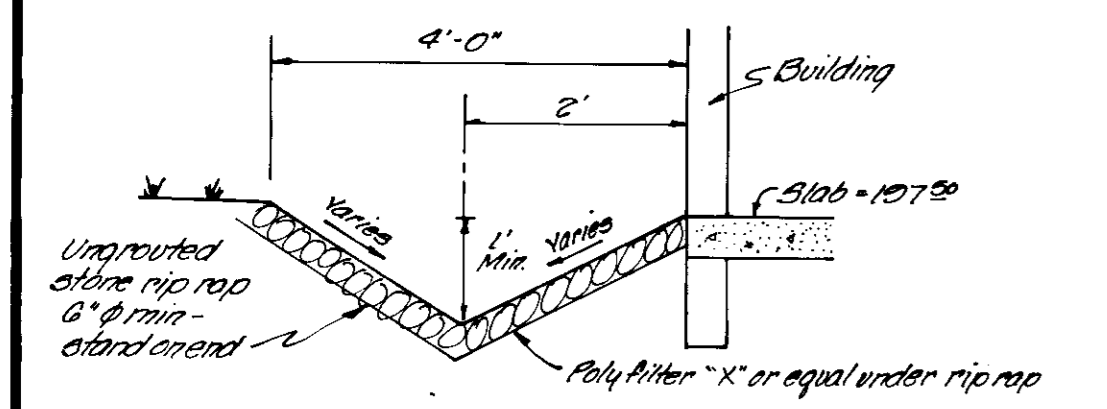


**STREAM PROFILE**  
 Horiz. 1" = 50'  
 Vert. 1" = 5'

Bit. Concrete Surface	1 1/2" Sand 0-3
Bit. Concrete Under	5" Gravel Mix
Crusher Run Base	8"



**DETAIL - RIP RAP DITCH**  
 No Scale

**DESIGN DATA**

Q	2.0 cfs
Area	2.0 sq ft
VIP	4.47'
HK	0.40'
Slope	0.4%
n	0.055
Vel.	1.8 fpm
Cap.	2.4 cfs

NOTE: Ditch to have 1' wide flat bottom through storm water management basin.

**PAVING DETAIL**  
 No Scale

NOTE: All construction shall be in accordance with Howard Co. Road Department Code & City Ord. C.O., page 25.

**SEDIMENT TRAP DATA**

- Trap to be in accordance with Standard ST-3, page 20 of the Standard & Specifications for Soil Erosion & Sediment Control in Developing Areas, Soil Conservation Service.
- Drainage area to trap = 0.25 ac.
- Bottom elevation of trap = 192.8'
- Elevation of trap lip = 192.8'
- Length of trap = 5'-0"
- Clear out trap when sediment accumulates to 195.8' elev.
- Diversion ditches to tie to existing bank on north end & existing building on south end.

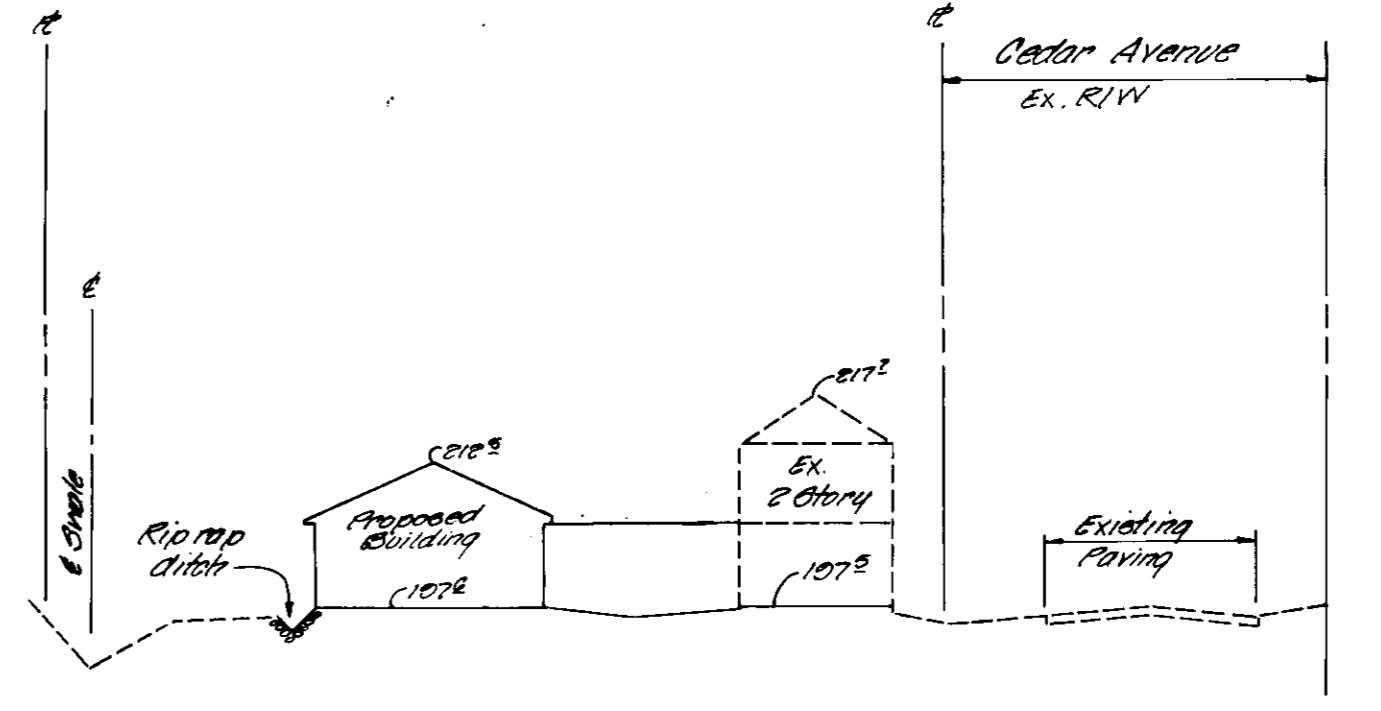
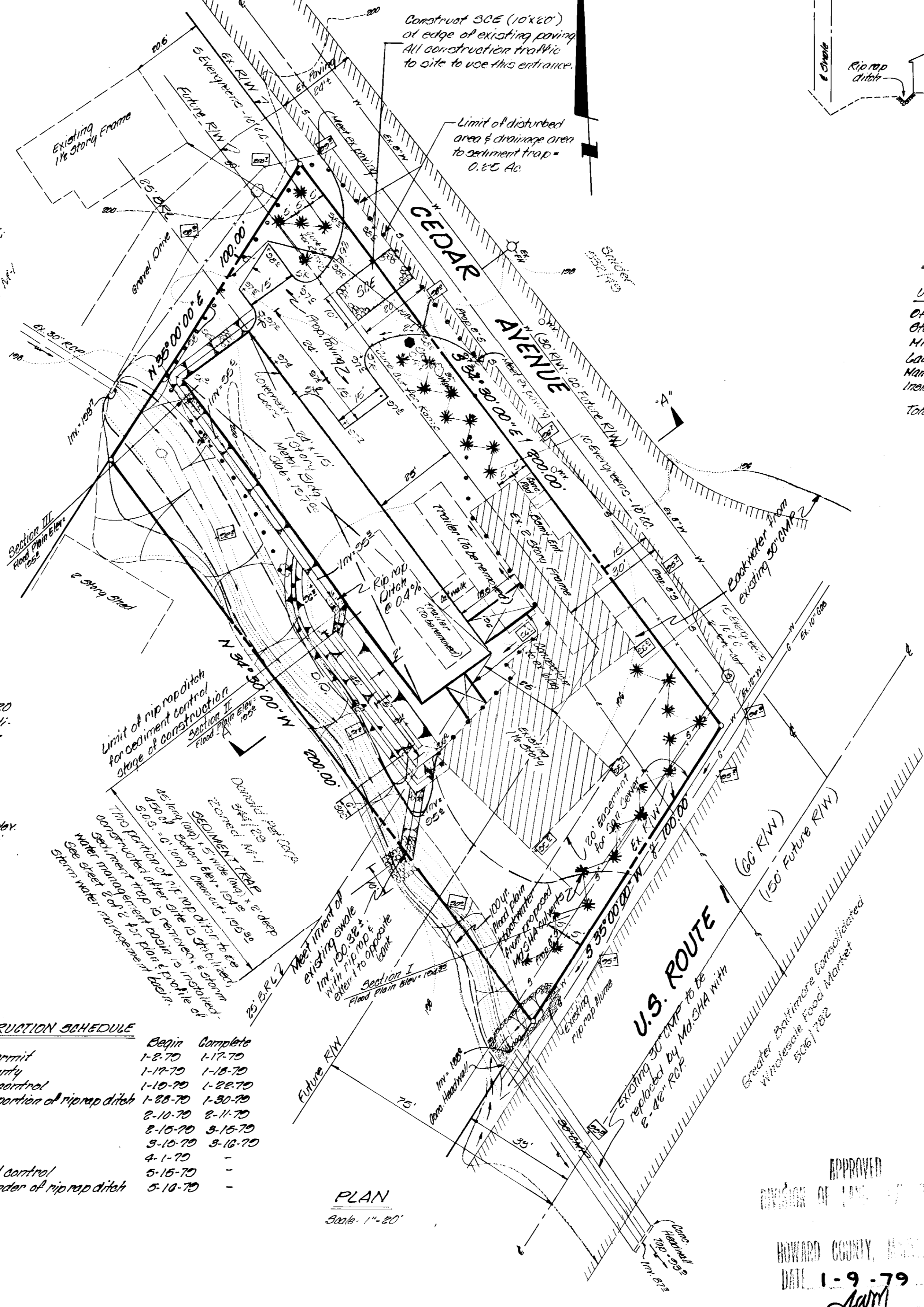
**SEDIMENT CONTROL NOTES**

