GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, i.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTER SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL TEST PIT FOR EXISTING UTILITIES AT LEAST FIVE (5) DAYS PRIOR TO STARTING WORK SHOWN ON THESE DRAWINGS.
4. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAY PRIOR TO BEGINNING WORK SHOWN ON THESE DRAWINGS.
   - MISS UTILITY....................559-0100
   - BELL TELEPHONE SYSTEM....................393-3649
   - LONG DISTANCE CABLE DIVISION....................393-3553/3554
   - BALTIMORE GAS & ELECTRIC COMPANY....................539-8000
   - HOWARD COUNTY BUREAU OF UTILITIES....................992-2366
   - HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR OF COMMENCEMENT OF WORK)....................792-7272
5. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
6. ALL STREET CURB RETURNS SHALL HAVE 25' RADII UNLESS OTHERWISE NOTED.
7. STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOL. IV, i.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
8. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1978 EDITION (REVISED).
9. PIPE SHALL NOT BE INSTALLED BY CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
10. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS.
    - GRAY ROCK DR. - 60' R/W (MINOR COLLECTOR) - 35 MPH
    - PAUL MILL RD. - 50' R/W (LOCAL ROAD) - 30 MPH
    - WALT MILL CT. - 50' R/W (CUL-DE-SAC) - 25 MPH
    - YELLOWSTONE CT. - 50' R/W (CUL-DE-SAC) - 25 MPH
    - SAND CREEK CT. - 50' R/W (CUL-DE-SAC) - 25 MPH
11. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
12. ALL FILL AREAS WITHIN ROADWAYS AND/OR UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% COMPACTION.
13. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
15. SUBJECT PROPERTY ZONED R-20 PER 08-02-85 COMPREHENSIVE ZONING PLAN.
16. TOPO SHOWN HEREON WAS FIELD RUN BY BOENDER ASSOCIATES ON: AUG & JUL. 1987.
17. NO PIPE SHALL BE LAID IN PLACE UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO WITHIN SIX (6) INCHES OF FINISHED GRADE ELEVATIONS.
18. ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4 OF THE HOWARD COUNTY DESIGN MANUAL, VOL. I, UNLESS OTHERWISE NOTED.
19. STREET LIGHT 'A' 250 W MERCURY VAPOR LAMP PENDENT MOUNTED FIXTURE ON 25-FOOT GALVANIZED STEEL POLE. STREET LIGHT 'B' - 175 W MERCURY VAPOR LAMP POST TOP FIXTURE ON 14 FOOT GRAY FIBERGLASS POLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Land Development Division — Date 1-29-88

Chief, Bureau of Highways — Date 1/29/88

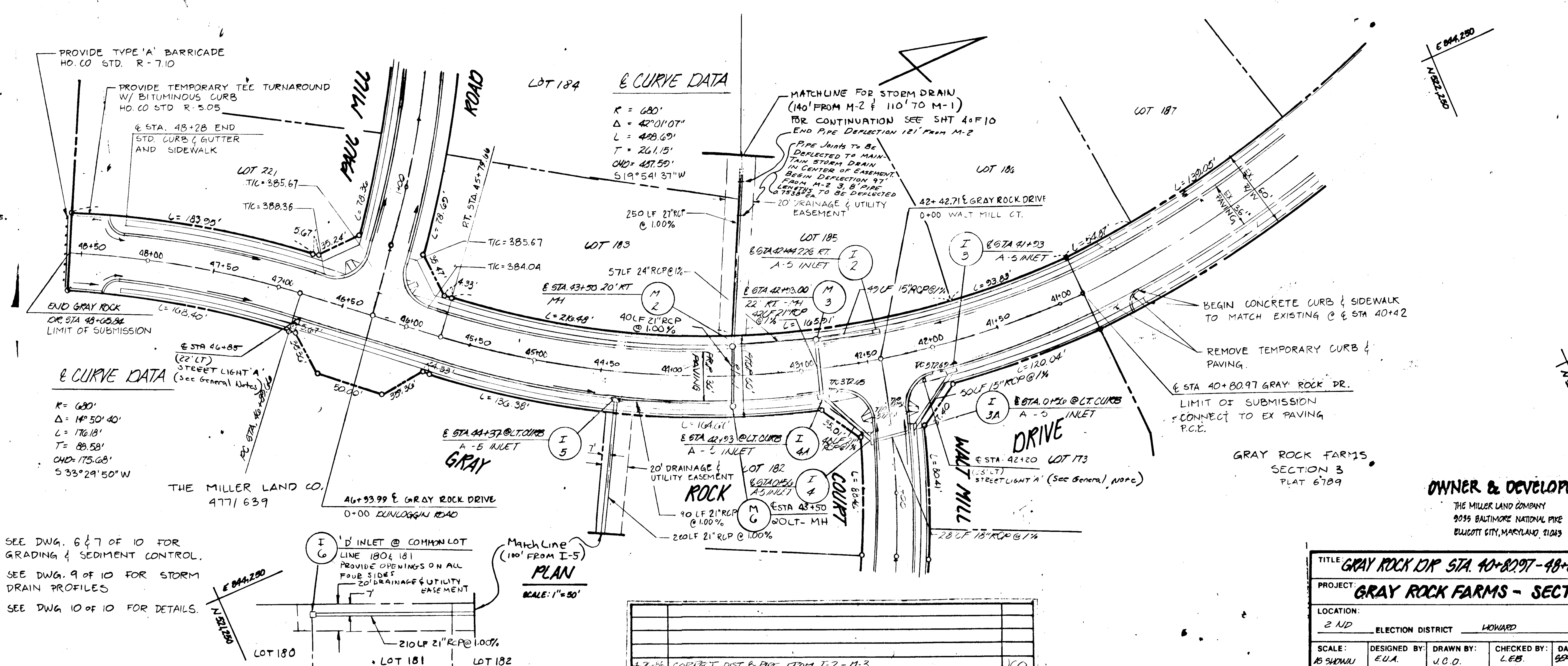
Chief, Bureau of Engineering — Date 2-2-88

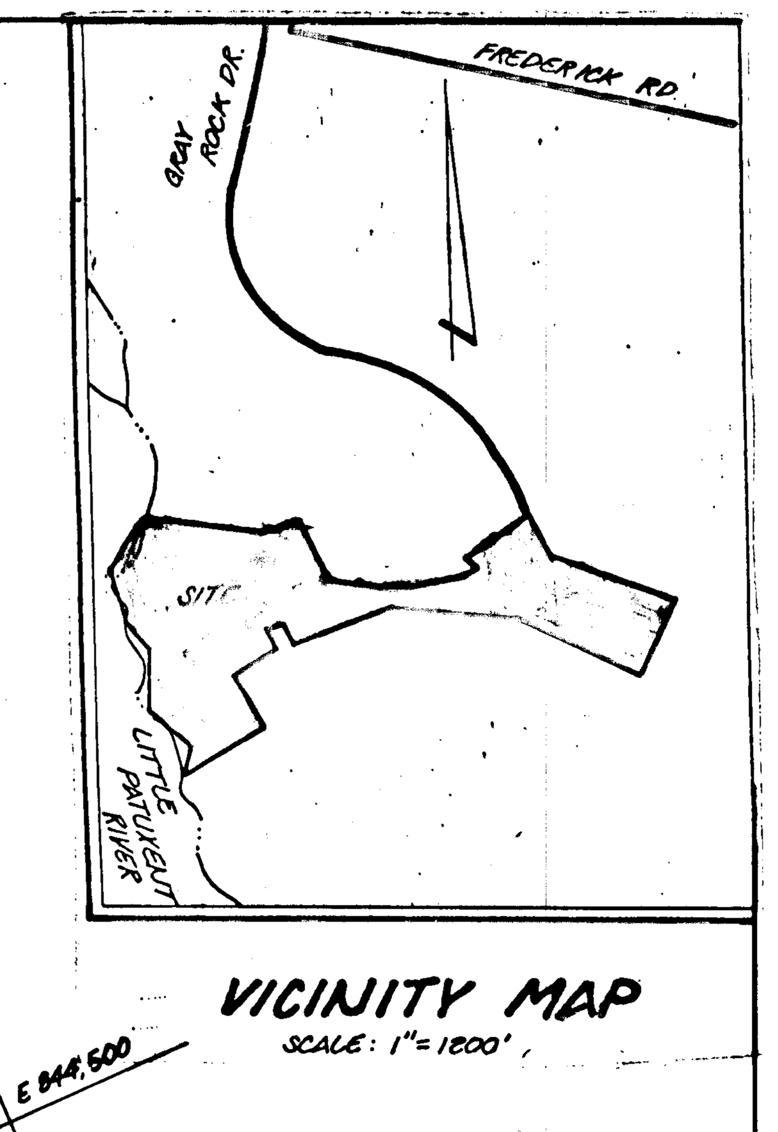
APPROVED: OFFICE OF PLANNING AND ZONING

Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT — Date 2/16/88

NOTES:

1. SEE DWG. 6 & 7 OF 10 FOR GRADING & SEDIMENT CONTROL.
2. SEE DWG. 9 OF 10 FOR STORM DRAIN PROFILES
3. SEE DWG. 10 OF 10 FOR DETAILS.





OWNER & DEVELOPER

THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

DATE	DESCRIPTION	BY
4-26-88	CORRECT DIST. & PIPE FROM I-2-M-3	JCO

REVISIONS

TITLE: GRAY ROCK DR STA. 40+80.97 - 48+65.84	
PROJECT: GRAY ROCK FARMS - SECT. 4	
LOCATION: 2 ND ELECTION DISTRICT HOWARD CO., MD.	
SCALE: AS SHOWN	DESIGNED BY: E.U.A.
DRAWN BY: J.C.O.	CHECKED BY: L.E.B.
DATE: SEPT., 1987	FIELD BOOK: -
PAGE NO.: -	JOB NO.: 8737
DRAWING NO.: 1 OF 10	

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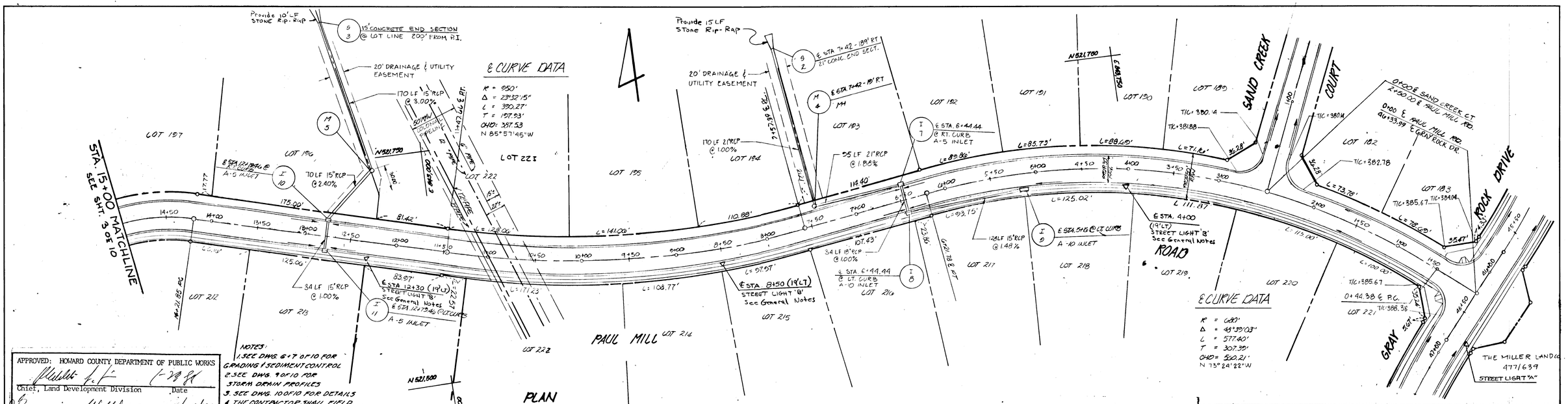
(301) 465-7777

K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.
48 7024 MADE IN U.S.A.

F 88-77

242



PLAN
SCALE: 1"=50'

NOTES:
1. SEE DWG. 6+7 OF 10 FOR GRADING & SEDIMENT CONTROL
2. SEE DWG. 9 OF 10 FOR STORM DRAIN PROFILES
3. SEE DWG. 10 OF 10 FOR DETAILS
4. THE CONTRACTOR SHALL FIELD LOCATE THE EXISTING COLONIAL PIPELINES TO DETERMINE THE EXACT LOCATION PRIOR TO BEGINING CONSTRUCTION AT THE SITE. COLONIAL PIPELINE SHALL BE NOTIFIED AT LEAST 2 WORKING DAYS PRIOR TO BEGINING WORK (301-795-1390).

