

PLANT SCHEDULE			
KEY	PLANT NAME	SIZE	QUANT. REMARKS
(G)	Fraxinus F. Lanceolata	2 1/2" OAL	25 3/4" & HEAVY HEADS
(M)	Acer Rubrum 'Red Sunset'	"	3.4 "
(P)	Quercus Paustris	"	9 "

- ### GENERAL NOTES
- All storm drain & paving shall be constructed in accordance with the latest edition and specifications of the HOWARD COUNTY DEPT. OF M&S&A.
 - Type of storm drainage shall be in accordance with the Standard Details of the Co. of M&S&A.
 - Trench excavation for storm drains within road or street right-of-way limits shall be in accordance with "4th Edition Design Manual Vol. II" (Class C Trench Bedding to be used for all storm drains, except where shown otherwise.)
 - Information concerning underground utilities was obtained from available records but the contractor must determine the exact location and elevation of mains by digging test pits, by hand, at all utility crossings, well in advance of construction.
 - All utility companies shall be notified 24 hrs. in advance of construction.
 - All traffic services, parking and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices" 1978 Edition.
 - See and Cross Vertical Curves were designed in accordance with "Ho. Co. Design Manual" Vol. III.
 - Provide concrete sidewalk ramps. Ho. Co. Std. Type A, R-4.01 where shown in plan.
 - Design Speed: 30 mph. Zoning: R-12.
 - The contractor or developer shall contact the Construction Inspection/Survey Division 24 hrs. in advance of commencement of work. Pk. 772-7272.

Construct Light Standards at Locations shown by Symbol
Light Standards: 4' Fiberglass Pole with 175 Watt Lamp

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: *Ronald J. Jones* Date: 4-16-86

Reviewed for Howard County S.C.D. and meets Technical Requirements
Signature: *J. Halberstam* Date: 4-16-86
U.S. Soil Conservation Service

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: *Stephen L. Huber* Date: 4/16/86
Signature: *G. Nelson Clark* Date: 4/21/86

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Engineering: *William S. P...* Date: 4-16-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Chief, Division of Land Development & Zoning Administration: *John M. Washburn* Date: 4-16-86

CLARK · FINEFROCK & SACKETT
ENGINEERS · PLANNERS · SURVEYORS
11315 LOCKWOOD DRIVE · SILVER SPRING, MARYLAND 20904 · (301) 593-3400

DESIGNED: E.P.
DRAWN: R/W
CHECKED: E.P.
DATE: 4-16-86

ROAD CONSTRUCTION PLANS
BAKERS PLACE

CANBURY WOODS
SECTION 1 AREA 2
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: BRANTLY DEVELOPMENT, CORP.
9330 Red Branch Rd. Suite 210
Columbia MA - 21045

SCALE: As Shown
DRAWING: 1 OF 6
JOB NO.: BA-044
FILE NO.: BA-044-D

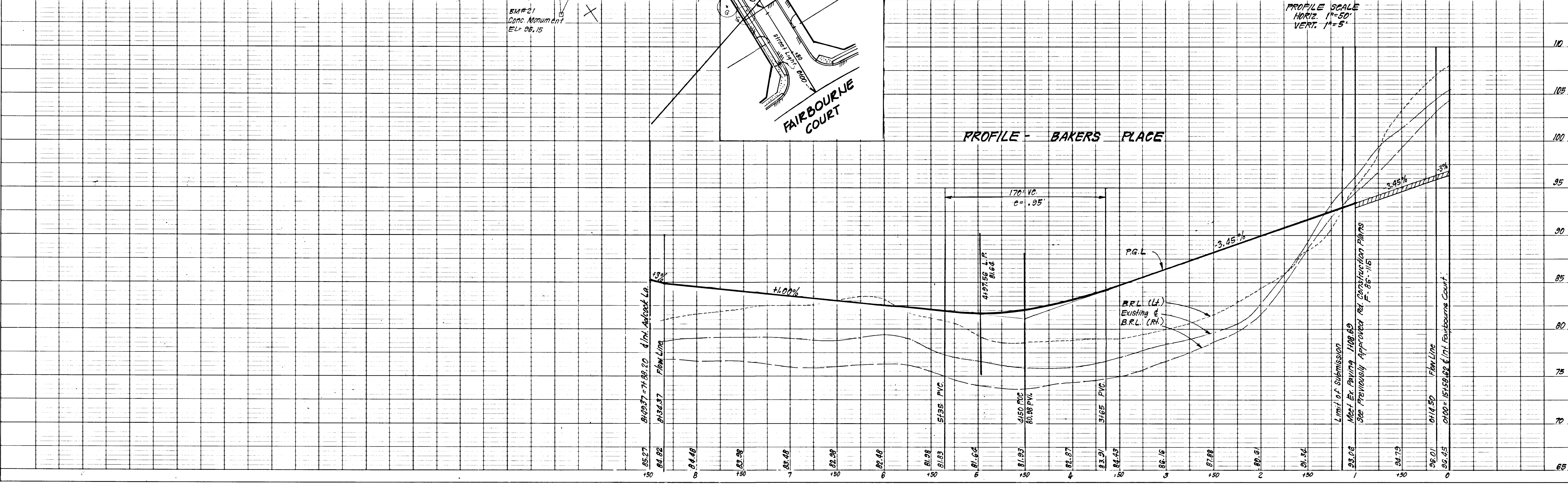
CENTERLINE CURVE DATA

STATIONS	RADIUS	Δ	ARC	TAN.	CHORD & BEARING
PC 3119.82 to PT 4176.70	300.00	30°00'00"	157.08	80.38'	155.29 N12°30'00" W
PC 6112.17 to PT 8149.87	1006.73	13°30'00"	237.20	119.15'	136.66 N10°45'00" W

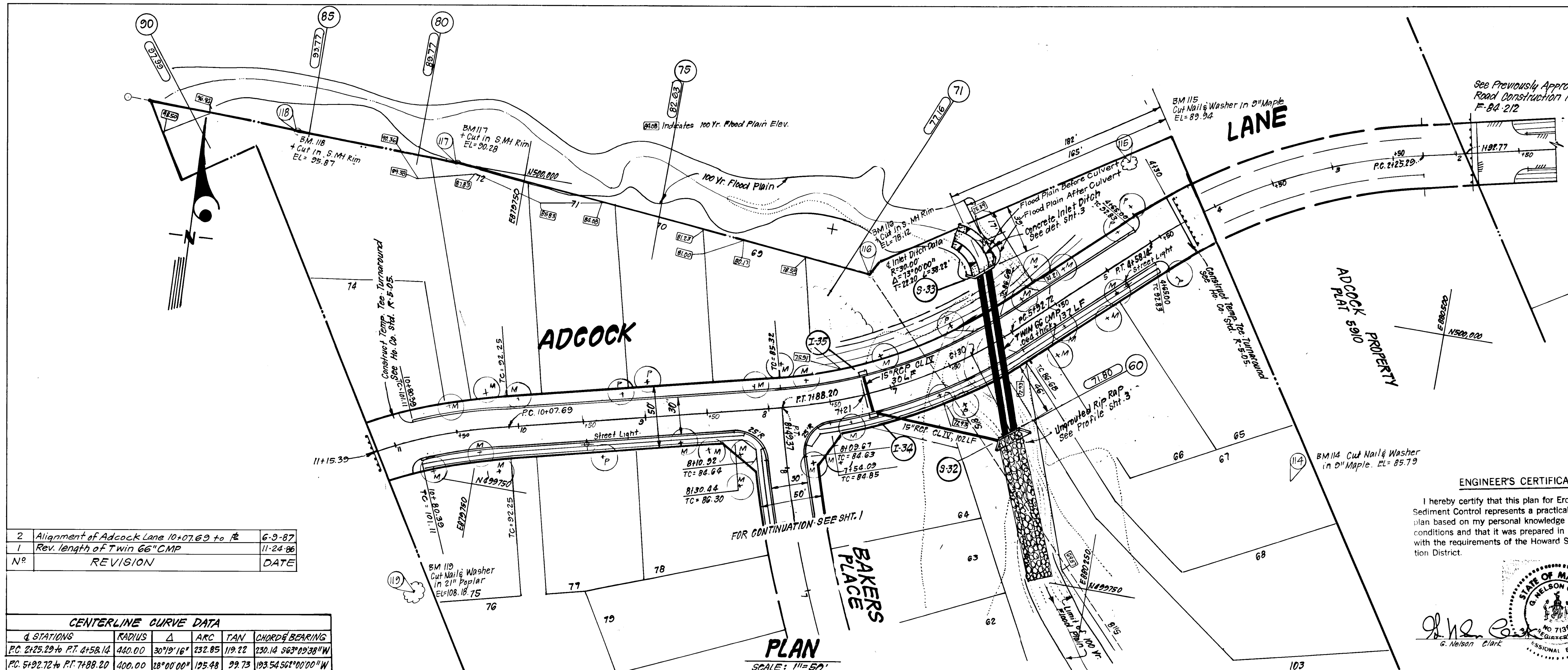
CURB & GUTTER LEGEND:
Modified Curb & Gutter
Reverse Mod. Curb & Gutter

