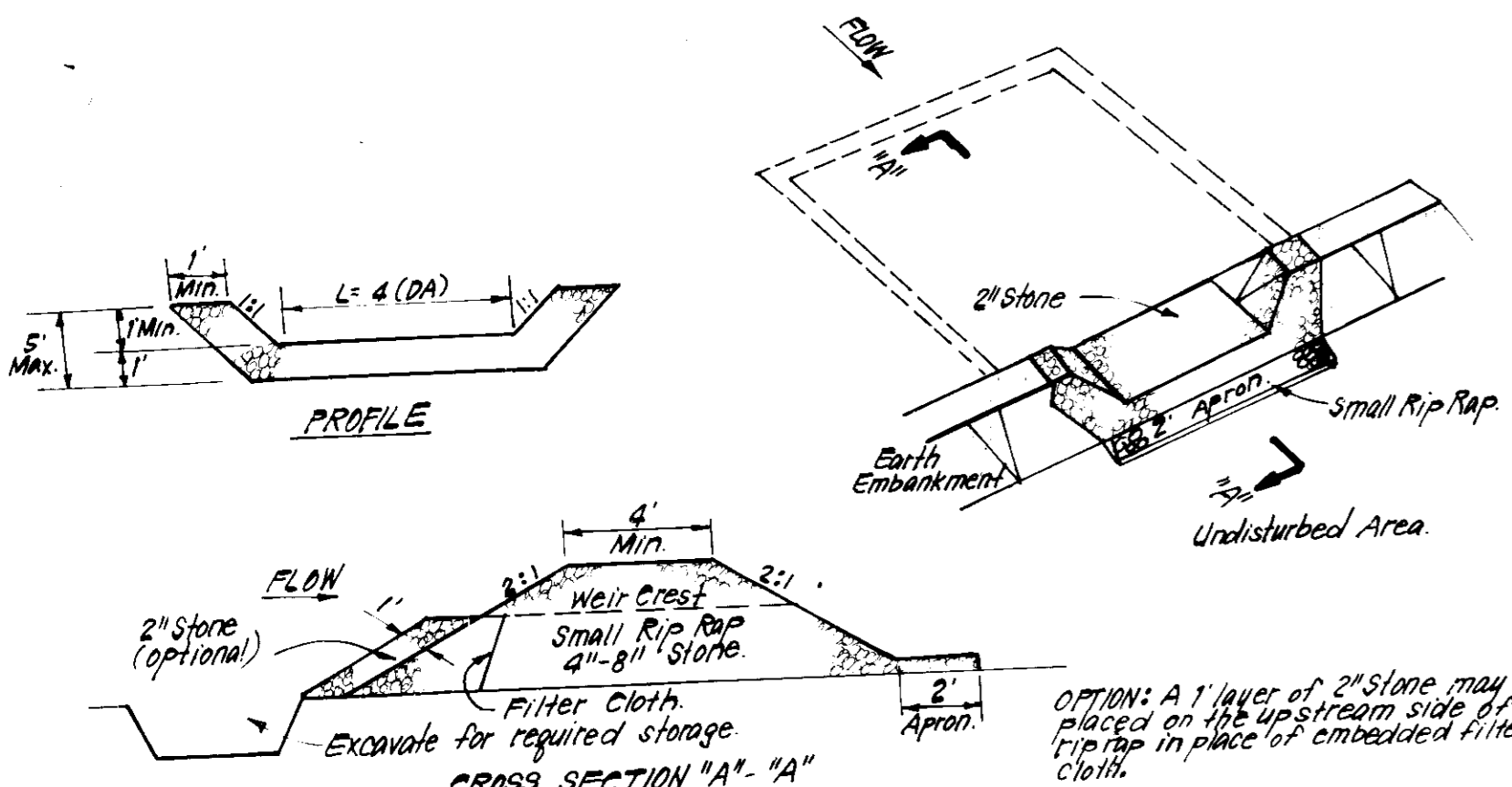
POSTS: Steel, either T or U Type or 2" Hardwood
FENCE: Woven Wire, 1 1/2 Gauge, 6" Max. Mesh Opening
FILTER CLOTH: Filter Cloth, Miraflex 100X, Stabilink, T140N or Approved equal
PREFABRICATED UNIT: Geo-Fab, Envirofence, or Approved equal

