

BENCH MARKS

BENCH MARK 1 ELEV. 402.14
HO. CO. CONTROL STA. 2644004

BENCH MARK 2 ELEV. 416.981
HO. CO. CONTROL STA. 2644005

STREET LIGHTS

- 'A' TYPE: 175 WATT MODERN MERCURY VAPOR LAMP POST TOP FIXTURES ON A 14 FOOT GRAY FIBERGLASS POLE LOCATED 2'-10" FROM BACK OF CURB.
- 'B' TYPE: 250 WATT MERCURY VAPOR LAMP PENDANT MOUNTED FIXTURES ON A 30 FOOT GALVANIZED STEEL POLE.

APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS

William J. Mason 3/3/89
CHIEF, LAND DEVELOPMENT DIVISION
Franklin W. Weaver 3/7/89
CHIEF, BUREAU OF HIGHWAYS

James R. Ray 3-8-89
DATE

APPROVED: OFFICE OF PLANNING AND ZONING

Mark S. Mangler 3/2/89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

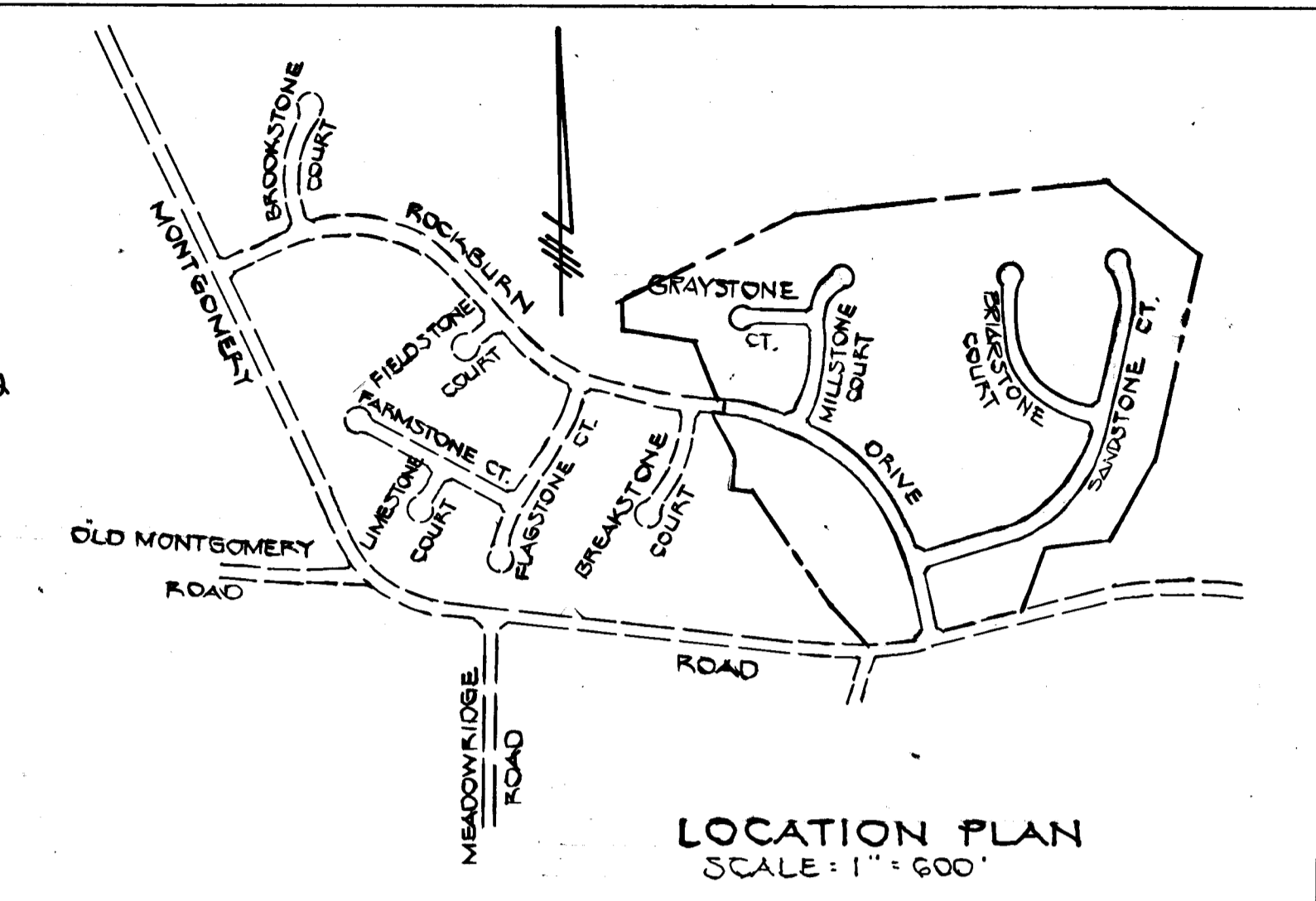
PROPERTY OF DONALD & LOIS COYNE 571/59

PROPERTY OF ELMA & MARY CISNA 275/560

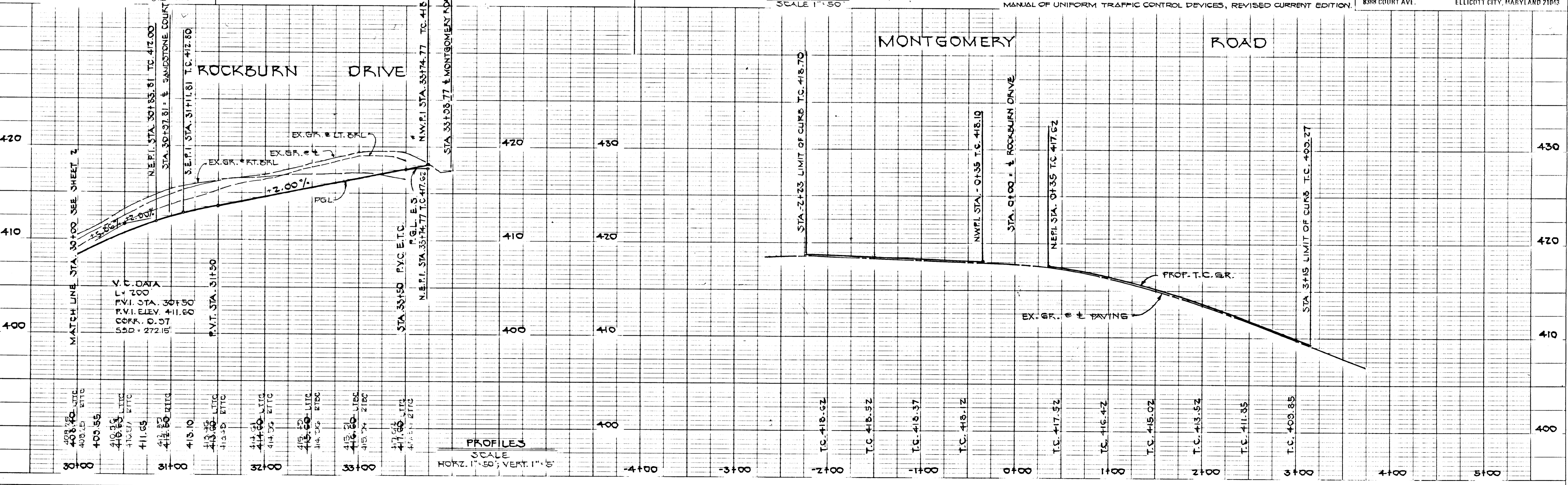
THE HORIZONTAL AND VERTICAL CONTROL IS BASED ON THE FOLLOWING HOWARD COUNTY CONTROL STATIONS:
264004 N 503° 00' 00" W
264005 N 503° 02' 46" W
E 862° 25' 00" S

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS, AND DETAILS FOR CONSTRUCTION.
2. ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HOURS IN ADVANCE OF ANY CONSTRUCTION.
3. ALL INLETS SHALL BE HOWARD COUNTY STANDARDS UNLESS OTHERWISE SHOWN ALL 'A' INLETS SHALL BE DEPRESSED.
4. STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
5. ANY DAMAGE TO PUBLIC RIGHTS-OF-WAYS OR PAVING WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
6. CONTRACTOR TO NOTIFY THE HOWARD COUNTY DEPT. OF INSPECTION AT LEAST 3 DAYS BEFORE STARTING WORK SLOW ON THESE DRAWINGS. TELEPHONE: 792-7272
7. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, REVISED CURRENT EDITION.



ROCKBURN TOWNSHIP SECTION 1-AREA 2
LOTS 103-200
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
ROCKBURN DRIVE MONTGOMERY ROAD PLAN AND PROFILE
OWNED AND DEVELOPED BY:
DANVILLE I ASSOCIATES
7775 NEW YORK LANE
GLEN BURNIE, MARYLAND 21061
SCALE AS SHOWN DATE: 1-19-89 OVER NO. 1 OF 16
DES. D.B. DRN. D.B. ENR. C.C.
FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

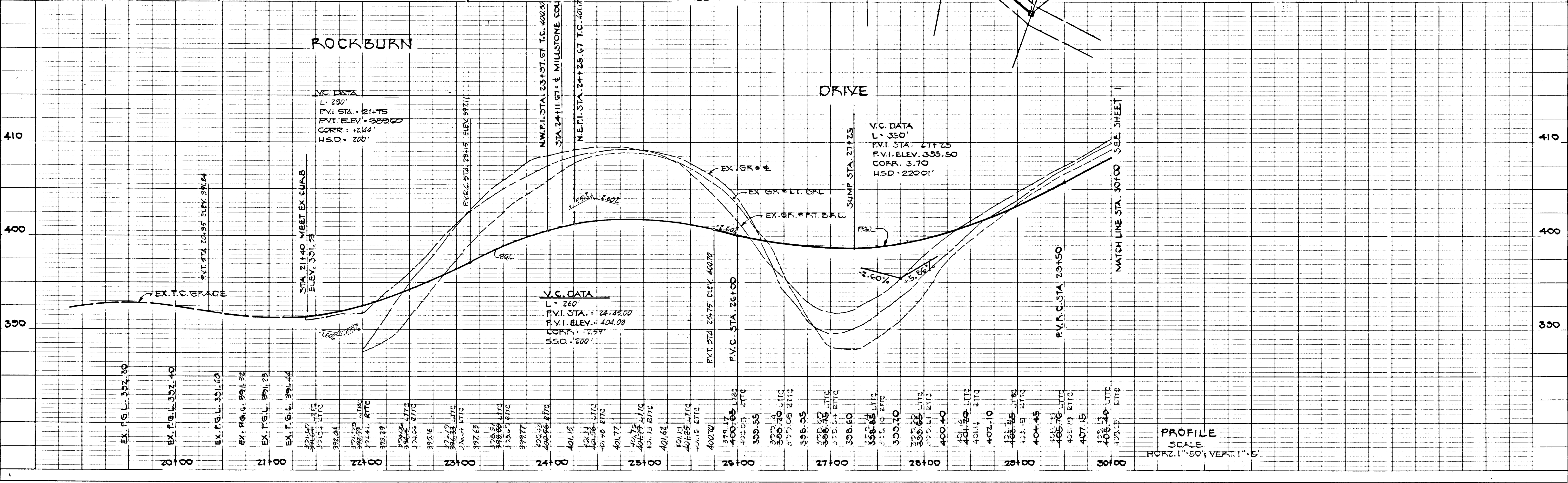


1379

PLAN
 SURVEYED
 ALIGNMENT CHECKED
 RT. OF WAY CHECKED
 DATE

APPROVED HOWARD CO. DEPT. OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE 3/3/89
 APPROVED
 OFFICE OF PLANNING AND ZONING
 DATE 3/1/89

PROFILE
 SURVEYED
 GRADES CHECKED
 B.M.'S NOTED
 STRUCTURE NOTATIONS OK'D
 DATE



ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
ROCKBURN DRIVE
MILLSTONE COURT
 PLAN AND PROFILE

OWNER AND DEVELOPER
 DANVILLE I ASSOCIATES
 7770 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061

SCALE AS SHOWN DATE: 1-19-89 DWG. NO. 2 OF 4
 DES. O.B. DRN. O.B. CHK. C.C.

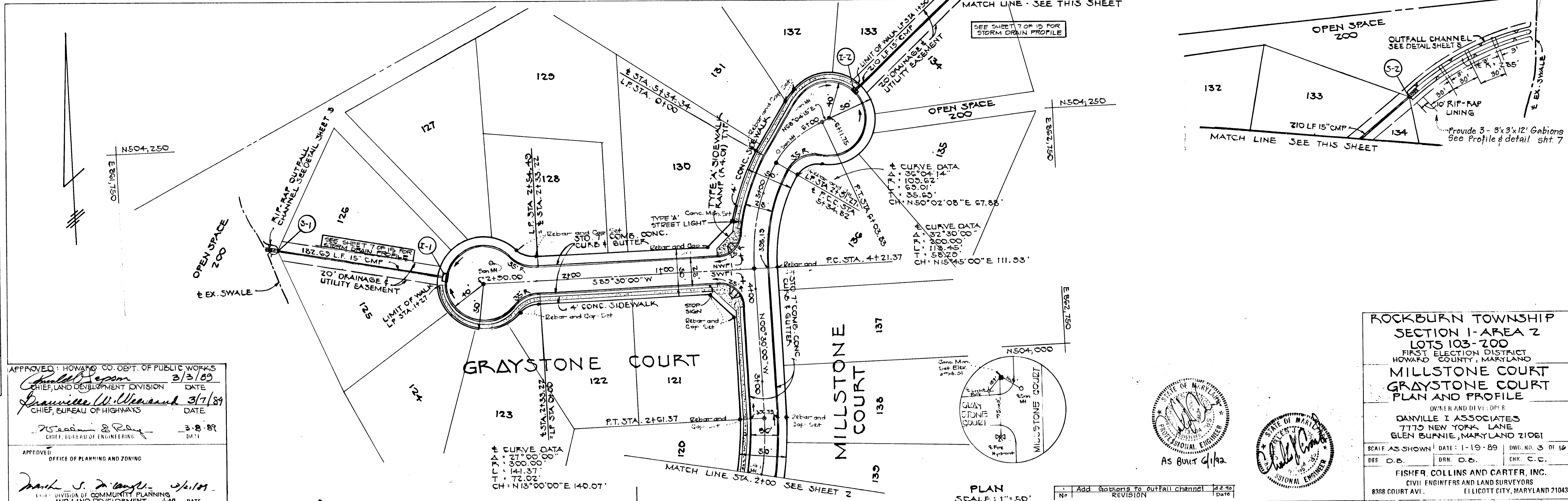
FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE, ELLICOTT CITY, MARYLAND 21103



1370

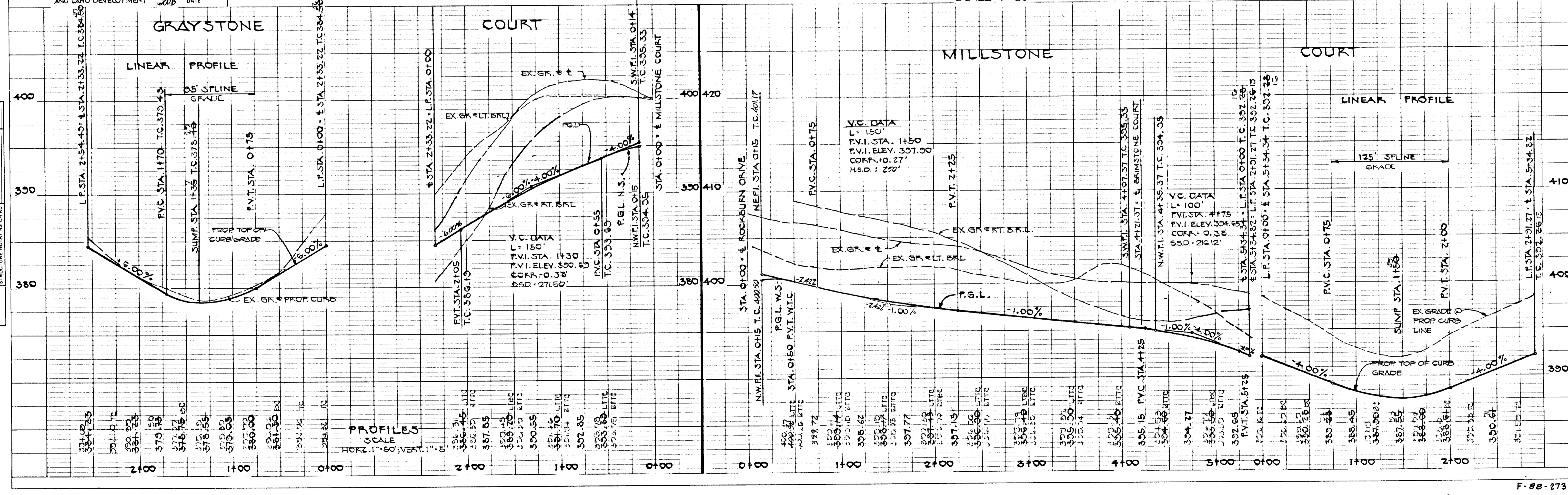
SURVEYED
 NOTE BOOK
 NO. 100

APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS
Charles E. Jones 2/3/89
 CHIEF, LAND DEVELOPMENT DIVISION DATE
James W. Weaver 3/7/89
 CHIEF, BUREAU OF HIGHWAYS DATE
William R. Ray 3-8-89
 CHIEF, BUREAU OF ENGINEERING DATE
 APPROVED: OFFICE OF PLANNING AND ZONING
Mark S. D. Angeli 3/6/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
**MILLSTONE COURT
 GRAYSTONE COURT
 PLAN AND PROFILE**
 OWNER AND DEVELOPER:
DANVILLE I ASSOCIATES
 7770 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061
 SCALE AS SHOWN DATE: 1-19-89 DWG. NO. 3 OF 16
 DES. D.B. DRN. D.B. CHK. C.C.
FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVI. ELICOTT CITY, MARYLAND 21043

PROFILING
 SURVEYED
 PLOTTED
 CHECKED
 BY
 NO. 100



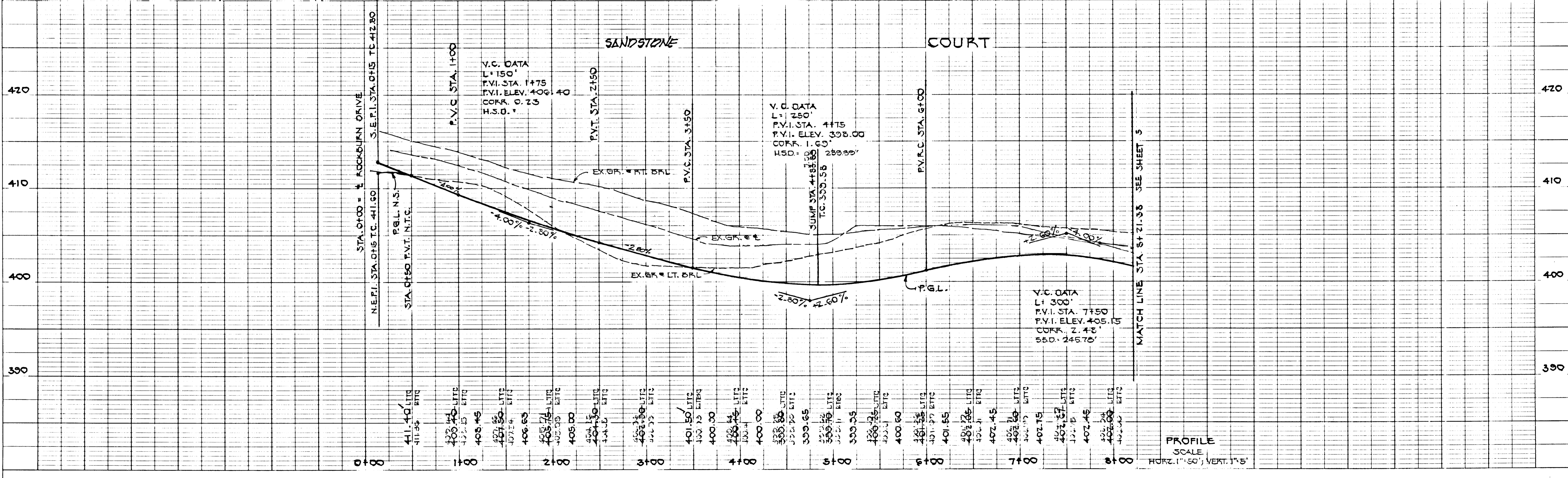
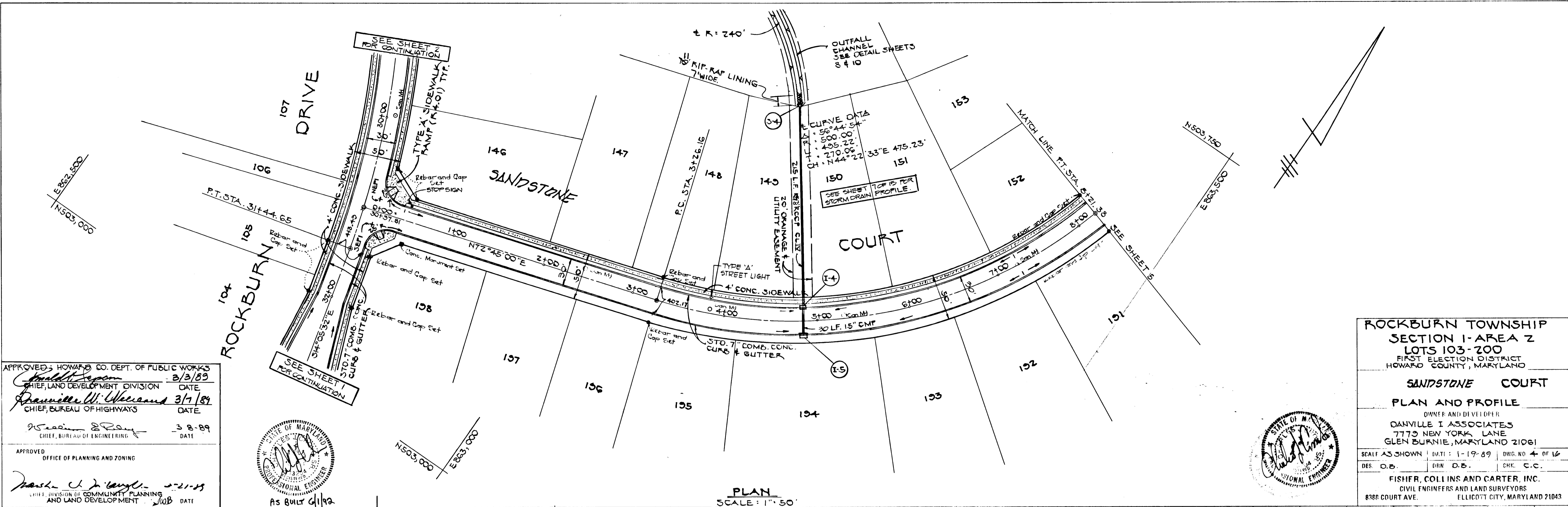
PLAN
 SURVEYED
 PLOTTED
 CHECKED
 DATE

