

**GENERAL NOTES**

- All coordinates are based on Howard County Geodetic control traverse stations.
- Total number of lots: 8.
- The total area included in this plan is 149,716 sq ft or 3.437 Acres.
- Any damage to county owned rights of way shall be corrected at the developer's expense.
- The contractor or developer shall contact the Construction Inspection Division 24 hours in advance of commencement of work at 792-2630.
- The property shown is zoned R-20.
- Plan Reference Nos are: S-90-20, F-87-140, P-90-31, F-91-07.
- Improvement to property: Single Family detached unit.
- Existing topography was field run by Clark, FineFrock & Sackett, Inc. in December of 1989.

**SPECIAL NOTES**

- All road construction, storm drainage facilities and public water and sewer are shown for reference only. Improvements shown within the rights of way on this S.D.P. are not to be used for construction, see approved Rd. constr. plans F-91-07 and/or Water & Sewer Contr. No. 24-3081-D. There are no Wetlands on this site as determined by Exploration Research, Ellicott City, Md. dated @ 22-89.
- Stormwater Management provided for under StoneBrooke Two F-87-140. It will be modified to include this development under F-91-07.

Subdivision Name	STONEBROOKE THREE	Lots	24-33
Plot No.	9989	Block No.	1
Zone	R-20	Tax./Map No.	2nd 602B
Water Code	F-16	Sewer Code	1400520

**MIN LOT AREA TABULATION**

LOT No	TOTAL LOT AREA	PIPE STEM AREA	FLOOD PLAIN AREA	STEEP SLOPE AREA	RESULTING MIN LOT AREA
24	16000	---	---	90	15910
25	18030	2000	---	600	15430
26	18025	2000	---	1674	14351
27	16013	---	---	---	16013
28	16059	---	---	900	15159
29	18436	2472	---	---	16022
30	27111	4420	---	---	22691
31	20043	---	---	---	20043

**REVISIONS**

No	Rev. desc & dtd.	Date
1	Rev. desc & dtd. lot 26, Rev. desc typical	6-2-98
2	Rev. desc & dtd. lot 27, Add desc typical	4-2-98
3	Rev. desc & dtd. lot 24, Add desc typical	3-18-98
4	Rev. desc & dtd. lot 31, Add desc typical	8-6-97

**ADDRESS CHART**

LOT NO	STREET ADDRESS
24	4505 Rebecca Court
25	4509 " "
26	4513 " "
27	4517 " "
28	4516 " "
29	4512 " "
30	4508 " "
31	4504 " "

