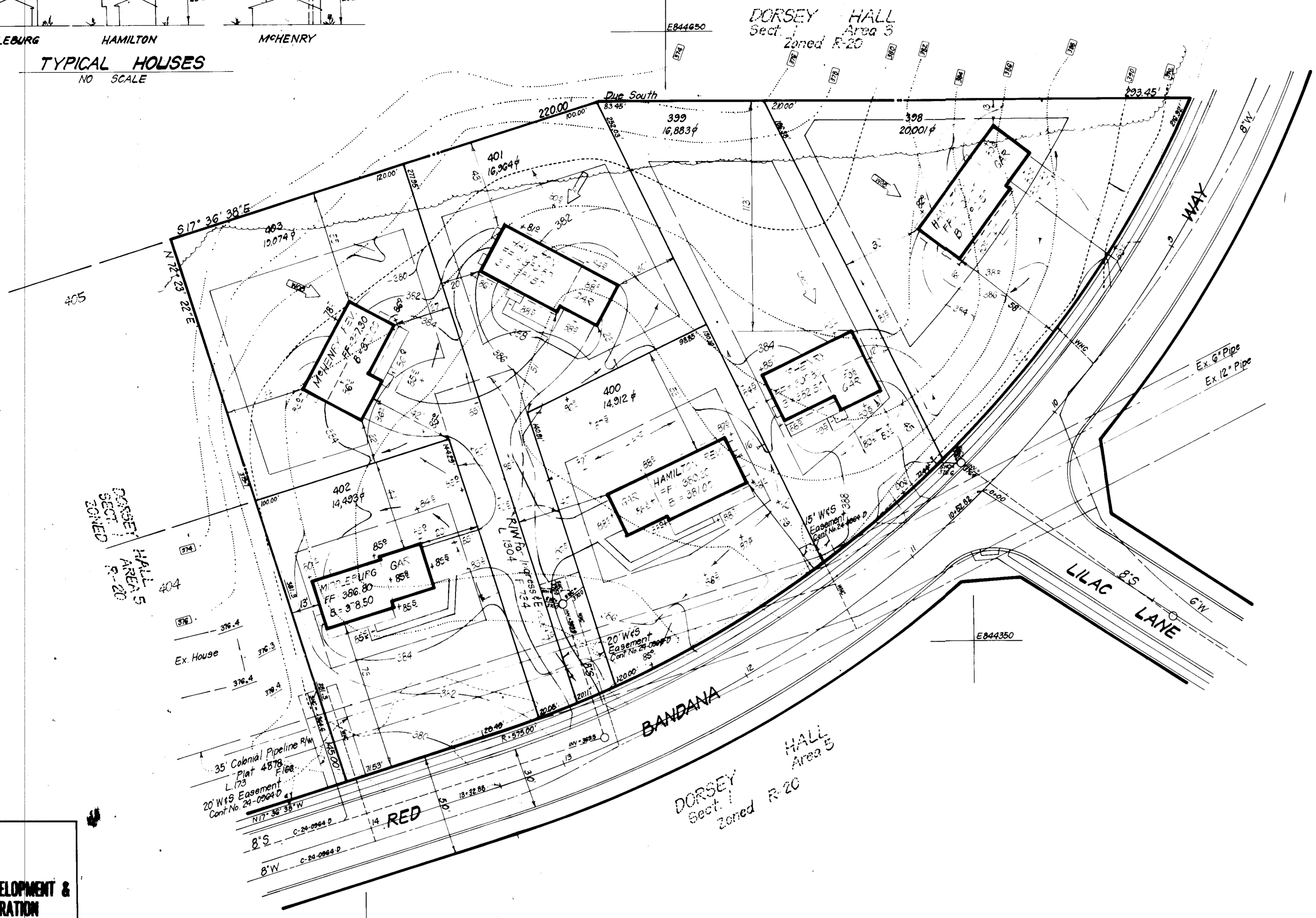
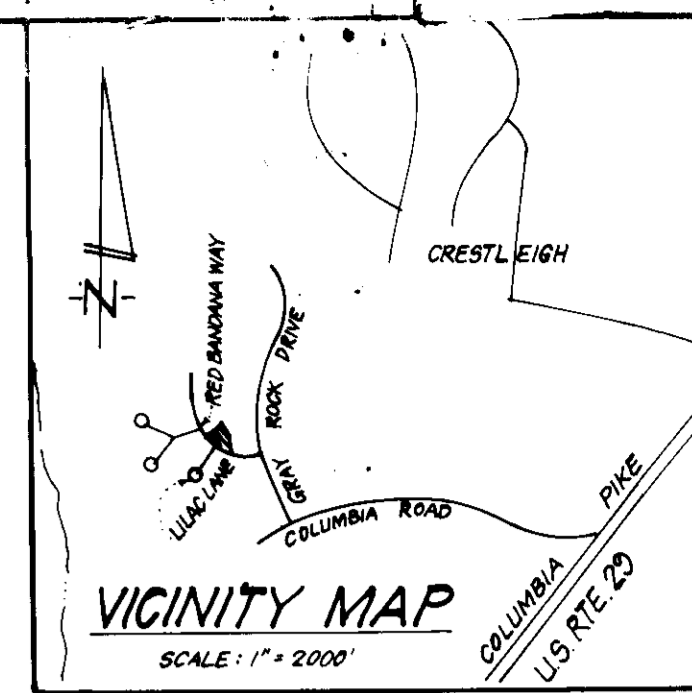


