

TEMP. SEDIMENT CONTROL DAM  
 SPILLWAY  
 ELEVATIONS  
 1) TOP OF DAM 420.0  
 2) 24" SPILLWAY 409.0  
 3) PROVIDE TEMPORARY FENCE

EXCESS MATERIAL, IF ANY TO BE USED  
 IN CONSTRUCTION OF TEMP. SEDIMENT  
 CONTROL DAM.

NO.	AREA	C	I	T.C.	Q
11					
13	2.96	.35	6.61	7min.	5.88
15	2.06	.35	6.61	7min.	4.77
14	.48	.50	6.61	7min.	1.59
11	.46	.50	6.33	7min.	1.46
12	2.08	.35	6.61	7min.	5.81
17	0.6	.50	6.55	7min.	1.97
16	0.6	.50	6.61	7min.	1.98
Area 9	0.3	.50	6.61	7min.	.99
Area 8	0.3	.50	6.61	7min.	.99

"I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control and I also authorize periodic on-site inspection, by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District."

*[Signature]*  
 Signature of Developer  
 June 3, 1974  
 Date

"I 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]*  
 Signature of Engineer  
 JAN 24, 1974  
 Date

REVIEWED BY HOWARD S.C.D.,  
 MEETS TECHNICAL REQUIREMENTS  
*[Signature]* 10/22/74  
 Date  
 U. S. SOIL CONSERVATION SERVICE  
 THIS DEVELOPMENT PLAN IS  
 APPROVED FOR SOIL EROSION  
 AND SEDIMENT CONTROL BY THE HOWARD  
 SOIL CONSERVATION DISTRICT  
*[Signature]* 10/22/74  
 Date  
 APPROVED  
 HOWARD S.C.D.

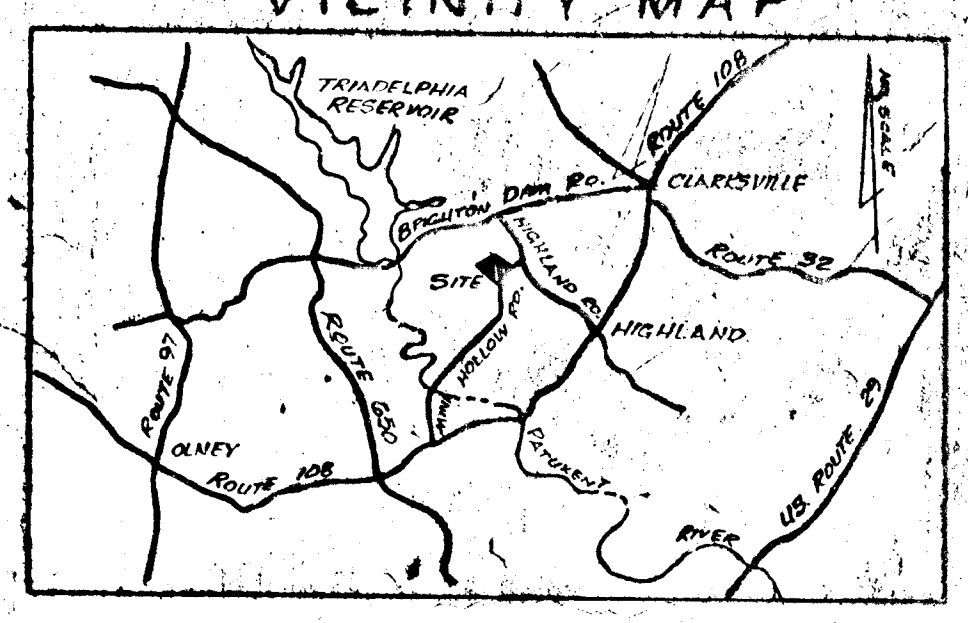
STORM DRAIN STUDY  
 AND  
 SEDIMENT CONTROL PLAN  
 SECTION "3"  
 GREEN HILL MANOR  
 HOWARD COUNTY, MARYLAND  
 ELECTION DISTRICT #5  
 5' CONTOUR INTERVAL  
 Datus: Continuation of Green Hill Manor Sec. 1  
 MAY, 1973

SURVEYOR'S CERTIFICATE  
 I hereby certify that this plan shown hereon is correct; that the boundary information is per survey of Shepherd & Associates, Inc. 1973 and that the topographic data is per Madox & Hopkins survey dated April 15, 1965.  
*[Signature]*  
 E. J. Shepherd, Jr.  
 M.D. Reg. No. 2539

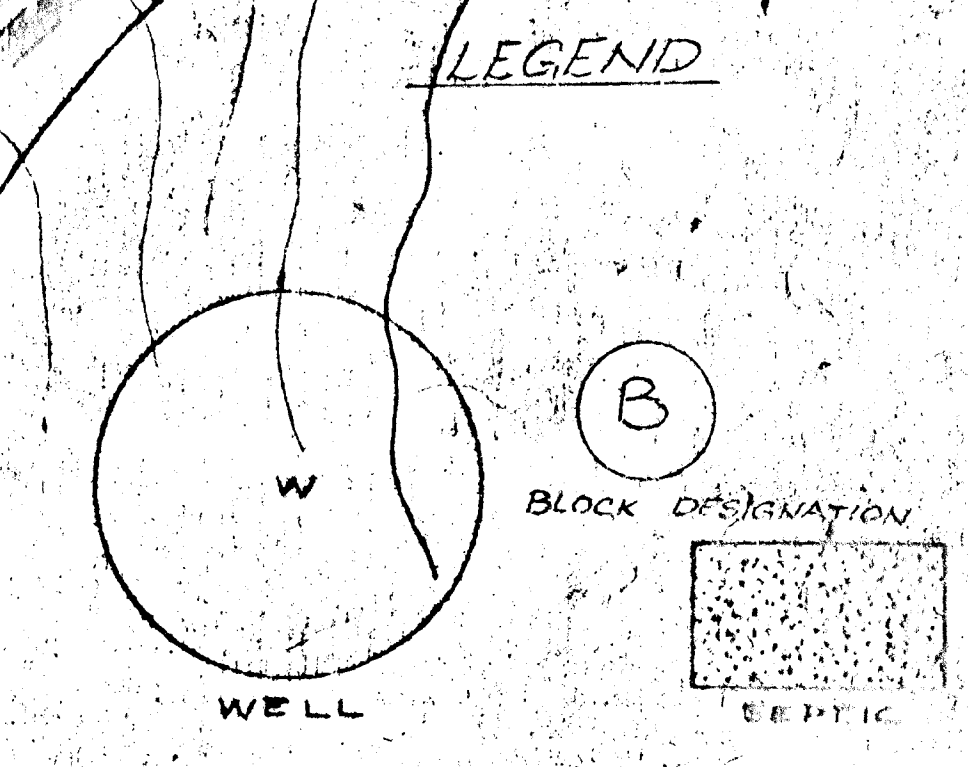
APPROVED: Department of Public Works  
*[Signature]* 11/4/74  
 Chief, Bureau of Highways  
 APPROVED: Howard Co Office of Planning & Zoning  
*[Signature]* 11/1/74  
 Planning Director  
 APPROVED: *[Signature]* 10/30/74  
 Chief, Division of Land Development & Transportation Planning

CONSTRUCTION SCHEDULE

STARTING DATE	ITEMS	COMPLETION DATE
	Construct Silt Trap Dam	
	Clear and Grade Streets	
	Construct Storm Drainage Structures	
	Pave Street Surfaces	
	Install Curbs	
	Seed or Sod all exposed areas	
	Silt Trap Dam to be retained to serve future subdivision	