**OWNER / DEVELOPER**

DORSEY CONTRACTORS, INC.  
16347 Frederick Road  
Woodbine, Maryland 21797

**CLARK • FINEFROCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS

115 MINNETHLE WAY • COLUMBIA, MD 21046 • (410) 871-1500 • BALTO. • (410) 871-1500 • WASH. DC • (202) 462-1500

**SITE DEVELOPMENT PLAN**  
LOTS: 24-31

**SCALE**  
1" = 30'

**DRAWING**  
1 of 3

**DESIGNED**  
JME

**DRAWN**  
BAK

**CHECKED**  
JME

**DATE**  
July 1990

**FOR: DORSEY CONTRACTORS, INC.**  
16347 Frederick Road  
Woodbine, Maryland 21797

**JOB NO**  
89-006

**FILE NO**  
89-006X

**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS**  
HOWARD COUNTY HEALTH DEPARTMENT

*James M. Handwerker* 10/11/91

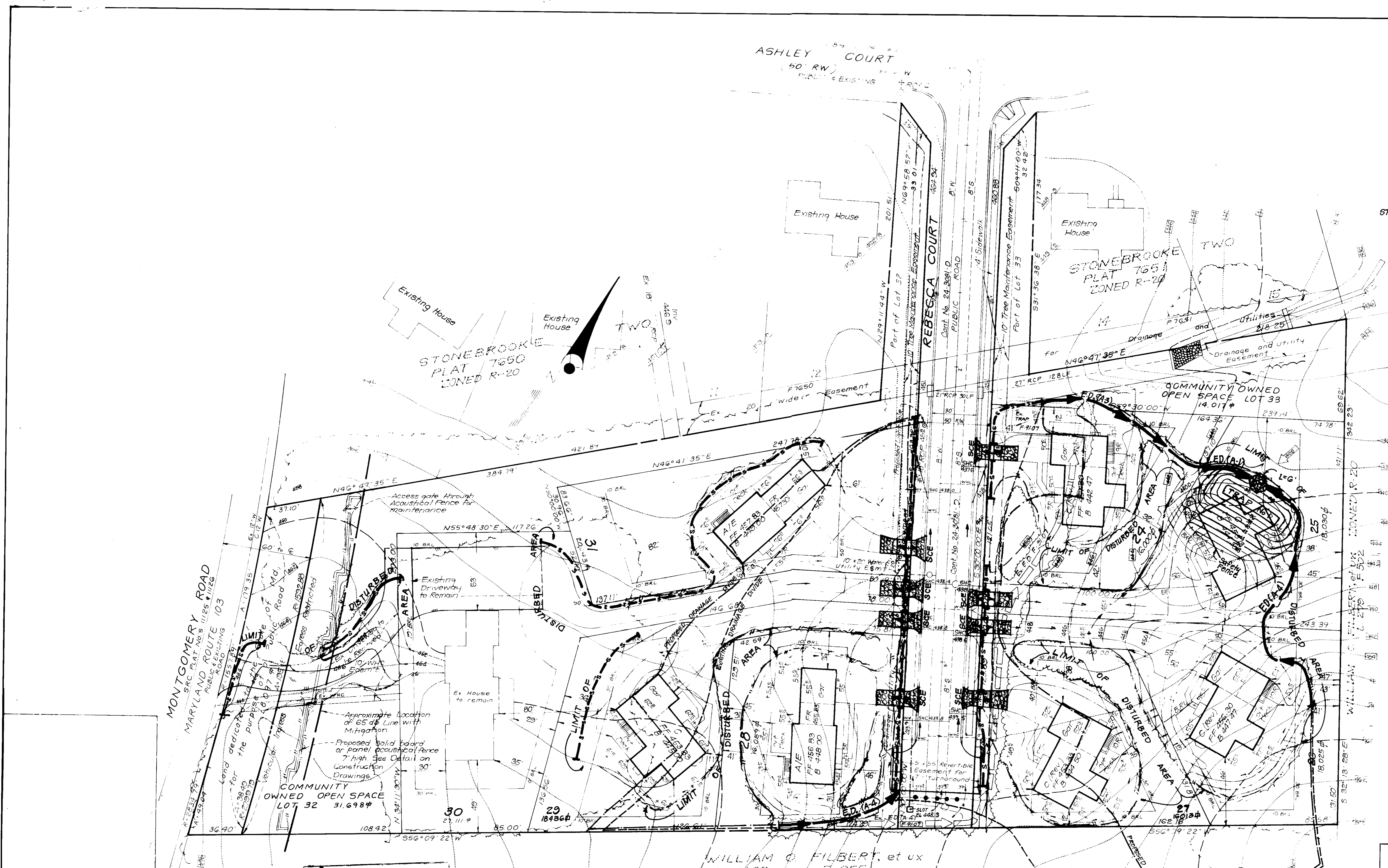
**APPROVED: HOWARD COUNTY OF PLANNING & ZONING**