TYPICAL HOUSES
NO SCALE



- GENERAL NOTES:**
- The land included in this plan is zoned: R-20.
 - All coordinates are extensions made from Maryland State Plane Coordinate System. Bearings refer to true North and are based on Maryland Bureau of Control Surveys Point "Columbia Reset 1966" NS12035.04 E 846139.78
 - Tax Map # 24.
 - All roadways are public and existing.
 - Total Area included in this plan: 12.35 Acres.
 - Any damage to county owned rights of way shall be corrected at the developer's expense.
 - Total number of lots in this plan: 6

- LEGEND:**
- Contour Interval
 - Existing Contour
 - Proposed Contour
 - Spot Elevation
 - Direction of Drainage
 - Existing Trees to be Retained
 - Existing Spot Elevations

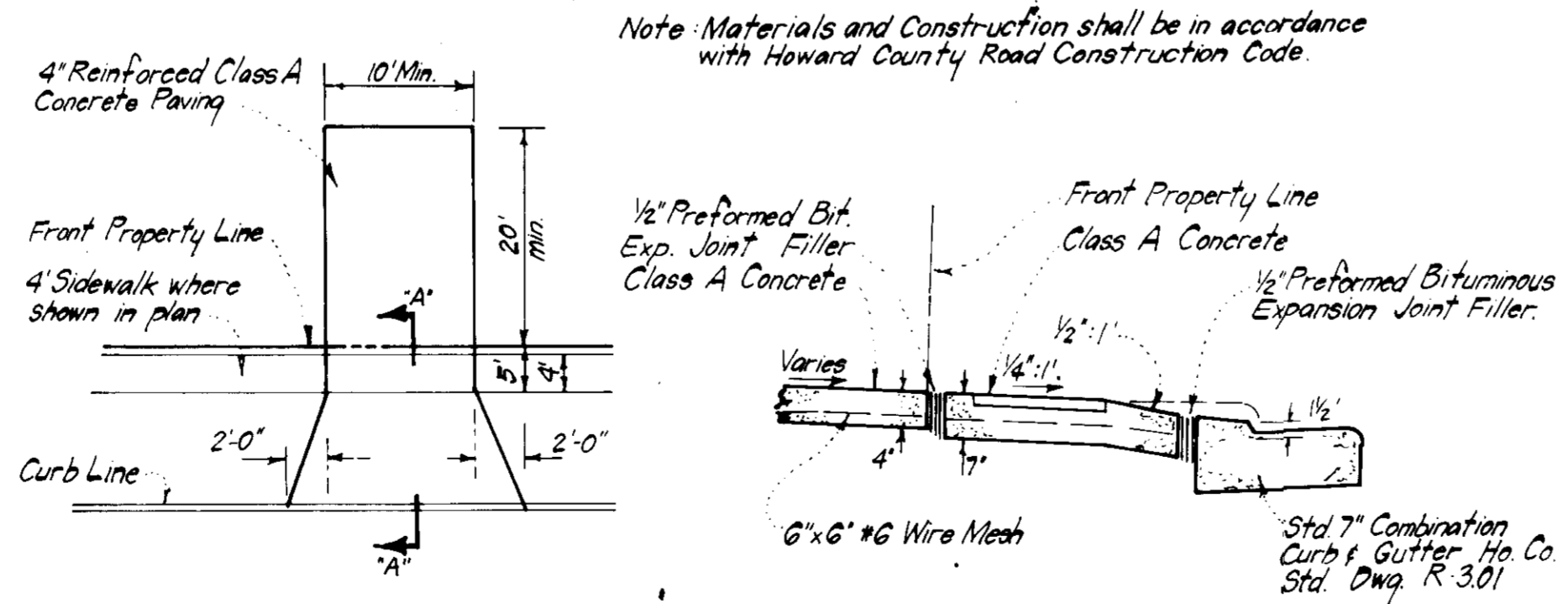
APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 12-3-84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER
DATE 12-26-84

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR
DATE 12-28-84

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE.
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR
DATE 12-19-84

CHIEF BUREAU OF ENGINEERING
DATE 12-19-84



DRIVEWAY ABUTTING STD. 7" COMB. CURB & GUTTER
NO SCALE

LOT #	STREET ADDRESS
398	4245 Red Bandana Way
399	4237 " " "
400	4233 " " "
401	4229 " " "
402	4221 " " "
403	4225 " " "

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL
DORSEY HALL	1 5	398 thru 403

PLAT OR L.P.	BLOCK #	ZONE	TAX/ZONE MAP/ELECT DIST	CENSUS TR.
4878	21	R-20	# 24	2ND 6023.01

WATER CODE	SEWER CODE
F 08	5830000



CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS

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

DESIGNED	JME	SITE DEVELOPMENT PLAN LOTS 398 THRU 403	SCALE 1" = 30'
DRAWN	BAF	DORSEY HALL	DRAWING 1 of 3
CHECKED	JME	SECTION 1 AREA 5 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 83-119
DATE	FOR	THE RYLAND GROUP (COL DIV.) One Knoll North Drive Suite 503 Columbia, Maryland 21044	FILE NO. 83-119-X

