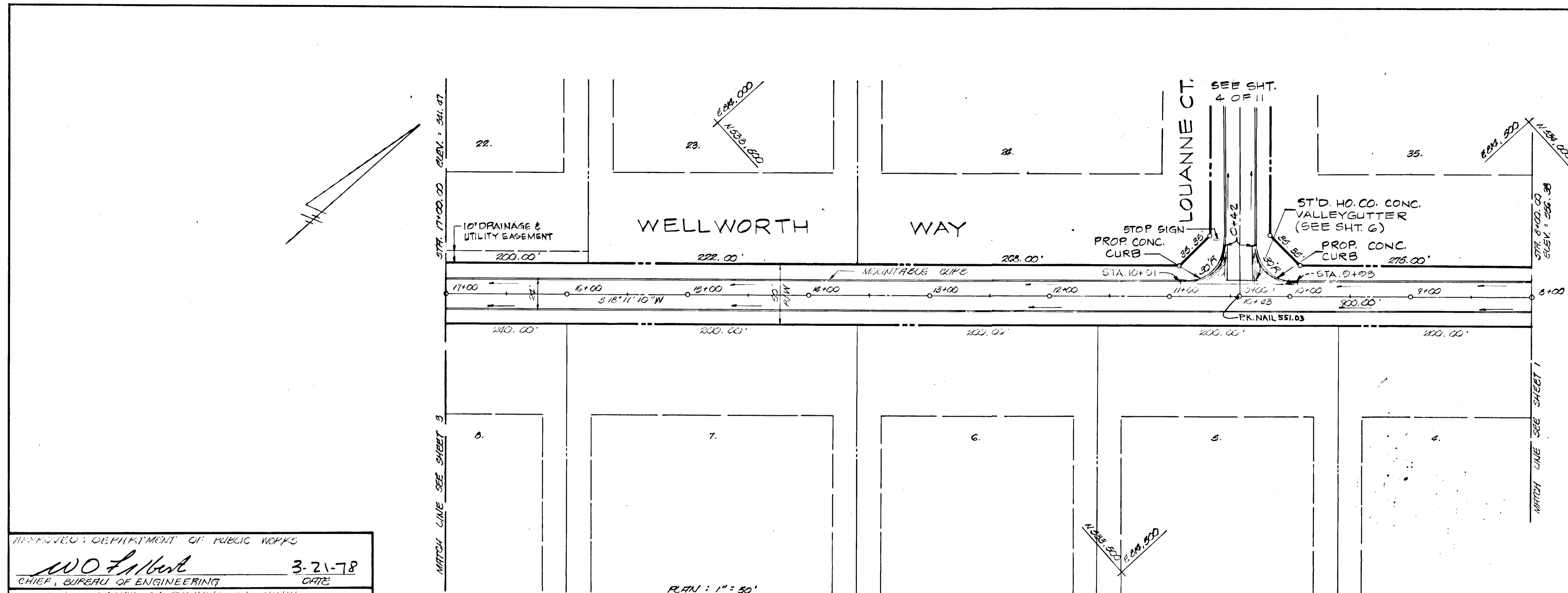


DATE
BY
SURVEYED
NOTE BOOK
PLAN
NO.

DATE
BY
SURVEYED
NOTE BOOK
PROFILE
NO.

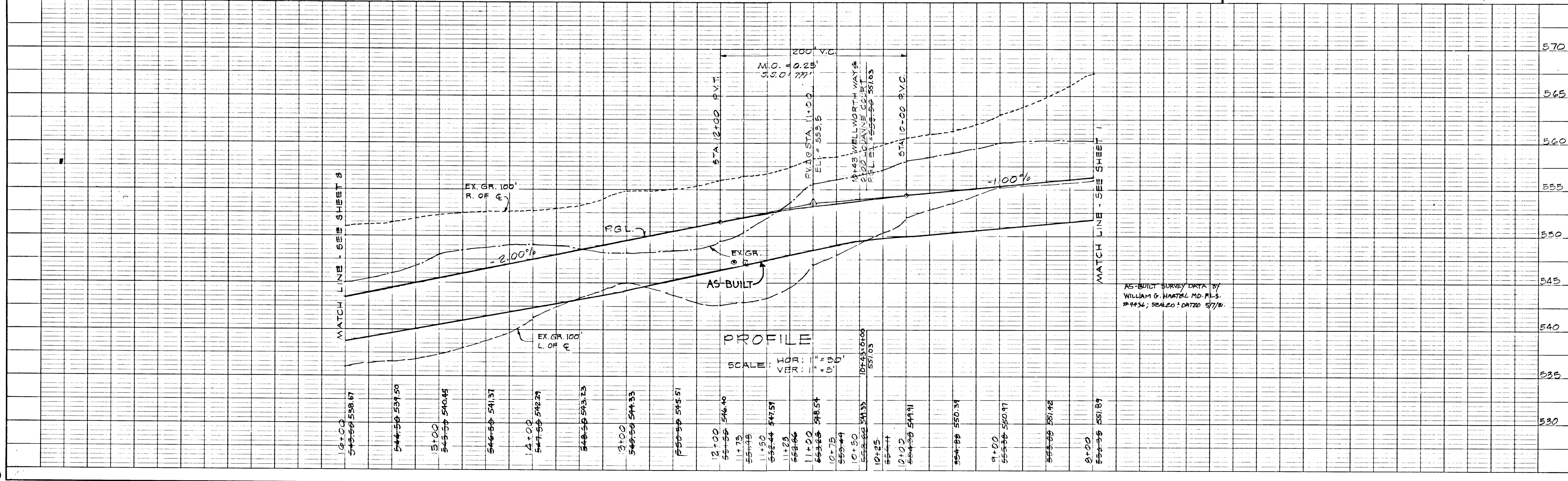


APPROVED: DEPARTMENT OF PUBLIC WORKS
W. O. F. [Signature] 3-21-78
 CHIEF, BUREAU OF ENGINEERING
 OFFICE OF PLANNING AND ZONING
John W. Murchman 5-10-78
 CHIEF, DIVISION OF LAND DEVELOPMENT

Rodolph May Jr.
 10-14-77
 OWNER & DEVELOPER
 HAYFIELD FARMS, INC.
 3620 SCHMIDT DRIVE
 ELLICOTT CITY, MD. 21043

TITLE: FINAL ROAD CONSTRUCTION PLAN - WELLWORTH WAY STA. 8+00 TO STA. 17+00	
PROJECT: FRIENDSHIP MANOR - SECTION 2	
LOCATION: 3RD ELECTION DISTRICT - HOWARD COUNTY, MD	
DATE: OCT. 1977	DESIGN BY: RM
SCALE: AS SHOWN	JOB NO.: 7768
DRAWN BY: DR	CHECKED BY: RM
DRAWING NO.: 2 OF 11	

boender associates
 engineers
 surveyors
 planners
 BALTIMORE 301-465-7777 • SALISBURY 301-749-1286

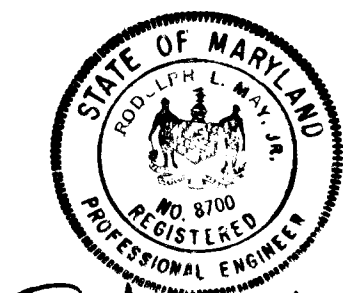


REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

A. Wayne Gray 3/8/79
 U.S. SOIL CONSERVATION SERVICE DATE

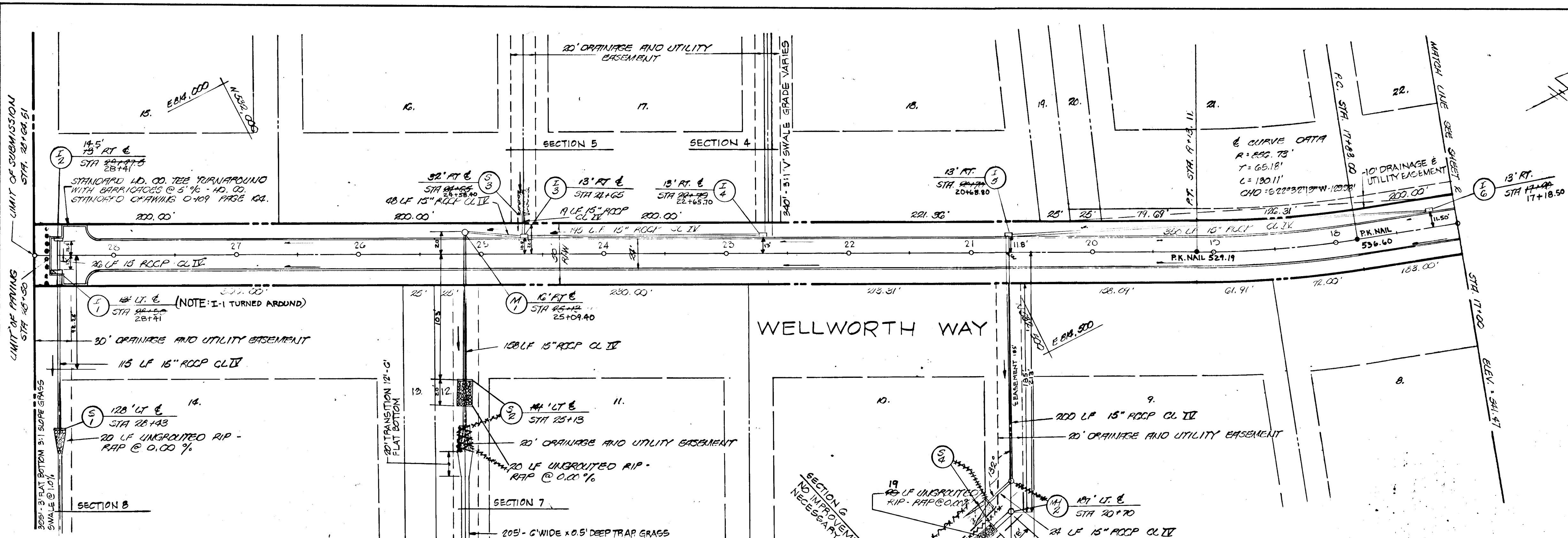
THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Roderick Zelman 3/8/79
 HOWARD SOIL CONSERVATION DISTRICT DATE



Roderick Zelman Jr.
 10-14-77

OWNER & DEVELOPER
 HAYFIELD FARMS, INC.
 3620 SCHMEL DRIVE
 BELLGATE CITY, MD. 21043



PLAN: 1" = 50'

DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE 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.

G. Albert Scheel Pres. 2/29/78
 DEVELOPER: G. ALBERT SCHEEL DATE

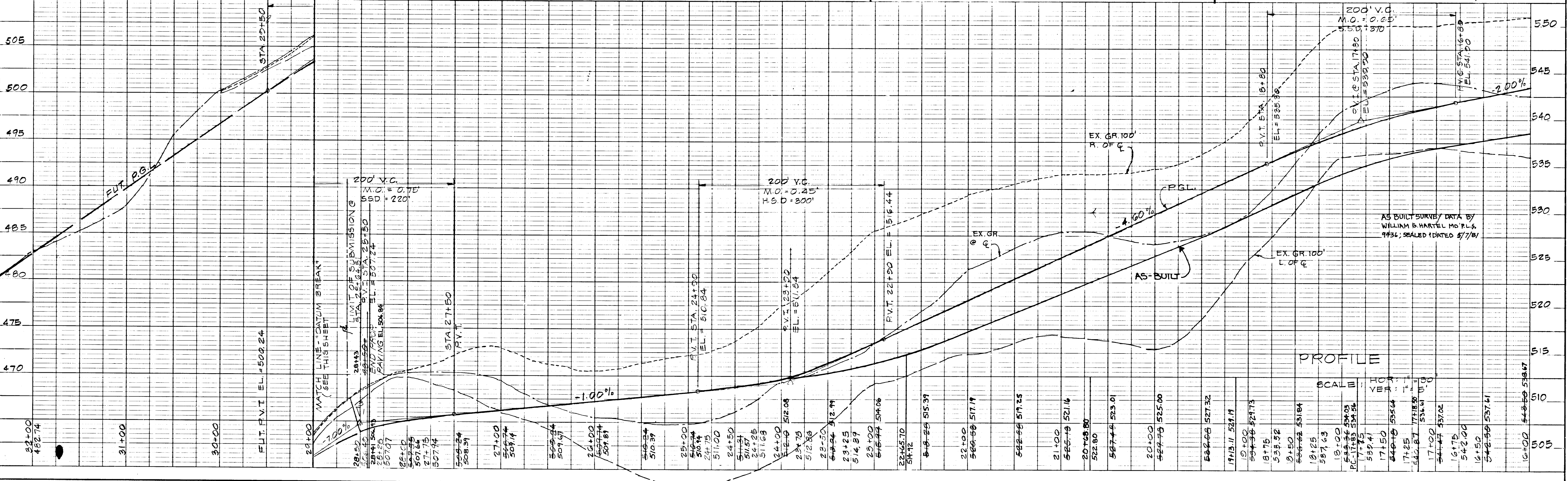
TITLE: FINAL ROAD CONSTRUCTION PLAN - WELLWORTH WAY STA. 28+00 TO 31+00	
PROJECT: FRIENDSHIP MANOR - SECTION 2	
LOCATION: 3RD ELECTION DISTRICT - HOWARD COUNTY, MD.	
DATE: OCT. 1977	DESIGN BY: RM
DRAWN BY: CR	CHECKED BY: RM
SCALE: AS SHOWN	JOB NO.: 7708
DRAWING NO.: 3 OF 11	
boender associates engineers/surveyors/planners	
BALTIMORE 301-465-7777 • SALISBURY 301-749-1286	

APPROVED: DEPARTMENT OF PUBLIC WORKS

W.O. Lambert 3-21-78
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING

John W. Mueselmann 5-10-78
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE



PROFILE
 SCALE: 1" = 10' VERT. 1" = 100' HORIZ.

F-78-83 AS-BUILT FEB 8, 1983

DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE 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.

G. Albert Scheel Pres. 2/23/78
 DEVELOPER: G. ALBERT SCHEEL DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS
W.O. Lambert 3-21-78
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING & ZONING
John W. Mullan 3-10-78
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

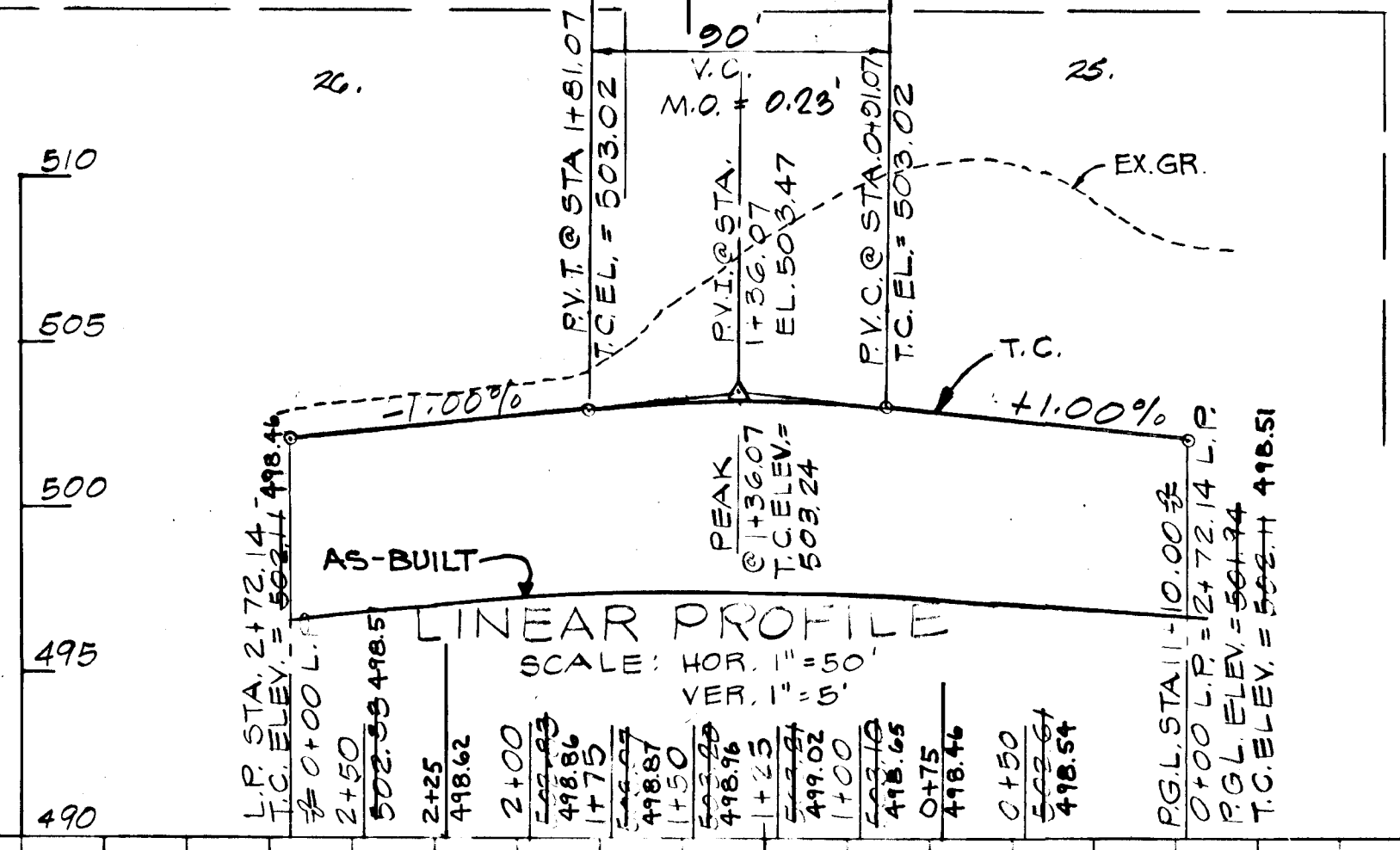
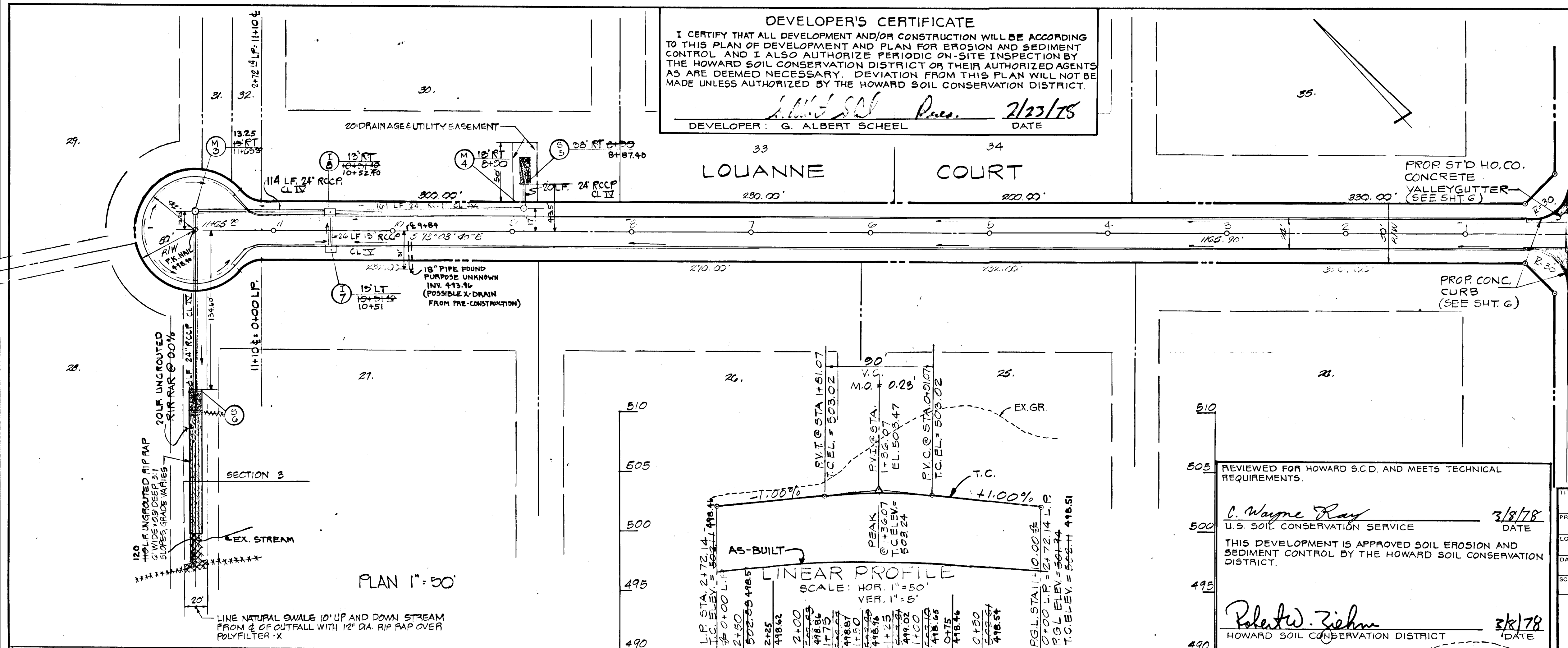


