

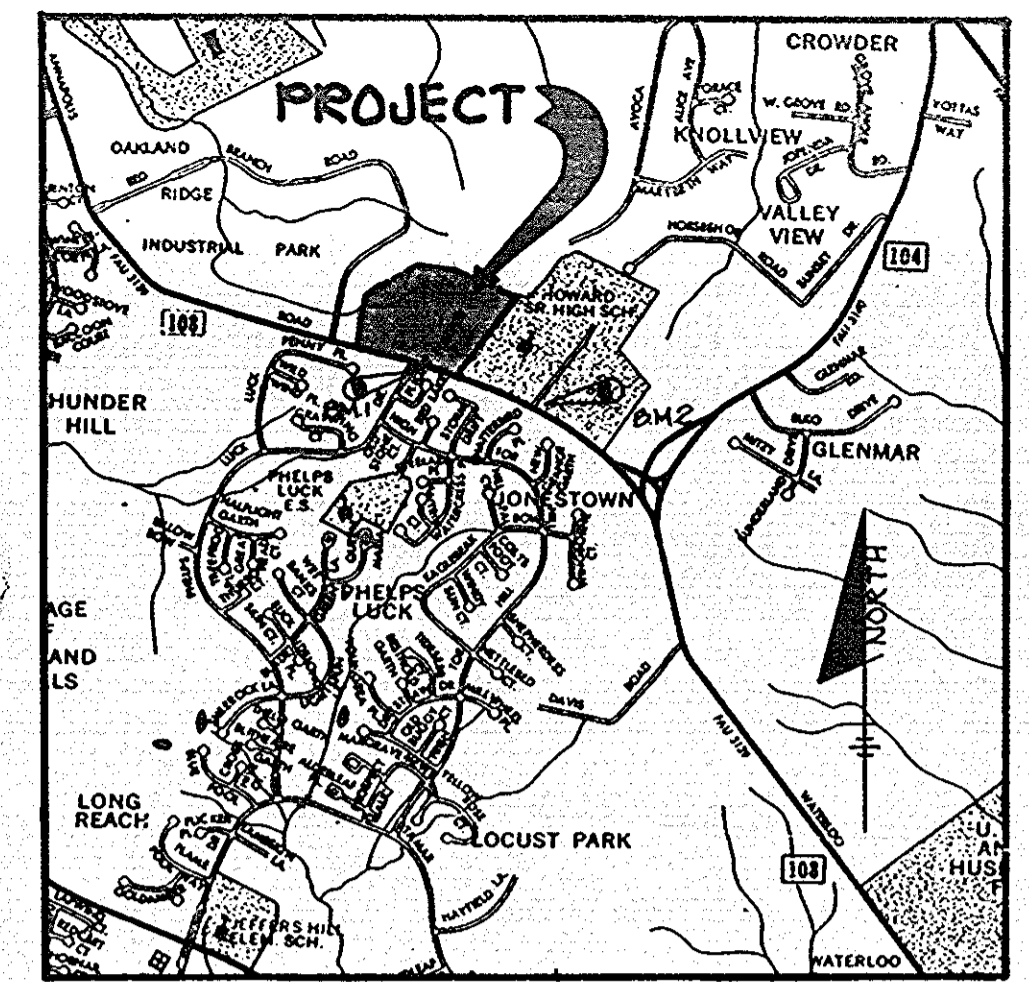
SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN & PROFILE MD. ROUTE 108
3	PLAN & PROFILE FOR CENTRE PARK DRIVE
4	STORM DRAIN PROFILES
5	ROADWAY AND STORM DRAIN DETAILS
6	DRAINAGE AREA MAP
7	SEDIMENT CONTROL AND GRADING PLAN
8	STORM WATER MANAGEMENT CONVERSION AND DETAILS

# ROADWAY & STORM DRAINS

# OAKLAND EXECUTIVE PARK

## 2 ND ELECTION DISTRICT

## HOWARD COUNTY, MARYLAND



VICINITY MAP  
SCALE 1"=2000'

GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 

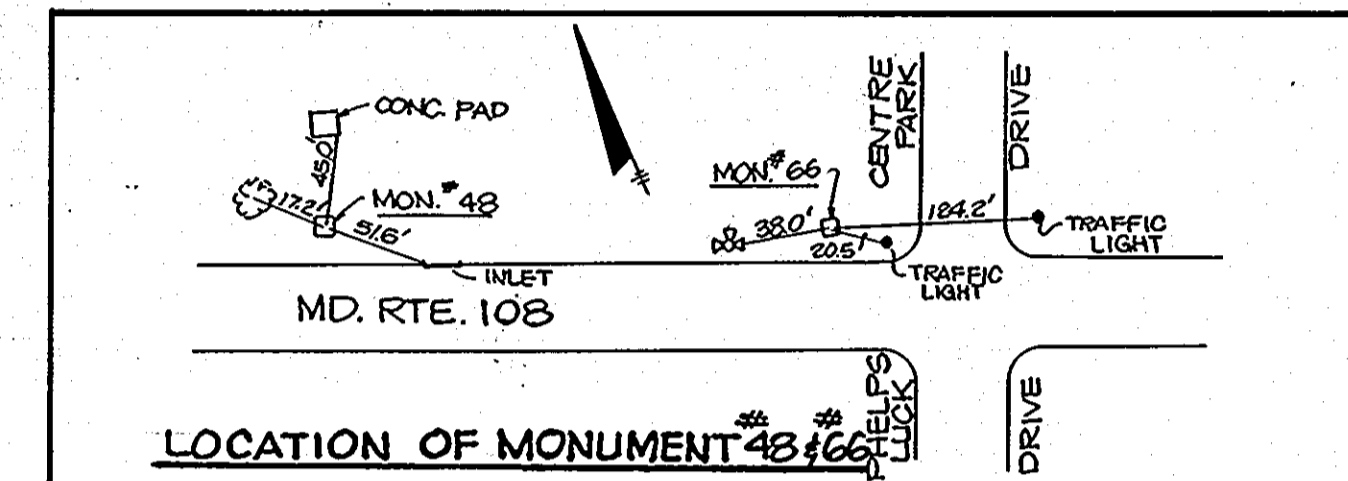
MISS UTILITY	559-0100
BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 or 3554
BALTIMORE GAS AND ELECTRIC COMPANY	539-8000, ext. 691
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL STREET CURB RETURNS SHALL HAVE 35.0' RADII UNLESS OTHERWISE NOTED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1971 EDITION.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:  
ALL 80' RIGHT-OF-WAYS 40 M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- SUBJECT PROPERTY ZONED M-1 PER 10-03-77 COMPREHENSIVE ZONING PLAN.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED JANUARY, 1984 BY THE RIEMER GROUP, INC.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME I OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- WORK WITHIN MARYLAND ROUTE 108 WILL BE COVERED BY A MARYLAND STATE HIGHWAY ADMINISTRATION PERMIT. ADDITIONAL SPECIFICATION AND WORK MAY BE A CONDITION OF THAT PERMIT AND SHALL BE CONSIDERED PART OF THIS CONTRACT.
- THE CONTRACTOR SHALL NOTIFY THE COLONIAL PIPELINE COMPANY AT LEAST TEN (10) DAYS BEFORE STARTING WORK ON THESE DRAWINGS. ROGER FOUNTAIN 705-1300

HORIZONTAL AND VERTICAL CONTROL USED FOR AS-BUILT SURVEY

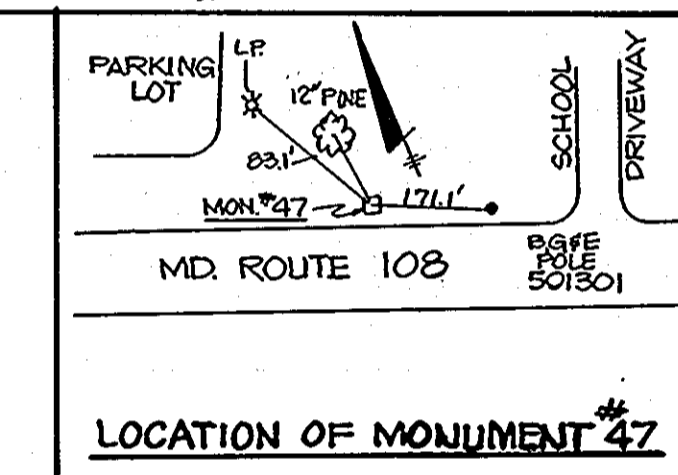
BENCH MARKS

BM #1  
NO. CO. 2743010-12 ELEV. 482.20  
3/4" REBAR @ 1" BELOW SURFACE 34.7'  
SOUTH OF CURB ON MARYLAND RT. 108  
175' EAST OF E PHELPS LUCK DRIVE

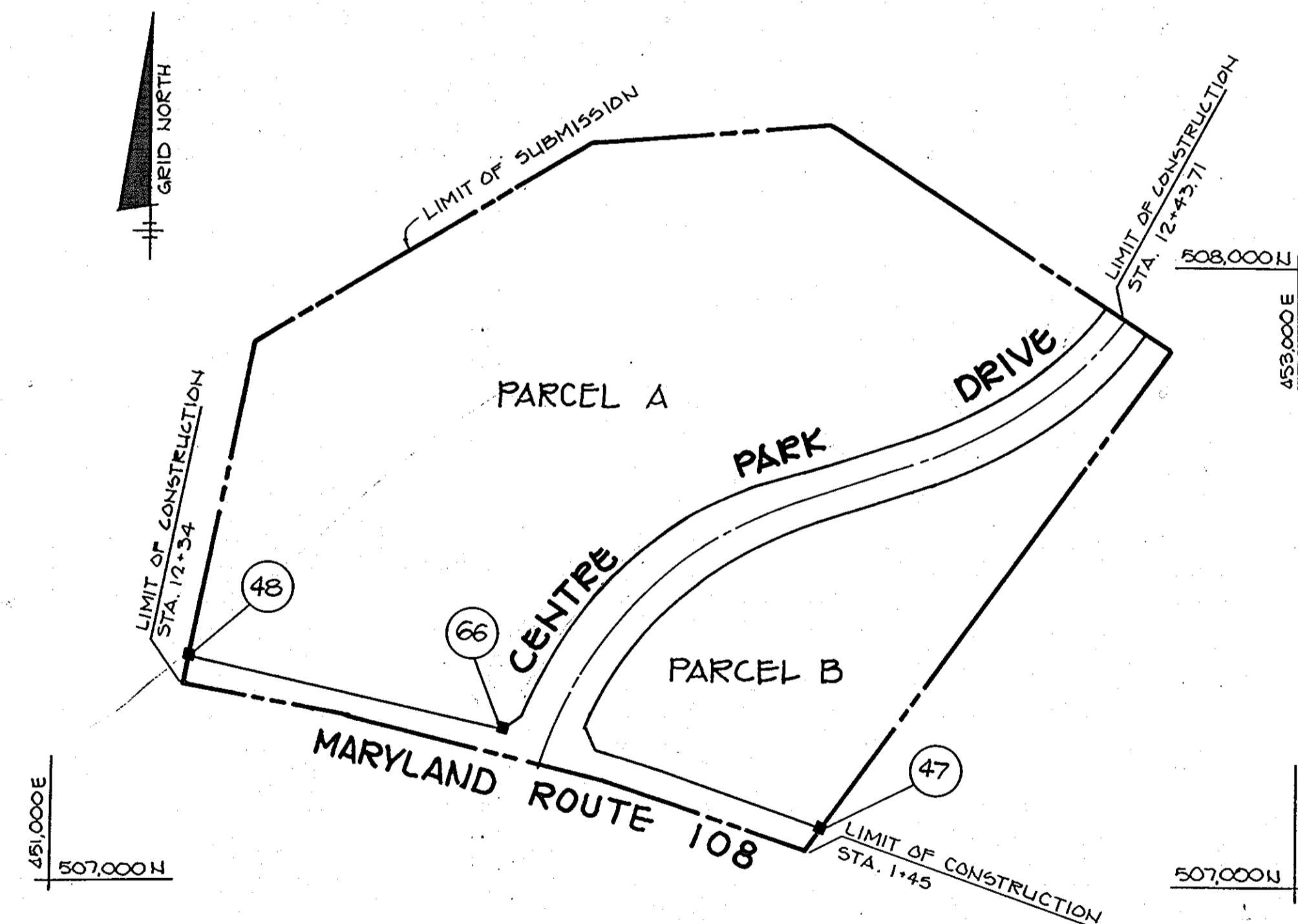
BM #2  
NO. CO. 2743000 ELEV. 530.07  
CONC. MONUMENT @ SURFACE 49'±  
EAST OF NORTHWEST DRIVE OF HOWARD  
HIGH SCHOOL ON NORTH SIDE OF  
MARYLAND ROUTE 108



