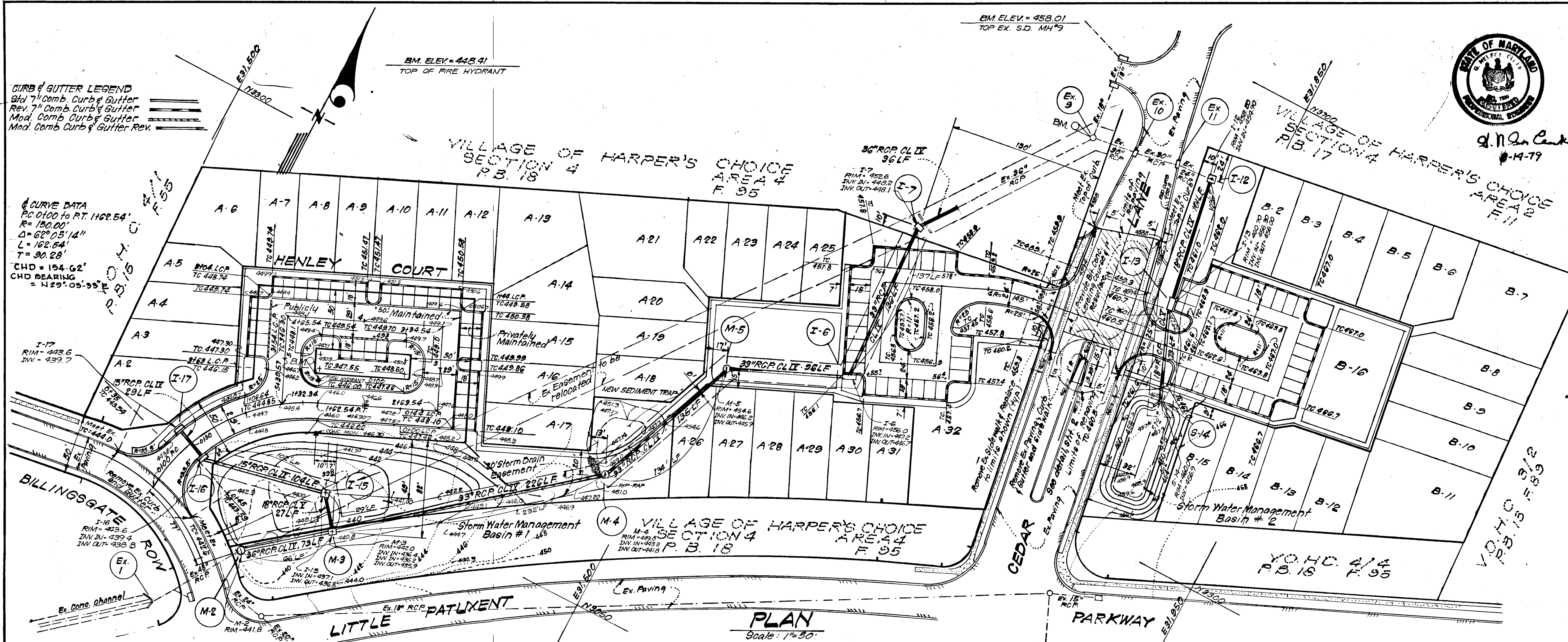
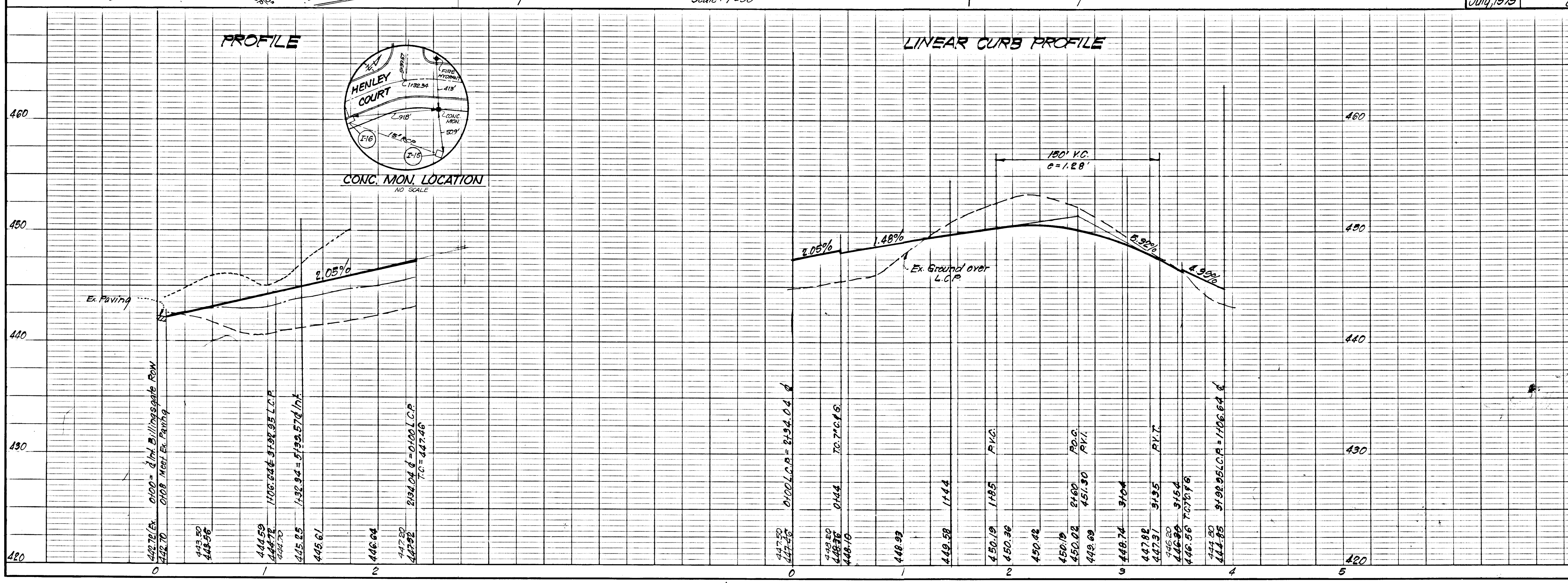