*James M. Handwerker* 10/16/91

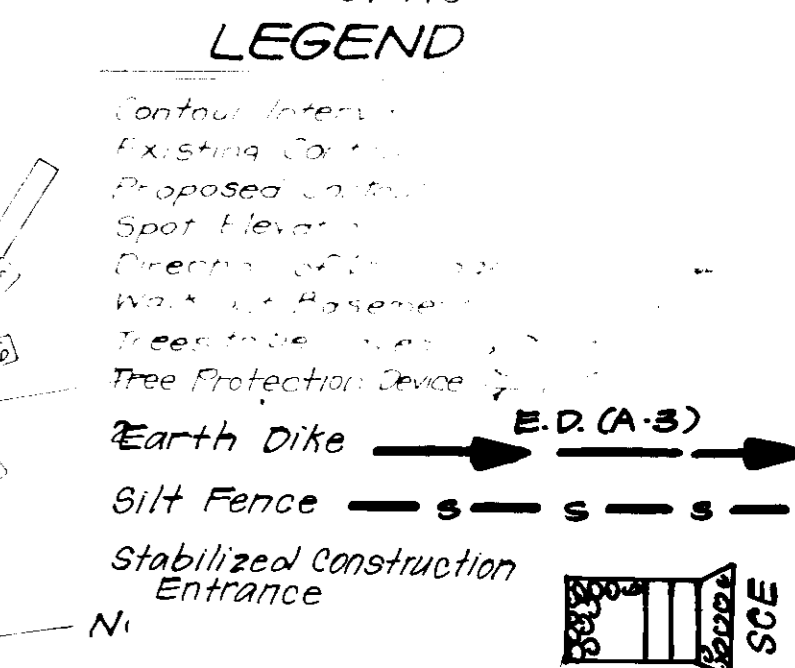
**APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE**  
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*James M. Handwerker* 10/9/91

**CHIEF BUREAU OF ENGINEERING** 10/11/91



VICINITY MAP  
 LOCATION OF OFF-SITE  
 STORMWATER MANAGEMENT FACILITY  
 F 67-140



**TRAP No. 1 S.O.S.T. (ST-Y)**

Drainage Area  $E_x = 1.5$  Ac  
 Trap = 1.2 Ac

Storage Required 2700 CF  
 Storage Provided 2800 CF  
 Depth 4'  
 Top of Stone Weir 439.0  
 Bottom Elevation 434.0  
 Clean out Elevation 437.0  
 Bottom Dimensions 42' x 6'  
 L = 6'  
 2:1 Side Slopes

NOTE: Delay construction of house on lot 25 until area draining to trap no. 1 has been stabilized.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HANOVER COUNTY HEALTH DEPARTMENT  
 Joyce M. Boyd-Luders 8/8/91  
 DATE

APPROVED FOR PLANNING & ZONING  
 Howard K. Smith 10/16/91  
 DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HANOVER COUNTY DEPARTMENT OF PUBLIC WORKS  
 10/8/91  
 DATE

Reviewed for HOWARD S.C.D.  
 Name  
 Signature  
 Date  
 U.S. Soil Conservation Service  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
 Approved  
 10/11/91

WILLIAM O. FILBERT, et ux  
 L 1689  
 ZONED R-20

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

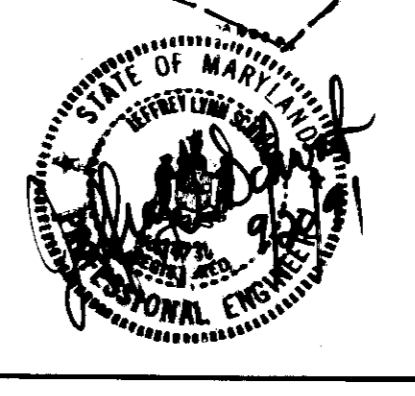
"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Environment Approved Training Program 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 of Developer/Builder  
 Date 12-19-90

**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.

Signature of Engineer  
 Date 9/20/91



OWNER/DEVELOPER  
 CORSEY CONTRACTORS, INC.  
 16347 Frederick Road  
 Woodbine, Maryland 21797