- S.O.E. = Stabilized Construction Entrance
- O.D. = Dimension Dike
- S.O.S. = Stone Outlet Structure
- See details in "Standards & Specifications for Soil Erosion & Sediment Control in Developing Areas" Soil Conservation Service - U.S.D.A.
- Property found on Soil Map # 30
- Predominant soils - S1Ktan silt loam, Manticos & Relay soils
- Permanent seeding of "Kernex 51" full texture @ 1.15 lbs/100 sq ft & "Kernex" lespedeza - inoculated @ 0.34 lbs/100 sq ft is to be used to stabilize all disturbed areas onsite.
- Fertilize with 10-10-10 @ 11.5 lbs/100 sq ft in fall for maintenance.
- Procedures for site preparation, seeding, fertilizing & mulching to be in accordance with Section 51 of the above referenced Standards & Specifications.
- All sediment control measures to be adjusted to meet field conditions at the time of construction & to be constructed prior to any grading or disturbance of existing surfaces material.
- Periodic inspection & maintenance of all sediment control structures must be provided to insure intended purpose is accomplished.
- Positive drainage to the stone outlet structure is to be maintained at all times.

**CONSTRUCTION SCHEDULE**

	Begin	Complete
1. Obtain grading permit	1-2-79	1-17-79
2. Notify Howard County	1-17-79	1-18-79
3. Install sediment control	1-18-79	1-22-79
4. Install northern portion of riprap ditch	1-22-79	1-30-79
5. Grade site	2-10-79	2-11-79
6. Install building	2-15-79	3-15-79
7. Pave site	3-15-79	3-16-79
8. Stabilize site	4-1-79	-
9. Remove sediment control	5-15-79	-
10. Construct remainder of riprap ditch	5-18-79	-