REVISION

NO.	REVISION	DATE
1	Delete from 78" CMP	7-20-80
2	Revised location of Structure S-26	9-4-87
3	Alignment at Adcock Lane	6-9-87



1222



2	Alignment of Adcock Lane 10+07.69 to #	6-9-87
1	Rev. length of T win 66" CMP	11-24-86
REVISION		DATE

CENTERLINE CURVE DATA					
STATIONS	RADIUS	Δ	ARC	TAN	CHORD & BEARING
PC 2125.29 to PT 4+58.12	340.00	30°19'16"	232.85	119.22	230.14 S62°09'38"W
PC 5192.72 to PT 7+88.20	400.00	18°00'00"	125.48	99.73	193.54 S61°00'00"W
PC 10+07.69 to #	500.00	12°20'25"	107.70	54.06	107.49 S60°45'46"W

Reviewed for Howard S.C.D. Name
 and meets Technical Requirements
 Signature: [Signature] Date: 8-1-86
 U.S. Soil Conservation Service

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: Thomas J. Lawen Date: 4-14-86

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: Stephen L. Fisher 8-9-86
 DATE

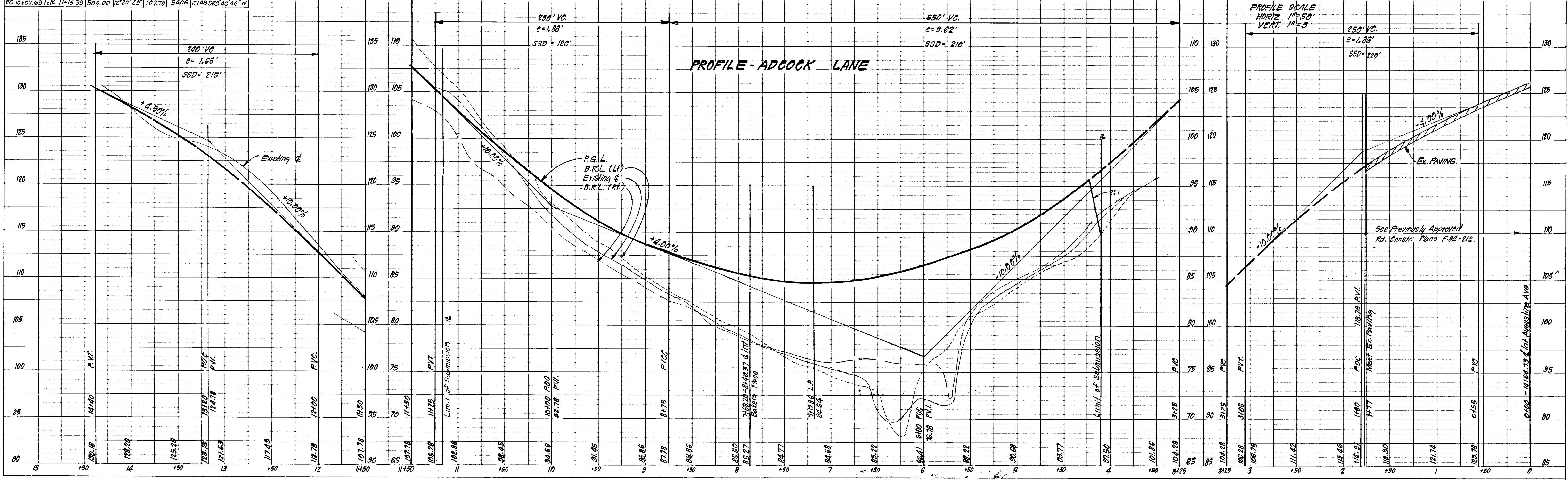
ENGINEER'S CERTIFICATE
 I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature: [Signature] Date: 8-9-86
 G. Nelson Clark, Regional Engineer

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Engineering: [Signature] Date: 8-9-86
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 Chief, Division of Land Development & Zoning Administration: [Signature] Date: 8-9-86

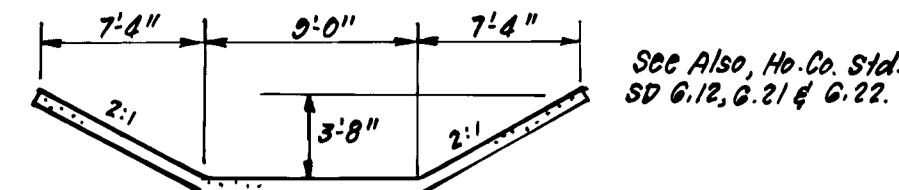
CLARK · FINEFROCK & SACKETT
 ENGINEERS · PLANNERS · SURVEYORS
 11315 LOCKWOOD DRIVE · SILVER SPRING MARYLAND 20904 · (301) 593-3400

DESIGNED	E.P.	SCALE	As Shown
DRAWN	E.P.	DRAWING	2 OF 6
CHECKED	K.W.	JOB NO.	84-044
DATE	E.P.	FILE NO.	84-044-D

ROAD CONSTRUCTION PLANS
ADCOCK LANE
CANBURY WOODS
 SECTION 1 AREA 2
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 FOR: BRANTLY DEVELOPMENT CORP.
 5501 TWIN KNOLLS ROAD
 Columbia, Md. 21045