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

1-28-88
Chief, Land Development Division — Date

Granville W. Wehland 1/29/88
Chief, Bureau of Highways — Date

2-2-88
Chief, Bureau of Engineering — Date

APPROVED: OFFICE OF PLANNING AND ZONING

Joseph Rutter 2/16/88
Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT — Date

DATE	DESCRIPTION	BY
9-21-88	REVISE RD. GRADE BETWEEN 8+70 & 13+50, SHOW PITTED PIPE ELEVATION	XO
01/15	REVISED VERTICAL CURVE (PVI STA. 2+04.00)	E.U.A.

REVISIONS

5/29/87

OWNER & DEVELOPER
THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

TITLE: PAUL MILL RD. STA. 0+00 - 15+00
PROJECT: GRAY ROCK FARMS - SECT. 4
LOCATION: 2ND ELECTION DISTRICT HOWARD CO., MD.

SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:
AS SHOWN	E.U.A.	J.C.O.	L.E.B.	SEPT., 1987

FIELD BOOK:	PAGE NO.:	JOB NO.:	DRAWING NO.:
-	-	8737	2 OF 10

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PLAN
NOTE BOOK
No.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK
No.
SURVEYED
PLOTS CHECKED
B.M.s NOTED
STRUCTURE LOCATIONS CHECKED
BY
DATE

PAUL MILL ROAD
DESIGN SPEED: 30 M.P.H.
PROFILE
SCALE HOR. 1"=50' VERT. 1"=5'

K+E PLATE 1, PLAN PROFILE KEUFFEL & ESSER CO
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F-88-77

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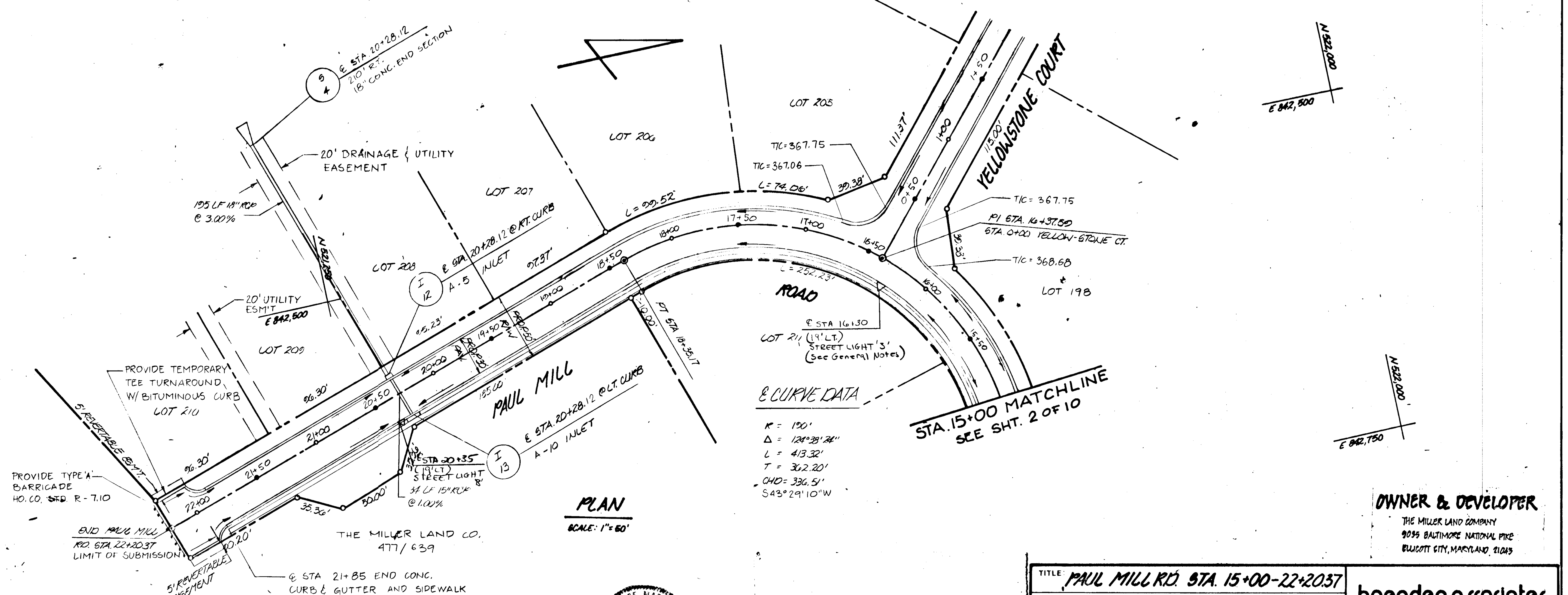

OWNER & DEVELOPER
THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Land Development Division — Date 1-29-88
Chief, Bureau of Highways — Date 1/29/88
Chief, Bureau of Engineering — Date 2-2-88

APPROVED: OFFICE OF PLANNING AND ZONING
Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT — Date 2/16/88

NOTES:
1. SEE DWG. 6 & 7 OF 10 FOR GRADING & SEDIMENT CONTROL
2. SEE DWG. 9 OF 10 FOR STORM DRAIN PROFILES
3. SEE DWG 10 OF 10 FOR DETAILS.

DATE	DESCRIPTION	BY
07/16	VERTICAL CURVE LENGTH CHANGED (FROM 250 TO 265)	E.U.A.
07/15	TURNAROUND DETAIL SHOWING DRAINAGE ADDED	E.U.A.

REVISIONS

TITLE:	PAUL MILL RD. STA. 15+00-22+20.37
PROJECT:	GRAY ROCK FARMS - SECT. 4
LOCATION:	2ND ELECTION DISTRICT HOWARD CO., MD.

SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:
AS SHOWN	E.U.A.	J.C.O.	L.E.B.	SEPT., 1987

FIELD BOOK:	PAGE NO.:	JOB NO.:	DRAWING NO.:
-	-	8737	3 OF 10

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PLAN | PROFILE

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F-88-77

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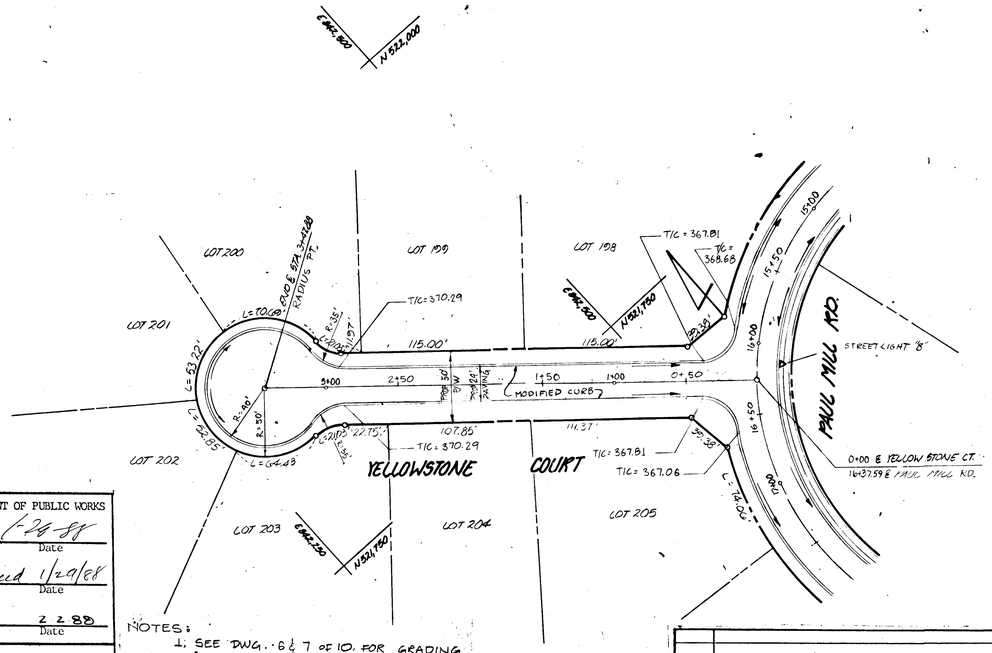

PLAN	
NOTE BOOK	SURVEYED PLOTTED ALIGNMENT CHECKED RT. OF WAY CHECKED
No.	

PROFILE	
NOTE BOOK	SURVEYED PLOTTED GRADES CHECKED B.M.'s NOTED STRUCTURE NOTATIONS CHECKED
No.	

242

℄ CURVE DATA
R = 106.37
Δ = 37°39'45"
L = 69.92'
T = 36.28'
CHD = 68.67'
N 04°45'46"E

PLAN

SCALE: 1" = 50'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

1-29-88
Chief, Land Development Division — Date

Granville W. Wehland 1/29/88
Chief, Bureau of Highways — Date

William E Riley 2 2 88
Chief, Bureau of Engineering — Date

APPROVED: OFFICE OF PLANNING AND ZONING

Joseph Rutter 2/16/88
Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT — Date

NOTES:

1. SEE DWG. 6 & 7 OF 10 FOR GRADING & SEDIMENT CONTROL
2. SEE DWG. 9 OF 10 FOR STORM DRAIN PROFILES
3. SEE DWG 10 OF 10 FOR DETAILS.

DATE	DESCRIPTION	BY
07/15	ROAD 'D' PROFILE CHANGED; ROAD 'B' - FIRST PVC MOVED 40' BACK	E.U.A.

REVISIONS

LUTHER E. BATHURST
No. 11333
5/21/87

OWNER & DEVELOPER

THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

TITLE: YELLOW STONE CT. STA. 0+00 TO 3+47.88 SAND CREEK CT. STA. 0+00 TO 2+65.9				
PROJECT: GRAY ROCK FARMS - SECT. 4				
LOCATION: 2ND ELECTION DISTRICT HOWARD CO., MD.				
SCALE: AS SHOWN	DESIGNED BY: E.U.A.	DRAWN BY: J.C.O.	CHECKED BY: L.E.B.	DATE: SEPT., 1987
FIELD BOOK: -	PAGE NO.: -	JOB NO.: 8737	DRAWING NO.: 4 OF 10	

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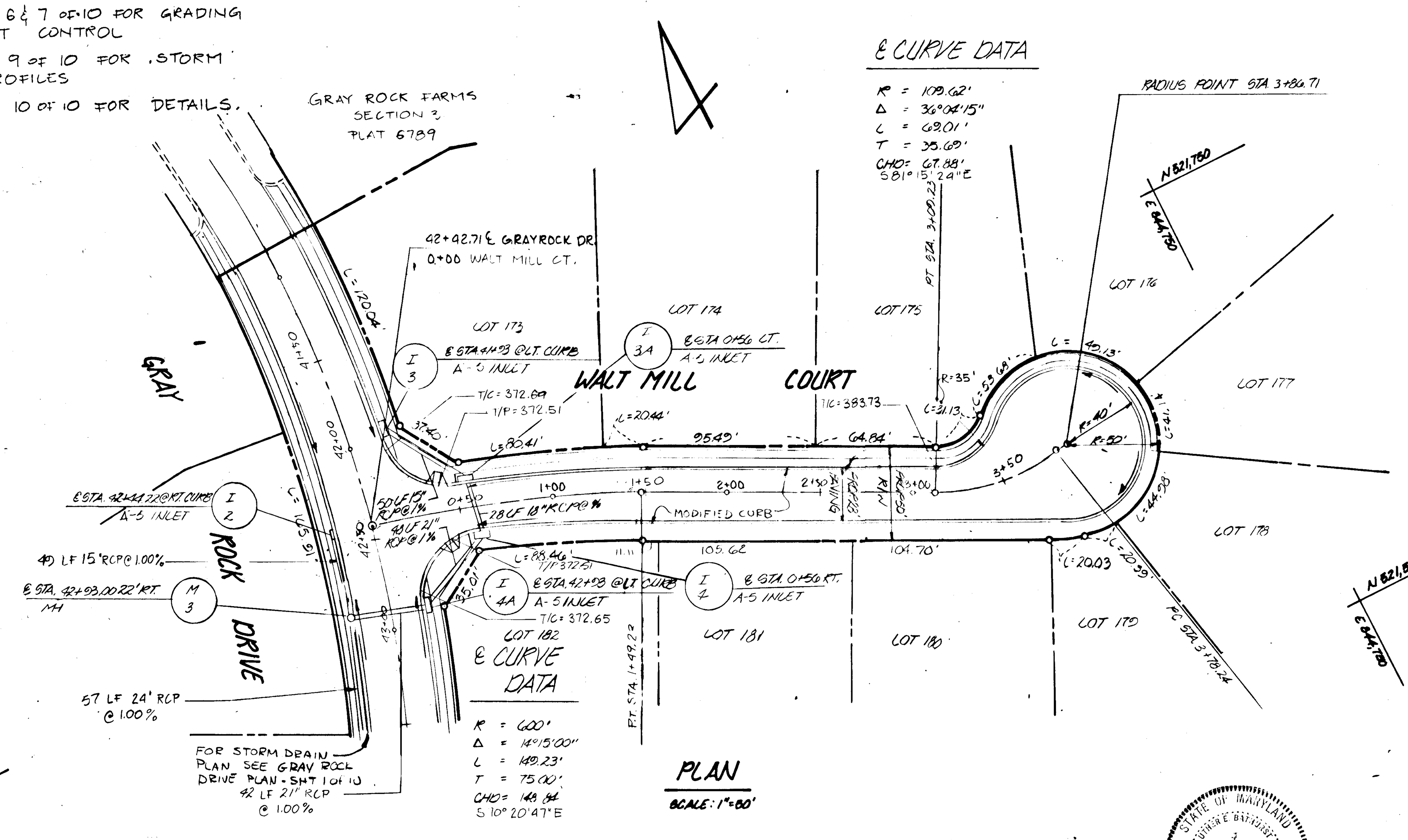
NOTES:
1. SEE DWG. 6 & 7 OF 10 FOR GRADING & SEDIMENT CONTROL
2. SEE DWG. 9 OF 10 FOR STORM DRAIN PROFILES
3. SEE DWG 10 OF 10 FOR DETAILS.