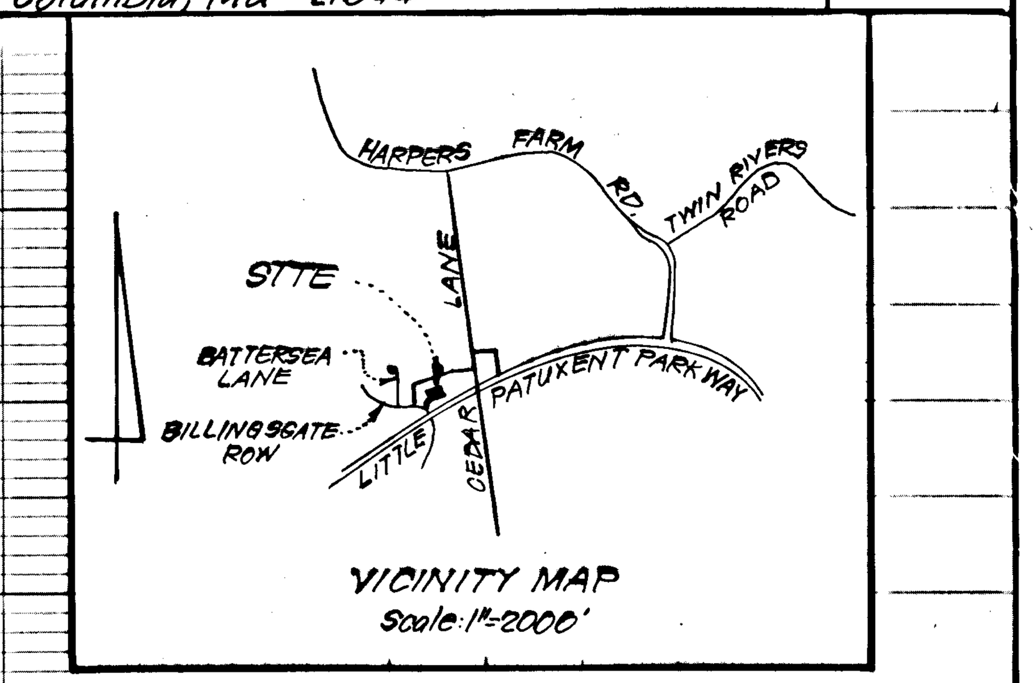




