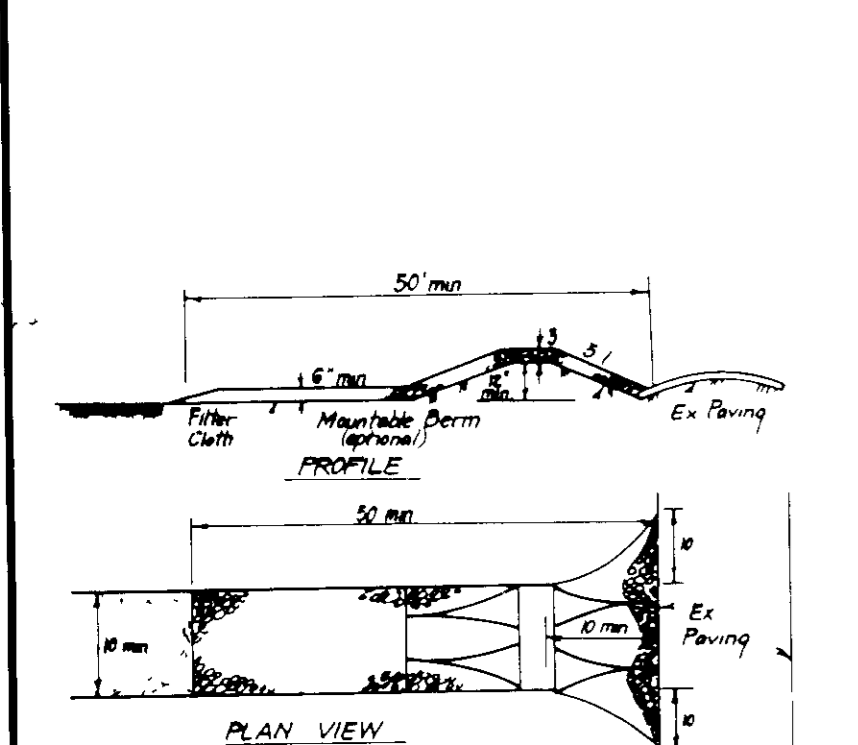
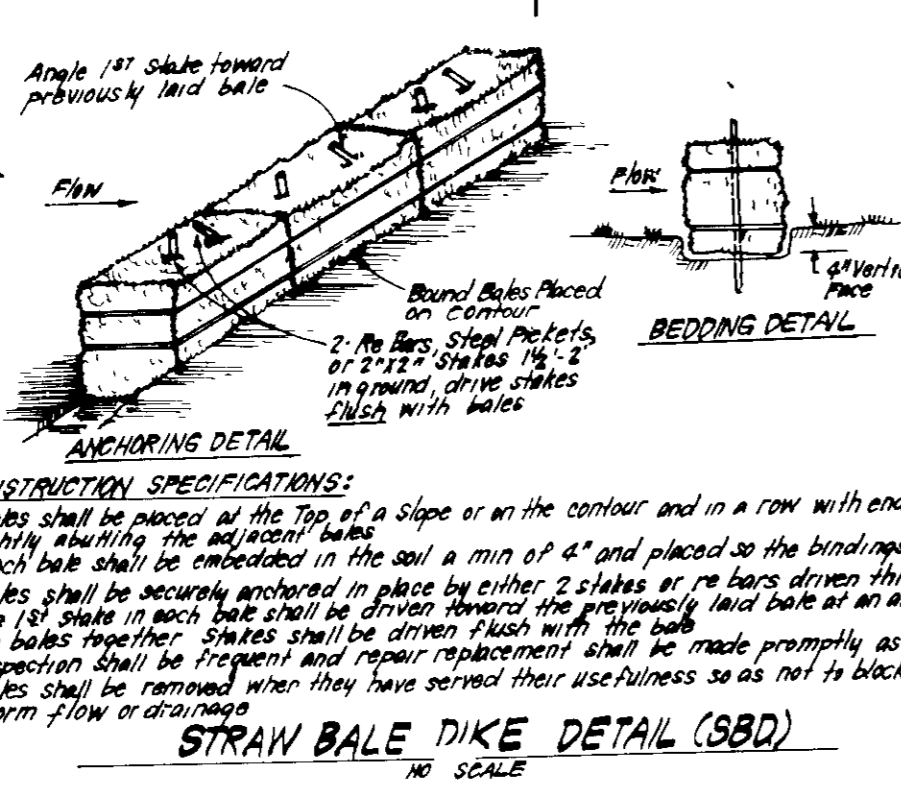