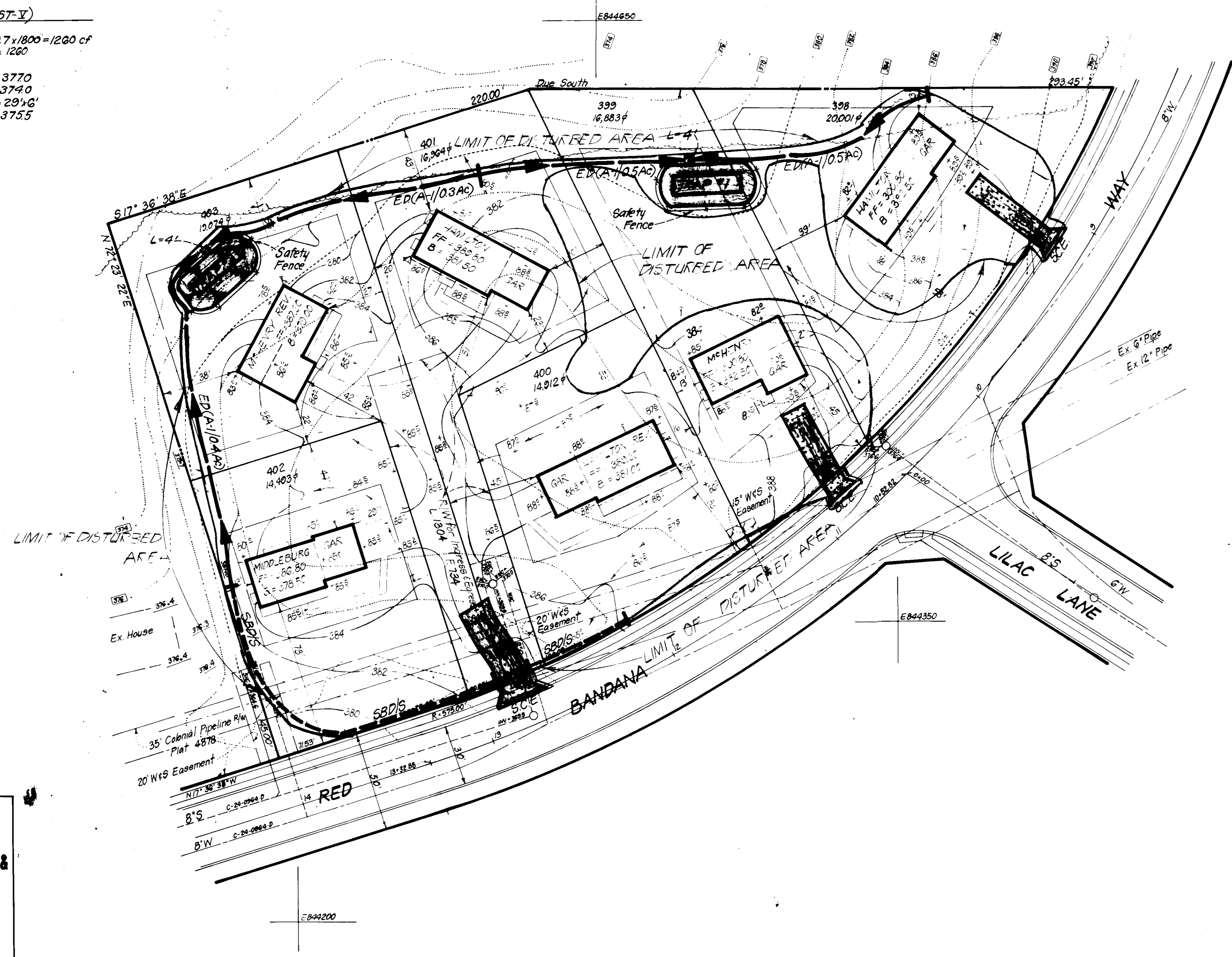
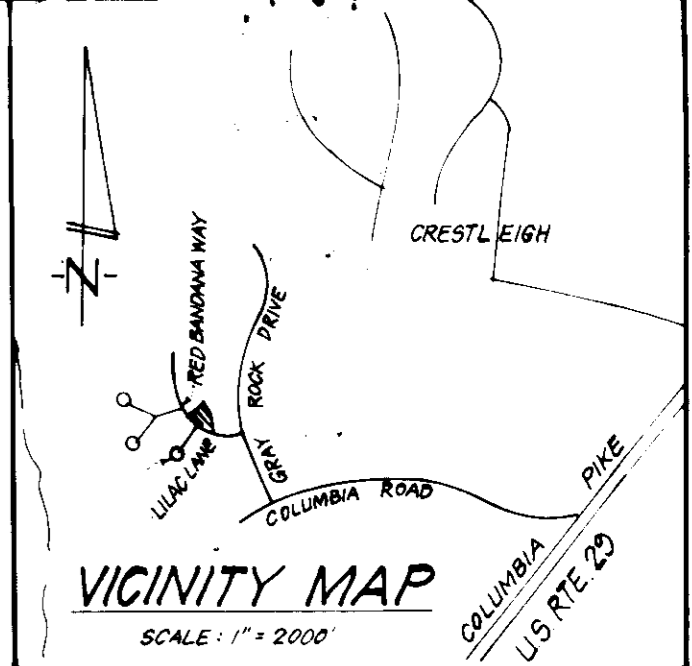
11-2-84

