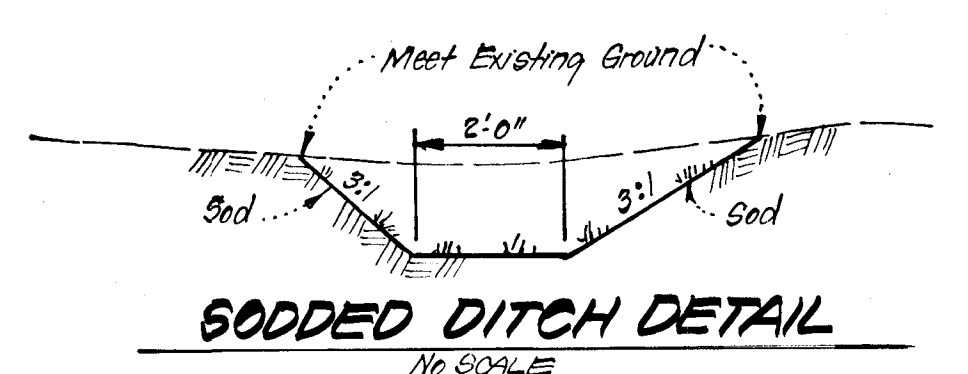
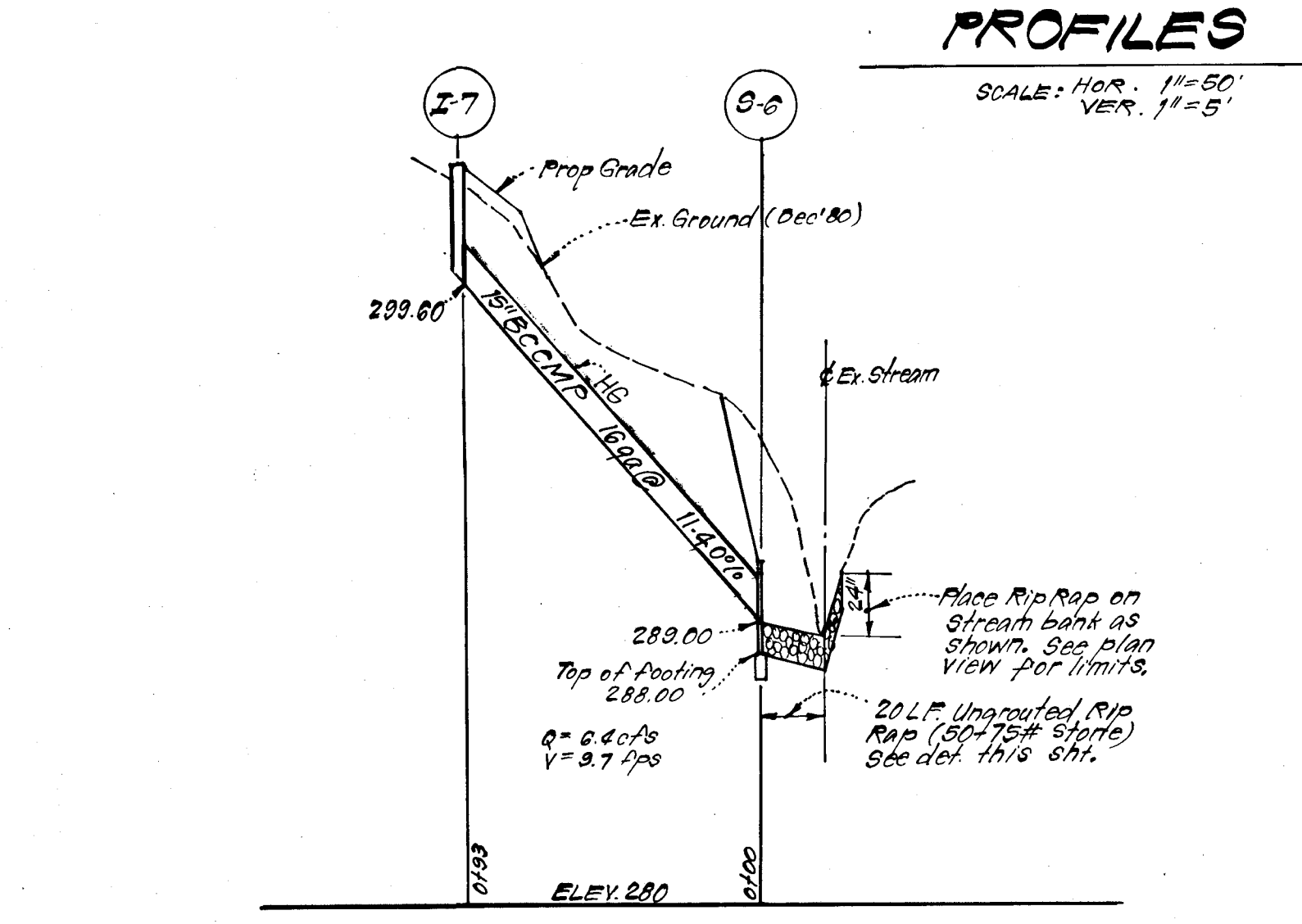
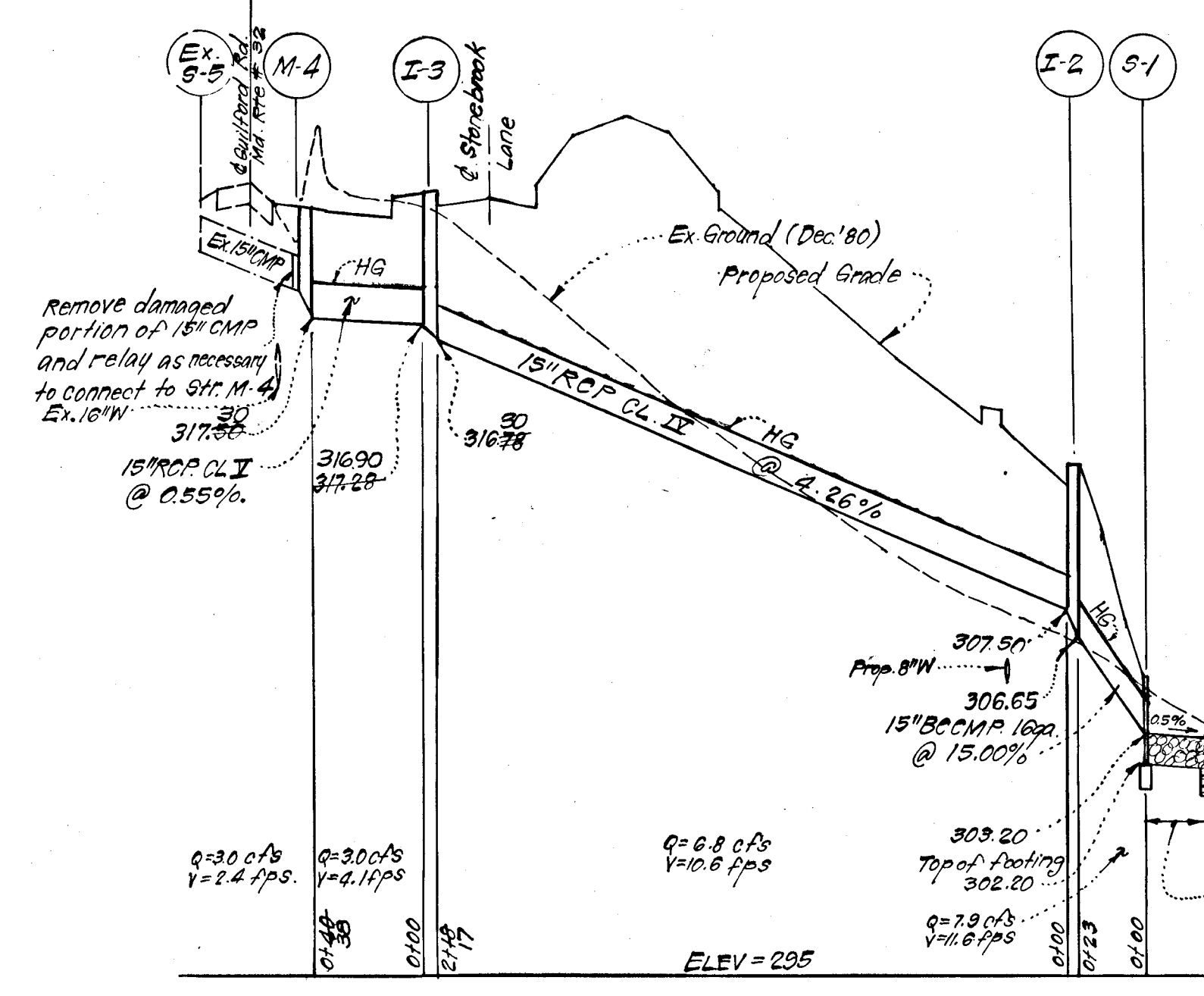