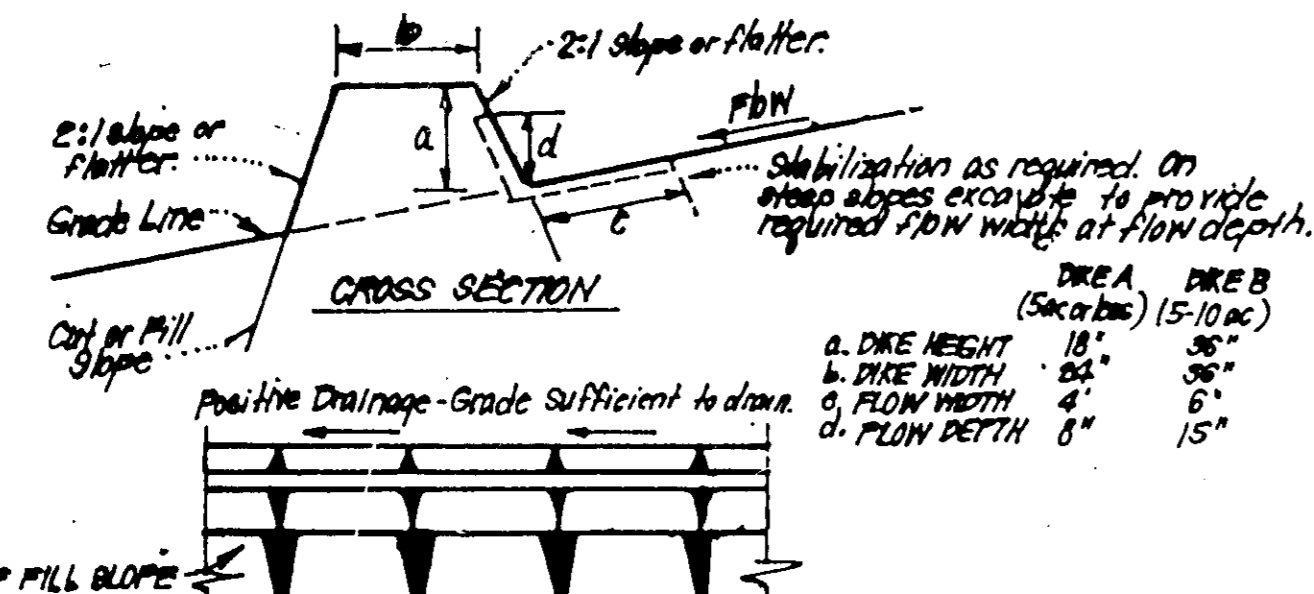
CLARK • FINEROCK & SACKETT INC.  
 DIST. BY  
 KIWM  
 DRAWN  
 BAK  
 CHECKED  
 KIWM  
 DATE  
 1990

**BEDIMENT & EROSION CONTROL PLAN**  
 LOT 23-32

**STONEBROOKE THREE**  
 A Resubdivision of Lot 13 STONEBROOKE TWO  
 2nd Election District  
 HOWARD COUNTY, MARYLAND

2 OF 3  
 89-000  
 89-000  
 SE

SDP 01-31



**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 driving 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 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.