LOCATION OF MONUMENT #43



LOCATION OF MONUMENT #47



PLAN  
SCALE 1"=200'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
<i>John M. Washburn</i>	8-29-84
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>William S. Reid</i>	8-31-84
CHIEF, BUREAU OF ENGINEERING	DATE
4-1-83	Rev. sheets 2, 3, 4, 6
10-31-83	1 CHANGED TITLE & ROAD NAME
DATE	NO. REVISION
OWNER: PETER KIRK, TRUSTEE, PATRICK M'CUAN, TRUSTEE, AND WILBUR SIMMONS TRUSTEE, 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044	
DEVEL: KHS GROUP, 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044	
PROJECT: OAKLAND EXECUTIVE PARK	
AREA TAX MAP NO. 30 PARCEL 104 2 ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONED M-1	
TITLE: TITLE SHEET	
THE RIEMER GROUP, INC. A LAND PLANNING, DESIGN & CIVIL ENGINEERING FIRM 3105 HEALTH PARK DRIVE, ELLICOTT CITY, MD. 21043 301 461-2890	
DATE: 8-23-84	584-33
DESIGNED BY:	
DRAWN BY: DAM	
PROJECT NO: 003400	
DATE: 8-23-84	
SCALE: AS SHOWN	
DRAWING NO. 1 OF 8	

AS-BUILT SURVEY CERTIFIED BY ARTHUR E. MUESSE III, MD. REG. RE. No. 8707, ON 10-15-87



MARYLAND BLUEPRINT CO. INC. 15268

# 1088



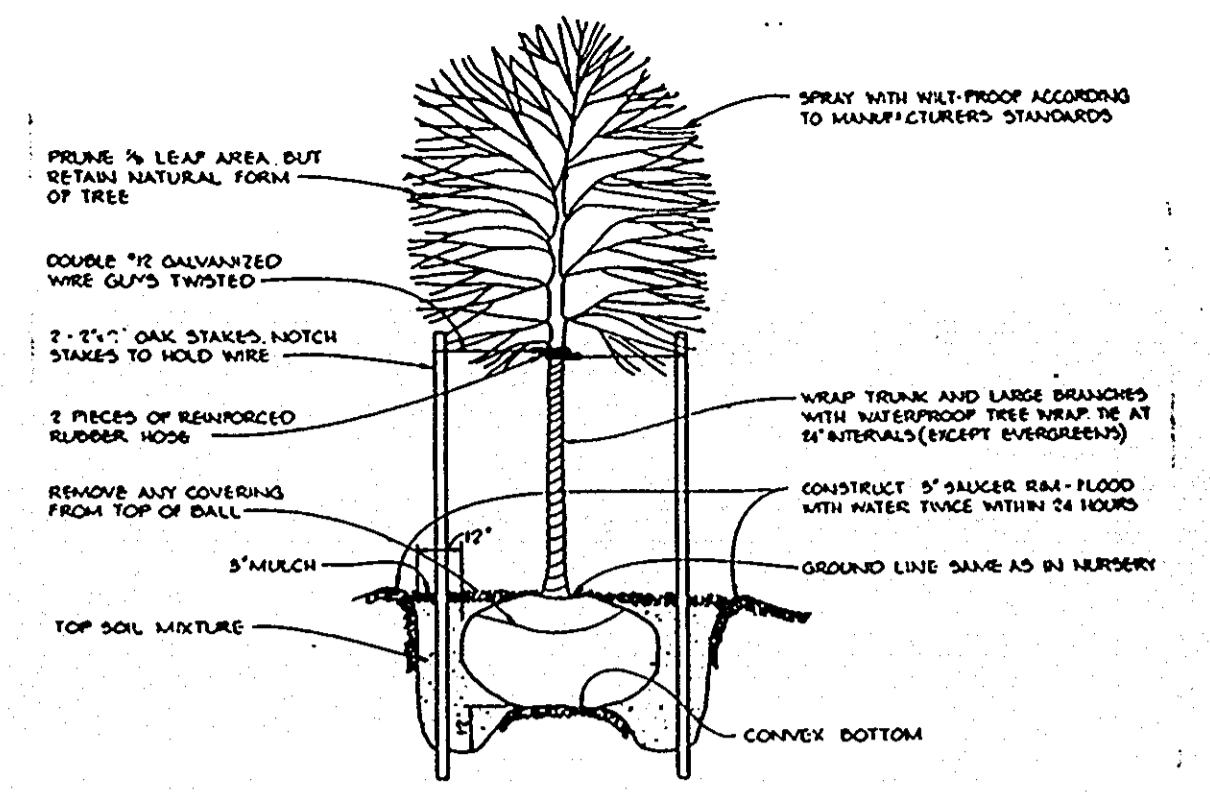




CURVE DATA  
 FROM STA. 0+00 TO STA. 3+38.52  
 $\Delta = 27^{\circ}50'22''$   
 $R = 650.00'$   
 $L = 338.52'$   
 $T = 173.15'$   
 $O_1 = 08^{\circ}48'53''$   
 $CHD = N29^{\circ}53'11''W, 334.71'$

CURVE DATA  
 FROM STA. 8+44.85 TO STA. 12+42.00  
 $\Delta = 35^{\circ}46'48''$   
 $R = 627.00'$   
 $L = 337.80'$   
 $T = 205.02'$   
 $O_1 = 08^{\circ}50'41''$   
 $CHD = N54^{\circ}26'30''E, 301.30'$

CURVE DATA  
 FROM STA. 3+38.52 TO STA. 4+15.7  
 $\Delta = 27^{\circ}00'14''$   
 $R = 643.00'$   
 $L = 303.05'$   
 $T = 154.40'$   
 $O_1 = 08^{\circ}54'28''$   
 $CHD = N56^{\circ}50'55''E, 300.25'$



**TREE PLANTING DETAIL**  
NO SCALE

**PLANT LIST**

SYMBOL	QUANTITY	NAME	SIZE	REMARKS
QP	41	QUERCUS PALUSTRIS PIN OAK	2 1/2" - 3" CAL. 12'-14" HT.	B & B FULL HEAD
QR	36	QUERCUS RUBRA NORTHERN RED OAK	2 1/2" CAL.	B & B
PS	32	PINUS STROBUS EASTERN WHITE PINE	6'-8" HT.	UNSHED

**STREET LIGHTING NOTE**

STREET LIGHT SYMBOL, 3 LIGHTS REQUIRED.  
 STREET LIGHT TO BE B.G.E. STANDARD, 30" BRONZE ALUMINUM POLE WITH 250 WATT MERCURY VAPOR LAMP. POLE TO BE LOCATED 6' BACK FROM FACE OF CURB.

AS-BUILT SURVEY CERTIFIED BY  
 ARTHUR E. MUEGGE, M.D. RE. NO. 8707 ON 10-15-87

7-13-87	DELETE SIDEWALKS ADDED 5-4-87
5-4-87	ADDED SIDEWALKS
5-20-85	REVISED WIDTH OF CPD TO 60'
DATE: 10/15/87	REVISION

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Arthur E. Muegge* 8-29-87  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*William S. Quinn* 8-31-87  
 CHIEF, BUREAU OF ENGINEERING

4/1/85 Rev ROAD GRADE  
 10-31-84 CHANGED TITLE AND ROAD NAME  
 DATE NO REVISION  
 OWNER: PETER KIRK, TRUSTEE, PATRICK MCGUIR, TRUSTEE, AND WILBUR SIMMONS, TRUSTEE, 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044

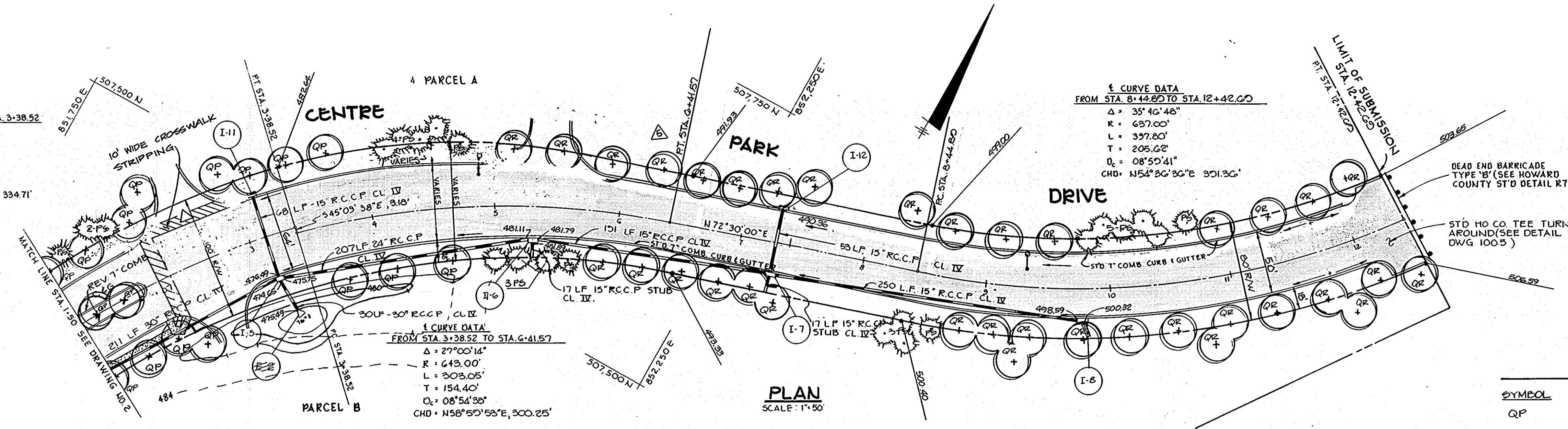
DEVEL: K.M.S. GROUP  
 1000 EQUITABLE BANK CENTER  
 COLUMBIA, MARYLAND 21044