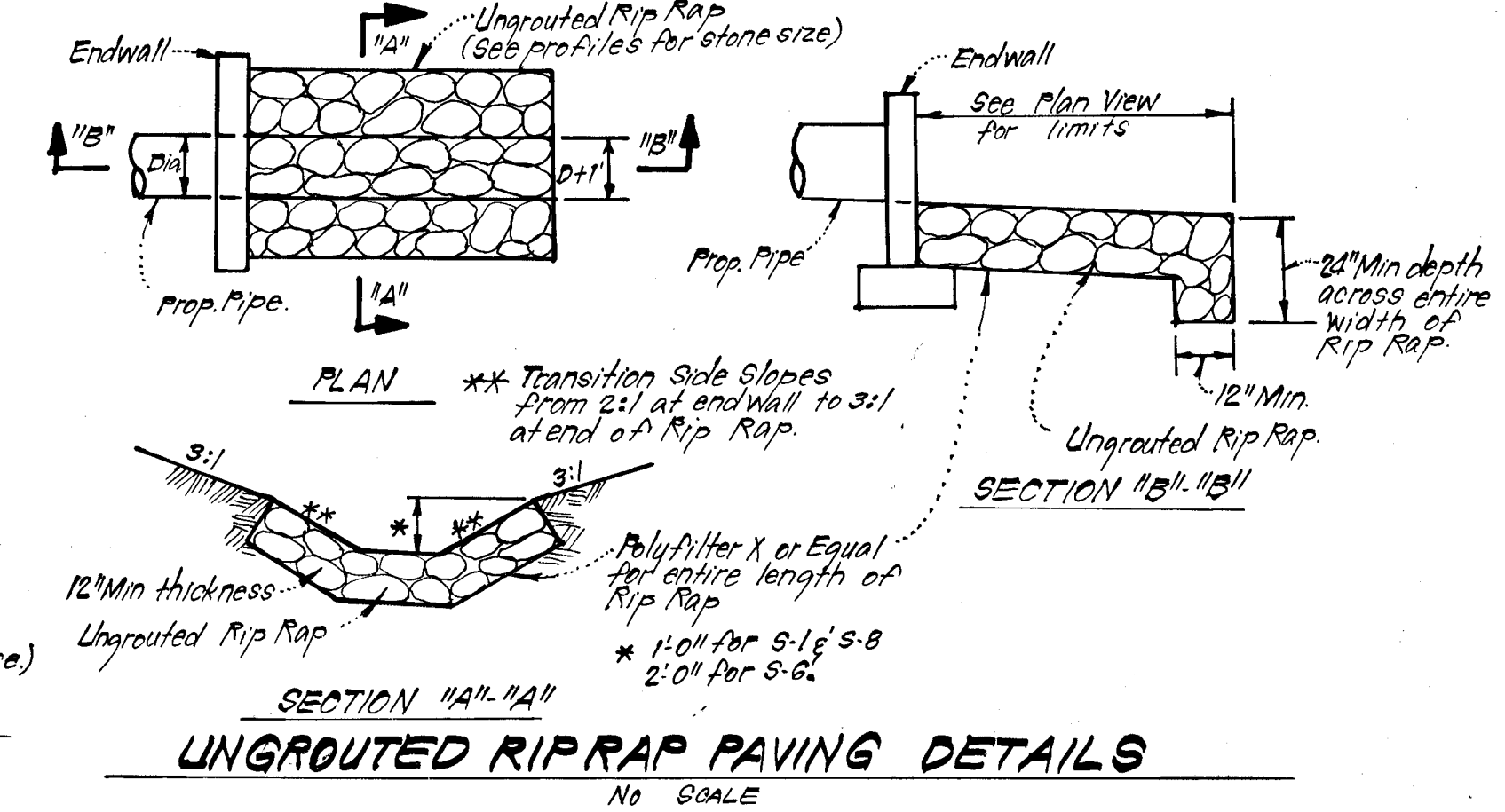
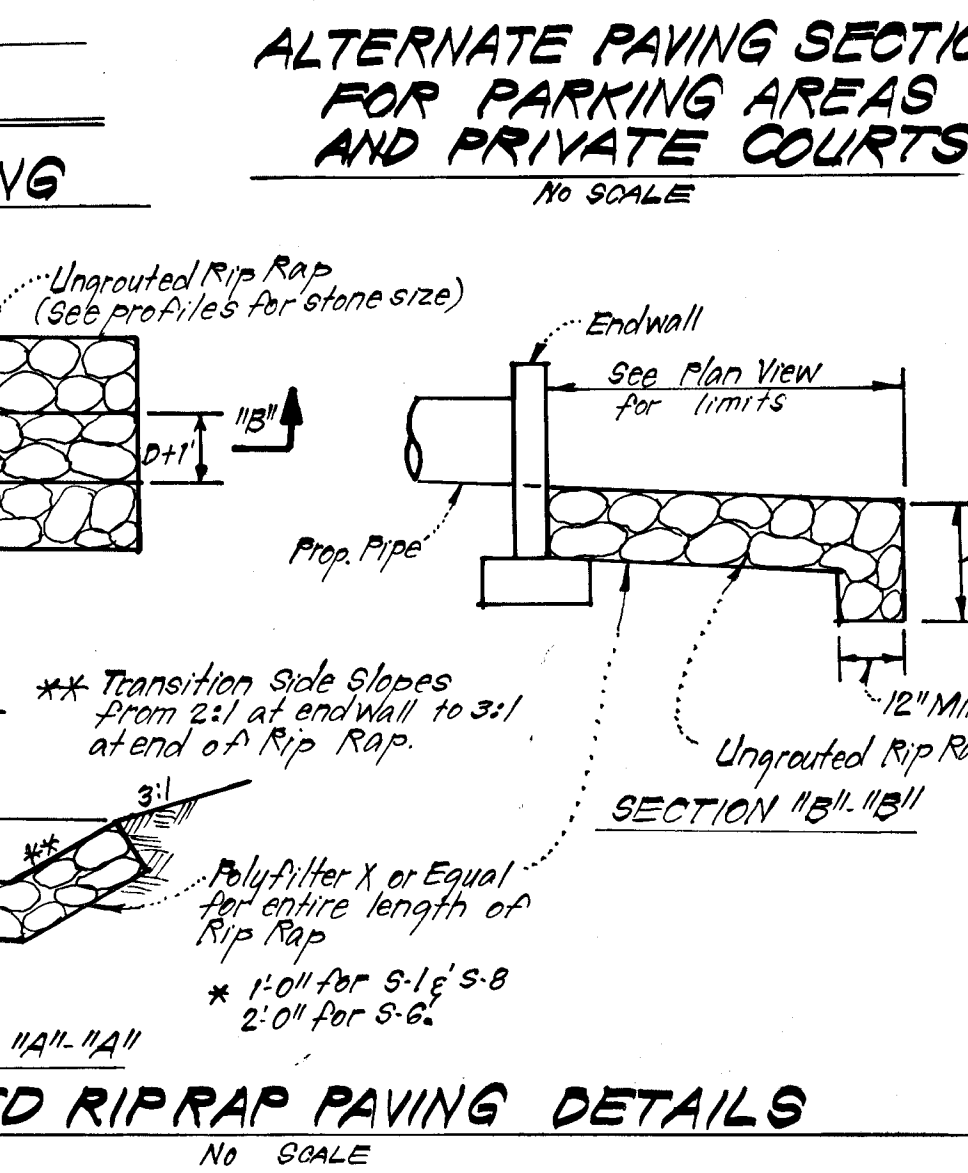