Rodolph May, Jr.
 10-14-77

OWNER & DEVELOPER
 HAYFIELD FARMS, INC.
 5630 SCHEEL DRIVE
 BELLICO TT, MD. 21028

PLAN
 SURVEYED: _____
 NOTE BOOK: _____
 ALIGNMENT CHECKED: _____
 EC. OF WAY CHECKED: _____

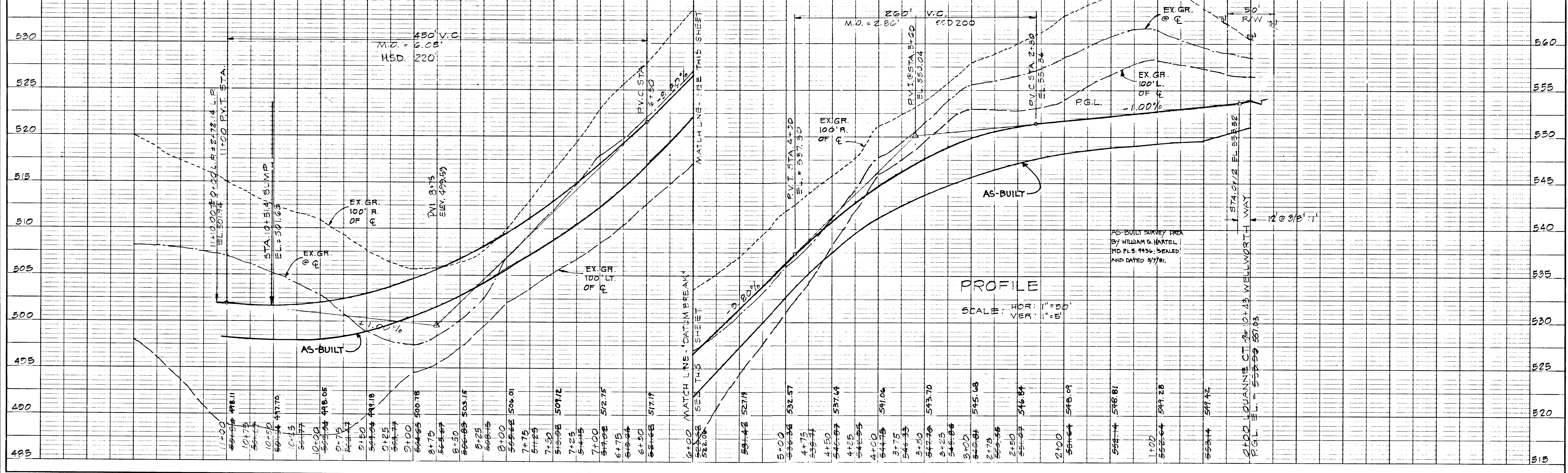
PROFILE
 SURVEYED: _____
 NOTE BOOK: _____
 E. W. I. NOTED: _____
 STRUCTURE MODIFICATIONS CHECKED: _____

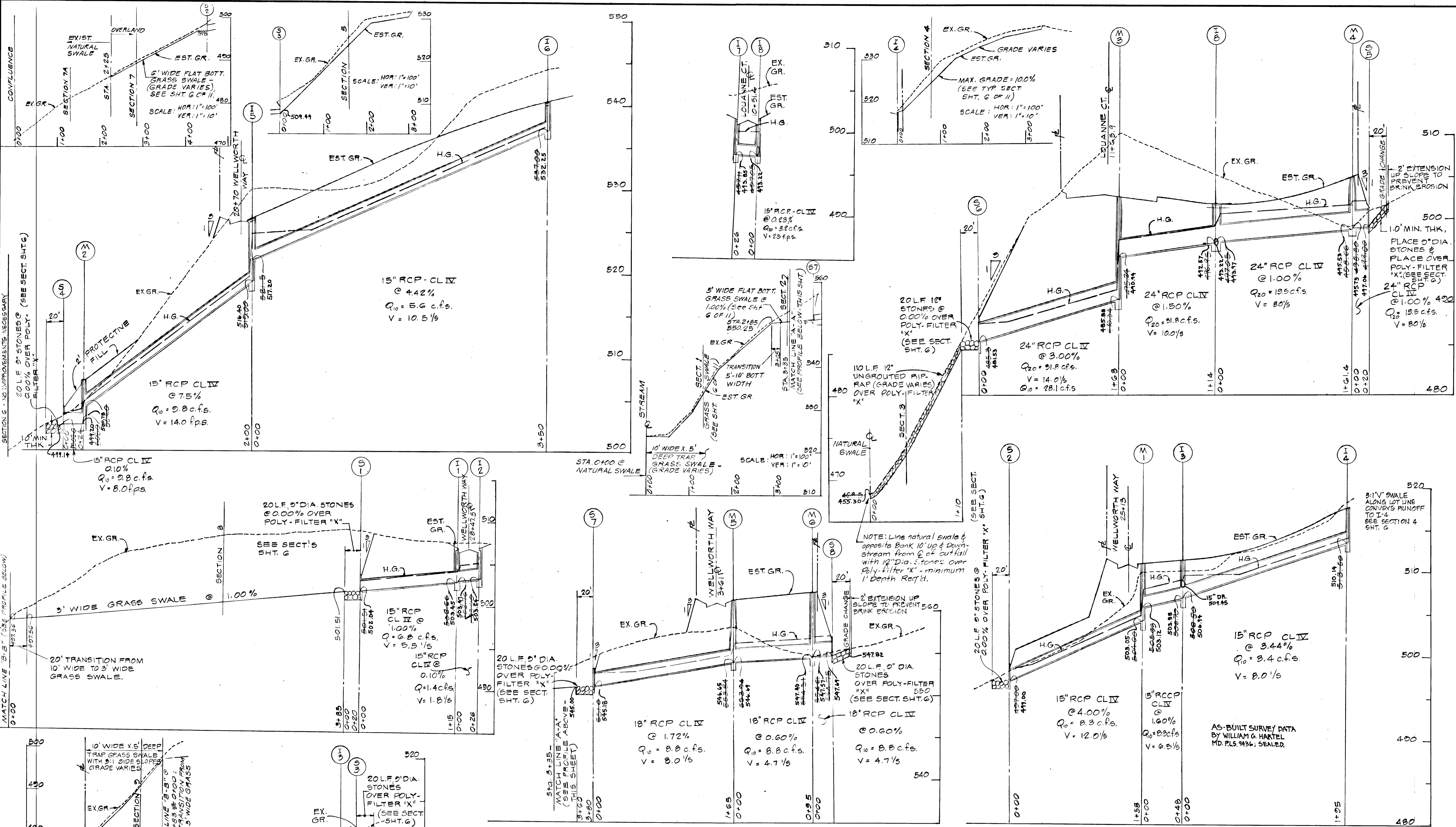


REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
C. Wayne Ray 3/8/78
 U.S. SOIL CONSERVATION SERVICE DATE

Robert W. Ziehm 3/8/78
 HOWARD SOIL CONSERVATION DISTRICT DATE

TITLE	FINAL ROAD CONSTRUCTION PLAN - LOUANNE CT. STA 0+00 TO 5+74.14	
PROJECT	FRIENDSHIP MANOR - SECTION 2	
LOCATION	3RD ELECTION DISTRICT - HOWARD COUNTY, MD.	
DATE	OCT. 1977	DESIGN BY: RM
SCALE	1/8" = 1'-0"	DRAWN BY: CR
		CHECKED BY: RM
		JOB NO.: 776A
		DRAWING NO.: 4 OF 11
boender associates		engineers surveyors planners
BALTIMORE 301-465-7777		SALISBURY 301-749-1286
		565





DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE 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.

G. Albert Scheel
 DEVELOPER: G. ALBERT SCHEEL
 DATE: 2/23/78

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

C. Wayne Key
 U.S. SOIL CONSERVATION SERVICE
 DATE: 3/8/78

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

Robert W. Ziemer
 HOWARD SOIL CONSERVATION DISTRICT
 DATE: 2/21/78

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 No. 8700
 REGISTERED

Edolph Mandy
 10-14-77

REV. ADD PROFILES: 2/23/78-WN.

APPROVED: DEPARTMENT OF PUBLIC WORKS
W. O. Libert
 CHIEF BUREAU OF ENGINEERING
 DATE: 3-21-78

APPROVED: OFFICE OF PLANNING AND ZONING
William M. ...
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 3-10-78

OWNER & DEVELOPER
 HAYFIELD FARMS, INC.
 2620 SCHEEL DRIVE
 ELLICOTT CITY, MD. 21043

TITLE: STORM DRAIN PROFILES
 FRIENDSHIP MANOR - SECTION 2

LOCATION: 3RD ELECTION DISTRICT HOWARD COUNTY, MD.

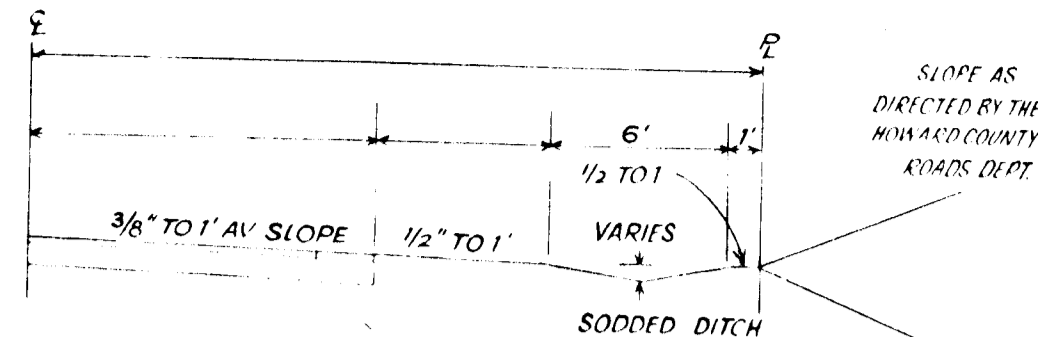
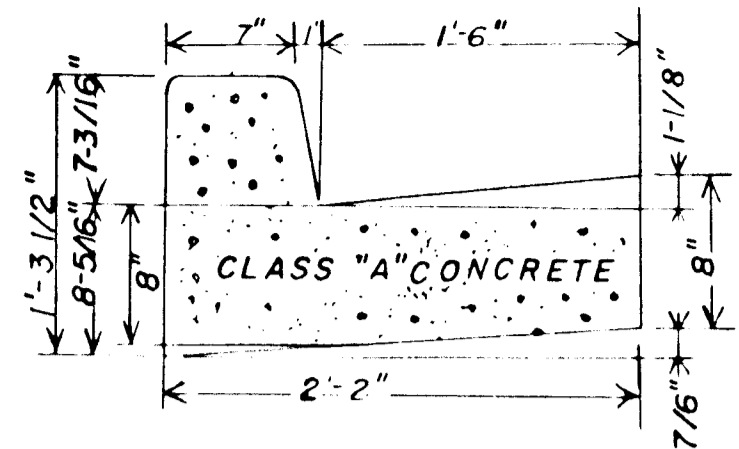
DATE: 10/17/77 DESIGN BY: R.M. DRAWN BY: W.H.N. CHECKED BY: R.M.

SCALE: HOR: 1"=50' VER: 1"=10'
 TYPICAL-UNLESS NOTED JOB NO.: 7768 DRAWING NO.: 50 OF 11

boender associates
 engineers
 surveyors
 planners

BALTIMORE 301-465-7777 • SALISBURY 301-749-1286

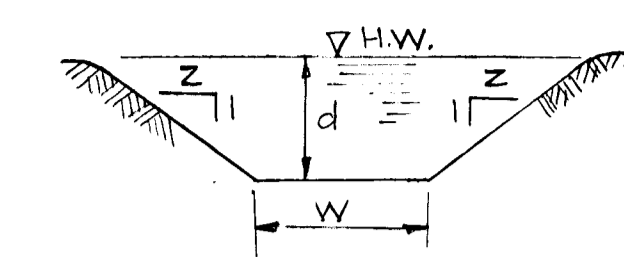
STANDARD 7" COMBINATION CURB & GUTTER



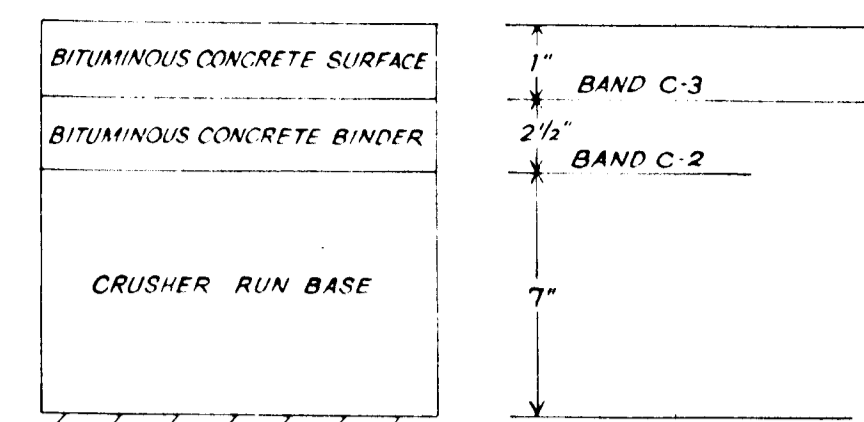
TYPICAL HALF SECTION
LOUANNE CT. & WELLWORTH WAY
DESIGN SPEED = 30MPH ZONING: R
NO SCALE

DRAWING D.16 (MAY, 1968) Page 71

SWALE SECTION SCHEDULE						
SECT. NO. (SEE SHT.S)	W	Z	d	GRADE (MAX.)	VELOCITY (F.P.S) (MAX. ALLOW. ACTUAL)	LINING
1	10'	3'	27"	10%	3.0	2.6 GRASS
2	5'	3'	0.8'	1%	6.0	1.6 GRASS
3	6'	3'	0.5'	10%	-	2.6 RIP-RAP
4	-	3'	0.6'	52.10%	4.0	3.7 GRASS
5	-	3'	0.6'	52.10%	4.0	3.7 GRASS
6	-	10'	0.7'	52.10%	4.0	3.4 GRASS
7	6'	3'	0.5'	52.10%	4.0	3.8 GRASS
7A	-	10'	0.7'	52.10%	4.0	3.4 GRASS
8	3'	3'	0.8'	1%	6.0	1.6 GRASS
9	10'	3'	0.2'	>10%	3.0	2.0 GRASS