SDP-85-86

TRAP #1 (S.O.S.T. ST-V)
 D.A. = 1.0 Acre
 Storage Required = 10 x 1800 = 1800 cf
 Storage Provided = 1800 cf
 Depth = 3'
 Top of Stone Crest = 380.0
 Bottom Elevation = 377.0
 Bottom Dimension = 34' x 9'
 Cleanout Elevation = 378.5



TRAP #2 (S.O.S.T. ST-V)
 D.A. = 0.7 Acre
 Storage Required = 0.7 x 1800 = 1260 cf
 Storage Provided = 1260
 Depth = 3'
 Top of Stone Crest = 377.0
 Bottom Elevation = 374.0
 Bottom Dimension = 29' x 9'
 Cleanout Elevation = 375.5



LEGEND:

- 1. Contour Interval
- 2. Existing Contour
- 3. Proposed Contour
- 4. Spot Elevation
- 5. Direction of Drainage
- 6. Existing Trees to be Retained
- 7. Existing Spot Elevations
- 8. Earth Dike
- 9. Straw Bale Dike / Silt Fence
- 10. Stabilized Construction Entrance

APPROVED
 DIVISION OF LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 12-3-84
 M.S. / J.F.D.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *John P. ...* DATE: 12-26-84

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: *Amel Knoll* DATE: 12-28-84
 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: *John F. ...* DATE: 12-19-84
 CHIEF BUREAU OF ENGINEERING

Reviewed for: **HOWARD S.C.D.**
 Name: *Howard ...*
 and meets Technical Requirements
 Signature: *Howard ...* Date: 12-17-84
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *Stephen L. ...* DATE: 12/17/84
 APPROVED

DEVELOPER/BUILDER'S CERTIFICATE
 "I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize persons on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."
 Signature: *Marice M. Simpkins* DATE: 11-5-84
 Marice M. Simpkins



ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable solution 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: *G. Nelson Clark* DATE: 11-5-84
 G. Nelson Clark

SUBDIVISION NAME DORSEY HALL	SECT./AREA 1/5	LOT/PARCEL 398-2-401-404
PLAT OR L.P. 4878	BLOCK # R-20	TAX/ZONE MAP/ELECT. DIST./GEN. TR. # 24 2ND
WATER CODE F 08	SEWER CODE 5830000	

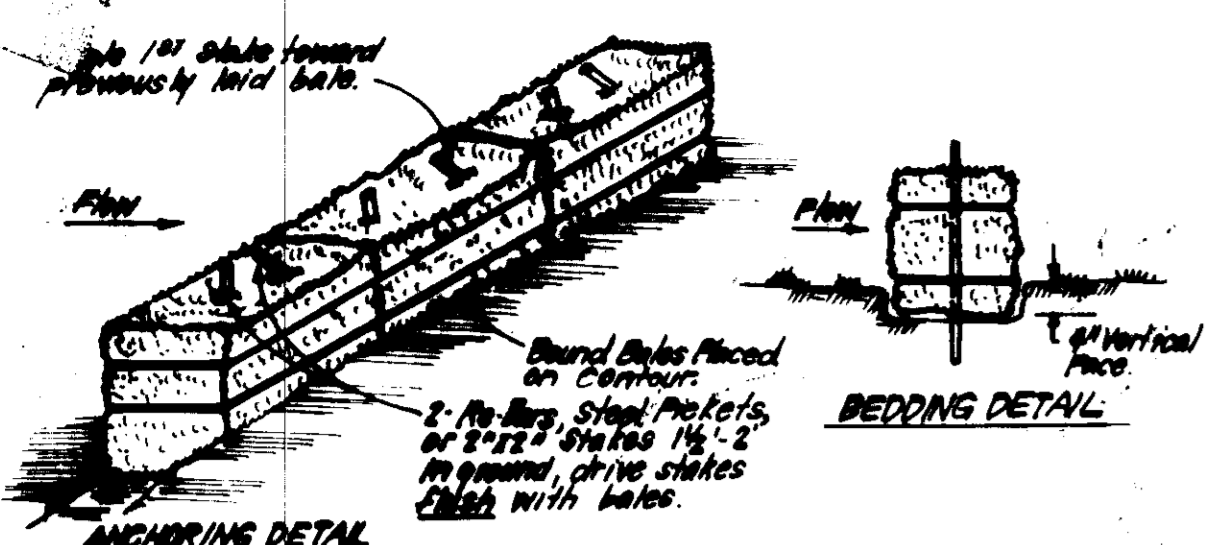
CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11315 LOCKWOOD DRIVE • SILVER SPRING, MARYLAND 20904 • (301) 593-3400

DESIGNED J.P.A. J.M.E.	SEDIMENT & EROSION CONTROL PLAN LOTS 398 THRU 403	SCALE 1" = 30'
DRAWN V.H.L. B.A.F.		DRAWING 2 of 3
CHECKED J.P.A. J.M.E.	SECTION 1 AREA 5 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 83-119
DATE 11-2-84	FOR: THE RYLAND GROUP (COL. DIV.) One Knoll North Drive Suite 503 Columbia, Maryland 21044	FILE NO. 83-119-SE