SECTION 14\"/>

Bituminous Conc. Surface	1 1/2"	Band C-3
Bituminous Conc. Base	2 1/2"	Band C-2
Prime	1"	
8\"/>		
6\"/>		

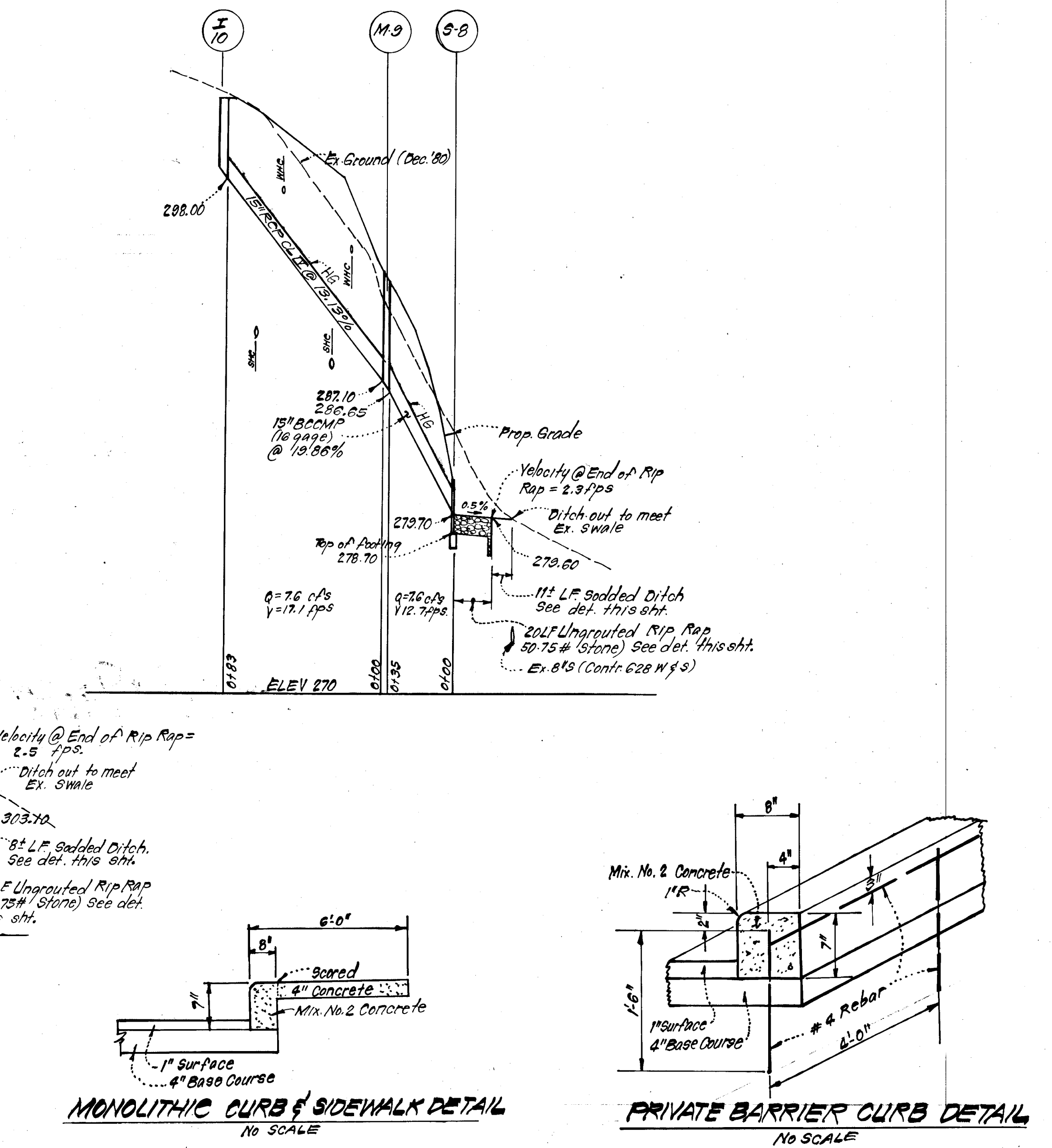
ALTERNATE PAVING SECTION FOR PUBLIC ROADS

Bituminous Conc. Surface	1"	Band C-3
Bituminous Conc. Base	2"	Band C-2
Prime	1"	
5\"/>		
4\"/>		



GENERAL SODDING NOTES:
 1. Apply 10-10-10 Fertilizer @ 1000#/acre (25#/1000 sf).
 2. Apply Ground Agricultural Limestone @ 2000#/acre (50#/1000sf).
 3. Incorporate both Lime and Fertilizer into soil by disking. Firm up after incorporation.
 4. Lay sod to a tight fit. Roll to insure contact with underlying soil. Water as necessary for 1st 2 weeks in summer to ensure establishment.
 5. All sod to be used must be certified by the state of Maryland.
 6. All sod to be placed or stacked.