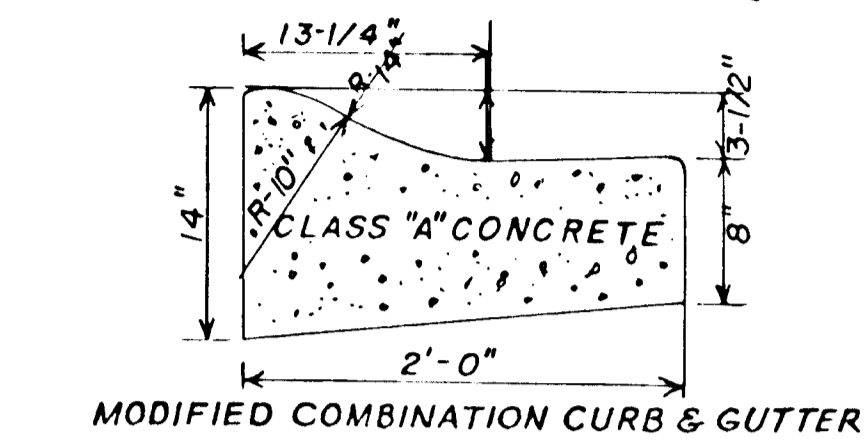
SWALE SECTION (FLAT BOTTOM) TYPICAL NO SCALE



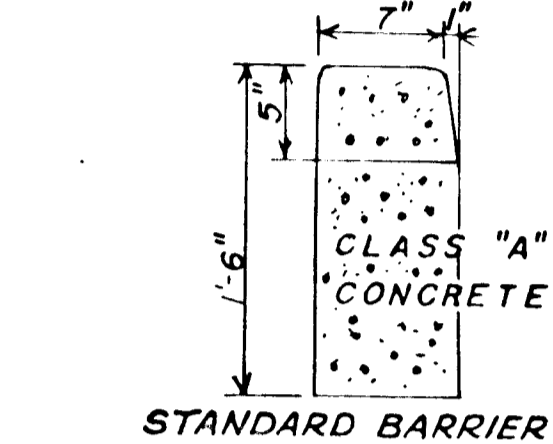
CLEARING and GRADING: ARTICLE C-1
SURGRADE: ARTICLE C-2
BASE COURSE: ARTICLE C-25
BINDER COURSE: ARTICLE C-31 or C-33
SURFACE COURSE: ARTICLE C-31

TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS

DRAWING D.4 (MAY, 1968) Page 59

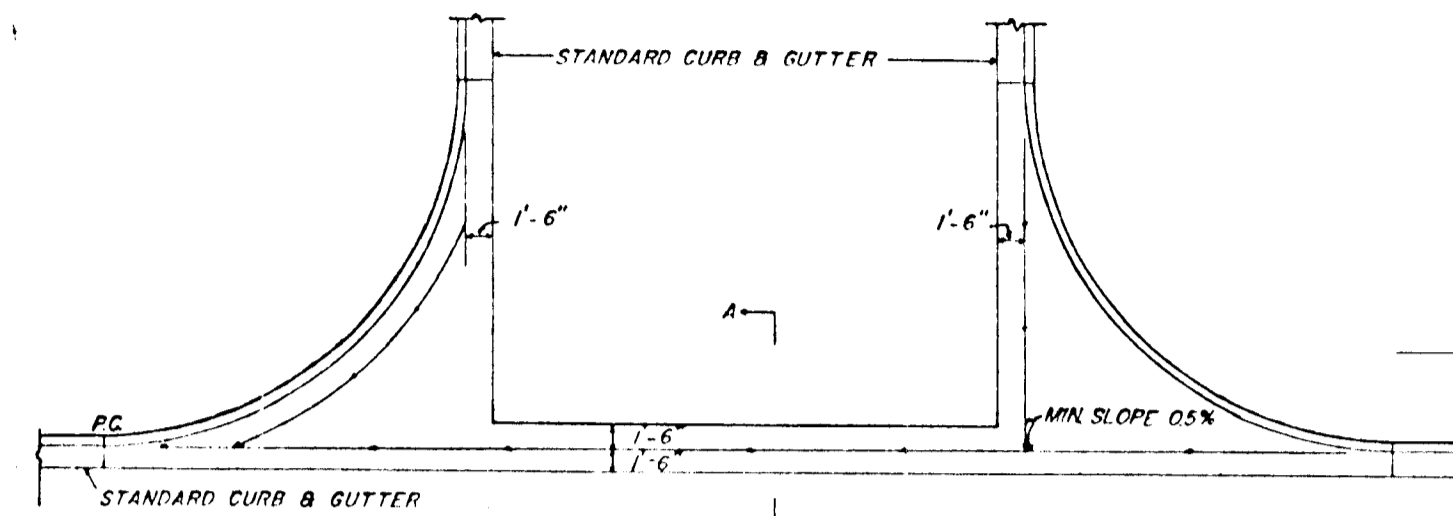


MODIFIED COMBINATION CURB & GUTTER

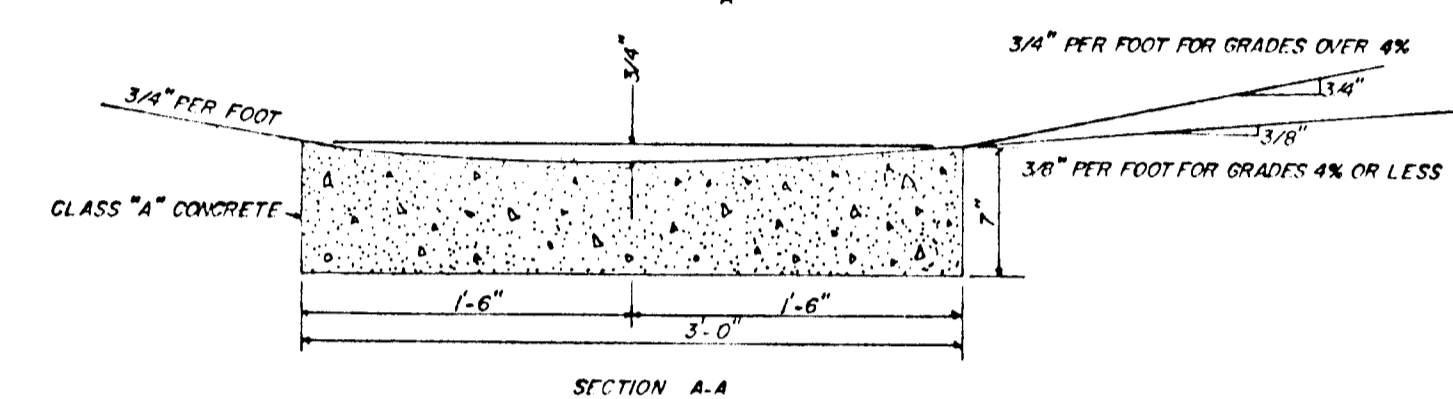


STANDARD BARRIER CURB

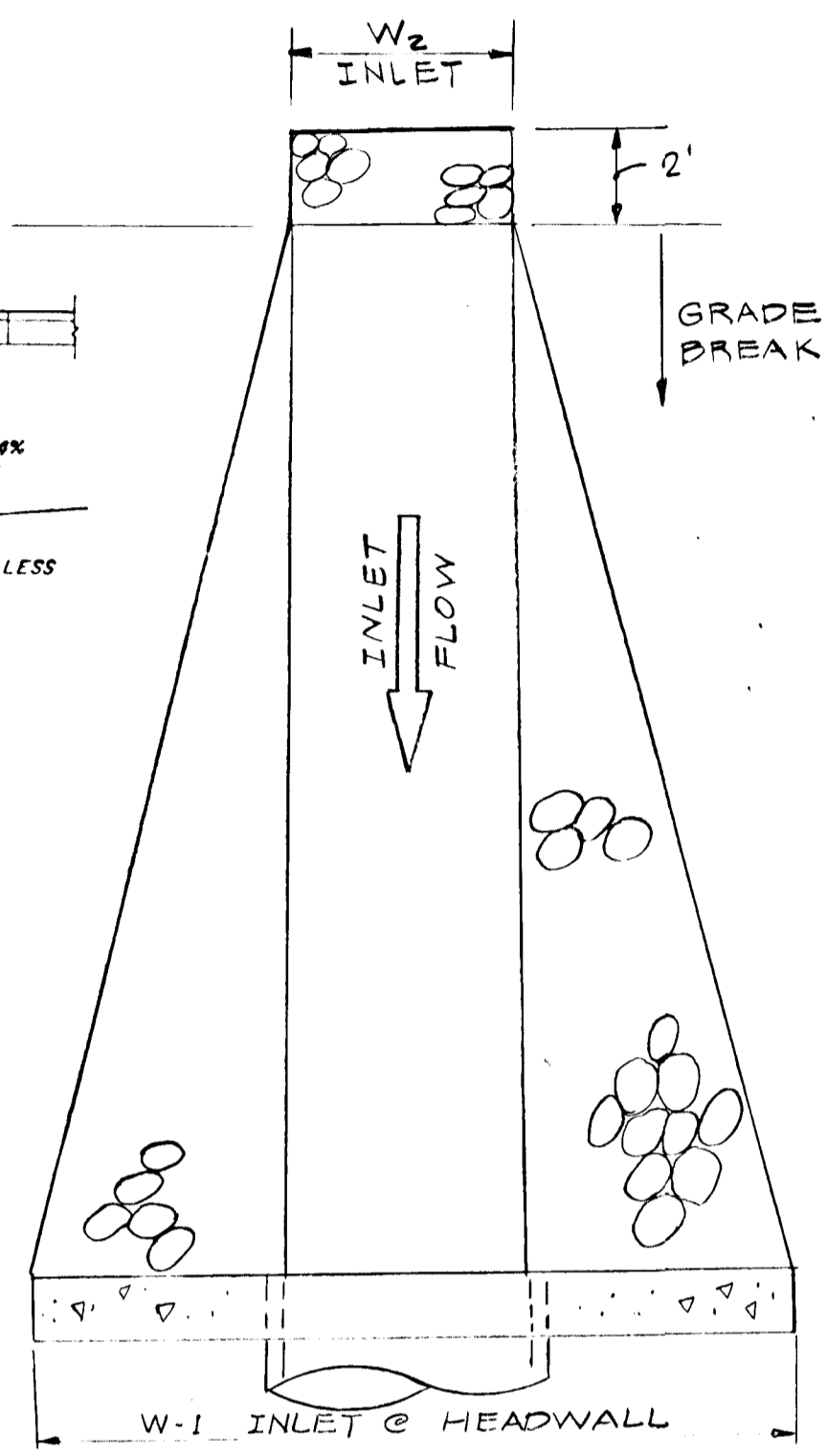
Howard County Concrete Curbs DRAWING D.40 (MAY, 1968) Page 95



Valley Gutter for 90° Intersection. DRAWING D.41 Page 96

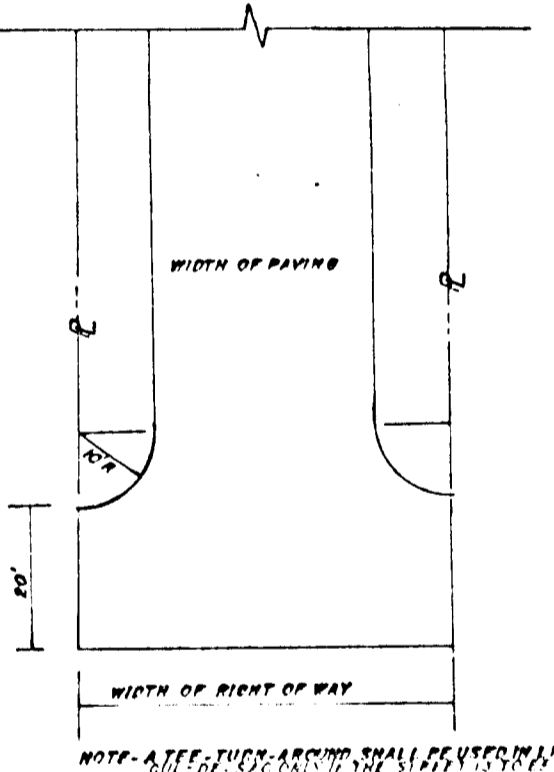


SECTION A-A



TEE TURN AROUND

DRAWING D.33 Page 88



NOTE: SEE STRUCTURE SCHEDULE FOR PIPE SIZES AND SPACING.

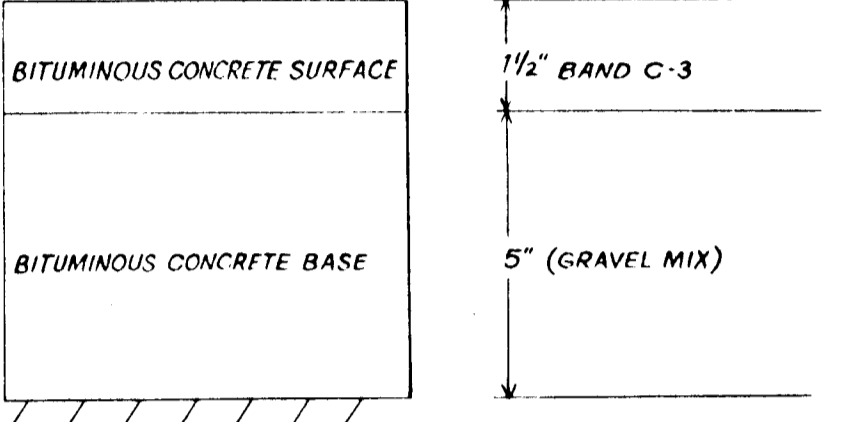
* AS-BUILT ELEVATIONS SHOWN ON PROFILES FOR ST. DR.

STRUCTURE SCHEDULE						
NO.	TYPE	INV. IN'	INV. OUT'	TOP CURB ELEV.	REMARKS	
S-1	"C" WALL	-	501.51	503.51	HO. CO. STD. D-52, P. 107	
I-1	"A-10" INLET W/DEF.	502.76	502.66	506.05	HO. CO. STD. D-64-A, P. 119-A	WITH DEFLECTORS
I-2	"A-5" INLET	-	503.00	506.83	HO. CO. STD. D-64-A, P. 119-A	
S-2	"C" WALL	-	497.00	498.75	HO. CO. STD. D-52, P. 107	
M-1	MOD. DROP MH	505.00	504.00	510.77	HO. CO. STD. D-104, P. 159	
I-3	"A-5" INLET	506.80	506.70	511.28	HO. CO. STD. D-64-A, P. 119-A	
I-4	"A-5" INLET	516.50	-	517.52	HO. CO. STD. D-64-A, P. 119-A	W/ DEFLECTORS
S-3	"C" WALL	-	508.00	510.00	HO. CO. STD. D-52, P. 107	
S-4	"C" WALL	-	502.00	504.00	HO. CO. STD. D-52, P. 107	
M-4	MOD. DROP MH	504.00	502.00	507.70	HO. CO. STD. D-104, P. 159	
I-5	"A-10" INLET	521.50	519.00	526.81	HO. CO. STD. D-64-A, P. 119-A	W/ DEFLECTORS
I-6	"A-10" INLET	537.00	-	541.15	HO. CO. STD. D-64-A, P. 119-A	W/ DEFLECTORS
S-5	"C" WALL	-	485.30	488.00	HO. CO. STD. D-52, P. 107	
M-3	MOD. DROP MH	495.34	490.24	502.50	HO. CO. STD. D-104, P. 159	
I-8	"A-5" INLET	497.00	496.00	501.70	HO. CO. STD. D-64-A, P. 119-A	
I-7	"A-5" INLET	-	497.11	501.70	HO. CO. STD. D-64-A, P. 119-A	
M-4	STD. MANHOLE	498.76	498.66	504.96	HO. CO. STD. D-103, P. 158	
S-5	"C" WALL	-	499.00	501.75	HO. CO. STD. D-52, P. 107	
S-7	"C" WALL	-	521.00	523.75	HO. CO. STD. D-52, P. 107	
M-5	STD. MANHOLE	553.04	553.84	561.24	HO. CO. STD. D-103, P. 158	
M-6	STD. MANHOLE	554.61	554.51	562.10	HO. CO. STD. D-103, P. 158	
S-8	"C" WALL	-	554.75	557.00	HO. CO. STD. D-52, P. 107	

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE 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.