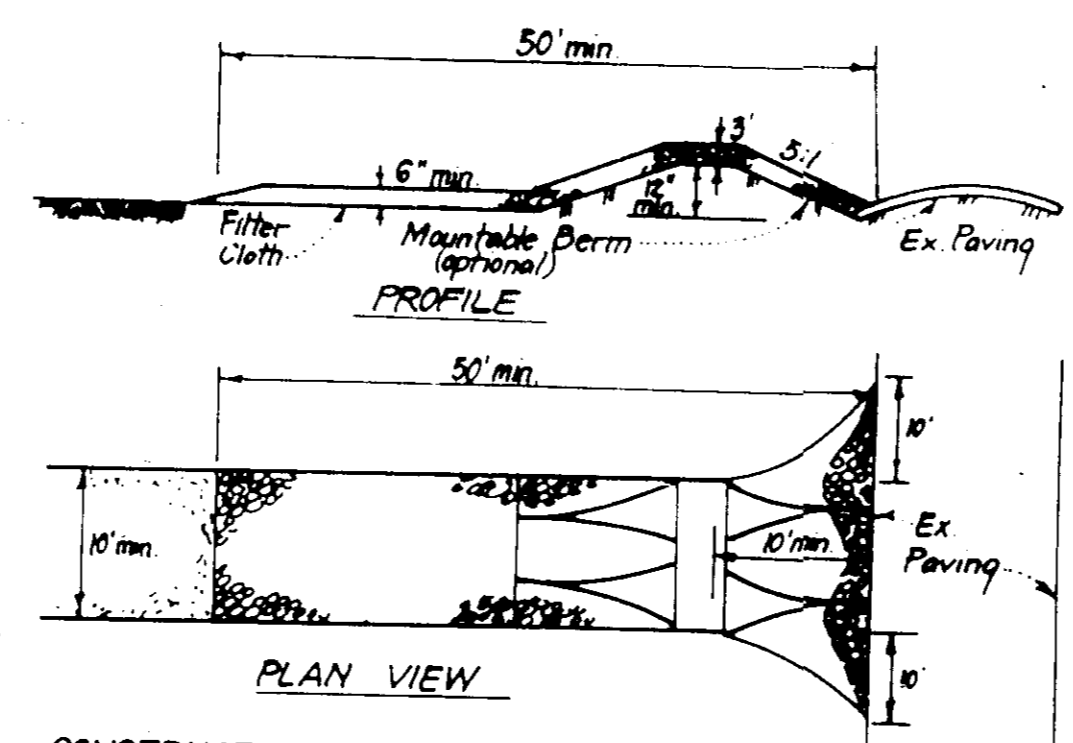
**FLOW CHANNEL STABILIZATION**

TYPE OF TREATMENT	CHANNEL SLOPE	DIKE A	DIKE B
1.	0.5 - 3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2.	3.1 - 8.0%	Seed & Straw Mulch	Seed w/white, or Excelsior Seed, 2" Stone
3.	8.1 - 20.0%	Seed w/white, or 2" Stone	Lined Rip Rap 4"-8" Stone
4.	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 8" thick, pressed into soil.  
 C. Appropriate equivalents can be substituted for any of the above materials.