**PLAN**  
 Scale: 1" = 20'



**SECTION "A-A"**  
 Horiz. 1" = 20'  
 Vert. 1" = 20'

**BUILDING USE & PARKING BREAKDOWN DATA**

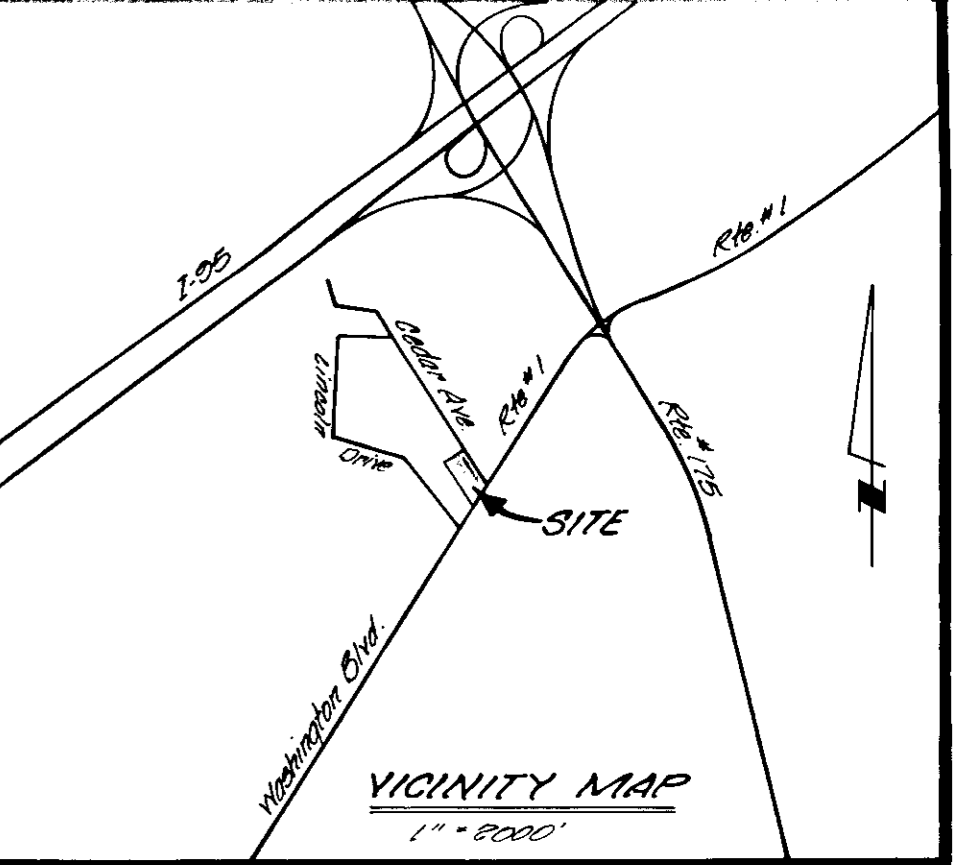
Use	Square Feet	No. Employees	Ex. Bldg. S.E. Park Spaces	New Bldg. S.E. Park Spaces			
Office	800	5	1.5	500	-		
Storage	1000	-	-	1000	-		
Auto	400	-	-	400	-		
Laundry	800	2	1.0	200	1		
Manufacturing	200	3	1.5	-	200	2	
Inside Parking @ 2000'	-	-	-	-	1200	-	
<b>Total</b>	<b>2700'</b>	<b>8</b>	<b>2.0</b>	<b>3,000</b>	<b>1+</b>	<b>2700'</b>	<b>5+</b>

**SITE ANALYSIS**

- Parcel Area = 18,794 sq ft or 0.430 ac.
- Zoning - M-1
- Parking required - 8 empl @ 2 empl/space = 4 spaces provided - 6 spaces\*
- Building Coverage - New - 2700 sq ft or 14.7% Total - 5200 sq ft or 28.0%
- Green space - 12,284 sq ft or 65.3%
- Paving - 1200 sq ft or 6.7%
- \* All parking provided inside building

**GENERAL NOTES**

- Check reference 015/170
- Zoning - M-1
- Topography from field survey
- Tax Map 43 Parcel 162
- Soil Map # 30
- Predominant soils onsite: S1Ktan silt loam, Manticos & Relay soils
- Public owner will be notified to this project only when contract # 2700 is completed & no approval of 2700 has been obtained
- Property has no direct vehicular access to U.S. Rte. 1
- Water & sewer connection to be made through existing structures
- No retail sales from site. All items picked up & delivered by company.
- No exterior lighting on this site
- Installation of all traffic control devices shall be in accordance with the Manual of Traffic Control Devices, 1971 revised edition
- Storm water management criteria: Storage - 10 year developed Release - 2 year undeveloped (Plant profile Sheet 2 of 2)



**VICINITY MAP**  
 1" = 2000'

**SURVEYOR'S CERTIFICATE**  
 I certify that this plan of development & plan for erosion & sediment control represents a practical & workable plan based on my personal knowledge of the site conditions & that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Date: 10-6-78

**OWNER'S CERTIFICATE**  
 I certify that all development and/or construction will be done according to this plan of development & plan for erosion & sediment control & I also authorize periodic inspection by the Howard Soil Conservation District or their authorized agent as deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.  
 Date: 10/4/78

Approved for public water & public sewage & public storm drainage systems & roads  
**HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS**  
 Date: 2-7-79  
 George F. Nummy, Director

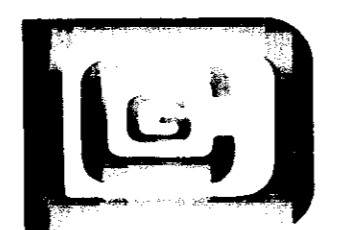
Approved for public water & public sewage systems  
**HOWARD COUNTY HEALTH DEPARTMENT**  
 Date: 2-8-79  
 Joseph M. Braden, County Health Officer

Approved  
**HOWARD COUNTY OFFICE OF PLANNING & ZONING**  
 Date: 2-13-79  
 Thomas G. Harigle, Planning Director  
 Date: 2-13-79  
 John W. Mueselman, Chief Division of Land Development

Reviewed for Howard Soil Conservation District and meets technical requirements.  
 Date: 1-22-79  
 Winda L. Bondette, Signature

**U.S. SOIL CONSERVATION SERVICE**  
 This plan is approved for soil erosion & sediment control by the Howard Soil Conservation District.  
 Date: 1-22-79  
 Les Ester, Howard Soil Conservation District

OWNER	NO.	REVISIONS	DATE
Jack Funderburk Commercial Drapery Service 8000 Washington Blvd Waterloo, Md. 21727 709-1388	1	General Revisions as per Hb. Co.	12-18-78
	2	Revisions as per DPM	12-25-78



**DEVELOPMENT CONSULTANTS GROUP, INC.**  
 LONG REACH VILLAGE CENTER  
 SUITE 235  
 COLUMBIA, MD. 21045  
 301-596-3811

**SITE PLAN**  
**COMMERCIAL DRAPERY SERVICE**  
 Tax Map 43 Parcel 162  
 Election District # 6  
 Howard County, Maryland

DATE	SHEET
Oct. 1978	1
DRAWN	OF 2
CHECKED	PROJECT NO.
SCALE	78-070
As Shown	

SDP-79-49

STANDARD AND SPECIFICATIONS

FOR  
CRITICAL AREA STABILIZATION  
(With Permanent Seedings)

Definition

Planting vegetation such as grasses and legumes on critical areas.

Purpose

To stabilize the soil; to reduce damages from sediment and runoff to downstream areas; improve wildlife habitat; enhance natural beauty.

Conditions Where Practices Apply

Graded or cleared areas subject to erosion and where a permanent, long-lived vegetative cover is needed.