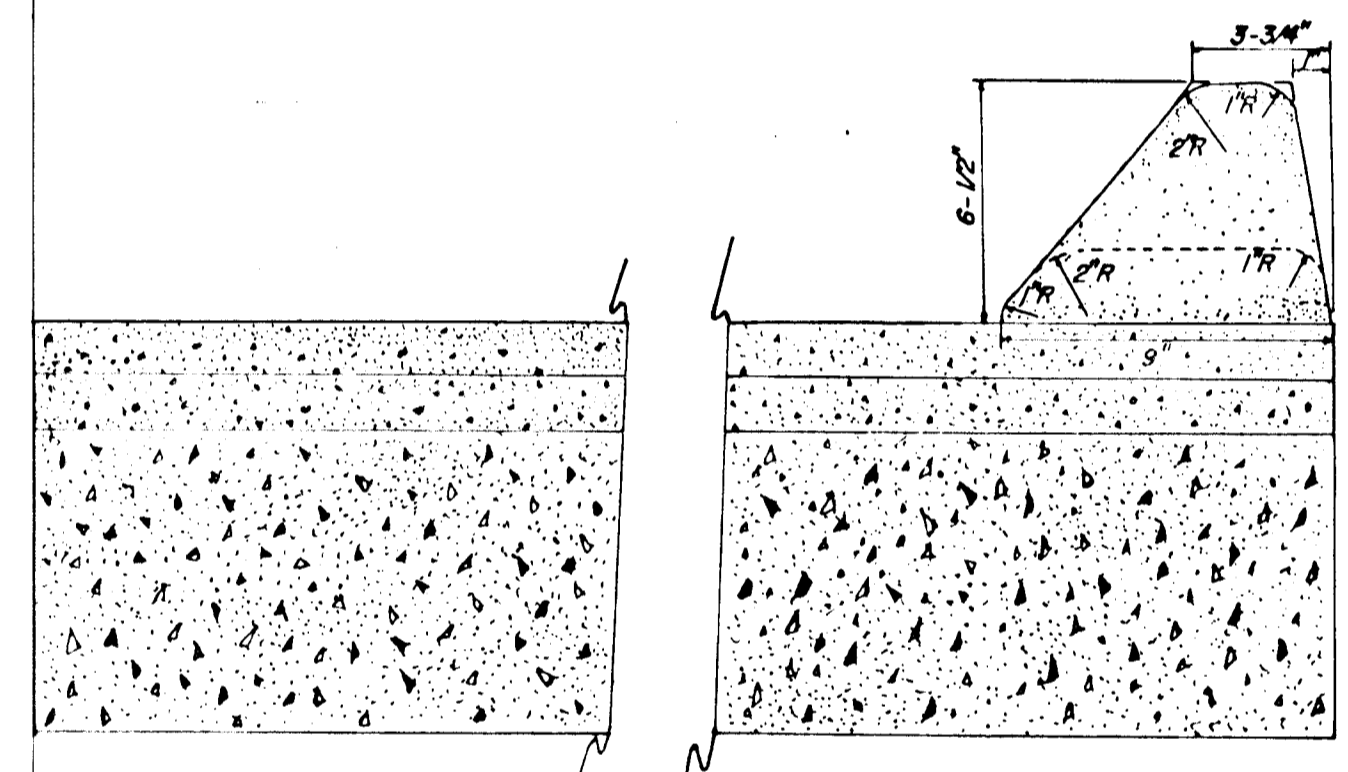
G. Albert Scheel Pres. 2/23/78
DEVELOPER: G. ALBERT SCHEEL DATE



CLEARING and GRADING: ARTICLE C-1
SURGRADE: ARTICLE C-2
BASE COURSE: ARTICLE C-31
SURFACE COURSE: ARTICLE C-33

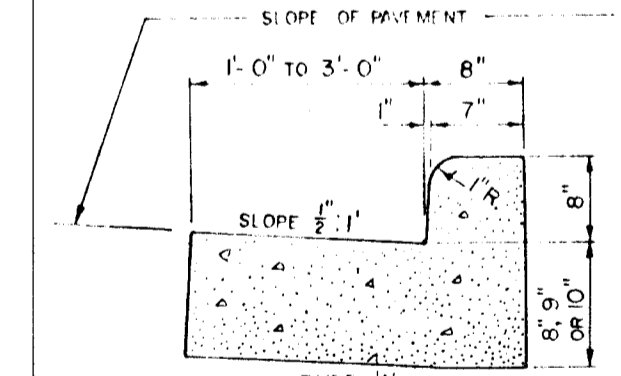
TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS

DRAWING D.5 (MAY, 1968) Page 60



Mountable Curb

DRAWING D.39 Page 94

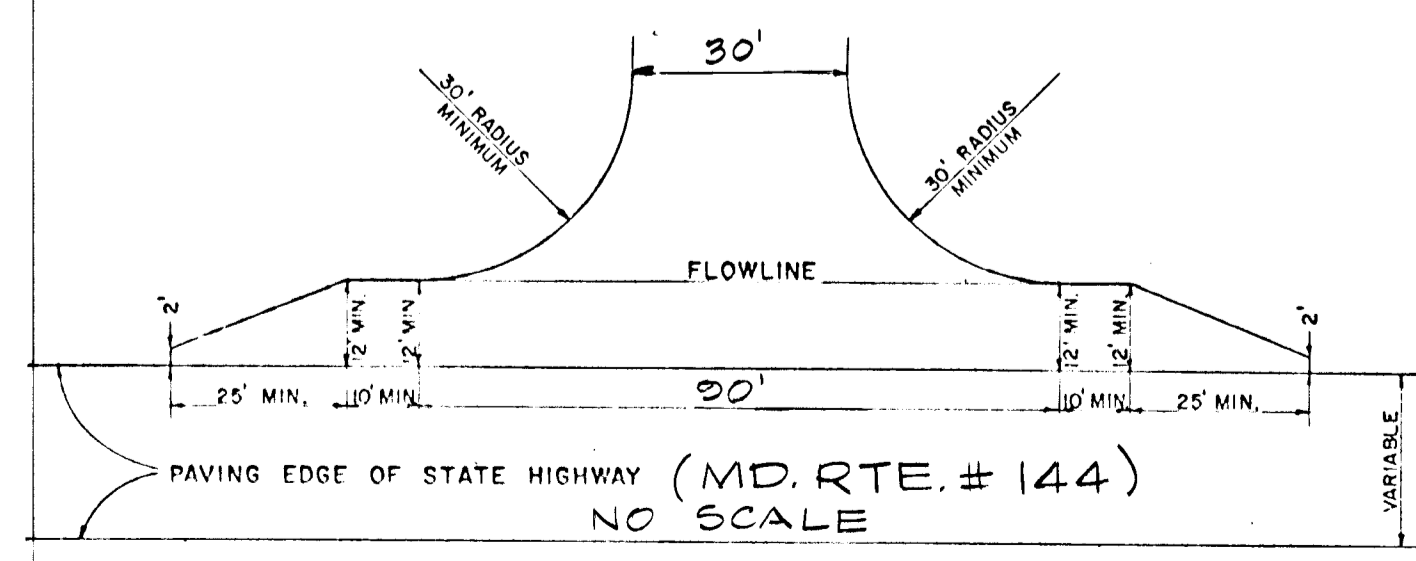


STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

STANDARD TYPES OF CONCRETE CURB
COMBINATION CONCRETE CURB & GUTTER

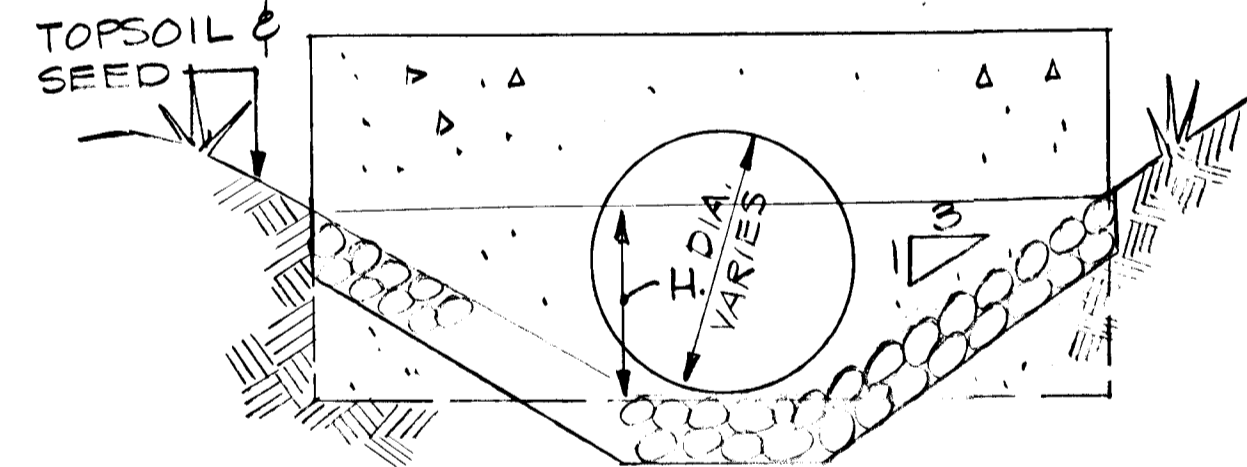
STANDARD NO. MD-620.02

MINIMUM DESIGN STANDARDS FOR
CONCRETE CURB CHANNELIZED INTERSECTION
OF SUBDIVISION ROAD WITH STATE HIGHWAY



Howard County Page 170

RIP-RAP APRON SCHEDULE				
STRUCTURE	PIPE DIA.	H.	W ₁	W ₂
S-1	15"	0.75'	1.5'	3.0'
S-2	15"	0.75'	1.5'	6'
S-3 (INLET)	15"	0.75'	10'	1.5'
S-4	15"	0.75'	1.5'	10'
S-5 (INLET)	24"	1.0'	10'	2.5'
S-6	24"	1.0'	2.5'	12'
S-7	18"	1.0'	2.0'	5'
S-8 (INLET)	18"	1.0'	10'	2.0'



APRON RIP-RAP DETAIL
NO SCALE

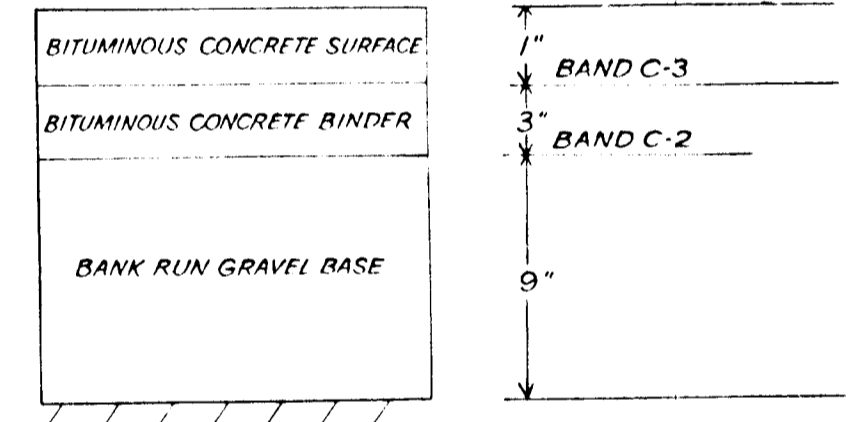
REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

C. Wayne Ray 3/8/78
U.S. SOIL CONSERVATION SERVICE DATE

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

Robert W. Ziehm 3/8/78
HOWARD SOIL CONSERVATION DISTRICT DATE

Robert W. Ziehm
10-14-77



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

DRAWING D.3 Page 58

- PAVING SPECIFICATIONS
- TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
 - BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-3 AS PROVIDED IN THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
 - TACK COAT IS IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.

NOTE: ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.

OWNER & DEVELOPER
HAYFIELD FARMS, INC.
3620 SCHEEL DRIVE
ELLCOTT CITY, MD. 21043

APPROVED: DEPARTMENT OF PUBLIC WORKS
W.O. Laibert 3-21-78
CHIEF, BUREAU OF ENGINEERING DATE

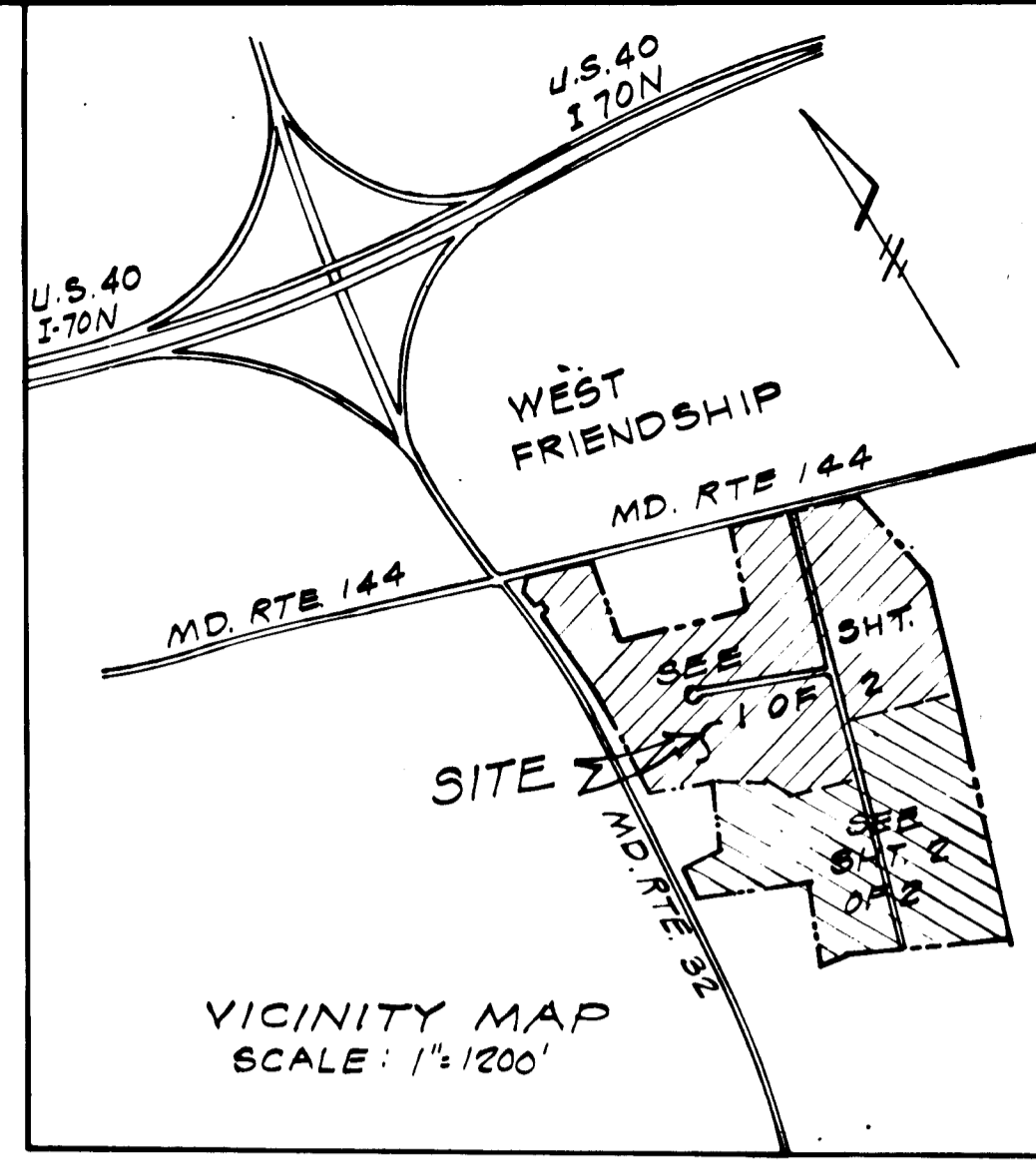
APPROVED: OFFICE OF PLANNING AND ZONING
John W. Meacham 3-10-78
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

STORM DRAIN AND ROAD CONSTRUCTION
DETAIL SHEET
PROJECT: FRIENDSHIP MANOR - SECTION 2
LOCATION: 9RD ELECTION DISTRICT - HOWARD COUNTY, MD.
DATE: OCT. 15, 1977 DESIGN BY: R.M. DRAWN BY: W.H.N. CHECKED BY: R.M.
SCALE: AS SHOWN JOB NO.: 776B DRAWING NO.: 6 OF 11

boender associates
engineers/surveyors/planners

SEDIMENT TRAP SCHEDULE

TRAP NO.	DRAINAGE AREA	VOLUME PROVIDED	VOLUME REQ'D	BOTTOM SIZE	BOTTOM ELEV.	ELEV. SPILLWAY
1	2.3 AC.	156	154	3'DEEP X 25' X 4'	488.0	491.0 15'L.
2	4.1 AC.	275	275	2'DEEP X 80' X 45'	520.0	522.0 26'L.
3	3.5 AC.	235	235	3'DEEP X 24' X 88'	503.0	506.0
4	1.9 AC.	145	129	2'DEEP X 24' X 66'	546.0	548.0 12'L.



- #### CONSTRUCTION SEQUENCE
- OBTAIN GRADING PERMIT (TELEPHONE NO. INSPECTION & PERMITS: 9522436)
 - NOTIFY BUREAU OF LICENSE, INSPECTION & PERMITS 24 HRS. PRIOR TO BEGINNING CONSTRUCTION.
 - INSTALL TEMP. SEDIMENT CONTROL MEASURES.
 - CONSTRUCT STORM DRAINS #BLOCK 12, 13, 14, 15, 16, 17 & 18.
 - CONSTRUCT ROADS. STABILIZE WITH BASE MATERIAL & TEMPORARY SEEDING.
 - PAVE ROADS. STABILIZE ALL GRADED AREAS ACCORDING TO SEDIMENT CONTROL NOTES.
 - REMOVE TEMP. SEDIMENT CONTROL MEASURES WITH APPROVAL OF BUREAU OF LICENSE, INSPECTION & PERMITS.

Note #4 : * BLOCK UPSTREAM END OF PIPE AT END OF DAY, UNTIL ALL DISTURBED AREAS ARE STABILIZED.

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

W. Wayne Day 3/8/78
U.S. SOIL CONSERVATION SERVICE DATE
THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Ziehm 3/8/78
HOWARD SOIL CONSERVATION DISTRICT DATE

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE 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.

G. Allen 10/14/77
DEVELOPER DATE

ENGINEER'S CERTIFICATE

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 BY THE HOWARD SOIL CONSERVATION DISTRICT.

Rodolph May Jr. 10-14-77
ENGINEER DATE

OWNER & DEVELOPER:
HAYFIELD FARMS, INC.
3620 SCHEEL DRIVE
ELLCOTT CITY, MD. 21043

SITE ANALYSIS

TOTAL AREA = 111.396 AC.
AREA DISTURBED = 8.23 AC.
AREA PAVED = 2.26 AC.
AREA RE-VEGETATED = 5.07 AC.
AREA UNDISTURBED = 103.166 AC.

