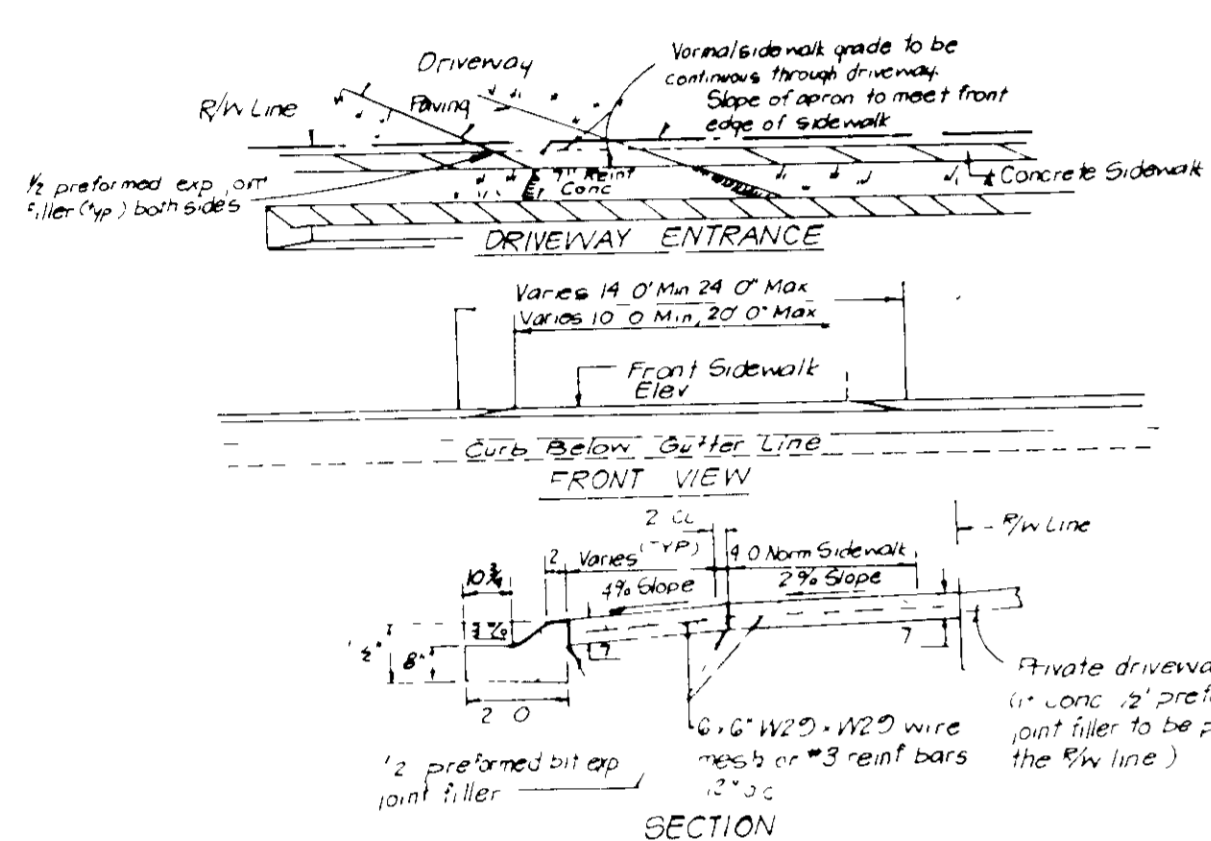
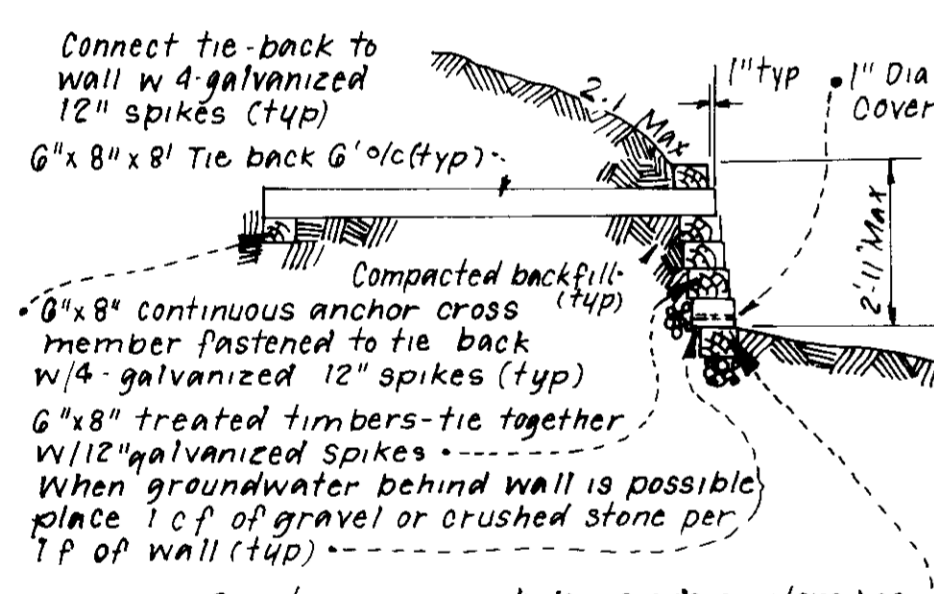


DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK



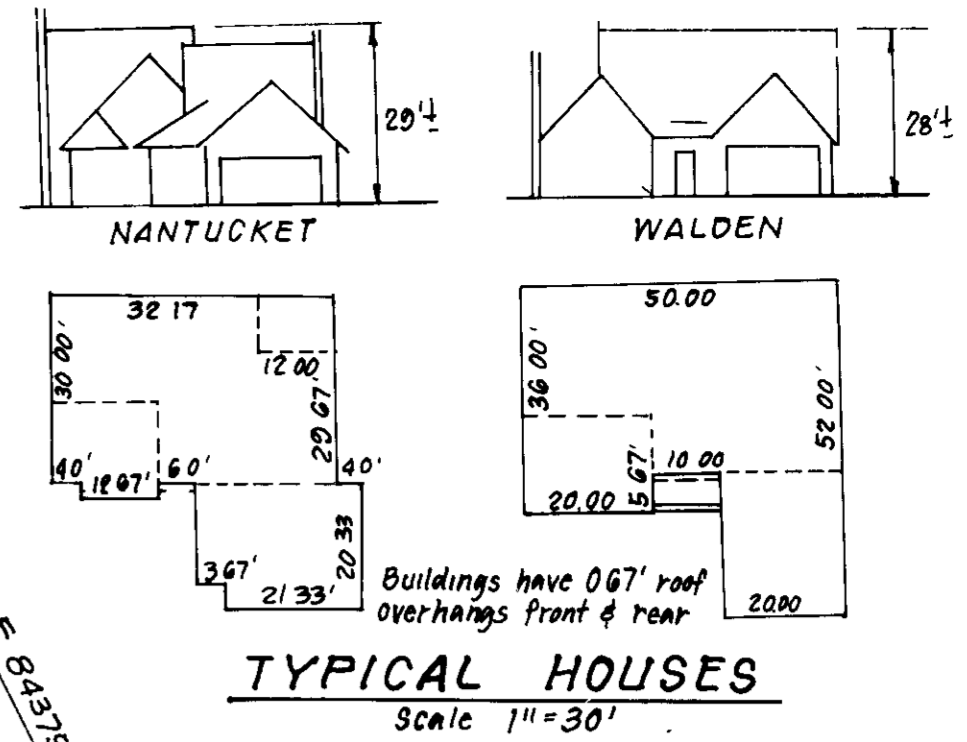
DRIVEWAY ABUTTING CLOSED SECTION WITH MODIFIED COMB CURB & GUTTER & SIDEWALK



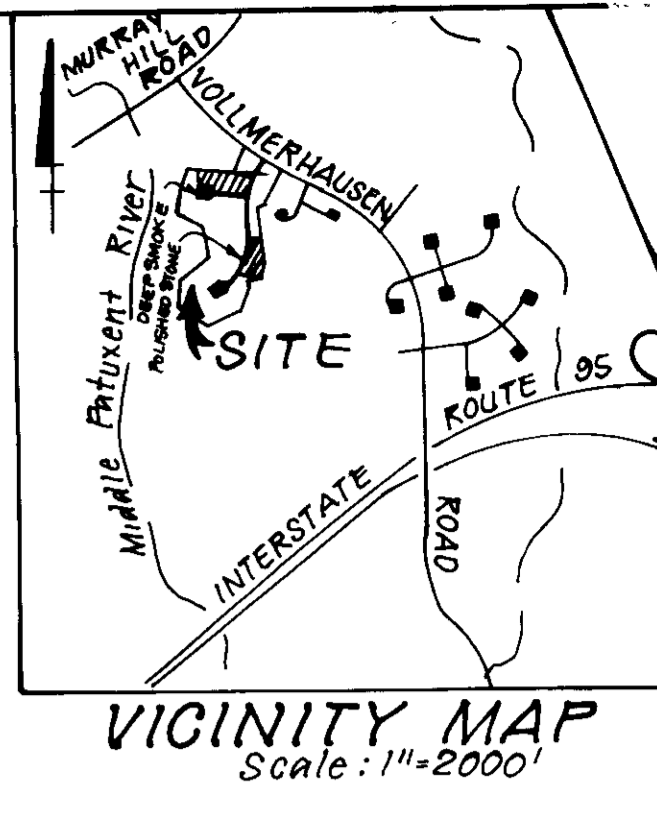