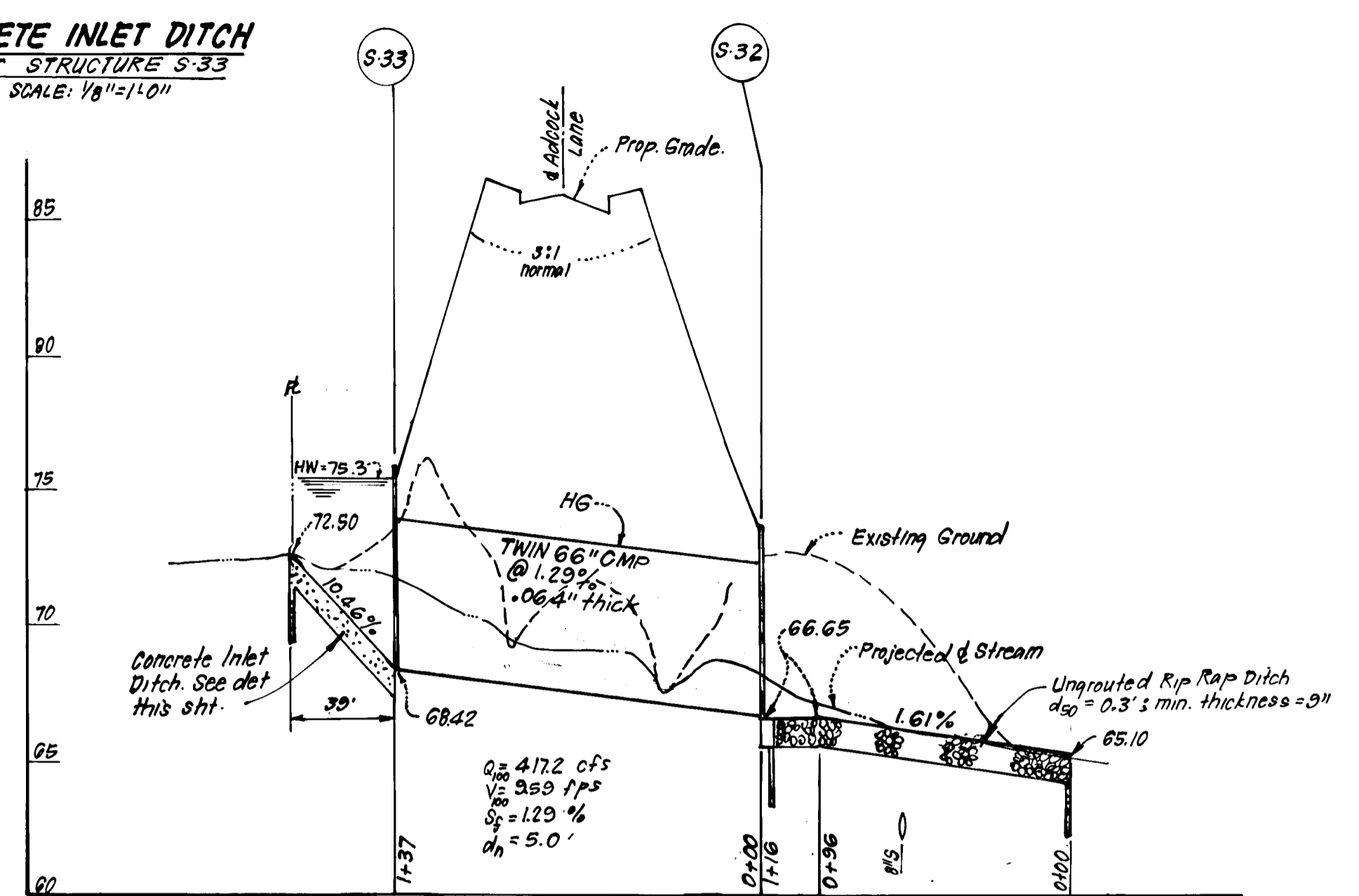
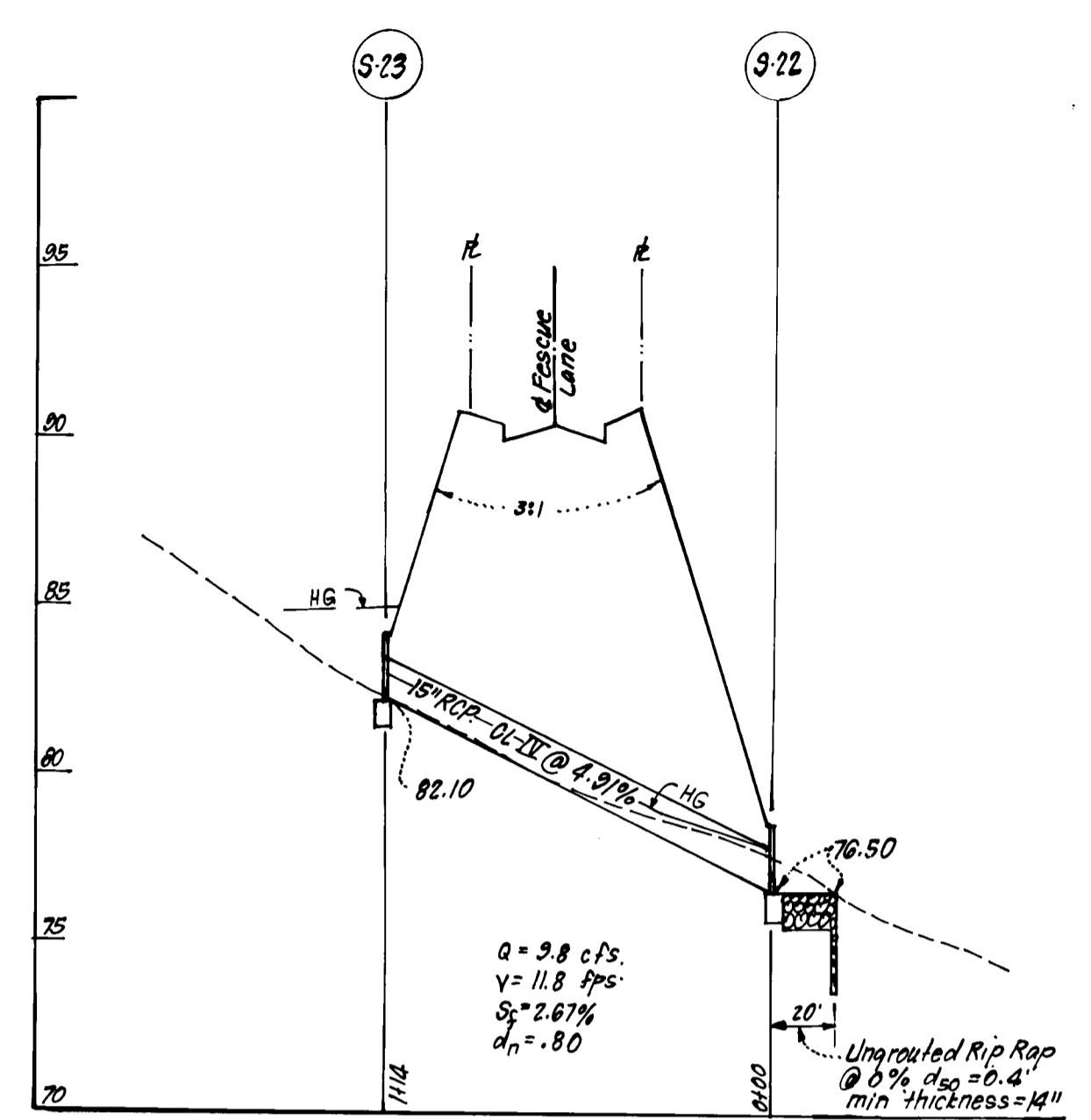
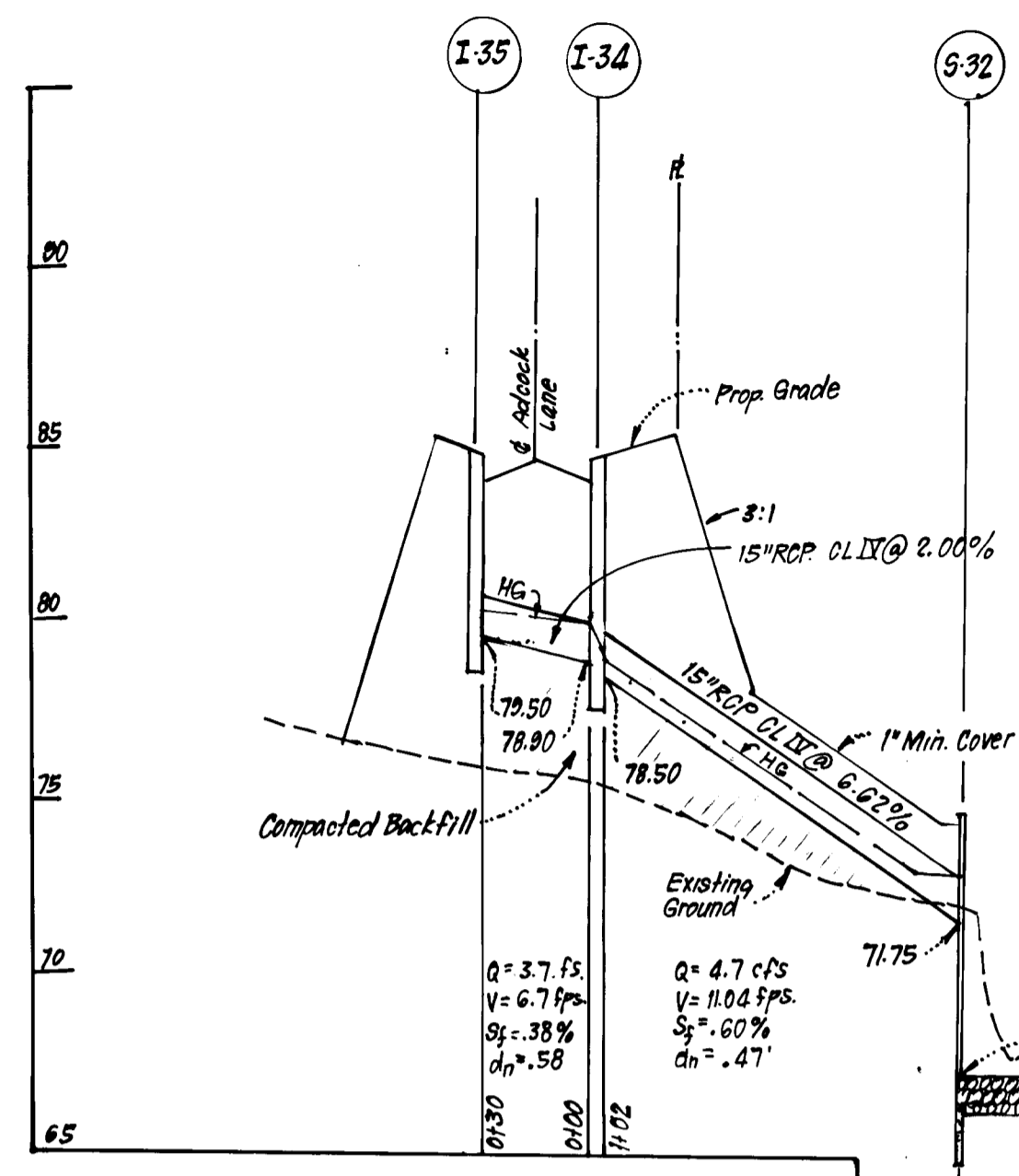