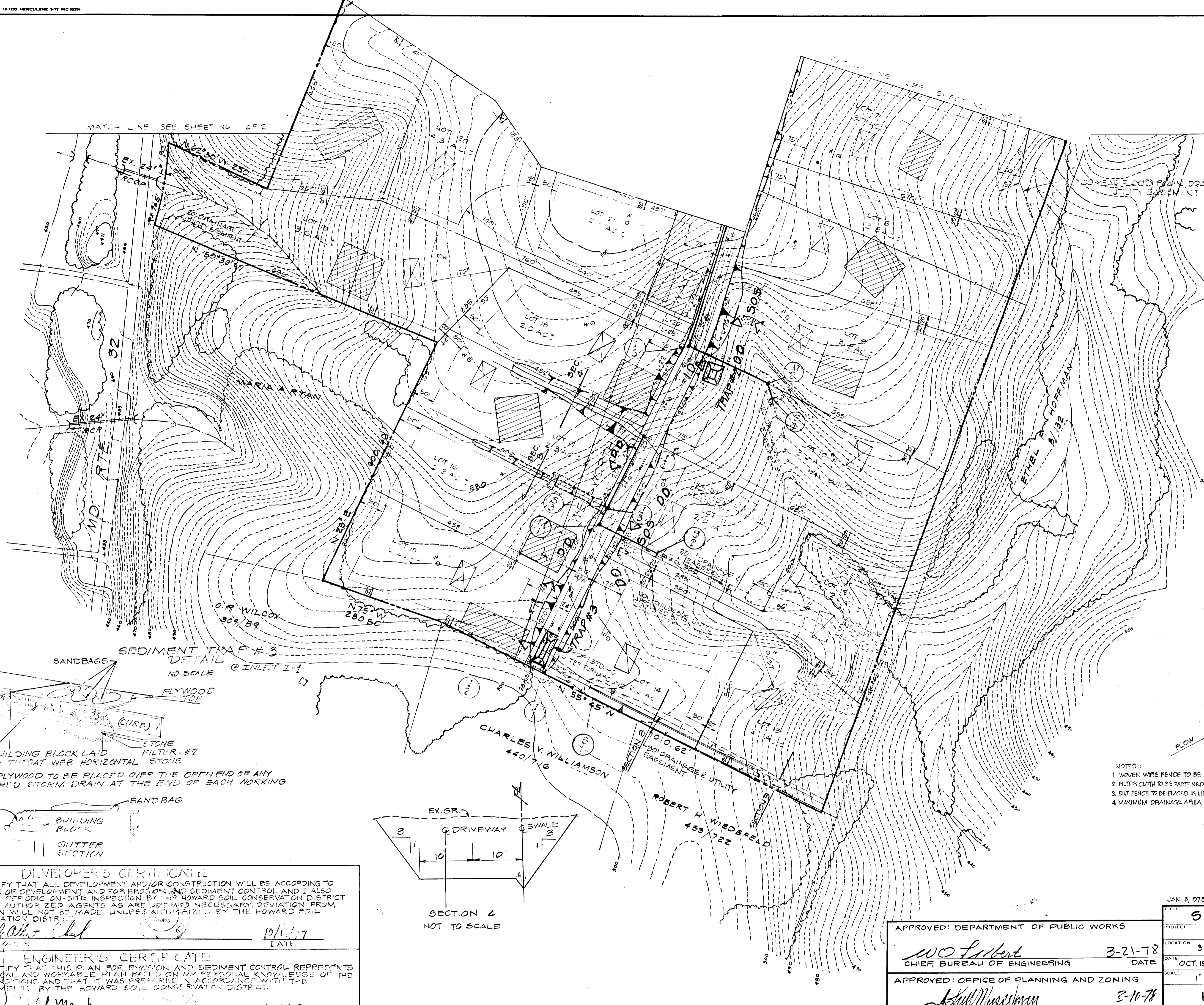
APPROVED: DEPARTMENT OF PUBLIC WORKS
W. O. Lohr 3-21-78
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
Robert M. Macman 3-10-78
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

JAN. 3, 1978 REVISION: ADDED TRAP #4 AND TRAP #5

SEDIMENT CONTROL PLAN			
PROJECT: FRIENDSHIP MANOR - SECT. 2			
LOCATION: 3RD ELECTION DISTRICT HOWARD COUNTY, MD.			
DATE: OCT. 15, 1977	DESIGN BY: R.M./W.H.N.	DRAWN BY: J.J.B./W.H.N.	CHECKED BY: R.M./D.R.
SCALE: 1"=100'	JOB NO.: 7768	DRAWING NO.: 7 OF 11	
boender associates			engineers/surveyors/planners

BALTIMORE 301-465-7777 • SALISBURY 301-749-1286

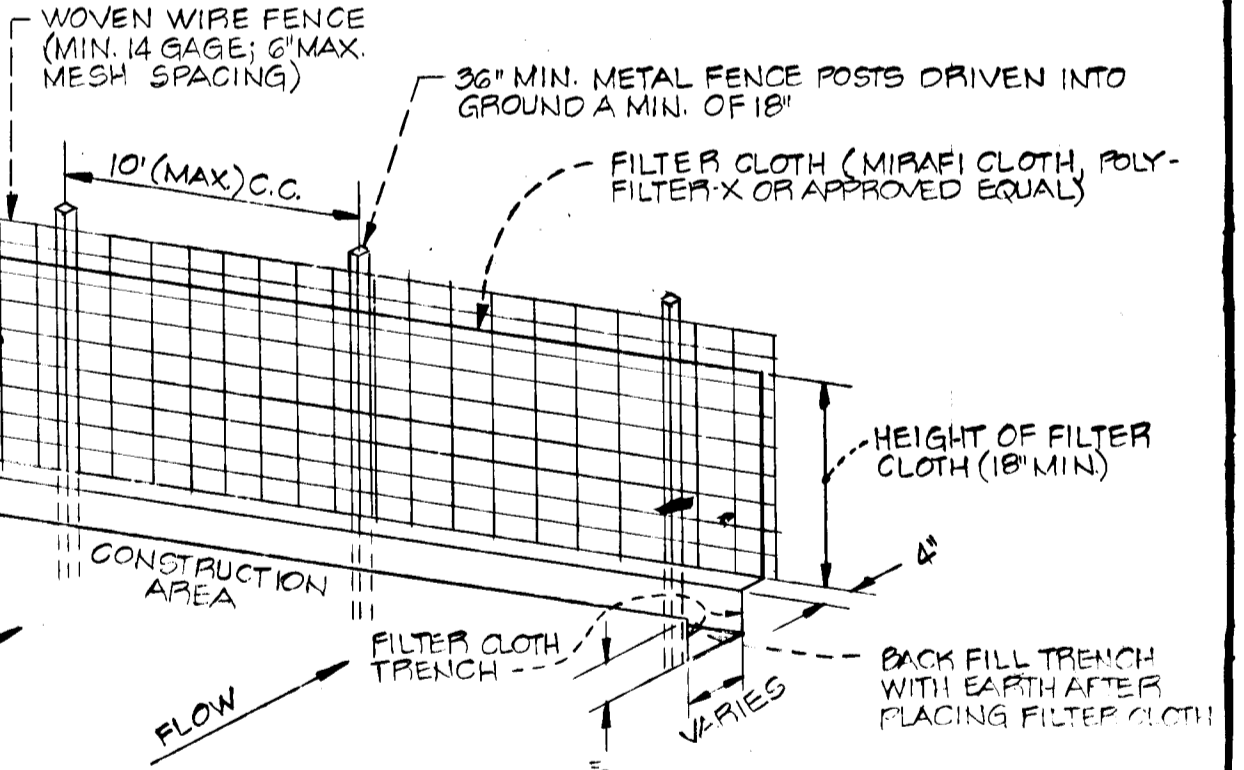


REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

C. Wayne Ray 3/8/78
 U.S. SOIL CONSERVATION SERVICE DATE

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

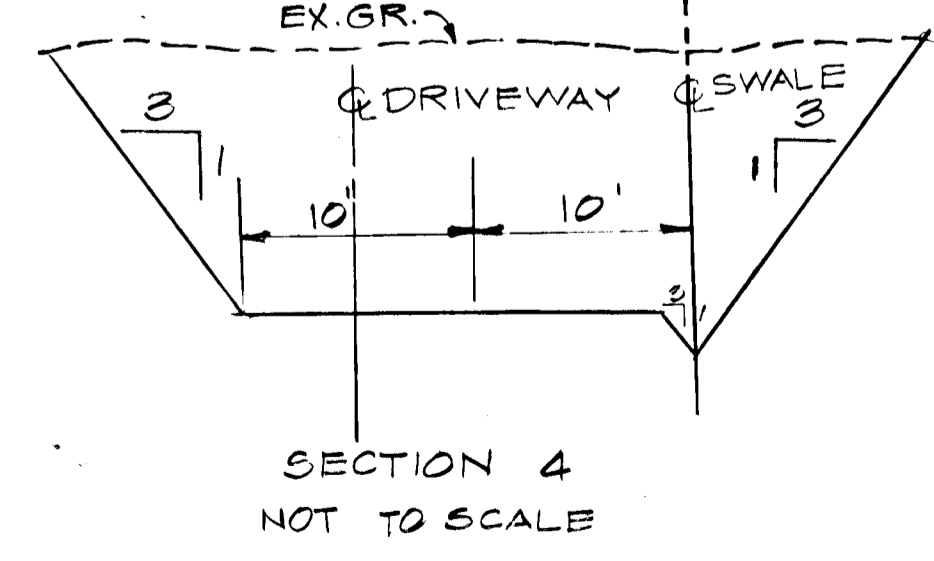
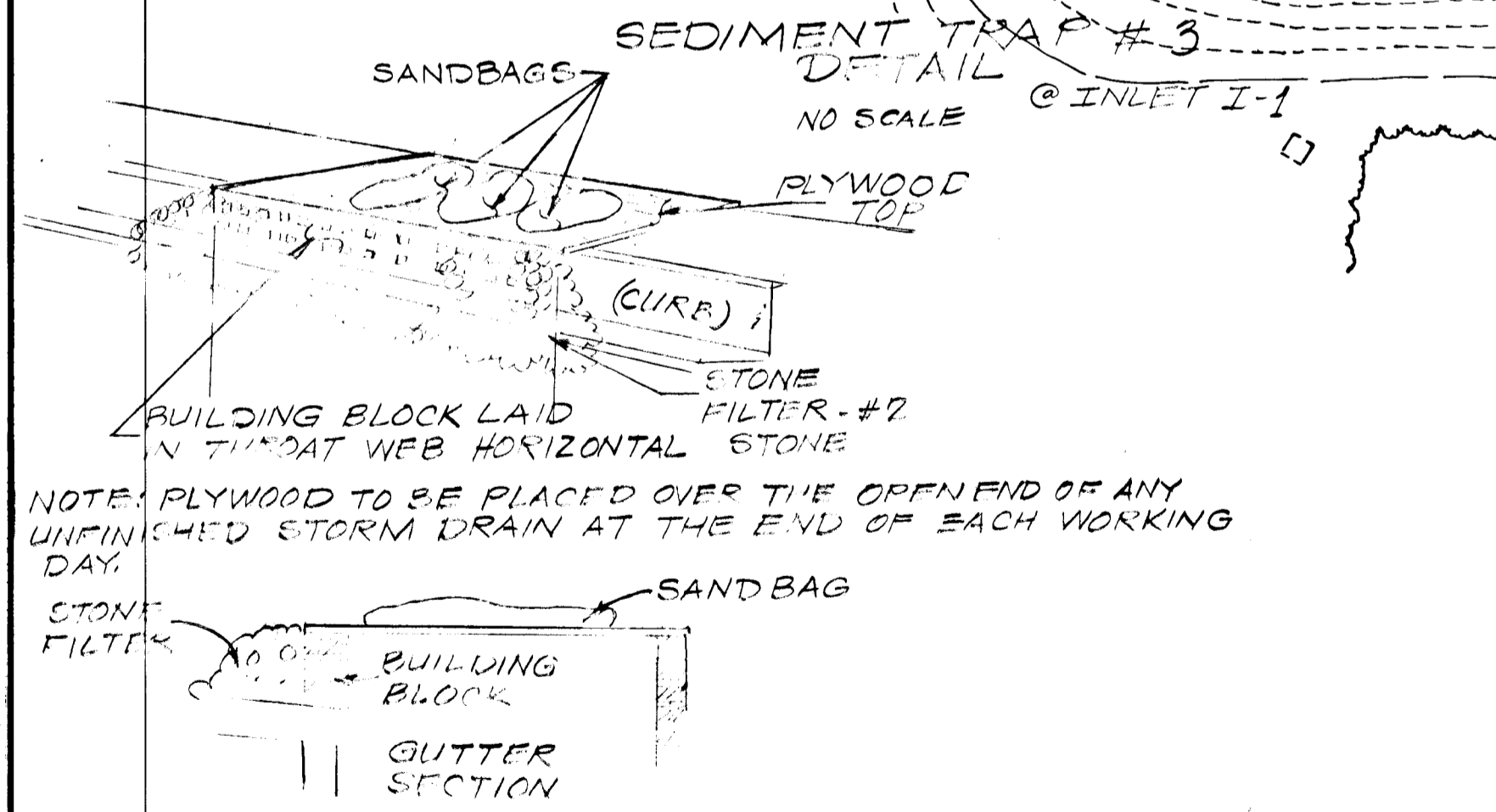
Robert W. Ziehm 3/8/78
 HOWARD SOIL CONSERVATION DISTRICT DATE



- 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 FENCE BY USE OF WIRE TIES SPACED OVER 24" x 24"
 3. SILT FENCE TO BE PLACED IN LIEU OF STRAW BALES AND/OR DIVERSION DIKES AT THE OPTION OF THE DEVELOPER.
 4. MAXIMUM DRAINAGE AREA - 3 AC.

SILT FENCE DETAIL
 NO SCALE

OWNER & DEVELOPER:
 HAYFIELD FARMS, INC.
 3620 SCHEEL DRIVE
 ELLICOTT CITY, MD. 21043



DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE ACCORDING TO THIS PLAN OF DEVELOPMENT AND FOR EROSION AND SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OF THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.

J. Allen + Child 10/14/77
 DEVELOPER DATE

ENGINEER'S CERTIFICATE
 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 BY THE HOWARD SOIL CONSERVATION DISTRICT.

R. H. May Jr. 10-14-77
 ENGINEER DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

W. O. Lambert 3-21-78
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING

Robert W. Ziehm 3-10-78
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

JAN. 3, 1978 REVISION: ADDED SILT FENCE DETAIL, RELOCATED TRAP #2

TITLE: SEDIMENT CONTROL PLAN

PROJECT: FRIENDSHIP MANOR-SECT. 2

LOCATION: 3RD ELECTION DISTRICT HOWARD COUNTY, MD.