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 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."
 John D. Troutman, Signature of Developer/Builder, 7/22/81, Date



STRUCTURE SCHEDULE

No	TYPE	INV.		TOP ELEVATION		REMARKS	LOCATION
		IN	OUT	Upper	Lower		
S-1	10" End Wall	303.20	-	-	-	Ho. Co. Std. SD/5.21 *	See Plan
I-2	14-5" Inlet	306.25	303.56	312.50	312.50	Ho. Co. Std. SD/4.01 W=2'6"	See Plan
I-3	14-10" Inlet	317.28	314.10	321.78	321.80	Ho. Co. Std. SD/4.02 W=2'6"	From Stream End @ Sta. 0+65. 1/8 Left
M-4	18" Manhole	Ex.	317.50	321.40	320	Ho. Co. Std. SD/3.03	4 Sta. 0+25. 7 1/2 Left
S-6	10" End Wall	289.00	-	-	-	Ho. Co. Std. SD/5.21 *	See Plan
I-7	14-10" Inlet	-	286.50	303.50	-	Ho. Co. Std. SD/4.02 W=2'6"	See Plan
S-8	14-10" End Wall	279.70	-	-	-	Ho. Co. Std. SD/5.21 *	See Plan
M-9	18" Manhole	287.10	286.65	302.80	-	Ho. Co. Std. SD/3.03	See Plan
I-10	14-10" Inlet	-	288.00	302.27	-	Ho. Co. Std. SD/4.02 W=2'6"	From Stream End @ Sta. 1+37. 15 1/2 Left

* Increase "4" dimension by 1-0" to accommodate Rip Rap.

PIPE SCHEDULE

SIZE	TYPE	LENGTH
15"	RCP	40 LF
15"	RCP	30 LF
15"	BCCMP	18 LF

AS-BUILT SURVEY CERTIFIED BY DONALD B. SACKETT, M.E., L.S. No. 8059 ON 6-15-81

Reviewed for: Howard S.C.D. and meets technical requirements. Signature: William V. Rowe, Date: 2-8-81. U.S. Soil Conservation Service.

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

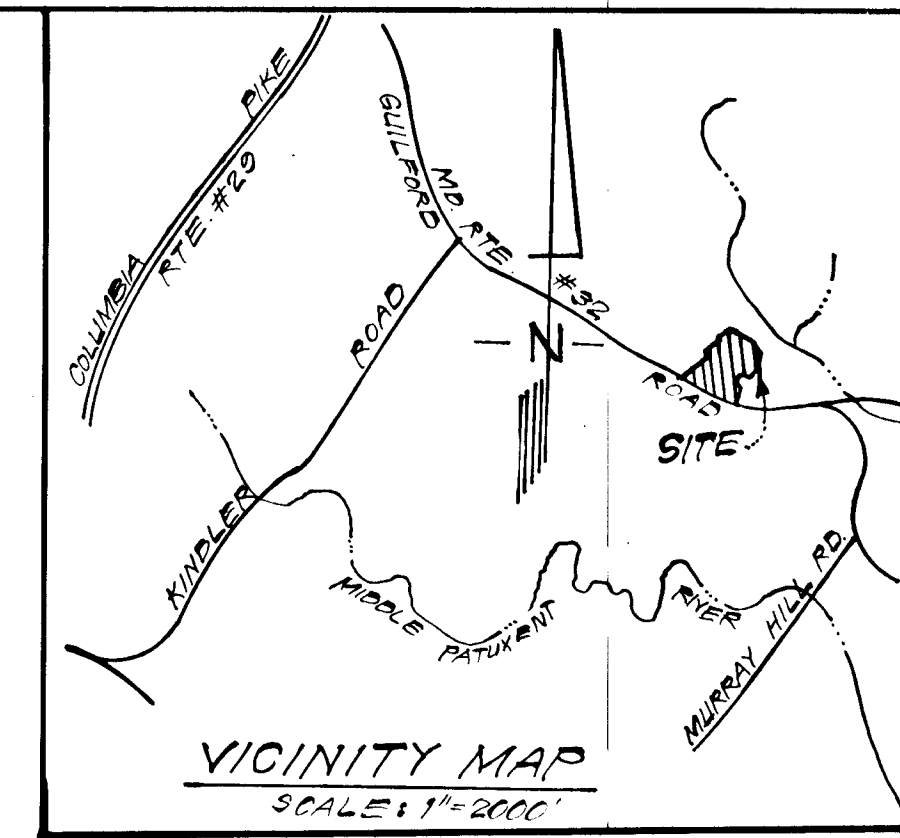
APPROVED: Department of Public Works, Chief, Bureau of Engineering, Date: 3-19-81.
 APPROVED: Howard County Office of Planning and Zoning, Chief, Division of Land Development & Zoning Administration, Date: 2-8-81.

ENGINEERS' 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.

CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS. 11314 LOCKWOOD DRIVE, SILVER SPRING, MARYLAND 20904. (301) 593-3400.

DESIGNED: R.U.S. ROAD CONSTRUCTION PLANS. SCALE: As Shown.
 DRAWN: K.I.W. DETAILS AND PROFILES. DRAWING: COLLIMBIA, 2 of 4.
 CHECKED: R.U.S. VILLAGE OF KINGS CONTRIVANCE. JOB NO.: 80-112.
 DATE: 6-8-81. FOR: The Troutman Communities, Suite 300, Wild Lake Village Green, Columbia, Maryland 21044. FILE NO.: 80-112-D.

#445



Reviewed for Howard S.C.D.
 Name
 and meets Technical Requirements
 Signature [Signature] Date 2-8-81
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED
 FOR SOIL EROSION AND SEDIMENT
 CONTROL BY THE HOWARD SOIL
 CONSERVATION DISTRICT.

William J. Rame 2-8-81
 Approved Date

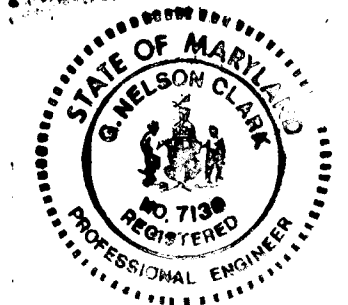
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 "I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."

John L. Troutman 7/24/81
 Signature of Developer/Builder Date

1. Straw Bale Dike/Silt Fence
 2. Perimeter Dike
 3. Stone Filter Inlet Protection
 4. Stabilized Construction Entrance
- LEGEND
1. Existing Contour (2 FT Interval)
 2. Existing Storm Drain
 3. Proposed Storm Drain
 4. Existing Sewer
 5. Building Restriction Line

APPROVED: Department of Public Works
[Signature] 3-19-82
 Chief, Bureau of Engineering Date

APPROVED: Howard County Office of Planning and Zoning
[Signature] 2-8-81
 Chief, Division of Land Development & Zoning Administration Date