SPECIFICATIONS

Vegetation cannot be expected to provide an erosion control cover and prevent soil slippage on a soil that is not stable due to its texture, structure, water movement or excessive slope.

Minimum soil conditions needed for the establishment and maintenance of a long-lived vegetative cover:

- A. Enough fine-grained materials (over 30 percent silt plus clay) to provide the capacity to hold at least a moderate amount of available moisture. Noticeable exception would be planting lovegrass and sericea lespedeza which can be planted on a sandier soil.
- B. Sufficient pore space to permit adequate root penetration.
- C. The soil shall be free from any material harmful to plant growth.
- D. If these minimum conditions cannot be met, see specification, Topsoiling (57.01).

I. Site Preparation

- A. Install needed erosion control practices such as interceptor dikes, berms and spreaders, contour ripping, erosion stops, channel liners and sediment basins.

- B. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, anchoring and maintenance.

II. Seedbed Preparation

Flat areas and slopes up to 3 to 1 grade shall be loose and friable to a depth of at least 3 inches. The top layer of soil shall be loosened by raking, discing or other acceptable means before seeding.

Slopes steeper than 3 to 1 shall have the top 1-3 inches of soil loose and friable before seeding.

III. Soil Amendments

Lime and fertilizer according to soil tests. Lime and fertilizer needs can be determined by a soil testing laboratory, such as the University of Maryland's Soil Testing Laboratory.

In lieu of soil test results, apply 2 tons dolomitic limestone and 600 pounds 0-20-20, or equivalent per acre before seeding. Harrow or disc lime and 0-20-20, or equivalent fertilizer uniformly into the soil to minimum depth of 3 inches on slopes flatter than 3 to 1. On slopes of greater than 3 to 1 grade, the lime and fertilizer shall be worked in as directed by the contracting officer. On sloping land, the final harrowing or discing operation should be on the contour wherever feasible. No attempt should be made to drag any disced area to make the soil surface very smooth after discing. At time of seeding, apply 400 pounds 38-0-0 ureaform fertilizer and 500 pounds 10-20-20, or equivalent fertilizer per acre. For mixtures containing perennial legumes, the 500 pounds of 10-20-20 may be omitted.

IV. Seeding

- A. Select a mixture from table 51-1

B. Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder or hydroseeder (slurry includes seed and fertilizer) on a firm, moist seedbed. Maximum seeding depth should be 1/4 inch on clayey soils and 1/2 inch on sandy soils, when using other than hydroseeder method of application.

V. Mulching

A. Materials and Amounts

- 1. Straw - Straw shall be unrotted small grain straw applied at the rate of 1-1/2 to 2 tons per acre, or 70 to 90 pounds per 1,000 sq. ft. Mulch materials shall be relatively free of all kinds of weeds and shall be free of prohibited noxious weeds which are: Canada thistle, Johnsongrass and quackgrass.

Spread uniformly by hand or mechanically. For uniform distribution of hand spread mulch, divide area into approximately 1,000 sq. ft. section and place 70-90 lbs. of mulch in each section.

- 2. Wood-fiber or paper-fiber mulch at the rate of 1,500 pounds per acre or 35 pounds per 1,000 sq. ft. may be applied by hydro-seeding. Use is limited to < 3% and < 150' length of slope and during optimum seeding periods in spring and fall.

- 3. Mulch nettings such as jute or excelsior blanket may be used. Staple to surface in waterways and on steep slopes. Lighter materials of paper, plastic and cotton mulch nettings may be used where erosion hazard is not severe. If area is to be mowed, do not use metal staples.

- 4. Wood chips at the rate of approximately 6 tons per acre or 275 lbs. per 1,000 sq. ft. may be used when available and when feasible to use. Particularly well-suited for utility and road rights-of-way.

B. Mulch anchoring shall be accomplished immediately after mulch placement to minimize loss by wind or water. This may be done by one of the following methods, depending upon size of area, erosion hazard, and cost. On sloping land, practice No. 3 below, should be done on the contour wherever possible. Applies to all straw and to wood chips or more critical sites, except "tracking" should be done up and down the slope with 1-1/2 inch cleat marks running across the slope.

- 1. Peg and Twine - Drive 8 to 10-inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss-cross within a square pattern. Secure twine around each peg with two or more round turns.

- 2. Mulch Nettings - Staple lightweight biodegradable paper, plastic or cotton nettings over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4 feet wide and up to 300 feet long.

- 3. Mulch Anchoring Tool - A tractor drawn implement designed to punch and anchor mulch into the surface 2 inches of soil. This practice affords maximum erosion control but is limited to flatter slopes where equipment can operate safely. Tracking - primarily used on > 3:1 cut and fill slopes to cut the mulch into the soil with bulldozer cleats.

4. Liquid Mulch Binders

Applications of liquid binders should be heavier at edges where wind catches mulch, in valleys, and at crests of banks. Remainder of area should be uniform in appearance. Caution should be used with asphalt in residential and similar areas.

- a. Cuthack asphalt - rapid curing (RC-70, RC-250, and RC-800) or medium curing (MC-250 or MC-800). Apply 5 gallons per 1,000 sq. ft. or 200 gallons per acre on flat areas, and on slopes less than 8 feet high. On slopes 8 feet or more high, use 8 gallons per 1,000 sq. ft. or 348 gallons per acre.

- b. Emulsified asphalt - (ES-1, CRS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, and CRS-2). Apply 5 gallons per acre on flat areas, and on slopes less than 8 feet high. On slopes 8 feet or more high, use 8 gallons per 1,000 sq. ft. or 348 gallons per acre.

All asphalt designations are from the Asphalt Institute Specifications.

- c. Synthetic binders - Synthetic binders such as Curasol, DCA-70, Petroset and Terra Tack may be used at rates recommended by the manufacturer to anchor mulch material.

Note: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other products.

VI. Irrigation

If soil moisture is deficient, supply new seedlings with adequate water for plant growth until they are firmly established, if feasible. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

VII. Maintenance

Maintenance is a vital factor in maintaining an adequate vegetative erosion control cover. See Table 51-2.

- A. Irrigation - If soil moisture becomes deficient, irrigate to prevent loss of stand of protective vegetation, if feasible.

- B. Repairs - Inspect all seed areas for failures and make necessary repairs, replacements, and reseeding within the planting season, if possible.

- 1. If stand is inadequate for erosion control, overseed and fertilize using half of the rates originally applied.
- 2. If stand is over 60% damaged, reestablish following original lime, fertilizer, seedbed preparation and seeding recommendations.