PROJECT: **OAKLAND EXECUTIVE PARK**  
 AREA TAX MAP NO. 30 PARCEL 104  
 2ND ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 ZONED M-1

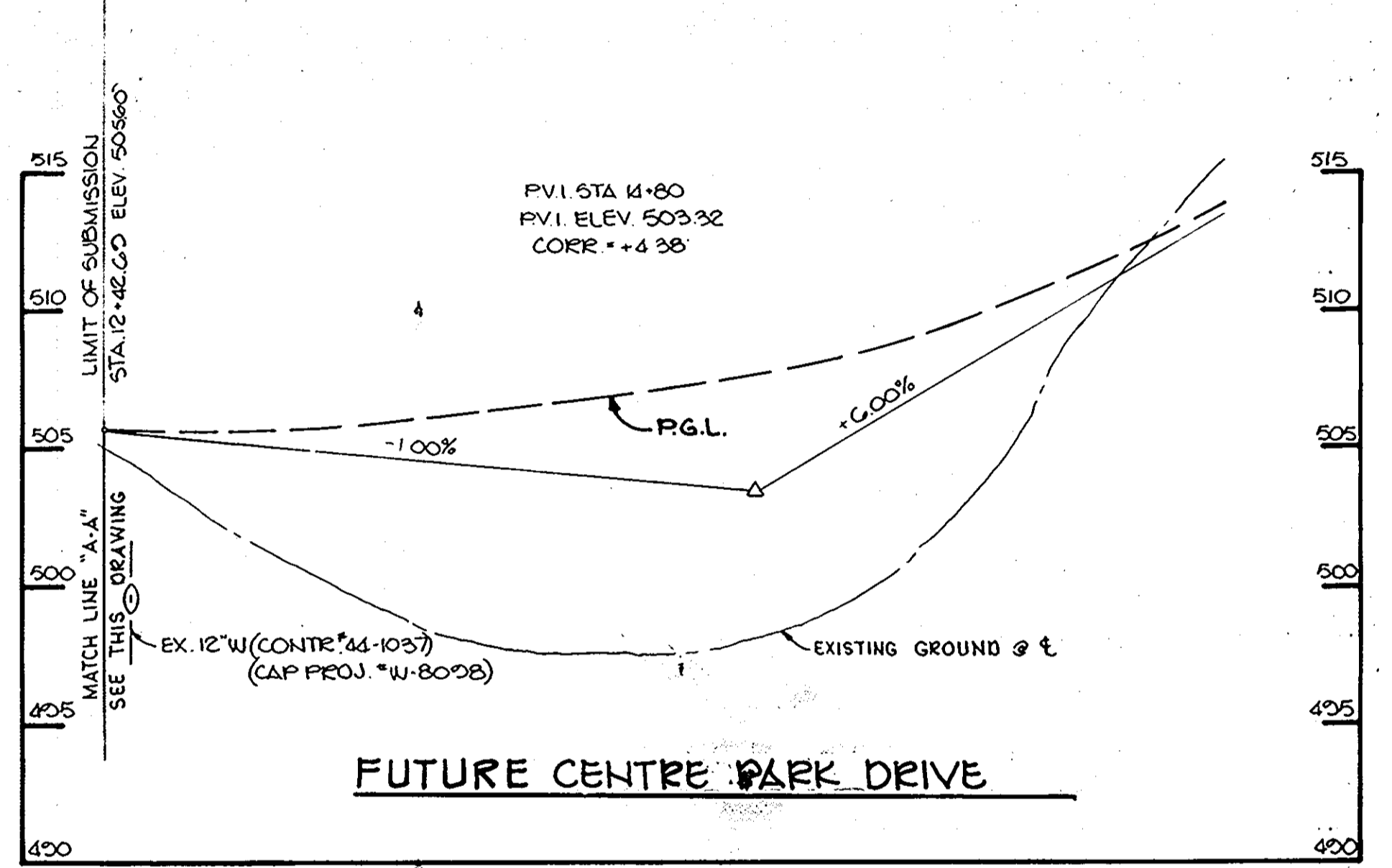
TITLE: **PLAN, PROFILE, & PLANTING PLAN OF CENTRE PARK DRIVE**

**THE RIEMER GROUP, INC.**  
 A LAND PLANNING, DESIGN & CIVIL ENGINEERING FIRM  
 3105 HEALTH PARK DRIVE, ELLEICOTT CITY, MD. 21043 301 461-2690

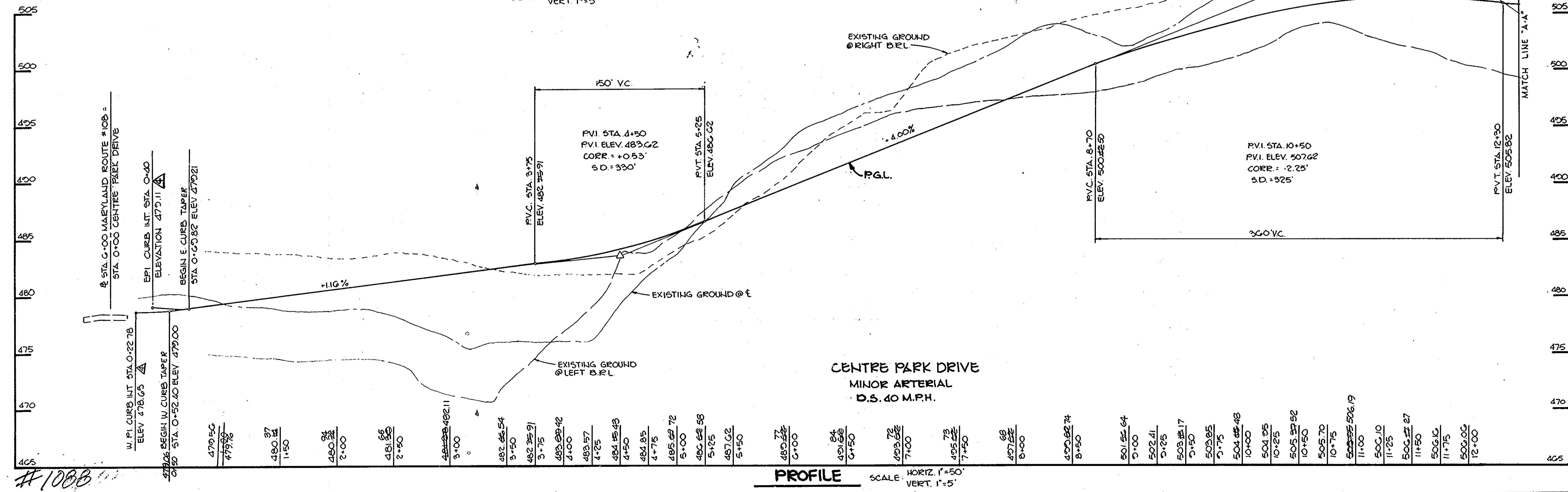
DATE: 8-23-84  
 DESIGNED BY: L.J.D.  
 DRAWN BY: OAM  
 PROJECT NO: 008400  
 DATE: 8-23-84  
 SCALE: AS SHOWN  
 DRAWING NO. 3 OF 3



**PLAN**  
SCALE: 1"=50'



**PROFILE**  
SCALE: HORIZ. 1"=50'  
VERT. 1"=5'



**PROFILE**  
SCALE: HORIZ. 1"=50'  
VERT. 1"=5'

MAYLAND BLUEPRINT CO., INC.

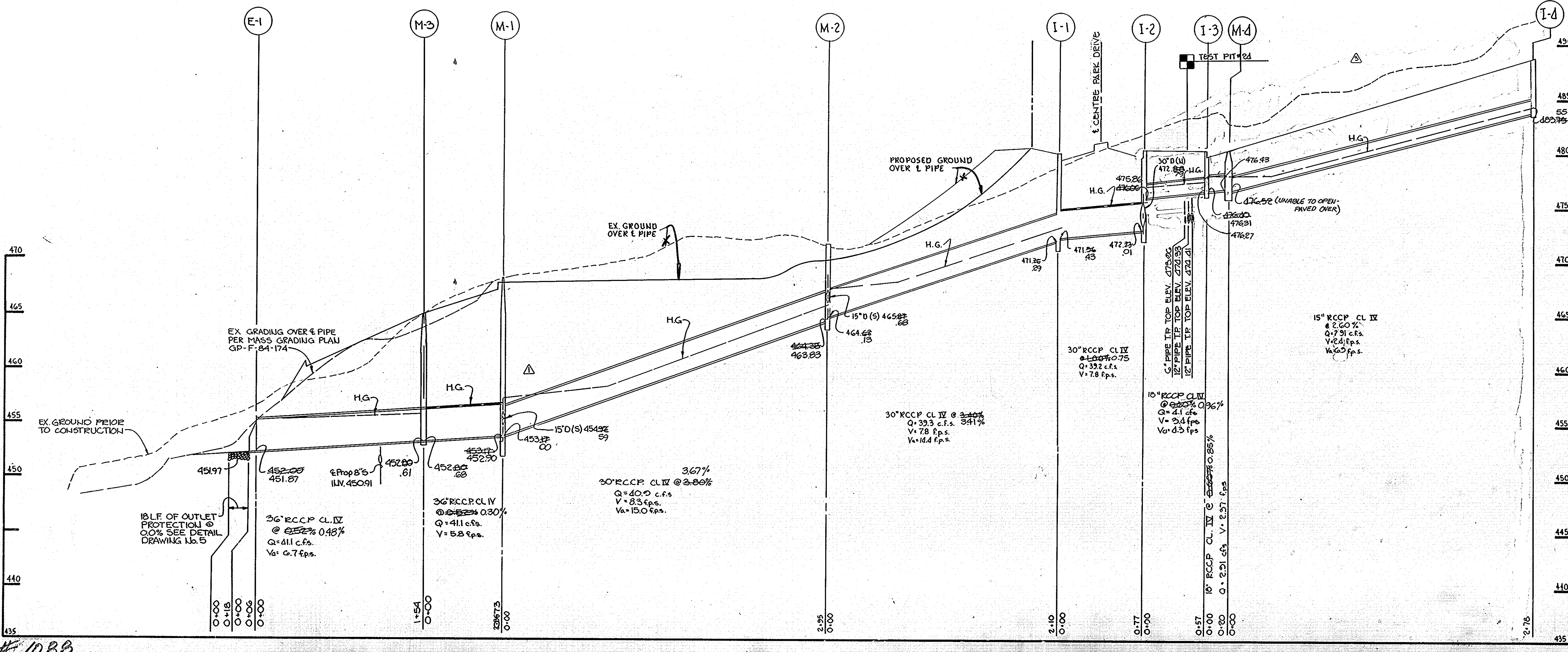
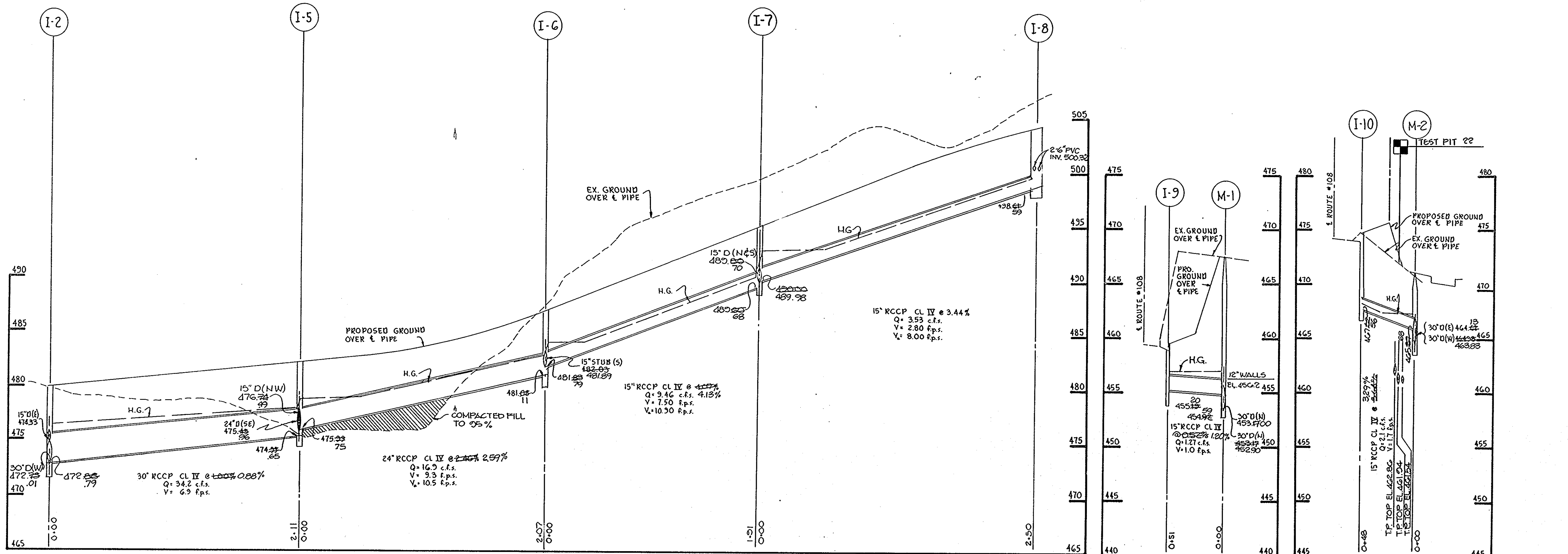
#1088