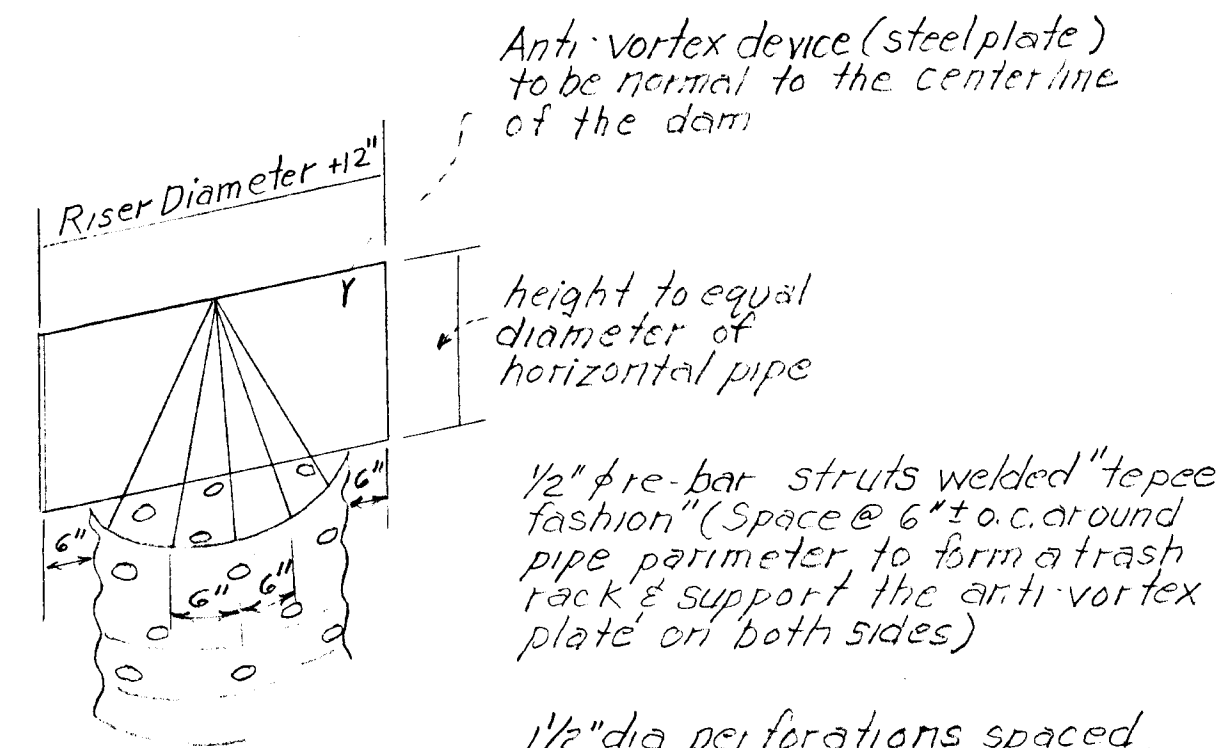
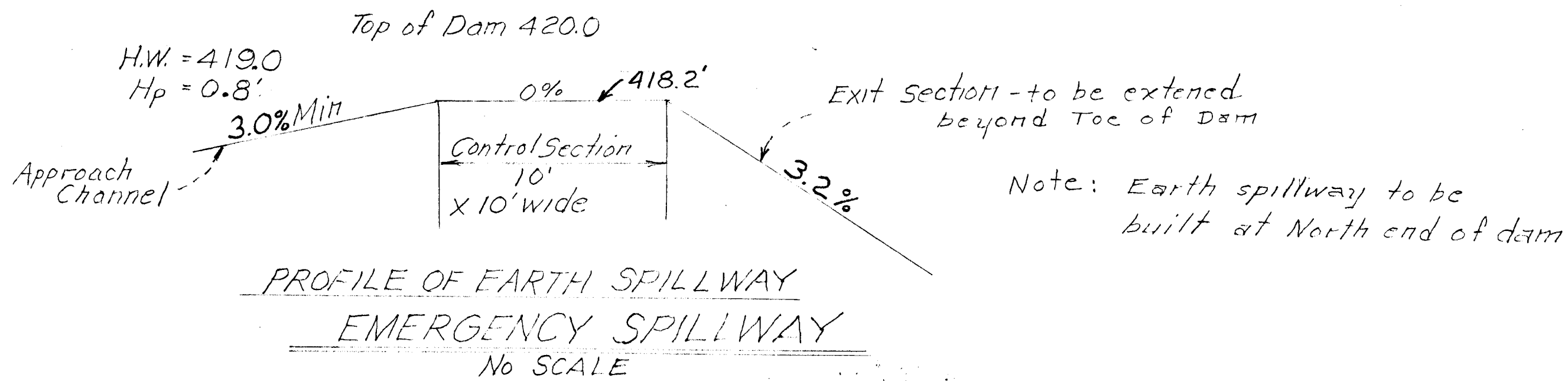
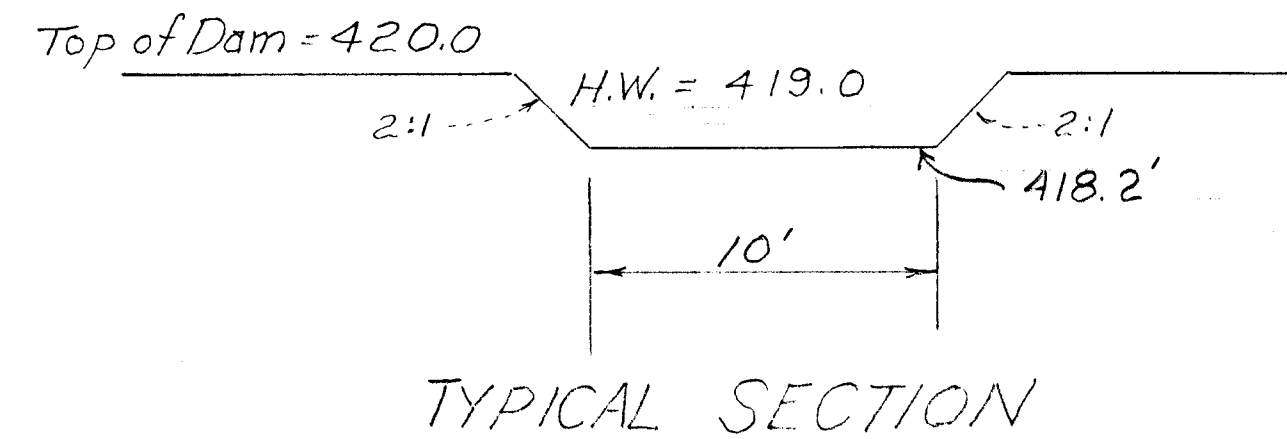
Total Area 94.512 Acres  
 This submission 20.739 Acres  
 Present Zoning R-40  
 Developer & Owner  
 V.L. VINELLA  
 12631 Circle Drive  
 Glen Hills  
 Rockville, Maryland  
 762-3007  
 Sheet 1 of 1  
 Revised B-174  
 SHEPHERD & ASSOCIATES, INC.  
 Engineers - Surveyors - Planners  
 7848 Airport Road  
 Rockville, Maryland 20850 (301) 581-1100



REQUEST FOR APPROVAL:  
 Lots 5 & 6 Block "B"  
 Lots 6, 7, 8, 9, 10 & 11 Block "C"  
 Lots 1, 2, 3, 4, 5, 6, 7 & 8 Block "D"  
 Lots 11 & 12 Block "D"  
 UTILITIES:  
 (1) Well and septic  
 (2) Overhead telephone & Electric  
 (3) exist at intersection of Villadest & Montell Drives  
 (4) Underground electric & telephone will be provided to all lots on this plan.  
 No 20% slopes in this submission