SDP-85-86

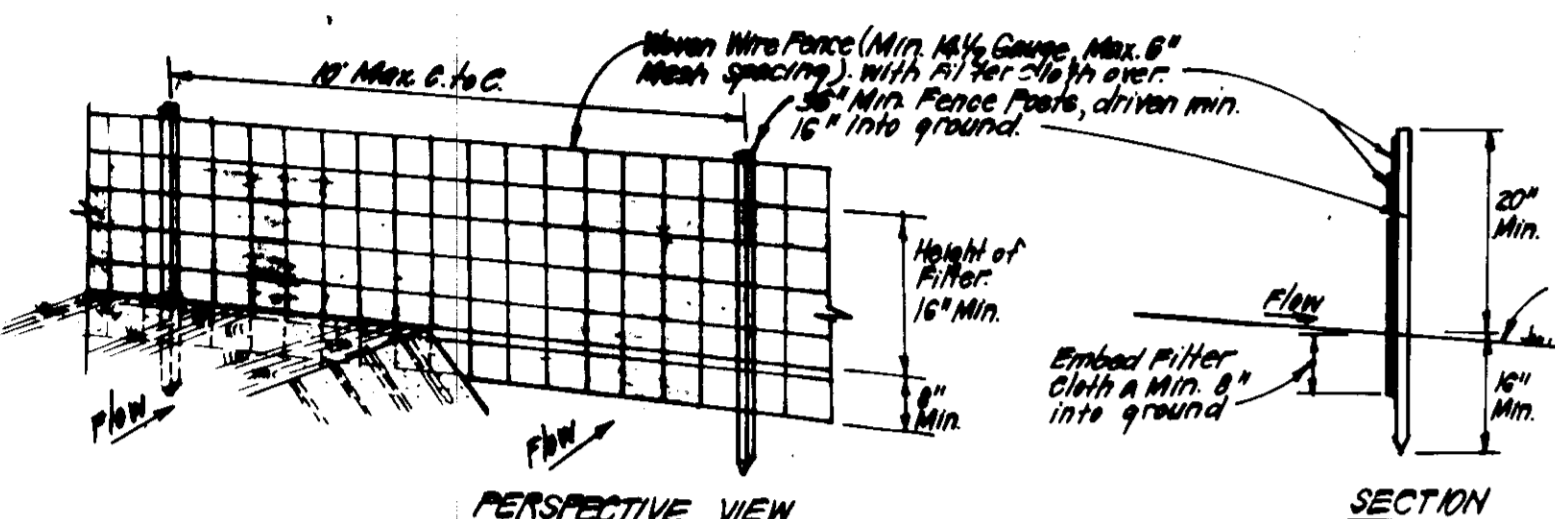
GENERAL NOTES

- Grading Permits shall be obtained prior to installation of sediment control.
- All Sediment Control Measures will be installed and stabilized according to this plan prior to any other grading, clearing or disturbance of existing surface of site.
- Notify the Bureau of Inspections and Permits at least 24 hours before starting any work.
- All Sediment Control Practices to conform to the Standards and Specs for Soil Erosion and Sediment Control in Developing Areas, and shall be adjusted to meet actual field conditions.
- All structural Sediment Control Measures are to remain in place until permission for their removal has been obtained from the Bureau of Inspections and Permits.
- On Site Inspection and maintenance of all sediment control measures (including clean-out of Sediment Traps and Dikes, and proper establishment of all planned vegetative measures) will be the responsibility of the developer or his representative on the site, on a continuing day to day basis.
- It will be the developer's responsibility to provide additional Sediment & Erosion Control Devices to protect stabilized areas during construction.
- The contractor shall keep all public roads free of sediment deposits left from traffic leaving construction site.
- Approval of this plan is conditional upon the approval of Sediment Control Plan for the on-site waste or bottom area prior to the import of any borrow or export of waste to or from this site.
- See Pages 51.01-51.08 of the Maryland State & Specs for Soil Erosion and Sediment Control for Permanent Seeding and Pages 50.01-50.05 for Temporary Seeding.
- As per C.D.M.A.R. D.R.S. 01.06-- "Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: (a) Seven calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to one vertical (3:1) and (b) fourteen days as to all other disturbed or graded areas on the project site."
- All Pipes to be blocked at the end of each day (See detail below).
- The total amount of Straw Bale Dikes/Silt Fence shown = 2350 L.P.
- SITE ANALYSIS:**
 - A Total Area: 2,349.7 Acres
 - B Area to be Roofed: 0.2550 Acres
 - C Area to be Paved: 0.1970 Acres
 - D Area to be Seeded: 1,235.7 Acres
 - E Area Undisturbed: 0.6520 Acres
- CONSTRUCTION SEQUENCE:**
 - A Install Sediment & Erosion Control Devices and Stabilize.
 - B Excavate for Foundations and Rough Grade.
 - C Construct Structures, Driveways & Sidewalks.
 - D Final Grade in accordance with note #10.
- IP houses are to be constructed on an "As-Built" basis, at random, single lot Sediment Control, as shown below, shall be implemented.
- All sediment traps shown must be fenced and warning signs posted around their perimeter in accordance with Vol 1, Chap. 12, of The Howard Co. Design Manual for Storm Drainage.