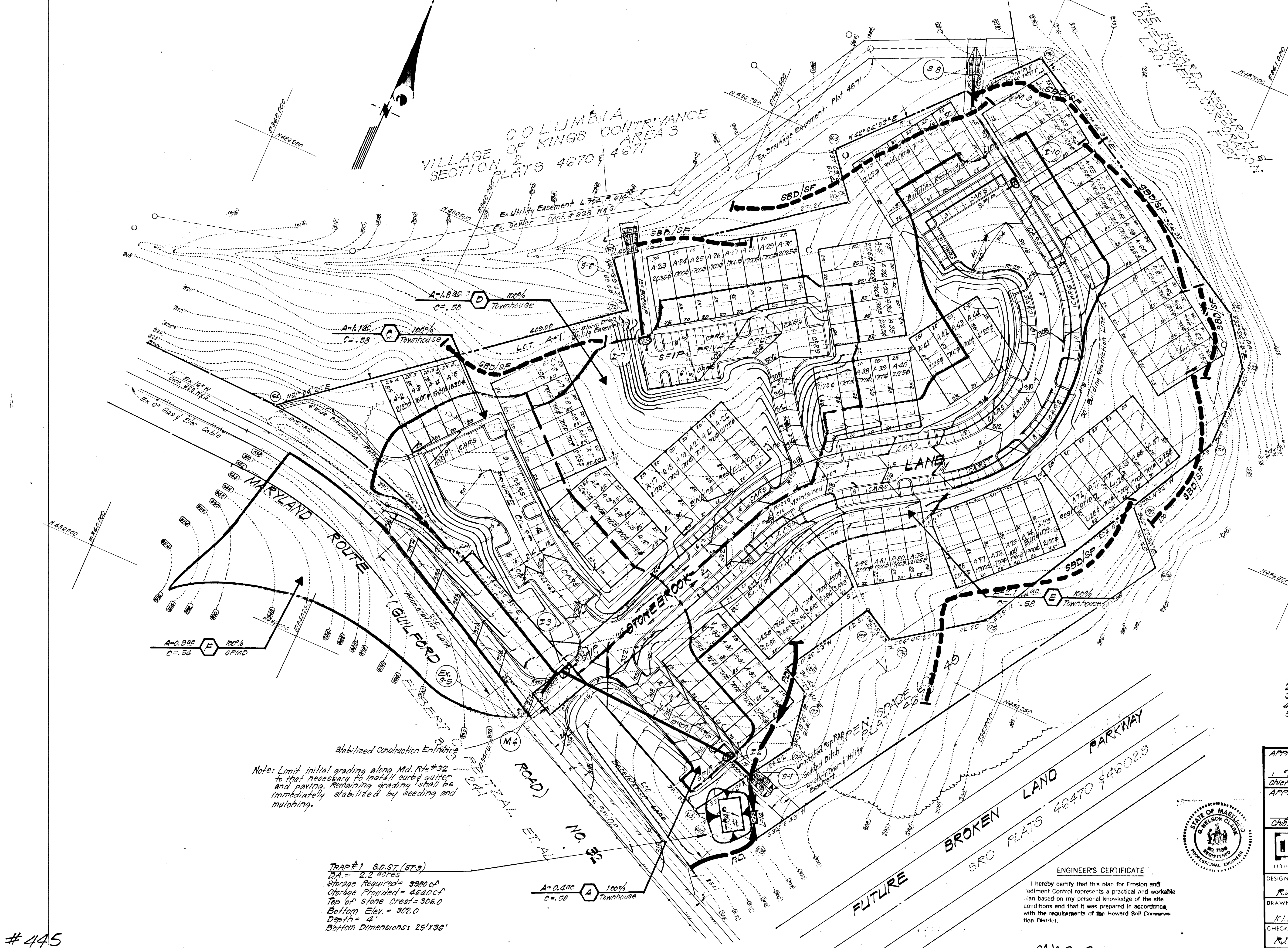


ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

G. Nelson Clark 6-8-81
 Date

DESIGNED	R.J.S.	ROAD CONSTRUCTION PLANS & EROSION CONTROL PLAN & DRAINAGE AREA MAP	SCALE	1"=50'
DRAWN	R.J.S.	A RE SUBDIVISION OF PARCEL "A"	DRAWING	3054
CHECKED	R.J.S.	VILLAGE OF KINGS CONTRIVANCE SECTION 2 AREA 3	JOB NO.	RD-12
DATE	6-8-81	8TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	FILE NO.	80-112-D

FOR: TRAUTMAN COMMUNITIES
 Suite 300 Wild Lake Village Green
 Columbia, Maryland 21044

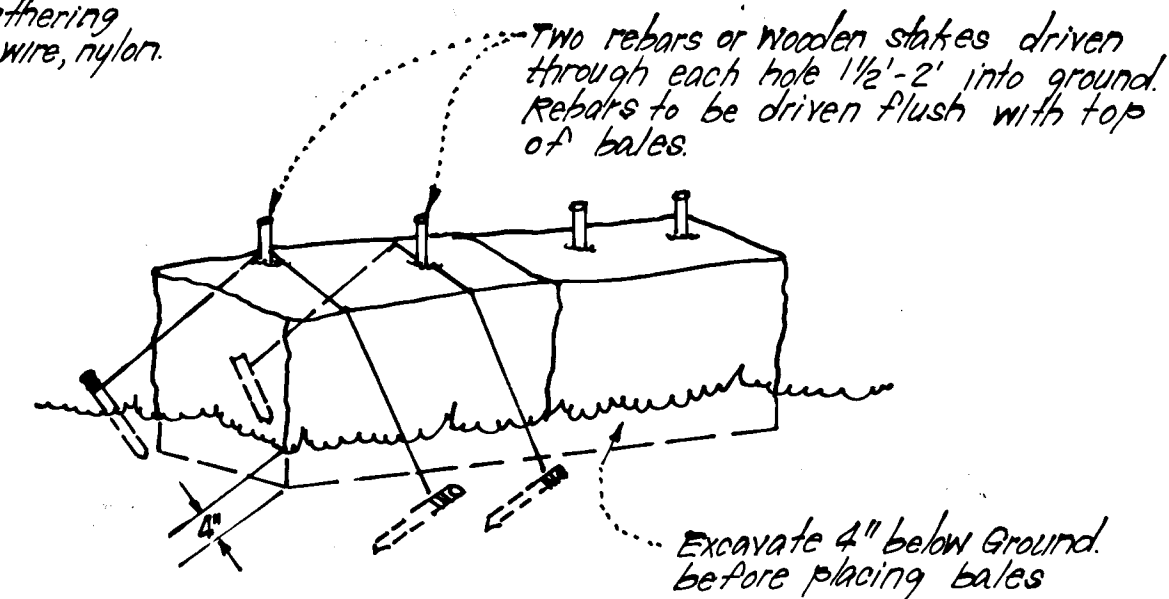


Note: Limit initial grading along Md. Rte #32 to that necessary to install curb gutter and paving. Remaining grading shall be immediately stabilized by seeding and mulching.