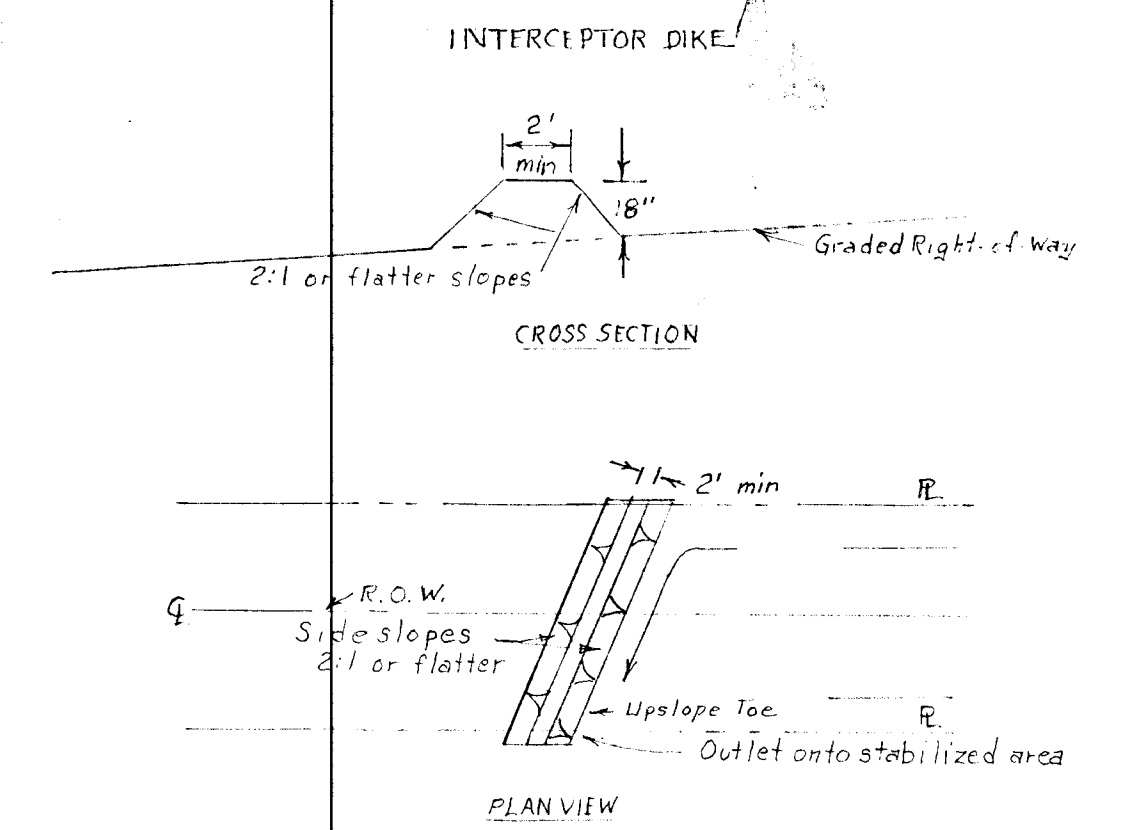






ANTI-VORTEX & TRASH RACK DETAIL  
NOT TO SCALE

NOTE: Connection between riser and barrel to be rigid and water tight. Provide a concrete base 24" thick, with the riser embedded 6" deep, square with each side 0.75' larger than the riser diameter.



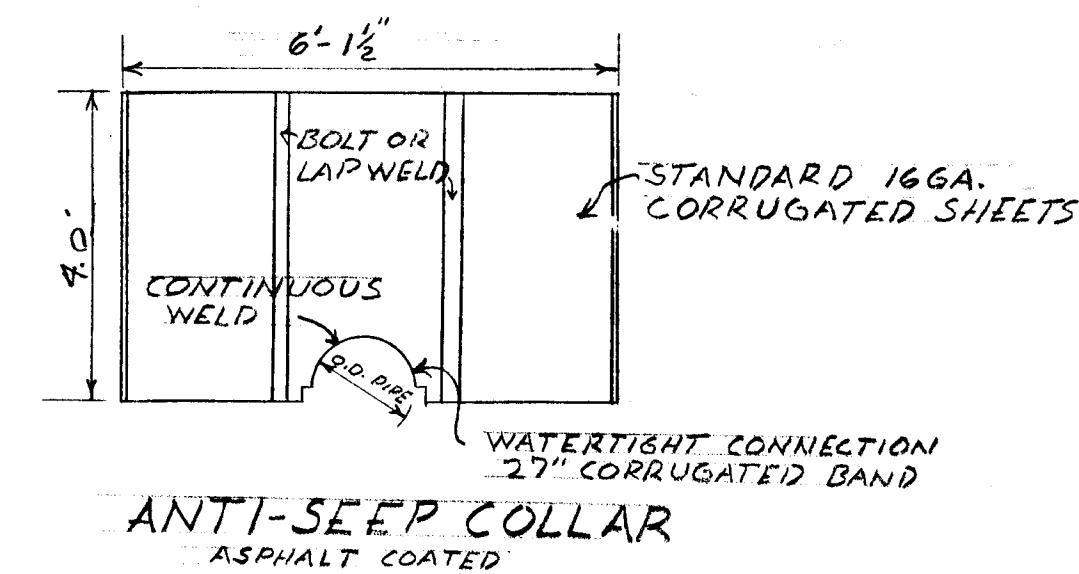
SEDIMENT BASIN CONSTRUCTION AND MAINTENANCE CRITERIA

The following are critical to successful installation and operation of Sediment Basins:

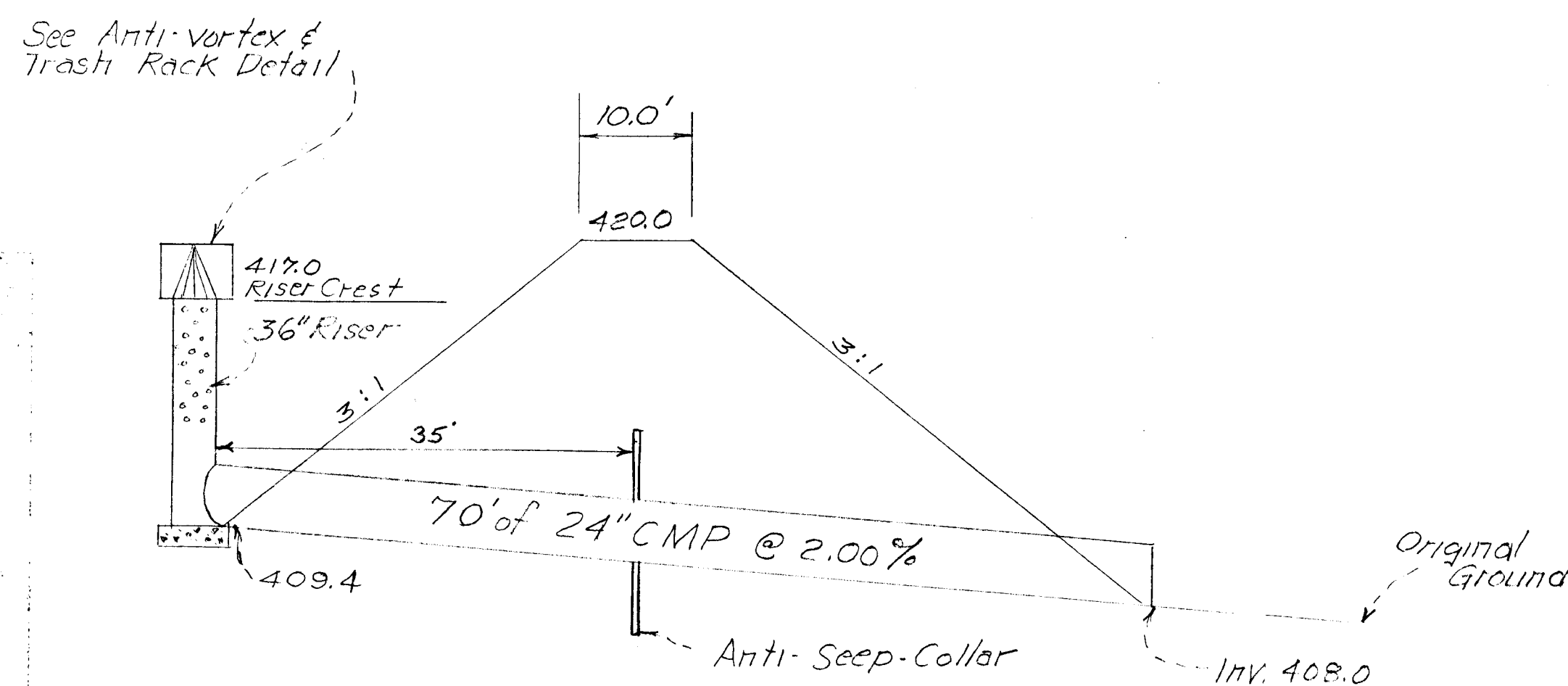
1. Locate the dam to provide maximum volume capacity for silt behind the structure.
2. Prepare the dam site by adequate clearing of vegetation and removal of topsoil before beginning dam construction.
3. Level the bed for the pipe spillway to provide uniform support throughout its entire length under the dam.
4. Securely and rigidly fasten the collar connecting the riser to the barrel (as well as collars connecting sections of the barrel) of the pipe spillway; insure a watertight bottom on the riser; hand tamp fill under shoulders and around the pipe; insure that outlet invert of pipe spillway is not more than one foot above streambed.
5. Place the fill in not more than 6" lifts compacted by construction equipment. A minimum of two (2) feet of hand compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment. Fill materials should be free from roots, woody vegetation, oversize stones, rocks or other objectionable material. Frozen material should not be used.
6. Construct emergency spillway as per design on undisturbed soil (not on fill). Design width, entrance and exit channel slopes are critical to the ability of the emergency spillway to successfully protect the dam with a minimum of erosion hazard in the spillway channel.
7. Stabilize embankment and emergency spillway by treatment (lime and fertilizer) sodding or seeding and mulching.
8. When trap efficiency drops below 0.2 inches per acre of drainage area, the sediment basin should be cleaned out to store its original capacity.
9. All construction will be done in accordance with standards and specifications for soil erosion and sediment control in urbanizing areas published by United States Department of Agriculture Soil Conservation Service.