RETAINING WALL DETAIL

**LEGEND**

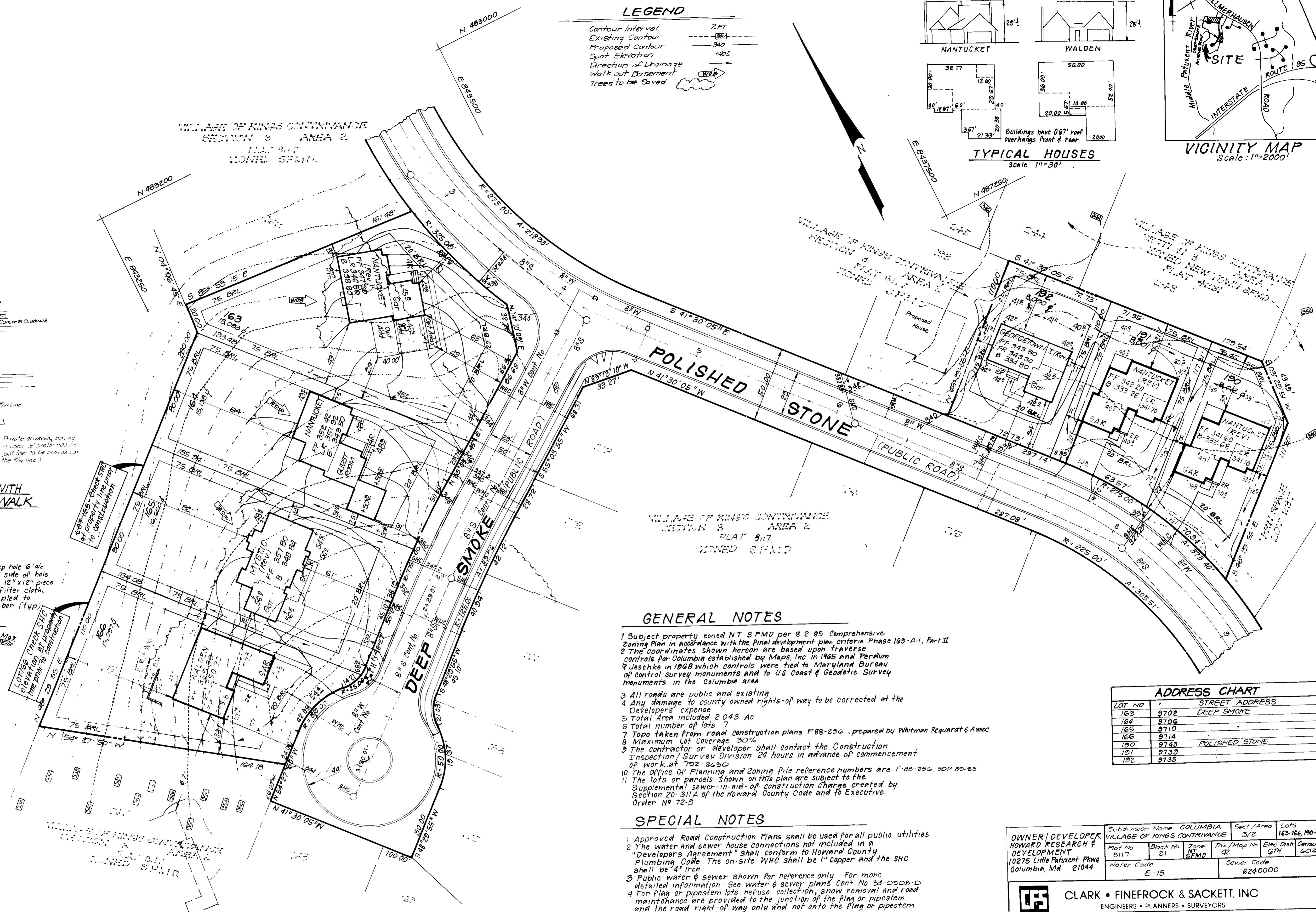
- Contour Interval 2 FT
- Existing Contour
- Proposed Contour
- Spot Elevation 1002
- Direction of Drainage
- Walk out Basement
- Trees to be Saved