OWNER & DEVELOPER

THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Land Development Division — Date 1-28-88

Chief, Bureau of Highways — Date 1/29/88

Chief, Bureau of Engineering — Date 2.2.88

APPROVED: OFFICE OF PLANNING AND ZONING

Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT — Date 2/16/88

DATE	DESCRIPTION	BY
4-26-88	CORRECT DIST. & PIPE FROM I-2 - M-3	JCO

REVISIONS

TITLE:	WALT MILL CT. STA. 0+00 - 3+86.71
PROJECT:	GRAY ROCK FARMS - SECT. 4
LOCATION:	2ND ELECTION DISTRICT HOWARD CO., MD.
SCALE: AS SHOWN	DESIGNED BY: E.U.A. · DRAWN BY: J.C.O. · CHECKED BY: L.E.B. · DATE: SEPT., 1987
FIELD BOOK: -	PAGE NO.: - · JOB NO.: 8737 · DRAWING NO.: 5 OF 10

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PLAN — NOTE BOOK No. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED

PROFILE — NOTE BOOK No. — SURVEYED — PLOTTED — GRADES CHECKED — B.M.'s NOTED — STRUCTURE NOTATIONS CHECKED

K+E PLATE 1. PLAN-PROFILE KEUFFEL & ESSER CO.
48 7024 MADE IN U.S.A.

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APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
Chief, Land Development Division	Date 1-28-88
Chief, Bureau of Highways	Date 1/29/88
Chief, Bureau of Engineering	Date 2-2-88

APPROVED: OFFICE OF PLANNING AND ZONING

Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT — Date 2/16/88

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

U.S. SOIL CONSERVATION SERVICE — DATE 1-22-88

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

SOIL CONSERVATION DISTRICT — DATE 1/22/88

DEVELOPER'S CERTIFICATE

"I/WE 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Paul L. Miller — DEVELOPER — DATE 10-1-87

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."

ENGINEER — DATE 9-30-87

NOTES.

1. — · — · — INDICATES CUL-DE-SAC FINAL GRADING.
2. LOT 188 & BACK OF THE LOT 194 TO BE GRADED AFTER SEDIMENT TRAPS ARE REMOVED.

SEDIMENT TRAP SCHEDULE

TRAP NO.	TYPE OF TRAP	STORAGE AREA AC.	STORAGE REQ'D C.F.	STORAGE PROV'D C.F.	OUTLET LENGTH OR PIPE SIZE	OUTLET ELEV.	STORAGE DEPTH & BOT. ELEV.	EMBANKM'T ELEV.
1	S. BASIN a.1	18.43	33,174	33,174	48"R 30"B	365.40	5.40 359.00	367.3
2	RIP-RAP OUTLET ST. VI	8.33	15,000	15,060	10'	356.00	3 353.0	359.0

LANDSCAPE SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	MIN. SIZE	SUGG. SPAC'G	NO.
⊕	PLATANUS X ACERIFOLIA	LONDON PLANE TREE	2-2½" CAL.	40' O.C.	174

NOTE: TREES TO BE PLACED WITH IN ROAD R/W

OWNER & DEVELOPER
THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

TITLE:	GRADING & SEDIMENT CONTROL	
PROJECT:	GRAY ROCK FARMS SECTION - 4	
LOCATION:	TAX MAP: 24; 2ND ELECTION DISTRICT; HOWARD CO., MD.	

SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:
1" = 50'	E.U.A.	J.C.O.	L.E.B.	AUGUST, 1987

FIELD BOOK:	PAGE NO.:	JOB NO.:	DRAWING NO.:
-	-	8737	6 OF 10

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ELLICOTT CITY, MD. 21043
(301) 465-7777

DATE	DESCRIPTION	BY
4-26-88	LOT 176 & 177 CELLAR ELEV.	JCO

REVISIONS

F-88-77

242

126522

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
Chief, Land Development Division	Date 1-28-88
Chief, Bureau of Highways	Date 1/29/88
Chief, Bureau of Engineering	Date 2.2.88

APPROVED: OFFICE OF PLANNING AND ZONING	
Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT	Date 2/16/88

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

U.S. SOIL CONSERVATION SERVICE — DATE 1-22-88

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

SOIL CONSERVATION DISTRICT — DATE 1/22/88

DEVELOPER'S CERTIFICATE

"I/WE 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.

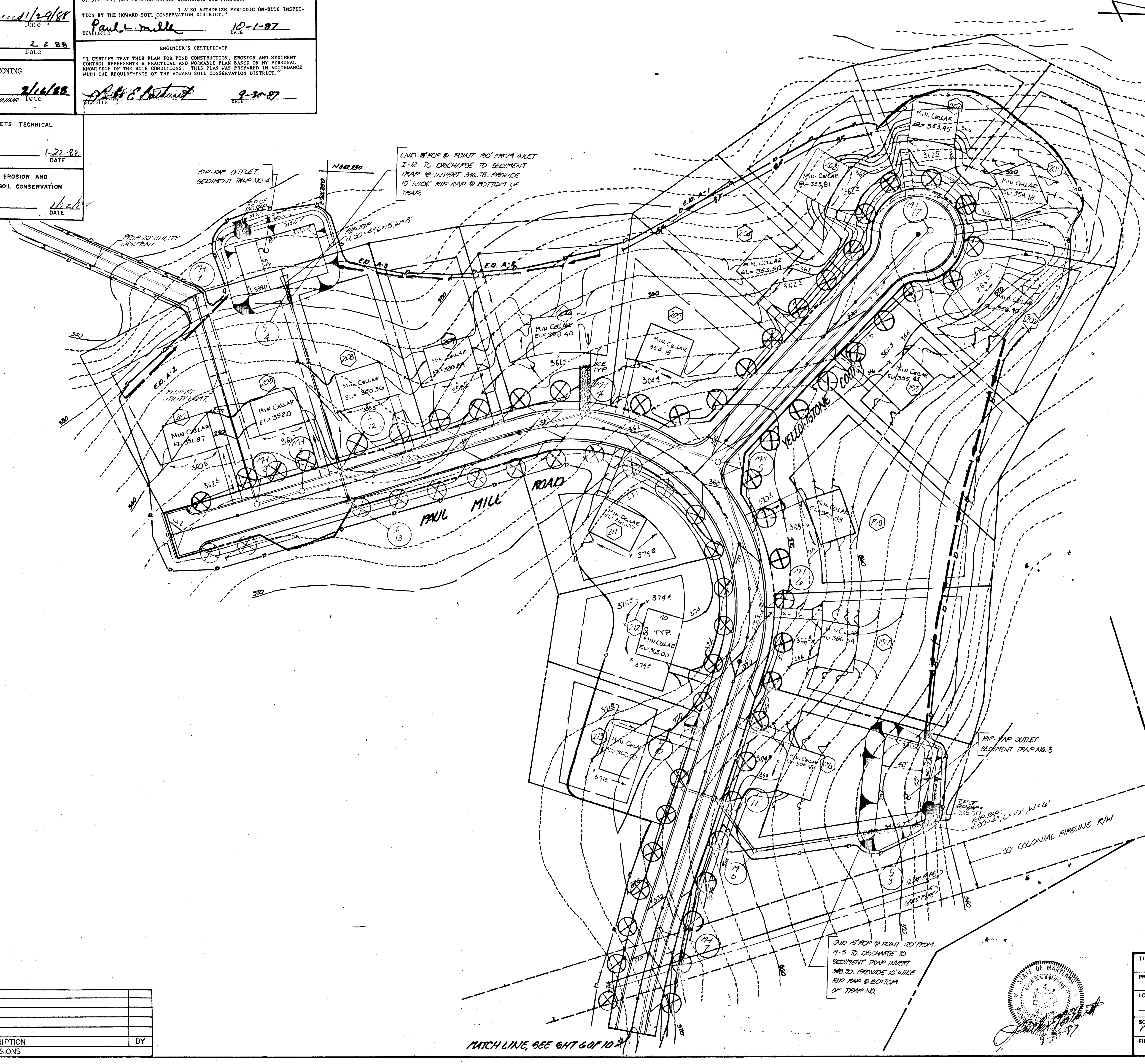
I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER: Paul L. Miller — DATE 10-1-87

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."

ENGINEER — DATE 9-30-87



SEDIMENT TRAP SCHEDULE

TRAP NO.	TYPE OF TRAP	DRAINAGE AREA AC.	STORAGE REQ'D C.F.	STORAGE PROV'D C.F.	OUTLET LENGTH OR PIPE SIZE	OUTLET ELEV.	STORAGE DEPTH & BOT. ELEV.	EMBANKMT ELEV.
3	RIP-RAP OUTLET S.T. VI	7.46	13,430	13,494	10'	344.5	3 341.5	347.0
4	RIP-RAP OUTLET S.T. VI	9.18	16,530	16,569	10'	342.0	3 339.0	345.0

DATE	DESCRIPTION	BY
	REVISIONS	

OWNER & DEVELOPER

THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

TITLE: GRADING & SEDIMENT CONTROL				
PROJECT: GRAY ROCK FARMS SECTION-4				
LOCATION: TAX MAP: 24 — 2 ND ELECTION DISTRICT — HOWARD CO., MD.				
SCALE: 1"=50'	DESIGNED BY: E.U.A.	DRAWN BY: J.C.O.	CHECKED BY: L.E.B.	DATE: AUGUST, 1987
FIELD BOOK: -	PAGE NO.: -	JOB NO.: 8T37	DRAWING NO.: 7 of 10	

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F-88-77

INLET STRUCTURE SCHEDULE

INLET DESIGNATION	DRAINAGE AREA	C	INLET SIZE	DISCHARGE (C.F.S)
I-1	1.10 AC.	0.35	A-5	1.50
I-2	0.94 AC.	0.86	A-5	4.73
I-3	2.12 AC.	0.35	A-5 W/DEFLECT.	4.38
I-4	1.21 AC.	0.55	A-5	3.97
I-5	0.57 AC.	0.40	A-5 W/DEFLECT.	1.06
I-6	6.47 AC.	0.38	D	14.38
I-7	0.40 AC.	0.89	A-5	1.93
I-8	3.79 AC.	0.35	A-10	7.33
I-9	2.22 AC.	0.35	A-10 W/DEFLECT.	4.50
I-10	0.40 AC.	0.89	A-5	2.10
I-11	2.09 AC.	0.35	A-5	4.32
I-12	0.93 AC.	0.89	A-5	4.54
I-13	3.65 AC.	0.40	A-5	5.10
I-3A	2.03 AC.	0.35	A-5	4.20
I-4A	0.92 AC.	0.55	A-5	3.14

LEGEND

- D.A. BOUNDRY
- SOILS BOUNDRY
- (A)—(A) SWALE SECTION (SEE SWALE COMP.)
- 1-113 336.8 LITTLE PATUXENT RIVER SECTION - 100 YR WSE REF: D-4-1007
- 336.20 100YR WSE BASED ON HYDROLOGY STUDY HO. CO. CAPITAL PROJECT D-4-1007
- SUB D.A. 1 SUB AREAS USED TO DETERMINE DRIVEWAY CULVERT SIZE.