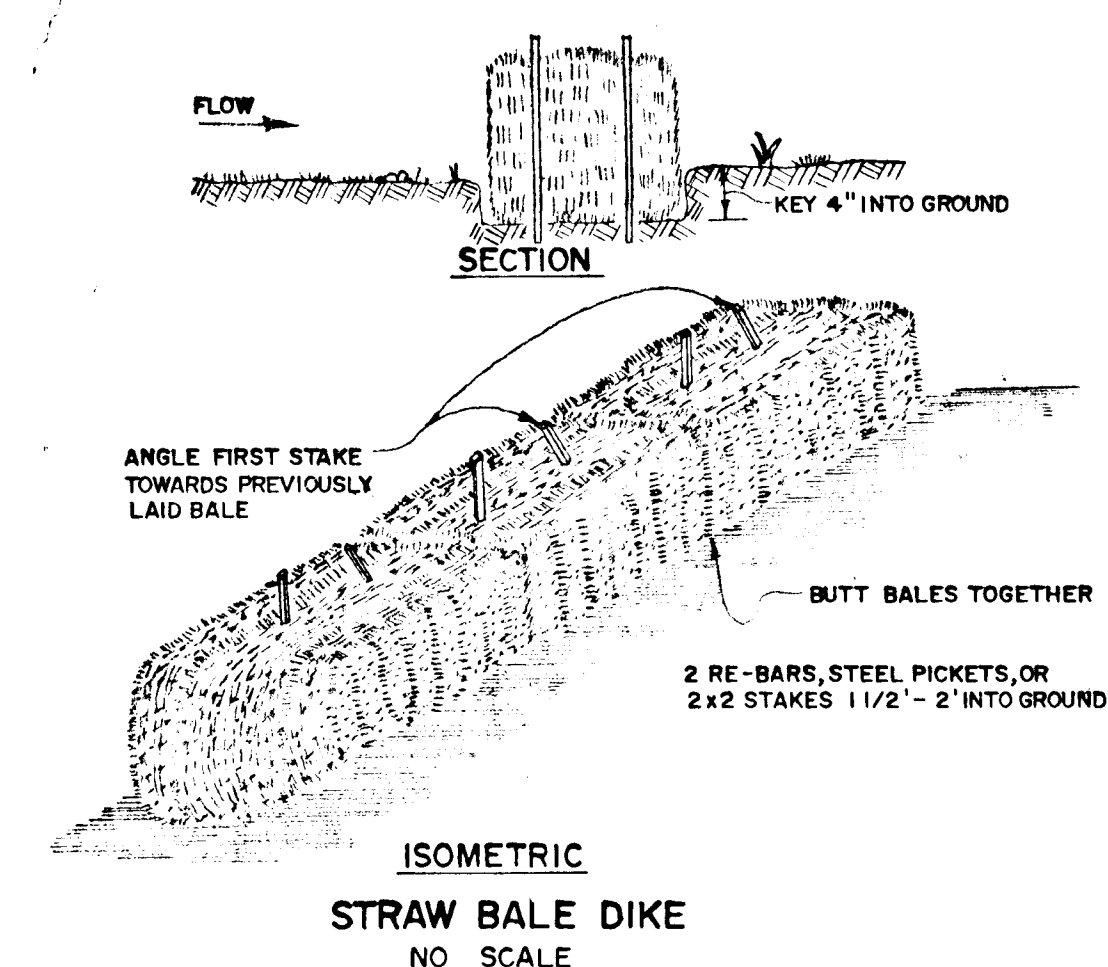
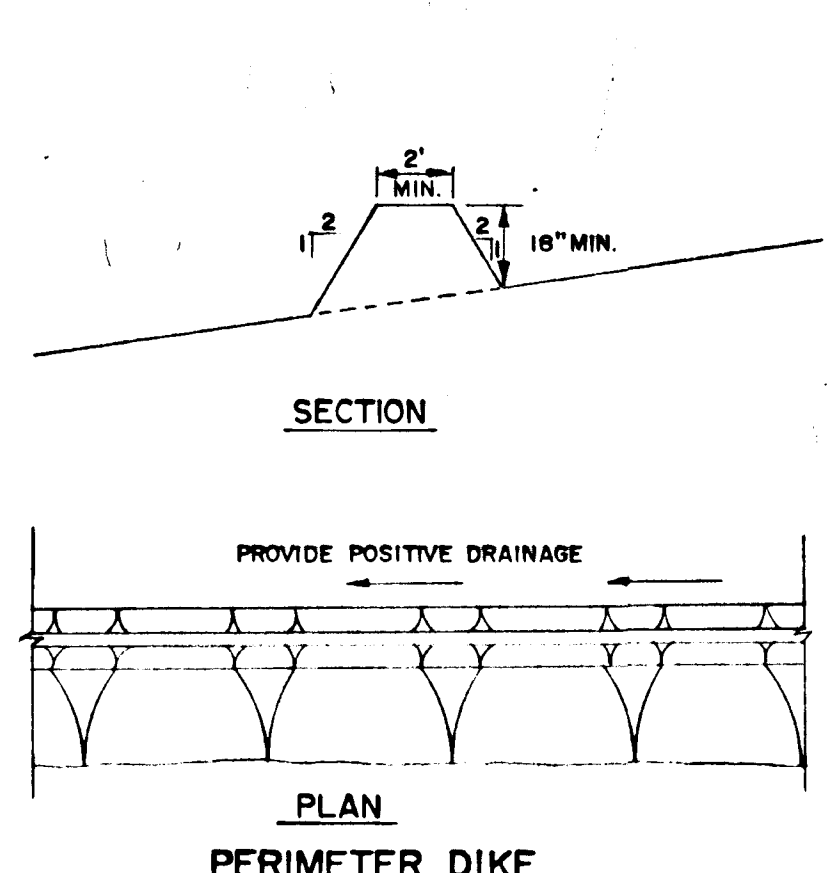
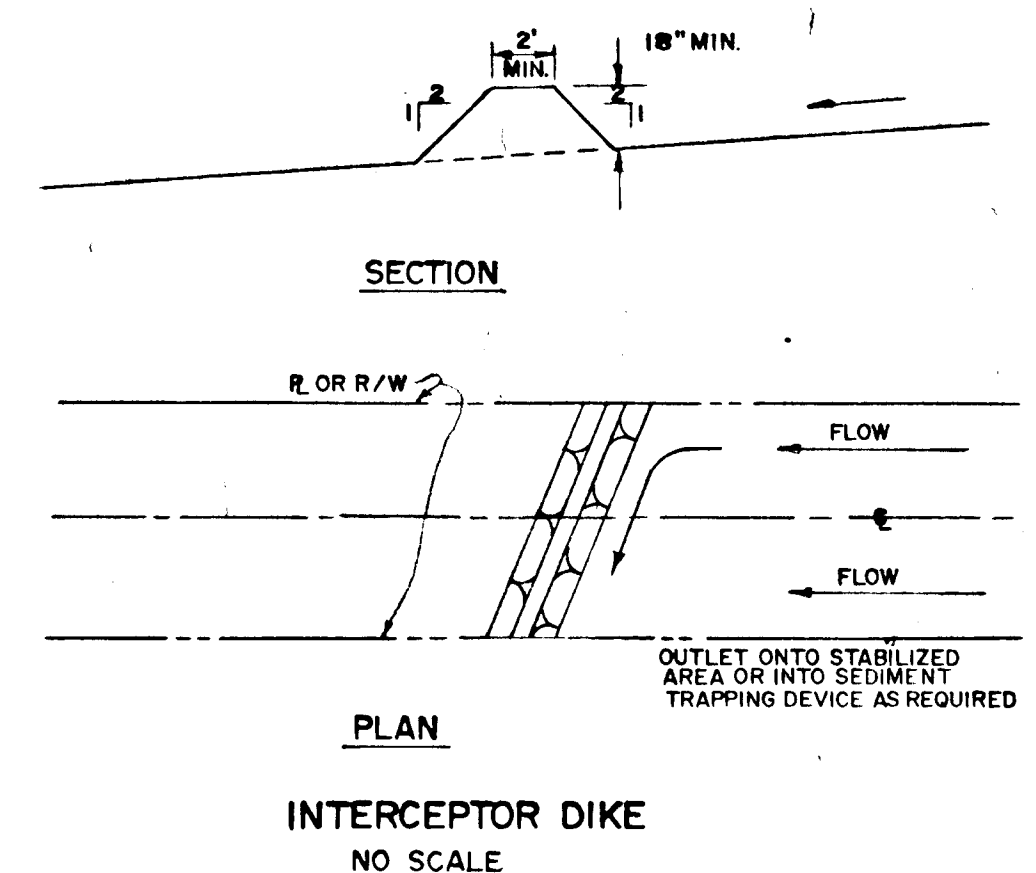
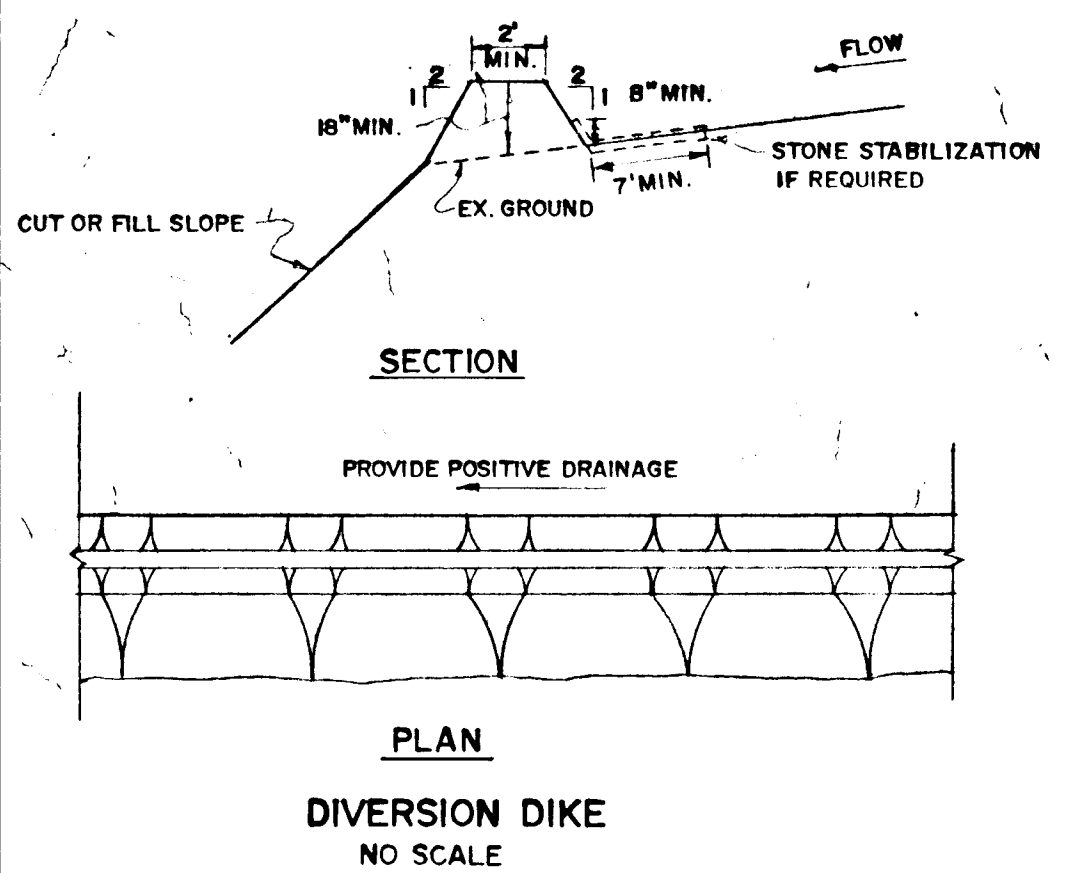
DATE: OCT. 15, 1977 DESIGN BY: R.M./W.H.N. DRAWN BY: J.J.B./W.H.N. CHECKED BY: R.M./D.R.