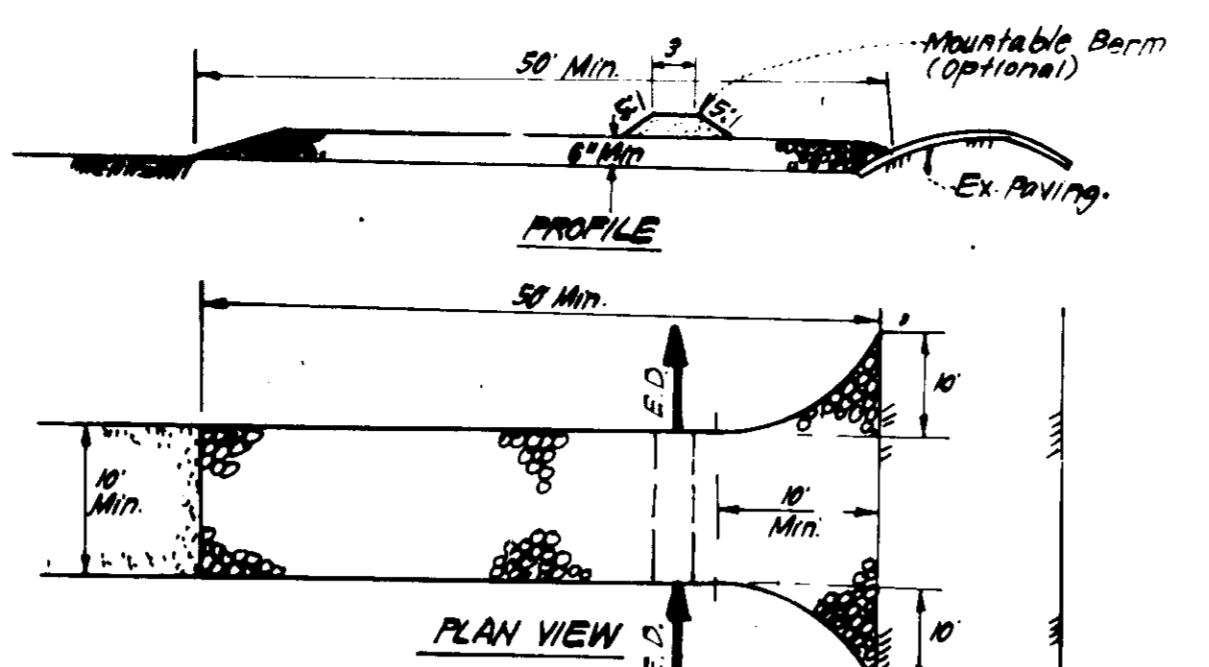
- CONSTRUCTION SPECIFICATIONS:**
- Bales shall be placed at the top of a slope or on the contour and in a row with ends right, matching the adjacent bales.
 - Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
 - Bales shall be securely anchored in place by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