1. A minimum of 24 hours prior to the start of construction, the contractor shall submit to the Howard County Department of Public Works a copy of the proposed plan for review and approval.
2. All construction activities shall be in accordance with the provisions of this plan and the applicable provisions of the 1981 MARYLAND ANNOTATED AND CODED STATUTES, TITLE 86, SUBTITLE 10, SECTIONS 1-10 AND 1-11.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within 10 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1 by 14 days as to all other disturbed or graded areas on the project site.
4. All sediment transport shall be fenced and warning posted around the 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 1981 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (Sec. 51) and temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch and straw only shall be done when recommended seeding data 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 permanent stabilization has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis
 Total area of site: 1.30 Acres
 Area to be seeded or stabilized: 0.28 Acres
 Area to be reseeded or stabilized: 0.69 Acres
 Total site: 2.27 Acres
 Disturbed area: 0.28 Acres
 Disturbed area/borrow area location:

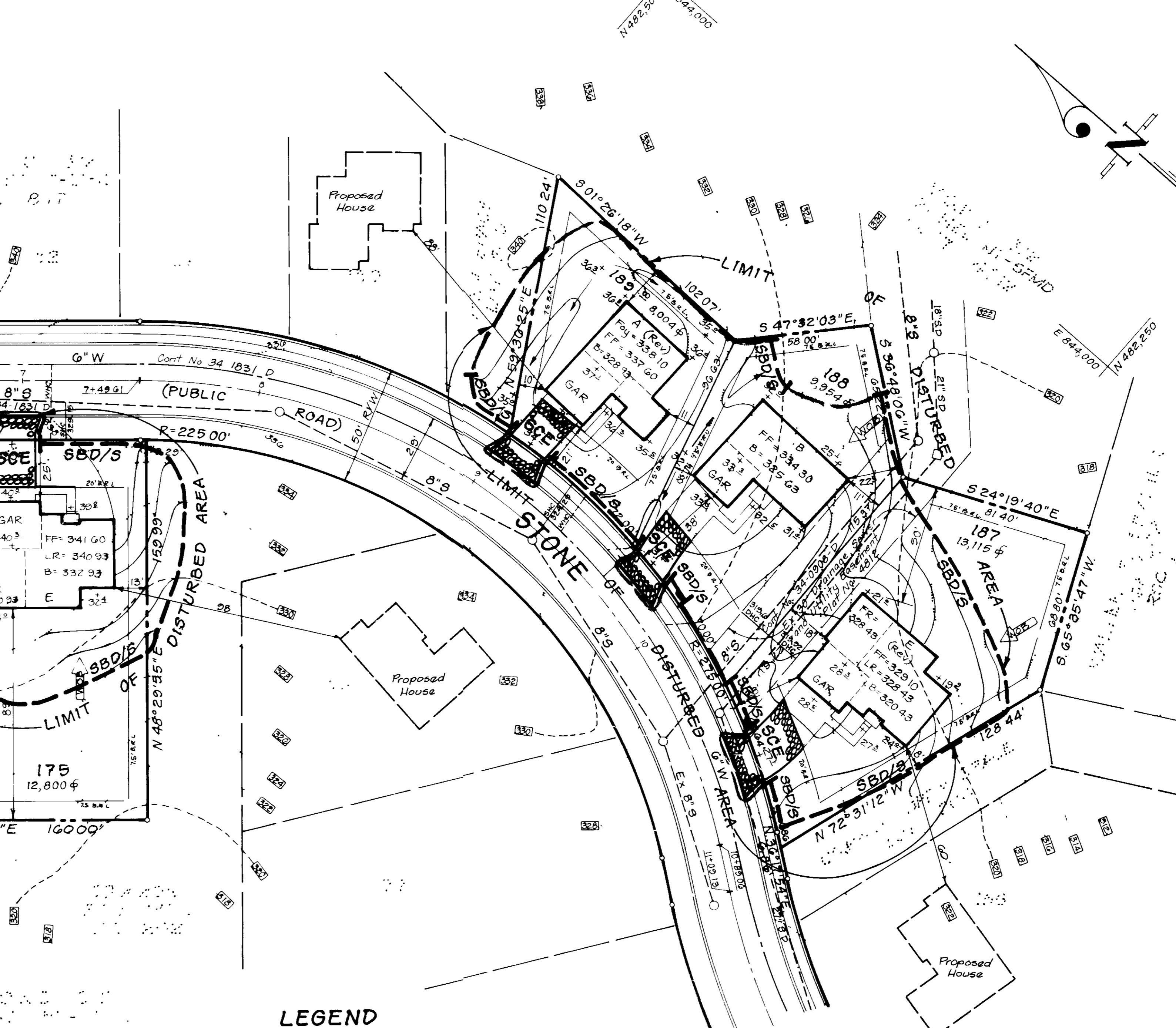
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County DMC sediment control inspector.
10. On all sites with disturbed 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 "As-Sold" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
12. All pipes to be blocked at the end of each day (see detail below).
13. The total amount of straw bale dikes/silt fence equals 1.1 F.
- CONSTRUCTION SEQUENCE**
- | # of Days | Description |
|-----------|---|
| 7 | 1. Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize. |
| 30 | 2. Excavate for Foundation and Rough Grade and Temporarily Stabilize. |
| 30 | 3. Construct Structures, Sidewalks and Driveways. |
| 30 | 4. Final Grade and Stabilize in accordance with Stds. and Specs. |
| 10 | 5. Upon approval of the Sediment Control Inspector, remove sediment and erosion controls and stabilize. |