SCALE: 1" = 100' JOB NO.: 7768 DRAWING NO.: 8 OF 11

boender associates engineers/surveyors/planners

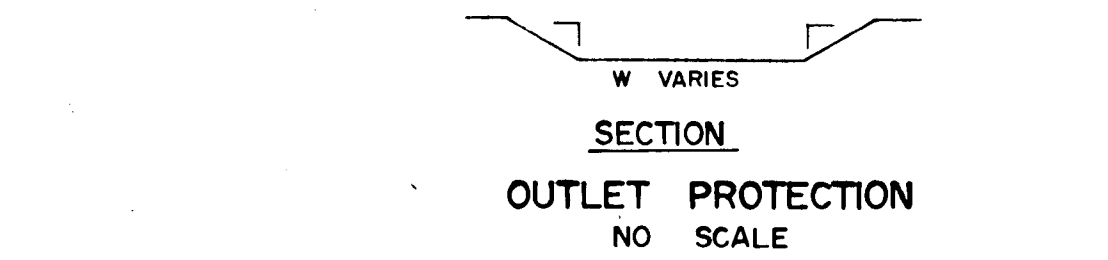
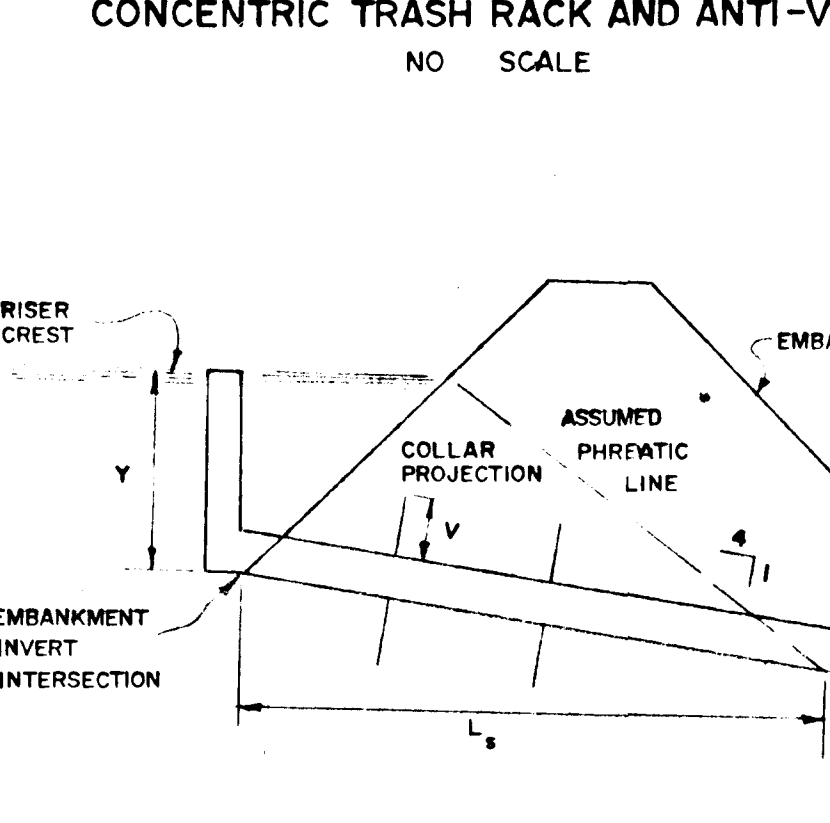
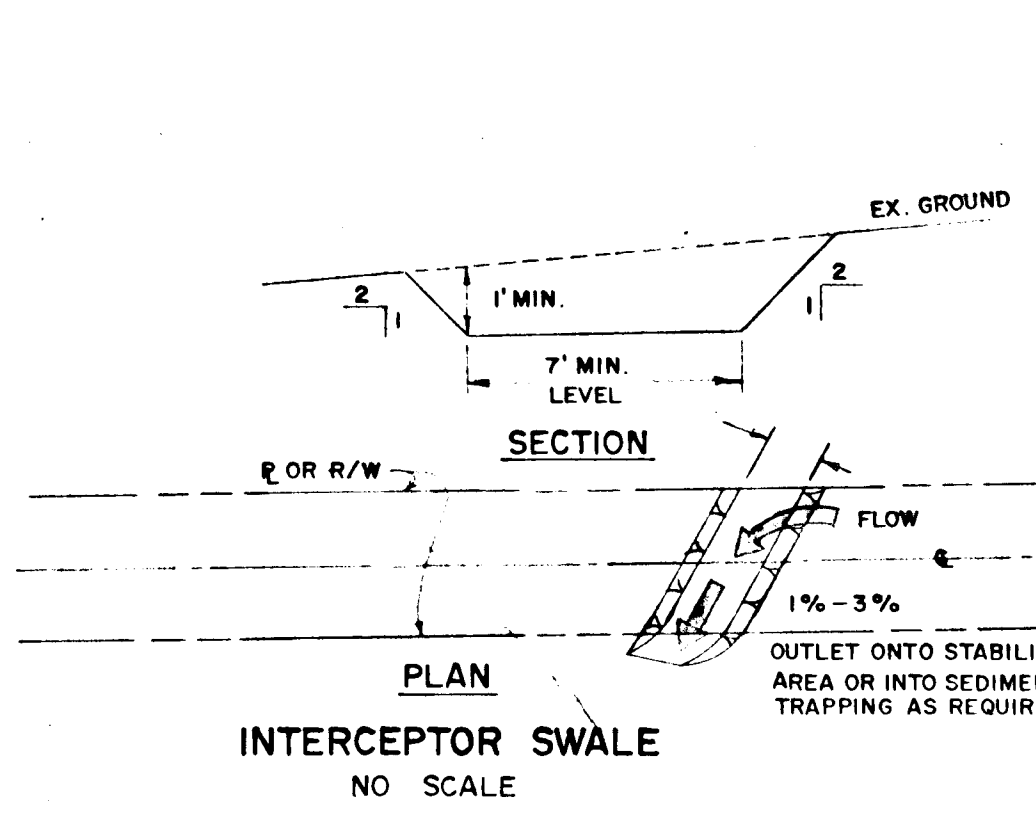
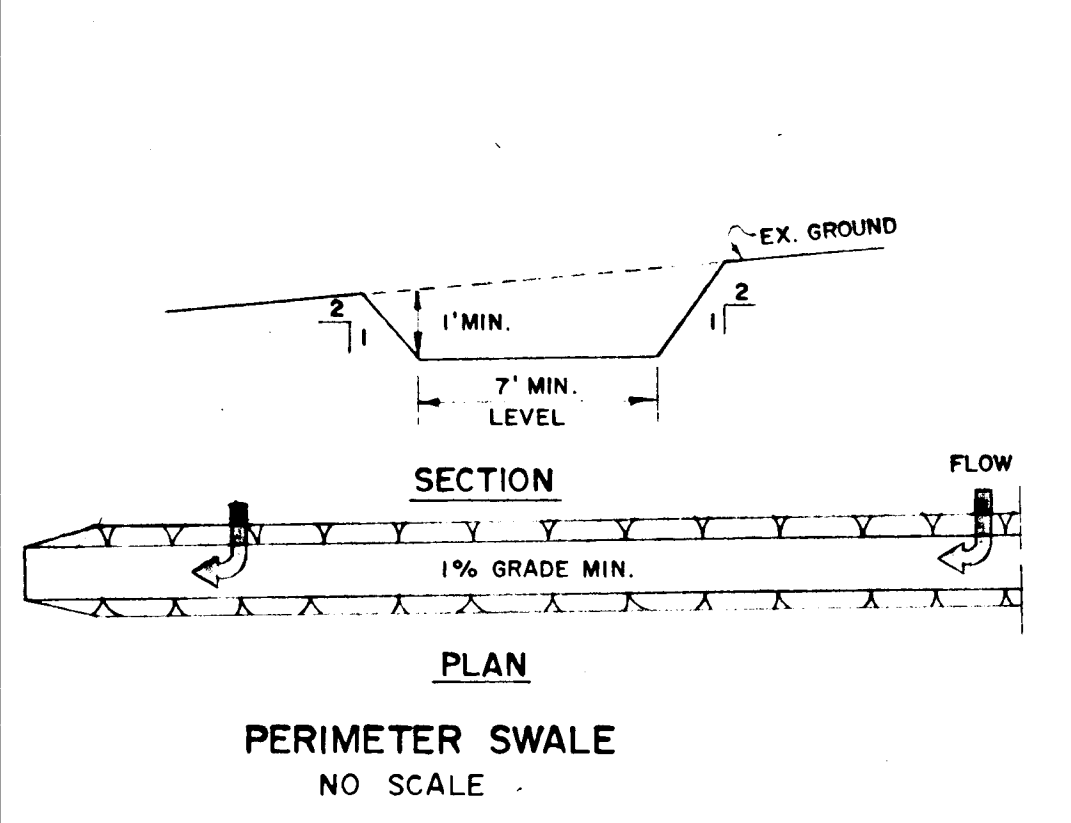
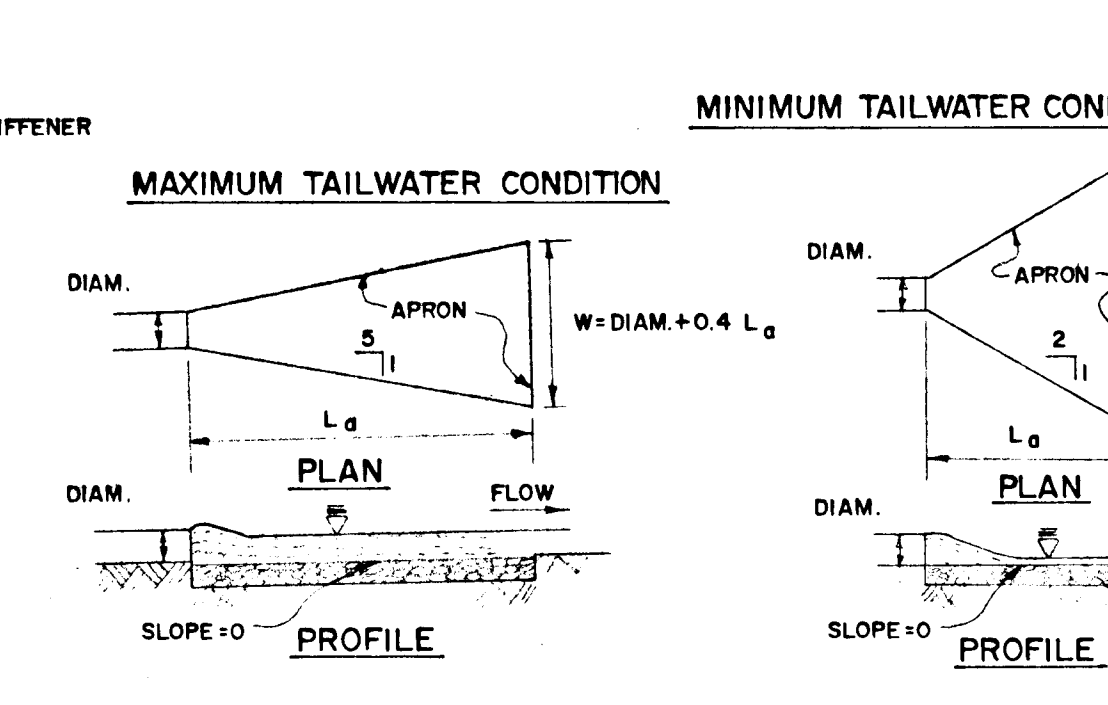
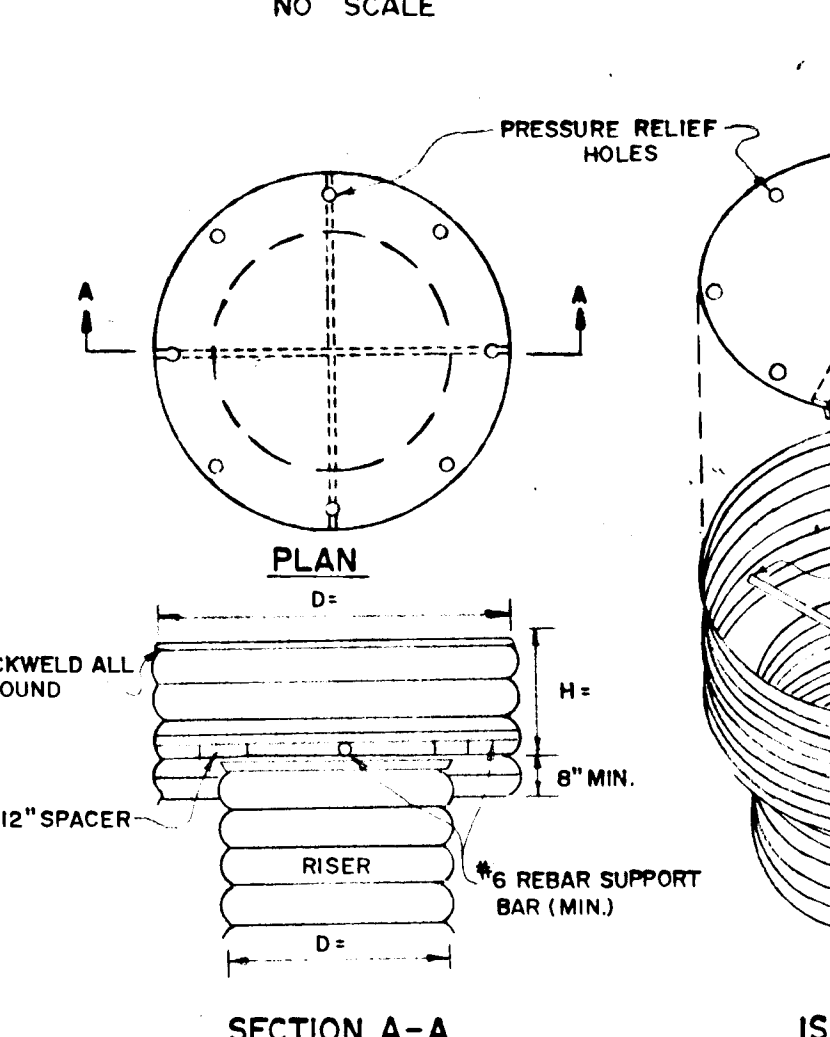
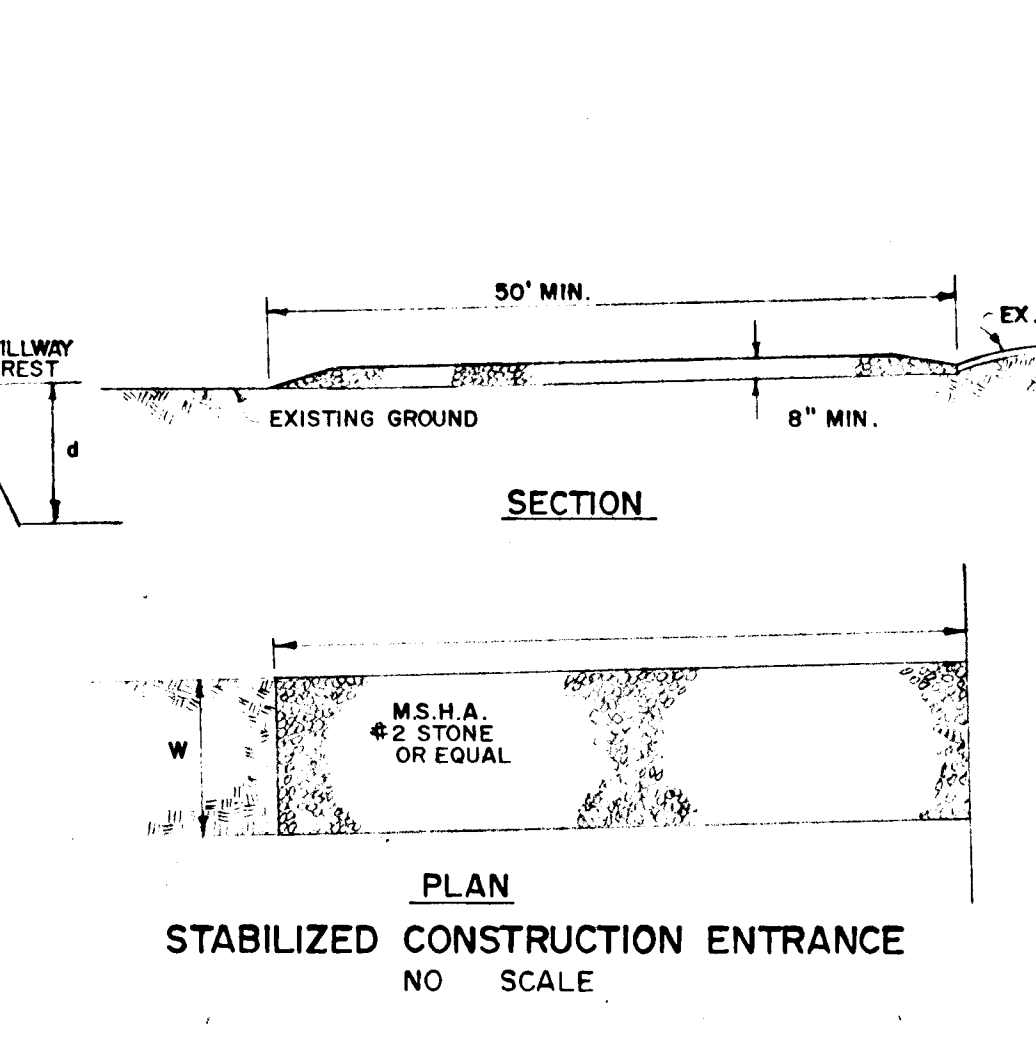
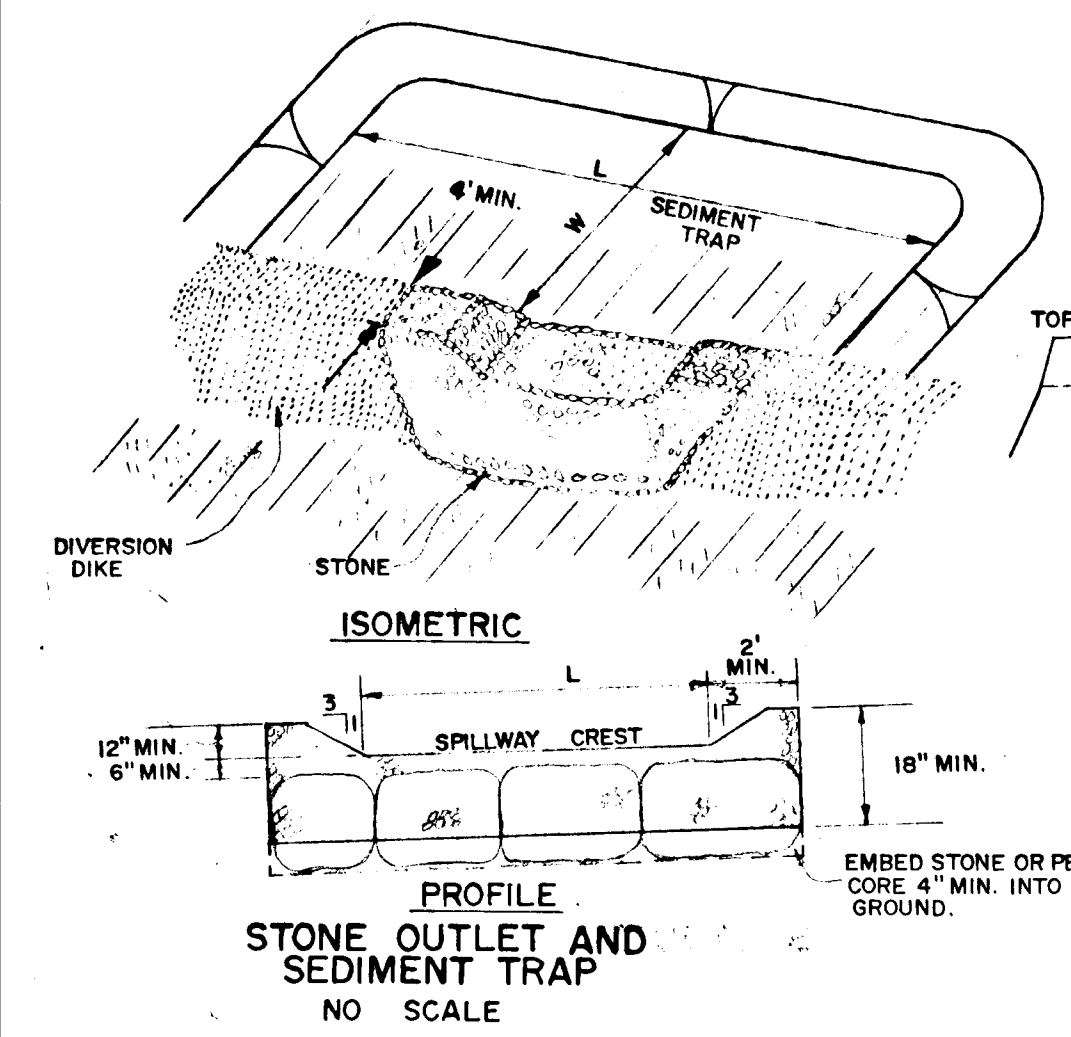
BALTIMORE 301-465-7777 • SALISBURY 301-749-1286

REVISIONS			
ISSUE	BY & DATE	DESCRIPTION	CHECK APPROVED & DATE



SEDIMENT CONTROL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" PREPARED BY THE U.S.D.A. SOIL CONSERVATION SERVICE.
- APPLY FOR GRADING PERMIT.
- NOTIFY THE BUREAU OF LICENSE INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS. (TELEPHONE NO. : 992-2436.)
- CONSTRUCTION SHALL ADHERE TO THE CONSTRUCTION SEQUENCE.
- CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM.
- ELEVATIONS MARKED THUS (X) SHALL BE FINISHED GRADE.
- ANY EXCESS MATERIAL SHALL BE STOCKPILED IN A CLEARED LOCATION ON SITE WHICH IS PROTECTED BY SEDIMENT CONTROL STRUCTURE(S). MAXIMUM FILL SLOPE SHALL BE 3:1. STOCKPILED MATERIAL SHALL BE STABILIZED ACCORDING TO SEEDING SPECIFICATIONS BELOW.
- SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED ONLY WITH PERMISSION OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.
- STABILIZATION MEASURES
- TEMPORARY STABILIZATION:
APPLY: 2000 LBS./AC. OR 46 LBS. OF PULVERIZED DOLOMIC LIMESTONE, 500 LBS./AC. OR 11.5 LBS./1000 SQ. FT. OF 10-10-10 FERTILIZER, PLANT WITH RYEGRASS AT 40 LBS./AC. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.
- PERMANENT STABILIZATION:
APPLY: 2000 LBS./AC. OF PULVERIZED DOLOMIC LIMESTONE, 500 LBS./AC. OF 10-10-10 FERTILIZER.
SEED: 85 LBS./AC. OF KENTUCKY 31 TALL FESCUE, 40 LBS./AC. OF KENTUCKY BLUE GRASS, 25 LBS./AC. OF ANNUAL RYEGRASS.
NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1, OR AUG. 1 - OCT. - 1 ONLY.
MULCH: ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.
MULCH: 2 TONS/AC. OF UNWEATHERED WHEATSTRAW. TIE MULCH DOWN WITH 480 GAL./AC. OF LIQUID ASPHALT.