NOTE:

1. FLOOD PLAIN TAKEN FROM "LITTLE PATUXENT RIVER" HYDROLOGY STUDY, HOWARD COUNTY CAPITAL PROJECT D-4-1007.
2. HYDRIC SOILS: Co AND Ba

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] 1-28-88
Chief, Land Development Division — Date

[signature] 1/29/88
Chief, Bureau of Highways — Date

[signature] 2-2-88
Chief, Bureau of Engineering — Date

APPROVED: OFFICE OF PLANNING AND ZONING

[signature] 2/16/88
Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT — Date

242

126522

DATE	DESCRIPTION	BY
4-26-88	I-2 TO M-3 49LF 15" RCP	JCO
07/16	[illegible]	[illegible]

REVISIONS

OWNER & DEVELOPER
MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD. 21043

TITLE: LANDSCAPE, SOILS & DRAINAGE AREA MAP
PROJECT: **GRAY ROCK FARMS - SECT. 4**
LOCATION: O.P. & Z. FILE NOS: SKETCH: P-78-35, PRELIMINARY: P-87-75
2ND ELECTION DISTRICT TAX MAP: 24 HOWARD CO., MD.

SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:
1" = 100'	E.A.	O.P.	O.R.	MARCH, 1987

FIELD BOOK:	PAGE NO.:	JOB NO.:	DRAWING NO.:
-	-	8737	8 OF 10

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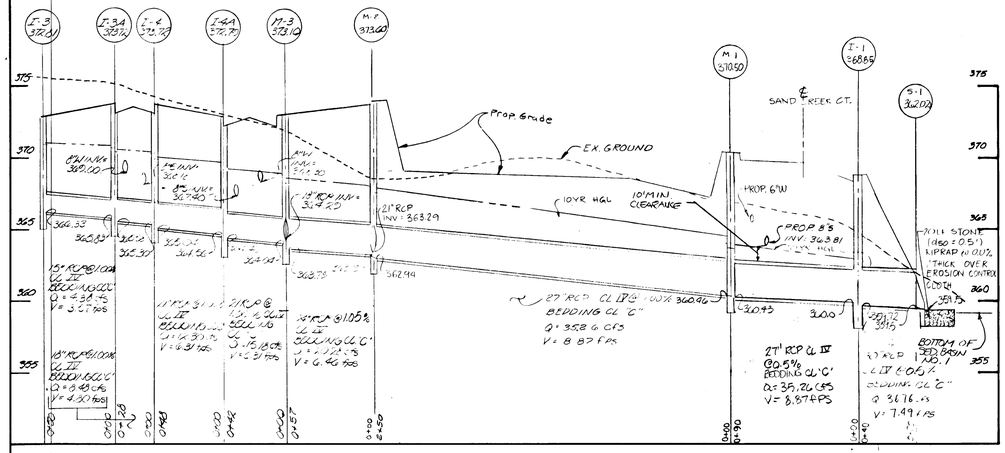
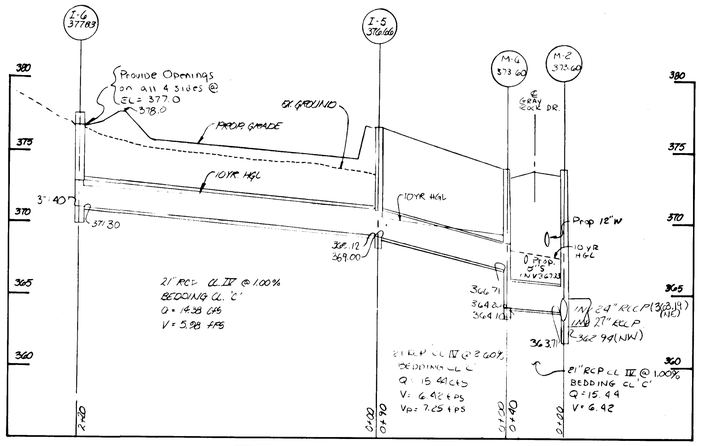
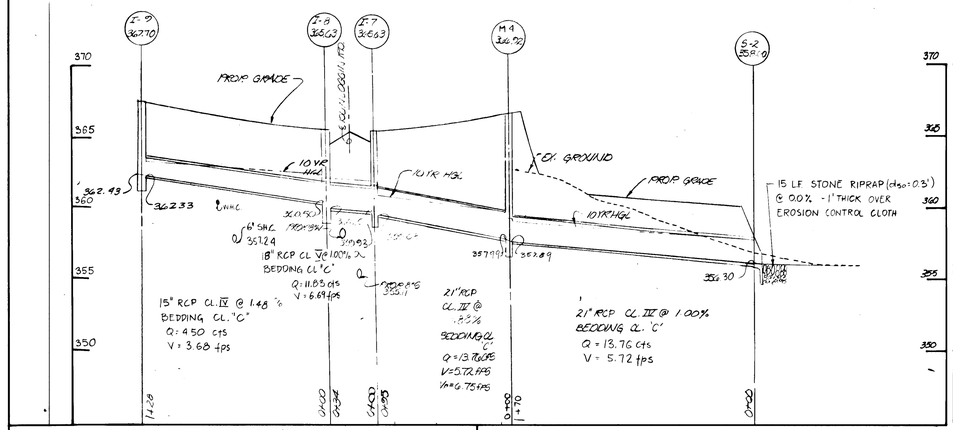
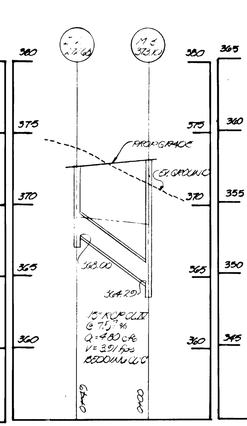
(301) 465-7777

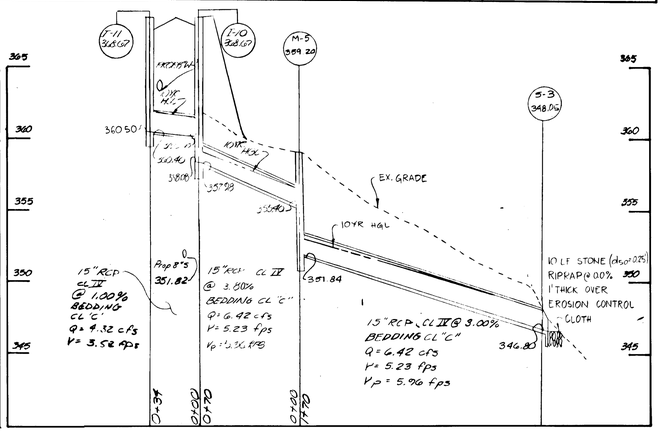
F-88-77

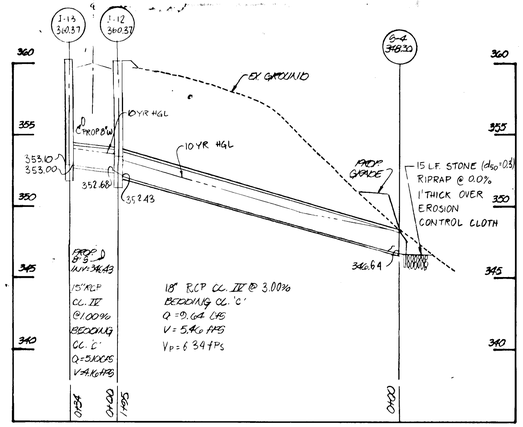












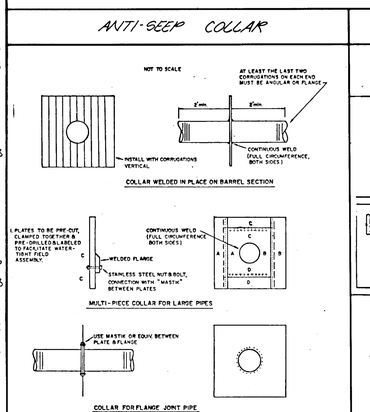
STRUCTURE SCHEDULE

NO.	TYPE	INV. OUT	INV. IN	TOP ELEV.	REMARKS HO. CO. STD. DET. NO.
I-1	'A-5'-IN SUMP	359.72	360.0	368.85	S.D. 4.01
I-2	'A-5'-IN SUMP	364.37	364.87	372.68	S.D. 4.01
I-3	'A-5' WIDER.	366.83	N/A	372.81	S.D. 4.01 & 4.03
I-3A	'A-5'	365.38	365.83	372.72	S.D. 4.01
I-4	'A-5'	365.05	365.30	372.72	S.D. 4.01
I-4A	'A-5'-IN SUMP	364.80	364.80	372.70	S.D. 4.01
I-5	'A-5' W/DEFL.	364.19	369.12	376.66	S.D. 4.01 & 4.03
I-6	'D'-4 OPENNINGS	371.30	371.40	377.83	S.D. 4.11.
I-7	'A-5'- IN SUMP	359.63	359.98	365.63	S.D. 4.01
I-8	'A-10'- IN SUMP	360.25	360.50	365.63	S.D. 4.02
I-9	'A-10' W/DEFL.	362.33	362.43	367.70	S.D. 4.02 & 4.03
I-10	'A-5'-IN SUMP	357.98	358.08	368.67	S.D. 4.01
I-11	'A-5'-IN SUMP	360.40	360.50	368.67	S.D. 4.01
I-12	'A-5'-IN SUMP	352.43	352.68	360.37	S.D. 4.01
I-13	'A-5'- IN SUMP	353.00	353.10	360.37	S.D. 4.01
M-1	5'-MANHOLE	360.43	360.46	370.50	G.5.02 OR G.5.13
M-2	5'-MANHOLE	362.94	363.19	373.60	G.5.02 OR G.5.13
M-3	4'-MANHOLE	363.99	364.09	372.90	G.5.01 OR G.5.12
M-4	4'-MANHOLE	357.89	357.99	366.00	G.5.01 OR G.5.12
M-5	4'-MANHOLE	351.84	355.40	359.20	G.5.01 OR G.5.12
M-6	4'-MANHOLE	366.71	364.10	373.60	"
S-1	30°-CONC. END SECT.	—	359.53	361.35	S.D. 5.15
S-2	21"-CONC. END SECT.	—	356.30	358.00	S.D. 5.15
S-3	15"-CONC. END SECT.	—	346.80	348.05	S.D. 5.15
S-4	18"-CONC. END. SECT.	—	346.84	348.25	S.D. 5.15

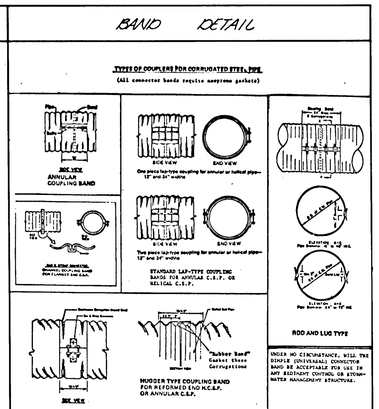
STORM DRAIN PROFILES

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

ANTI-SEEP COLLAR



BAND DETAIL



SEDIMENT BASIN CONSTRUCTION SPECIFICATIONS

Site Preparation

Areas under the embankment shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. In order to facilitate clean-out and restoration, the pool area (measured at the top of the pipe spillway) will be cleared of all brush, trees, and other objectionable materials.

Cut-off-Trench

A cut-off trench shall be excavated along the centerline of earth fill embankments. The minimum depth shall be two feet. The cut-off trench shall extend up both abutments to the riser crest elevation. The minimum bottom width shall be four feet, but wide enough to permit operation of excavation and compaction equipment. The side slopes shall be no steeper than 1:1. Compaction requirements shall be the same as those for embankment. The trench shall be dewatered during the backfilling-compaction operations.

Embankment

The fill material shall be taken from approved areas shown on the plans. It shall be clean mineral soil free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Relatively pervious materials such as sand or gravel (Unified Soil Classes GW, GP, SW & SP) shall not be placed in the embankment. Areas on which fill is to be placed shall be scarified prior to placement of fill. The fill material shall contain sufficient moisture so that it can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction. Fill material shall be placed six-inch to eight-inch thick continuous layers over the entire length of the fill. Compaction shall be obtained by routing and hauling the construction equipment over the fill so that the entire surface of each layer of the fill is traversed by at least one wheel or tread track of the equipment or by the use of a compactor. The embankment shall be constructed to an elevation 10 percent higher than the design height to allow for settlement.

Pipe Spillways

The riser shall be securely attached to the barrel or barrel stub by welding the full circumference making a watertight structural connection. The barrel stub must be attached to the riser at the same percent (angle) of grade as the outlet conduit. The connection between the riser and the riser base shall be watertight. All connections between barrel sections must be achieved by approved watertight band assemblies. (See page 18.22 for details.) The barrel and riser shall be placed on a firm, smooth foundation of impervious soil. Pervious materials such as sand, gravel, or crushed stone shall not be used as backfill around the pipe or anti-seep collars. The fill material around the pipe spillway shall be placed in four inch layers and compacted under and around the pipe to at least the same density as the adjacent embankment.