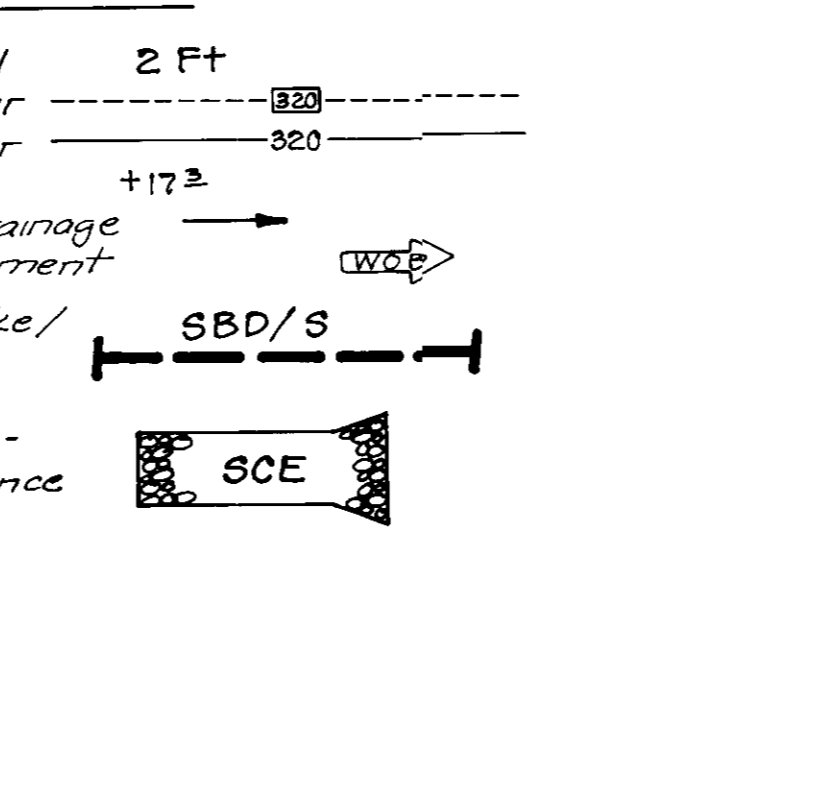
- CONSTRUCTION SPECIFICATIONS**
- Stone Size - Use 2" stone or equivalent or recycled concrete or equivalent.
 - Length - As required, but not less than 10' feet (except on a single residence lot where a 30' foot maximum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Ten (10) feet minimum, but not less than the full width of 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 constructed entrances shall be used across the entrance. If piping is impractical, a mound able dam with 5' slopes will be permitted.
 - 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 or concrete. If the entrance is not used or cleaned at all, measures shall be taken to prevent all sediment applied, dropped, washed or tracked onto public rights-of-way must be removed or prevented.
 - Warning - Warning shall be obtained to remove sediment prior to entrance onto public rights-of-way. When warning 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