TABLE 51-1  
Permanent Seedings and Seeding Dates.

Mix. No.	SEEDING MIXTURES (Use Certified Seed if available)	SEEDING RATE Lbs./1,000 Acres	OPTIMUM SEEDING DATES (a)											
			COASTAL PLAIN				PIEDMONT				MOUNTAINS			
			2/1-4/30	4/1-8/24	8/15-10/31	1/1-4/30	5/1-9/21	9/1-10/15	1/1-5/31	6/1-7/31	8/1-9/30	1/1-2/30	3/1-4/30	
1.	'Kentucky 31' Tall Fescue *	60	1.38	x	x	x	x	x	x	x	x	x	x	
2.	'Kentucky 31' Tall Fescue *	60	1.38	x	x	x	x	x	x	x	x	x	x	
3.	Warping lovegrass (a)	2	.05											
4.	'Kentucky 31' Tall Fescue *	50	1.15	x	x	x	x	x	x	x	x	x	x	
5.	'Korean' lespedeza (b) inoculated	15	.34											
6.	'Kentucky 31' Tall Fescue *	40	.92	x	x	x	x	x	x	x	x	x	x	
7.	Crownvetch, inoculated	3	.07											
8.	'Kentucky 31' Tall Fescue *	30	.69	x	x	x	x	x	x	x	x	x	x	
9.	Warping lovegrass (b) inoculated	2	.05											
10.	'Kentucky 31' Tall Fescue *	30	.69	x	x	x	x	x	x	x	x	x	x	
11.	Red canarygrass (c)	10	.23											
12.	'Kentucky 31' Tall Fescue *	60	1.38	x	x	x	x	x	x	x	x	x	x	
13.	Red Fescue "Jamestown" or "Penn-lawn"	40	.92	x	x	x	x	x	x	x	x	x	x	
14.	Lawns & High Maintenance Areas 'Merion' Kentucky Bluegrass * 'Common' Kentucky Bluegrass * (d) Red Fescue "Jamestown" or "Penn-lawn"	40 40 20	.92 .92 .46	x x x	x x x	x x x	x x x	x x x	x x x	x x x	x x x	x x x	x x x	
15.	'Kentucky 31' Tall Fescue * (e)	220 280	5-6	x	x (f)	x	x	x	x (f)	x	x	x	x (f)	