PROFILE
 SURVEYED
 PLOTTED
 CHECKED
 DATE

APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE: 2/3/89
 Approved: *William W. Williams* 3/7/89
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 3/8/89
 Approved: *William E. Ray*
 CHIEF, BUREAU OF ENGINEERING
 DATE: 3/8/89
 APPROVED: OFFICE OF PLANNING AND ZONING
 Approved: *Paul J. Taylor* 5-21-89
 CHIEF, DIVISION OF COMMUNITY PLANNING
 AND LAND DEVELOPMENT
 DATE: 5/21/89



ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
SANDSTONE COURT
 PLAN AND PROFILE
 OWNER AND DEVELOPER
 DANVILLE I ASSOCIATES
 7779 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061
 SCALE AS SHOWN DATE: 1-19-89 DWG. NO. 4 OF 16
 DES. D.B. DRN. D.B. CHK. C.C.
 FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELlicOTT CITY, MARYLAND 21043



1379

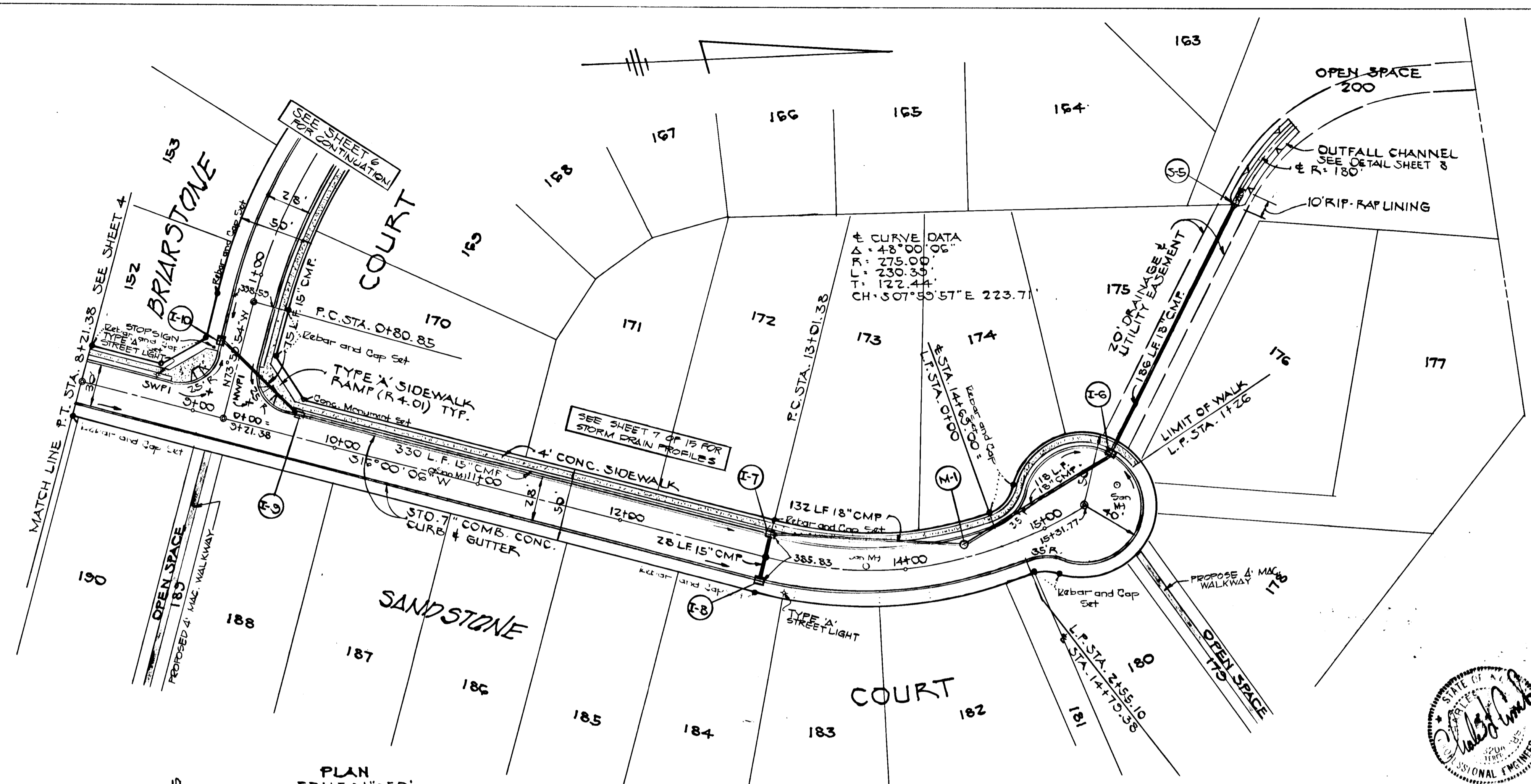
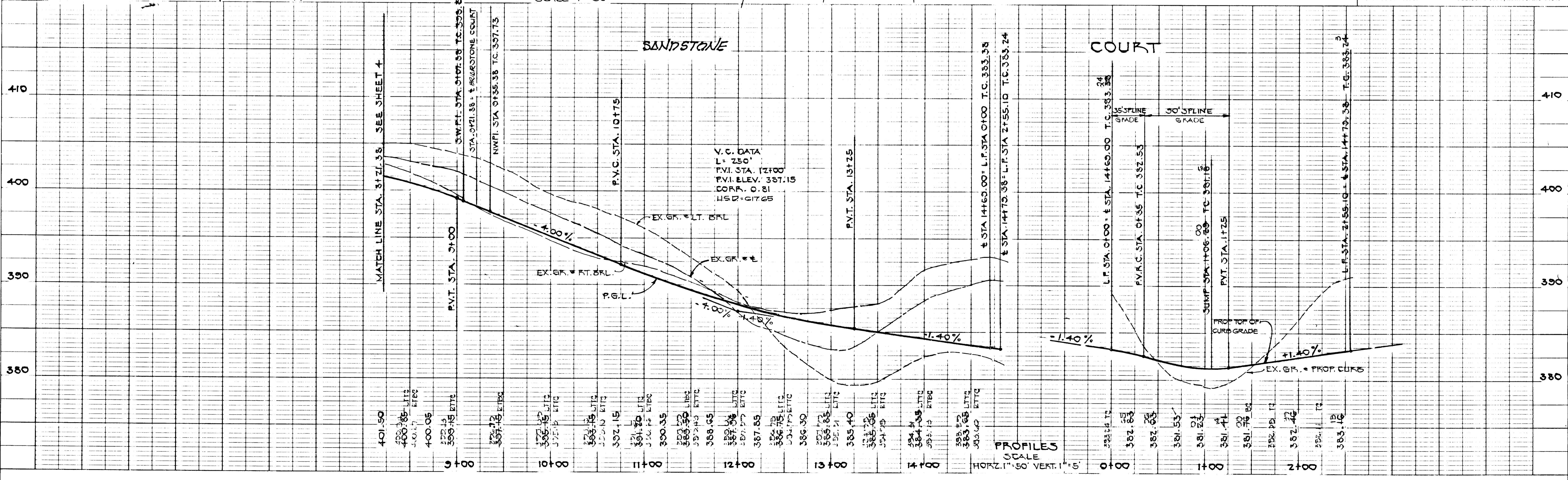
PLAN
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 DATE: 3/13/89
 NOTE BOOK NO. []

APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS
 [Signature] 3/13/89
 CHIEF, LAND DEVELOPMENT DIVISION
 [Signature] 3/7/89
 CHIEF, BUREAU OF HIGHWAYS
 [Signature] 3-8-89
 CHIEF, BUREAU OF ENGINEERING
 APPROVED: OFFICE OF PLANNING AND ZONING
 [Signature] 4-21-89
 CHIEF, OFFICE OF COMMUNITY PLANNING AND LAND DEVELOPMENT



AS BUILT 6/1/92

PROFILE
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 DATE: []
 NOTE BOOK NO. []



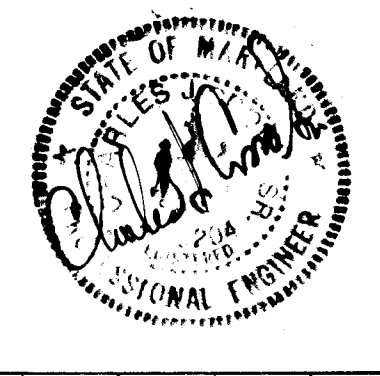
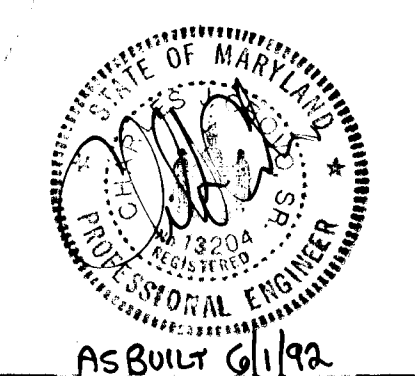
ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
SANDSTONE COURT
 PLAN AND PROFILE
 OWNER AND DEVELOPER:
 DANVILLE I ASSOCIATES
 7775 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061
 SCALE AS SHOWN DATE: 1-19-89 DWG. NO. 5 OF 16
 DES. D.B. DIM. D.B. CHK. C.C.
 FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8386 COURT AVE. ELLICOTT CITY, MARYLAND 21043

1373

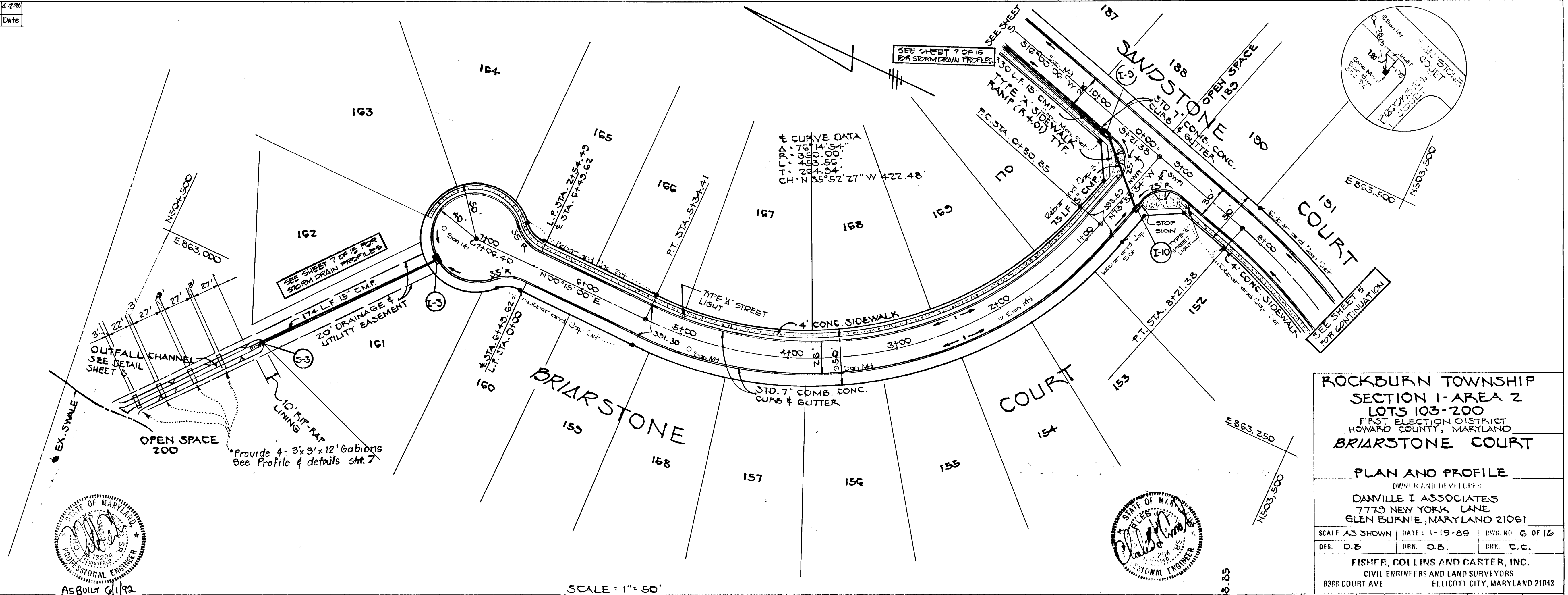
Add Gabions to outfall

PLAN
NO. 1
DATE: 3/2/89

APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS
 Chief, Land Development Division
 DATE: 3/2/89
 Danville W. Howard
 Chief, Bureau of Highways
 DATE: 3-8-89
 William B. Roney
 License No. 13000
 PROFESSIONAL ENGINEER
 DATE: 3-21-89
 Division of Community Planning and Land Development

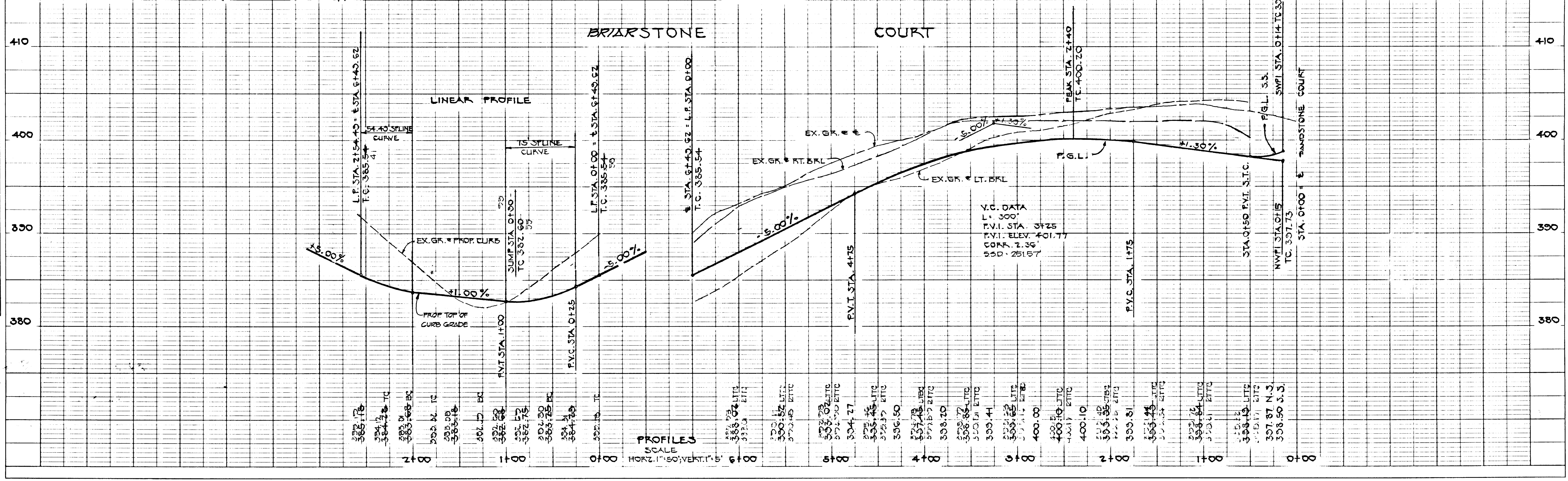


ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
BRIARSTONE COURT
 PLAN AND PROFILE
 OWNER AND DEVELOPER
 DANVILLE I ASSOCIATES
 7775 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061
 SCALE AS SHOWN | DATE: 1-19-89 | DWG. NO. 6 OF 16
 DES. D.B. | DRN. D.B. | CHK. C.C.
 FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8998 COURT AVE | ELLICOTT CITY, MARYLAND 21033