A minimum depth of two feet of hand compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment. Steel base plates on risers shall have at least 2-1/2 feet of compacted earth, stone or gravel placed over it to prevent flotation.

Emergency Spillway

The emergency spillway shall be installed in undisturbed ground. The achievement of planned elevations, grades, design width, entrance and exit channel slopes are critical to the successful operation of the emergency spillway and must be constructed within a tolerance of ± 0.2 feet.

Vegetative Treatment

Stabilize the embankment and emergency spillway in accordance with the appropriate vegetative Standard and Specifications immediately following construction. In no case shall the embankment remain unstabilized for more than seven(7) days.

Erosion and Pollution Control

Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized. State and local laws shall be complied with concerning pollution abatement.

Safety

State and local requirements shall be met concerning fencing and signs, warning the public of hazards of soft sediment and floodwater.

Maintenance

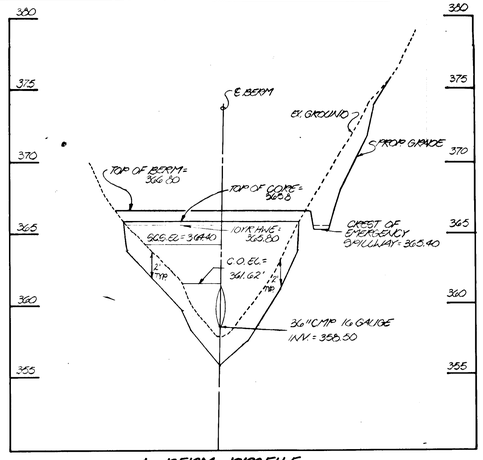
1. Repair all damages caused by soil erosion and construction equipment at or before the end of each working day.
2. Sediment shall be removed from the basin when it reaches the specified distance below the top of the riser. This sediment shall be placed in such a manner that it will not erode from the site. The sediment shall not be deposited downstream from the embankment, adjacent to a stream or flood plain.

Final Disposal

When temporary structures have served their intended purpose and the contributing drainage area has been properly stabilized, the embankment and resulting sediment deposits are to be leveled or otherwise disposed of in accordance with the approved sediment control plan. The proposed use of a sediment basin site will often dictate final disposition of the basin and any sediment contained therein. If the site is scheduled for future construction, then the basin material and trapped sediments must be removed, safely disposed of, and backfilled with a structural fill. When the basin area is to remain open space the pond may be pumped dry, graded and back filled.

E BERM PROFILE

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



NOTES:
1) FOR GRADING & SEDIMENT CONTROL SEE DWGS NOS. 6 & 7 OF 10.
2) FOR ROAD CONST. PLANS SEE DWGS 1 TO 5 OF 10.
3) FOR STORM DRAIN & INLET LOCATIONS SEE DWGS. 5 & 7 OF 10.
4) FOR SEDIMENT BASIN AND OTHER DETAILS SEE DWG. 10 OF 10.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chief, Land Development Division — Date 1-29-88

Chief, Bureau of Highways — Date 1/29/88

Chief, Bureau of Engineering — Date 2-2-88

APPROVED: OFFICE OF PLANNING AND ZONING

Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT — Date 2/16/88

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

U.S. SOIL CONSERVATION SERVICE — DATE

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

SOIL CONSERVATION DISTRICT — DATE

DATE	REVISION	BY
9/21/88	REVISE TOP ELEV I-10 & I-11	JCO
5/24/88	CHANGE PIPE TYPE M-1 - I-1 - S-1	JCO
4/26/88	CORRECT DIST & SLOPES, M-2 - M-3, I-2 - M-3	JCO
4/26/88	CORRECT & SHOW PIPE FROM M-2	JCO

OWNER & DEVELOPER
THE MILLER LAND COMPANY
8055 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

TITLE	STORM DRAIN PROFILES & DETAILS
PROJECT	GRAY ROCK FARMS SECTION-4
LOCATION	2ND ELECTION DISTRICT HOWARD CO., MD.
SCALE: AS SHOWN	DESIGNED BY: E.A.
DRAWN BY: V.C.O.	CHECKED BY: C.E.B.
DATE: OCT., 1987	
FIELD BOOK: —	PAGE NO.: —
JOB NO.: 8737	DRAWING NO.: 9 OF 10

boender associates inc.
consulting engineers
land surveyors
land planners
COURTHOUSE SQUARE
3565 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MD. 21043
(301) 465-7777

242

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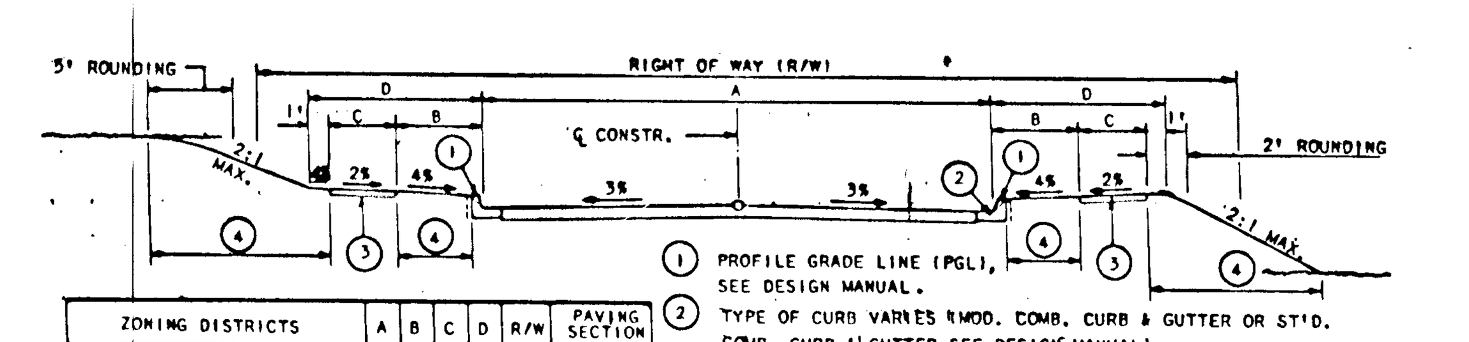


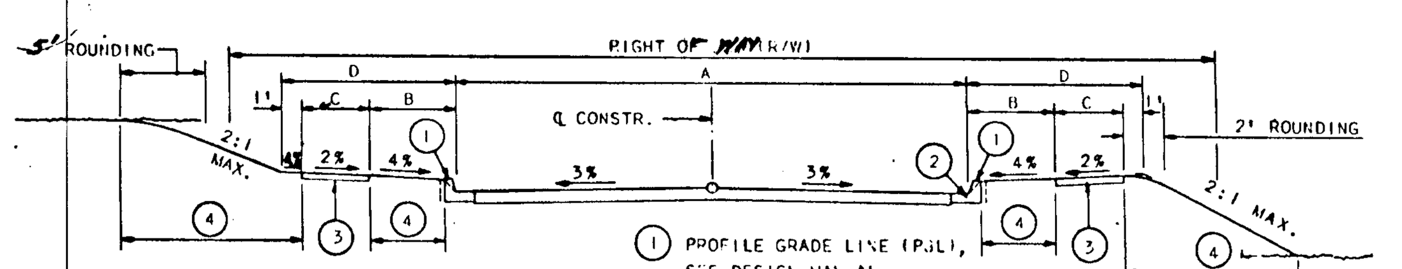
ZONING DISTRICTS	A	B	C	D	R/W	PAVING SECTION
COMMERCIAL & INDUSTRIAL	44'	3'	4'	8'	60'	P-4
R-SC, R-SA, R-A1, R-MH, NT-APARTMENT AREA	38'	6'	4'	11'	60'	P-3
R-12, R-20, NT-SINGLE FAMILY AREA	36'	7'	4'	12'	60'	P-3
R	26'	—		11'	60'	P-3

1. PROFILE GRADE LINE (PGL), SEE DESIGN MANUAL.
2. TYPE OF CURB VARIES (MOD. COMB. CURB & GUTTER OR ST'D. COMB. CURB & GUTTER-SEE DESIGN MANUAL).
3. 4" CONCRETE SIDEWALK AS REQUIRED BY SUB-DIVISION REGULATIONS.
4. INDICATES 2" TOPSOIL, SEED AND MULCH.
5. GUARDRAIL WHERE REQUIRED BY THE DESIGN MANUAL.
6. DITCH CROSS SECTION SLOPE MAY BE FLATTENED TO PROVIDE A SWALE AT OR NEAR THE CREST OF VERTICAL CURVES WHERE QUANTITY OF SWALE FLOW IS SMALL, AS APPROVED BY DPW.

CLOSED SECTION (VARIOUS ZONING DISTRICTS)

TYPICAL SECTION MINOR COLLECTOR STREET

NOTES:
1. GRAY ROCK DRIVE STA. 40+80.97 TO STA. 48+65.84
2. EX. ZONING: R-20
3. DESIGN SPEED: 35 MPH
4. NOT TO SCALE



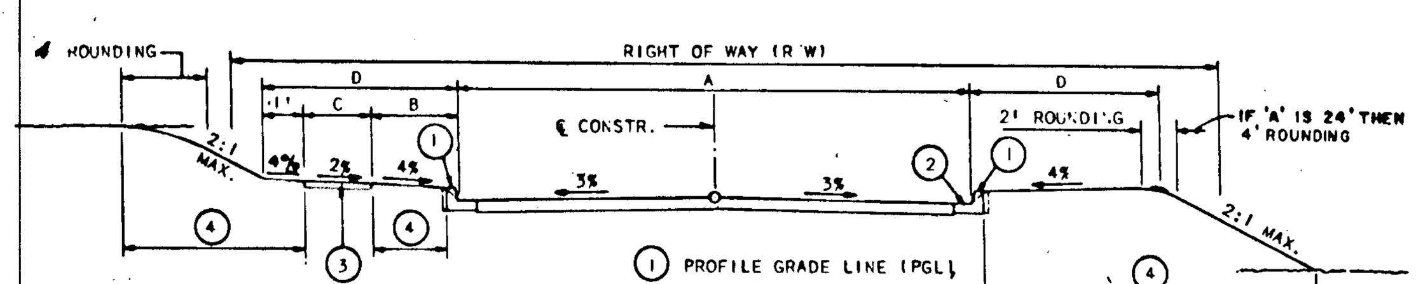
ZONING DISTRICTS	A	B	C	D	R/W	PAVING SECTION
COMMERCIAL & INDUSTRIAL ADT ≤1000	38'	5'	4'	10'	60'	P-3
COMMERCIAL & INDUSTRIAL ADT 1000-3000	44'	3'	4'	8'	60'	P-4
R-SC, R-SA, R-A1, R-MH, NT-APARTMENT AREA						
R-12, R-20, NT-SINGLE FAMILY AREA	30'	4'	4'	9'	50'	P-2
R	24'	—		10'	50'	P-2

1. PROFILE GRADE LINE (PGL), SEE DESIGN MANUAL.
2. TYPE OF CURB VARIES (BITUMINOUS CURB OR MOD. COMB. CURB & GUTTER OR ST'D. COMB. CURB & GUTTER-SEE DESIGN MANUAL).
3. 4" CONCRETE SIDEWALK AS REQUIRED BY SUB-DIVISION REGULATIONS.
4. INDICATES 2" TOPSOIL, SEED AND MULCH.
5. GUARDRAIL WHERE REQUIRED BY THE DESIGN MANUAL.
6. DITCH CROSS SECTION SLOPE MAY BE FLATTENED TO PROVIDE A SWALE AT OR NEAR THE CREST OF VERTICAL CURVES WHERE QUANTITY OF SWALE FLOW IS SMALL, AS APPROVED BY DPW.

CLOSED SECTION (VARIOUS ZONING DISTRICTS)

TYPICAL SECTION LOCAL STREET

NOTES:
1. PAUL MILL ROAD STA. 0+00 TO STA. 22+20.37
2. EX. ZONING: R-20
3. DESIGN SPEED: 30 MPH
4. NOT TO SCALE



ZONING DISTRICTS	A	B	C	D	R/W	PAVING SECTION
R-SC, R-SA, R-A1, R-MH, NT-APARTMENT AREA	28'	4'	4'	9'	50'	P-2
R-12, R-20, NT-SINGLE FAMILY AREA						
R	24'	—		10'	50'	P-2

1. PROFILE GRADE LINE (PGL), SEE DESIGN MANUAL.
2. TYPE OF CURB VARIES (BITUMINOUS CURB OR MOD. COMB. CURB & GUTTER OR ST'D. COMB. CURB & GUTTER-SEE DESIGN MANUAL).
3. 4" CONCRETE SIDEWALK AS REQUIRED BY SUB-DIVISION REGULATIONS.
4. INDICATES 2" TOPSOIL, SEED AND MULCH.
5. GUARDRAIL WHERE REQUIRED BY THE DESIGN MANUAL.
6. DITCH CROSS SECTION SLOPE MAY BE FLATTENED TO PROVIDE A SWALE AT OR NEAR THE CREST OF VERTICAL CURVES WHERE QUANTITY OF SWALE FLOW IS SMALL, AS APPROVED BY DPW.