\* Use certified seed only

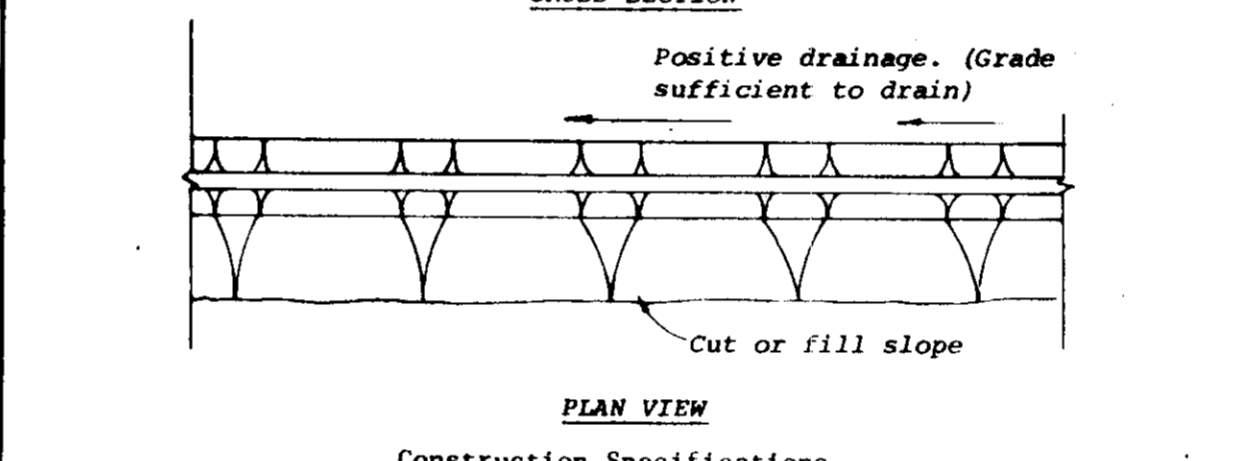
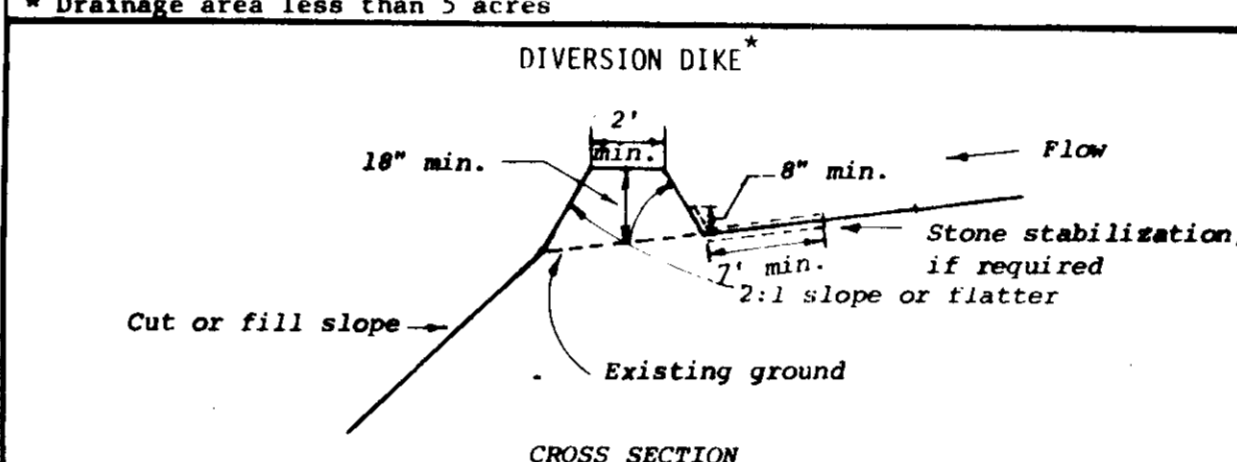
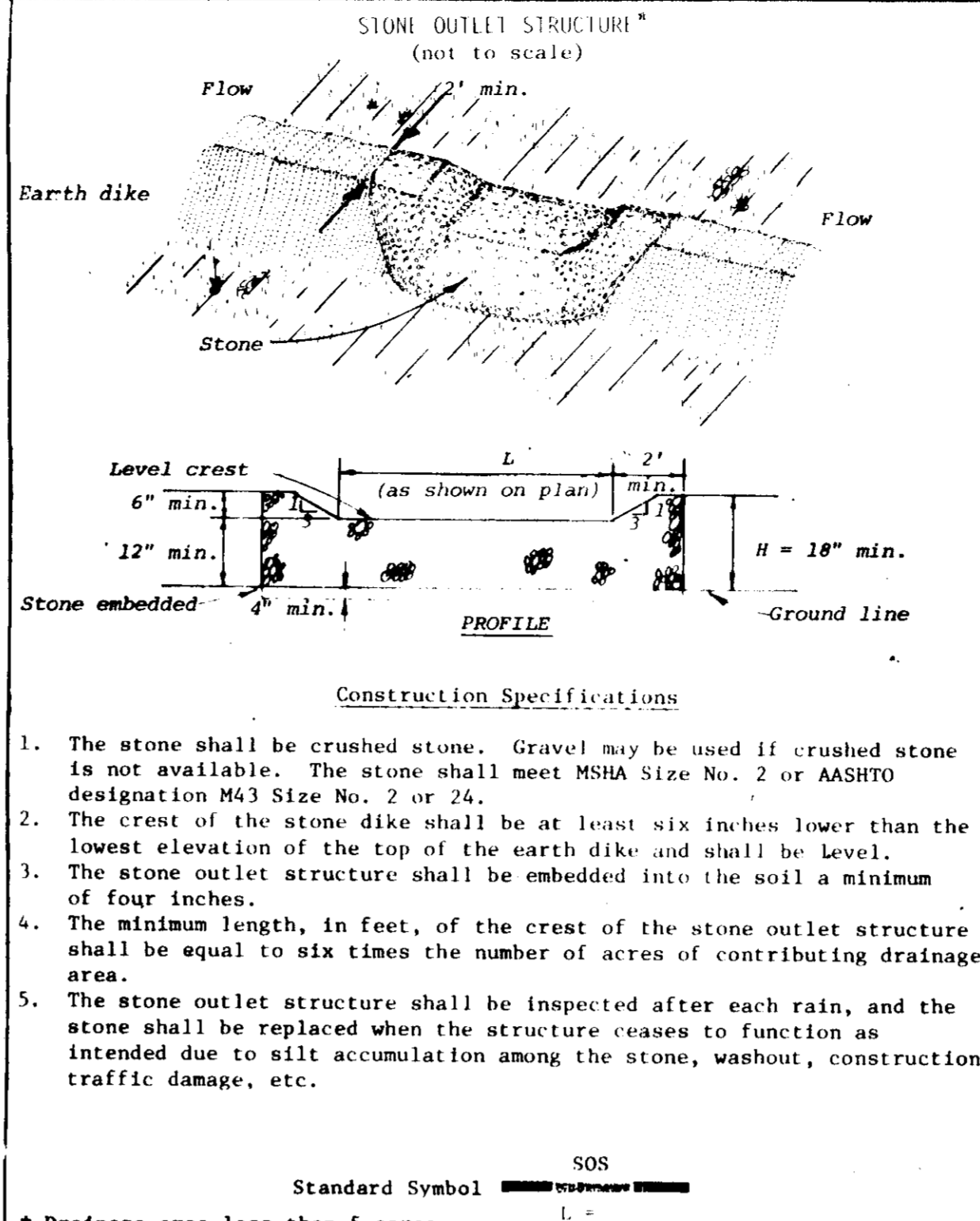
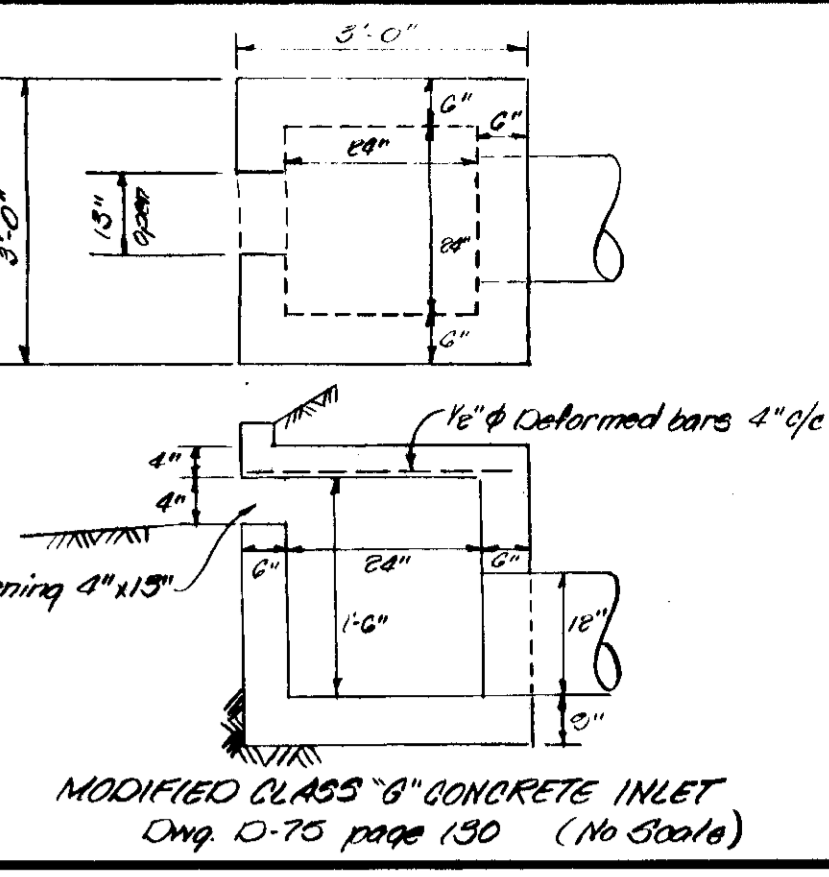