AS-BUILT 10-15-87

F-84-174

MAY 6, 1985





AS-BUILT SURVEY CERTIFIED BY  
ARTHUR E. MUEGGE, MD. P.E. No.  
8707 ON 10-15-87

4-1-85/A Rev Ex. Gr. over ST. Dr.  
11-2-84 ADDED M-4

APPROVED: HOWARD COUNTY OFFICE OF  
PLANNING AND ZONING  
*John M. ...* 8-29-84  
CHIEF, DIVISION OF LAND  
DEVELOPMENT AND  
ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF  
PUBLIC WORKS  
*William D. ...* 8-31-84  
CHIEF, BUREAU OF ENGINEERING

10-31-84 2 CHANGED TITLE  
9-13-84 1 Revised pipe from E-1 to M-2

DATE NO. REVISION

OWNER: PETER KIRK, TRUSTEE, PATRICK MCCUAN, TRUSTEE,  
AND WILBUR SIMMONS, TRUSTEE,  
1000 EQUITABLE BANK CENTER  
COLUMBIA, MARYLAND 21044

DEVEL: K.M.S. GROUP  
1000 EQUITABLE BANK CENTER  
COLUMBIA, MARYLAND 21044

PROJECT:  
**OAKLAND EXECUTIVE PARK**

AREA: TAX MAP NO. 30 PARCEL 104  
2 ND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
ZONED M-1

TITLE:  
STORM DRAIN PROFILES

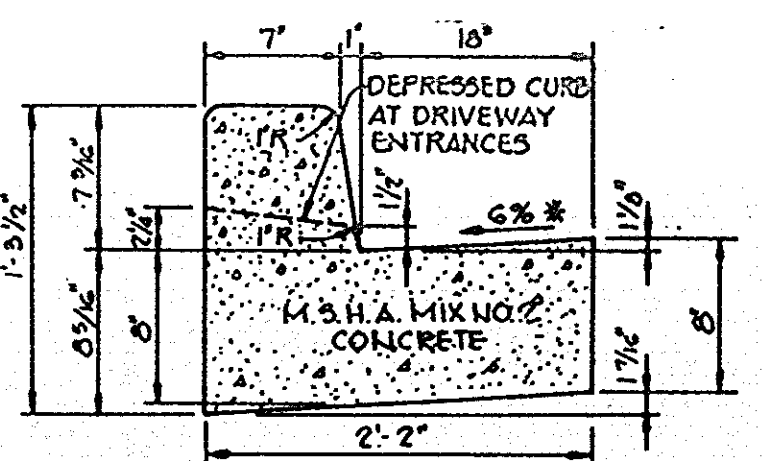
**THE RIEMER GROUP, INC.**  
A LAND PLANNING, DESIGN & CIVIL ENGINEERING FIRM  
3105 HEALTH PARK DRIVE, ELLICOTT CITY, MD. 21043 301 461-2690

DATE 8-23-84  
DATE 5-84-33  
VP-84-111

DESIGNED BY: L.J.D.  
DRAWN BY: W.C.W.  
PROJECT NO: 003400  
DATE 8-23-84  
SCALE: HORIZ - 1"=50'  
VERT - 1"=5'  
DRAWING NO. 4 OF 8

ARTHUR E. MUEGGE  
ARTHUR E. MUEGGE 8707

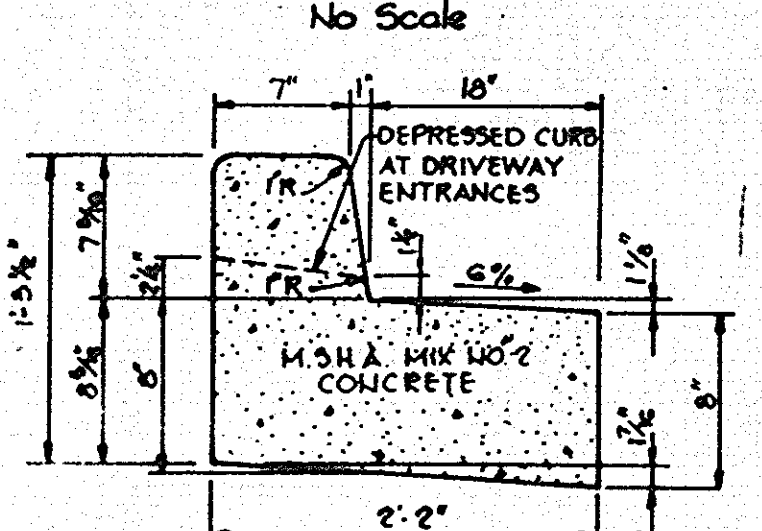




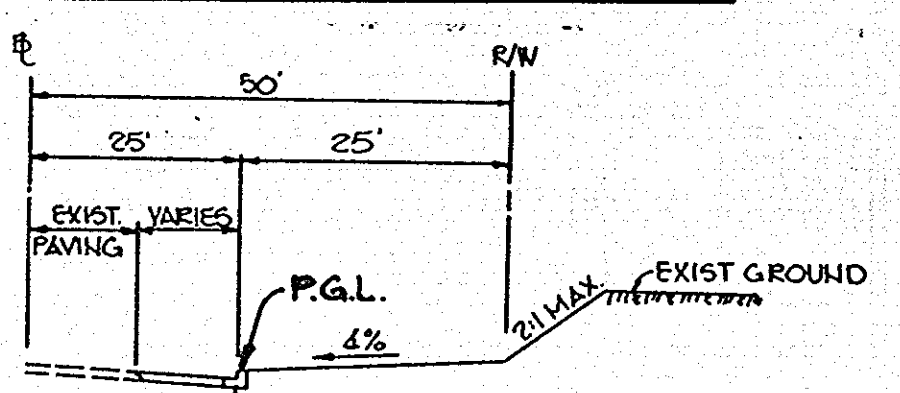
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

\* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

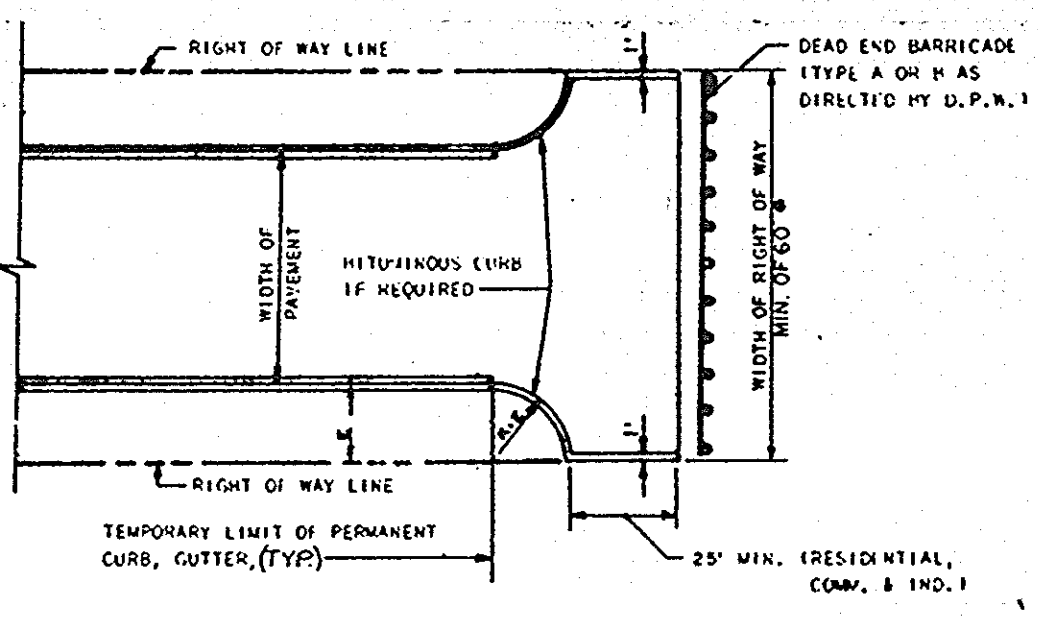
**STANDARD 7" COMBINATION CURB AND GUTTER**  
No Scale



**REVERSED 7" COMBINATION CURB AND GUTTER**  
No Scale

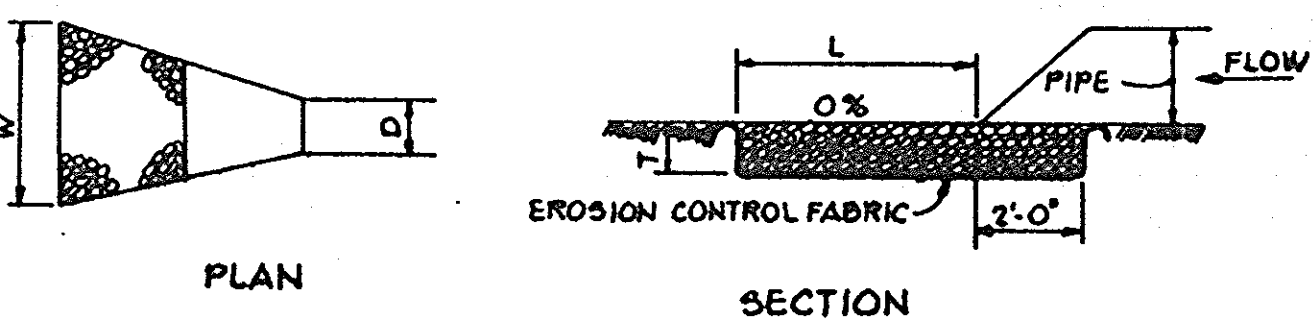


**MD ROUTE #108 ROAD WIDENING**  
No Scale



- 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-5.01 FOR TYPICAL ROADWAY PROFILE OF TEMPORARY LIMIT OF PAVING.
  - \* FOR LOCAL ROADS, PROVIDE 5' REVERTIBLE EASEMENT EACH END OF THE TEE.