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

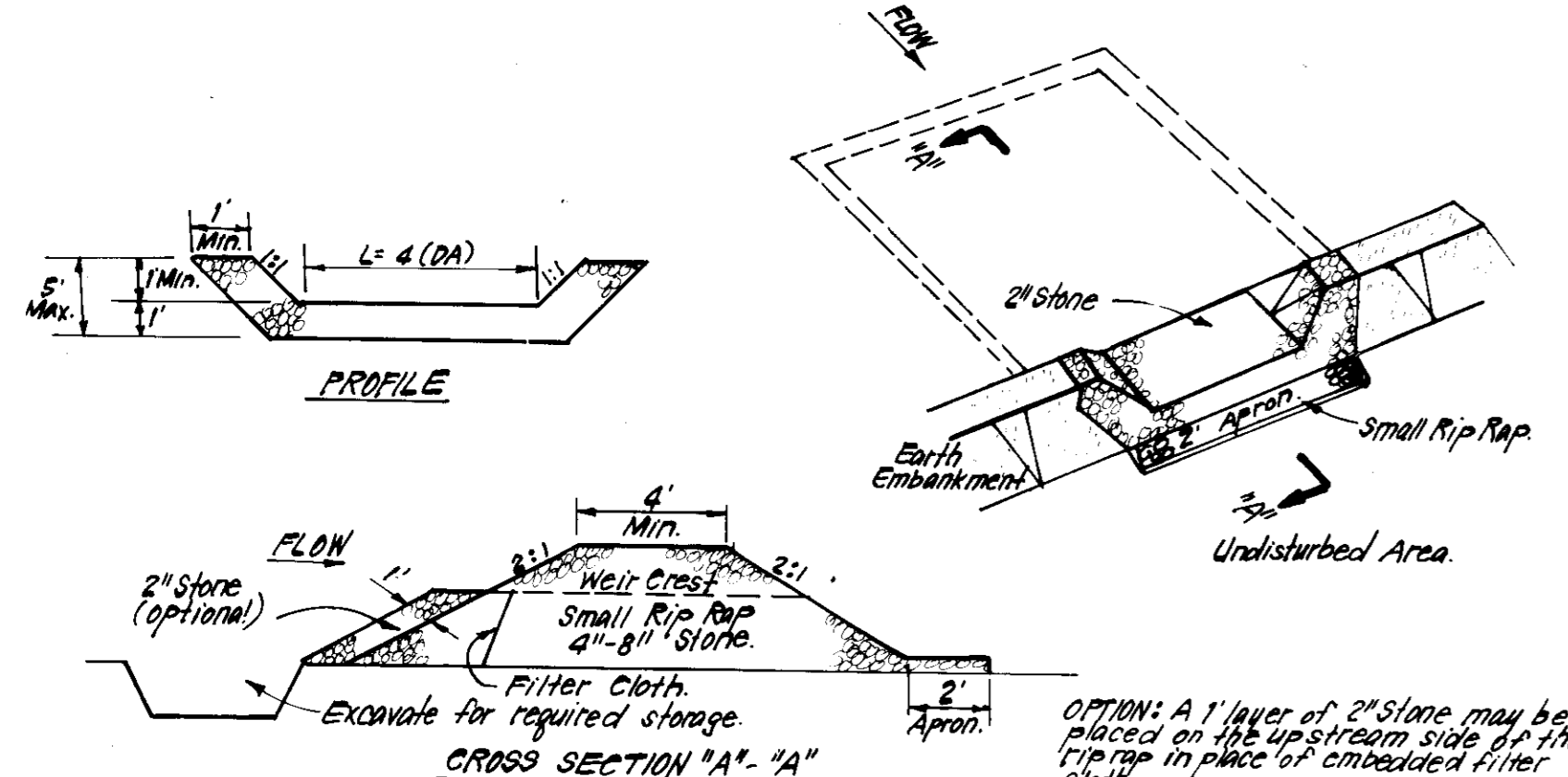
**EARTH DIKE DETAIL (E.D.)**  
NO SCALE



**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 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 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 mound 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 cleanup of any measures 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.

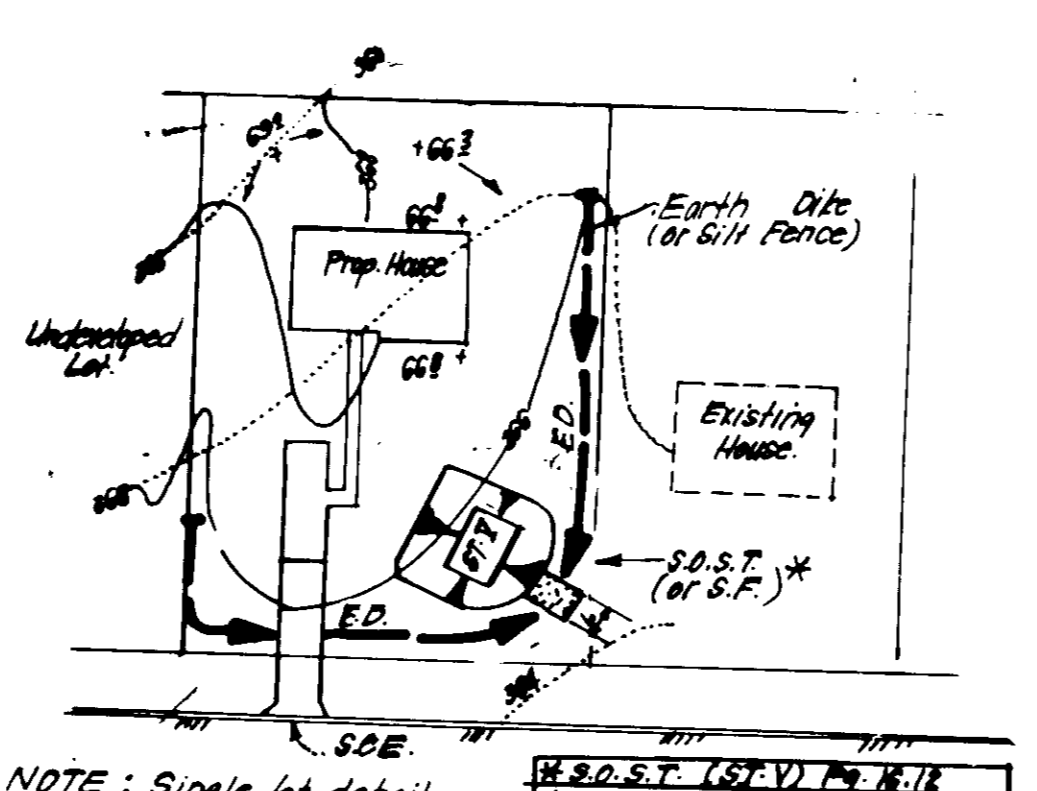
**STABILIZED CONSTRUCTION ENTRANCE (SCE)**  
NO SCALE