General Notes:

1. All drawings Not to Scale.
2. All dikes must be machine compacted.
3. Top width may be wider and side slopes may be flatter, if desired.
4. Field location should be adjusted as needed to provide a stabilized safe outlet.
5. Diverted runoff shall outlet onto an undisturbed stabilized area, prepared level spreader, or into a grade stabilization structure.
6. Periodic inspection and required maintenance must be provided.



ANTI-SEEP COLLAR  
ASPHALT COATED



SEDIMENT BASIN & DETENTION POND

NOTES: Notify Howard Soil Conservation District 24 hrs. prior to beginning construction, call 465-3180 or 465-5000 x 328

No sediment central structure is to be removed without securing approval in writing to do so from the Howard Soil Conservation.

Seeding

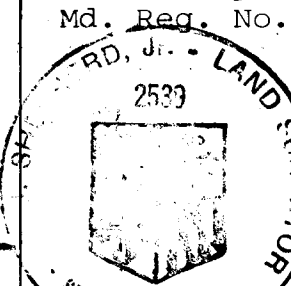
Sediment basin area.	
Kent.31 tall fescue	1.15 lbs./1000 s.f.
Korean Lespedeza (B) inoculated	0.34 lbs./1000 s.f.
Roadside and lawns.	
Certified Merion Kent. Bluegrass	0.92 lbs./1000 s.f.
Common Kent. Bluegrass	0.92 lbs./1000 s.f.
Pennlawn Red Fescue	0.46 lbs./1000 s.f.

Certification of the Quantities

I hereby certify the estimated total amount of excavation and fill as shown on these plans has been computed to be 10,900 cubic yards of excavation and 4,000 cubic yards of fill.

E. G. Shepherd Jr. Date  
Md. Reg. No. 2539

APPROVED  
DIVISION OF LAND DEVELOPMENT  
AND TRANSPORTATION PLANNING  
HOWARD COUNTY, MARYLAND  
DATE 10/16/74  
JKC



SEDIMENT CONTROL PLAN

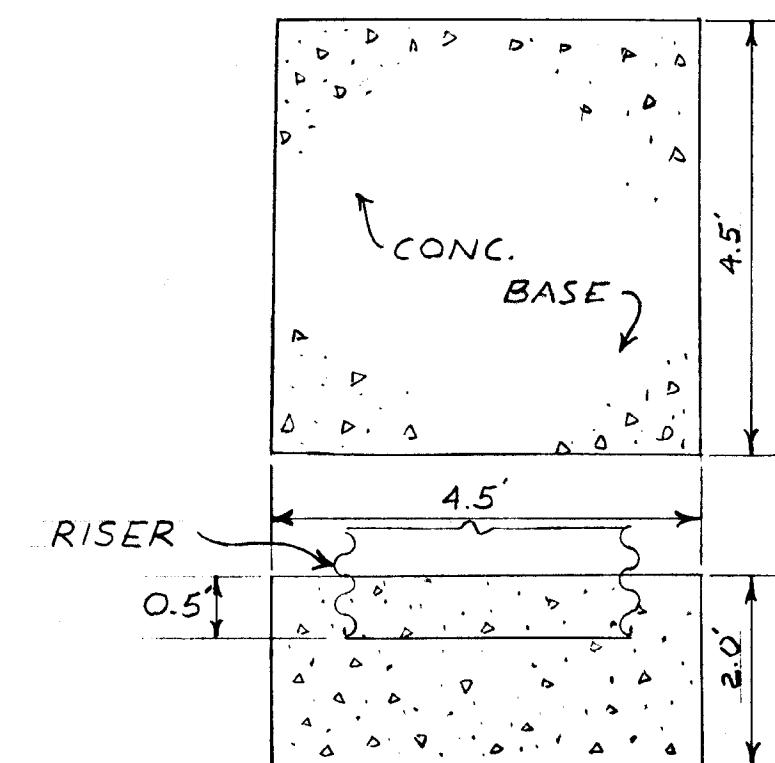
GREEN HILL MANOR  
SECTION '3'  
HOWARD COUNTY MARYLAND  
SCALE = 1"=100' JOB 72-77  
Sheet 2 of 6

Revised 8-15-74

APPROVED: Department of Public Works  
J. N. McKeena 11/4/74  
Chief, Bureau of Highways Date

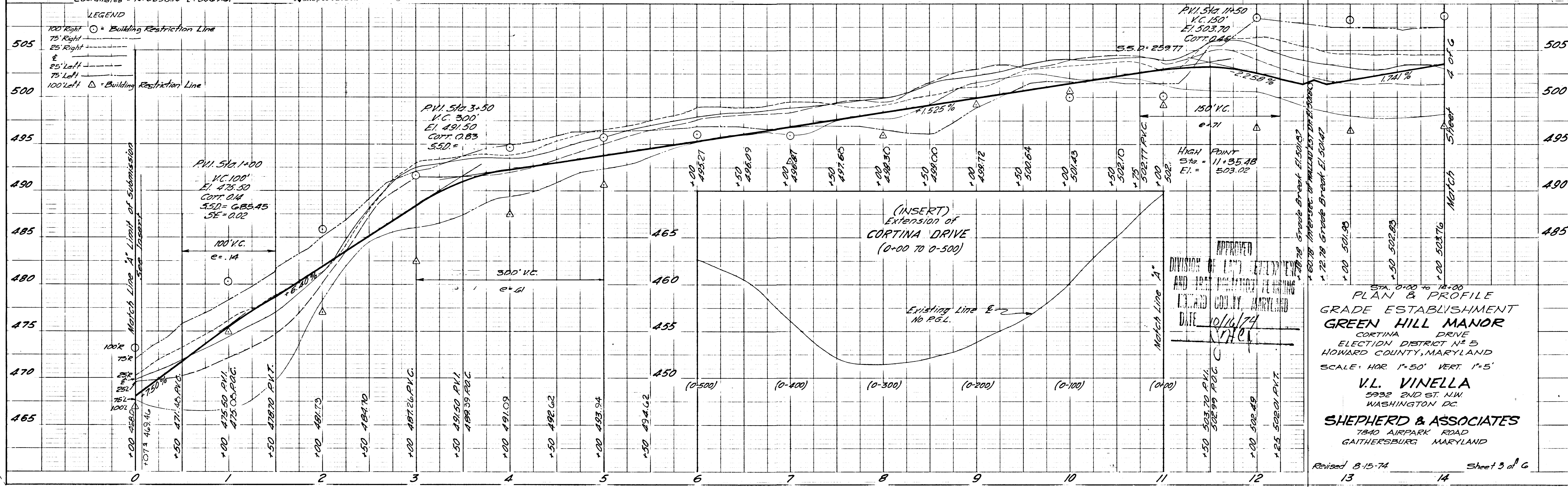
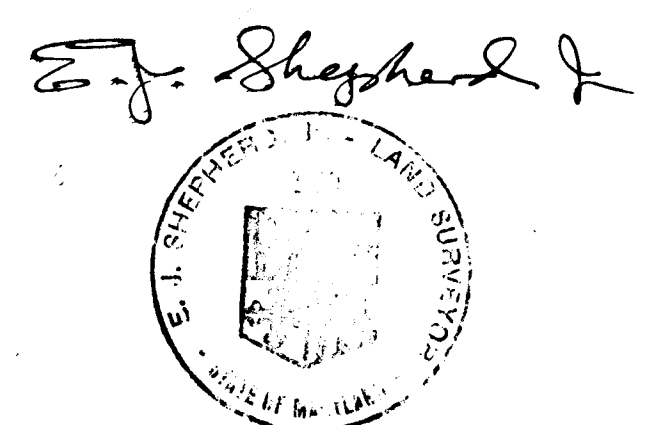
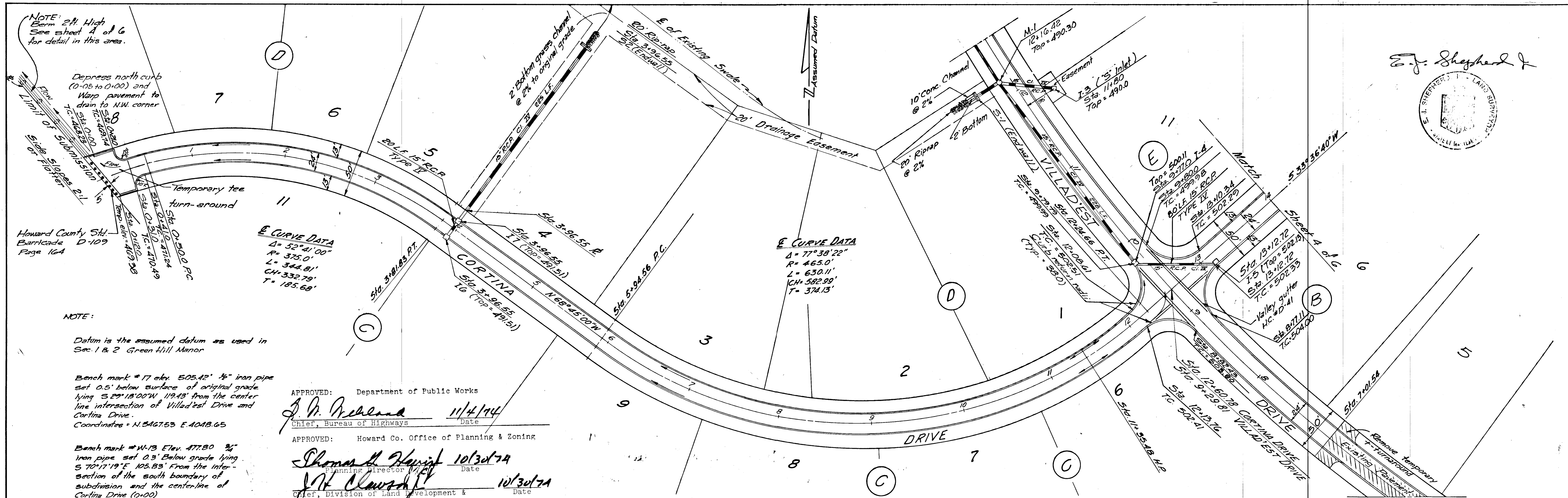
APPROVED: Howard Co. Office of Planning & Zoning  
Thomas H. Henig 10/30/74  
Planning Director Date  
J. H. Clewson 10/30/74  
Chief, Division of Land Development & Transportation Planning Date