TYPICAL HOUSES Scale: 1"=30'



VICINITY MAP Scale: 1"=2000'



**GENERAL NOTES**

- 1 Subject property zoned NT SFMD per 8-2-85 Comprehensive Zoning Plan in accordance with the final development plan, Criteria Phase 160-A-1, Part II
- 2 The coordinates shown herein are based upon traverse controls for Columbia established by Maps, Inc. in 1965 and Perdom & Jeschke in 1968 which controls were tied to Maryland Bureau of Control Survey monuments and to US Coast & Geodetic Survey monuments in the Columbia area
- 3 All roads are public and existing
- 4 Any damage to county owned rights-of-way to be corrected at the Developer's expense
- 5 Total Area included 2.043 Ac
- 6 Total number of lots 7
- 7 Topo taken from road construction plans F88-256 prepared by Whitman Requardt & Assoc
- 8 Maximum Lot Coverage 30%
- 9 The contractor or Developer shall contact the Construction Inspection Survey Division 24 hours in advance of commencement of work at 702-2620
- 10 The Office of Planning and Zoning file reference numbers are F-80-256, S0P 80-25
- 11 The lots or parcels shown on this plan are subject to the Supplemental sewer-in-aid-of-construction charge created by Section 20-311A of the Howard County Code and to Executive Order No 72-5

**SPECIAL NOTES**

- 1 Approved Road Construction Plans shall be used for all public utilities
- 2 The water and sewer house connections not included in a "Developers Agreement" shall conform to Howard County Plumbing Code. The on-site WHC shall be 1" copper and the SHC shall be 4" iron
- 3 Public water & sewer shown for reference only. For more detailed information - See water & sewer plans Cont No 34-0008-D
- 4 For flag or pipestem lots refuse collection, snow removal and road maintenance are provided to the junction of the flag or pipestem and the road right-of-way only and not onto the flag or pipestem lot driveway
- 5 Stormwater Management Provided in the Village of Kings Contrivance Section 3 Area 1, F-78-201 and Section 3 Area 2, F-80-87

ADDRESS CHART		
LOT NO	STREET	ADDRESS
163	9702	DEEP SMOKE
164	9710	
165	9710	
166	9714	
190	9743	POLISHED STONE
191	9739	
192	9735	

OWNER/DEVELOPER HOWARD RESEARCH & DEVELOPMENT 10275 Little Patuxent Pkwy Columbia, Md 21044	Subdivision Name VILLAGE OF KINGS CONTRIVANCE	Block No 21	Zone SFMD	Lot No 163-166, 190-192	Sec./Area 3/2	Map No 42	Elec. Dist GTH	Census Tr 6021
	Water Code E-15						Sewer Code 6240000	

<b>CLARK • FINEFROCK &amp; SACKETT, INC</b> ENGINEERS • PLANNERS • SURVEYORS 1135 MINISTREL WAY • COLUMBIA MD 21045 • (301) 381-7800 • BALTO • (301) 611-8100 • WASH		SCALE 1" = 30' DRAWING 1 OF 2 JOB NO 88-040 FILE NO 88-040K
DESIGNED CJS DRAWN JME CHECKED JME DATE 8-2-88	<b>SITE DEVELOPMENT PLAN</b> LOTS 163-166 AND 190-192 <b>COLUMBIA</b> VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: JOHN McDONOUGH BUILDERS, INC 6310 Stevens Forest Rd #104 Columbia, Maryland 21046	