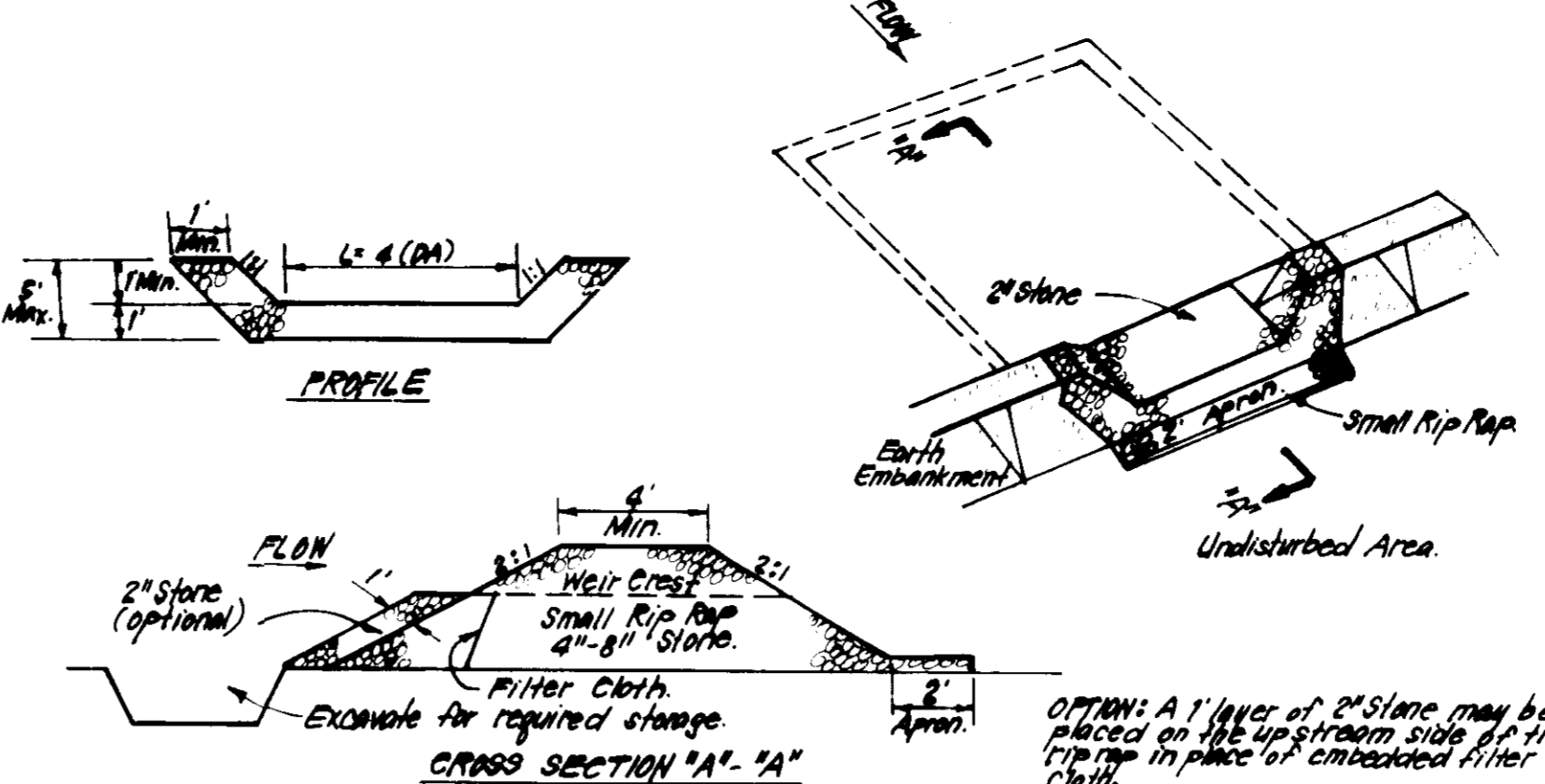
- CONSTRUCTION SPECIFICATIONS:**
- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
 - Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
 - When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and stapled.
 - Maintenance shall be performed as needed and material removed when "pulpies" develop in Silt Fence.
- POSTS: Steel either T or U Type or 2" Hardwood.
FENCE: Woven Wire, 1 1/4 Gauge, 6" Max. Mesh Opening.
FILTER CLOTH: Filter X, Miraflex 100X, Stabilinks, T140N or Approv. equal.
PREFABRICATED UNIT: Geofab, Envirofence, or Approv. equal.

SILT FENCE DETAIL (S)
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
- Stone Size - Use 2" Stone, or reclaimed or recycled concrete equivalent.
 - Length - As required, but not less than 50 feet (except on a single residence lot where a 100' min. length would apply).
 - Thickness - Not less than 6".
 - Width - Ten foot min, but not less than the full width at point where ingress of water 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 "drainage berm" or "drainage ditch" 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 sweeping with additional stone as conditions demand. Sediment spillers 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 (S.C.E.)
NO SCALE



- CONSTRUCTION SPECIFICATIONS:**
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil area shall be compacted.
 - The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material 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" - 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.
 - 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.
 - 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.S.T.) ST.V.
NO SCALE

Development for: **HOWARD** S.C.D.
and meets Technical Requirements
James M. Sellen 12-17-84
Signature Date
U.S. Soil Conservation Service

APPROVED
DIVISION OF LAND DEVELOPMENT &
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 12-3-84

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Huber 12/17/84
APPROVED DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
James Boyles 12-26-84
DATE

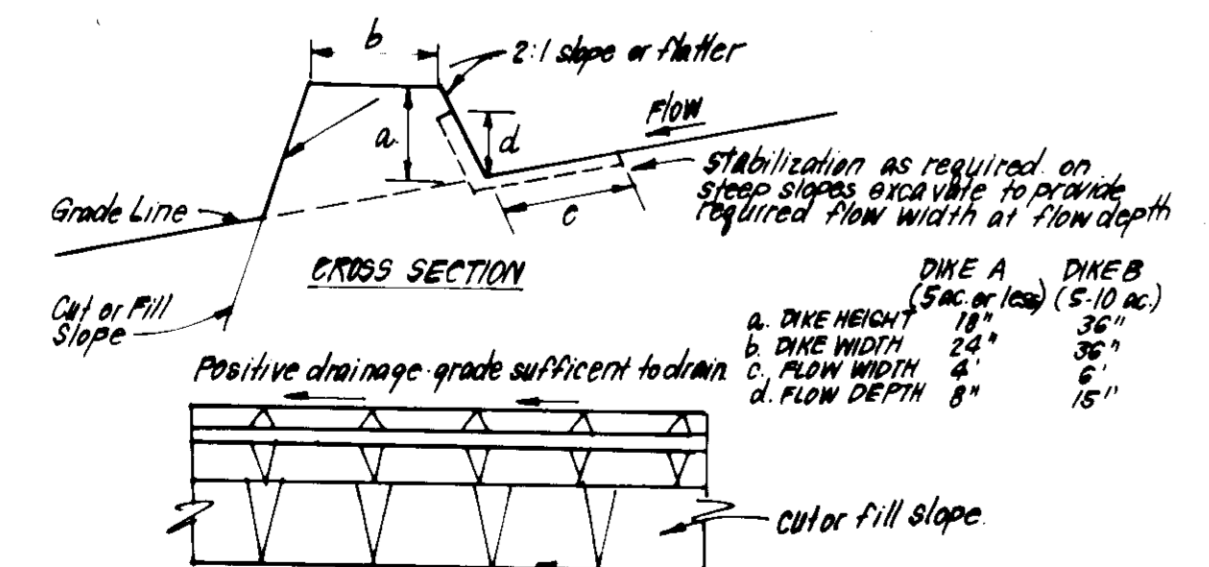
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
James Boyles 12-28-84
DATE