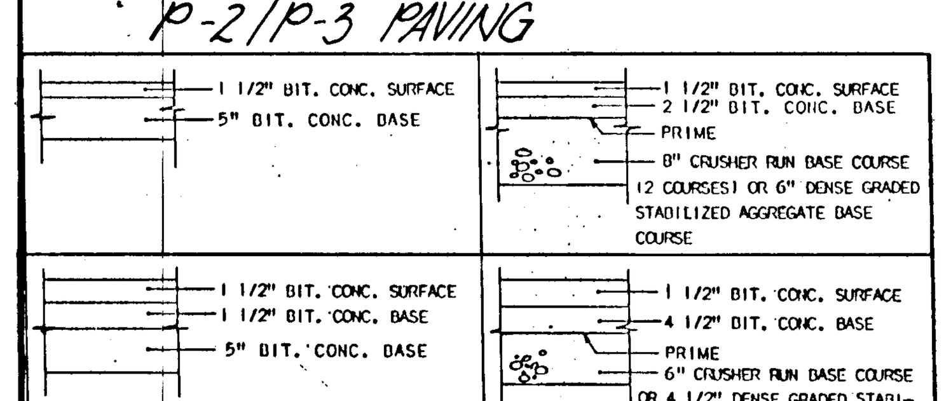
*24' MAY BE USED FOR CUL-DE-SAC WITH AN ADT OF 72 OR LESS OR WITH 3 OR LESS FRONTING LOTS.

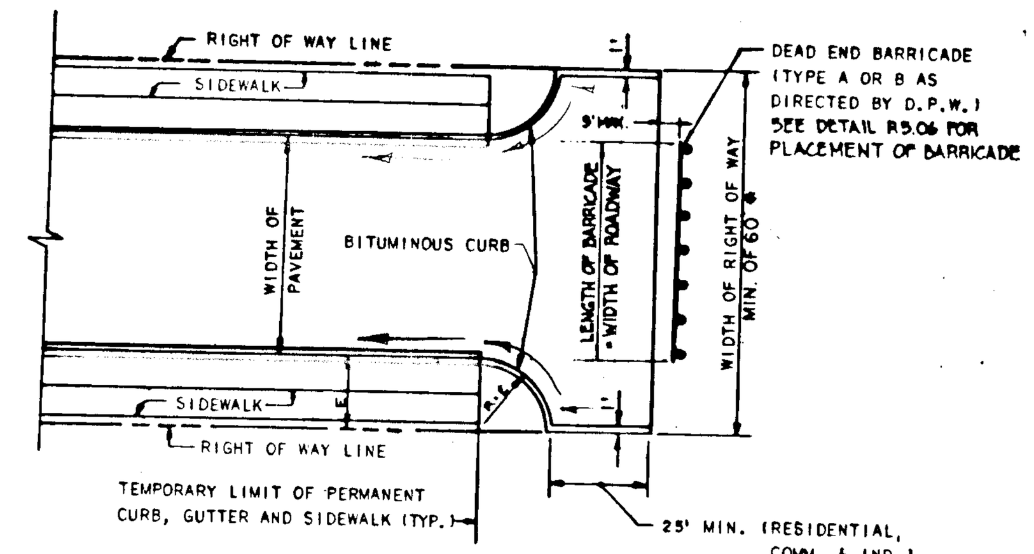
CLOSED SECTION (VARIOUS ZONING DISTRICTS)

TYPICAL SECTION CUL-DE-SAC

NOTES:
1. SAND CREEK CT. STA. 0+00 TO STA. 2+65.91
2. WALT MILL COURT STA. 0+00 TO STA. 3+86.71
3. YELLOW STONE COURT STA. 0+00 TO STA. 3+47.88
4. EX. ZONING: R-20
5. DESIGN SPEED: 25 MPH
6. NOT TO SCALE

P-2/P-3 PAVING





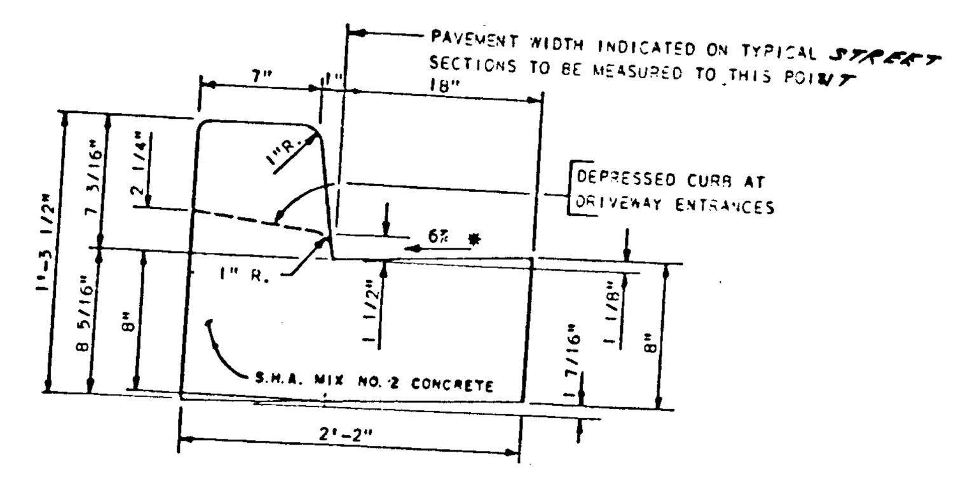
NOTES:
1. A TEE TURN-AROUND SHALL BE USED IN LIEU OF A CUL-DE-SAC ONLY IF THE STREET IS TO BE EXTENDED IN THE FUTURE.
2. BITUMINOUS CURB SHALL EXTEND AROUND THE TEE TURN-AROUND IF AND AS REQUIRED TO CONTROL CURB DRAINAGE FROM THE ROADWAY SECTION.
3. REFER TO STANDARD R-5.06 FOR TYPICAL ROADWAY PROFILE OF TEMPORARY LIMIT OF PAVING.

✱ FOR LOCAL ROADS, PROVIDE 5' REVERTIBLE EASEMENT EACH END OF THE TEE.

4. PROVIDE EASEMENTS AS REQUIRED FOR PLACEMENT OF BARRICADE AND ANY NECESSARY GRADING (SEE DETAIL R5.06)

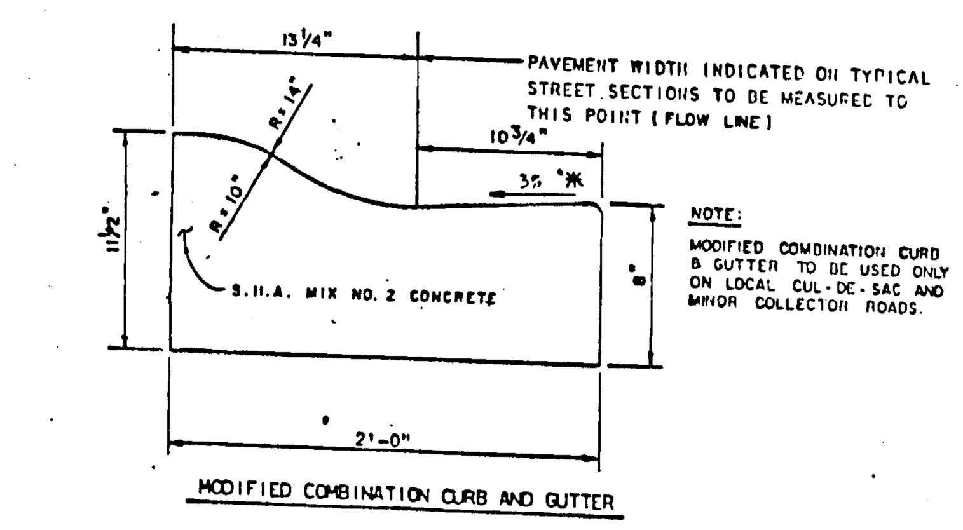
TEMPORARY TEE TURN-AROUND

NOTES:
1. PAUL MILL ROAD STA. 22+20.37
2. GRAY ROCK DR. STA 48+65.84
3. NOT TO SCALE



STANDARD 7" COMBINATION CURB AND GUTTER

NOTE:
USE ON GRAY ROCK DR., PAUL MILL RD. AND SAND CREEK CT.
NOT TO SCALE



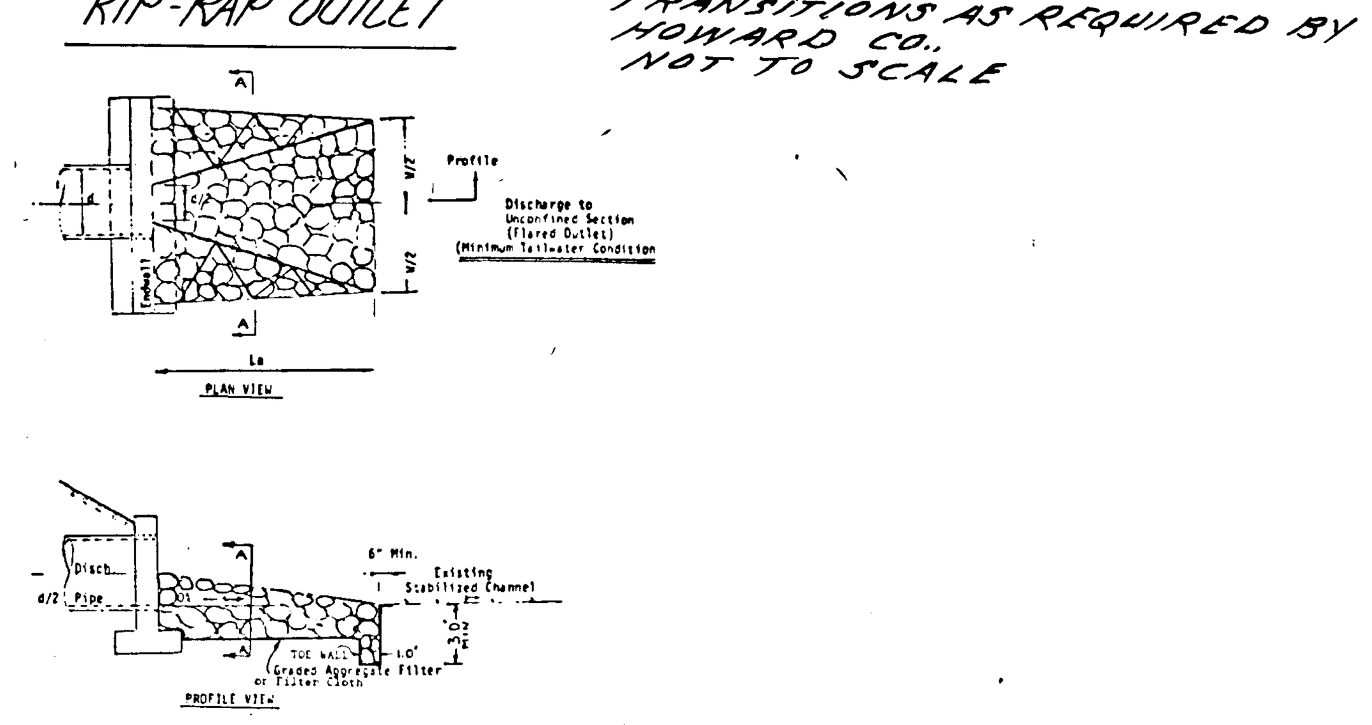
NOTE:
MODIFIED COMBINATION CURB & GUTTER TO BE USED ONLY ON LOCAL CUL-DE-SAC AND MINOR COLLECTOR ROADS.

MODIFIED COMBINATION CURB AND GUTTER

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.