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT	DATE 10-24-88
APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING & ZONING	DATE 11-7-88
PLANNING DIRECTOR	DATE 1-28-89
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE 10-11-88
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	DATE 10-20-88
DIRECTOR	DATE 10-20-88
CHIEF BUREAU OF ENGINEERING	DATE 10-20-88

1	Rev use of 9rd lots 163-165 & 192	7-9-91
2	REVISIONS	Date





CONSTRUCTION SEQUENCE:

- A. Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize. 7
- B. Excavate for Foundations and Rough Grade & Temporarily Stabilize. 30
- C. Construct Structures, Sidewalks and Driveways. 120
- D. Final Grade and stabilize in accordance with Stds. & Specs. 30
- E. Upon approval of the sediment control inspector, remove sediment and erosion controls and stabilize. 14

7  
30  
120  
30  
14

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

- 1) 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 urethane 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 60 lbs per acre (1 1/2 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 80 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 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 368 gallons per acre (8 gal/1000 sq ft) for anchoring

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

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)

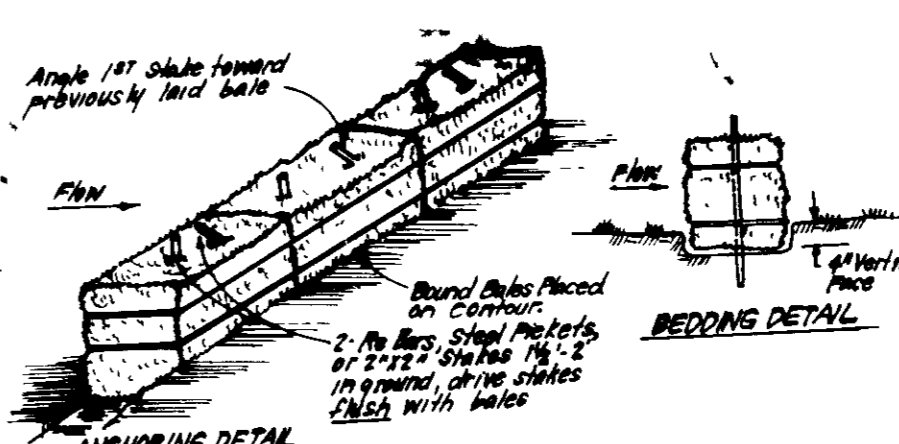
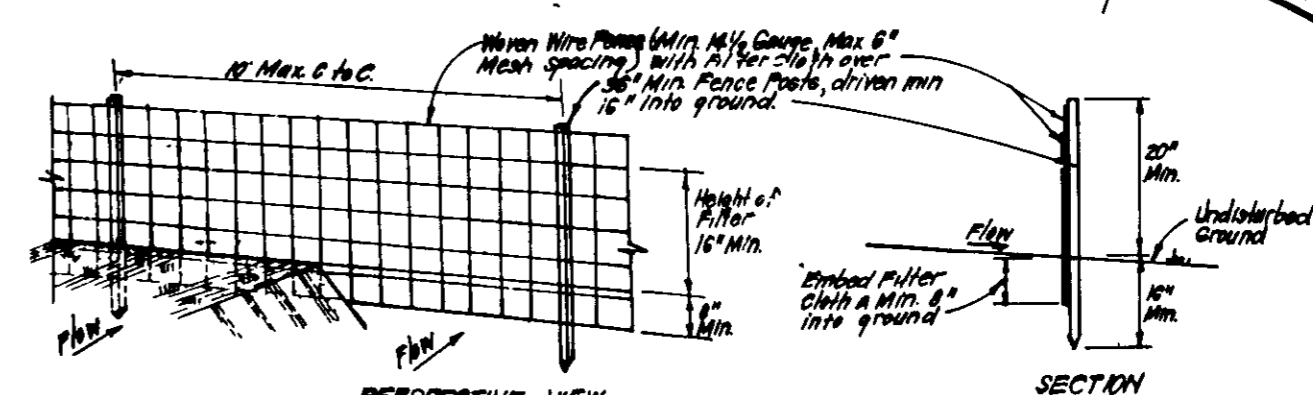
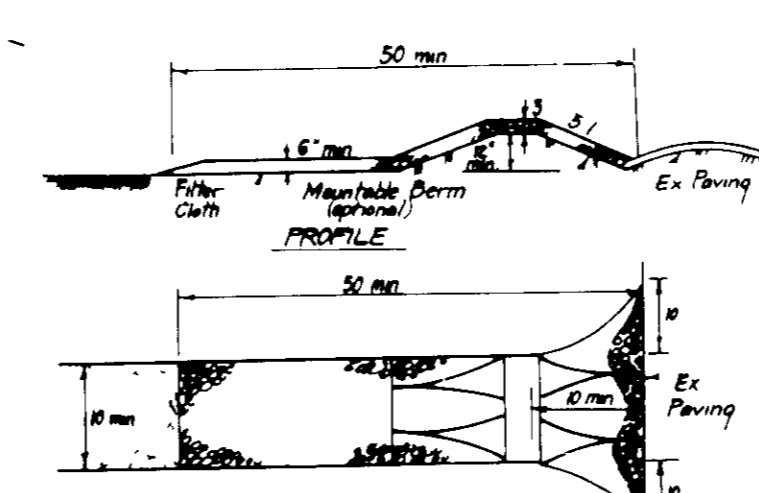
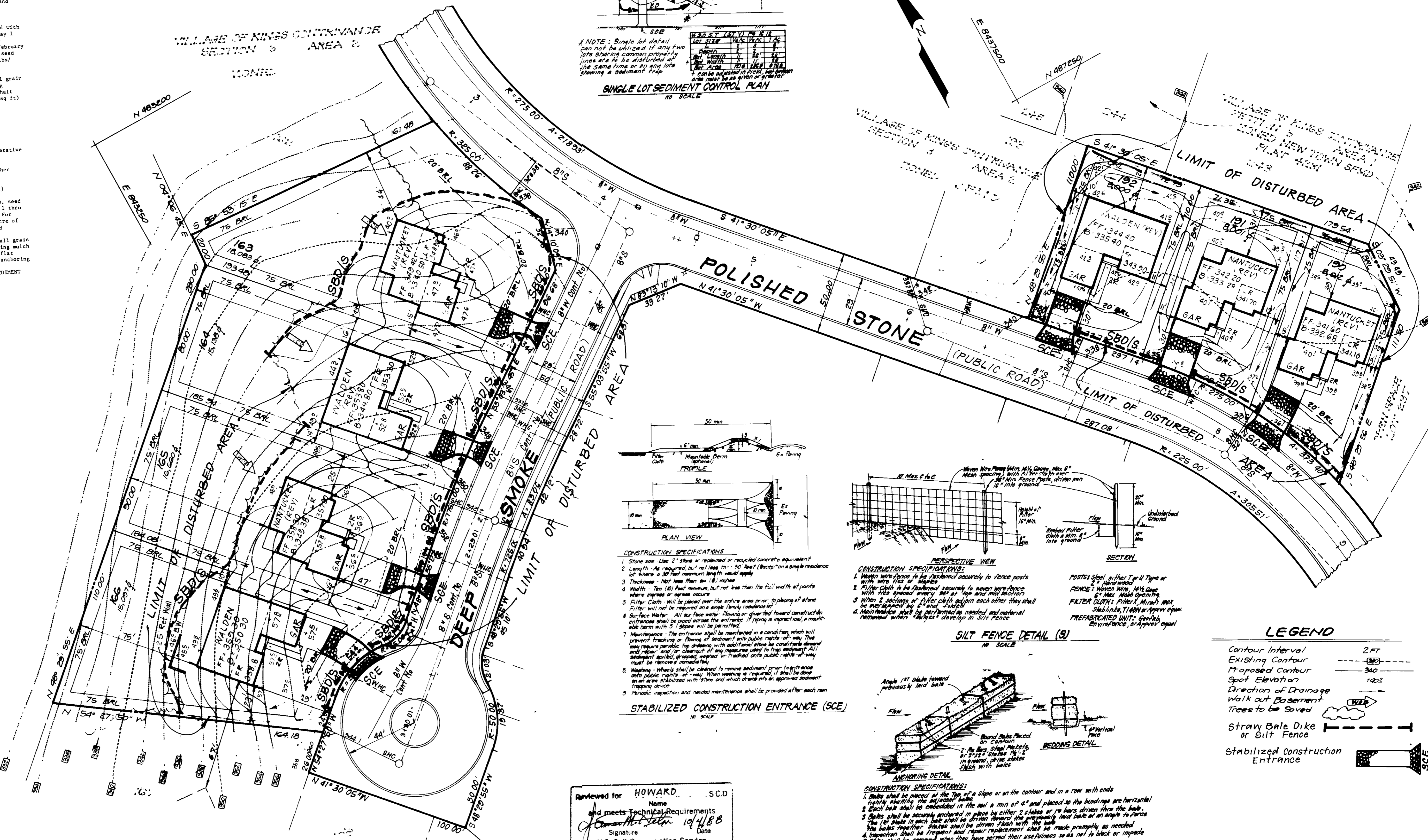
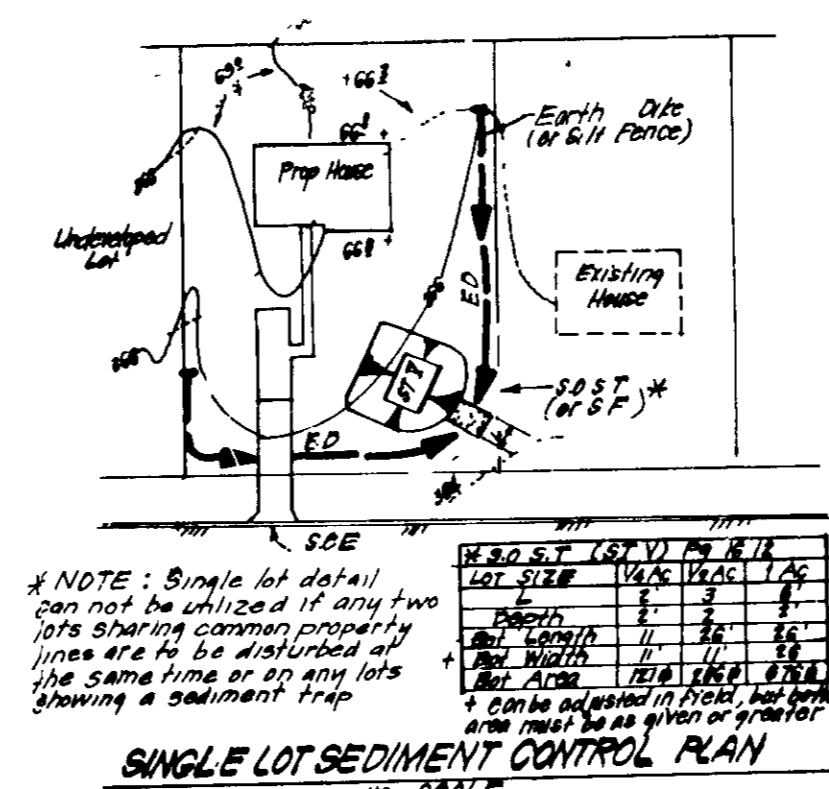
**Seeding** For periods March 1 thru April 30 and from August 15 thru November 15, seed with 25 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (0.7 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use 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 368 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