1222



CONCRETE INLET DITCH
AT STRUCTURE S-33
SCALE: 1/8"=1'-0"

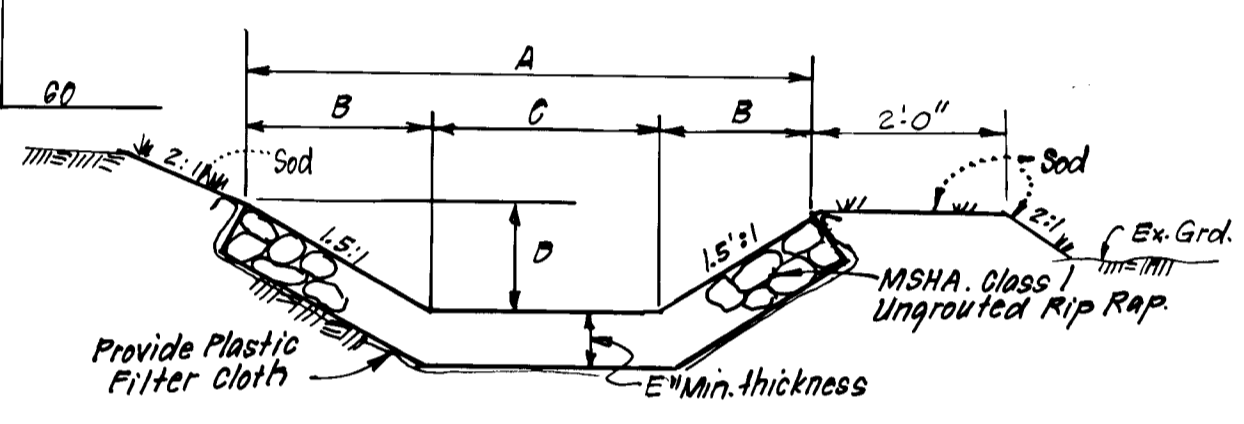
See Also, Ho. Co. Std. SD 6-12, G.21 & G.22.



STORM DRAIN PROFILES

SCALES: HORIZ: 1"=50'
VERT: 1"=5'

CONCRETE INLET DITCH
AT STR. S-28
Note: See Also, Ho. Co. Std. SD 6-12, G.21 & G.22.
NO SCALE



UNGRAVATED RIP RAP DETAIL
NO SCALE

STR. NO.	A	B	C	D	E	d50	d max.
S-22	8'-0"	2'-0"	2'-0"	1'-4"	1/4"	0.4"	3"
S-26	6'-0"	2'-0"	2'-0"	1'-4"	1/4"	0.4"	3"
S-32	20'-0"	5'-6"	5'-6"	3'-8"	1/4"	0.5"	3"