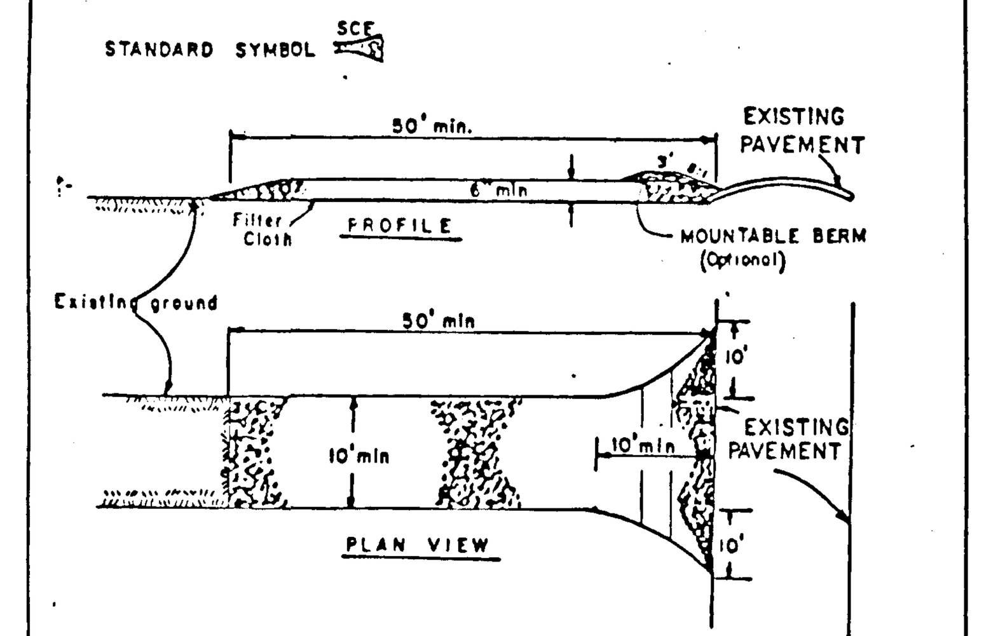
NOTE:
USE ON ALL CUL-DE-SAC ROADS EXCEPT SAND CREEK CT.
TRANSITIONS AS REQUIRED BY HOWARD CO.
NOT TO SCALE

RIP-RAP OUTLET



STABILIZED CONSTRUCTION ENTRANCE

not to scale

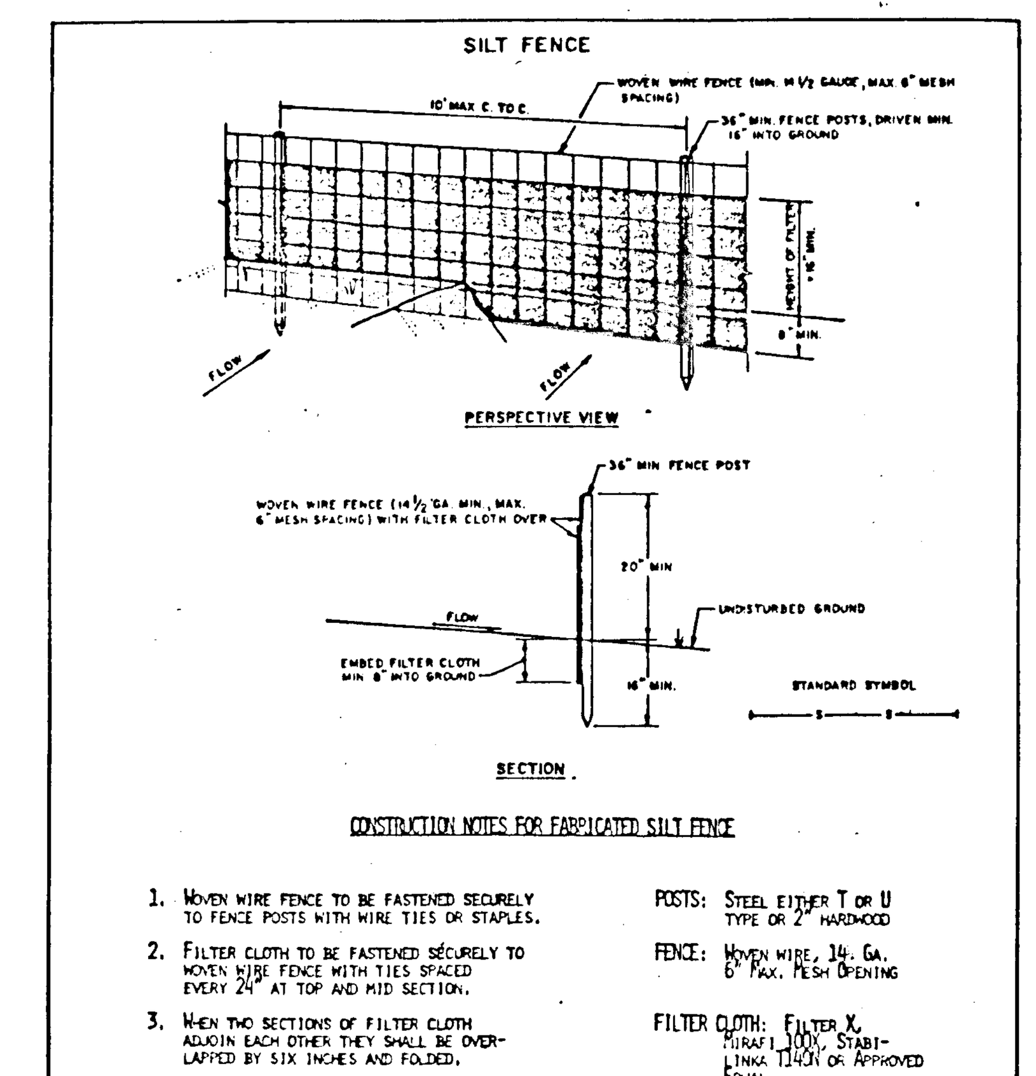


CONSTRUCTION SPECIFICATIONS

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 single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at 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 single 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 flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed 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.

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE College Park, Md.	STABILIZED CONSTRUCTION ENTRANCE	Standard Drawing SCE-1

SILT FENCE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

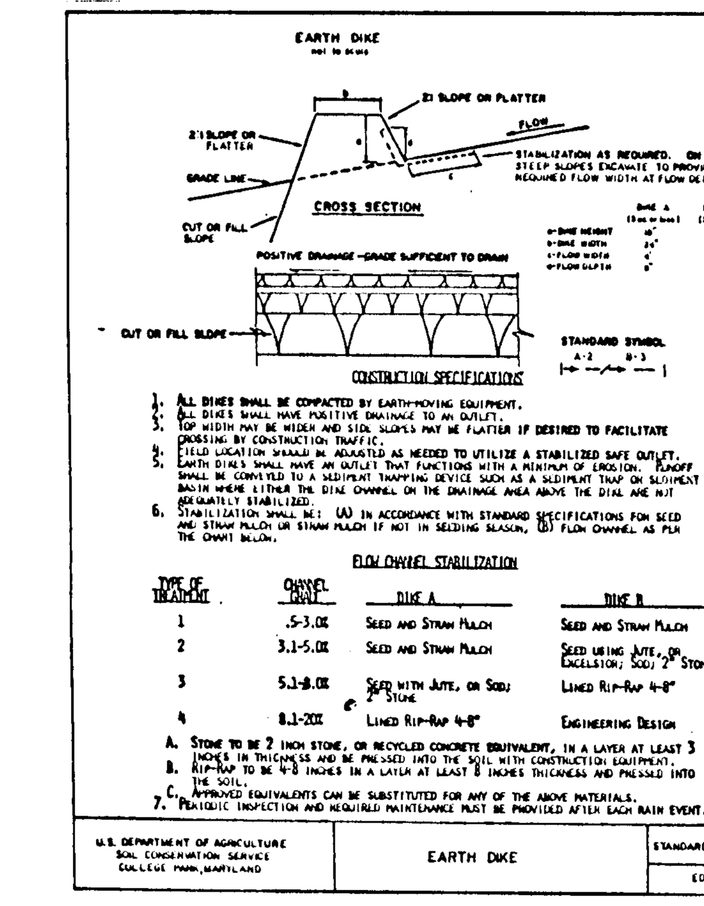
POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

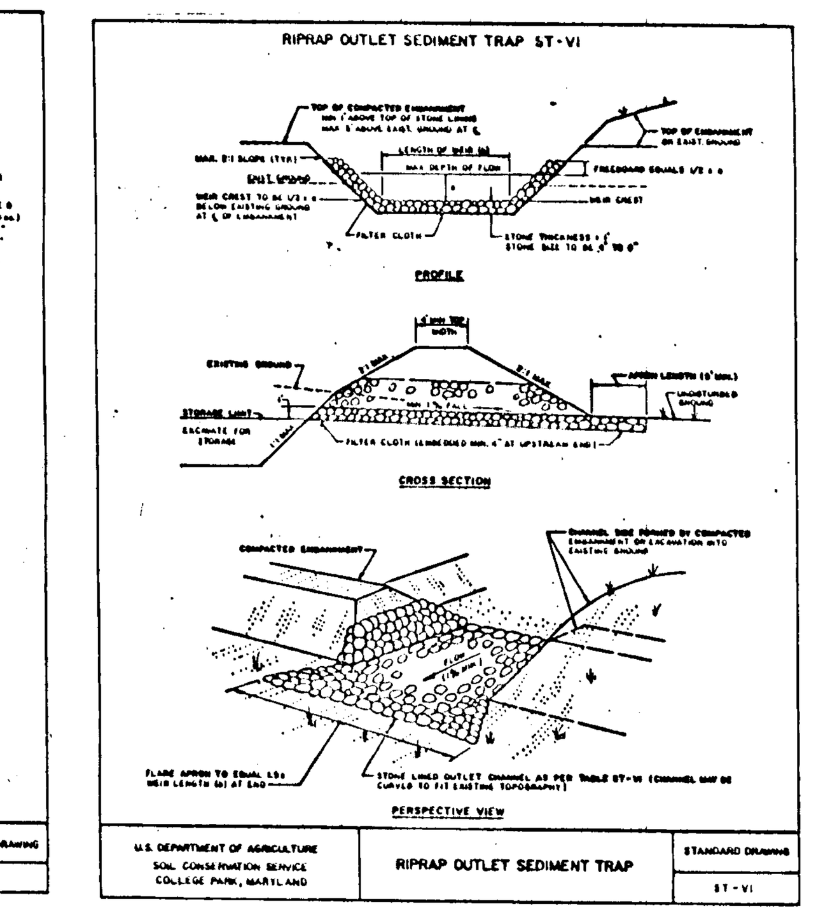
FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING

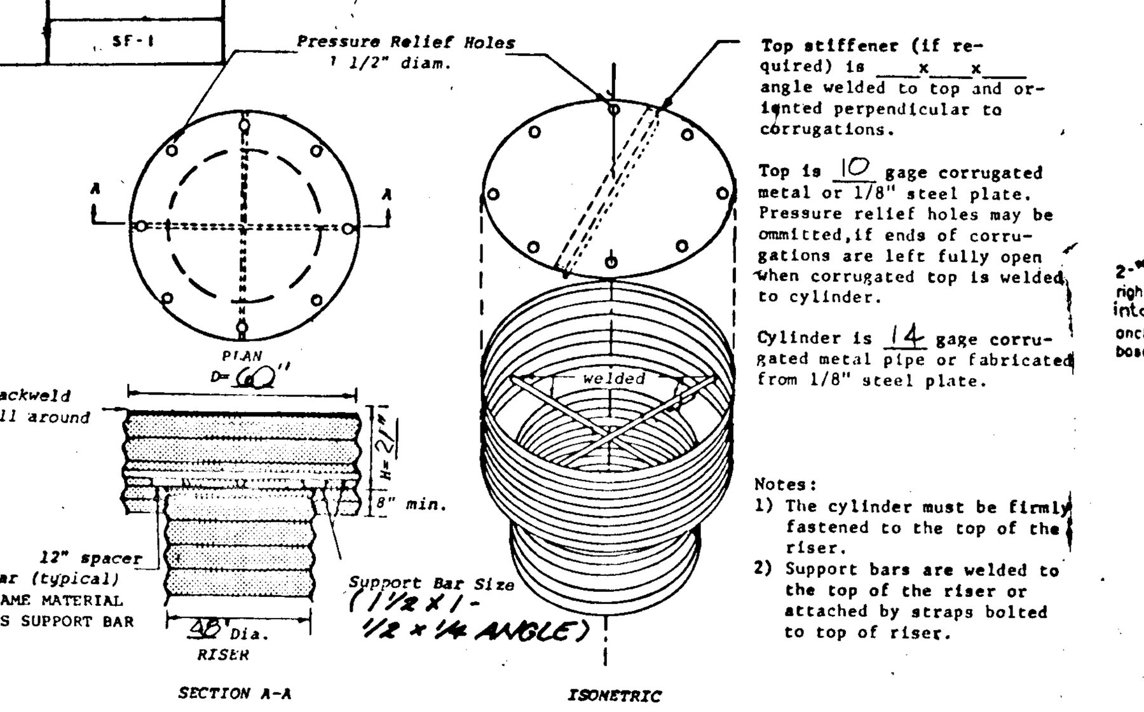
FILTER CLOTH: FILTER X, MIRAFI 100, STABILINKA T140N OR APPROVED EQUAL.