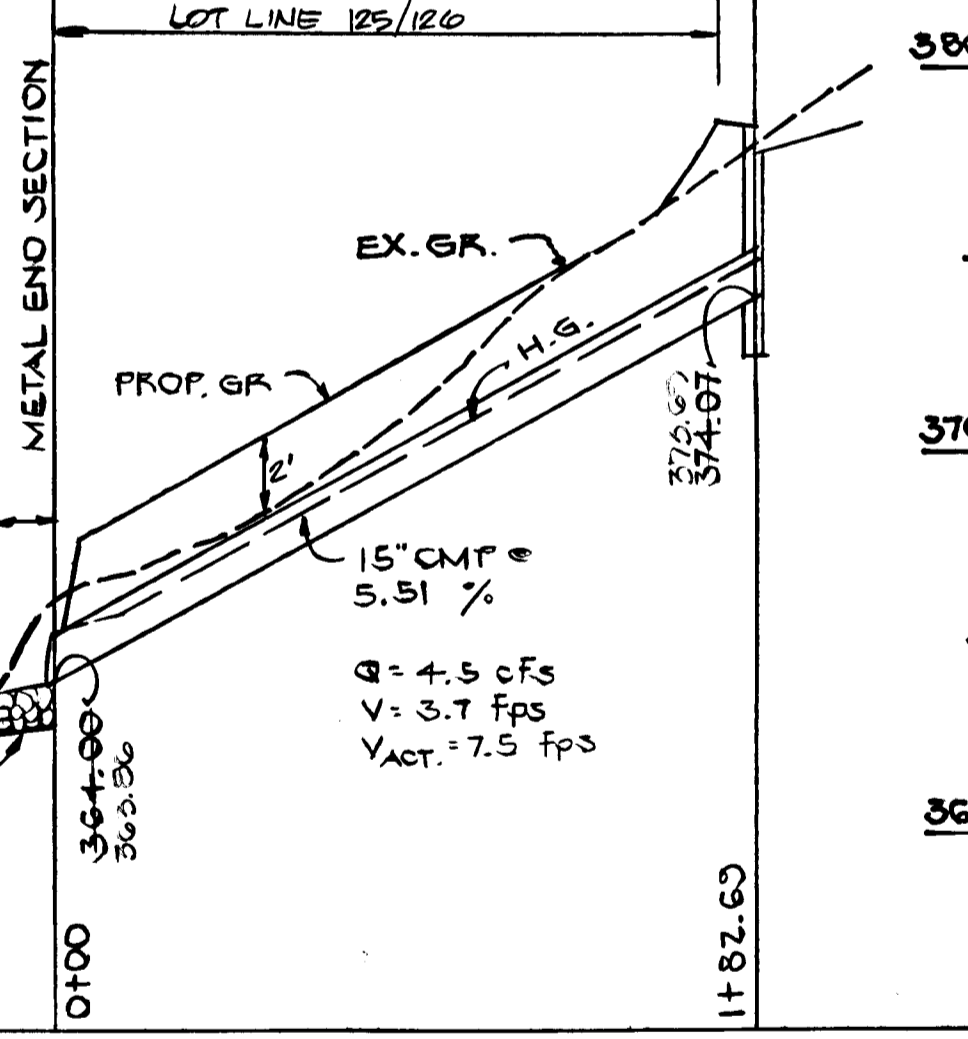
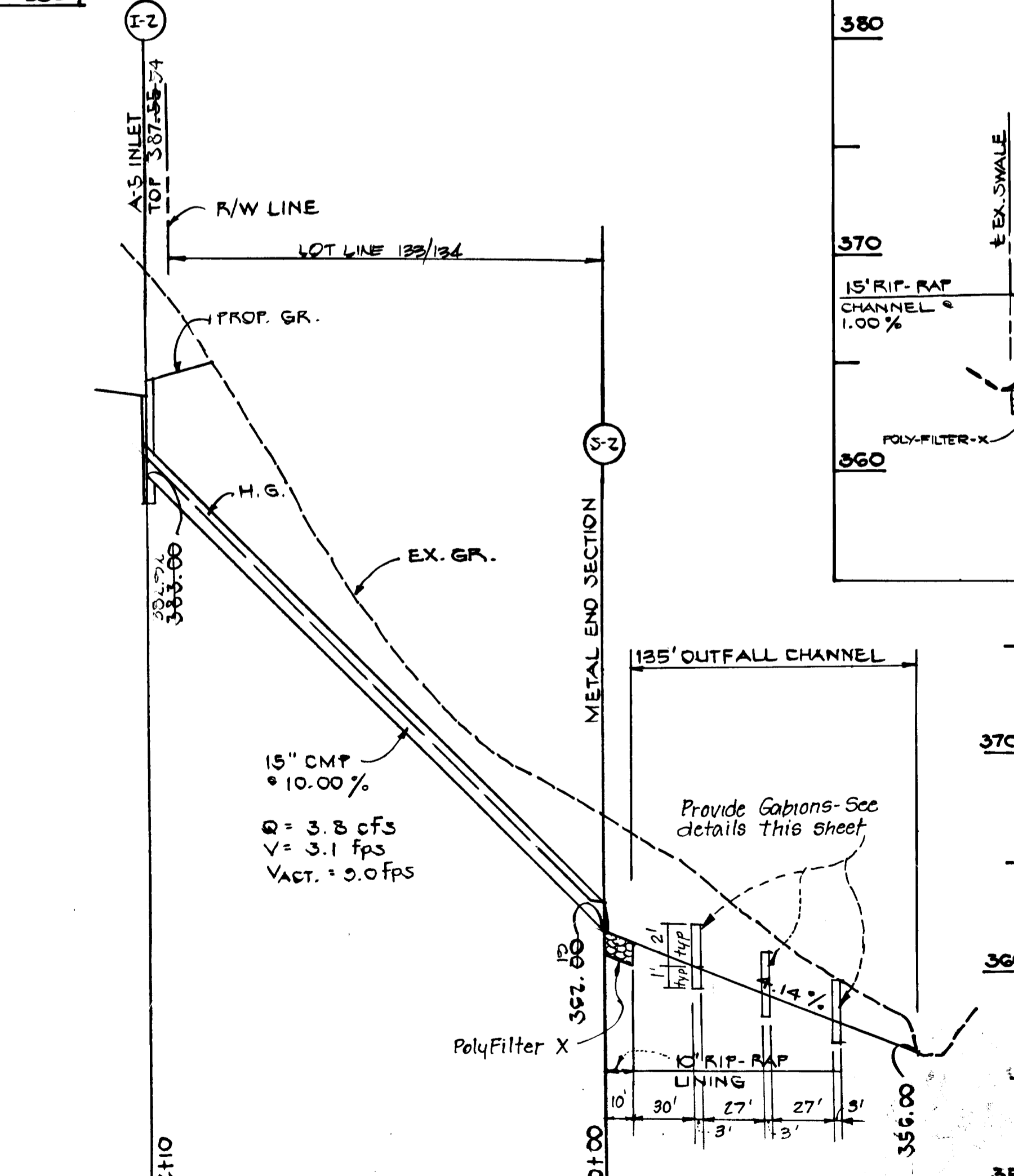
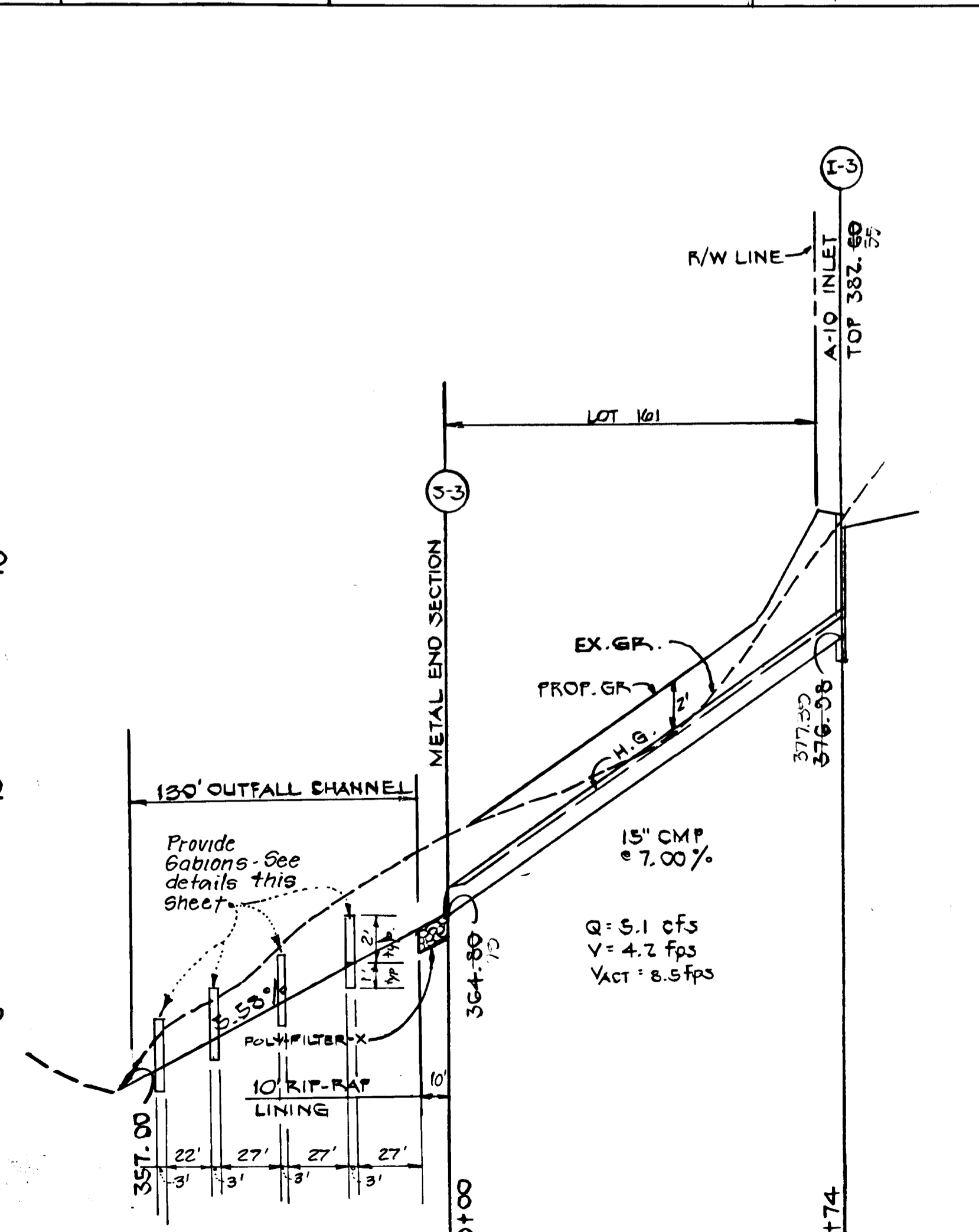
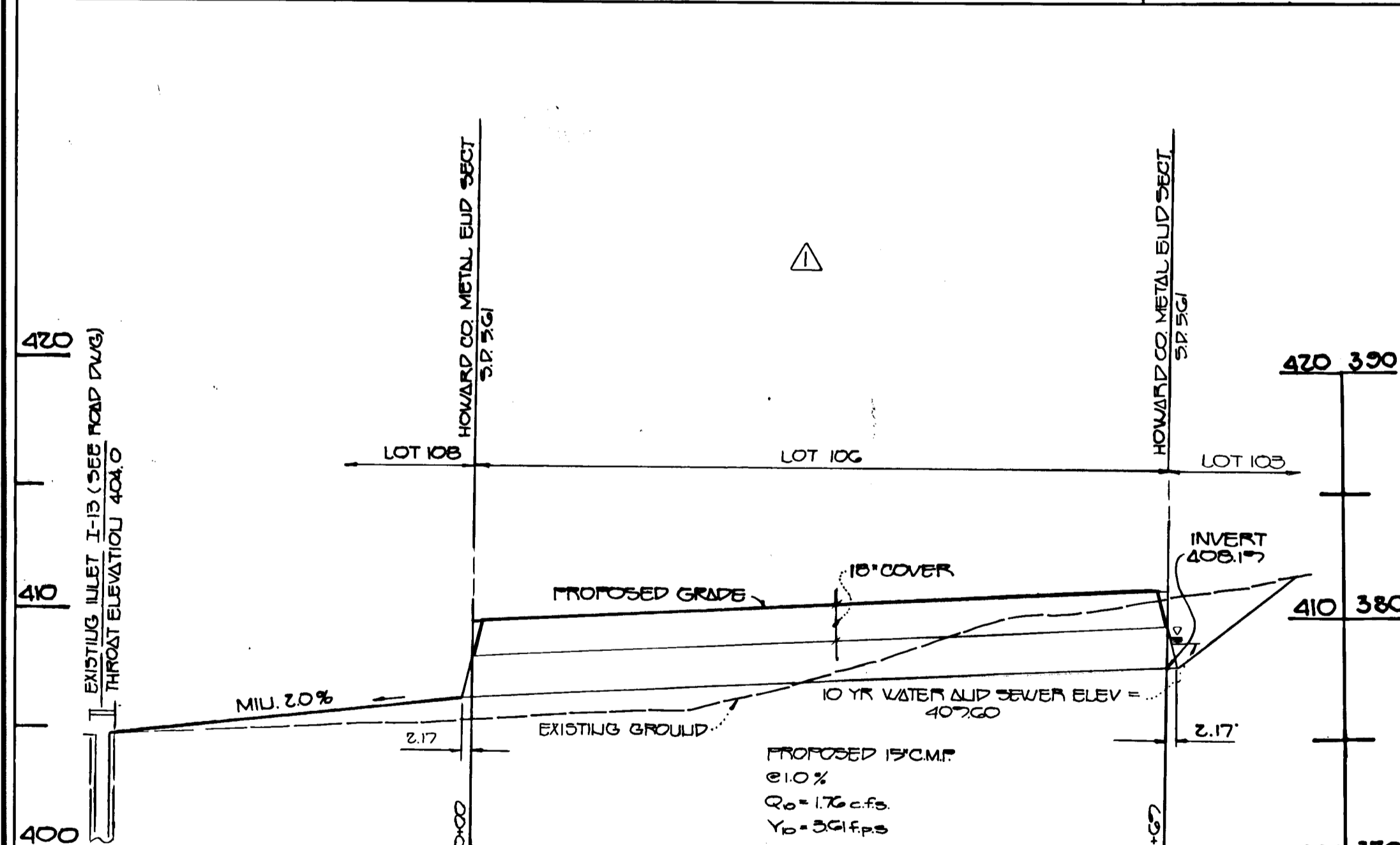
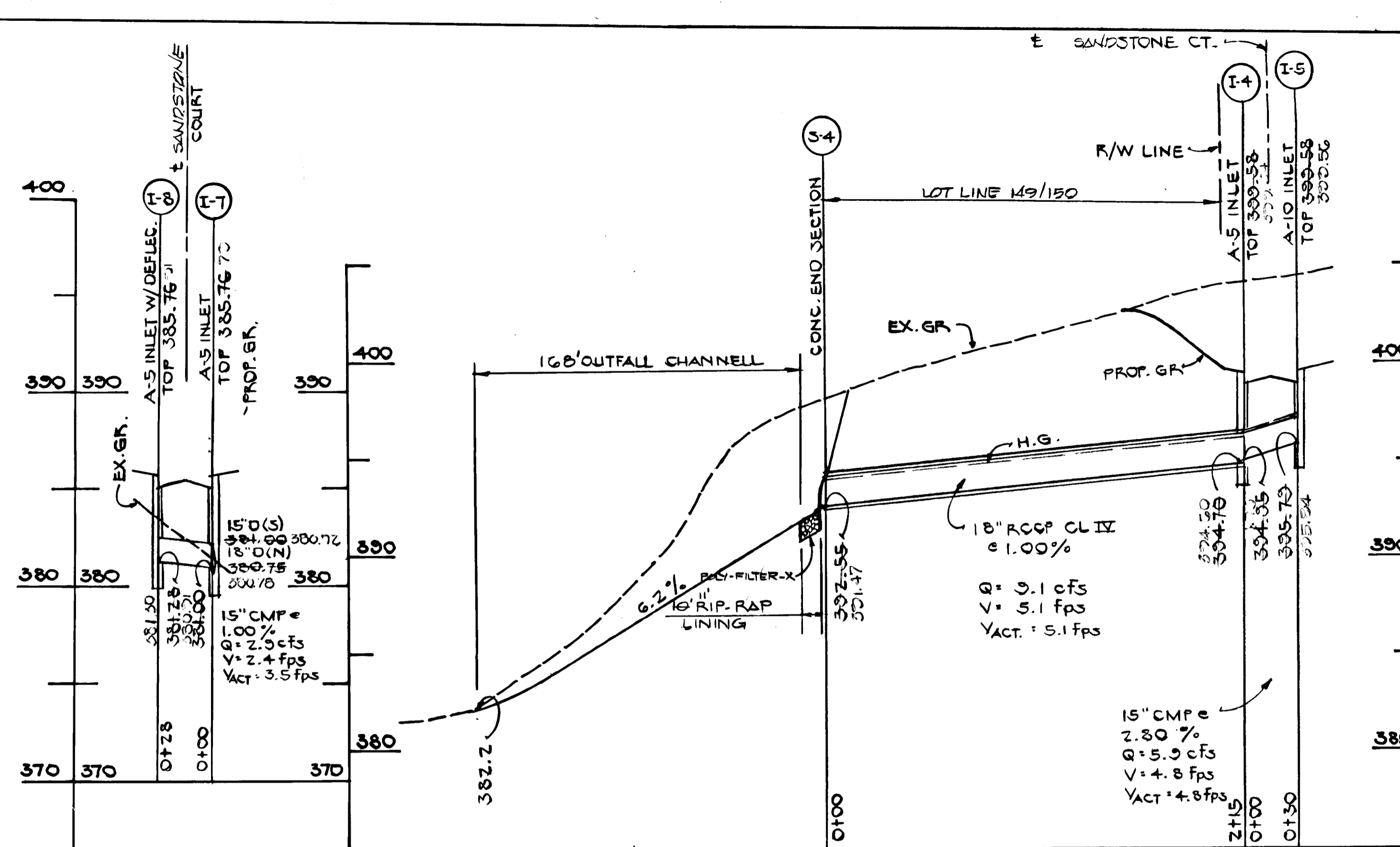
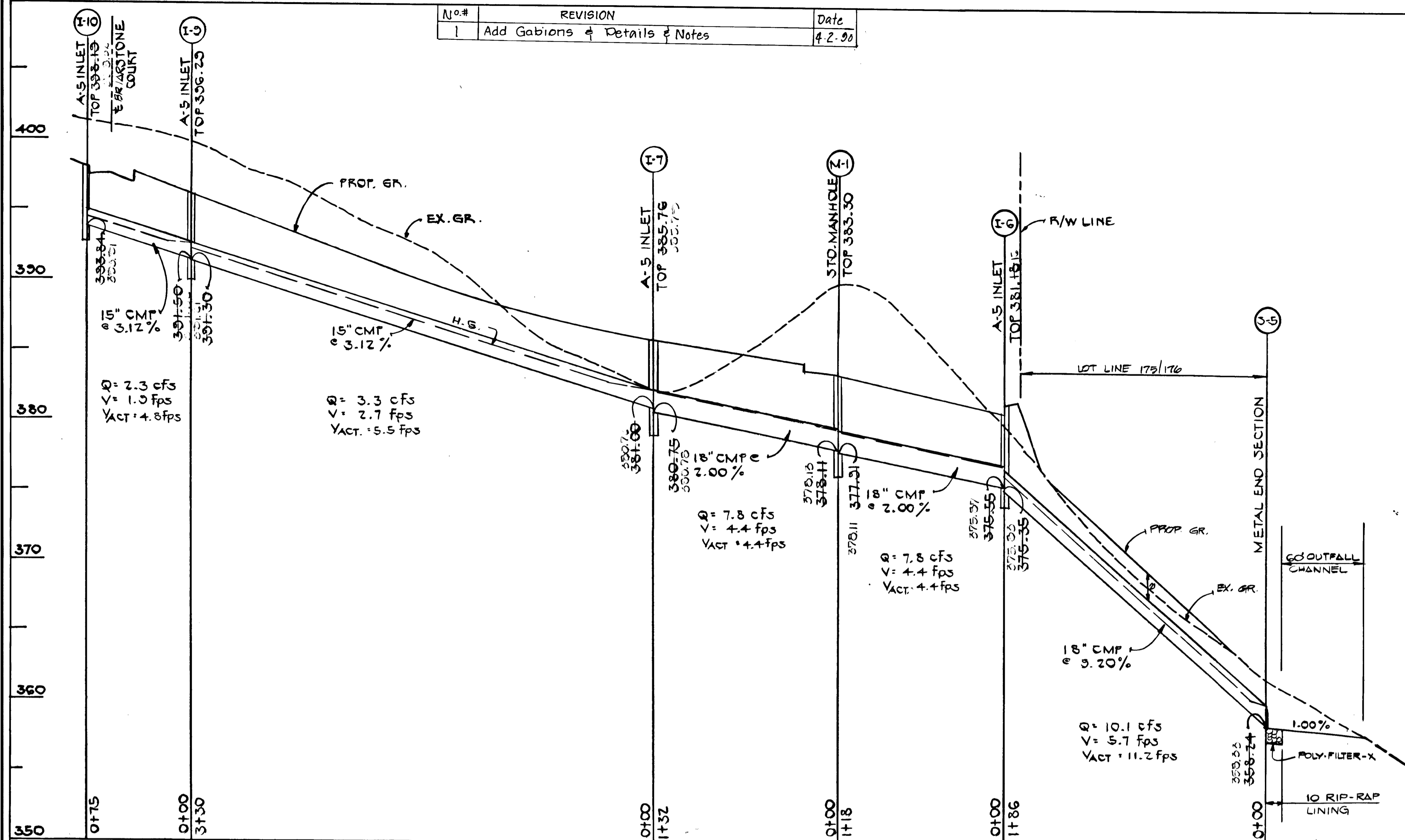
SCALE: 1" = 50'

PROFILE
NO. 1
DATE: 3/2/89

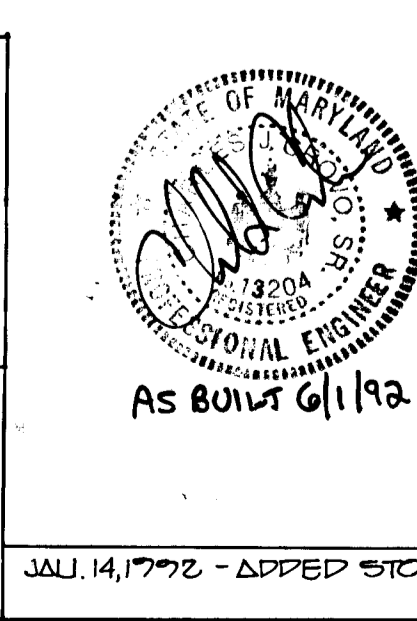


1373

No.#	REVISION	Date
1	Add Gabions & Details & Notes	4.2.89



APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS
 Chief, Land Development Division
 3/3/89 DATE
 Chief, Bureau of Highways
 3/7/89 DATE
 Chief, Bureau of Engineering
 3/8/89 DATE
 APPROVED: OFFICE OF PLANNING AND ZONING
 Chief, Division of Community Planning and Land Development
 3-21-89 DATE



PROFILES
 SCALE: HORIZ. 1"=50'
 VERT. 1"=5'

ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

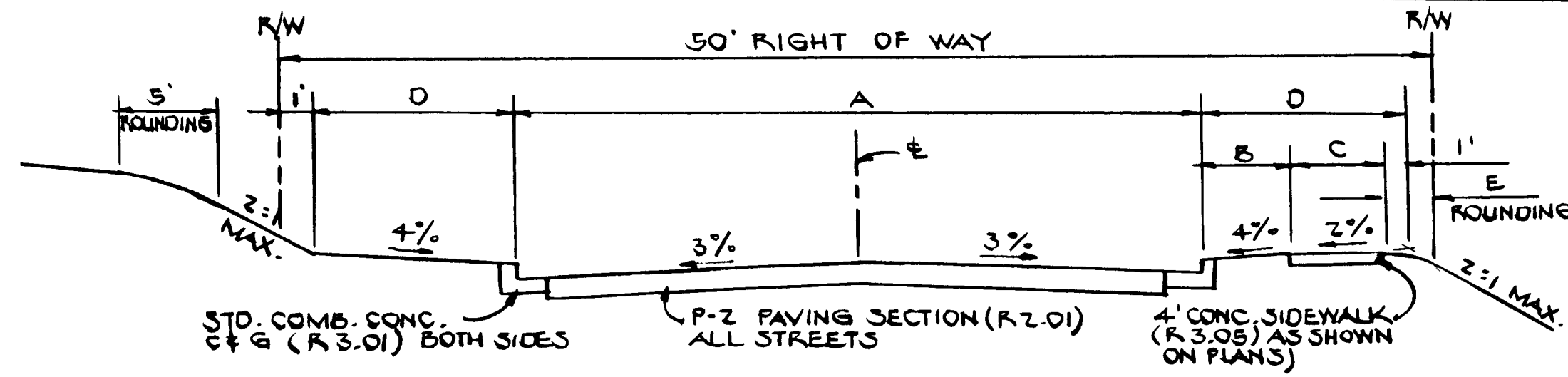
STORM DRAIN PROFILES

OWNER AND DEVELOPER
 DANVILLE I. ASSOCIATES
 7775 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061

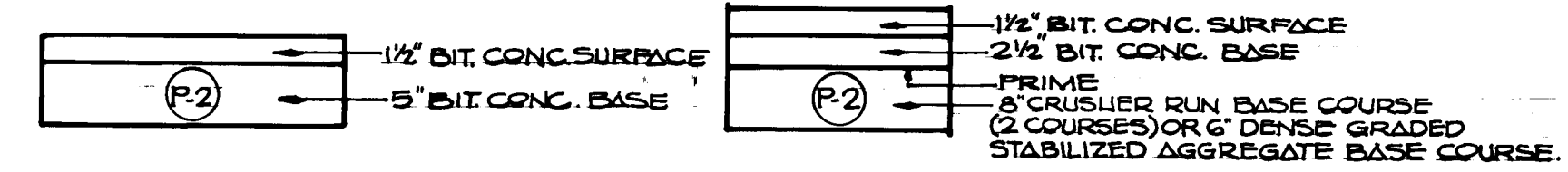
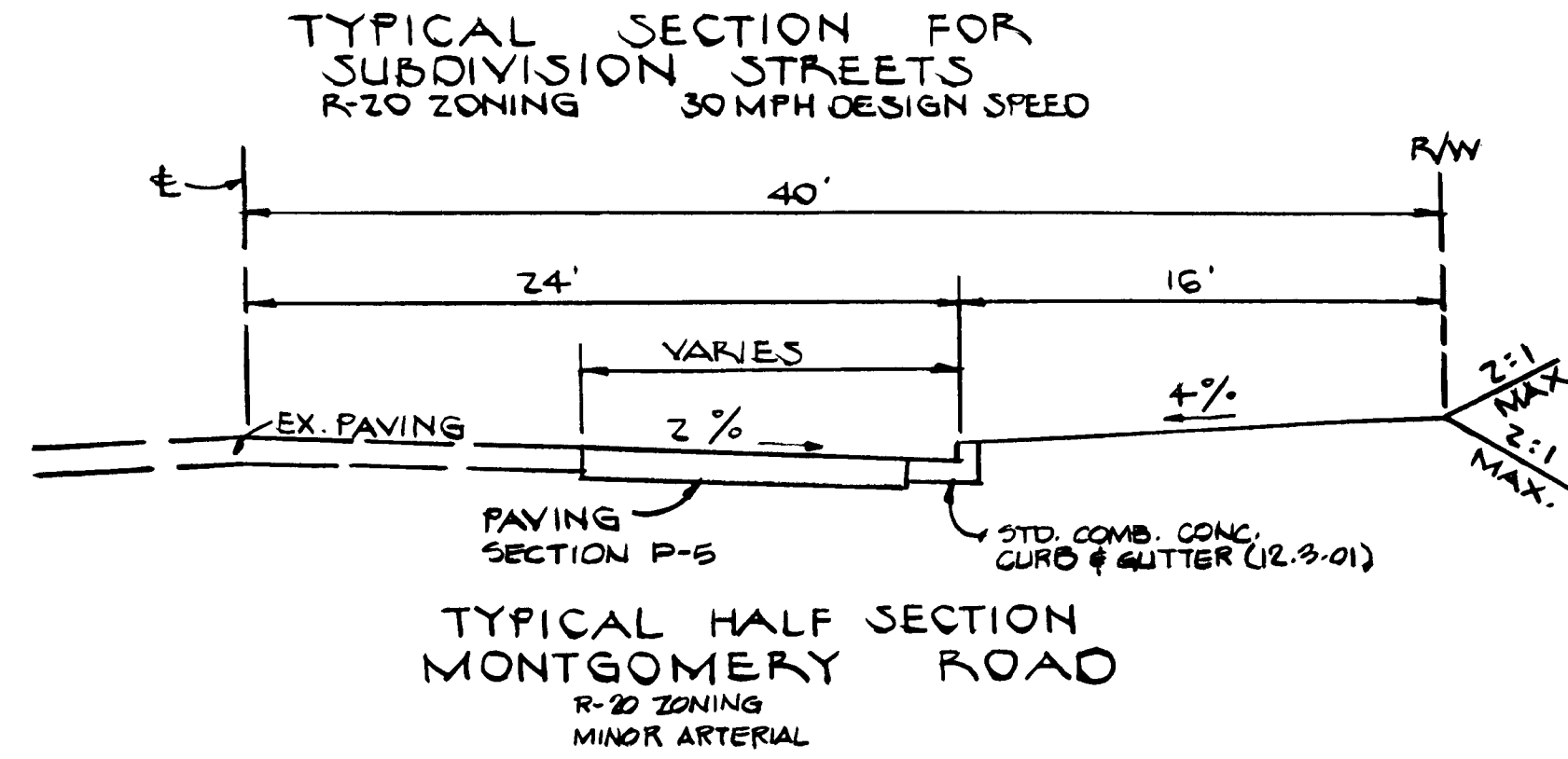
SCALE: AS SHOWN DATE: 1-19-89 DWG. NO. 7 OF 14
 DES: D.B. ORN: D.B. CHK: C.C.

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

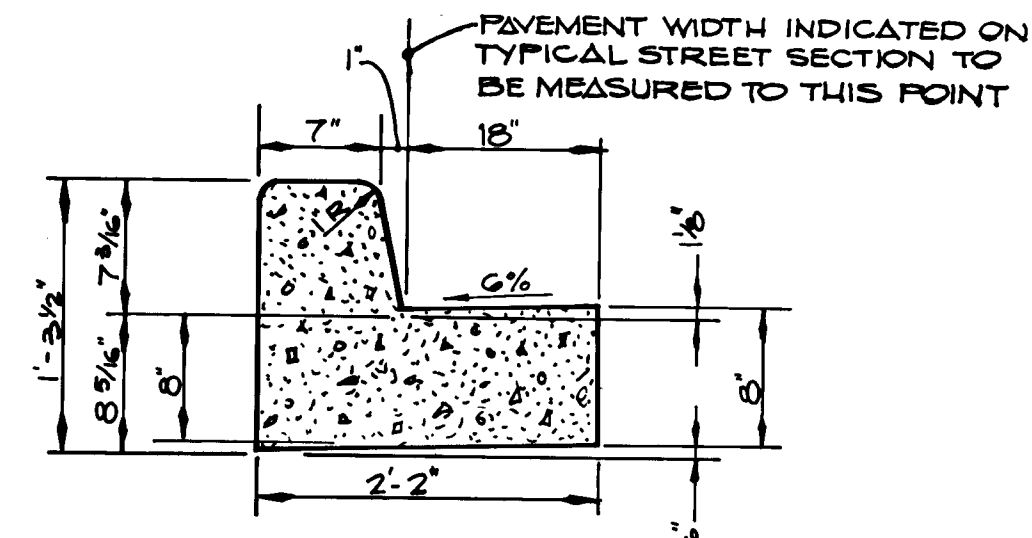
STRUCTURE SCHEDULE						
NO	TYPE	INV. IN	INV. OUT	TOP	LOCATION	REMARKS
I-1	A-10	-	374.27	378.40	LP STA. 1+35.7	S.O. 4.01
I-2	A-5	-	383.00	387.55	LP STA. 1+50+7	S.O. 4.01
I-3	A-10	-	376.36	382.70	LP STA. 0+50.0	S.O. 4.02
I-4	A-5	334.65	334.70	339.58	STA. 4+83.85 14' LT.	S.O. 4.01
I-5	A-10	-	335.75	339.68	STA. 4+83.85 14' RT.	S.O. 4.02
I-6	A-5	375.66	375.35	381.18	LP STA. 1+00.23	S.O. 4.01
I-7	A-5	381.03	380.75	385.70	STA. 13+01.38 14' LT.	S.O. 4.01
I-8	A-5/DEFLEC.	-	381.78	385.70	STA. 13+01.38 14' LT.	S.O. 4.01 S.O. 4.83
I-9	A-5	331.50	331.30	336.23	STA. 9+71.38 14' LT.	S.O. 4.01
I-10	A-5	-	333.84	338.15	STA. 0+50 14' LT.	S.O. 4.01
I-11	A-5	332.50	332.30	338.80	STA. 2+25 15' LT.	S.O. 4.01
I-12	A-10	333.88	333.88	338.80	STA. 2+25 15' RT.	S.O. 4.02
I-13	O	-	401.82	404.83	SEE PLAN	S.O. 4.11
J-1	METAL END SECTION	-	364.00	-	SEE PLAN	S.O. 5.61
J-2	"	-	362.00	-	SEE PLAN	S.O. 5.61
J-3	"	-	364.80	-	SEE PLAN	S.O. 5.61
J-4	CONC. END SECTION	-	358.24	-	SEE PLAN	S.O. 5.52
J-5	METAL END SECTION	-	358.24	-	SEE PLAN	S.O. 5.61
J-6	METAL END SECTION	-	356.48	-	SEE PLAN	S.O. 5.61
M-1	STD. MANHOLE	378.17	377.51	383.30	STA. 14+48 10' LT.	G.S. 05
M-2	STD. MANHOLE	354.24	354.24	359.35	STA. 27+82.55 21' RT.	G.S. 05
M-3	STD. MANHOLE	400.24	400.04	406.30	SEE PLAN	G.S. 02



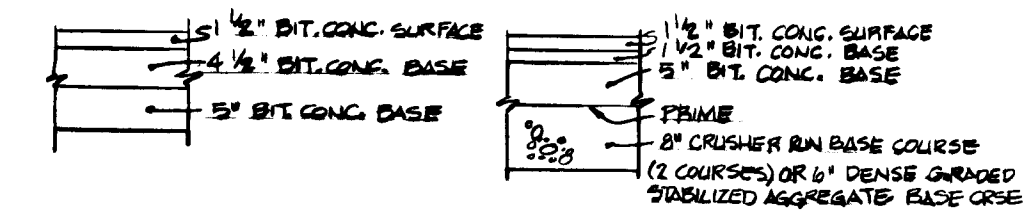
ROAD NAME	A	B	C	D	E
ROCKBURN DRIVE	30'	4'	4'	0'	2'
SANDSTONE CT.	20'	4'	4'	9'	2 1/2'
BURNSTONE CT.	28'	4'	4'	0'	3'
MILLSTONE CT.					
BRIMSTONE CT.					



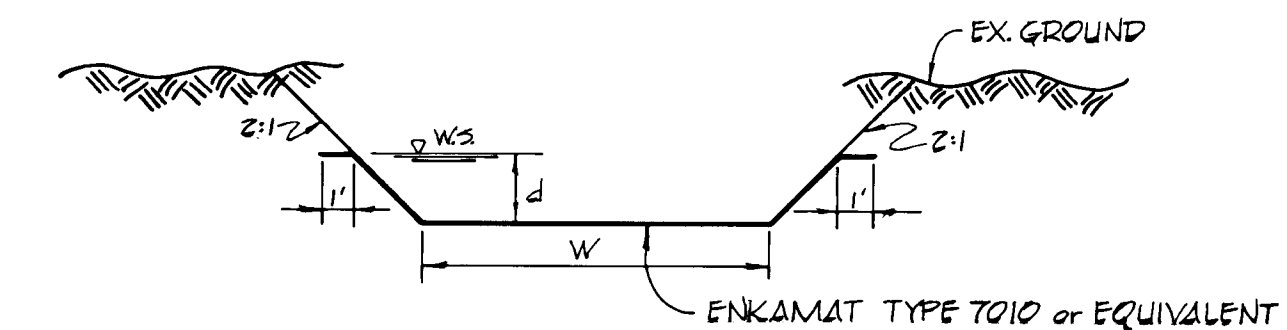
PAVING SECTION P-2
NO SCALE



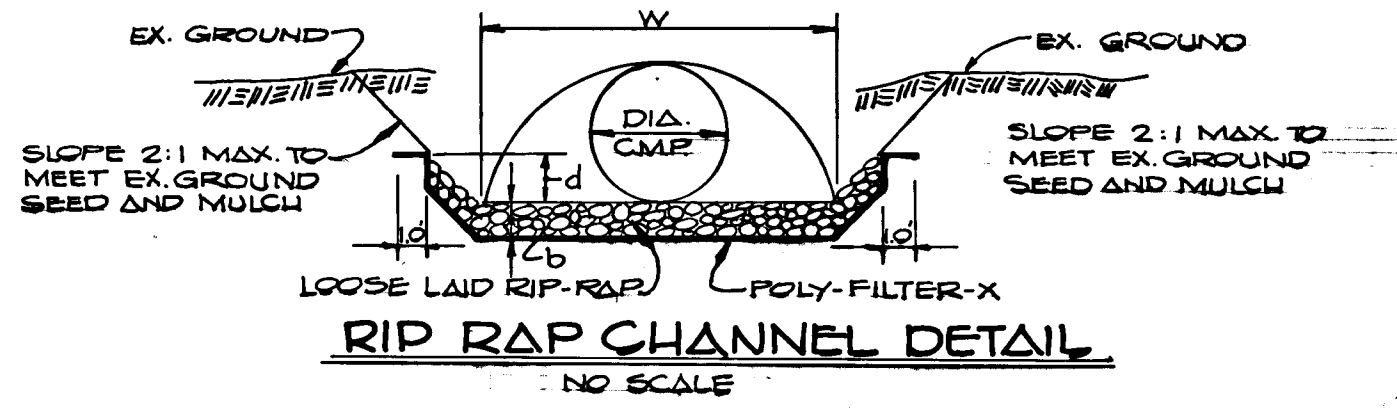
STANDARD SLOPE 7\"/>



PAVING SECTION P-5
NO SCALE

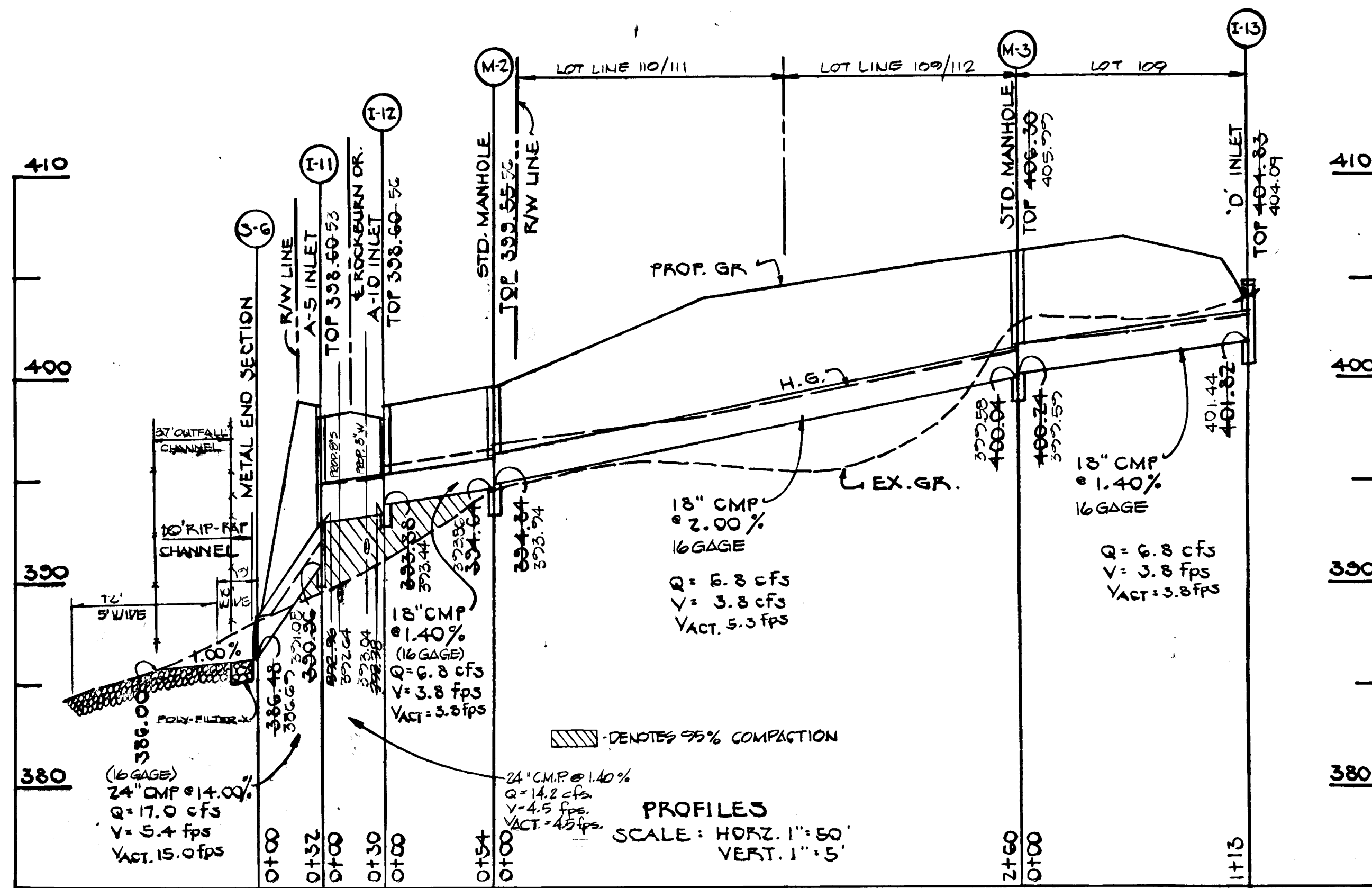


EARTH CHANNEL DETAIL
NO SCALE



RIP-RAP CHANNEL DESIGN DATA														
STRUCTURE	Δ#	P.R.	R	R ^{2/3}	S%	S ^{1/2}	T	Q cfs	V fps	d ft.	W ft.	RIP-RAP SIZE	d MAX	b
S-1	250	570	0.44	0.578	1.00	0.10	0.095	6.30	2.50	0.60	3.00'	4	G	9
S-2	140	530	0.26	0.407	4.14	2.2035	0.03	5.70	4.10	0.30	4.00'	4	G	9
S-3	140	530	0.26	0.407	5.58	2.2362	0.03	6.70	4.80	0.30	4.00'	4	G	9
S-4	170	630	0.27	0.418	7.40	0.2720	0.03	9.50	8.00	0.30	3.00'	4	G	9
S-5	370	66	0.26	0.407	1.00	0.10	0.03	12.60	3.40	0.80	3.00'	4	G	9
S-6	660	200	0.23	0.311	1.00	0.10	0.035	22.40	3.40	0.80	5.00'	4	G	9

EARTH CHANNEL DESIGN DATA														
STRUCT.	Δ#	P ft.	R	R ^{2/3}	S%	S ^{1/2}	n	Q cfs	V fps	d ft.	W ft.			
S-2	120	0.25	0.243	0.389	4.14	0.204	0.04	3.8	2.94	0.28	4			
S-3	140	0.43	0.273	0.421	5.58	0.236	0.04	5.49	3.70	0.32	4			
S-4	195	5.19	0.376	0.521	6.20	0.249	0.04	9.38	4.81	0.49	3			
S-5	393	6.76	0.382	0.697	1.00	0.100	0.04	10.10	2.59	0.84	3			
S-6	646	9.02	0.216	0.300	1.00	0.100	0.04	19.2	2.97	0.90	5			



APPROVED: HOWARD O. DEPT. OF PUBLIC WORKS
CHIEF, LAND DEVELOPMENT DIVISION
DATE: 3/3/89

APPROVED: W. W. WILSON
CHIEF, BUREAU OF HIGHWAYS
DATE: 3/3/89

APPROVED: M. R. RAY
CHIEF, BUREAU OF ENGINEERING
DATE: 3-3-89

APPROVED: OFFICE OF PLANNING AND ZONING
DATE: 3-2-89

APPROVED: J. S. LAYTON
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
DATE: 3-2-89

ROCKBURN TOWNSHIP
SECTION 1-AREA 2
LOTS 103-200
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