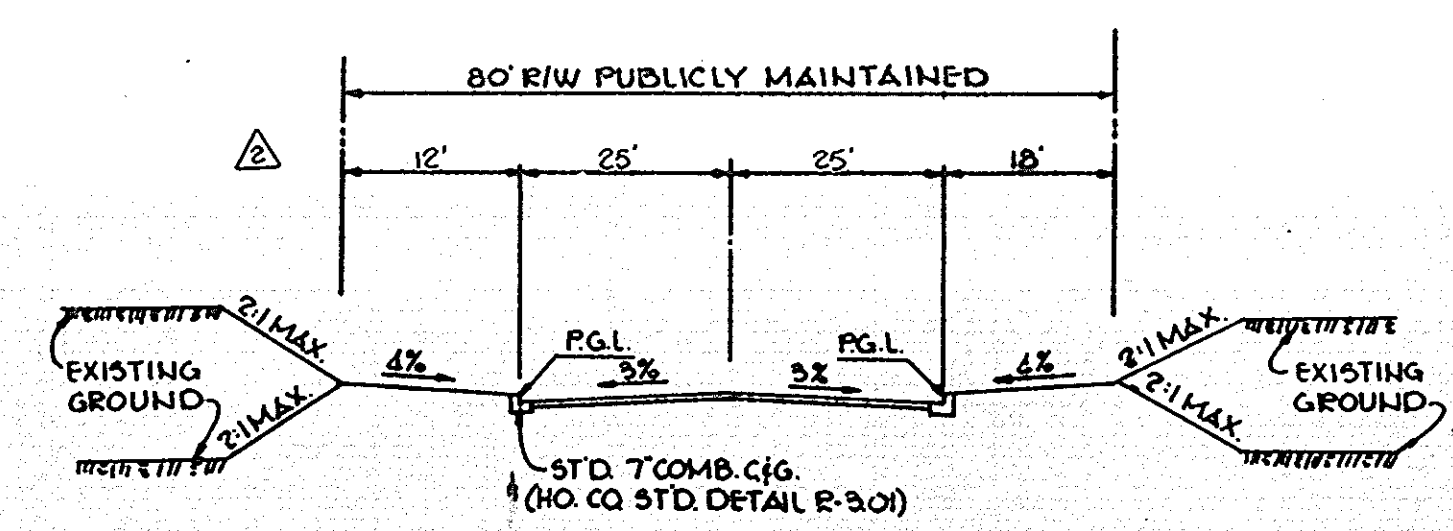
**TEE TURN AROUND**  
No Scale



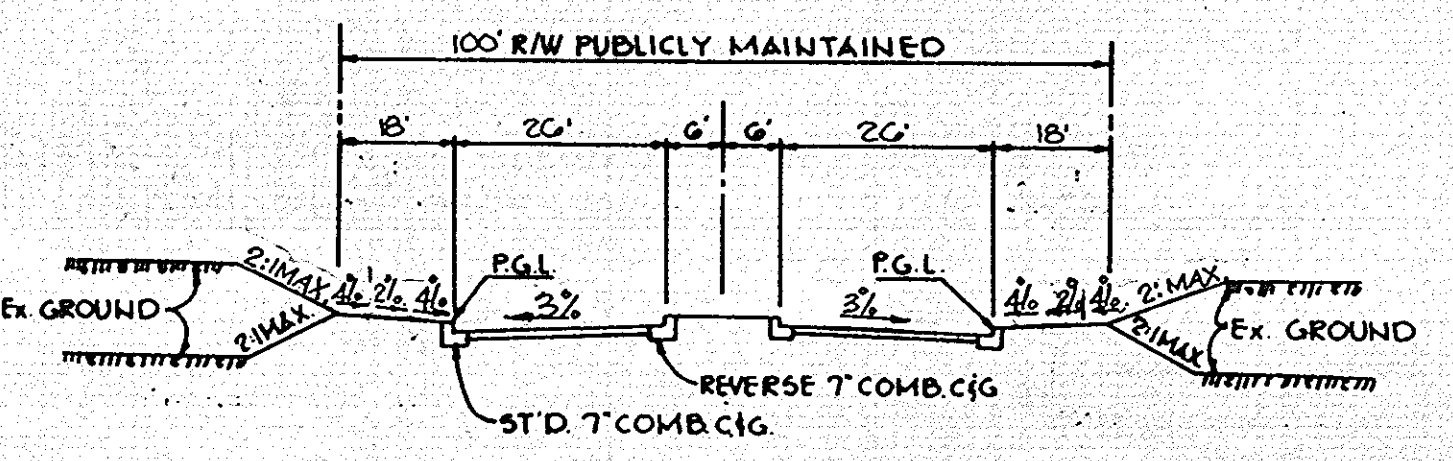
STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	0.5'	18"	20.5'	5"

**OUTLET PROTECTION DETAIL**  
No Scale

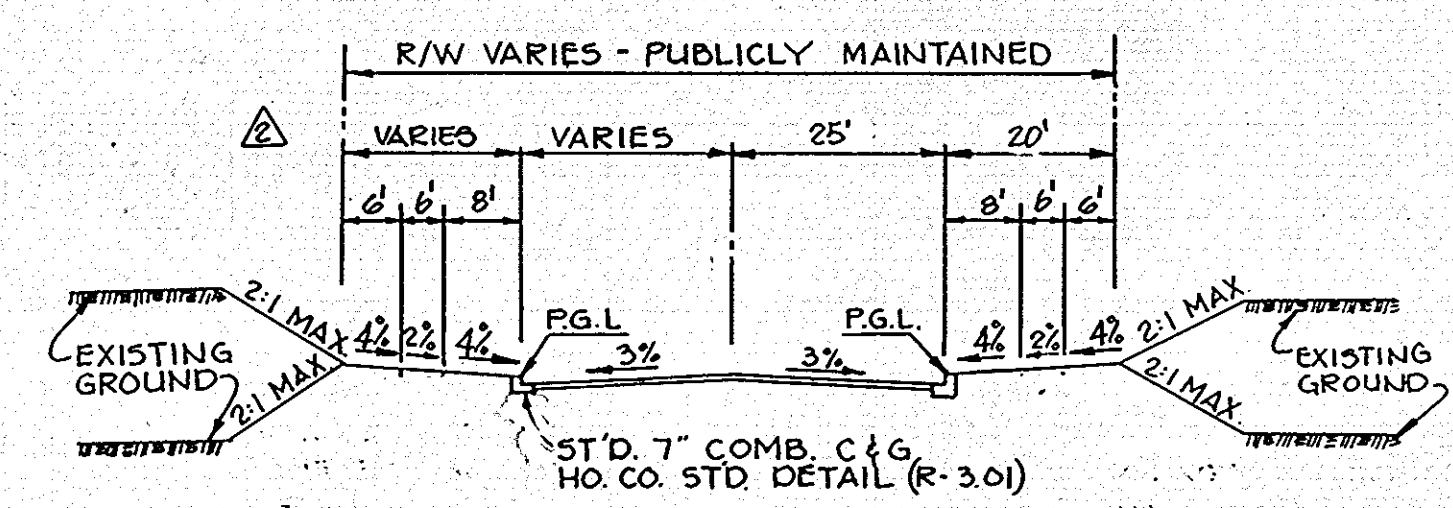
#1088



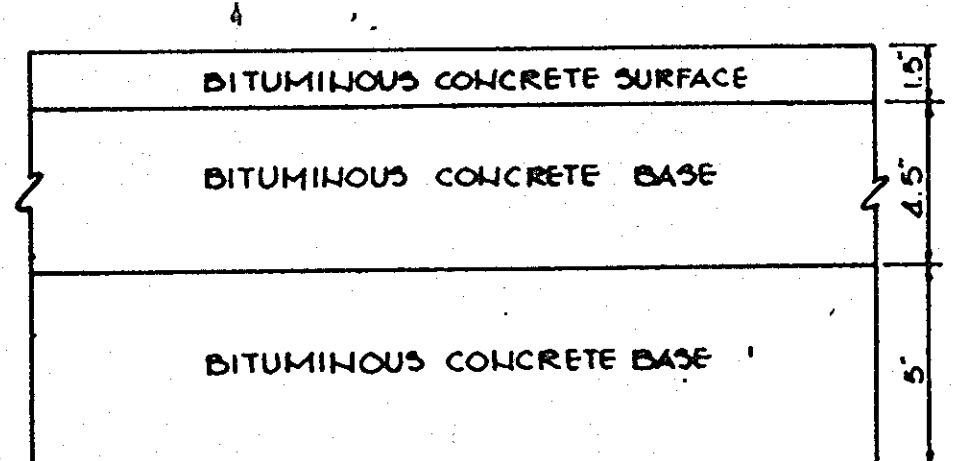
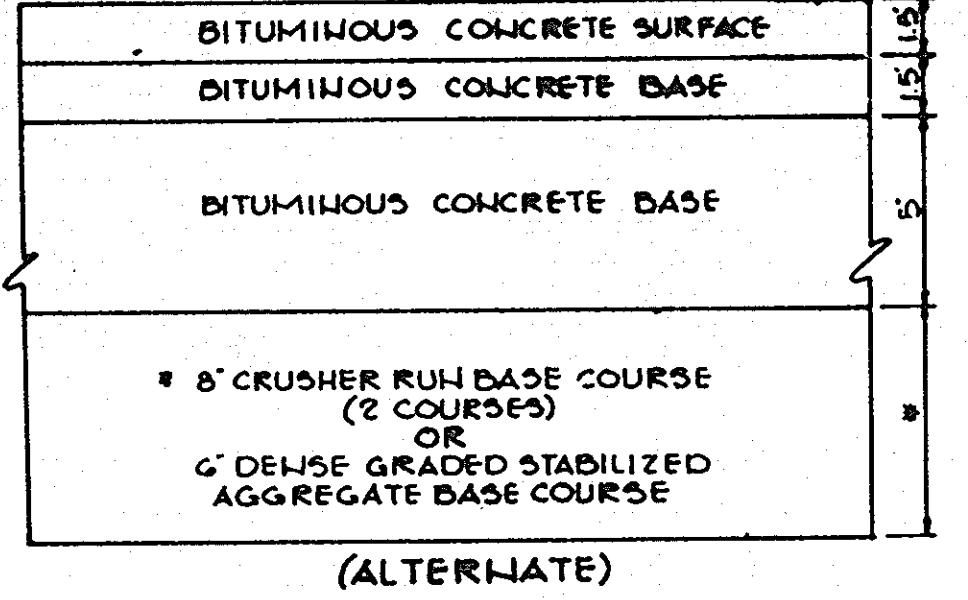
**TYPICAL SECTION 80' R/W**  
NO SCALE  
CENTRE PARK DRIVE (MINOR ARTERIAL)  
DESIGN SPEED - 40 MPH FROM E STA. 0+30.05 TO E STA. 12+43.71