APPROVED BY HOWARD COUNTY  
SOIL CONSERVATION DISTRICT  
BY: Robert J. Bohan



RISER BASE

DATE	
BY	
REVISIONS	
NO.	
PLAN	
NO.	
NOTE BOOK	
NO.	
DATE	
BY	
REVISIONS	
NO.	
PROFILE	
NO.	
NOTE BOOK	
NO.	
DATE	
BY	
REVISIONS	
NO.	



**PLAN & PROFILE**  
**GRADE ESTABLISHMENT**  
**GREEN HILL MANOR**  
CORTINA DRIVE  
ELECTION DISTRICT NO. 5  
HOWARD COUNTY, MARYLAND  
SCALE: HOR. 1"=50' VERT. 1"=5'  
**V.L. VINELLA**  
5932 2ND ST. N.W.  
WASHINGTON DC.  
**SHEPHERD & ASSOCIATES**  
7840 AIRPARK ROAD  
GAITHERSBURG MARYLAND

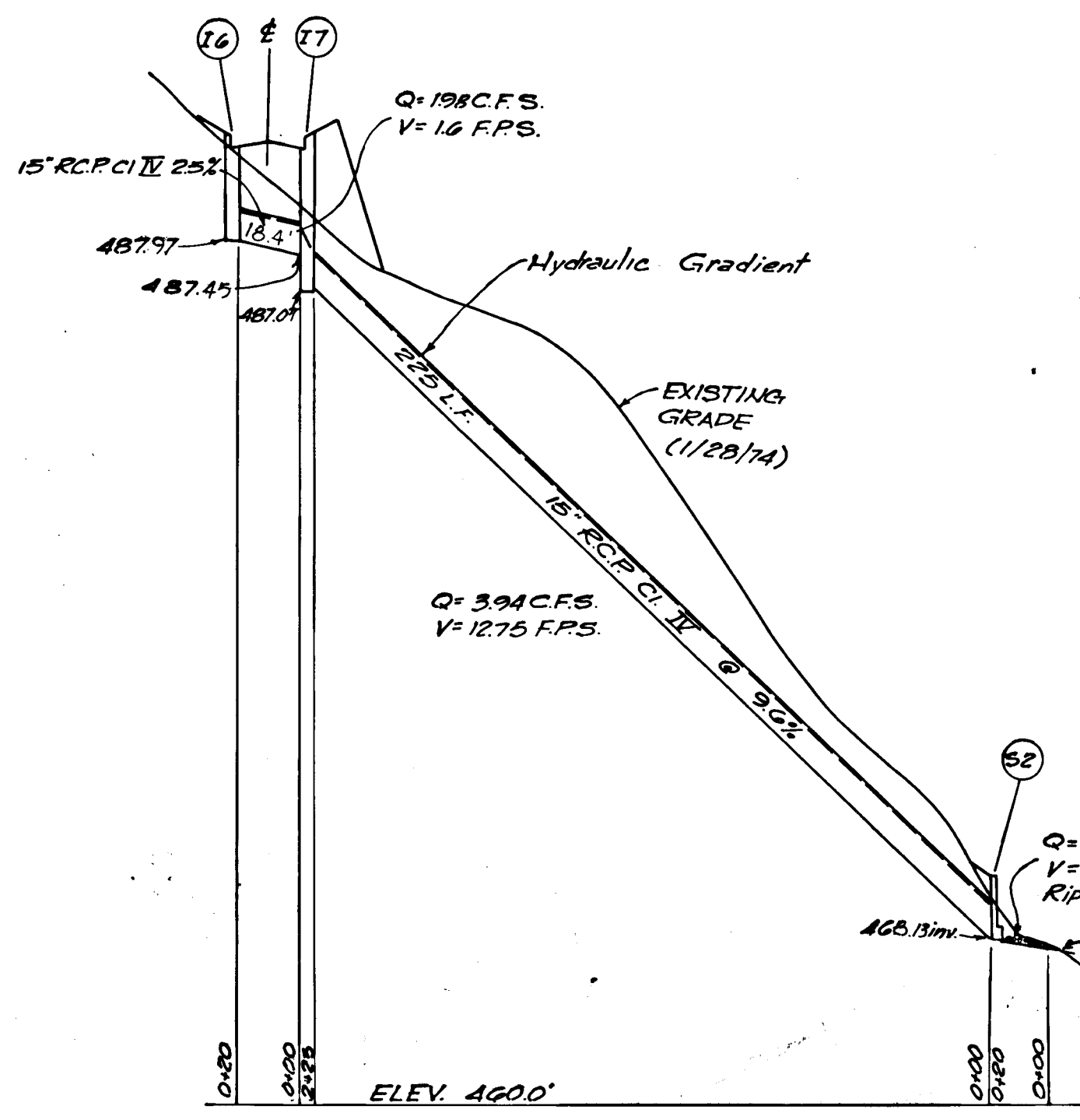
Revised 8-15-74  
13  
Sheet 3 of 6  
14