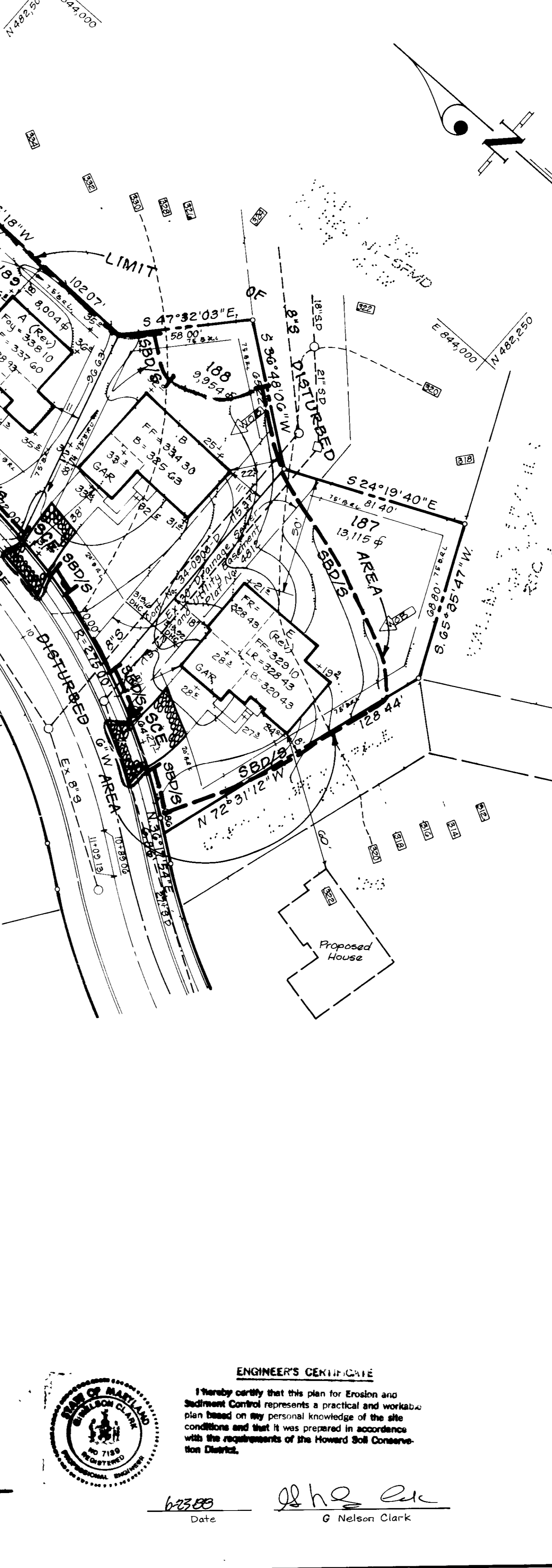
- CONSTRUCTION SPECIFICATIONS:**
- Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
 - Each bale shall be embedded in the soil a min. of 4" and placed so the bindings are horizontal.
 - Bales shall be secured in place by either 2 stakes or 1" bars driven thru the bale. The 1" 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.
 - Inspector shall be frequent and repair replacement shall be made promptly as needed.
 - Bales shall be removed when they have served their usefulness as a net to block or impede storm flow or drainage.
- STRAW BALE DIKE DETAIL (SBD)**
NO SCALE