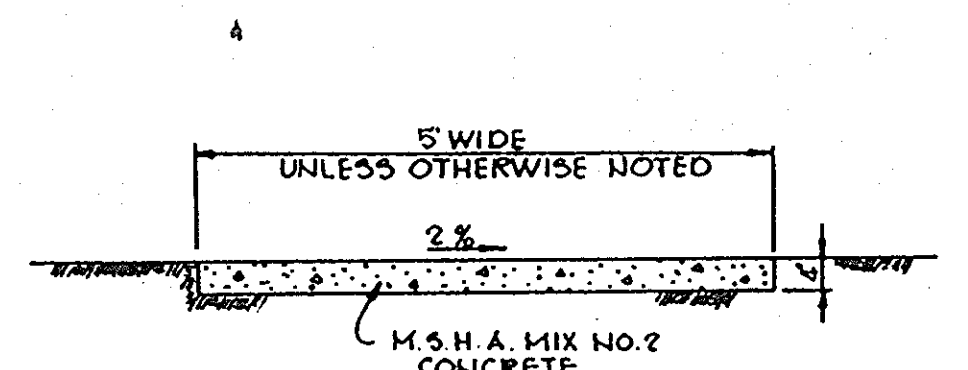
**TYPICAL DIVIDED ROADWAY SECTION**  
NO SCALE  
CENTRE PARK DRIVE (MINOR ARTERIAL)  
DESIGN SPEED - 40 MPH FROM E STA. 0+00 TO E STA. 3+28.52  
GRASSSED ISLAND FROM E STA. 0+50 TO E STA. 2+07



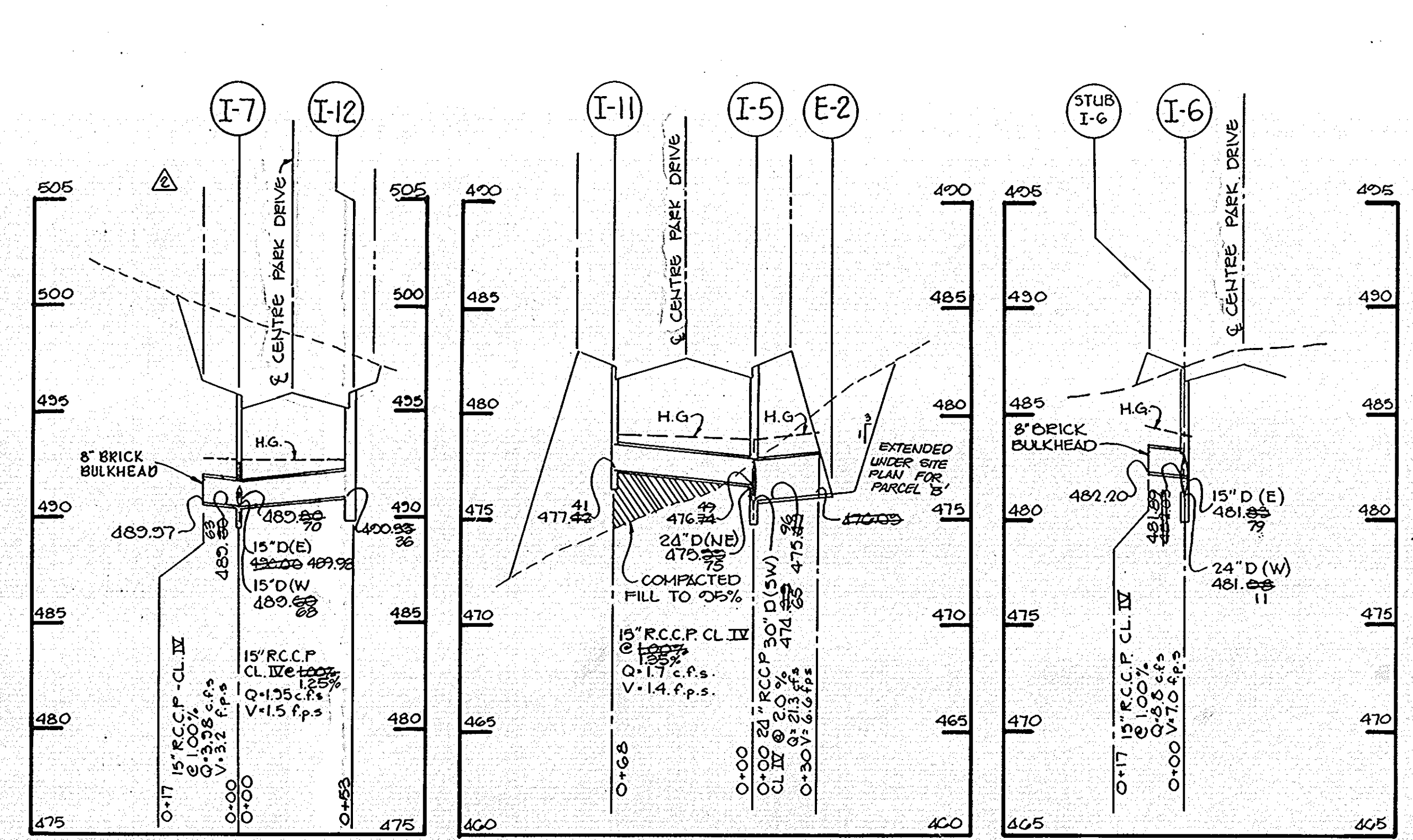
**TYPICAL SECTION VARIABLE R/W**  
NO SCALE  
CENTRE PARK DRIVE (MINOR ARTERIAL)  
DESIGN SPEED - 40 MPH FROM E STA. 3+28.52 TO E STA. 6+26.05



HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.02)  
**(11" PAVING - 5)**  
CENTRE PARK DRIVE AND MARYLAND ROUTE 108  
**TYPICAL PAVING SECTION**  
NO SCALE



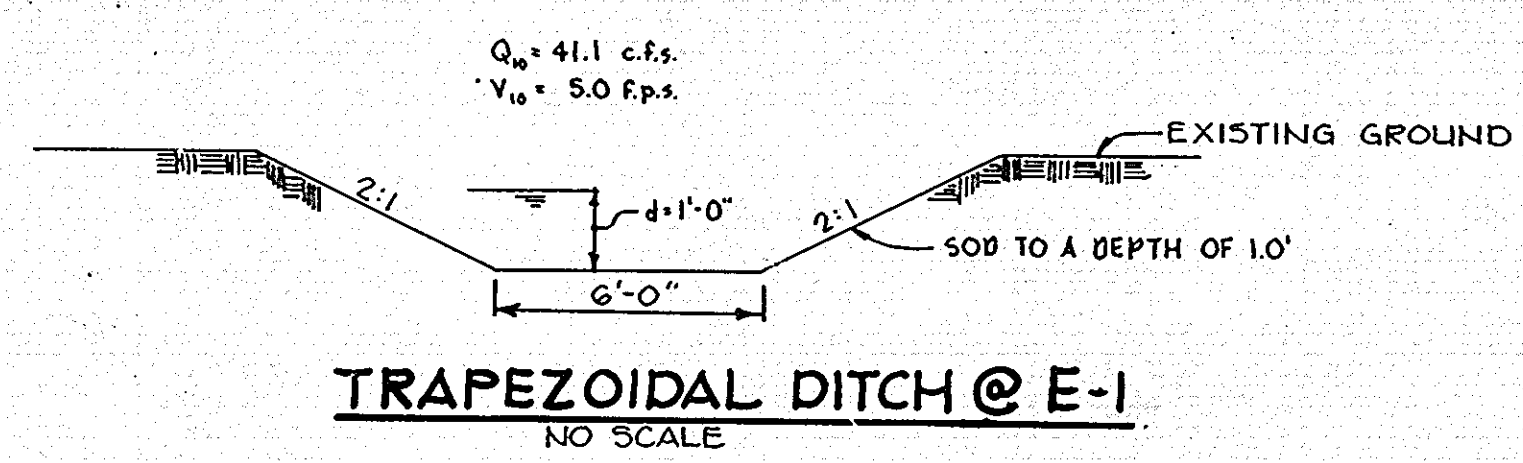
**SIDEWALK DETAIL**  
No Scale



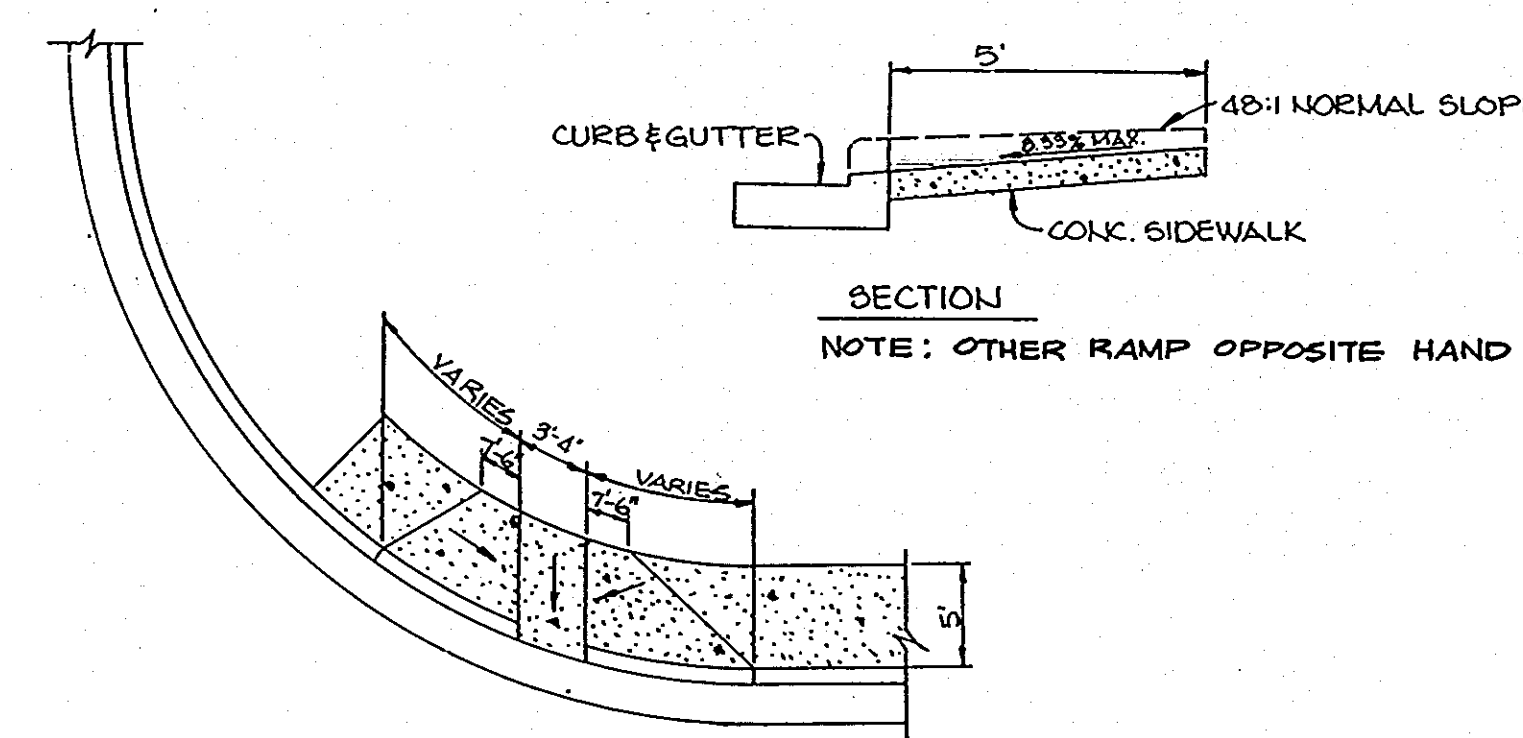
**PROFILE**  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