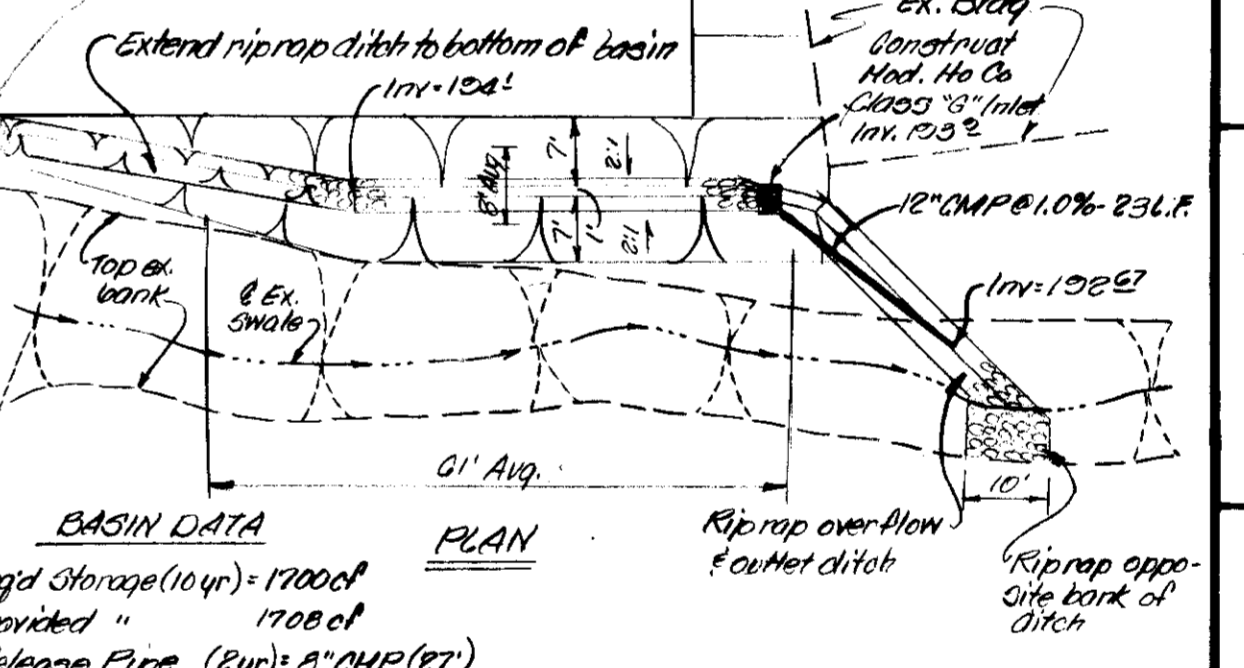
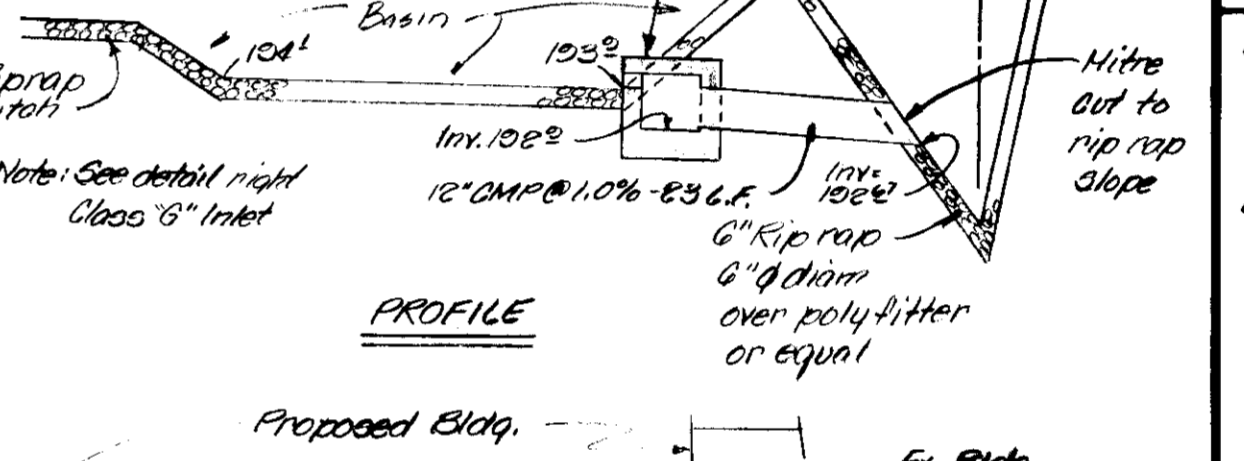
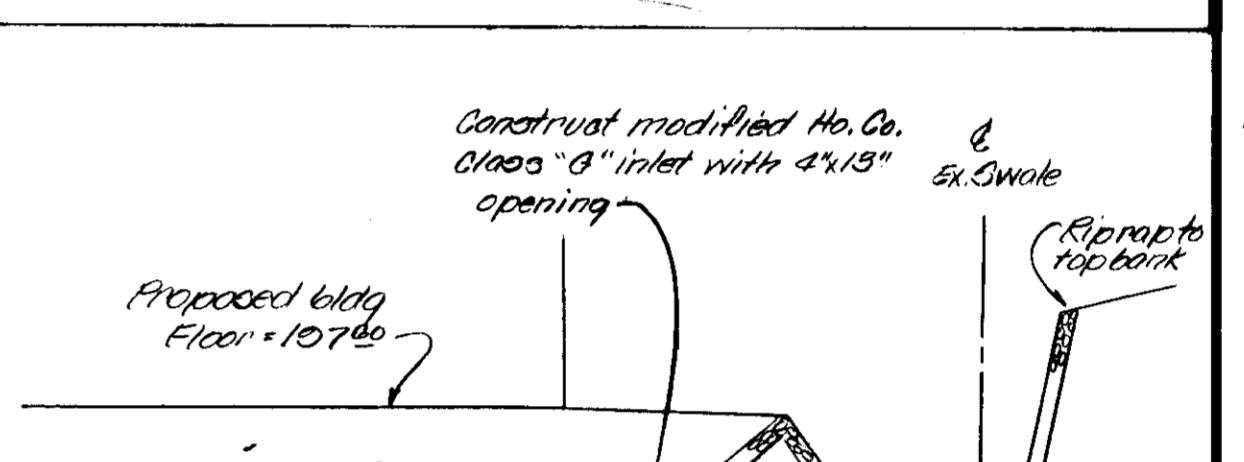
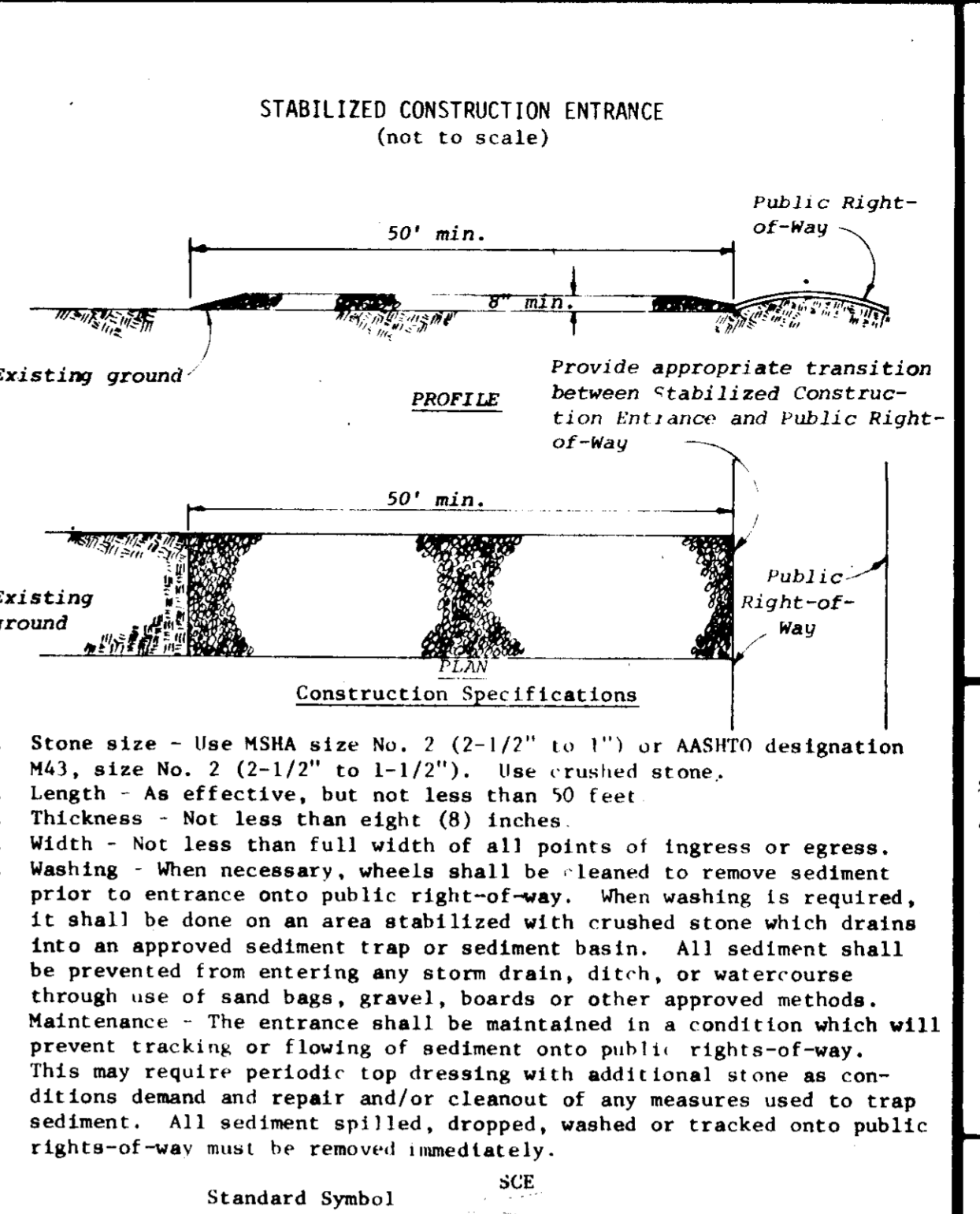