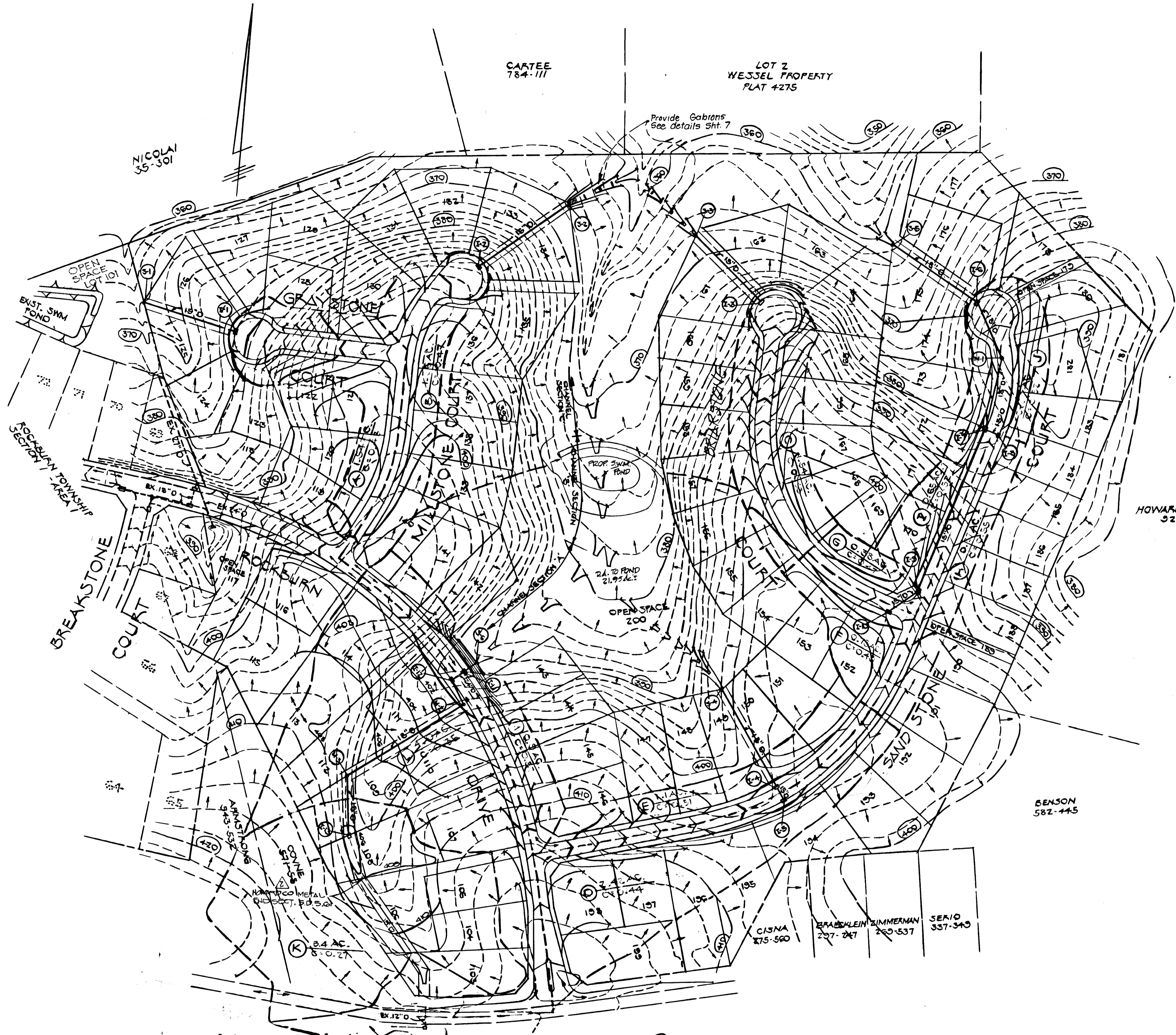
STORM DRAIN PROFILES,
DETAILS & TYPICAL SECTIONS

OWNER AND DEVELOPER
DANVILLE ASSOCIATES
7775 NEW YORK LANE
GLEN BURNIE, MARYLAND 21061

SCALE: AS SHOWN DATE: 1-19-89 DWG. NO. 8 OF 16
DES.: D.B. DRN.: D.B. CHK.: C.C.

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8588 COURT AVE. ELLICOTT CITY, MARYLAND 21042

F-88-213 AS-BUILT

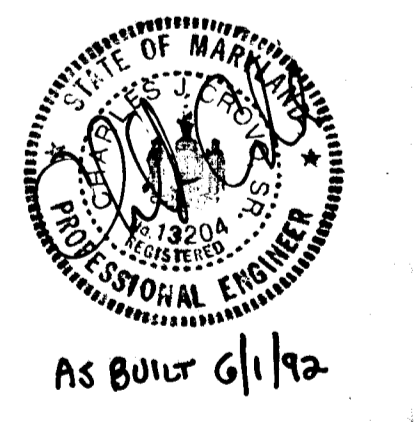


HOWARD CO., MARYLAND
226-841

BENSON
582-445

APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS
 Chief, LAND DEVELOPMENT DIVISION DATE 3/2/89
Drannelle M. McLeod
 Chief, BUREAU OF HIGHWAYS DATE 3/7/89
W. C. ...
 Chief, BUREAU OF ENGINEERING DATE 3/8/89
 APPROVED: OFFICE OF PLANNING AND ZONING
Frank V. ...
 Chief, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE 3-2-89

No	REVISION	Date
2	REVISED GRADINGS & DRAINAGE AREA BEHIND LOTS 103-110B. ADD 15" PIPE	1/14/89
1	Add Gabions to outfalls	4/2/89
No	REVISION	Date

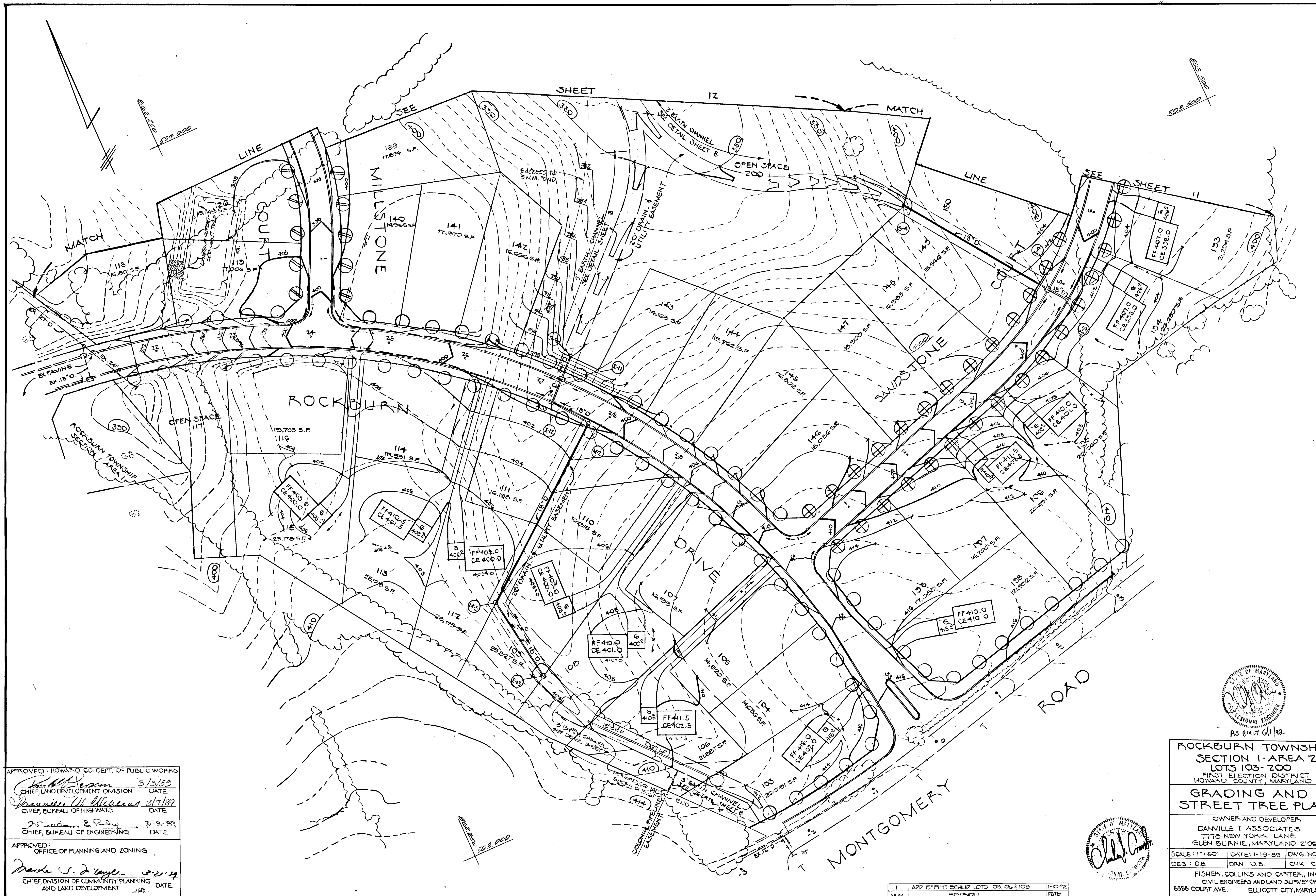


AS BUILT 6/1/92

ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
DRAINAGE AREA MAP
 OWNER AND DEVELOPER
 DANVILLE I ASSOCIATES
 7775 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061
 SCALE: 1"=100' DATE: 1-19-89 DWG. NO. 50F 12
 DES: D.B. DRN: D.B. CHK: C.C.
 FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043
 F-88-273 AS-BUILT



1375



APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS
[Signature] 3/3/89
 CHIEF, LAND DEVELOPMENT DIVISION DATE
[Signature] 3/7/89
 CHIEF, BUREAU OF HIGHWAYS DATE
[Signature] 3-8-89
 CHIEF, BUREAU OF ENGINEERING DATE
 APPROVED: OFFICE OF PLANNING AND ZONING
[Signature] 3-2-89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

AS BUILT 6/1/92

ROCKBURN TOWNSHIP
SECTION 1-AREA 2
LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

GRADING AND STREET TREE PLAN

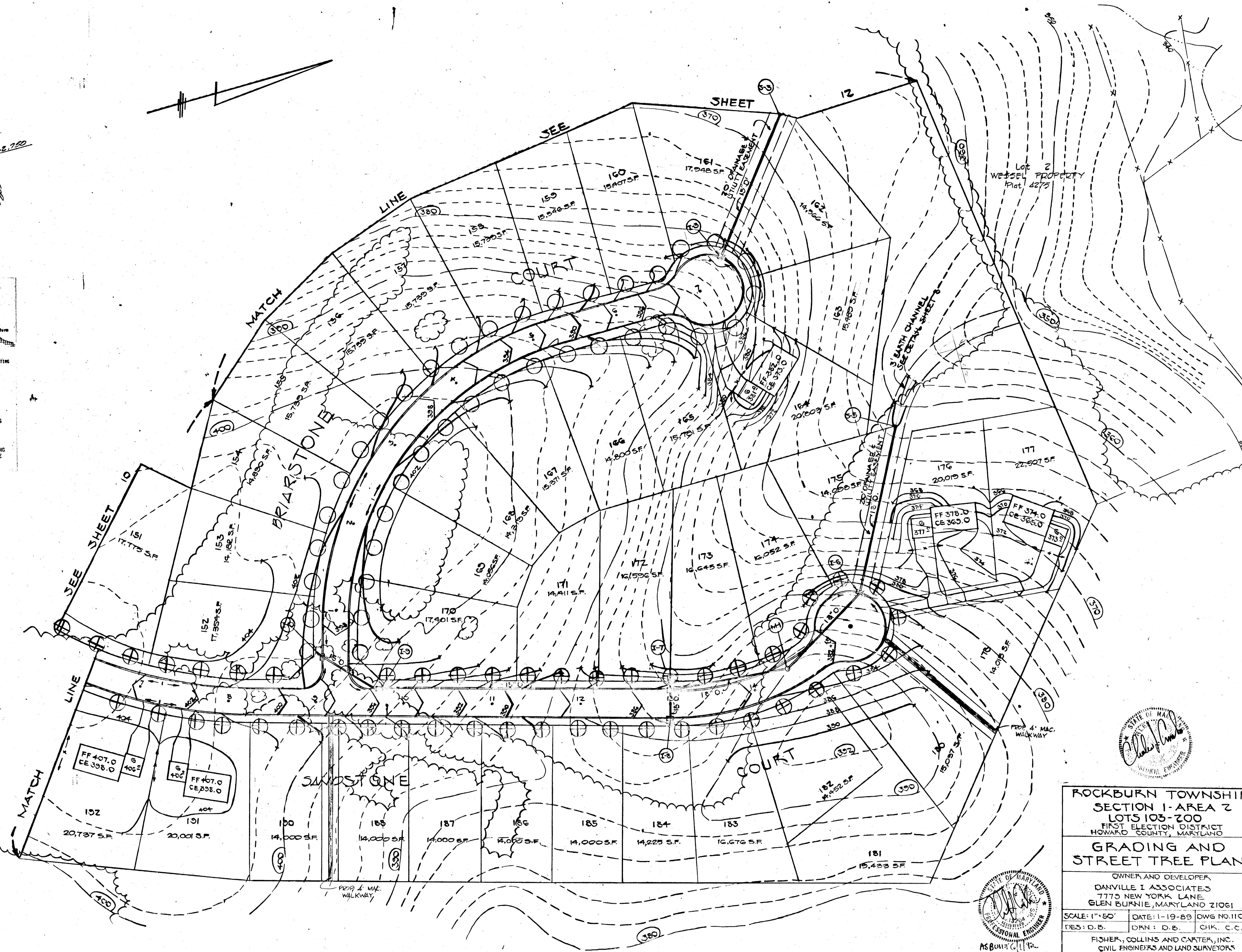
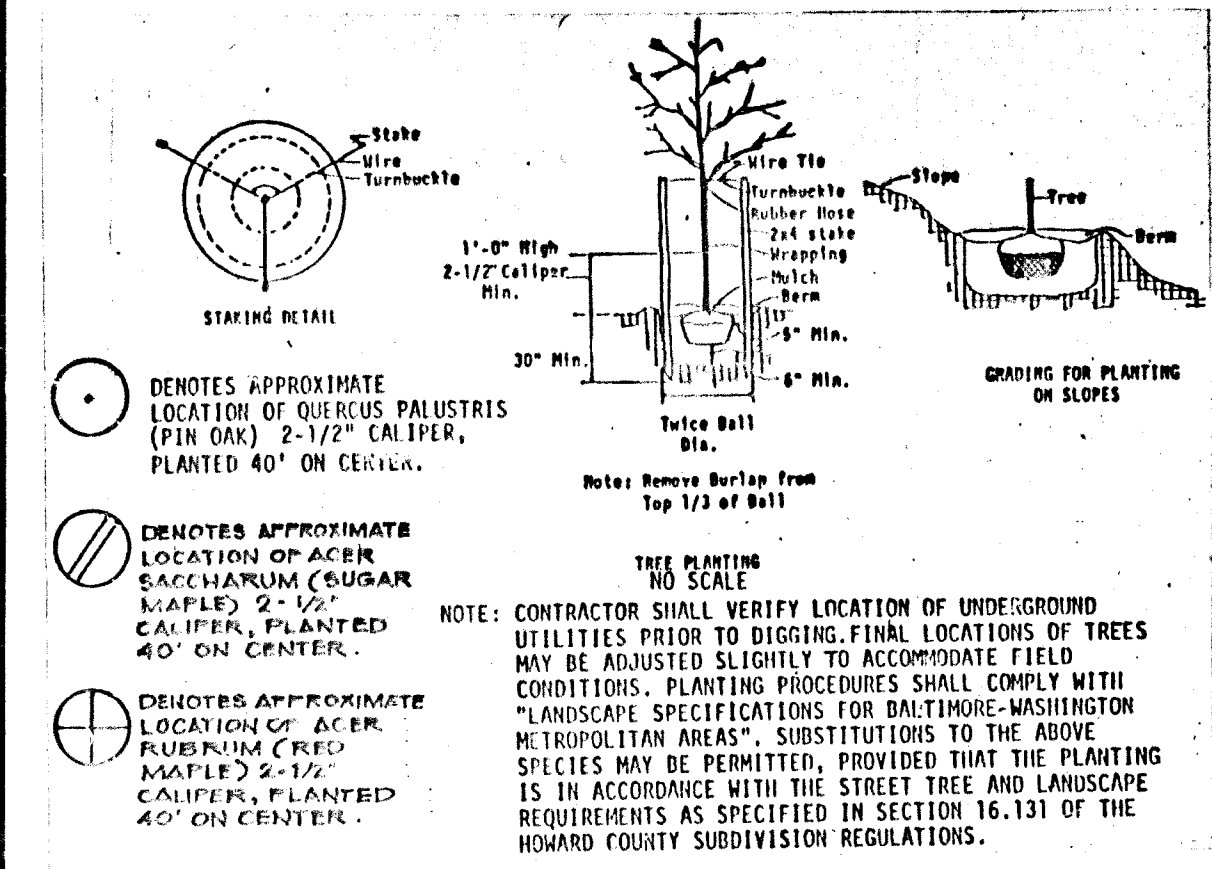
OWNER AND DEVELOPER
 DANVILLE I ASSOCIATES
 7770 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061

SCALE: 1"=50' DATE: 1-19-89 DWG. NO. 100F16
 DES: D.B. DRN: D.B. CHK: C.C.

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

NUM.	REVISION	DATE
1	ADD 18" PIPES BEHIND LOTS 108, 106 & 103	1-10-79

1379



APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS

[Signature] 3/3/89
 CHIEF, LAND DEVELOPMENT DIVISION DATE

[Signature] 3/7/89
 CHIEF, BUREAU OF HIGHWAYS DATE

[Signature] 3/8/89
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING

[Signature] 3/6/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

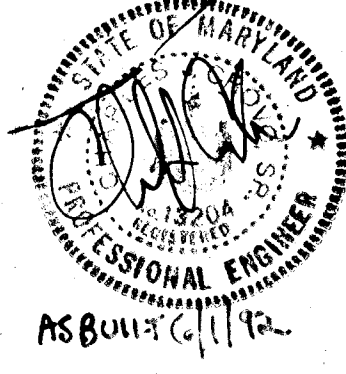
GRADING AND STREET TREE PLAN

OWNER AND DEVELOPER
 DANVILLE I ASSOCIATES
 7775 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061

SCALE: 1"=50' DATE: 1-19-89 OWG NO. 11 OF 14
 DES: D.B. DRN: D.B. CHK: C.C.

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

1.379



STORM WATER MANAGEMENT POND CERTIFICATION AND APPROVAL

DEVELOPER'S CERTIFICATE

"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Ronald R. Hayes 2/3/89
SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Charles J. ... 2/3/89
SIGNATURE OF ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Frank ... 2-18-89
SOIL CONSERVATION SERVICE DATE

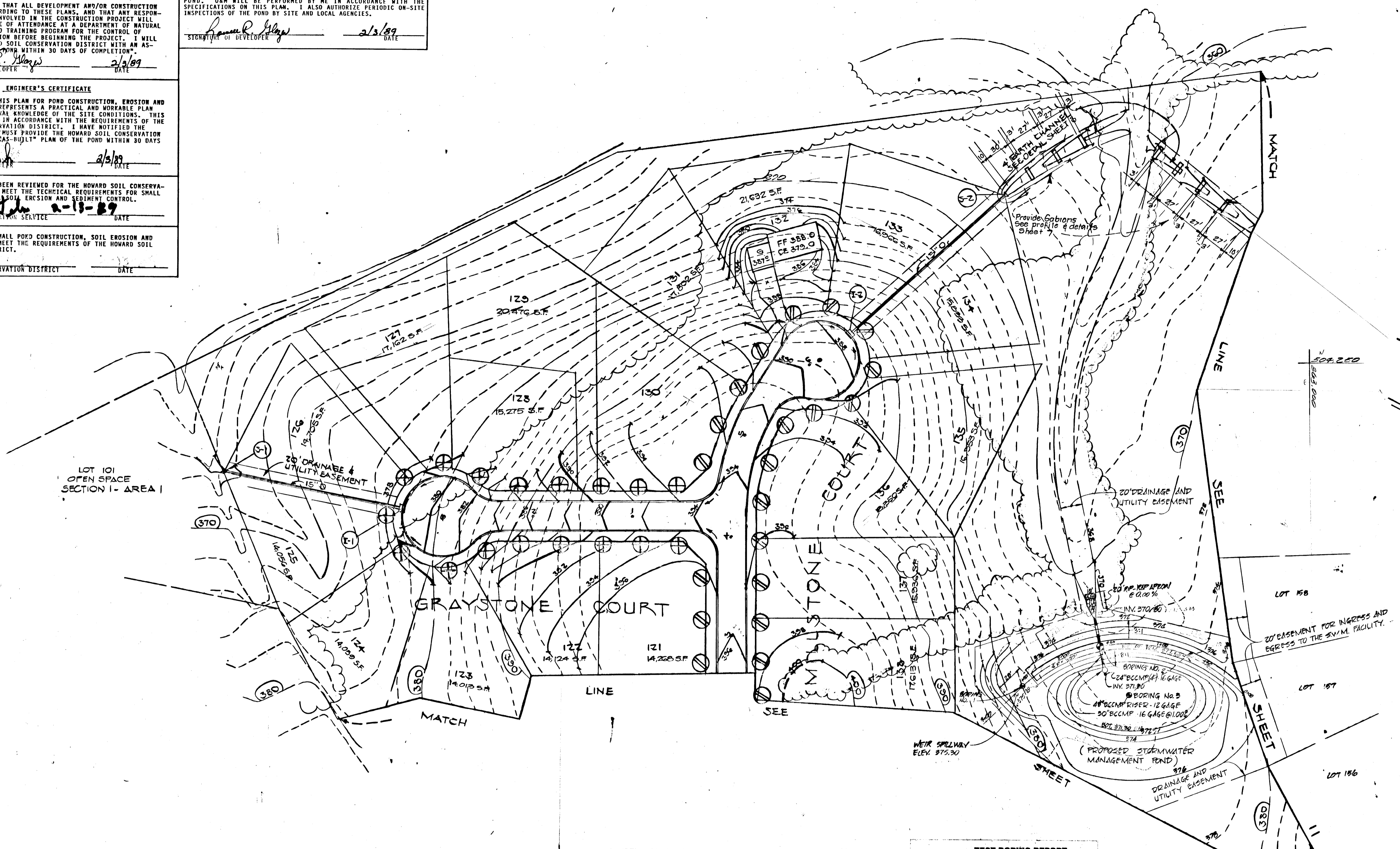
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE

POND CONSTRUCTION CERTIFICATION

I CERTIFY THAT UPON COMPLETION OF CONSTRUCTION I WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE (O&M) OF THE SMALL POND. O&M WILL BE PERFORMED BY ME IN ACCORDANCE WITH THE SPECIFICATIONS ON THIS PLAN. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS OF THE POND BY SITE AND LOCAL AGENCIES.