SILT FENCE DETAIL (S)
NO SCALE



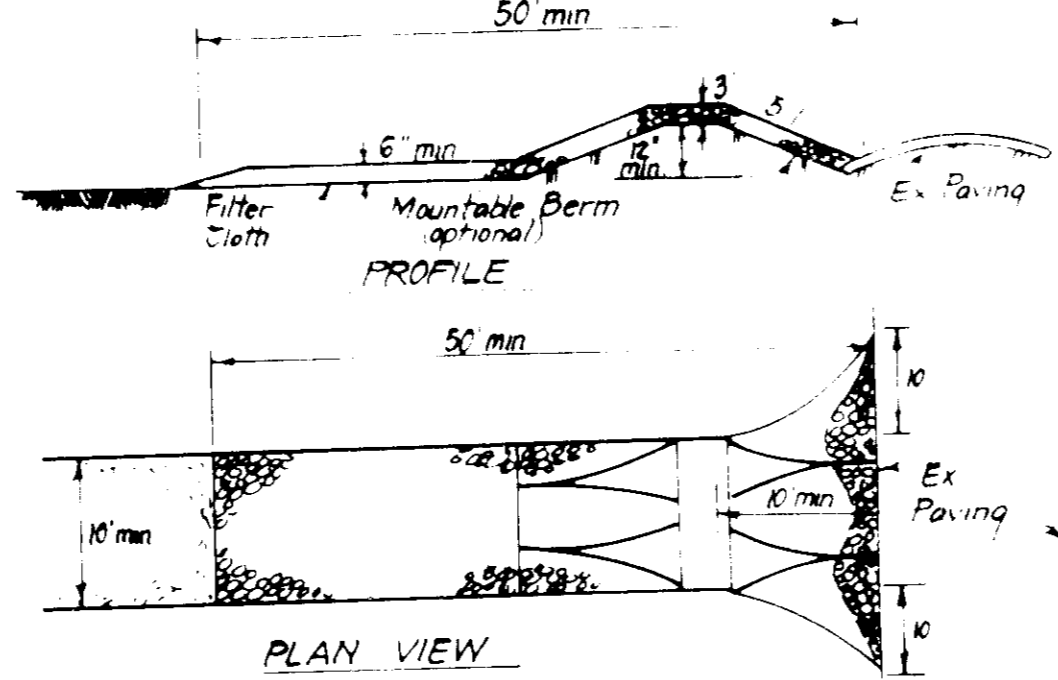
- CONSTRUCTION SPECIFICATIONS:**
- Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
 - Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
 - Bales shall be securely anchored in place by either 2 stakes or re-bars driven thru the bale. The 1st stake in each bale shall be driven flush with the bale. The bales together shall be driven flush with the bales.
 - Inspection shall be frequent and repair/replacement shall be made promptly as needed.
 - 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