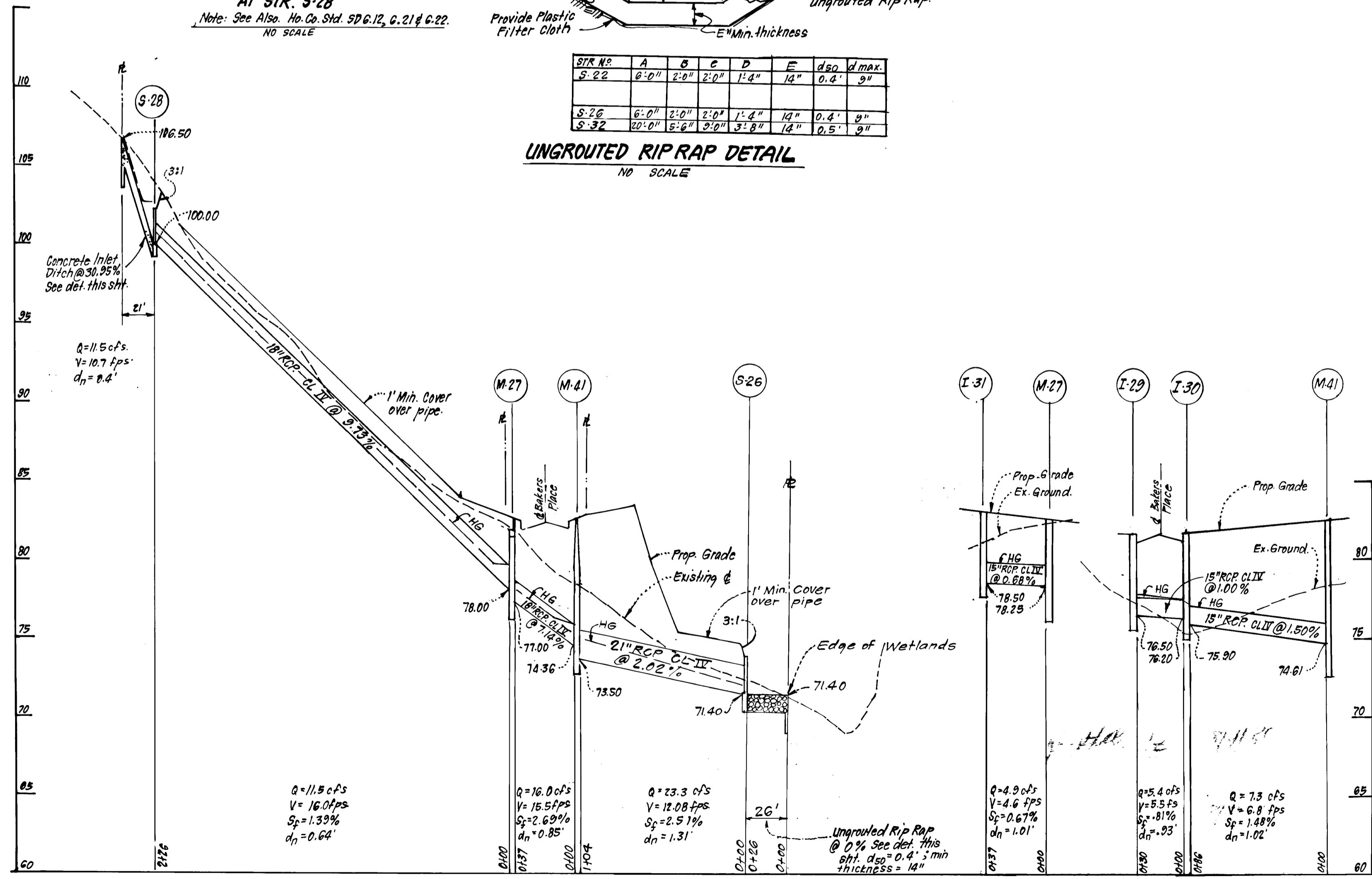
STRUCTURE SCHEDULE

No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
S-22	Type E Headwall	76.50	-	-	-	Ho. Co. Std. SD 5-31	15"Ø See Plan
S-23	Type E Headwall	-	82.10	-	-	Ho. Co. Std.	" "
S-26	Type C Endwall	71.40	-	-	-	Ho. Co. Std. SD 5-21	24"Ø " "
M-27	Shallow Precast MH	76.25/76.00	77.00	82.71	-	" " " " G-5-12	" "
S-28	Type C Endwall	100.00	-	-	-	" " " " SD 5-21	" "
I-29	A-10 Inlet	-	78.50	81.69	81.69	" " " " SD 4-02	" "
I-30	A-5 Inlet	76.20	75.90	81.69	81.69	" " " " SD 4-01	" "
I-31	A-10 Inlet	-	78.50	83.01	82.90	" " " " SD 4-02	" "
S-32	Type A Headwall Mod.	67.50	-	-	-	See detail SHF 4.	" "
S-33	Type A Headwall Mod.	69.50	-	-	-	See detail SHF 4.	" "
I-34	A-5 Inlet	78.90	78.50	84.69	84.69	Ho. Co. Std. SD 4-01	" "
I-35	A-5 Inlet	-	79.90	84.69	84.69	" " " " SD 4-01	" "
M-41	Std. Precast MH	74.36/74.01	73.50	82.56	-	" " " " G-5-12	" "

PIPE SCHEDULE

SIZE	TYPE	LENGTH
15"	RCP CLIX	399 LF
18"	RCP CLIX	263 LF
21"	RCP CLIX	104 LF
66"	CMP .06d1" thick	274 LF

* 3"x1" Corrugations.



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 deemed necessary."

Signature: *Thomas J. Dwyer* Date: 4-16-86
Name: Thomas J. Dwyer
Title: Signature of Developer/Builder

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: *John E. Nelson* Date: 4-16-86
Name: John E. Nelson
Title: Professional Engineer

Reviewed for *Howard* S.C.D. and meets Technical Requirements
Signature: *John E. Nelson* Date: 8-4-86
Name: John E. Nelson
Title: U.S. Soil Conservation Service

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

Signature: *Stephen F. Hahn* Date: 8-4-86
Name: Stephen F. Hahn
Title: Approved

3	Delete twin 72" CMP	7-20-80
2	Revised Pipe From M-41 to S-26 to pullout of wetlands	9-4-87
1	Culverts from S-33 to S-32	11-24-86
Nº	REVISION	DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

Signature: *William J. Dwyer* Date: 8-4-86
Name: William J. Dwyer
Title: Chief, Division of Engineering

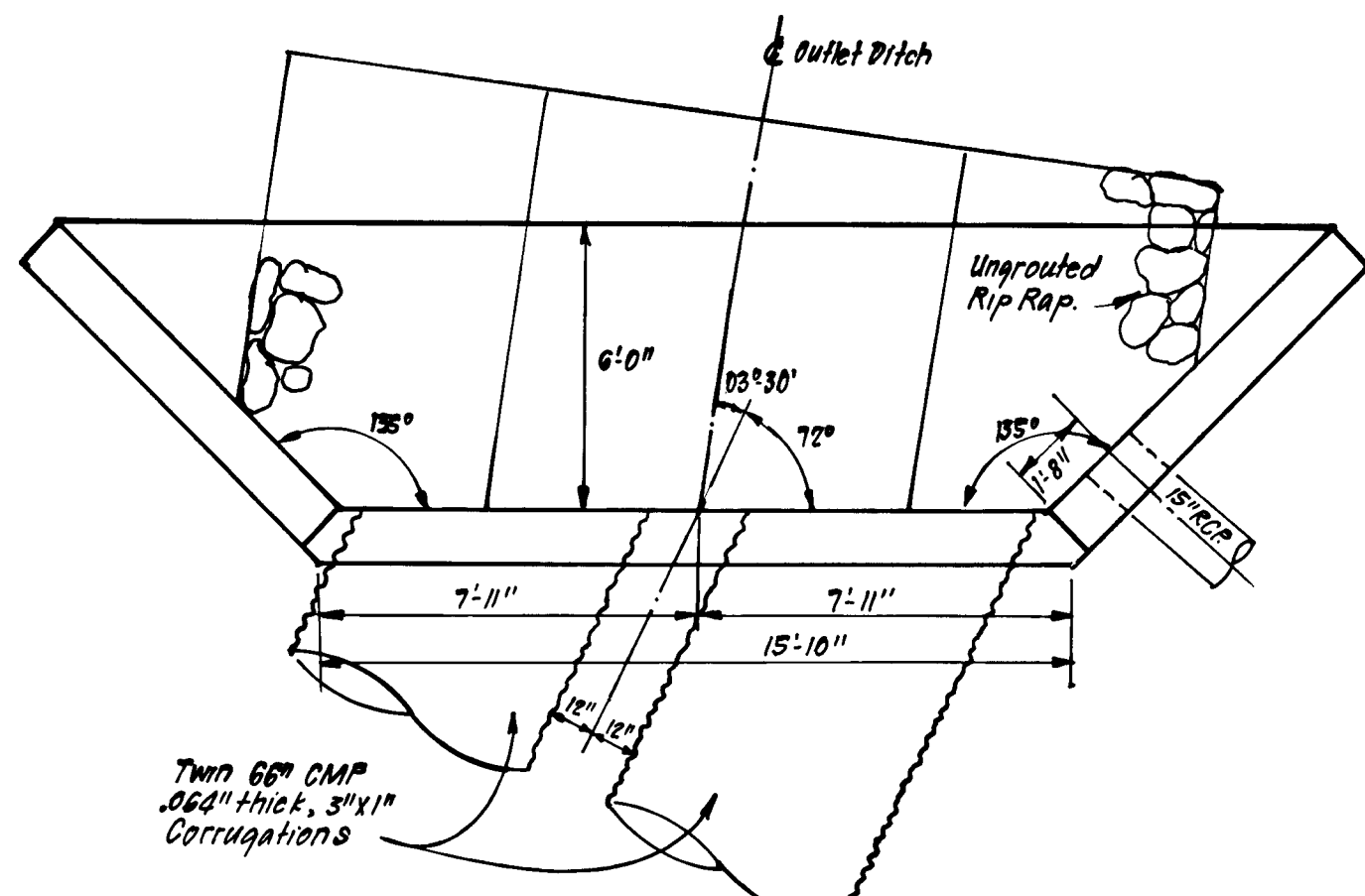
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Signature: *John W. Munnell* Date: 8-4-86
Name: John W. Munnell
Title: Chief, Division of Land Development & Zoning Administration

CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400

DESIGNED	SCALE
E.P.	As Shown
DRAWN	DRAWING
KIW	3 OF 6
CHECKED	JOB NO.
E.P.	84-044
DATE	FILE NO.
4-16-86	84-044-D

ROAD CONSTRUCTION PLANS
STORM DRAINAGE PROFILES
CANBURY WOODS
SECTION 1 AREA 2
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FOR: BRANTLY DEVELOPMENT CORP.
3030 Red Branch Road, Suite 210
Columbia, Md 21045