Ronald R. Hayes 2/3/89
SIGNATURE OF DEVELOPER DATE



TEST BORING REPORT

Boring No. 1

0.0'	Ground surface	
1.0'	Moist brown topsoil	
	Loose moist brown fine to medium sand trace fine gravel.	2 3.5'
		3 spt
		5 5.0'
	Moist to wet firm yellow brown fine to medium sand, trace gravel.	6 8.5'
		7 spt
		8 10.0'
14.0'	Firm wet gray white silty clay	2 13.5'
15.0'		3 spt
		7 15.0'

Boring stopped at 15.0'

Boring No. 2

0.0'	Ground surface	
1.0'	Moist brown topsoil	
	Loose moist brown fine to medium sand, trace fine gravel.	2 3.5'
		3 spt
	(lost sample)	4 5.0'
	Boulder at 6.0'	
	Wet very compact yellow fine to coarse sand and fine to coarse rounded gravel.	10 8.5'
		16 spt
		14 10.0'
13.0'	Wet hard gray white silty clay.	3 13.5'
		12 spt
		9 15.0'

Boring stopped at 15.0'

Boring No. 3

0.0'	Ground surface	
1.0'	Moist brown topsoil	
	Moist gray brown very fine sand and silt.	3 3.5'
		4 spt
		8 5.0'
6.0'		
7.0'	Boulder	
7.5'		
8.5'	Wet yellow brown loose to firm fine to coarse sand and fine to coarse rounded gravel.	3 8.5'
	(lost sample)	4 spt
		10 10.0'
13.0'	Wet medium gray white silty clay.	2 13.5'
		4 spt
		2 15.0'

Boring stopped at 15.0'

APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS

W. ... 3/3/89
CHIEF, LAND DEVELOPMENT DIVISION DATE

Frank ... 3/7/89
CHIEF, BUREAU OF HIGHWAYS DATE

W. ... 3/8/89
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING

W. ... 3/1/89
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

1	Add Gabions	4 2 98
Nº	REVISION	Date

ROCKBURN TOWNSHIP
SECTION 1-AREA 2
LOTS 103-200
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

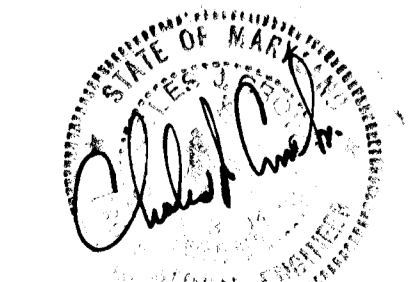
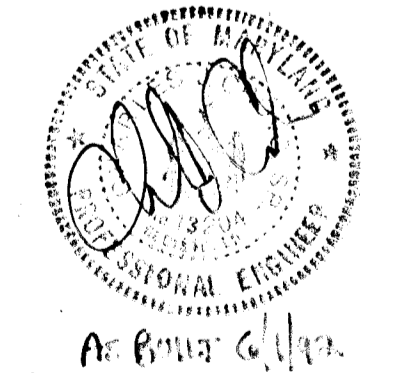
GRADING, STREET TREE & STORMWATER MANAGEMENT PLAN

OWNER AND DEVELOPER:
DANVILLE I ASSOCIATES
7773 NEW YORK LANE
GLEN BURNIE, MARYLAND 21061

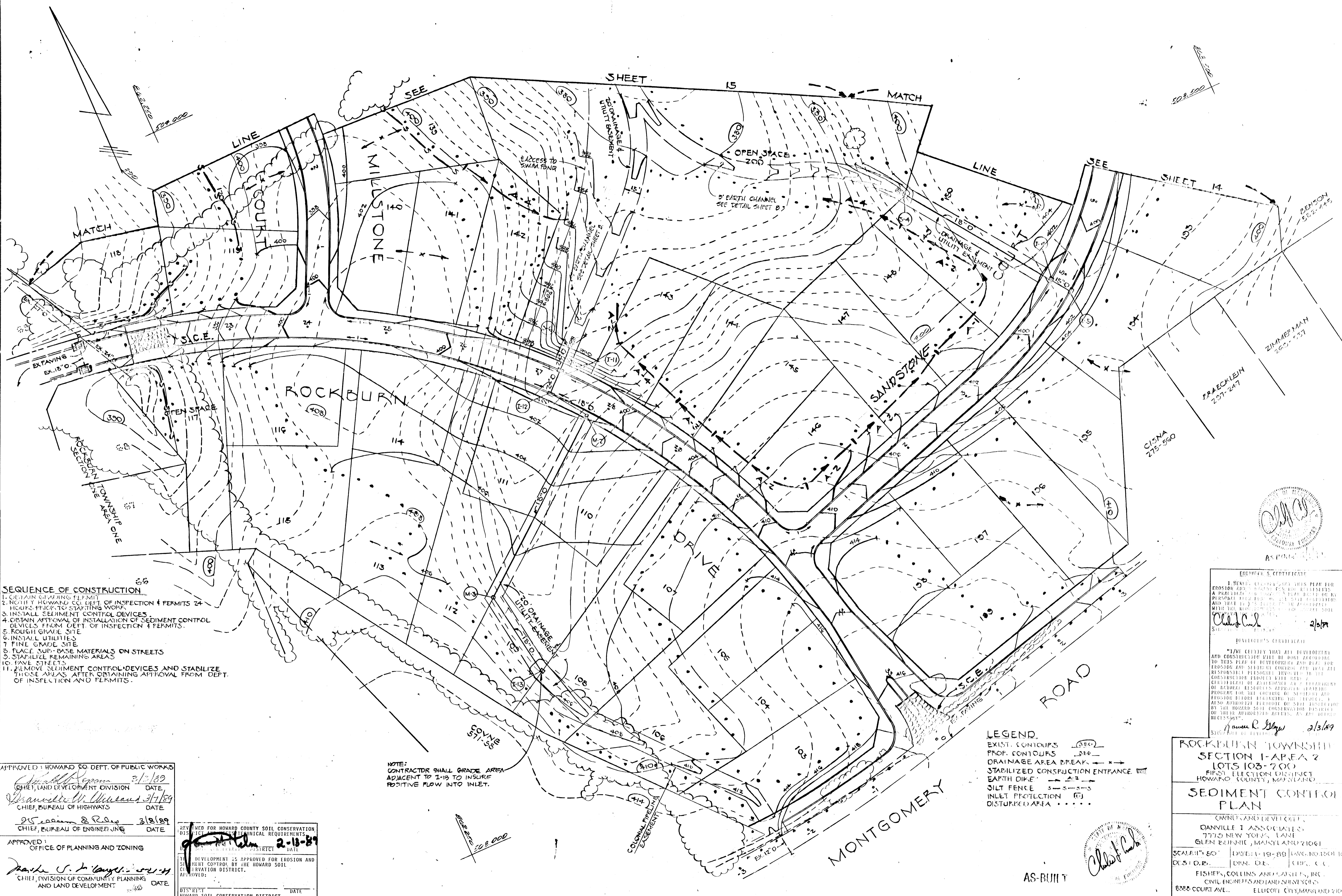
SCALE: 1"=30'
DATE: 1-18-89
DES: D.B.
DRAWN: D.B.
CHK: C.C.

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
6388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

AS-BUILT



1373



- SEQUENCE OF CONSTRUCTION**
1. OBTAIN GRADING PERMIT
 2. NOTIFY HOWARD CO. DEPT. OF INSPECTION & PERMITS 24 HOURS PRIOR TO STARTING WORK
 3. INSTALL SEDIMENT CONTROL DEVICES
 4. OBTAIN APPROVAL OF INSTALLATION OF SEDIMENT CONTROL DEVICES FROM DEPT. OF INSPECTION & PERMITS
 5. ROUGH GRADE SITE
 6. INSTALL UTILITIES
 7. FINE GRADE SITE
 8. PLACE SUB-BASE MATERIALS ON STREETS
 9. STABILIZE REMAINING AREA
 10. PAVE STREETS
 11. REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE THOSE AREAS AFTER OBTAINING APPROVAL FROM DEPT. OF INSPECTION AND PERMITS.

APPROVED: HOWARD CO. DEPT. OF PUBLIC WORKS
Howard Co. Dept. of Public Works 3/13/89
 CHIEF, LAND DEVELOPMENT DIVISION DATE
Manville W. Wilson 3/17/89
 CHIEF, BUREAU OF HIGHWAYS DATE
W. E. ... 3/2/89
 CHIEF, BUREAU OF ENGINEERING DATE
 APPROVED: OFFICE OF PLANNING AND ZONING
Mark S. ...
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT
[Signature] 2-13-89
 DISTRICT ENGINEER DATE
 DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: _____ DATE
 DISTRICT HOWARD SOIL CONSERVATION DISTRICT

NOTE:
 CONTRACTOR SHALL GRADE AREA ADJACENT TO I-13 TO INSURE POSITIVE FLOW INTO INLET.

- LEGEND**
- EXIST. CONTOURS (380)
 - PROP. CONTOURS (380)
 - DRAINAGE AREA BREAK
 - STABILIZED CONSTRUCTION ENTRANCE
 - EARTH DIKE
 - SILT FENCE
 - INLET PROTECTION
 - DISTURBED AREA

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL MEASURES A PROPERLY ENGINEERED PLAN FOR ALL PERSONAL PROPERTY ON THE SITE AND THAT IT IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Charles C. ... 2/13/89
 DISTRICT ENGINEER

ROCKBURN TOWNSHIP
 SECTION 1-AREA 2
 LOTS 103-700
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
SEDIMENT CONTROL PLAN
 OWNED AND DEVELOPTD BY
 DANVILLE 1 ASSOCIATES
 7775 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061
 SCALE: 1" = 50' DATE: 1-19-89 (REV. 10/15/81)
 D.S. O.P. D.P.N. D.R. C.H.P. C.C.
 FISHER, COLLINS AND CASH, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELICOTT CITY, MARYLAND 21040

1379

PERMANENT SEEDING NOTES:
 APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE
 WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR
 OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED,
 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 20-20-20 UREA-BASED 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 SO.

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 SO2. 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 UNROTTE
 SKILL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY
 AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE
 (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET
 OR HIGHER, USE 340 GALLONS PER ACRE (6 GAL/1000 SQ.FT.) FOR ANCHORING.
 MAINTAINANCE: INSPECT ALL SEEDS 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.

SEEDING PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR
 OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED,
 SOIL AMENDMENTS: APPLY 400 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000
 SQ.FT.)

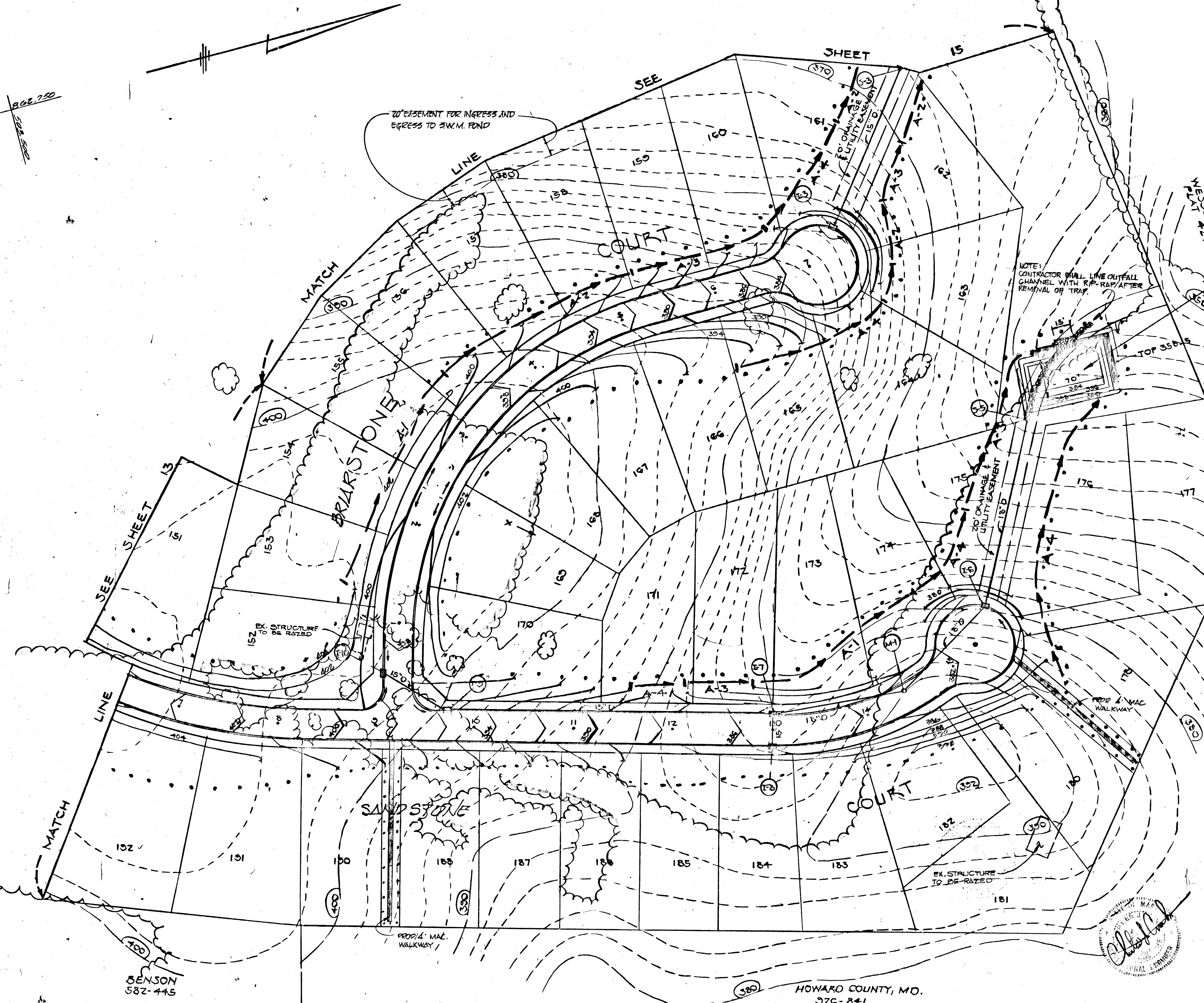
SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER
 15, SEED WITH 2 1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ.FT.).
 FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING
 LOVEGRASS (.07 LBS/1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28,
 PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED
 AS SOON AS POSSIBLE IN THE SPRING. USE SO2.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTE
 AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE
 (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FT. OR HIGHER,
 USE 340 GAL PER ACRE (6 GAL/1000 SQ.FT.) FOR ANCHORING.

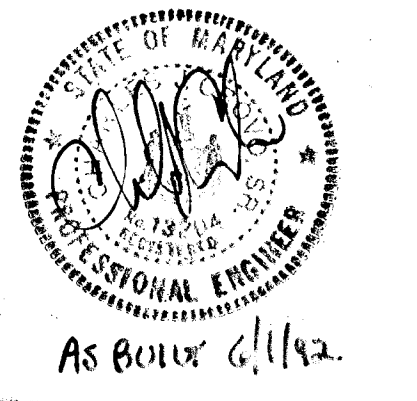
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND
 SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT CONTROL NOTES:

- 1) A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE
 OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION
 (5902-2437).
- 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 REDISTURBANCE, PERMANENT OR
 TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 2 CALENDAR DAYS
 FOR ALL PERIMETER 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/GASINGS SHALL 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) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND
 BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER
 SEEDING 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 53.5 ACRES
 AREA TO BE ROOFED OR PAVED 15.1 ACRES
 AREA TO BE VEGETATIVELY STABILIZED 38.4 ACRES
 TOTAL CUT 2180 CU.YDS.
 TOTAL FILL 2850 CU.YDS.
 OFFSITE WASTE/BORROW AREA LOCATION 2850 CU.YDS.
- 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY
 FOR REPAIR OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF
 DISTURBANCE.
- 9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY
 THE HOWARD COUNTY DPM SEDIMENT CONTROL INSPECTOR.
- 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF
 THE INSPECTION AGENCY SHALL BE REQUESTED 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.



TRAP NO. 3
 (STONE OUTLET SEDIMENT TRAP ST-V)
 DRAINAGE AREA - 3.7 AC.
 VOL. REQ. - 3.7 x 1800 = 6660 CF
 VOL. FREQ. = 6720
 SIZE - 70' x 32' x 3'
 BOTT. ELEV. = 353.5
 CREST WEIR = 357.5
 WIDTH WEIR = 15'
 TOP OF EMBANKMENT 358.5
 CLEANOUT ELEV. 355.0



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.

Robert A. [Signature] 1/1/89
 STATE ENGINEER

DEVELOPER'S CERTIFICATE
 I HEREBY 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 DEPARTMENT
 OF NATURAL RESOURCES APPROVED TRAINING
 PROGRAM FOR THE CONTROL OF SEDIMENT AND
 EROSION BEFORE BEING PERMITTED TO INSPECT
 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED
 NECESSARY.

Robert A. [Signature] 1/1/89
 STATE ENGINEER

ROCKBURN TOWNSHIP
SECTION 1-AREA 2
LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL PLAN

OWNER AND DEVELOPER
 DANNVILLE I ASSOCIATES
 7770 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061

SCALE: 1" = 50' DATE: 1-19-89 DWG. NO. 104 OF 14
 DES. O. B. ORN. O. B. CHK. C. C.