**PROFILE**  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'

**PROFILE**  
SCALE: HORIZ. 1" = 50'  
VERT. 1" = 5'



**TRAPEZOIDAL DITCH @ E-1**  
NO SCALE



**HANDICAP RAMP**  
NO SCALE

NOTE: AT INTERSECTION OF RTE. 108 PER HOWARD COUNTY STD. DETAIL R-4.04

AS-BUILT SURVEY CERTIFIED BY ARTHUR E. MUEGGE, P.E. No. 8707 ON 10/15/87

DATE	NO.	REVISIONS
7-13-87	1	DELETE SIDEWALKS ADDED 5-4-87
5-4-87	2	ADDED SIDEWALK TO SECTION & RAMP DETAILS

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Arthur E. Muegge* 8-29-84  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*John S. ...* 8-31-84  
CHIEF, BUREAU OF ENGINEERING

OWNER: PETER KIRK, TRUSTEE, PATRICK McCUAN, TRUSTEE, AND WILBUR SIMMONS, TRUSTEE, 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044

DEVEL: K.M.S. GROUP 1000 EQUITABLE BANK CENTER COLUMBIA, MARYLAND 21044

PROJECT: **OAKLAND EXECUTIVE PARK**

AREA TAX MAP NO. 30 PARCEL 104 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONED M-1

TITLE: ROADWAY AND STORM DRAIN DETAILS

**THE RIEMER GROUP, INC.**  
A LAND PLANNING, DESIGN & CIVIL ENGINEERING FIRM  
3105 HEALTH PARK DRIVE, ELLICOTT CITY, MD. 21043 301 461-2690

DATE	NO.	REVISIONS
8-13-84	1	DATE
5-84-33	2	VP-84-111

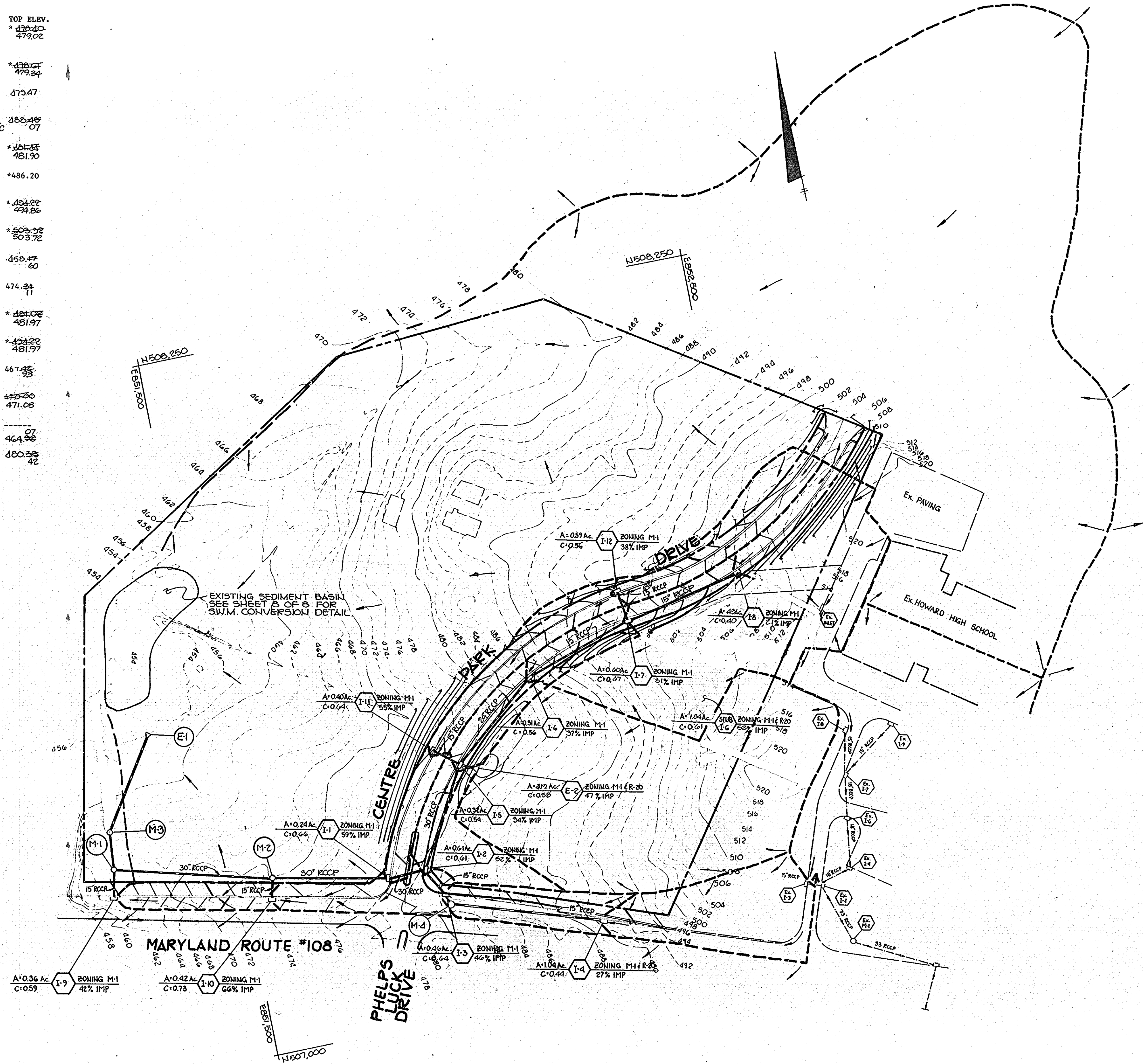
DESIGNED BY: L.J.D.  
DRAWN BY: J.C.J.  
PROJECT NO: 003400  
DATE: 8-23-84  
SCALE: AS SHOWN  
DRAWING NO. 2 OF 5



STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.
I-1	ST'D Ho. Co. A-5 inlet w/DEF (Detail SD-4.01)	34' LT of STA 0+54	471.45 472.00 472.29	471.76 29 T/C	*472.40 473.24
I-2	ST'D Ho. Co. A-5 inlet w/DEF (Detail SD-4.01)	34' RT of STA 0+84	475.86 476.00 476.79	472.22 01 T/C	*473.24 473.24
I-3	M.S.H.A. ST'D inlet (Detail MD-374.04)	34' RT of STA 5+26 MD RTE 108	476.40 31	476.40 27	473.47
I-4	M.S.H.A. ST'D WR inlet (Detail MD. 374.04)	24' RT of STA 2+36 MD RTE. 108	-----	480.75 55 T/C	480.49 07
I-5	ST'D Ho. Co. A-5 inlet (Detail SD-4.01)	34' RT of STA 3+13	476.49 475.25 475.25	474.22 65 T/C	*474.22 481.90
I-6	ST'D Ho. Co. A-5 inlet W/Def. (Detail SD-4.01)	24' RT of STA 5+31	481.83 481.83 481.83	481.83 11 T/C	*486.20
I-7	ST'D Ho. Co. A-5 inlet W/Def. (Detail SD-4.01)	24' RT of STA 7+30	489.79 489.63 489.79	489.63 T/C	*484.86 484.86
I-8	ST'D Ho. Co. A-10 inlet (Detail SD-4.02)	24' RT of STA 9+78	2-6' F.V.C. 500.32	498.44 T/C	*500.32 503.72
I-9	M.S.H.A. ST'D WR inlet (Detail MD-374.04)	24' RT of STA 11+35 MD RTE 108	-----	455.13 20 T/C	450.47 60
I-10	M.S.H.A. ST'D WR inlet (Detail MD-374.04)	24' RT of STA 8+39 MD RTE. 108	-----	467.26 70	474.24
I-11	ST'D Ho. Co. A-5 inlet (Detail SD-4.01)	34' ET. OF STA. 3 + 13	-----	477.21 41 T/C	*481.02 481.97
I-12	ST'D Ho. Co. A-5 inlet W/DEF (Detail SD-4.01)	24' LT of STA 7+30	-----	490.26 T/C	*484.22 481.97
M-1	MANHOLE (Ho. Co. ST'D Detail G-5.13)	75' RT of STA 11+35 MD RTE 108	453.00 59	454.83 453.90	467.45 93
M-2	MANHOLE (Ho. Co. ST'D Detail G-5.13)	62' RT of STA 8+39 MD RTE 108	465.87 464.45 465.87	464.45 463.83	475.00 471.08
E-1	CONCRETE END SECTION (Ho. Co. ST'D Detail SD-5.51)	SEE PLAN	-----	451.97	-----
M-3	MANHOLE (Ho. Co. ST'D. DETAIL G-5.13)	SEE PLAN	454.10 452.68	452.61	464.92
M-4	MANHOLE (SHALLOW) (HO. CO. STD. DETAIL G-5.13)	10' ET. OF STA. 5+12 MD. RTE 108	476.56 45	476.52 43	480.23 42

\* ELEVATIONS @ THROAT OPENING



AS-BUILT SURVEY CERTIFIED BY  
ARTHUR E. MUEGGE, MD. P.E. No. 8707  
ON 10-15-87

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*Arthur E. Muegge* 8-23-84  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*Richard D. ...* 8-31-84  
CHIEF, BUREAU OF ENGINEERING

10-31-84: 1 CHANGED TITLE & ROAD NAME-ADDED M-4  
DATE NO REVISION

OWNER: PETERKIRK, TRUSTEE, PATRICK McCUAN, TRUSTEE, AND WILBUR SIMMONS, TRUSTEE  
1000 EQUITABLE BANK CENTER  
COLUMBIA, MARYLAND 21044

DEVEL: K.M.S. GROUP  
1000 EQUITABLE BANK CENTER  
COLUMBIA, MARYLAND 21044

PROJECT: OAKLAND EXECUTIVE PARK

AREA: TAX MAP NO 30 PARCEL 104  
2ND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
ZONED M-1

TITLE: DRAINAGE AREA MAP

THE RIEMER GROUP, INC.  
A LAND PLANNING, DESIGN & CIVIL ENGINEERING FIRM  
3105 HEALTH PARK DRIVE, ELLICOTT CITY, MD. 21043 301 461-2690

8-23-84 DATE  
8-84-33 VP-84-111  
DESIGNED BY L.J.D.  
DRAWN BY T.M.  
PROJECT NO 003400  
DATE: 8-23-84  
SCALE 1"=100'  
DRAWING NO C OF B