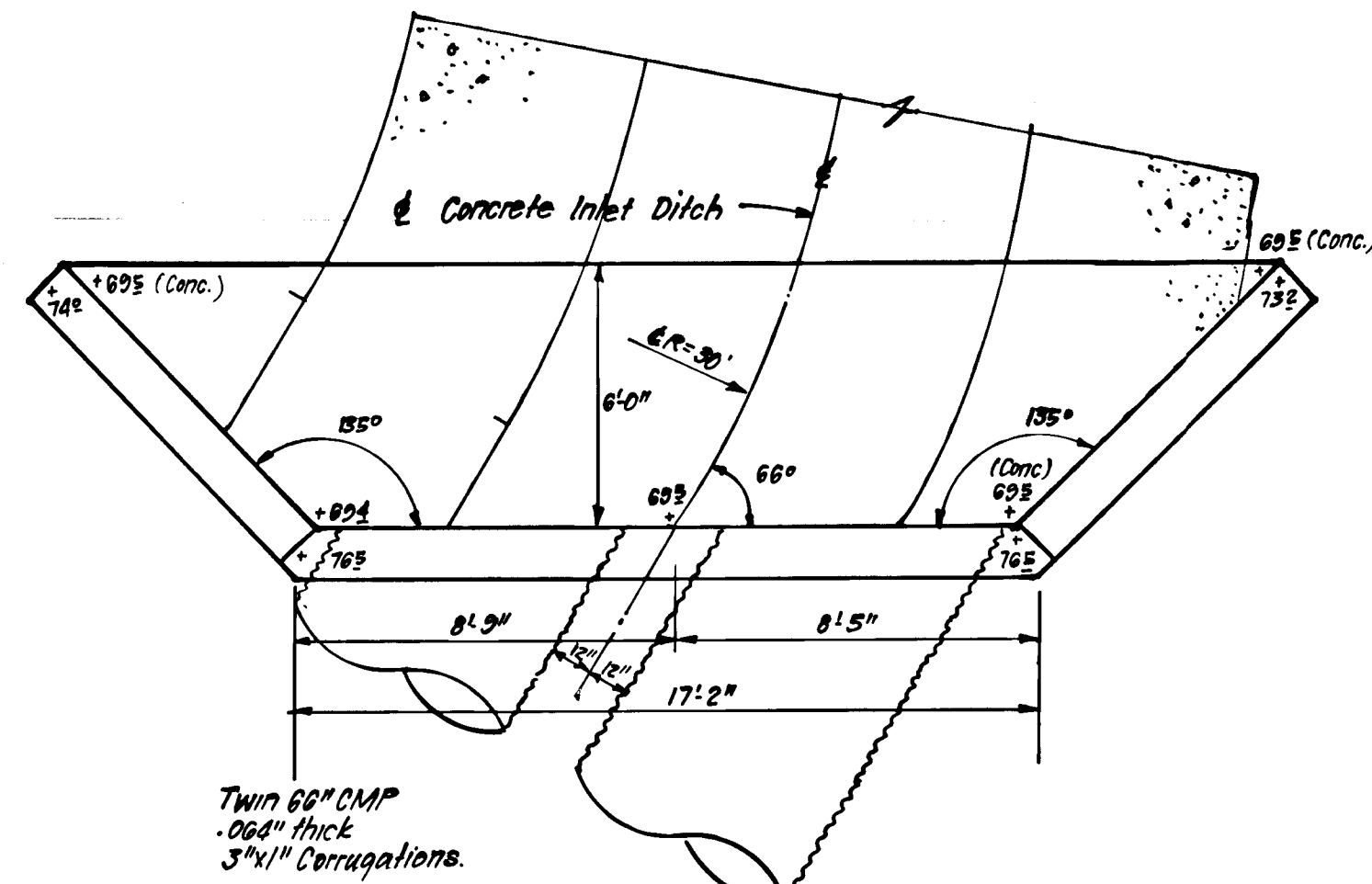
F-86-177



Twin 66" CMP
3" x 1" thick, 3" x 1"
Corrugations

Note: For reinforcing, dimensions not shown, and all other details, see Ho. Co. Std. SP 5.11 for Type A headwall for 66" pipe.

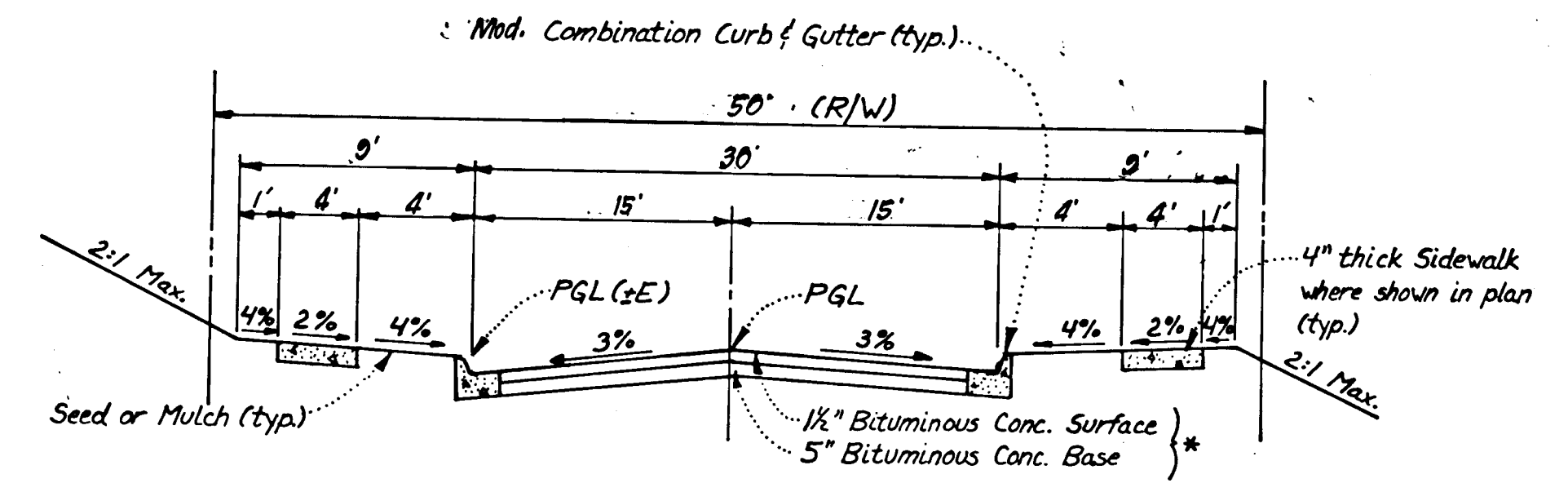
DETAIL - STRUCTURE No. 32
SCALE: 1/4" = 1'-0"



Twin 66" CMP
3" x 1" thick
3" x 1" Corrugations

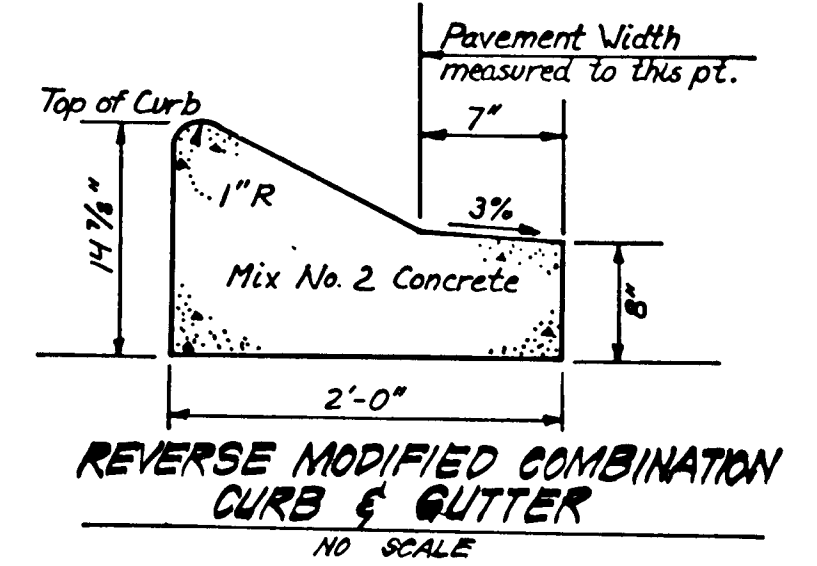
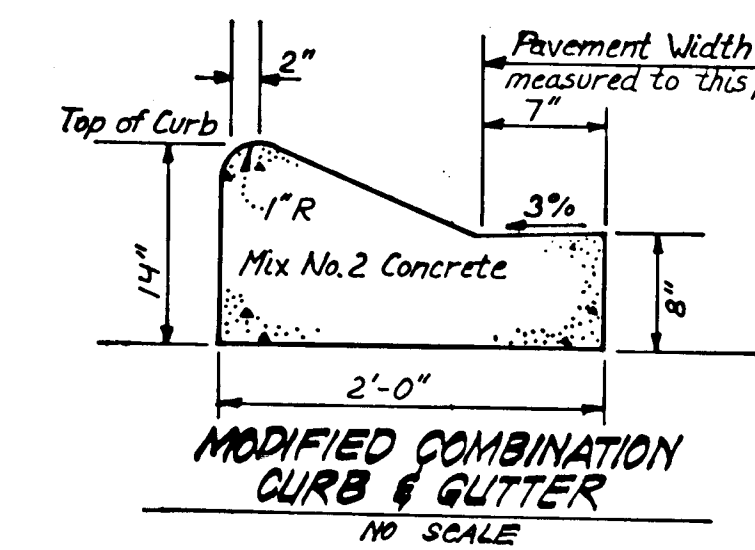
Note: For reinforcing, dimensions not shown and all other details, see Ho. Co. Std. SP 5.11 for Type A Headwall for 66" pipe.