FISHER, COLLINS AND PARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

APPROVED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

DATE: 2-13-89

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

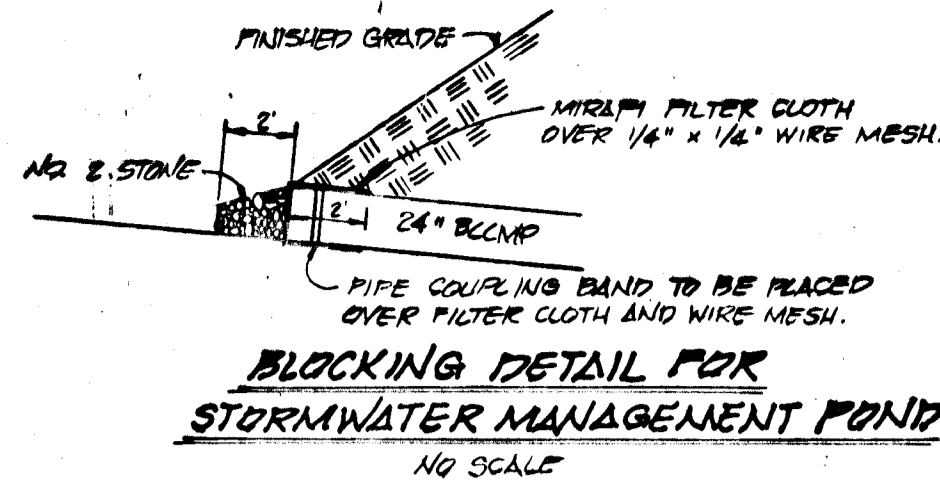
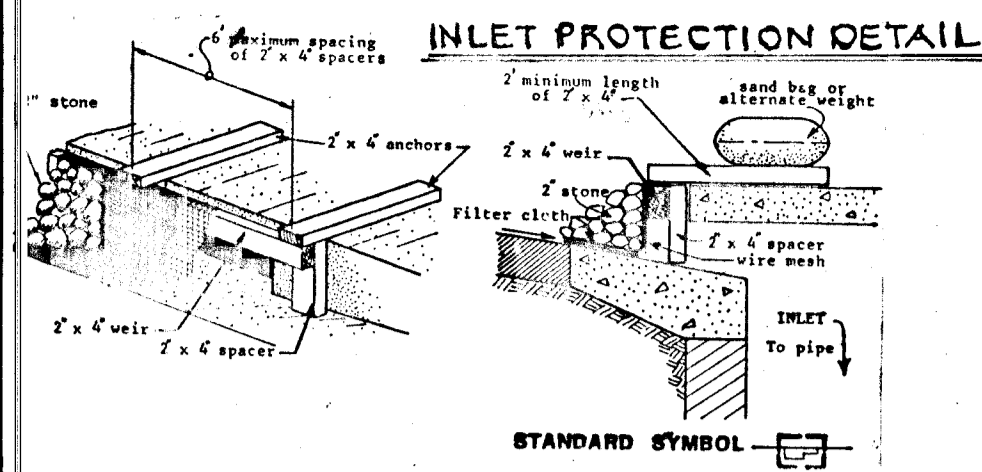
APPROVED: [Signature] DATE: 3/2/89
 CHIEF, LAND DEVELOPMENT DIVISION

[Signature] DATE: 3/1/89
 CHIEF, BUREAU OF HIGHWAYS

[Signature] DATE: 3/1/89
 CHIEF, BUREAU OF ENGINEERING

APPROVED: [Signature] DATE: 3-21-89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

1379



3. Inlet Protection.
1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (supporting throat length plus 2") as shown on the standard drawing.
 2. Place a piece of approved filter cloth (40-85 sigma) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
 3. Securely nail the 2" x 4" weir to the long wall (weir) to be located between the inlet throat and inlet face (see 2' spacer).
 4. Place the assembly against the inlet throat and wall (minimum 2' length of 2" x 4" to the top of the weir at spacer location). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
 5. The assembly shall be placed so that the end spacer are a minimum 1" beyond both ends of the throat opening.
 6. Form the wire mesh and filter cloth to the concrete grade and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
 8. Assume that storm flow does not bypass inlet by installing temporary earth or asphalt dike directing flow into inlet.

TRAP NO. 6 (STONE OUTLET SEDIMENT TRAP ST-V)
 DRAINAGE AREA = 2.0 AC
 VOL. REQ. = 2.0 x 1800 = 3600 CF
 VOL. PROV. = 3600 CF
 SIZE = 30" x 40" x 3"
 CREST WEIR = 364.00
 WIDTH WEIR = 6"
 TOP OF EMBANKMENT = 365.00
 CLEANOUT ELEV. = 361.50

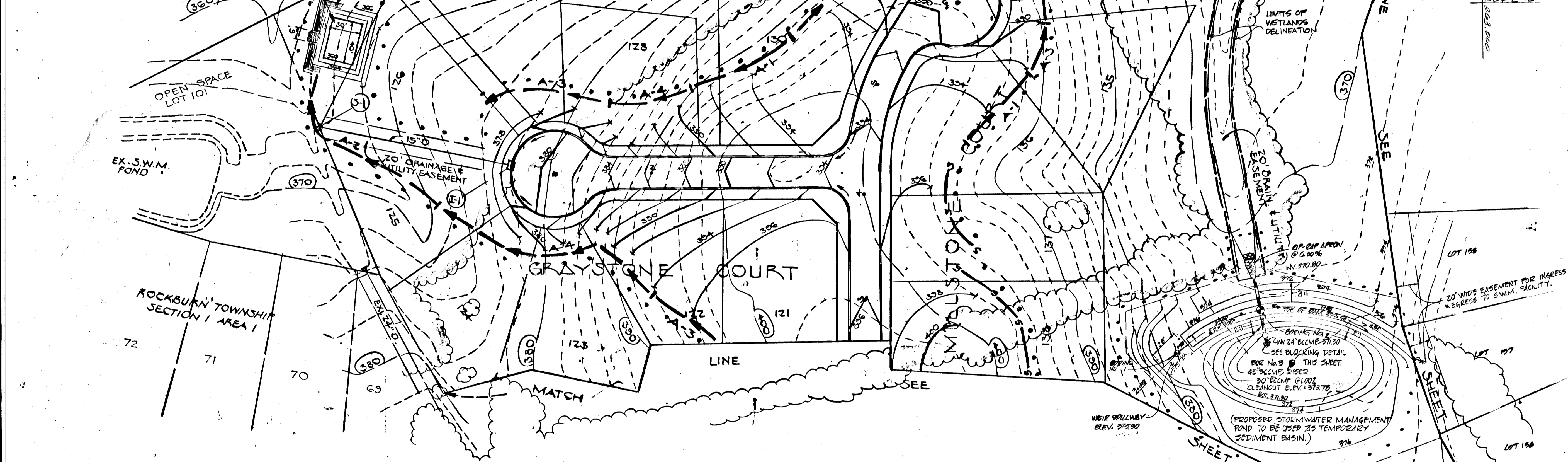
TRAP NO. 4 (STONE OUTLET SEDIMENT TRAP ST-V)
 DRAINAGE AREA = 2.0 AC
 VOL. REQ. = 2.0 x 1800 = 3600 CF
 VOL. PROV. = 3600 CF
 SIZE = 30" x 40" x 3"
 BOTT. ELEV. = 355.00
 CREST WEIR = 363.00
 WIDTH WEIR = 6"
 TOP OF EMBANKMENT = 364.00
 CLEANOUT ELEV. = 360.5

LOT 2 WESSEL PROPERTY PLAT 4-275

POND CONSTRUCTION CERTIFICATION

I CERTIFY THAT UPON COMPLETION OF CONSTRUCTION I WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE (O&M) OF THE SMALL POND. O&M WILL BE PERFORMED BY ME IN ACCORDANCE WITH THE SPECIFICATIONS ON THIS PLAN. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS OF THE POND BY STATE AND LOCAL AGENCIES.

Signature: *James R. Glegg* DATE: 2/3/89



STORM WATER MANAGEMENT POND CERTIFICATION AND APPROVAL

DEVELOPER'S CERTIFICATE
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 Signature: *Russell R. Gloger* DATE: 2/3/89
 SIGNATURE OF DEVELOPER DATE

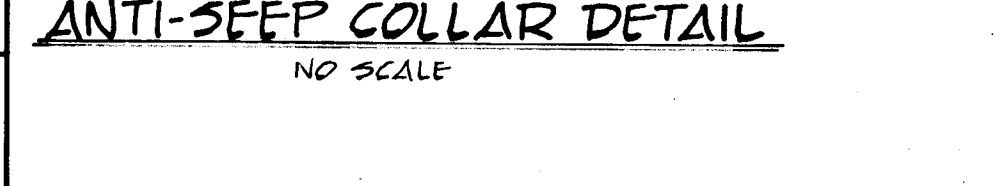
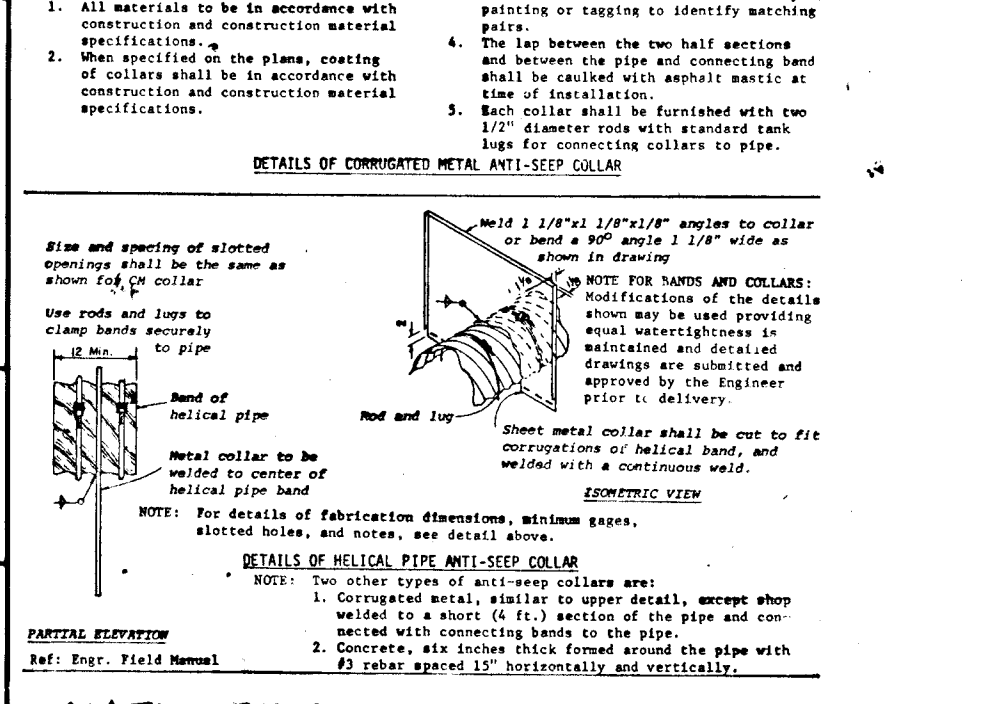
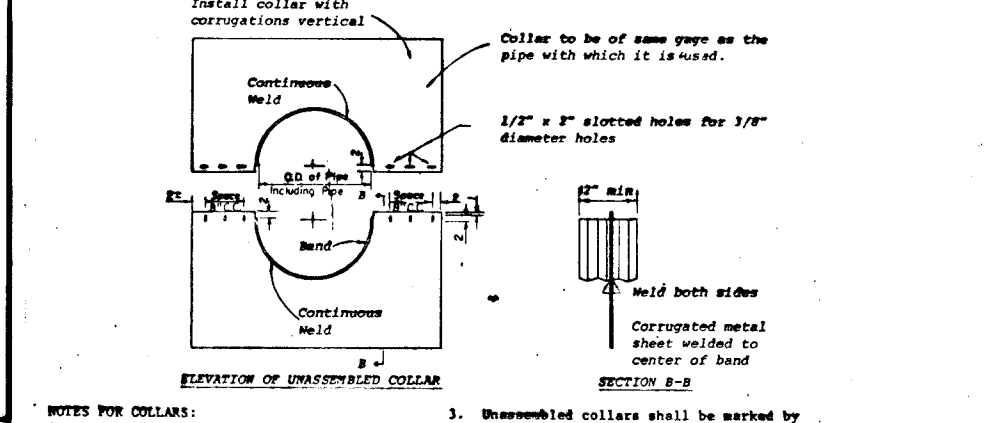
ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND HONORABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 Signature: *Charles J. Gloger* DATE: 2/3/89
 SIGNATURE OF ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 Signature: *Charles J. Gloger* DATE: 2/13/89
 SIGNATURE OF ENGINEER DATE

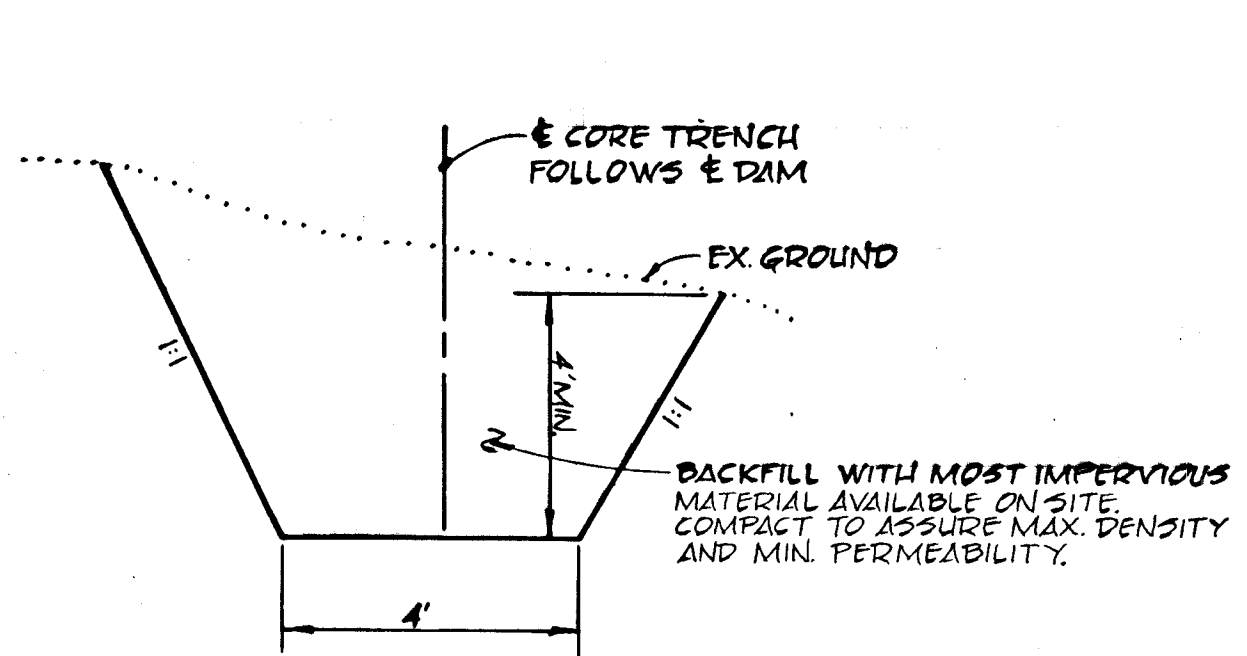
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *Charles J. Gloger* DATE: 2/13/89
 SIGNATURE OF ENGINEER DATE

HOWARD SOIL CONSERVATION DISTRICT DATE: 2-21-89
 APPROVED: OFFICE OF PLANNING AND ZONING
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION DATE: 2/24/89

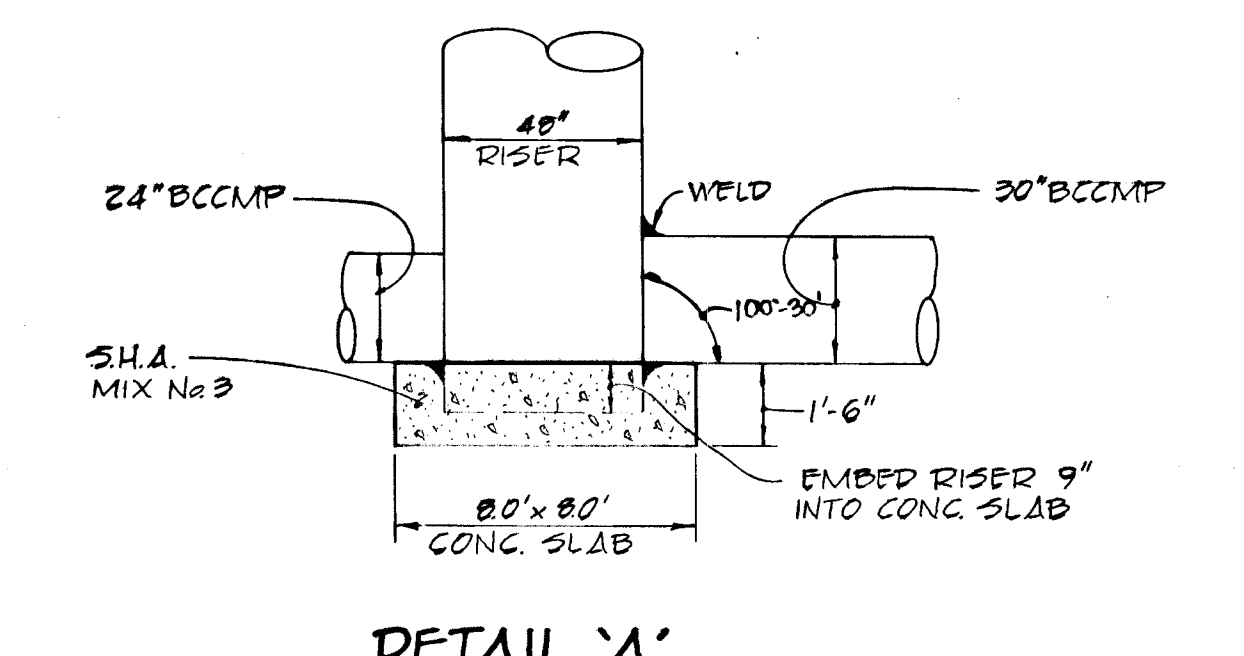
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS DATE: 3/7/89
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 2/18/89
 CHIEF, BUREAU OF ENGINEERING



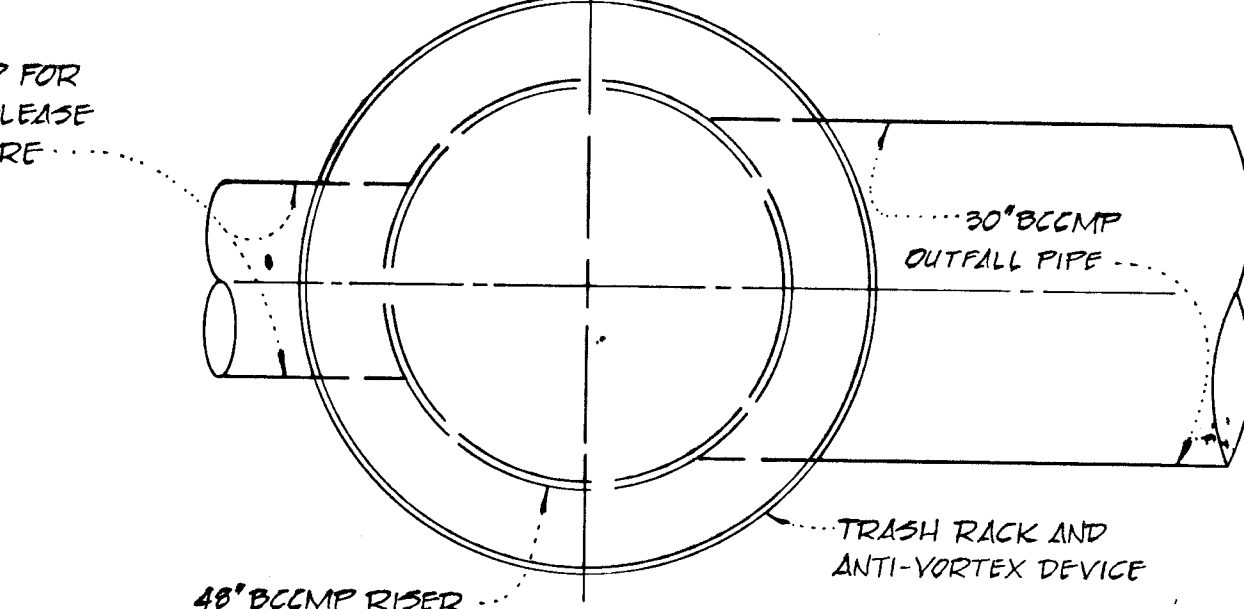
POND CONSTRUCTION CERTIFICATION
 I CERTIFY THAT UPON COMPLETION OF CONSTRUCTION I WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE (O&M) OF THE SMALL POND. O&M WILL BE PERFORMED BY ME IN ACCORDANCE WITH THE SPECIFICATIONS ON THIS PLAN. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS OF THE POND BY SITE AND LOCAL AGENCIES.
 Signature: *Russell R. Gloger* DATE: 2/3/89
 SIGNATURE OF DEVELOPER DATE



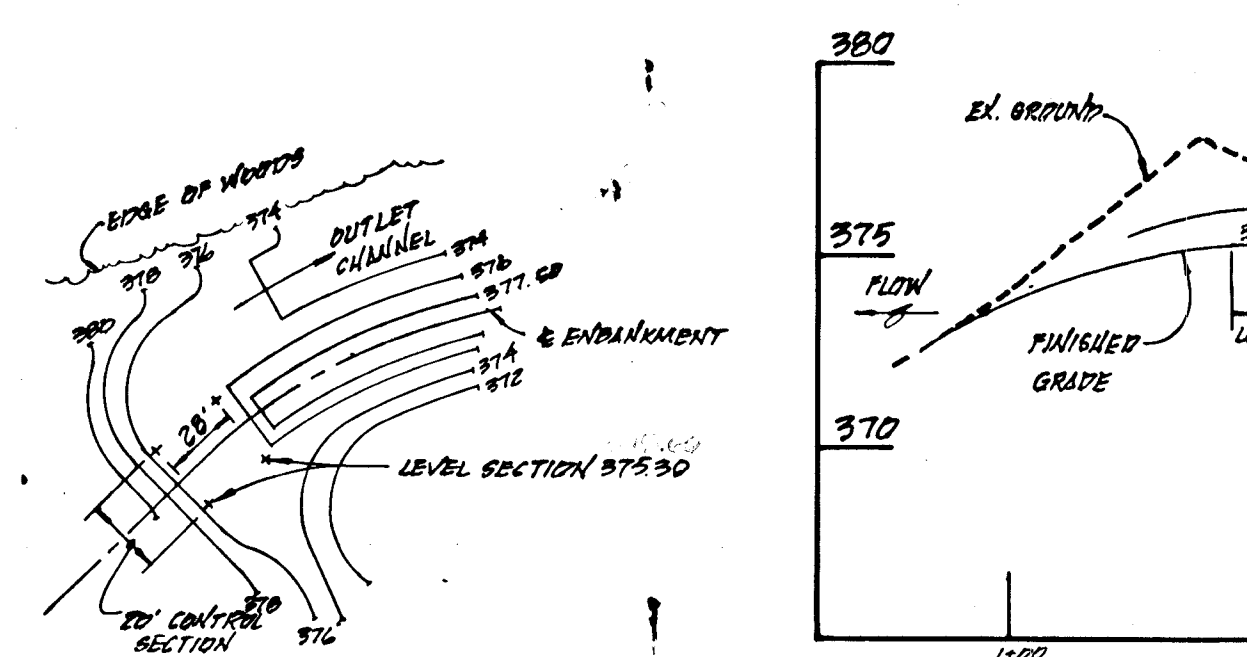
CORE TRENCH DETAIL
 NO SCALE
 NOTE: CORE TRENCH SHALL BE DEWATERED, BY PUMPING, DURING THE BACKFILLING - COMPACTION OPERATIONS.