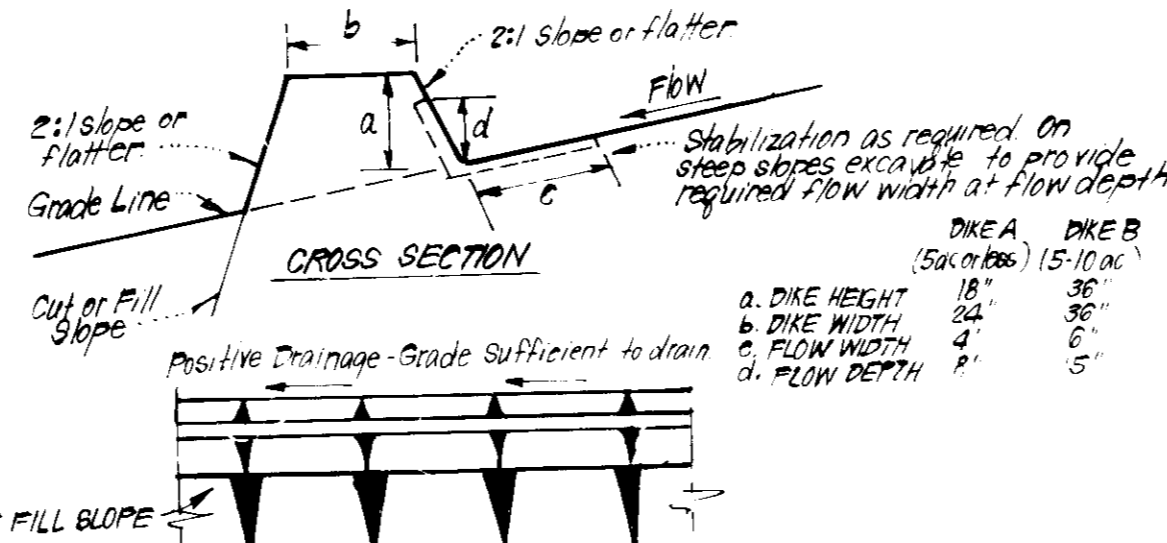
- CONSTRUCTION SPECIFICATIONS:**
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top area shall be cleared.
 - The fill material for the embankment shall be free of roots and other woody vegetation as well as over-ripe grass and be compacted.
 - The fill material for the embankment or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
 - All cut and fill slopes shall be 2:1 or flatter.
 - The stone used in the outlet shall be small rip rap 4" 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.
 - Sediment shall be removed and traps restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
 - The structure shall be inspected after each rain and repairs made as needed.
 - Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 - The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.ST.) ST.V.
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
- Stone size - Use 2" stone or recycled concrete equivalent
 - Length - As required, but not less than 50 feet, except for a single residence lot where a 30 foot minimum length would apply
 - Thickness - Not less than six (6) inches
 - Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs
 - Filter Cloth - Will be placed over the entire area prior to placement 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 moundable berm with 5:1 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 clearing of any material used to trap sediment. All sediment spilled, 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)
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
- All dikes shall be constructed by earth-moving equipment
 - All dikes shall have positive drainage to an outlet
 - Top width may be wider and side slopes may be flatter if desired to facilitate crossing by construction traffic
 - Field location should be adjusted as needed to utilize a stabilized soft outlet
 - 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 sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized
 - 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

TREATMENT	DIKE A	DIKE B
1. 0.5 - 3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2. 3.1 - 5.0%	Seed & Straw Mulch	Seed with or without Erosion Control Blanket
3. 5.1 - 8.0%	Seed with or without 2" Stone	Lined Rip Rap 4"-8" Stone
4. 8.1 - 20.0%	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 3" thick, pressed into soil.
 C Approved equivalents can be substituted for any of the above materials
- 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, disking or other acceptable means before seeding.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

- 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. Harrow or disc into upper three inches of soil. At 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 (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 (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre and 2 lbs per acre three 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.

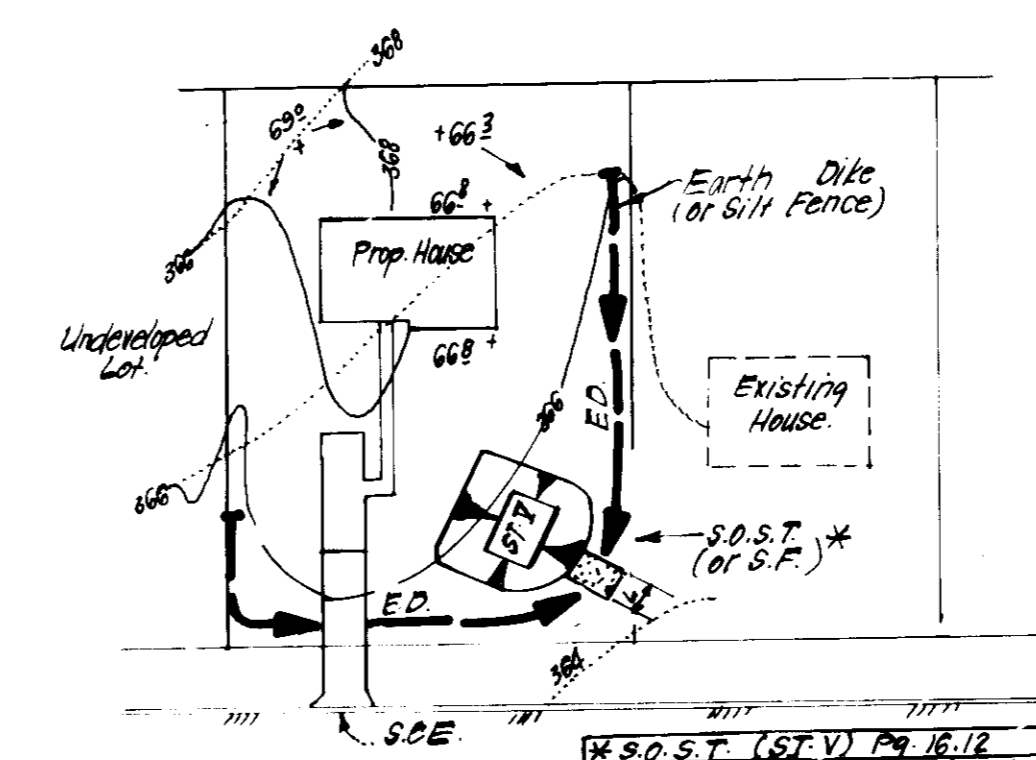
Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