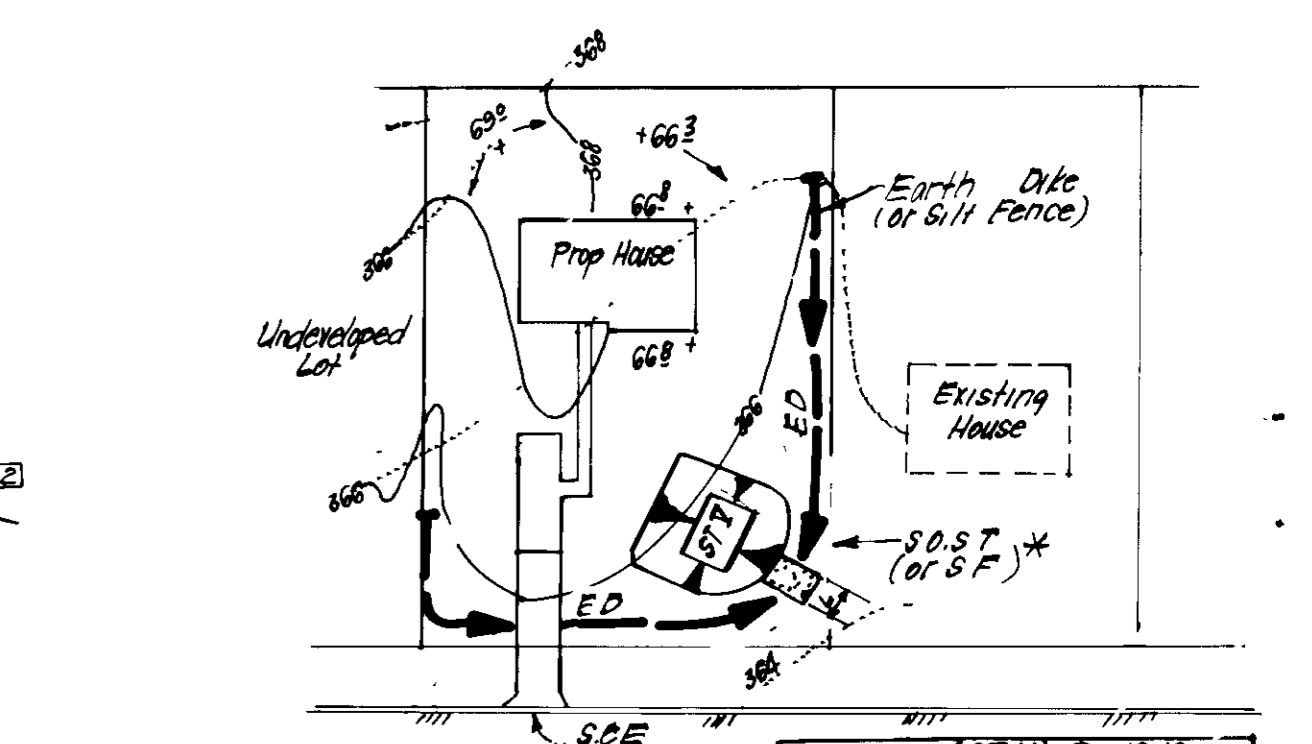
- LEGEND**
- Contour Interval 2 Ft
 - Existing Contour
 - Proposed Contour
 - Spot Elevation +17.2
 - Direction of Drainage
 - Walk-Out Basement
 - Straw Bale Dike/Silt Fence
 - Stabilized Construction Entrance



- 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 6" at top and bottom.
 - When a section of filter cloth joins another they shall be overlapped by 6" and stapled.
 - Maintenance shall be performed as needed and notified to the Howard County Sediment Control Inspector.
- 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 (0.5 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 seed. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- Mulching** - Apply 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 reseeding.
- 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 25 bushels 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 (0.7 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 seed.
- Mulching** - Apply 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 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.
- Refer to the 1981 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



- 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 6" at top and bottom.
 - When a section of filter cloth joins another they shall be overlapped by 6" and stapled.
 - Maintenance shall be performed as needed and notified to the Howard County Sediment Control Inspector.
- SILT FENCE DETAIL (S)**
NO SCALE

SUBDIVISION NAME	COLUMBIA	SECT./AREA	3/2	LOTS
VILLAGE OF KINGS CONTRIVANCE				174, 175 & 187-189
PLAT No	B117	BLOCK #	21	ZONE
			S.F.M.D.	42
				5th
				6062
WATER CODE	E-15	SEWER CODE		2650000

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

COUNTY HEALTH OFFICER: *[Signature]* DATE: 10-24-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING

PLANNING DIRECTOR: *[Signature]* DATE: 10-27-88

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT: *[Signature]* DATE: 10-27-88

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

DIRECTOR: *[Signature]* DATE: 10-20-88

CHIEF BUREAU OF ENGINEERING: *[Signature]* DATE: 10-20-88

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE: *[Signature]* DATE: 10/7/88

U.S. SOIL CONSERVATION SERVICE

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

APPROVED: *[Signature]* DATE: 10-20-88

Howard S.C.D. DATE:

DEVELOPER'S/BUILDER'S CERTIFICATE

I hereby certify that the 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 Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or its authorized agents, as are deemed necessary.

[Signature] DATE: 6-23-88

Signature of Developer/Builder: _____ 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.

[Signature] DATE: 6-23-88

Date: _____ G. Nelson Clark

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

7335 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 991-7500 • BALTO. • (410) 321-1100 • WASH.

DESIGNED: DT
DRAWN: LAI
CHECKED: DT

SEDIMENT AND EROSION CONTROL PLAN
LOTS 174, 175 & 187 THRU 189
COLUMBIA
VILLAGE OF KINGS CONTRIVANCE
SECTION 3 AREA 2
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1" = 30'
DRAWING: 2 of 2
JOB NO: 88-09G
FILE NO: 88-0965E

DATE: June, 1988
For: GOODIER BUILDERS, INC., R/C
11207 McGee Way
Ellicott City, Maryland 21043