DEVELOPER'S CERTIFICATE

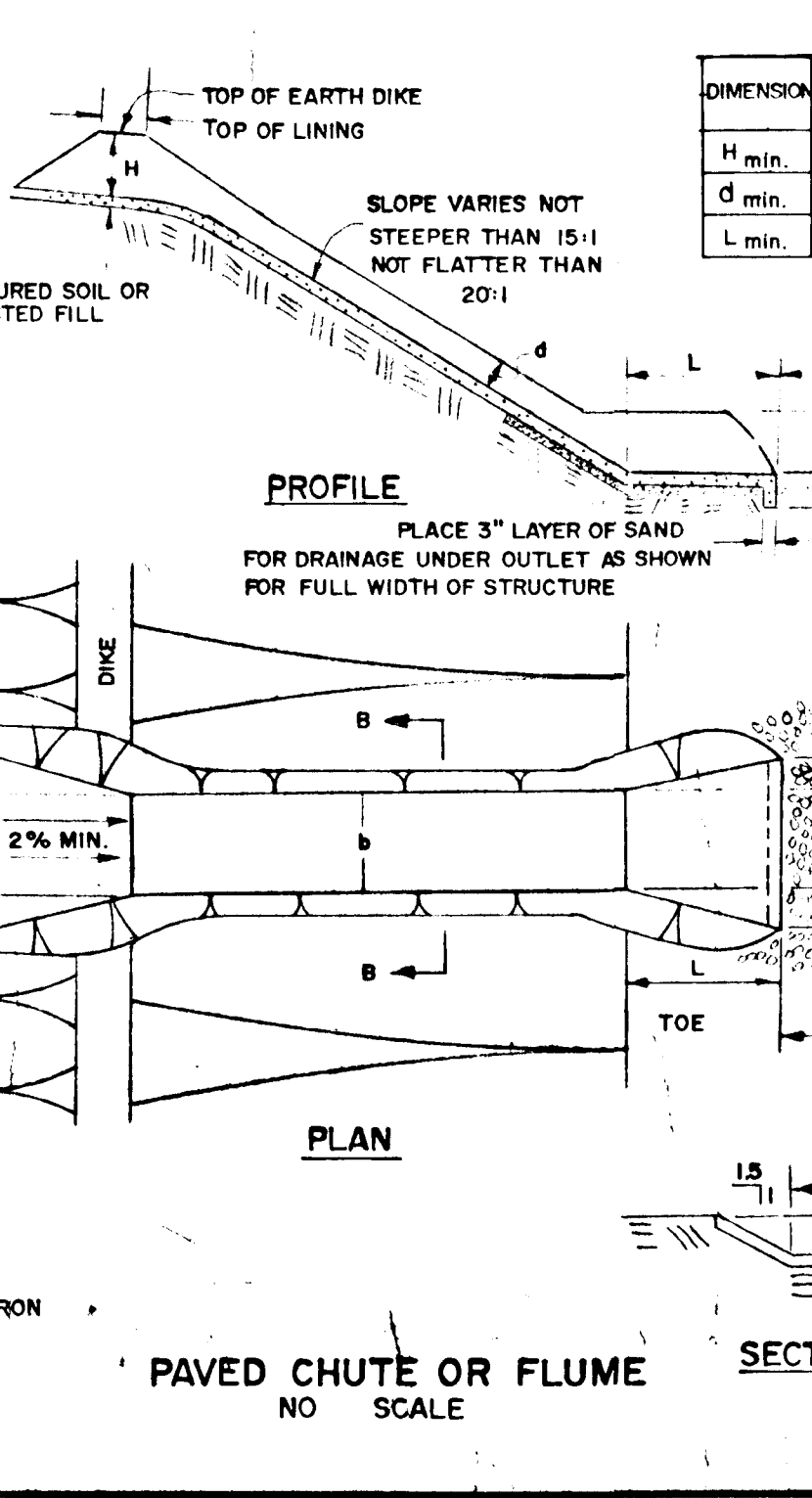
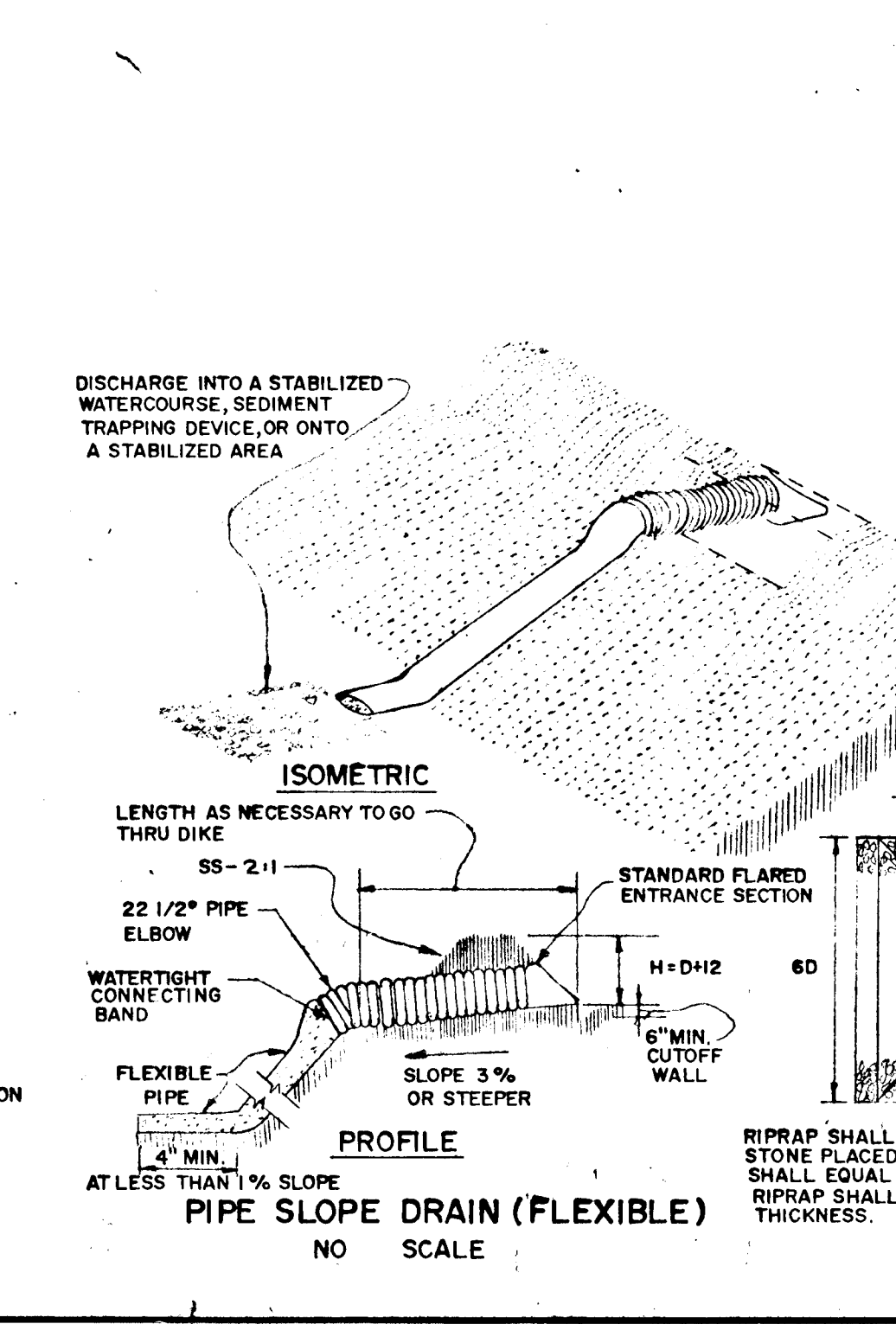
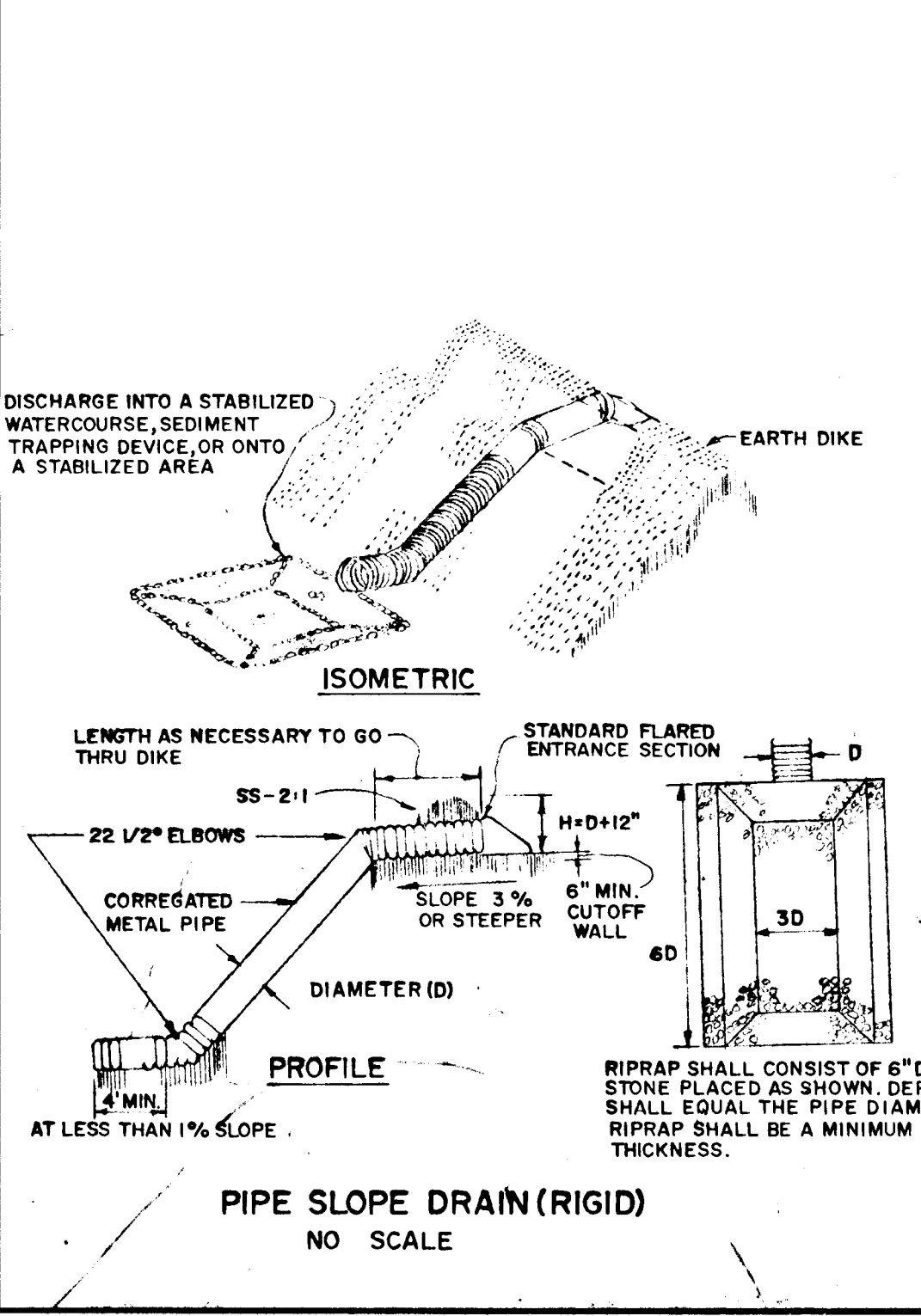
I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: *[Signature]* DATE: 10/18/77

ENGINEER'S CERTIFICATE

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 BY THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEER: *[Signature]* DATE: 10/18/77



STANDARD SYMBOLS

SILT FENCE	[Symbol]
DIVERSION DIKE	[Symbol]
INTERCEPTOR DIKE	[Symbol]
PERIMETER DIKE	[Symbol]
STRAW BALE DIKE	[Symbol]
INTERCEPTOR SWALE	[Symbol]
PERIMETER SWALE	[Symbol]
STABILIZED CONSTRUCTION ENTRANCE	[Symbol]
STONE OUTLET STRUCTURE	[Symbol]
GRADE STABILIZATION STRUCTURE	[Symbol]
CHUTE OR FLUME	[Symbol]
RIGID PIPE SLOPE DRAIN	[Symbol]
FLEXIBLE PIPE SLOPE DRAIN	[Symbol]
DIVERSION	[Symbol]
GRASSED WATERWAY	[Symbol]
LEVEL SPREADER	[Symbol]
SUBSURFACE DRAIN	[Symbol]

NOTES:
1. ARROWS POINT DOWNSLOPE OR TO THE OUTLET.
2. DIKE AND DIVERSION SYMBOLS SHALL HAVE A CROSS MARK TO CLEARLY SHOW WHERE THE STRUCTURE BEGINS AND ENDS.

DIMENSION	SIZE	GROUP
A	1.5'	2.0'
H min.	8"	10"
L min.	5'	6'

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

C. Wayne Ray 3/8/78
U.S. SOIL CONSERVATION SERVICE DATE

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

Robert W. Zichms 3/8/78
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED DEPARTMENT OF PUBLIC WORKS

W. O. Libert 3-21-78
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING

[Signature] 3-10-77
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

TITLE: SEDIMENT CONTROL DETAILS

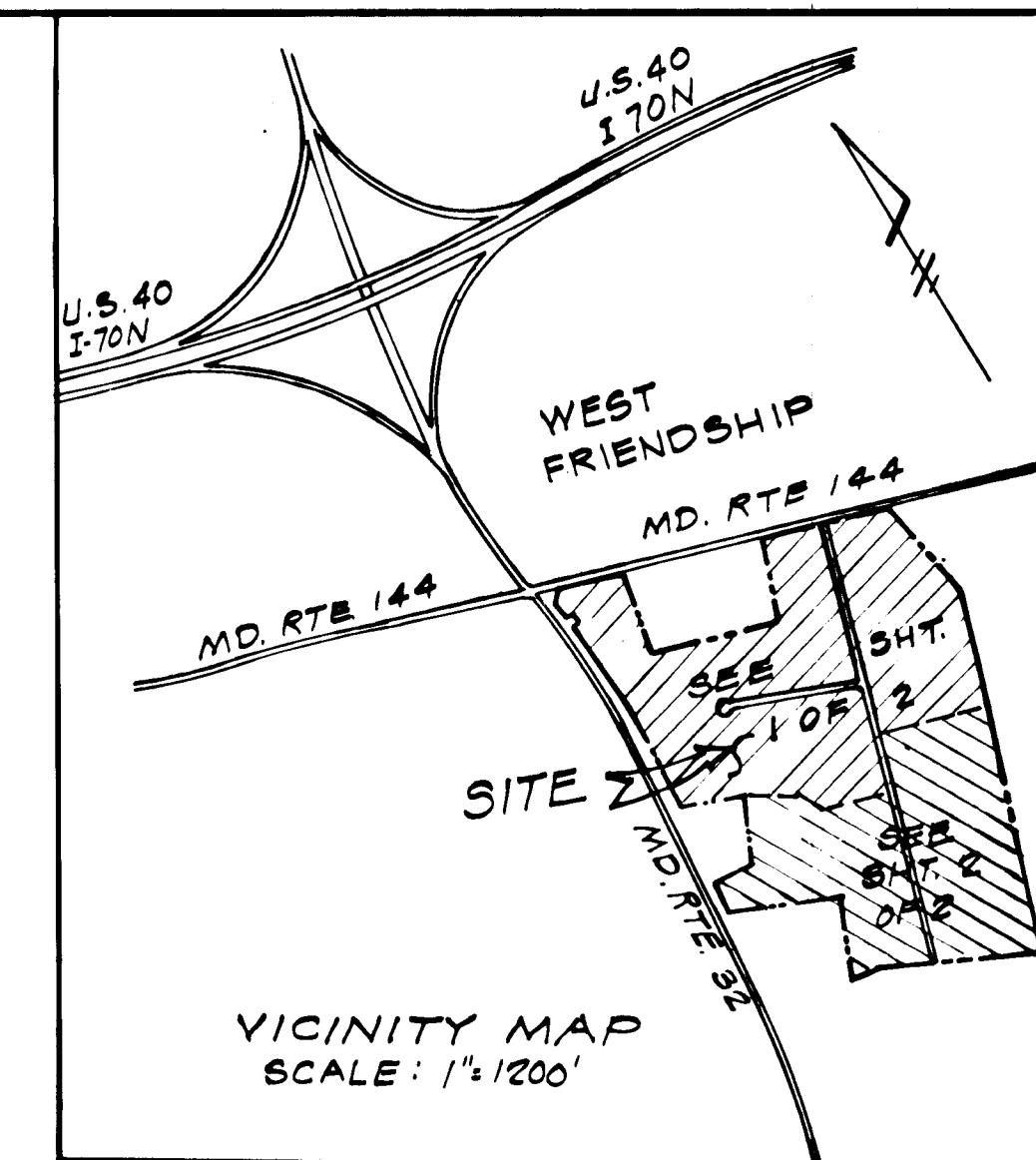
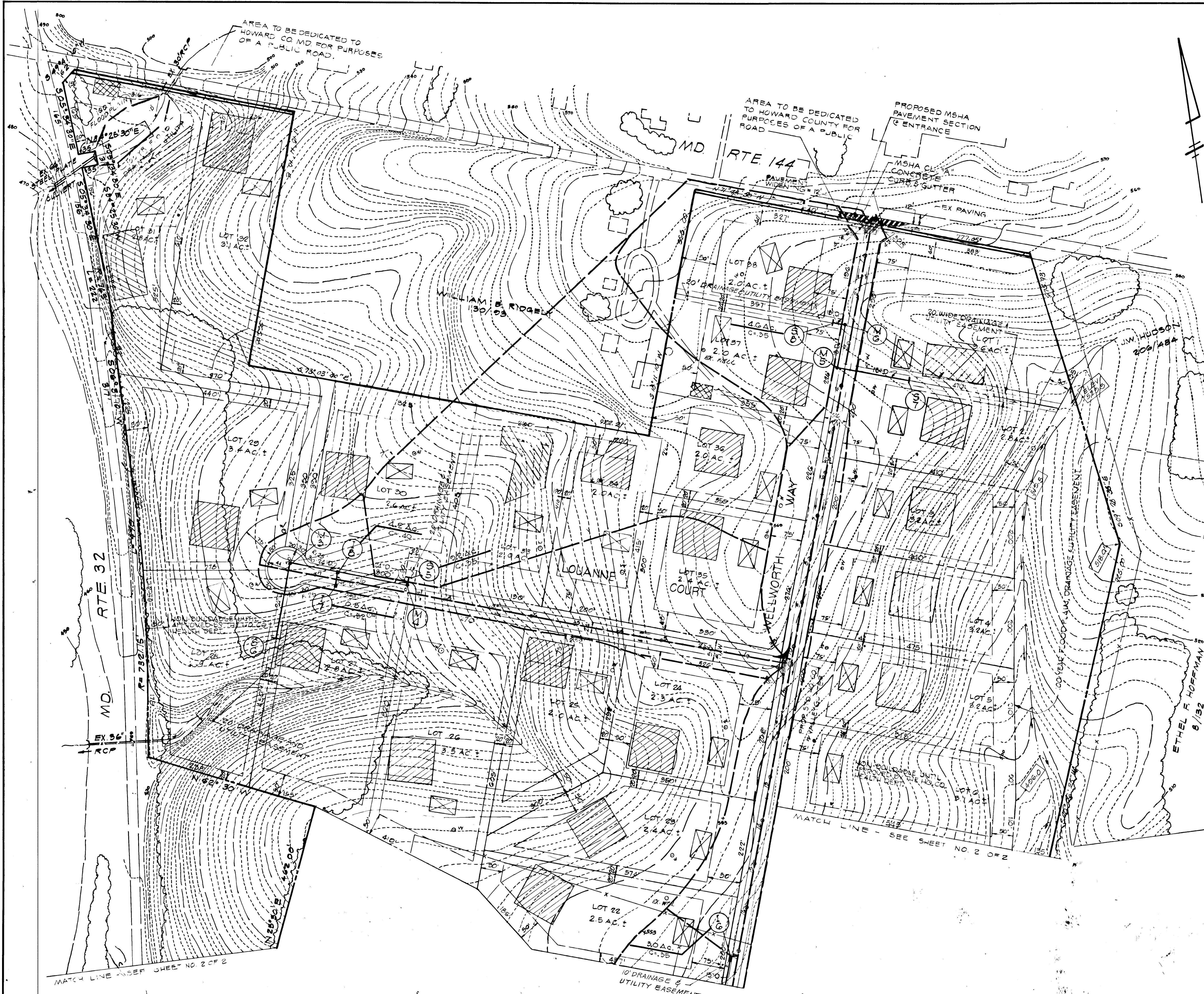
PROJECT: FRIENDSHIP MANOR - SECT. 2

LOCATION: 3RD ELECTION DISTRICT, HOWARD CO., MD.

DATE: 10/15/77 DES. BY: R.M. DRAWN BY: J.K. CHKD. BY: R.M.

SCALE: AS SHOWN JOB NO. 7768 DRWG. NO. 2 OF 11

BOENDER ASSOCIATES INC.
Baltimore, MD. 410-7777
SALISBURY, MD. 743-1295
WESTMINSTER, MD. 848-5588



APPROVED: DEPARTMENT OF PUBLIC WORKS
W.O. Leibel 3-21-78
 CHIEF, BUREAU OF ENGINEERING DATE
 APPROVED: OFFICE OF PLANNING & ZONING
Phillip Muechman 3-10-78
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Joseph May Jr.
 10-14-77

OWNER & DEVELOPER:
 HAYFIELD FARMS, INC.
 3620 SCHEBL DRIVE
 ELLICOTT CITY, MD. 21043

TITLE			
DRAINAGE AREA MAP			
PROJECT			
FRIENDSHIP MANOR			
LOCATION			
3RD ELECTION DISTRICT HOWARD COUNTY, MD.			
DATE	DESIGN BY	DRAWN BY	CHECKED BY
OCT. 15, 1977	R.M./W.H.N.	J.J.B./W.H.N.	R.M./D.R.
SCALE	JOB NO.	DRAWING NO.	
1"=100'	7768	10 OF 11	
boender associates		engineers/surveyors/planners	
BALTIMORE 301-485-7777 • SALISBURY 301-749-1288			



APPROVED: DEPARTMENT OF PUBLIC WORKS
W.O. Lambert 3-21-78
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
J. M. ... 3-10-78
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

OWNER & DEVELOPER:
 HAYFIELD FARMS, INC.
 3620 SCHEEL DRIVE
 ELLICOTT CITY, MD. 21043

Rodolph May Jr.
 10-14-77

TITLE DRAINAGE AREA MAP			
PROJECT FRIENDSHIP MANOR			
LOCATION 3RD ELECTION DISTRICT HOWARD COUNTY, MD.			
DATE OCT. 15, 1977	DESIGN BY R.M./W.H.N.	DRAWN BY J.J.B./W.H.N.	CHECKED BY R.M./D.R.
SCALE 1" = 100'	JOB NO. 7768	DRAWING NO. 11 OF 11	
boender associates		engineers surveyors planners	