#1088

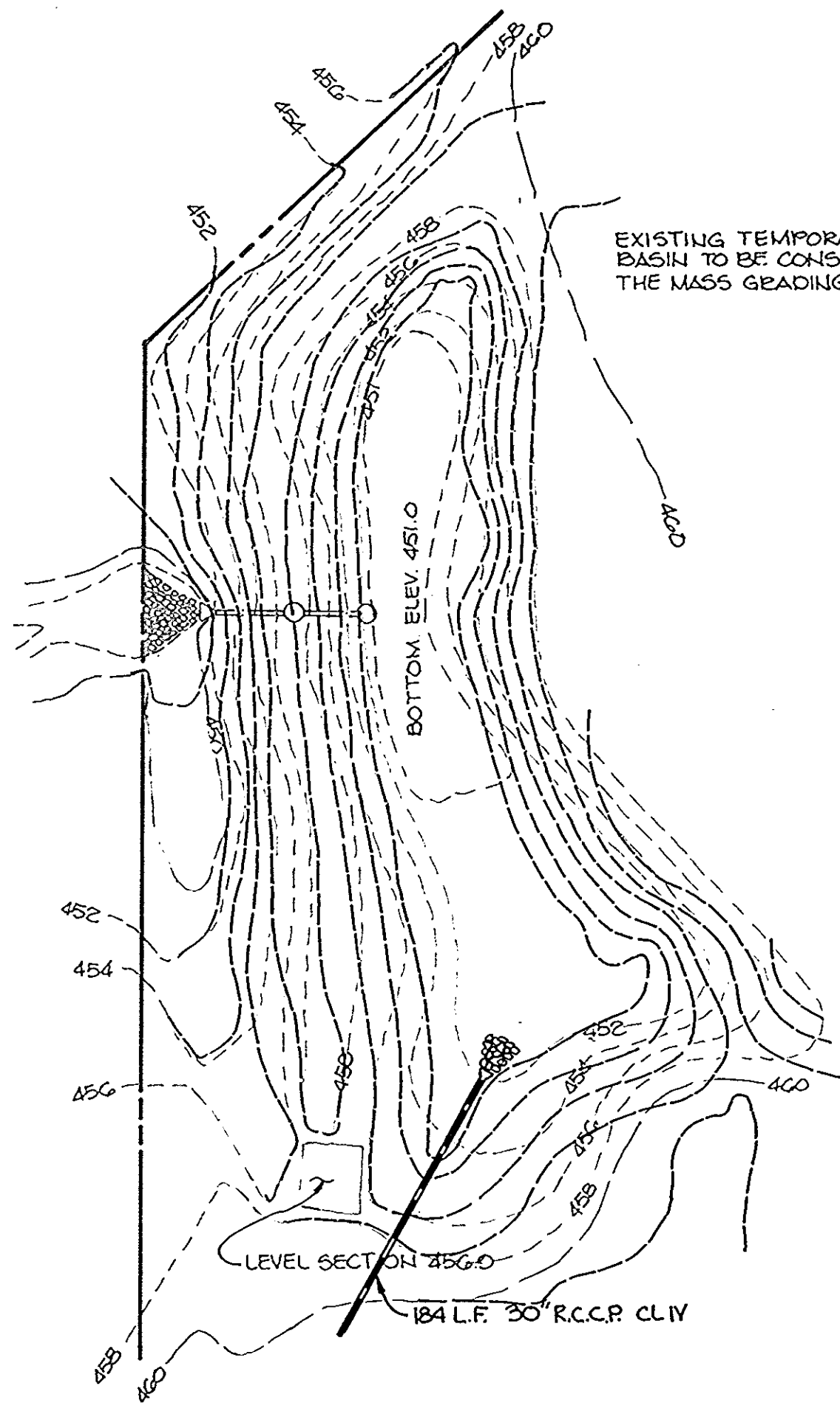


SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. NOTIFY THE BUREAU OF LIC., INSP. AND PERMITS 24 HOURS PRIOR TO CONSTRUCTION AT 992-2436.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCES, DIVERSION DIKES, STRAW BALE DIKE AND INTERCEPTOR SWALE.
4. GRADE COLUMBIA DATA DRIVE ONLY.
5. INSTALL STORM DRAINAGE, BLOCKING ALL INLETS.
6. WATER AND SANITARY SEWER CONSTRUCTED BY OTHER AT THIS TIME.
7. CONSTRUCT CURB AND GUTTER. GRADE SHOULDERS OF MARYLAND ROUTE 108 WITH CURB AND GUTTER CONSTRUCTION PROTECTING AREAS WITH STRAWBALE DIKE OR SILT FENCE. LEAVE SECTION OF CURB OPEN AT NORTH WEST CORNER OF S.C.E. TO DIVERT DRAINAGE TO SEDIMENT BASIN.
8. BACKFILL CURB AND STABILIZE DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
9. CONSTRUCT PAVING.
10. UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR CONVERT THE SEDIMENT BASIN TO STORM WATER MANAGEMENT IN ACCORDANCE WITH THE CONVERSION NOTES AND REMOVE ALL SEDIMENT CONTROL FACILITIES STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.

FOR DETAILS SEE DRAWING NO. 8

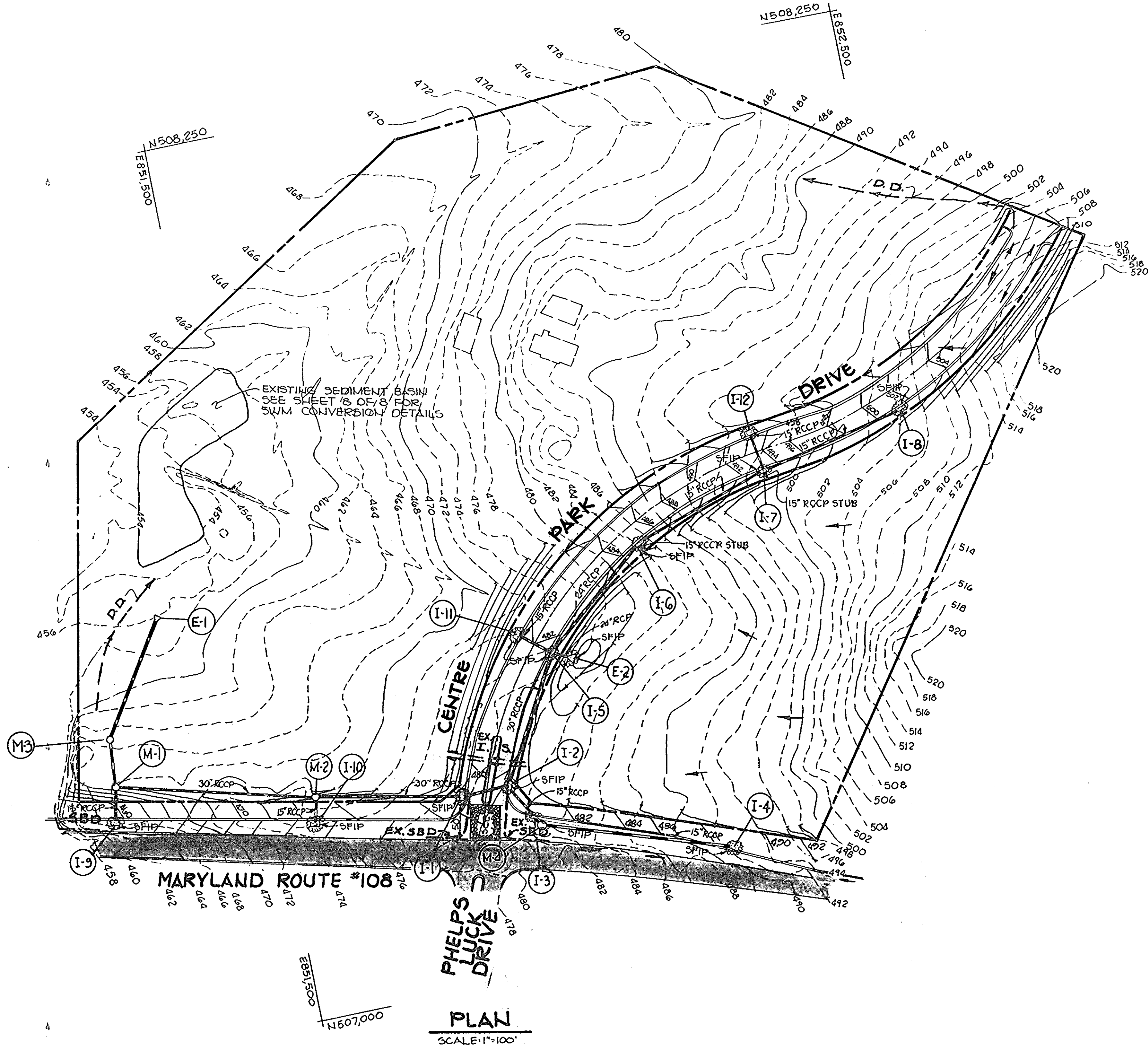
EXISTING TEMPORARY SEDIMENT BASIN TO BE CONSTRUCTED UNDER THE MASS GRADING PLAN GP-F-84-174



**POND**  
SCALE: 1"=50'

SEDIMENT BASIN DATA

DRAINAGE AREA	45.8 AC
STORAGE REQUIRED	5070 CY
STORAGE PROVIDED	5111 CY
CREST ELEVATION	455.8
BOTTOM ELEVATION	450.0
CLEANOUT ELEVATION	454.0



**PLAN**  
SCALE: 1"=100'

AS-BUILT SURVEY CERTIFIED BY ARTHUR E. MUEGGEL, MD. P.E. No. 8707 ON 10-15-87

BY THE DEVELOPER:

"I 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."

Developer: *Wilbur S. Simmons, Trustee* DATE: 8-23-84

BY THE ENGINEER:

"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."

Engineer: *Arthur E. Mueggel* DATE: 8-23-84

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.

U.S. SOIL CONSERVATION SERVICE DATE: 8-29-84

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

APPROVED: *Robert W. Zickow* DATE: 8-29-84  
HOWARD S.C.D.

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
*John M. Marchman* DATE: 8-29-84  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
*William B. Ray* DATE: 8-31-84  
CHIEF, BUREAU OF ENGINEERING

DATE	NO	REVISION
10-31-84	1	CHANGED NAME OF ROAD & TITLE/ADDED M-1

OWNER: PETER KIRK, TRUSTEE, PATRICK MCQUAH, TRUSTEE AND WILBUR SIMMONS, TRUSTEE, 1000 EQUITABLE BANK CENTER, COLUMBIA, MARYLAND 21044

DEVELOPER: KMS GROUP, 1000 EQUITABLE BANK CENTER, COLUMBIA, MARYLAND 21044

PROJECT: OAKLAND EXECUTIVE PARK

AREA: TAX MAP NO. 30 PARCEL 104, 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND, ZONED M-1

TITLE: SEDIMENT CONTROL AND GRADING PLAN

**THE RIEMER GROUP, INC.**  
A LAND PLANNING, DESIGN & CIVIL ENGINEERING FIRM  
3105 HEALTH PARK DRIVE, ELLICOTT CITY, MD. 21103 301 461-2690

DATE: 8-23-84  
DESIGNED BY: L.J.D.  
DRAWN BY: W.D.S.  
PROJECT NO: 003400  
DATE: 8-23-84  
SCALE: AS SHOWN  
DRAWING NO. 7 OF 8

#1088