DETAIL - STRUCTURE No. 33
SCALE: 1/4" = 1'-0"



TYPICAL PAVING SECTION - PUBLIC ROADS

NO SCALE
*For Alternate Paving Section - See det. this sht.



ALTERNATE PAVING SECTION FOR PUBLIC ROADS
(SECTION P-2)
NO SCALE

Bituminous Conc. Surface	1 1/2"
Bituminous Conc. Base	2 1/2"
Prime	
8" Crusher Run Base (Placed in 2 Courses)	8"
or	
6" Dense Graded Stabilized Aggregate Base Course	6"

Reviewed for Howard S.C.D.
Name
and meets Technical Requirements
Signature [Signature] Date 4/16/06
U.S. Soil Conservation Service

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

[Signature] Approved
[Signature] Date

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] Signature of Developer/Builder
4-16-06 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] G. Nelson Clark
4-16-06 Date

1	Delete Str. 5-24 and 5-25	DATE
No.	REVISION	DATE
APPROVED: DEPARTMENT OF PUBLIC WORKS		
<u>[Signature]</u>	<u>[Signature]</u>	<u>8-9-06</u>
Chief, Division of Engineering		
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING		
<u>[Signature]</u>	<u>[Signature]</u>	<u>8-4-06</u>
Chief, Division of Land Development & Zoning Administration		
CLARK • FINEFROCK & SACKETT ENGINEERS • PLANNERS • SURVEYORS 11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593-3400		
DESIGNED	ROAD CONSTRUCTION PLANS STORM DRAIN AND PAVING DETAILS	SCALE: 1"=50'
E.P.		HOR. 1"=50'
DRAWN	CANBURY WOODS	DRAWING
KIW		4 OF 6
CHECKED	SECTION 1 AREA 1	JOB NO.
E.P.	1ST ELECTION DISTRICT	84-044
DATE	HOWARD COUNTY, MARYLAND	FILE NO.
4-16-06	FOR: BRANTLY DEVELOPMENT CORP	84-044-D
	550 TWIN KNOLLS ROAD	
	Columbia, Md. 21045	

SEDIMENT TRAP TABLE											
TRAP No.	TYPE OF TRAP	DRAINAGE AREA (Ac)	STORAGE REQUIRED	STORAGE PROVIDED	STORAGE DEPTH	WEIR CREST ELEVATION	INV. ELEV. OF POND	CLEAN OUT ELEV.	BOTTOM WIDTH OF WEIR OPENING	ELEV. FOR TOP OF DAM	SIZE OF THE BOTTOM OF POND
1	SOST ST-V	2.4	4320 CF	2812 CF	3'	76.0	72.0	74.0	1'	78.0	40' X 20'
2	SOST ST-V	1.5	2700 CF	4826 CF	4'	72.0	68.0	70.0	2'	74.0	22' X 32'

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, disking or other acceptable means before seeding.
- 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 ureaform 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 (1.4 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 (.05 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 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2 1/2 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 ft or higher, use 3 1/2 gallons per acre (8 gal/1000 sq ft) for anchoring.
- Maintenance:** Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- 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 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 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2 1/2 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 ft or higher, use 3 1/2 gal per acre (8 gal/1000 sq ft) for anchoring.
- Maintenance:** Inspect all seeded areas and make needed repairs, replacements and reseedings.

CONSTRUCTION SEQUENCE

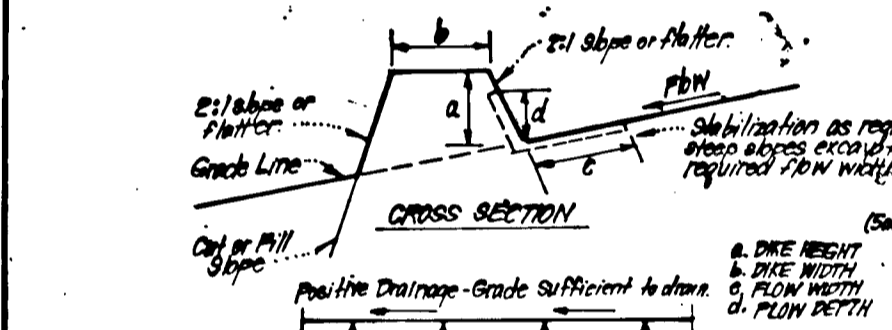
1. All Sediment Controls shown on GP-86-39 shall be in place prior to any grading under this plan.
2. Provide In Stream Sediment Control below culvert locations.
3. Install storm drainage, except from M-41 to S-26 and remove temp. stream crossing & temp. culvert under Bakers Place.
4. Temp. divert storm drainage from M-41 to Sediment Basin.
5. Complete final grading on roads. Adjust E.D.'s as necessary on Adcock Lane.
6. Install curb & gutter, sidewalks & paving.
7. Stabilize all disturbed areas.
8. Install storm drainage M-41 to S-26 and remove temp. pipe from M-41 to Sediment Basin.
9. Remove sediment control devices with the approval of the Sediment Control Inspector.
10. Restore areas under sediment control devices to proposed grades and stabilize with vegetative measures.
11. Developer shall delay the sale of lots 56-G1 until all other areas are stabilized in order to utilize the sediment basin as long as possible.

SEDIMENT CONTROL NOTES

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (892-2437)
- 2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3) Following initial soil disturbance or redisturbances, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all permanent sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to 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 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (Sec. 54), temporary seedings (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seedings 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: 12.3 Acres
 - Area Disturbed: 10.7 Acres
 - Area to be seeded or paved: 2.11 Acres
 - Area to be vegetatively stabilized: 7.5 Acres
 - Total Cut: 2540 Cu. yds
 - Total Fill: 4200 Cu. yds
 - Offsite waste/borrow area location: ON ADJ. PLOTS
- 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 EPM sediment control Inspector.
- 10) On all sites with disturbed areas in excess of 2 acres approval of the inspection agency shall be required 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 "the-bolt" basins, at least, Single Lot Sediment Control as shown below shall be implemented. N/A
- 12) All pipes to be blocked at the end of each day (see detail below). N/A
- 13) The total amount of straw bale dikes/silt fence equals NONE L.V.