TRAP #1 S.O.S.T. (ST3)
 P.A. = 2.2 ACRES
 Storage Required = 3980 CF
 Storage Provided = 4640 CF
 Top of Stone Crest = 306.0
 Bottom Elev. = 302.0
 Depth = 4'
 Bottom Dimensions: 25' x 36'

#445

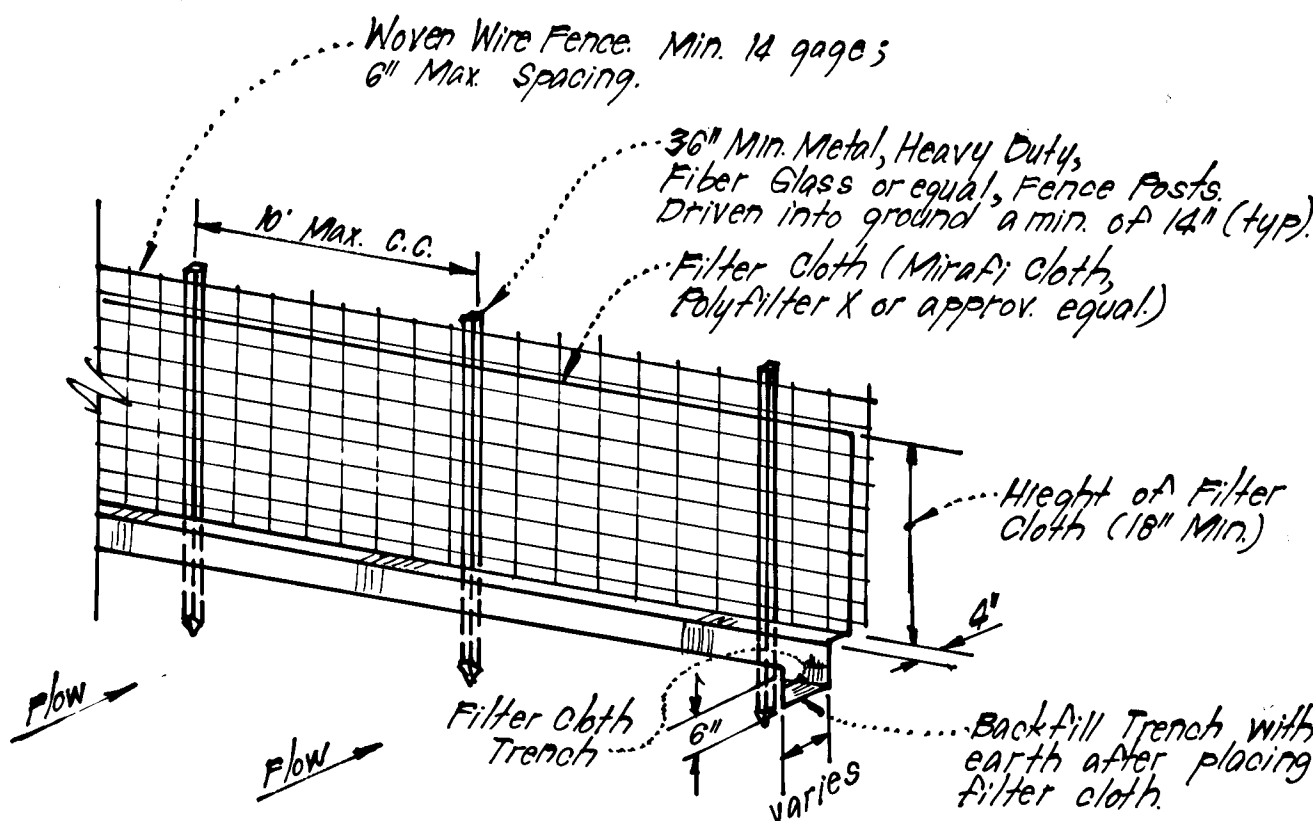
All bales shall be tied with non-weathering materials, i.e., wire, nylon.



Notes:
1. In lieu of the use of rebar each straw bale may be fastened to ground with pegs (4 per bale and wire or nylon as shown above).

TYPICAL STRAW BALE DIKE DETAIL (S.B.D.)

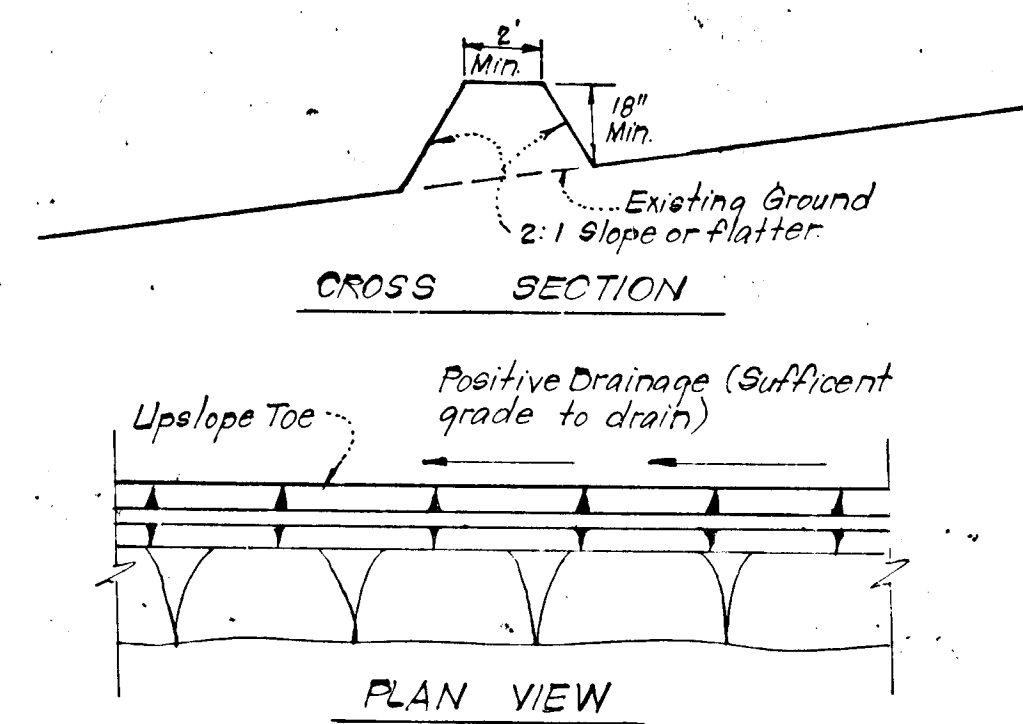
No Scale



Notes:
1. Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
2. Filter Cloth to be fastened securely to woven wire, by use of wire ties spaced every 24" x 24"

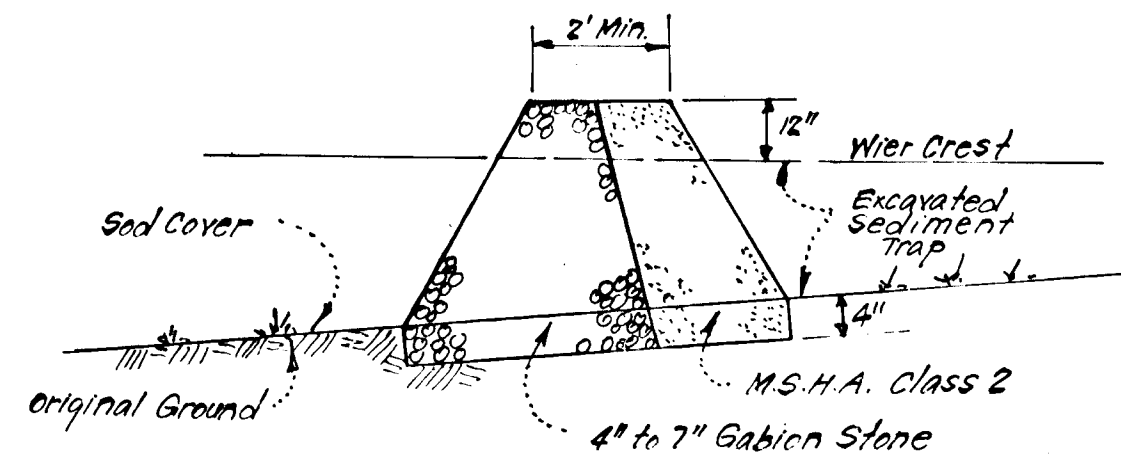
TYPICAL SILT FENCE DETAIL (S.F.)