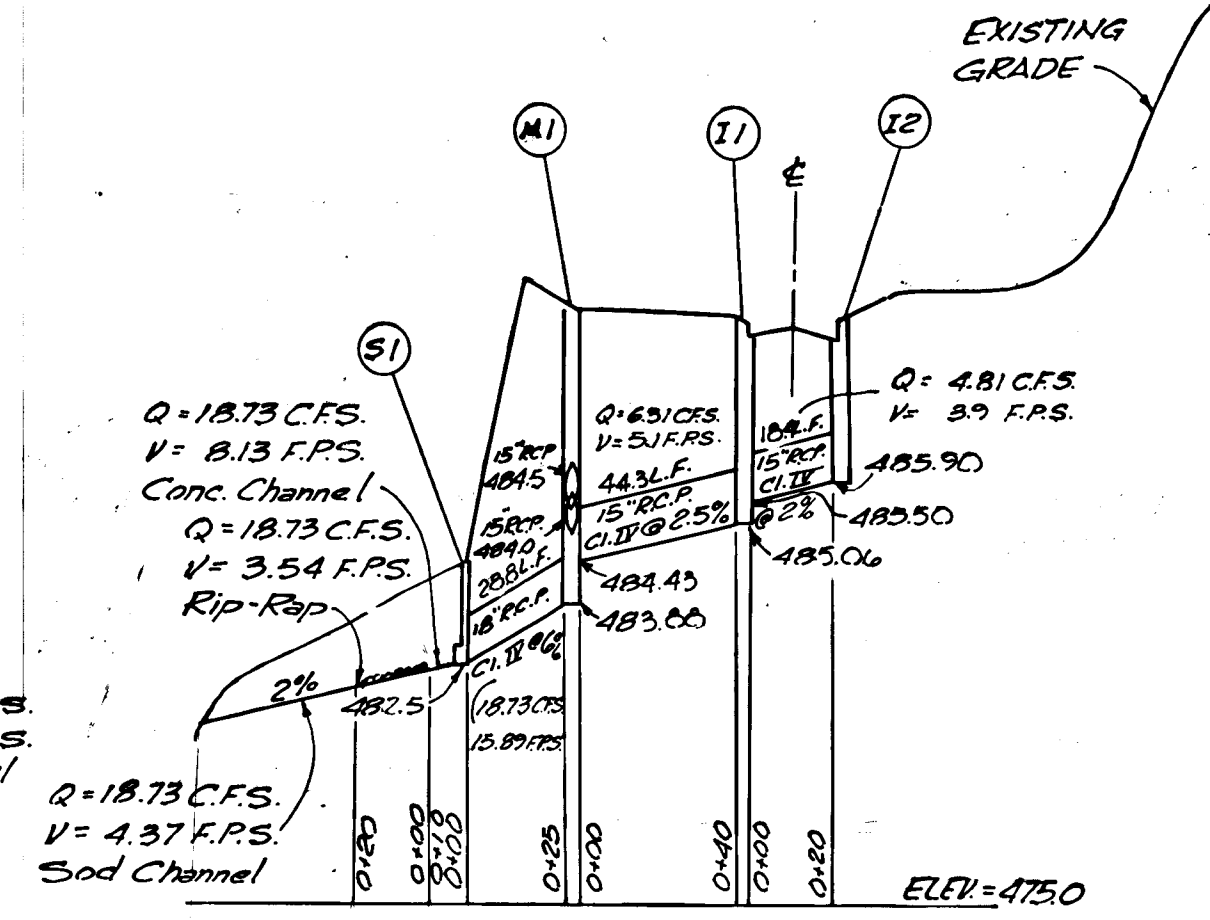




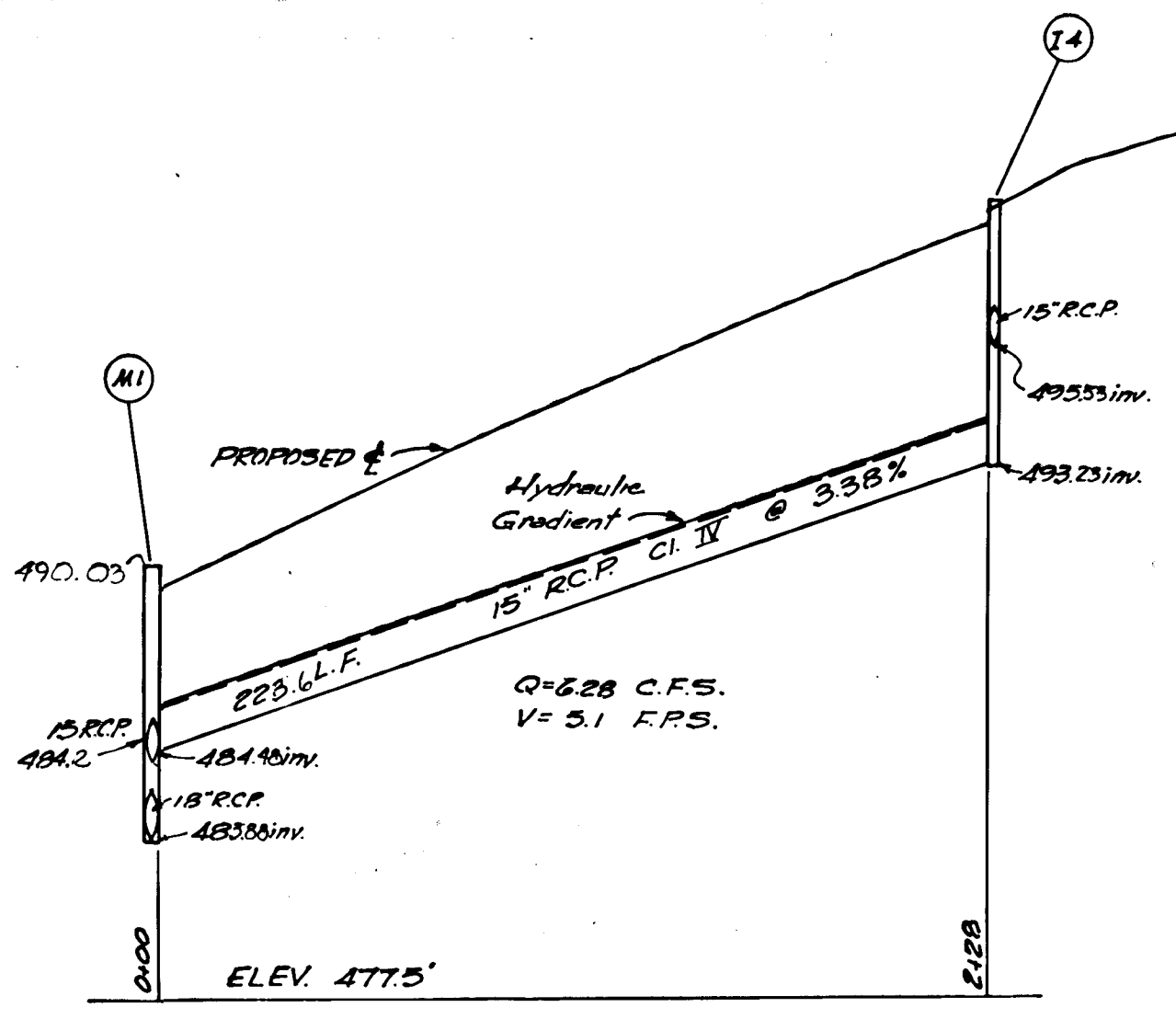




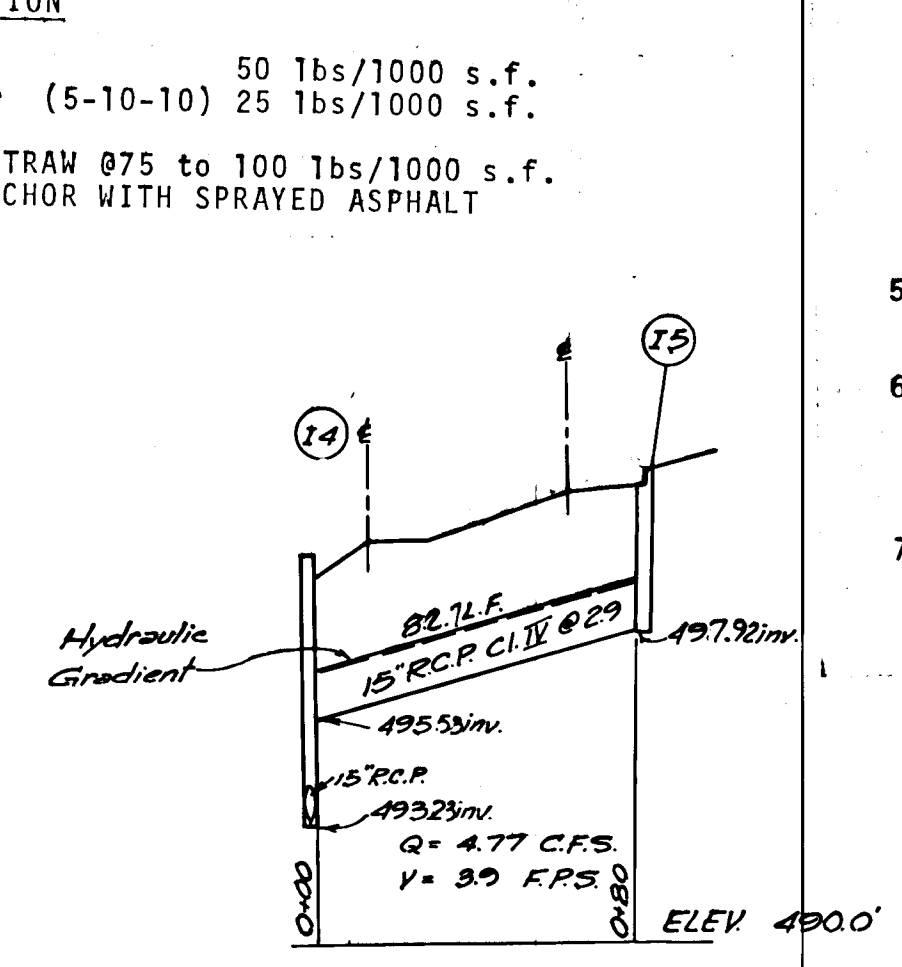
CORTINA DRIVE



VILLAD'EST DRIVE



VILLAD'EST DRIVE



CORTINA DRIVE

APPROVED: Department of Public Works  
*J. H. Reed* 11/4/74  
 Chief, Bureau of Highways Date