**CONSTRUCTION SPECIFICATIONS:**

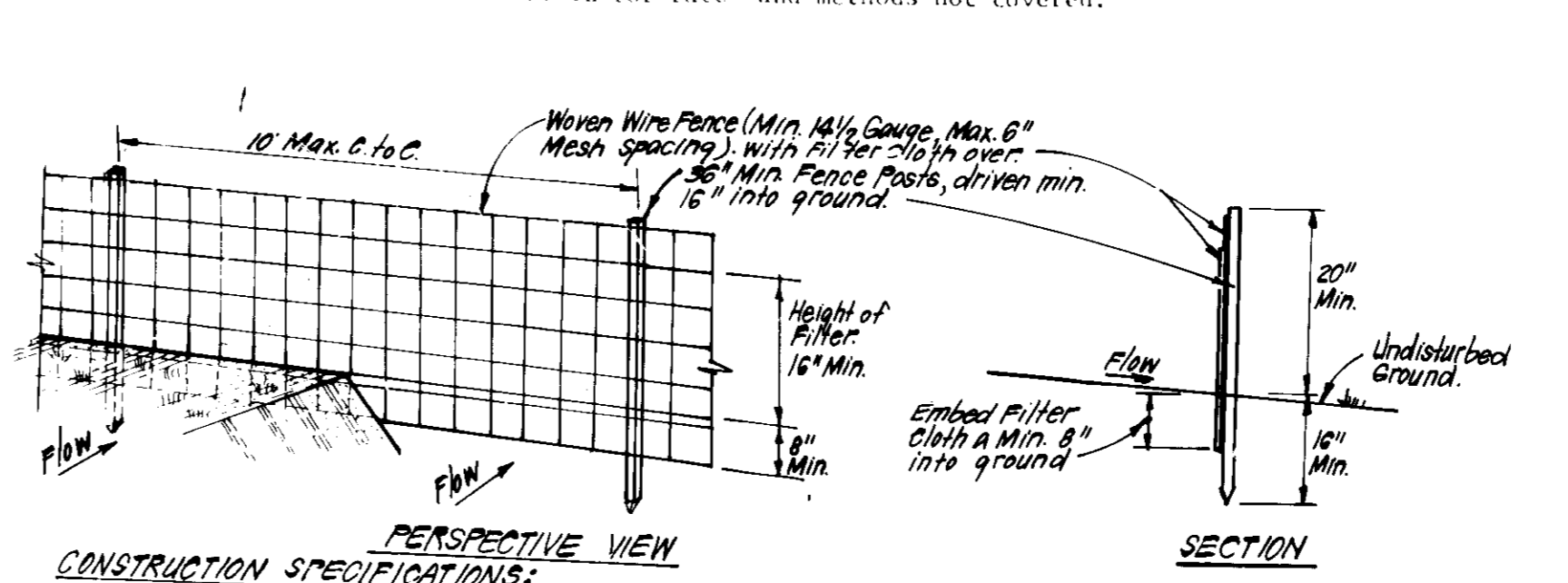
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil area shall be compacted.
- The fill material for the embankment shall be free of roots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. 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.ST.) STY.**  
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.