No Scale

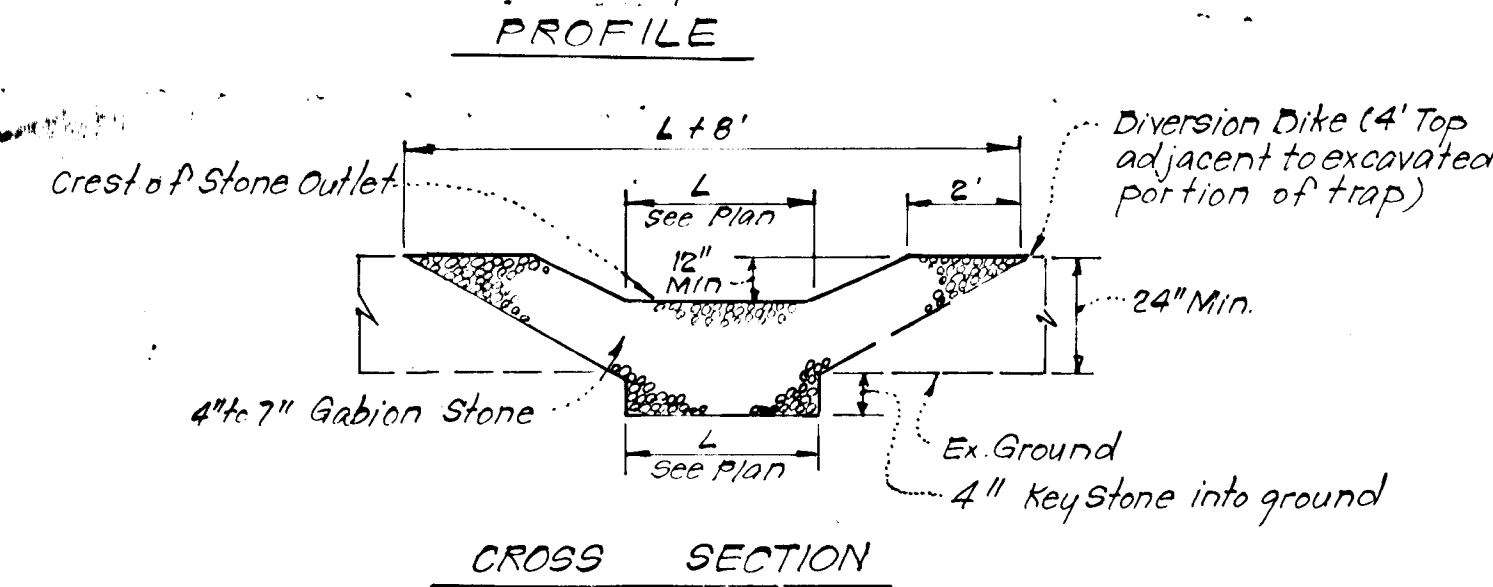


TYPICAL PERIMETER DIKE DETAIL (P.D.)

No Scale



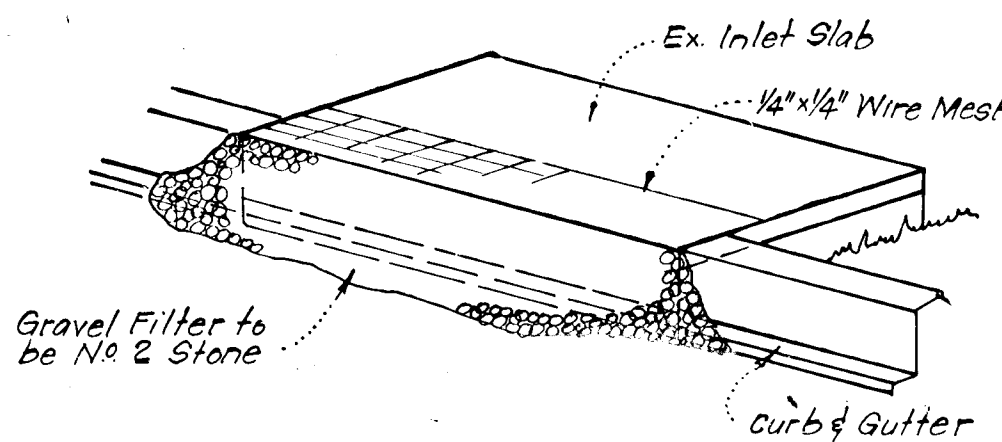
Note: For Dimensions not shown, see plan.



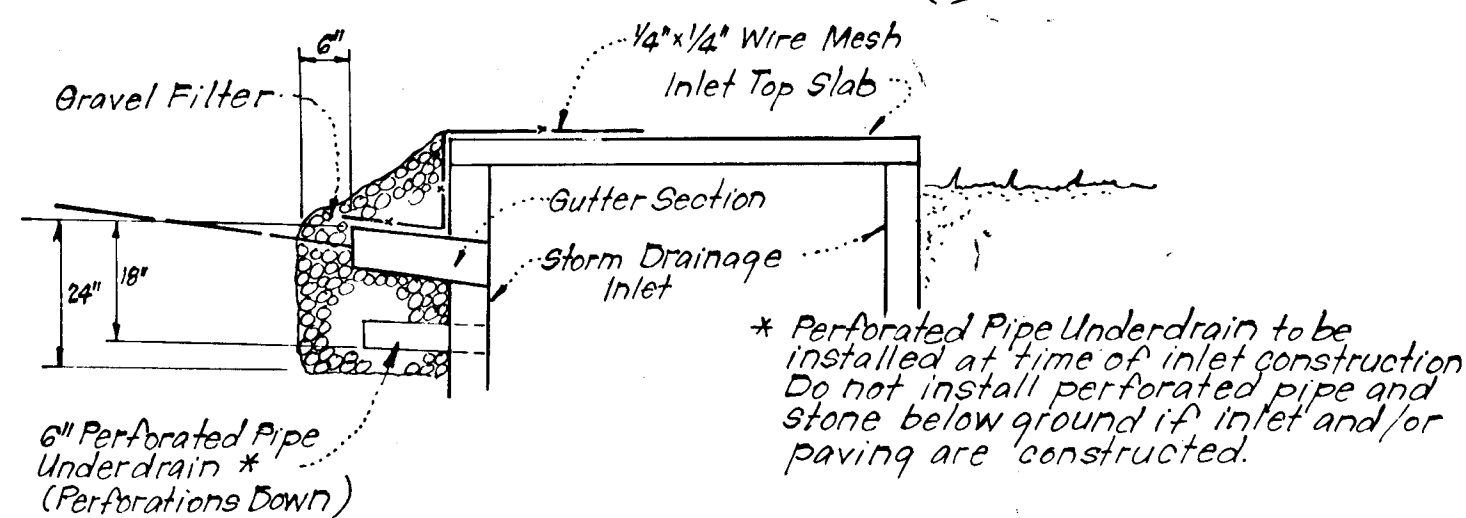
Notes:
1. Sediment Trap to be cleaned out when sediment reaches a level of 1 ft below crest of stone outlet.
2. Bottom of Sediment Trap to be level and constructed to the dimensions shown on plan.
3. Stone Outlet to be constructed through diversion dike adjacent to excavated portion of sediment trap.