TABLE 51-2  
Maintenance Fertilization for Permanent Seedings  
Use Soil Test Recommendations or Rates Shown Below

Mixture No.	Seeding Mixture	Formulation	Lbs. Per Acre	Lbs. Per 1000 Sq. Ft.	Time	Mowing
1,2,3,7,8, 10,11	Tall fescue makes up 70% or more of cover.	10-10-10 or 38-0-0+ 0-20-20	500	11.5	Fall	Yearly, or as needed
4,5,6,7,9,	Crownvetch, Sericea lespedeza, Birdsfoot trefoil	0-20-20	400	9.2	Spring, Year following establishment and every 4-5 yrs. thereafter	Not closer than 3" if occasional mowing is desired.
4,5	Fairly uniform stand of tall fescue and sericea lespedeza, or birdsfoot trefoil.	5-10-10	500	11.5	Fall, Year following establishment and every 4-5 yrs. thereafter	Not required. Not closer than 4" if occasional mowing is desired, & then in fall after sericea seed has matured.



MODIFIED CULVERT INLET  
Comp. D-75 page 130 (No Scale)

SURVEYOR'S CERTIFICATE  
I certify that this plan of development & plan for erosion & sediment control represents a practical & workable plan based on my personal knowledge of the site conditions & that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
Date: 12-13-78  
Maurice D. Lawrence  
Johnston D. Lawrence  
M.D.P.L.S. #5112

OWNER'S CERTIFICATE  
I certify that all development and/or construction will be done according to this plan of development & plan for erosion & sediment control & I also authorize periodic inspection by the Howard Soil Conservation District or their authorized agent as deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.  
Date: 12-13-78  
Owner: Jack Funderburk

APPROVED FOR PUBLIC WATER & PUBLIC DAMAGE SYSTEMS & ROUTE  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
Date: 2-2-79  
Jemy F. Mumby  
Director

APPROVED FOR PUBLIC WATER & PUBLIC DAMAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT  
Date: 2-8-79  
Joseph M. Brydnes  
County Health Officer

APPROVED  
HOWARD COUNTY OFFICE OF PLANNING & ZONING  
Date: 2-13-79  
D. Donald L. Hamble  
Planning Director

Reviewed for Howard Soil Conservation District and meets technical requirements.  
Date: 1/22/79  
Winital Bunkette  
Signature

U.S. SOIL CONSERVATION SERVICE  
This plan is approved for soil erosion & sediment control by the Howard Soil Conservation District.  
Date: 1-22-79  
L. E. FOSTER  
HOWARD COUNTY SOIL CONSERVATION DISTRICT

OWNER	NO.	REVISIONS	DATE
Jack Funderburk Commercial Drapery Service 8040 Washington Blvd. Waterloo, Md. 21787 708-1934	1	Street added as per SDP	12-18-78
	2	Revisions as per RFP	12-28-78

**DEVELOPMENT CONSULTANTS GROUP, INC.**  
LONG REACH VILLAGE CENTER  
SUITE 235  
COLUMBIA MD. 21045  
301-596-3811

**COMMERCIAL DRAPERY SERVICE**  
SEDIMENT CONTROL DETAILS  
Tax Map 45 Parcel 102  
Election District MGA  
Howard County, Maryland