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 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 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 rates and methods not covered.



S.O.ST. (ST.V) TABLE

LOT SIZE	VAAC	VAAC	1 AC.
1/4	2'	3'	6'
1/2	2'	3'	6'
3/4	2'	3'	6'
1	2'	3'	6'
1 1/4	2'	3'	6'
1 1/2	2'	3'	6'
1 3/4	2'	3'	6'
2	2'	3'	6'
2 1/4	2'	3'	6'
2 1/2	2'	3'	6'
2 3/4	2'	3'	6'
3	2'	3'	6'
3 1/4	2'	3'	6'
3 1/2	2'	3'	6'
3 3/4	2'	3'	6'
4	2'	3'	6'

SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

SEDIMENT CONTROL NOTES

- A minimum of 30 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- 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.
- Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter slopes and all 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.
- 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.
- 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.
- 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	3.84 Acres
Area Disturbed	3.23 Acres
Area to be roofed or paved	0.70 Acres
Area to be vegetatively stabilized	2.55 Acres
Total Cut	4200 Cu. yds
Total Fill	1700 Cu. yds
Off-site waste/borrow area location	N/A
- 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 DPM 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 building or grading initial approval by the inspection agency is made.
- If houses are to be constructed on an "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail below). N/A
- The total amount of straw bale dikes/silt fence equals 1128 L.F.

CONSTRUCTION SEQUENCE: No. of Days

- Obtain Grading Permit - 2
- Clear & Grub for installation of Sediment Control Devices. - 1
- Install Sediment Control Devices & Stabilize. - 10
- Clear, Grub & Rough Grade remainder of site and Temporarily Stabilize. - 30
- Construct Structures, Driveways & Walkways - 32.5
- Fine Grade & Stabilize in accordance with Standards and Specifications. - 20
- Upon Approval of the Sediment Control Inspector, remove Sediment and Erosion Controls and Stabilize. - 5

* Delay construction on Lot 87 until removal of Sediment Trap. Construct house utilizing Single Lot Control.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 7-22-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 PLANNING DIRECTOR: *[Signature]* DATE: 7-23-86
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 7-16-86
 CHIEF BUREAU OF ENGINEERING

DIVISION: ZONING AND PLANNING
 HOWARD COUNTY DEPT. OF PUBLIC WORKS
 DATE: 5-16-86
[Signature]

Howard
[Signature] 7-10-86
[Signature] 4-21-86
 Maurice M. Simpkins
[Signature] 7/10/86
 Approved Date

CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11317 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400
 DESIGNED: GLB
 DRAWN: JTR
 CHECKED: GLB
 DATE: 4-22-86
 FOR THE RYLAND GROUP
 30 Minister Way Columbia, Maryland 21046
 Columbia Division
 Suite 215
 Date: 4-21-86
 G. Nelson Clark

CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11317 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400
 DESIGNED: GLB
 DRAWN: JTR
 CHECKED: GLB
 DATE: 4-22-86
 SCALE: As shown
 DRAWING: 3 OF 3
 JOB NO: 85-140
 FILE NO: 85-140 SE
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