APPROVED: Howard Co. Office of Planning & Zoning  
*Sharon A. Kerist* 10/30/74  
 Planning Director Date  
*J. H. Clauson* 10/30/74  
 Chief, Division of Land Development & Transportation Planning Date

NOTES: Notify Howard Soil Conservation District 24 hrs. prior to beginning construction, call 465-3180 or 465-5000 x-328.  
 No sediment central structure is to be removed without securing approval in writing to do so from the Howard Soil Conservation.  
 Seeding  
 Sediment basin area.  
 Kent, 3l tall fescue 1.15 lbs./1000 s.f.  
 Korean Lespedeza (B) inoculated 0.34 lbs./1000 s.f.  
 Roadside and lawns.  
 Certified Merion Kent, Bluegrass 0.92 lbs./1000 s.f.  
 Common Kent, Bluegrass 0.92 lbs./1000 s.f.  
 Pennlawn Red Fescue 0.46 lbs./1000 s.f.

SOIL PREPARATION  
 Limestone 50 lbs/1000 s.f.  
 Fertilizer (5-10-10) 25 lbs/1000 s.f.  
 MULCH WITH STRAW @75 to 100 lbs/1000 s.f. AND ANCHOR WITH SPRAYED ASPHALT

DRAINAGE NOTES

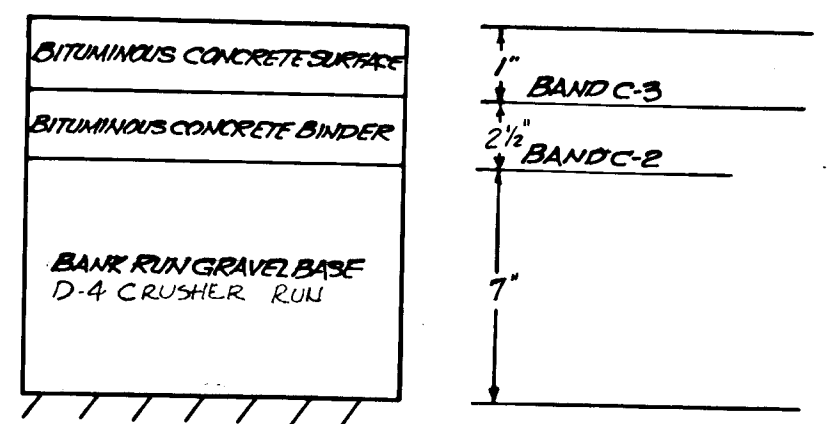
- All storm drains shall be constructed in accordance with the latest edition of the Howard County Road Code.
- Types of structures refer to the standard storm drainage details of Howard Co. unless otherwise noted.
- Where the drop on the main line through a structure can be accommodated by an invert slope of 1/2:1 or flatter, a rounded channel lined with sewer brick on edge shall be built to the crown of the pipes.
- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevations of the mains by digging test pits by hand at all utility crossings, well in advance of trenching.
- All elevations are invert elevations, unless otherwise shown.
- Adjustment or repair to utilities damaged as the result of the contractors negligence or method of operation will be made at his own expense.
- Storm Drain trends EVT - compaction

STRUCTURE SCHEDULE

NO.	TYPE	TOP	INV.	REMARKS
15	DOUB. 'S' COMB. INLET	502.13	498.10	H.C. STD. D-99
14	'S' COMB. INLET	500.11	493.00	H.C. STD. D-98
M1	MODIFIED DROP MH	490.30	481.20	H.C. STD. D-104
11	'S' COMB. INLET	489.96	485.35	H.C. STD. D-98
17	'S' COMB. INLET	491.51	487.00	H.C. STD. D-98
16	'S' COMB. INLET	491.51	488.50	H.C. STD. D-98
S2	C-ENDWALL	467.80	465.5	H.C. STD. 15" D-52
S1	C-ENDWALL	483.10	478.8	H.C. STD. 18" D-52
13	'S' INLET	490.0	485.6	H.C. STD. D-98
12	'S' COMP. INLET	489.96	485.75	H.C. STD. D-98

PIPE SCHEDULE

SIZE	TYPE	CLASS	LENGTH
15"	R.C.P.	IV	668.0'
18"	R.C.P.	IV	25.0'

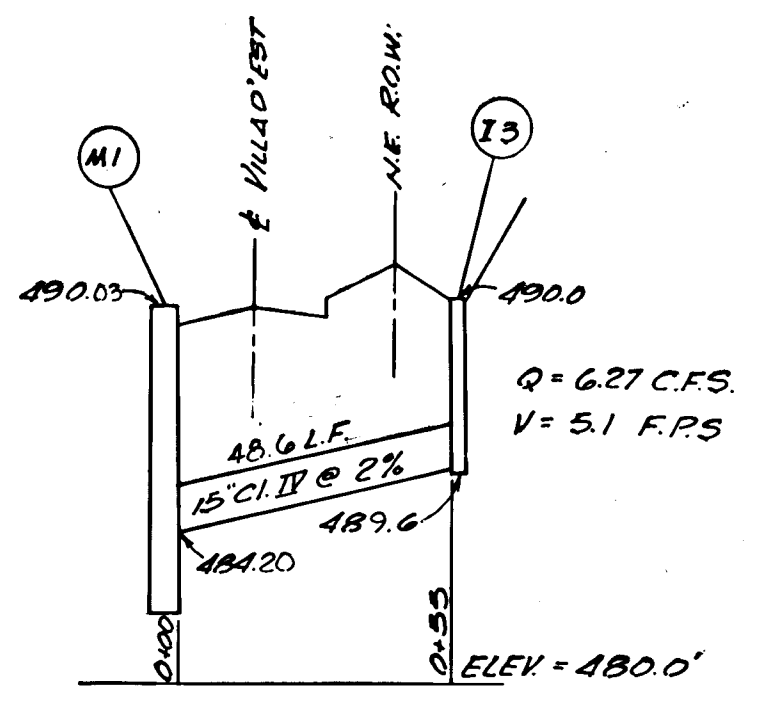


CLEARING AND GRADING: ARTICLE C-1  
 SUBGRADE: ARTICLE C-2  
 BASE COURSE: ARTICLE C-25  
 BINDER COURSE: ARTICLE C-31 or C-33  
 SURFACE COURSE: ARTICLE C-31  
 TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS