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND	SILT FENCE	STANDARD DRAWING SF-1







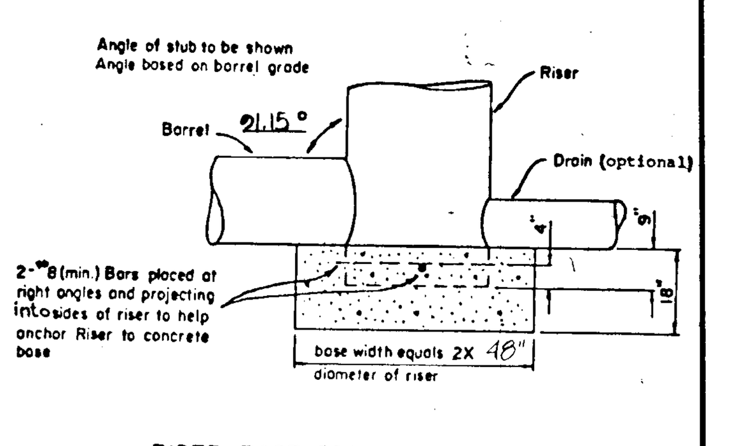
Top stiffener (if required) is __ x __ angle welded to top and orientated perpendicular to corrugations.

Top is 10 gage corrugated metal or 1/8" steel plate. Pressure relief holes may be omitted, if ends of corrugations are left fully open when corrugated top is welded to cylinder.

Cylinder is 14 gage corrugated metal pipe or fabricated from 1/8" steel plate.

Notes:
1) The cylinder must be firmly fastened to the top of the riser.
2) Support bars are welded to the top of the riser or attached by straps bolted to top of riser.

CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE (not to scale)



RISER BASE DETAIL

NOTES:
1. The concrete base shall be poured in such a manner to insure that the concrete fills the bottom of the riser to the invert of the outlet pipe to prevent the riser from breaking away from the base.
2. With aluminum or aluminized pipe, the embedded section must be painted with zinc chromate or equivalent.
3. Riser base may be sized as computed using floatation with a factor of safety of 1.2.

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. (992-2437).
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) 7 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/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) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates 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	23.05	Acres
Area Disturbed	10.17	Acres
Area to be roofed or paved	3.29	Acres
Area to be vegetatively stabilized	6.88	Acres
Total Cut } ROADS & TRAPS	2315	Cu.Yds.
Total Fill } ROADS & TRAPS	13878	Cu.Yds.
Offsite waste/borrow area location		

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 controls must be provided, if deemed necessary by the Howard County DPW 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.

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, 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 square 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 sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small 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 348 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.

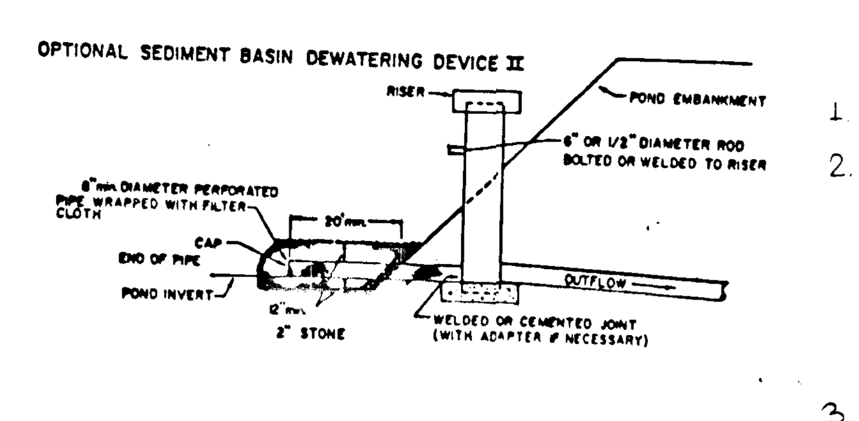
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

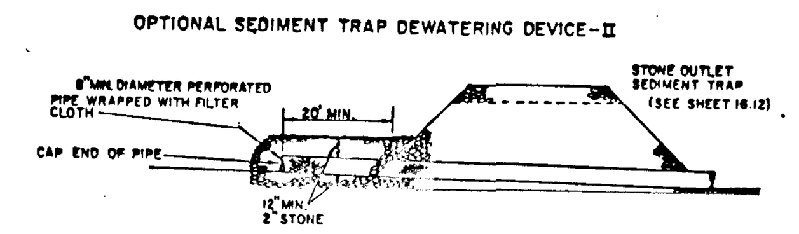
Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft)

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ 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, or use sod.

Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately 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 348 gal per acre (8 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.

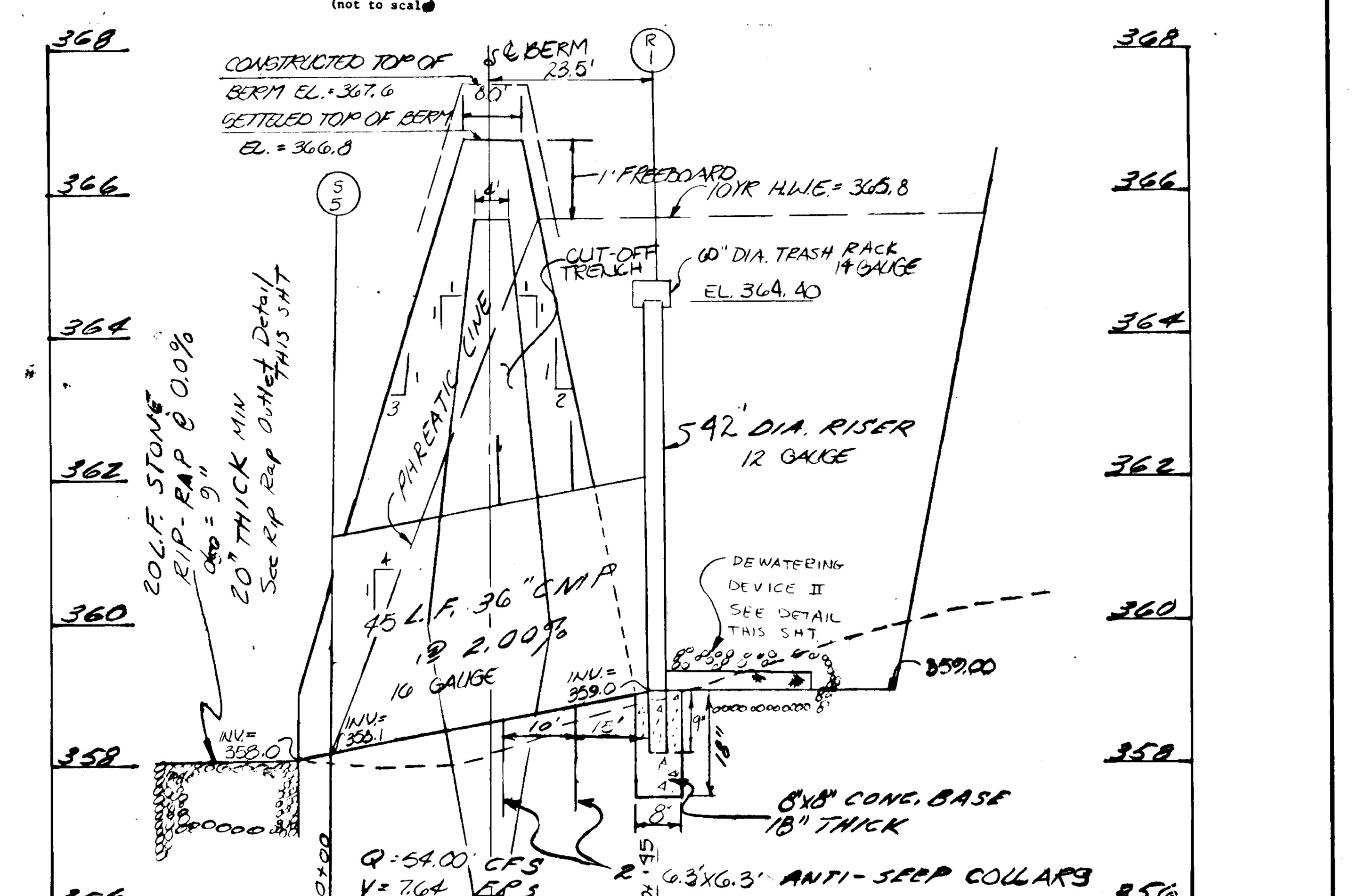




DEWATERING DEVICE DETAIL

SEQUENCE OF CONSTRUCTION

1.	OBTAIN GRADING PERMIT	
2.	NOTIFY MISS UTILITY @ 559-0100 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. NOTIFY THE HO. CO BUREAU OF LICENCE, INSPECTIONS & PERMITS AND THE CONSTRUCTION INSPECTION/SURVEYS DIVISION @ (301) 792-7272 AT LEAST 24 HOURS PRIOR TO BEGINNING CONSTRUCTION	
3.	CLEAR AND GRUB FOR SEDIMENT CONTROL DEVICES, INSTALL S.C.E., S.F., E.D. & SEDIMENT TRAPS (1,2,3,4) & SED. BASIN.	2 WEEKS
4.	CONSTRUCT SANITARY SEWER & WATER SYSTEMS	5 WEEKS
5.	CONSTRUCT STORM DRAINS TO THE POINT OF DISCHARGE TO TRAPS. STABILIZE DISTURBED AREAS	3 WEEKS
6.	GRADE FOR ROADS CONSTRUCTION	2 WEEKS
7.	CONSTRUCT CONCRETE CURB & GUTER	2 WEEKS
8.	PAVE ROADS & CONSTRUCT SIDEWALKS	3 WEEKS
9.	VEGETATIVELY STABILIZE DISTURBED AREAS TO REMAIN UNDISTURBED DURING HOUSE CONSTRUCTION	1 WEEK
10.	GRADE LOTS FOR HOUSE CONSTRUCTION	ON GOING
11.	CONSTRUCT DRIVEWAYS & HOUSES. HOUSE ON LOTS 188 & 189 MAY NOT BE CONSTRUCTED PRIOR TO REMOVAL OF BASIN	ON GOING
12.	FINAL GRADE LOTS & VEGETATIVELY STABILIZE DISTURBED AREAS	ON GOING
13.	FLUSH STORM DRAINS, GRADE AS NECESSARLY TO CONSTRUCT THE REMAINDER OF THE STORM DRAIN SYSTEM TO THE PERMAMENT OUTFALL.	1 WEEK
14.	WITH THE GRADING INSPECTORS APPROVEL STABILIZE ALL DISTURBED AREAS TRIBUTARY TO BASIN NO. 1 WITH VEGETATION. DEWATER AND REMOVE BASIN NO. 1 AND CONSTRUCT HOUSES ON LOTS 188 & 189 AFTER INSTALLATION OF SILT FENCE	
15.	REMOVE ALL TEMPORARY SEDIMENT CONTROL DEVICES & STABILIZE ANY REMAINING DISTURBED AREAS UPON APPROVAL FROM THE GRADING AND SEDIMENT CONTROL INSPECTOR.	



SEDIMENT BASIN Nº 1 PROFILE

SCALE: HORZ.: 1" = 20'
VERT.: 1" = 2'

NOTES:
1. FOR ℄ BERM PROFILE SEE DRWG. 9 OF 10.
2. FOR SED. BASIN CONSTRUCTION SPEC'S AND OTHER DETAILS SEE DRWG. 9 OF 10.

STATE OF MARYLAND — LUTHER E. BATHURST — 9-30-87

OWNER & DEVELOPER
THE MILLER LAND COMPANY
9035 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21043

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] 1-28-88	
Chief, Land Development Division	Date
[signature] 1/29/88	
Chief, Bureau of Highways	Date
[signature] 2-2-88	
Chief, Bureau of Engineering	Date

APPROVED: OFFICE OF PLANNING AND ZONING

[signature] 2/16/88	
Chief, Division of COMMUNITY PLANNING AND LAND DEVELOPMENT	Date

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

[signature]	1-22-88
U.S. SOIL CONSERVATION SERVICE	DATE

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

[signature]	1-22-88
SOIL CONSERVATION DISTRICT	DATE

DATE	DESCRIPTION	BY
	REVISIONS	

DEVELOPER'S CERTIFICATE

"I/WE 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Paul L. Miller — DEVELOPER — DATE 10-1-87

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.

[signature] — ENGINEER — DATE 9-30-87

TITLE:	DETAIL SHEET			
PROJECT:	GRAY ROCK FARMS - SECT. 4			
LOCATION:	ELECTION DISTRICT	HOWARD CO., MD.		
SCALE: AS SHOWN	DESIGNED BY: E.U.A.	DRAWN BY: BWS	CHECKED BY: L.B.	DATE: Aug. '87
FIELD BOOK: –	PAGE NO.: –	JOB NO.: 8737	DRAWING NO.: 10 OF 10	

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