**SINGLE LOT SEDIMENT CONTROL PLAN**  
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 1/2\"/>
- When 2 sections of filter cloth adjoin each other they shall be overlapped by 6\"/>
- Maintenance shall be performed as needed and material removed when "dikes" develop in silt fence.

**SILT FENCE DETAIL (S)**  
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, if not previously loosened.

**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. Narrow 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. Narrow 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. 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 seeping lovegrass. During the period of October 15 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.

**Maintenance -** Inspect all seeded areas and make needed repairs, replacements and reseeds.

**TEMPORARY SEEDING NOTES**

Apply to graded or cleared areas likely to be redistributed 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, 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 rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 15, seed with 3 lbs per acre of seeping lovegrass (.07 lbs/1000 sq ft). For the period November 15 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.

**SEDIMENT CONTROL**

- 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)
  - 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 redistribution, 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.
  - 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	343 Acres
Area Disturbed	1.97 Acres
Area to be roofed or paved	0.64 Acres
Area to be vegetatively stabilized	1.39 Acres
Total Cut	2890 Cu. yds
Total Fill	2084 Cu. yds
Offsite waste/borrow area location	
  - 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 DPW 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 authorized until this initial approval by the inspection agency is made.
  - If houses are to be constructed on an "As-Built" 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).
  - The total amount of straw bale dikes/silt fence equals 1080 L.F.
- \* It is the responsibility of the contractor to identify the spoil site; gain approval from and notify H.S.C.D. of the site and its grading permit number at the time of construction.

**CONSTRUCTION SEQUENCE:**

	No. OF DAYS
A. Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize.	7
* B. Excavate for Foundations and Rough Grade & Temporarily Stabilize.	14
C. Construct Structures, Sidewalks and Driveways.	30
D. Final Grade and stabilize in accordance with Stds. & Specs.	14
E. Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize.	7

\* Delay construction on lot 25 until trap #1 is removed and areas draining to it are stabilized.

*Jeffrey L. Schwab*  
Jeffrey L. Schwab

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.

*Jeffrey L. Schwab* 8/31/90  
Jeffrey L. Schwab / Date

**OWNER / DEVELOPER**  
DORSEY CONTRACTORS, INC.  
16347 Frederick Road  
Woodbine, Maryland 21797

**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 erosion and sediment control and that all reasonable measures will be used in the construction process to have a Certificate of Attendance or a Certificate of Environmental Awareness Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic audits, inspections by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

*Jeffrey L. Schwab* 8/31/90  
Signature of Developer/Builder Date

**CLARK • FINEFLOCK & SACKETT, INC.**  
ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 BALTO • (301) 621-8100 - WASH

DESIGNED KIWM	<b>SEDIMENT &amp; EROSION CONTROL PLAN DETAIL SHEET LOTS 24-31</b>	SCALE As Shown
DRAWN BAL	<b>STONEBROOKE THREE</b>	DRAWING 3 of 3
CHECKED KIWM	<b>A RESUBDIVISION OF LOT 13, STONEBROOKE TWO 2ND ELECTION DISTRICT HOWARD COUNTY MARYLAND</b>	JOB NO 89-006
DATE August 1990	<b>FOR: DORSEY CONTRACTORS, INC. 16347 Frederick Road Woodbine, Maryland 21797</b>	FILE NO 89-006

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

*Jane M. Boyden* 10/1/91  
COUNTY HEALTH OFFICER DATE

**APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING**

*James S. Smith* 10/14/91  
DATE

*William A. Adams* 10/16/91  
DATE

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

*James P. Scher* 10/9/91  
DIRECTOR DATE

*John C. ...* 10-9-91  
CHIEF BUREAU OF ENGINEERING DATE

Reviewed for HOWARD COUNTY S.C.D.  
Name: *John C. ...*  
Signature: *John C. ...* 10/1/91  
Date: 10/1/91  
U.S. Soil Conservation Service

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

*John C. ...* 10/1/91  
Approved