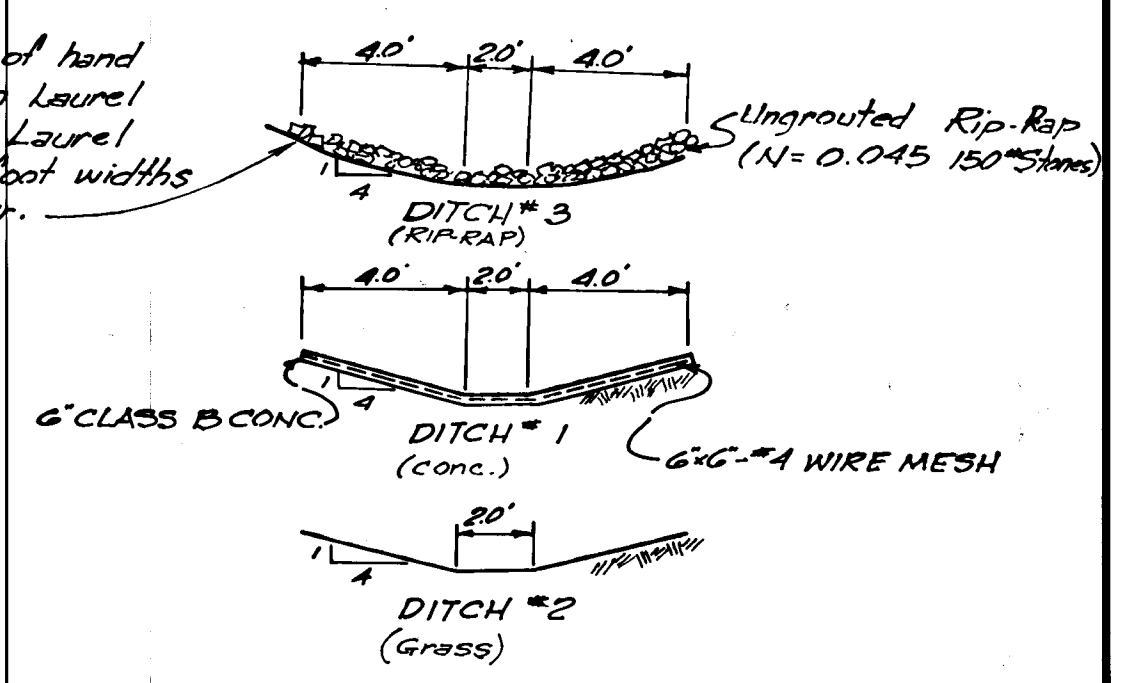
PAVING SECTION

DRAINAGE DETAILS  
 SCALE: VERT. 1"=5'  
 HOR. 1"=50'

Base will be primed in accordance with Art. C-50-3 of the How. Co. Rd. Const. Code.  
 Tack coat is required in accordance with the How. Co. Road Const. Code as per Article C-31-4.  
 All disturbed areas shall be sodded or top soiled, seeded & mulched.

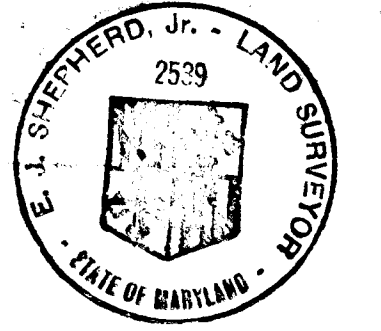


VILLAD'EST DRIVE

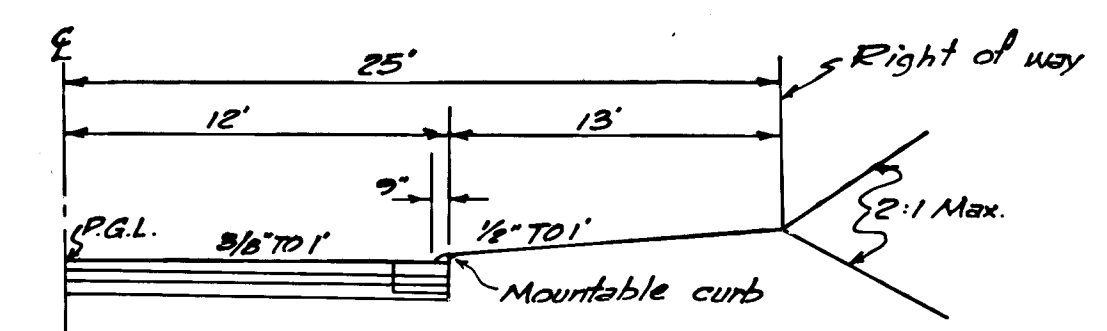


DETAILS OF OUTFALL DITCHES  
 NO SCALE

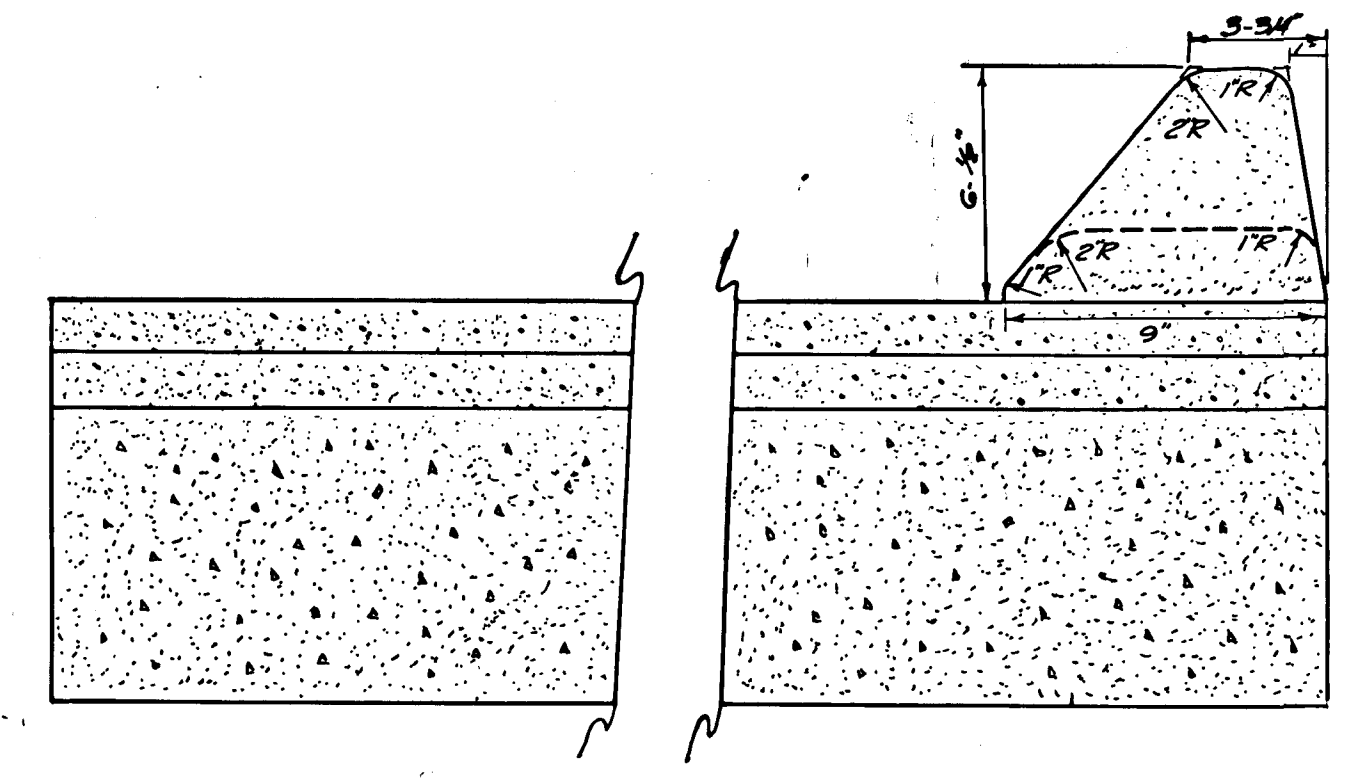
*E. J. Shepherd, Jr.*



APPROVED  
 DIVISION OF LAND DEVELOPMENT AND TRANSPORTATION PLANNING  
 HOWARD COUNTY, MARYLAND  
 DATE 10/16/74  
*[Signature]*



TYPICAL ROAD SECTION  
 VILLAD'EST DRIVE  
 CORTINA DRIVE  
 Residential, R 40  
 How. Co. Std. D.G. B.71



MOUNTABLE CURB

PAVING NOTES

- All work in public right-of-ways shall be in accordance with the standards and specifications of Howard Co.
- Work shall not commence until the proper permits have been issued.
- All unpaved areas within the right-of-way and slopes adjacent thereto shall be sodded in accordance with art. c-36.
- No street surfacing shall be started until grading and sodding has been completed and inspected.
- All streets are designed in accordance with the Howard Co. Road Code. 30 MPH speed design.

OWNER & DEVELOPER  
**V.L. VINELLA**  
 5932 2ND ST. N.W.  
 WASHINGTON DC.

DETAILS FOR PAVING AND DRAINAGE PLAN  
 VILLAD'EST DRIVE  
 CORTINA DRIVE  
**GREEN HILL MANOR SEC. 3**  
 HOWARD COUNTY MARYLAND  
 ELECTION DISTRICT #5  
 Scale 1"=50' May 15, 1974  
 Sheet 6 of 6  
**SHEPHERD & ASSOCIATES, INC.**  
 ENGINEERS - SURVEYORS - PLANNERS  
 8-15-74 MONTGOMERY COUNTY AIRPARK, GAITHERSBURG, MD.