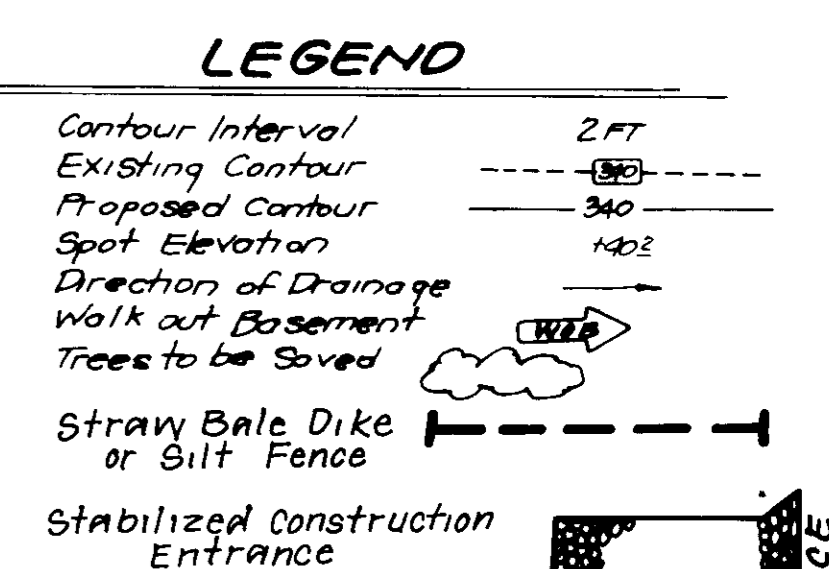
SEEDING EQUIPMENT

- 1) A minimum of 24 hours notice must be given to the jurisdiction officials in the jurisdiction and permit prior to the start of any construction (992-237)
- 2) All activities and structural practices are to be in accordance with the provisions of the plan and are to be in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
- 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 or 1:1 days for 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 13 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 seeding (Sec. 53) and (Sec. 54), temporary seeding (Sec. 50) and (Sec. 52) Temporary stabilization with "mats" alone can only be done when recommended seeding rates 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: 2.043 Acres
  - Area to be roofed: 1.84 Acres
  - Area to be paved: 0.470 Acres
  - Area to be vegetatively stabilized: 0.977 Acres
  - Total C: 3.287 Acres
  - Total I: 1.11 Acres
  - Off-site waste/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 DWM 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 least one 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 885 L.F.



- CONSTRUCTION SPECIFICATIONS**
1. Stone size: Use 2" stone or equivalent or recycled concrete equivalent
  2. Length: As required, but not less than 30 feet (except on a simple residence lot where a 30 foot maximum length would apply)
  3. Thickness: Not less than 18 inches
  4. Width: Ten (10) feet minimum, but not less than the full width of points where slopes or areas occur
  5. Filter Cloth: Will be placed over the entire area prior to placing of stone. Filter will not be required area except where noted
  6. Surface Water: All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a multiple side berm with 3' slope will be required
  7. Maintenance: The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment into public rights-of-way. This may require periodic watering with water hoses or similar methods and/or other measures as required. If any measures used to trap sediment, all sediment shall be disposed, washed or treated on-site under rights-of-way must be removed immediately
  8. Warning: Warning signs shall be placed to remove sediment prior to entrance onto public rights-of-way. When watering 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

- CONSTRUCTION SPECIFICATIONS**
1. Material: 1/2" x 1/2" x 1/2" wire mesh
  2. Length: As required, but not less than 30 feet
  3. Thickness: Not less than 18 inches
  4. Width: Ten (10) feet minimum, but not less than the full width of points where slopes or areas occur
  5. Filter Cloth: Will be placed over the entire area prior to placing of stone. Filter will not be required area except where noted
  6. Surface Water: All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a multiple side berm with 3' slope will be required
  7. Maintenance: The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment into public rights-of-way. This may require periodic watering with water hoses or similar methods and/or other measures as required. If any measures used to trap sediment, all sediment shall be disposed, washed or treated on-site under rights-of-way must be removed immediately
  8. Warning: Warning signs shall be placed to remove sediment prior to entrance onto public rights-of-way. When watering 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



Reviewed for HOWARD COUNTY SCD  
Name: \_\_\_\_\_  
and meets Technical Requirements  
Signature: \_\_\_\_\_ Date: 10/1/88  
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
Signature: \_\_\_\_\_ Date: 8-3-88



**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: 8-3-88  
B Nelson Clark

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
Signature: \_\_\_\_\_ Date: 10-24-88

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING  
Signature: \_\_\_\_\_ Date: 11-7-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
Signature: \_\_\_\_\_ Date: 8-25-88

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
Signature: \_\_\_\_\_ Date: 10-20-88

**DEVELOPER'S SELF-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 are deemed necessary.  
Signature: \_\_\_\_\_ Date: 8-3-88

**CLARK • FINEPROCK & SACKETT, INC**  
ENGINEERS • PLANNERS • SURVEYORS  
7155 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7200 • BALTO • (301) 411-8100 • WASH

DESIGNED: US  
DRAWN: QS  
CHECKED: US  
DATE: Aug 1988

**SEDIMENT & EROSION CONTROL PLAN**  
LOTS 163-166, 190-192  
**COLUMBIA**  
VILLAGE OF KINGS CONTRIVANCE  
SECTION 3 AREA 2  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

For John McDonough Builders, Inc.  
8310 Stevens Forest Rd # 104  
Columbia, Maryland 21046

SCALE: 1"=30'  
DRAWING: 2 OF 2  
JOB NO: 88-040  
FILE NO: 88-040X  
S.D.P. 89 23