PLANNING DIRECTOR
James Boyles 12-28-84
DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
James Boyles 12-19-84
DATE

DIRECTOR
James Boyles 12-19-84
DATE

CHIEF BUREAU OF ENGINEERING
James Boyles 12-19-84
DATE



- CONSTRUCTION SPECIFICATIONS:**
- All dikes shall be compacted 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 safe outlet.
 - Earth dikes shall have an outlet that functions with a min. of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike or the drainage area above the dike are not adequately stabilized.
 - Stabilization shall be: (A) in accordance with the State & Specs for seed and straw mulch if not in seeding season; (B) flow channel as per chart shown at right.

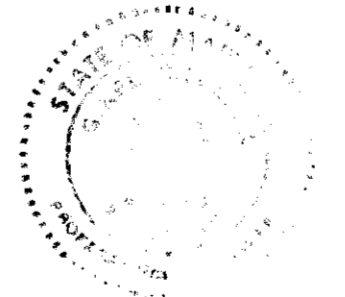
EARTH DIKE DETAIL (E.D.)
NO SCALE

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	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 w/ Jute or Eragrost, God. 2" Stone
3	5.1-8.0%	Seed w/ Jute or Sod, 2" Stone	Lined Rip Rap 4"-8" Stone
4	8.1-20.0%	Lined Rip Rap 4"-8" Stone	Engineering Design

- Stone to be 2" Stone or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.
- Rip Rap to be 4"-8" in a layer at least 8" thick, pressed into soil.
- Approved equivalents can be substituted for any of the above materials.
7. Periodic Inspection and Required Maintenance must be provided after each run.

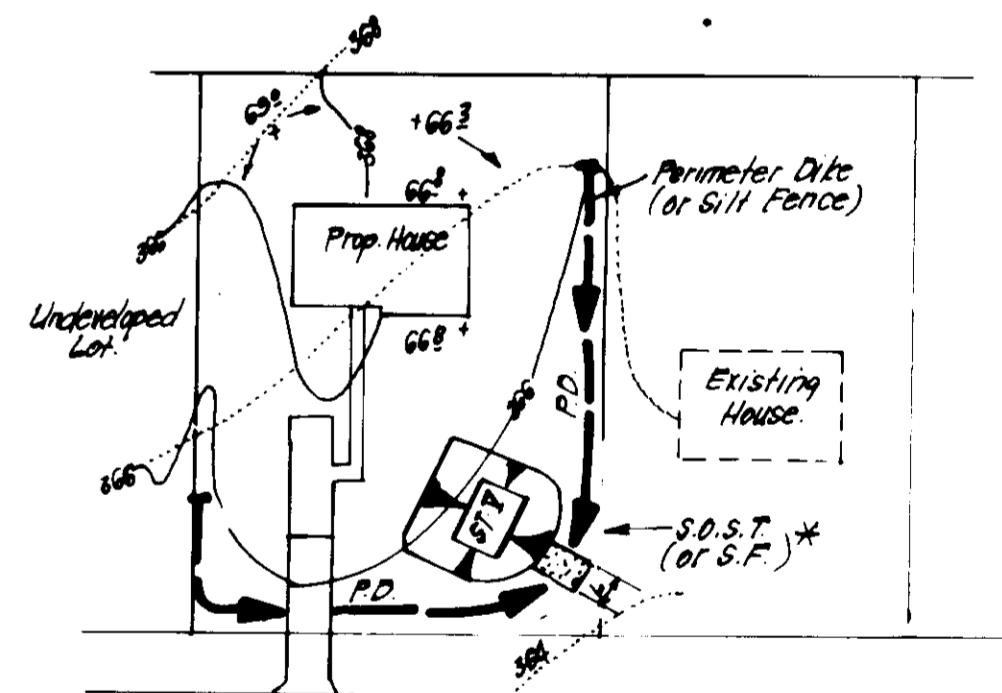
DEVELOPER'S CERTIFICATE
"I/We certify that all development and construction will be done according to the plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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 deemed necessary."
Thomas A. Smith 11-5-84
Signature of Developer/Builder Date



G. Nelson Clark 11-5-84
Date

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment 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.



LOT SIZE	VAE	TRAC	TAC
2	2	2	2
2	2	2	2
2	2	2	2
2	2	2	2
2	2	2	2
2	2	2	2

SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

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

DESIGNED: JPA
DRAWN: VHL
CHECKED: JPA
DATE: 11-2-84

SCALE: 1"=30'
DRAWING: 3 of 3
JOB NO: 83-119
FILE NO: 83-119 SE

FOR: THE RYLAND GROUP (Co. Div.)
One Knoll North Drive Suite 503
Columbia, Maryland 21044

SDP-85-86