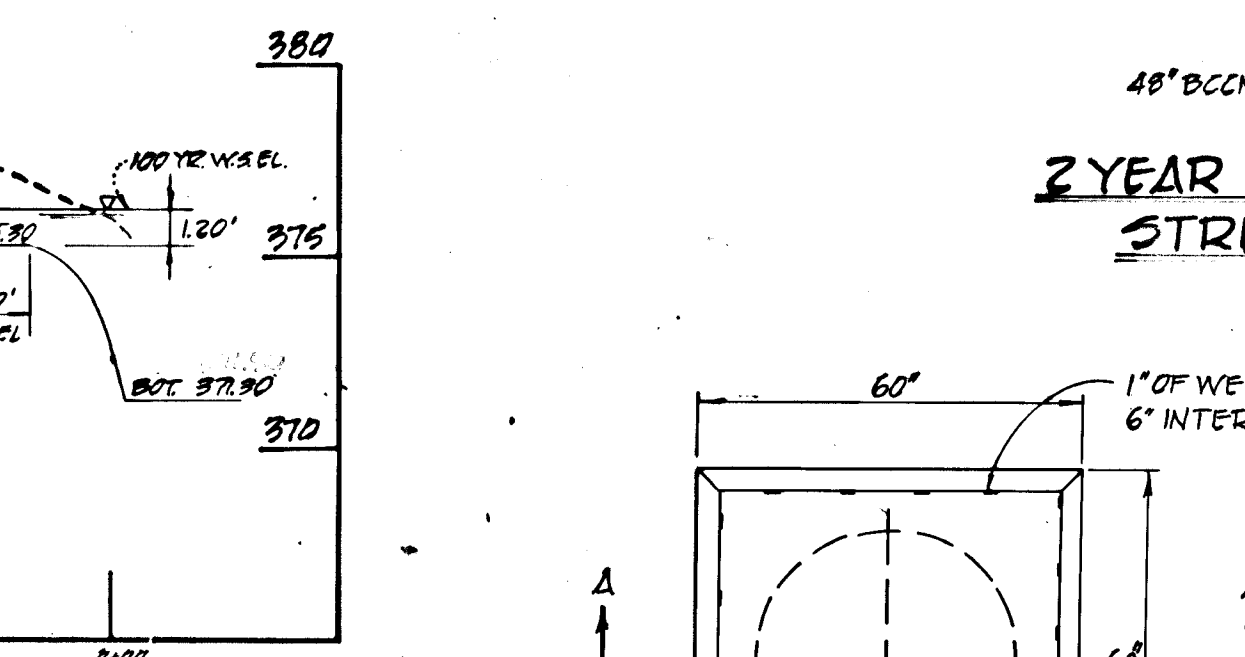
DETAIL 'A'
 NO SCALE



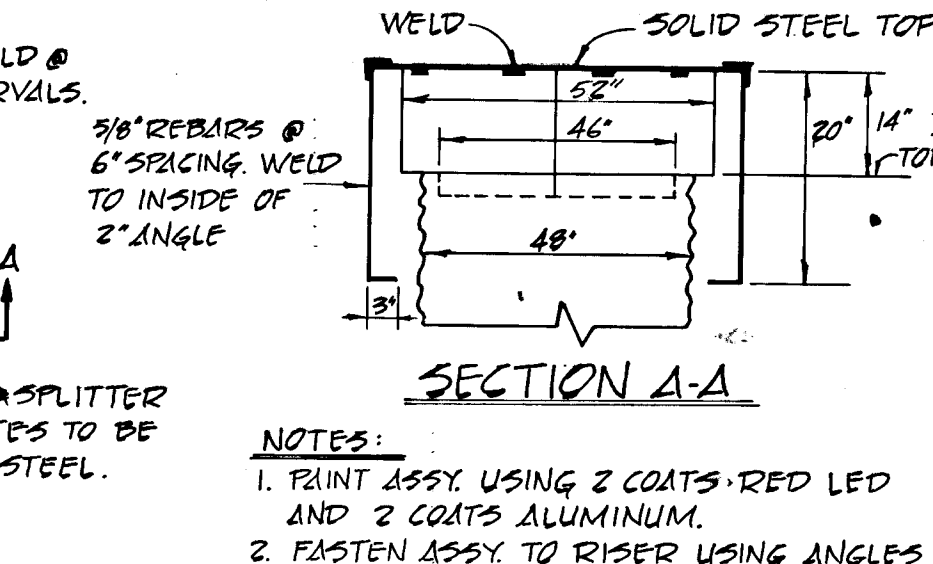
2 YEAR * 10 YEAR RELEASE STRUCTURE DETAIL
 NO SCALE



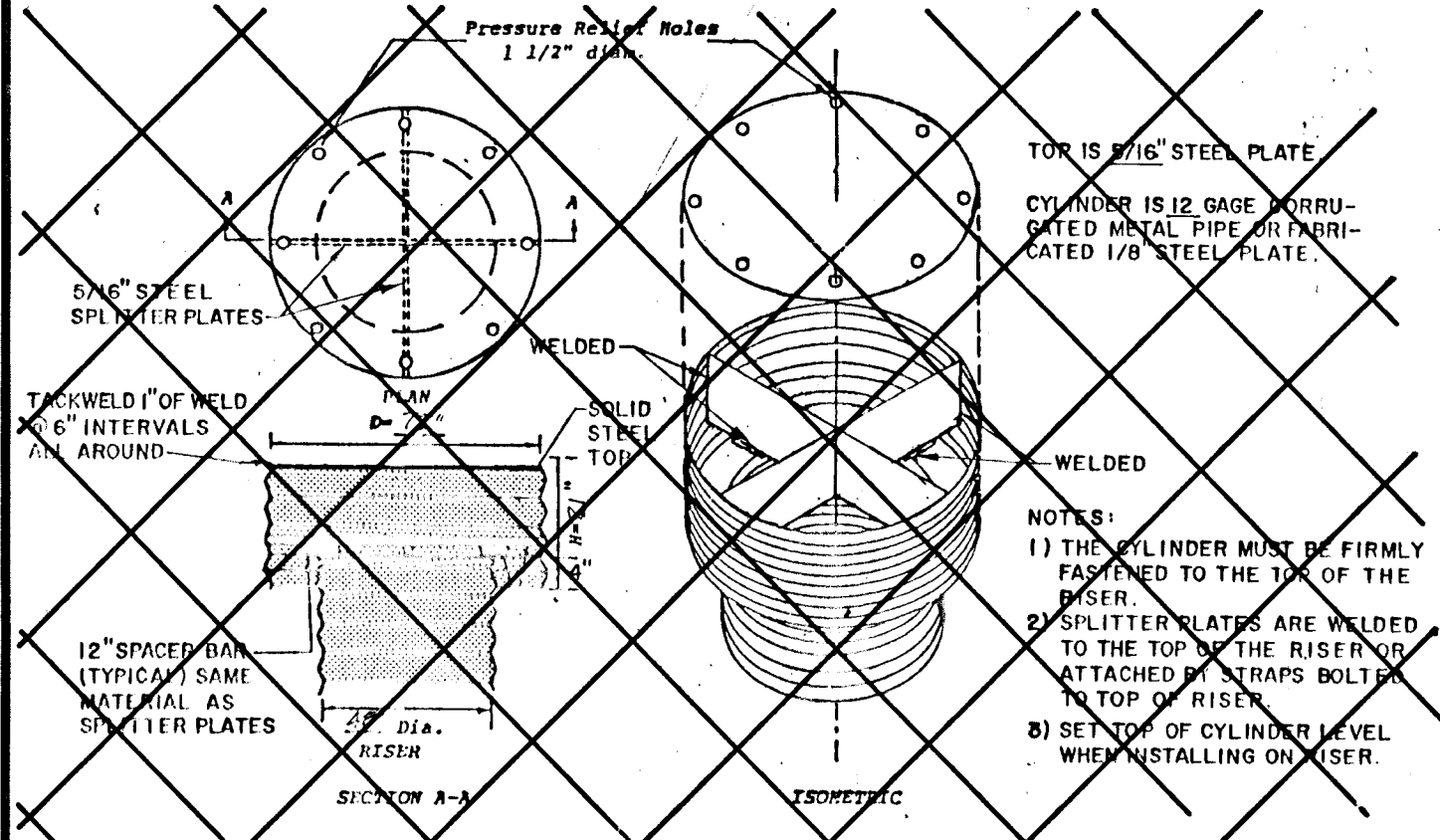
PLAN OF EARTH SPILLWAY
 SCALE: 1" = 50'



PROFILE ALONG & EARTH SPILLWAY
 SCALE: 1" = 50' HORIZ.
 1" = 5' VERT.



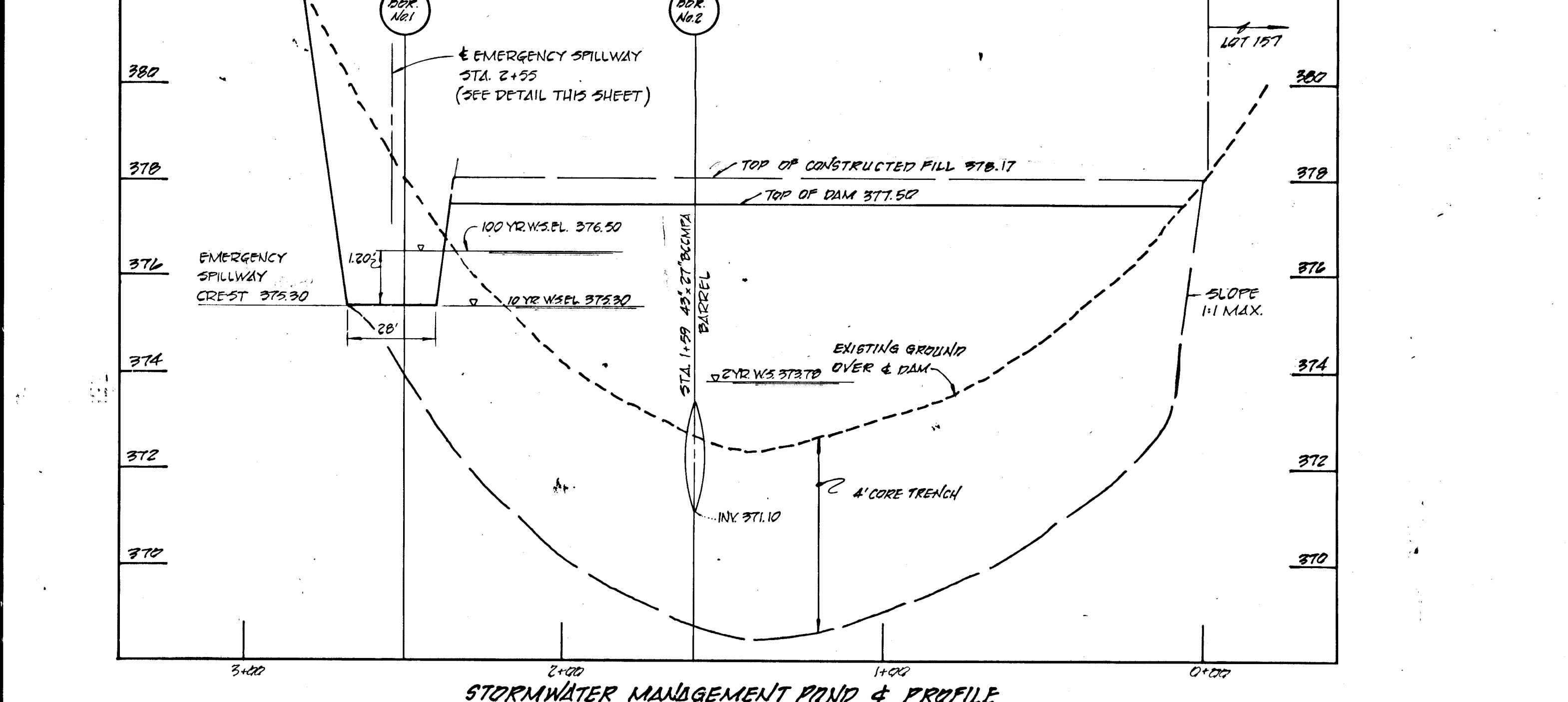
SECTION A-A
 NOTES:
 1. PAINT ASSY USING 2 COATS RED LED AND 2 COATS ALUMINUM.
 2. FASTEN ASSY TO RISER USING ANGLES BOLTED TO SPLITTER PLATES * VERTICAL RISER PIPE.
 3. SET TOP OF ASSY LEVEL WHEN INSTALLING ON RISER.



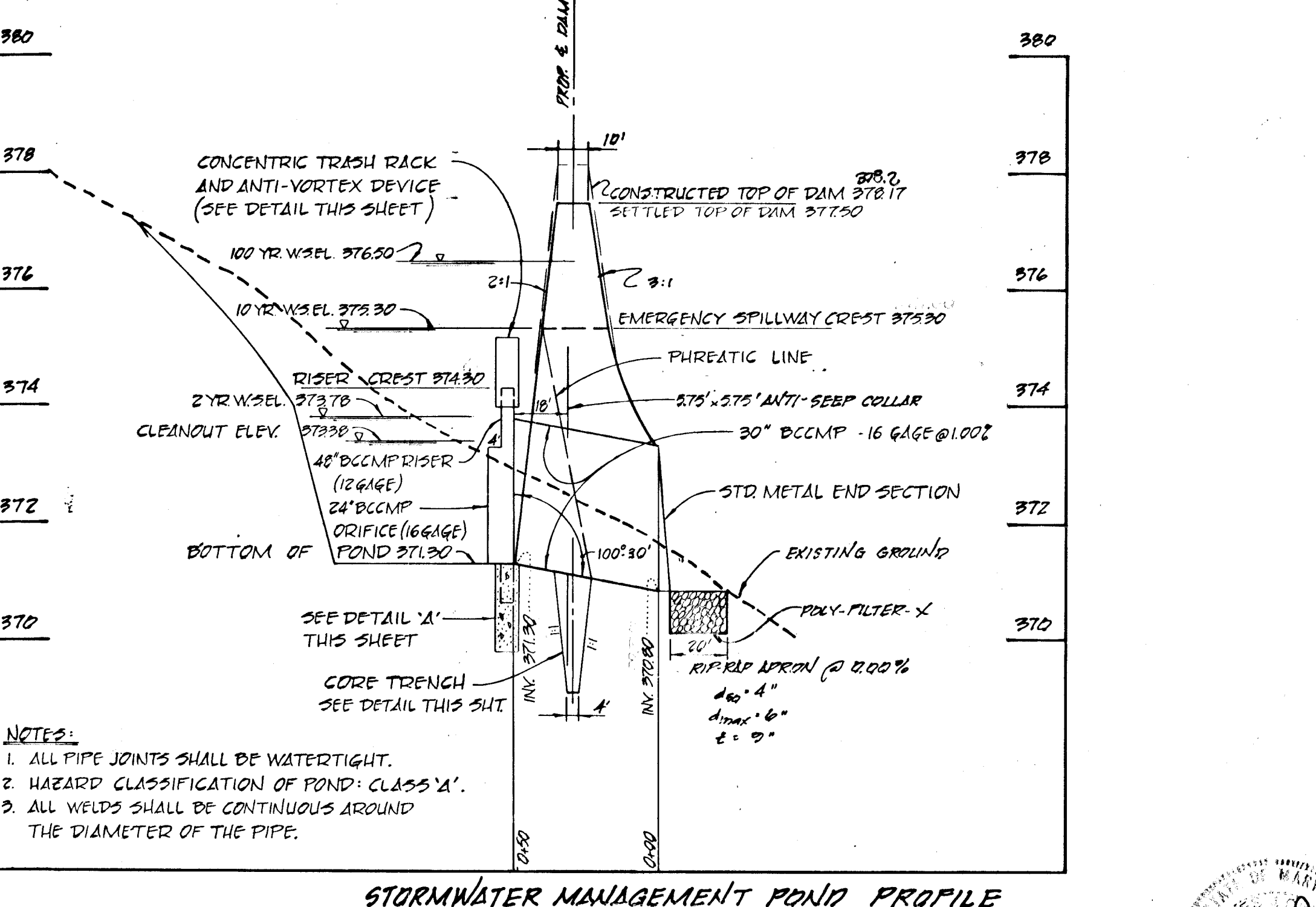
CONCENTRIC TRASH RACK & ANTI-VORTEX DEVICE
 NO SCALE

EMERGENCY SPILLWAY DETAILS @ S.W.M. POND

FABRICATION DETAILS FOR TRASH GAUARD - ANTI-VORTEX DEVICE
 NOT TO SCALE



STORMWATER MANAGEMENT POND & PROFILE
 SCALE: 1" = 30' HORIZ.
 1" = 2' VERT.



STORMWATER MANAGEMENT POND PROFILE
 SCALE: 1" = 40' HORIZ.
 1" = 2' VERT.

STORMWATER MANAGEMENT POND NOTES

- SITE PREPARATION**
 Areas under the embankment and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. To facilitate clean-out and restoration, it is recommended that the permanent pool area be cleared of all brush and trees.
- EARTH FILL MATERIAL**
 The fill material shall be taken from approved designated borrow areas or areas. It shall be free from roots, stumps, wood, rubbish, over-size stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased at least 10 percent above the design elevation (including free-board) unless otherwise shown on the plans. All fill material shall be CL or ML, as approved by Soils Engineer.
Placement
 Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8 inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.
Core Trench
 Where specified, a core trench shall be excavated along or parallel to the centerline of the embankment, as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation. The minimum width being 4 feet. The depth shall be at least 4 feet or as shown on the plans. The side slopes of the trench shall be 1:1 or flatter. The backfill material for the core trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability. Compact to 95% of ASTM D-1557 density. Materials shall be CL or ML as approved by Soils Engineer.
- STRUCTURAL BACKFILL**
 Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed 4 inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than 4 feet to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a structure or pipe unless there is a compacted fill of 2 feet or greater over the structure or pipe.
- PIPE CONDUITS**
 A. CORRUGATED METAL PIPE
 1. Materials - Metal Pipe - This pipe and its appurtenances shall conform to the requirements of ASTM Specification M-150 or M-211, with watertight coupling bands.
 2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the control structure shall be mortared all around. Watertight couplings bands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.
 3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
 4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
 5. Backfilling shall conform to structural backfill as shown above.
 6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
 B. CONCRETE
 Concrete shall meet minimum requirements set forth in Maryland State Highway Administration Specifications for Materials, Highways, Bridges, and Incidental Structures, Article 20.07 (Portland Cement Concrete), Mix No. 3.
 C. STABILIZATION
 All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway and borrow areas shall be protected by permanent seeding and applying straw mulch in accordance with "Standards and Specifications for Soil Erosion and Sediment Control in Urbanizing Areas" immediately after finish grading.

Fertilizer:	10-10-10	@ 11.5 lbs./1000 sq.ft.
Seed:	Crownvetch inoculated	@ 0.5 lbs./1000 sq.ft.
	"K3-31" tall fescue	@ 1.5 lbs./1000 sq.ft.
Mulch:	Straw	@ 80 lbs./1000 sq.ft.
Asphalt Tie-down:	Slopes	@ 8 gal./1000 sq.ft.
	Flat areas	@ 5 gal./1000 sq.ft.

ROCKBURN TOWNSHIP
SECTION 1 - AREA 2
LOTS 103-200
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
STORMWATER MANAGEMENT POND
PLAN & PROFILES
 DWG. AND DESIGN BY
 DANVILLE 3 ASSOCIATES
 7715 NEW YORK LANE
 GLEN BURNIE, MARYLAND 21061
 SCALE: AS SHOWN DATE: 1-15-89 DWG. NO. 16-89-10
 DES. BY: DAN DATE: 1-15-89 CHK. BY: C.J.G.
 DESIGNER, COLLINS AND CARTER INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8308 COURT AVE. ELLICOTT CITY, MD 21117

1300