DETAILS OF STONE FILTER OUTLET (FOR STONE OUTLET SEDIMENT TRAP)

No Scale

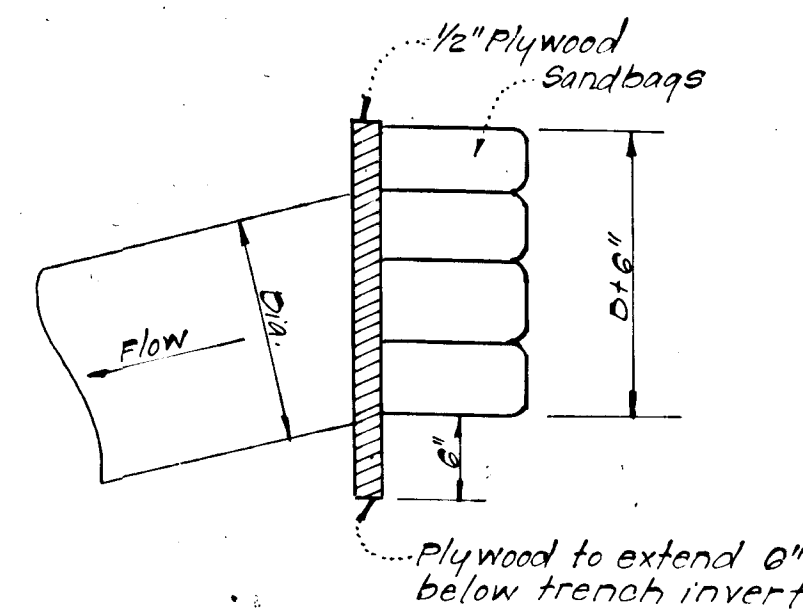


ISOMETRIC VIEW



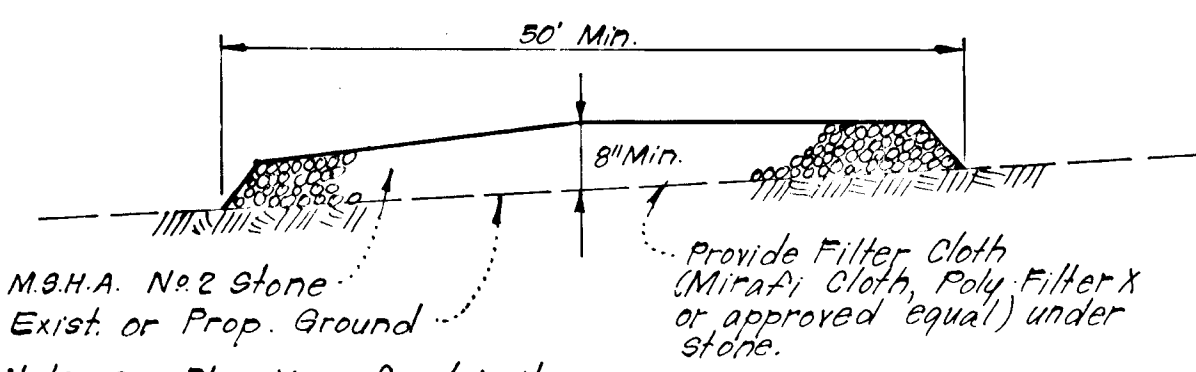
STONE FILTER INLET PROTECTION (S.F.I.P.)

No Scale



PIPE BLOCKING DETAIL

No Scale



STABILIZED CONSTRUCTION ENTRANCE

No Scale

Reviewed for HOWARD S.C.D. Name and meets Technical Requirements
Signature William J. Rowe Date 2-22-82
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved William J. Rowe Date 2-22-82

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 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 of Developer/Builder John L. Troutman Date 2/22/82

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 G. Nelson Clark Date 6-8-81

GENERAL NOTES

- Grading Permits shall be obtained prior to installation of Sediment Control & Grading.
- All Sediment and Erosion Control Measures will be installed and stabilized according to this plan prior to any other grading, clearing or disturbance of the existing surface of the site. See note #6 for stabilization except that the seed mixture will be annual rye applied at a rate of 1.4 lbs/1000 sq ft.
- Notify the Bureau of Inspections and Permits at least 24 hrs before starting any work.
- All Sediment Control Practices to conform to the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" and shall be adjusted to meet actual field conditions.
- Stabilization of Disturbed ground to be done as soon after construction as possible.
- All disturbed area to be stabilized in accordance with the following Specifications:
A. Seed - certified 85% germination applied at the rate of 3 lbs/1000 sq ft. Mixture - 40% Kentucky Blue, 20% chewing Fescue, 20% Kentucky 31 and 20% annual rye.
B. Fertilizer - 10-10-10 applied at a rate of 23 lbs/1000 sq ft. Ground Agricultural Lime or Dolomitic Lime applied at a rate of 90 lbs/1000 sq ft.
C. Mulch - Weed free grain straw applied at a rate of 70-90 lbs/1000 sq ft. Mulch shall be secured to the ground by any approved method i.e.; asphalt tacks, chemical binder, etc.
D. All Sod used shall be Maryland State Certified.
- 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 developers 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 off-site waste or borrow area prior to the import of any borrow or export of waste to or from this site.
- SITE ANALYSIS:
A. Total Area: 9.82 Acres
B. Area to be Paved: 2.09 Acres
C. Area to be Seeded: 1.35 Acres
D. Area Undisturbed: 6.38 Acres
- CONSTRUCTION SEQUENCE:
A. Install Stabilized Construction Entrance, Perimeter Dikes, S.B.D./S.F. and Sediment Trap.
B. Rough Grade Roadways, Private Courts and Lots.
C. Construct Storm Drainage and immediately install S.F.I.P.'s.
D. Install remaining utilities.
E. Final Grade, pave and stabilize in accordance with note #6 above.



APPROVED: Department of Public Works		
<u>William E. Rowe</u> Chief, Bureau of Engineering	<u>2-19-82</u>	Date
APPROVED: Howard County Office of Planning and Zoning		
<u>William E. Rowe</u> Chief, Division of Land Development & Zoning Administration	<u>2-8-82</u>	Date
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11315 LOCKWOOD DRIVE SILVER SPRING MARYLAND 20904 (301) 593 3400		
DESIGNED R.J.S.	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL DETAILS A RESUBDIVISION OF PARCEL "A"	SCALE As Shown
DRAWN K.I.W.	COLUMBIA VILLAGE OF KINGS CONTRIVANCE SECTION 2 AREA 3	40% JOB NO.
CHECKED R.J.S.	6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	80-112 FILE NO.
DATE 6-8-81	FOR: TROUTMAN COMMUNITIES Suite 300, Wild Lake Village Green Columbia, Maryland 21044	80-112-D FILE NO.

#445