LEGEND

1. Proposed Contour
2. Proposed Storm Drain
3. Earth Dike



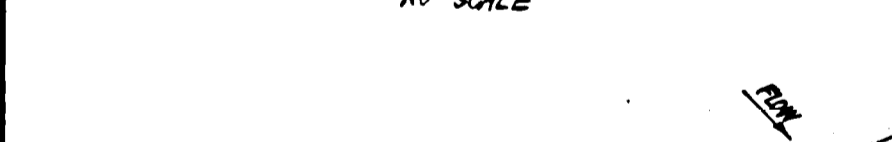
CONSTRUCTION SPECIFICATIONS

1. All dikes shall be constructed by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate clearing by construction vehicles.
4. Dike location should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. Sediment traps shall be: (A) in accordance with standard specifications for sand and straw mulch or straw mulch, if not in seeding season, (B) flow channel as per chart below.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIVE A	DIVE B
1	1.5 - 3.0%	Straw Mulch	Seed or Straw Mulch
2	3.1 - 5.0%	Straw Mulch	Seed or Straw Mulch
3	5.1 - 8.0%	Straw Mulch or 2" Stone	Seed or Straw Mulch
4	8.1 - 20.0%	Lined Rip Rap or 4" Stone	Lined Rip Rap or 4" Stone

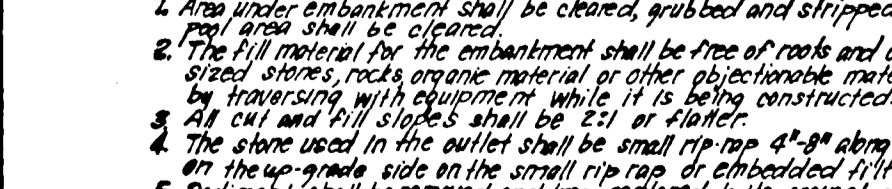
EARTH DIKE DETAIL (E.D.)



CONSTRUCTION SPECIFICATIONS

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top area shall be cleared.
2. The riprap for the embankment shall be free of roots and other nearby vegetation as well as man-made structures, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
3. The stone used in the outlet shall be small riprap 4" or 6" in size with 1" thickness of 2" aggregate placed on the up-slope side on the small riprap or embedded filter cloth in the riprap.
4. Sediment traps and traps rest on the original dimensions when the sediment has accumulated to the design depth of the trap.
5. The structure shall be inspected after each rain and repairs made as needed.
6. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
7. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.ST) STV.

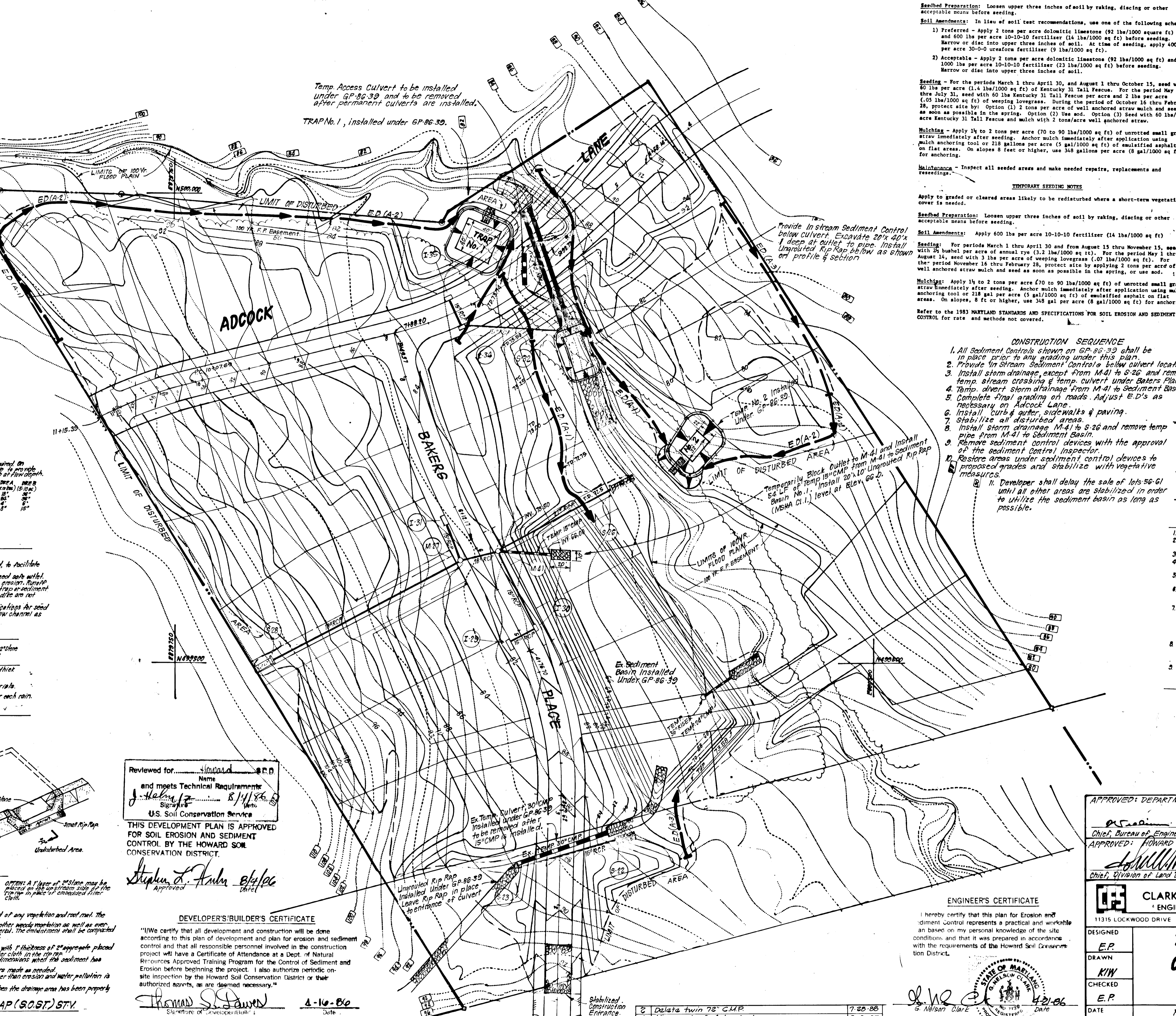


CONSTRUCTION SPECIFICATIONS

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top area shall be cleared.
2. The riprap for the embankment shall be free of roots and other nearby vegetation as well as man-made structures, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
3. The stone used in the outlet shall be small riprap 4" or 6" in size with 1" thickness of 2" aggregate placed on the up-slope side on the small riprap or embedded filter cloth in the riprap.
4. Sediment traps and traps rest on the original dimensions when the sediment has accumulated to the design depth of the trap.
5. The structure shall be inspected after each rain and repairs made as needed.
6. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
7. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

CONSTRUCTION SPECIFICATIONS

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The top area shall be cleared.
2. The riprap for the embankment shall be free of roots and other nearby vegetation as well as man-made structures, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
3. The stone used in the outlet shall be small riprap 4" or 6" in size with 1" thickness of 2" aggregate placed on the up-slope side on the small riprap or embedded filter cloth in the riprap.
4. Sediment traps and traps rest on the original dimensions when the sediment has accumulated to the design depth of the trap.
5. The structure shall be inspected after each rain and repairs made as needed.
6. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
7. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.



Reviewed for...
Name
Signature
Date
U.S. Soil Conservation Service

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

Signature
Date

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
Date

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable one 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

CONSTRUCTION SPECIFICATIONS

1. Stone size - Use 2" stone or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a simple residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) feet minimum, but not less than the full width of points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a simple family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. 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 riprap or aggregate as needed and repair and/or cleanup of any areas used to trap sediment. All sediment applied, dropped, or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing 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.

STABILIZED CONSTRUCTION ENTRANCE (SCE)



APPROVED: DEPARTMENT OF PUBLIC WORKS
Signature
Date
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Signature
Date

CLARK • FINEFROCK & SACKETT
ENGINEERS • PLANNERS • SURVEYORS
11315 LOCKWOOD DRIVE SILVER SPRING, MARYLAND 20904 (301) 593 3400

ROAD CONSTRUCTION PLANS & SEDIMENT & EROSION CONTROL PLANS

CANBURY WOODS
SECTION 1 AREAS 16'2
15' SELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: BRANTLY DEVELOPMENT CORP
2030 Red Branch Rd
Columbia, MD 21045

DESIGNED: E.P.
DRAWN: K.W.
CHECKED: E.P.
DATE: 4-16-86

SCALE: 1"=50'
DRAWING: 606 G
JOB NO: 84-084
FILE NO: 84-084-D