PROFILE SCALE:
Horiz.: 1" = 50'
Vert.: 1" = 5'

PROFILE LEGEND:
Profile Grade Line
Exist. ℄
B.R.L. (Rt.)
B.R.L. (Lt.)



VICINITY MAP
Scale: 1" = 2000'

GENERAL NOTES:

1. All Storm Drain & Paving shall be constructed in accordance with the latest details and specifications of How. Co. & M.D.S.H.A.
2. Types of Storm Drain structures refer to the Standard Details of How. Co. & Maryland State Highway Administration.
3. Trench Compaction for Storm Drains within Road or Street right of way limits shall be in accordance with the latest Howard Co. Road Code.
4. Information concerning underground utilities was obtained from available records, but the Contractor must determine the exact location and elev. of the mains by digging test pits, by hand at all utility crossings, well in advance of construction.
5. All utility companies shall be notified 24 hrs. in advance of construction.
6. All traffic control services, parking, and signing to be done in accordance with the Manual of Traffic Control Devices, 1971 Edition.
7. Sag and Crest Vertical curves were designed in accordance with "A Policy on Geometric Design of Rural Highways", 1965, by A.A.S.H.O.
8. Provide Concrete Sidewalk Ramps in curbs, where shown in plan. See detail sht 2.
9. Design Speed: 25 mph.

REVISION BLOCK

No	Description	Date
1	Eliminated Barrier Curb in Private Court islands. and added Std. and Revised C & G as shown	9/13/80

APPROVED: Department of Public Works
for Allen S. Brown — 11/9/79
Chief, Bureau of Engineering — Date

APPROVED: Howard County Office of Planning and Zoning.
[signature] — 11-5-79
Chief, Division of Land Development — Date

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DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS, A RESUBDIVISION OF PARCELS A-1 & B-1 HENLEY COURT	SCALE As Shown
DRAWN K.I.W.	**COLUMBIA** VILLAGE OF HARPERS CHOICE	DRAWING 1 of 5
CHECKED D.A.B.	SECTION 4 AREA 5, 5th ELECTION DISTRICT, HOWARD COUNTY, MARYLAND	JOB NO.
DATE July, 1979	FOR: K. & M. DEVELOPMENT, Suite 314 Teachers Building, Columbia, Md 21044	FILE NO. 79-039-D

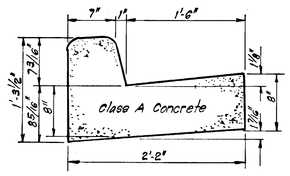
AS-BUILT SEPT. 1982

F-80-29c

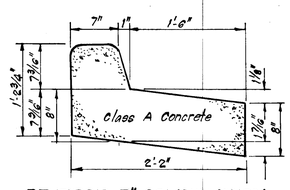
79 039 D
Sht 1

HERCULENE® MADE IN U.S.A.

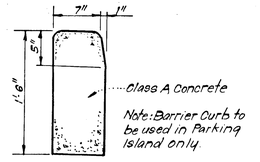
K&E 48-7024S



STANDARD 7" COMBINATION CURB & GUTTER
No Scale



REVERSE 7" COMBINATION CURB & GUTTER
No Scale



BARRIER CURB
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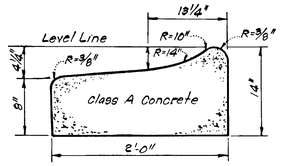

MODIFIED COMBINATION CURB & GUTTER (REVERSED)
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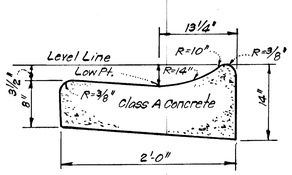
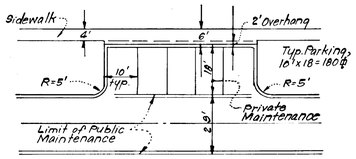
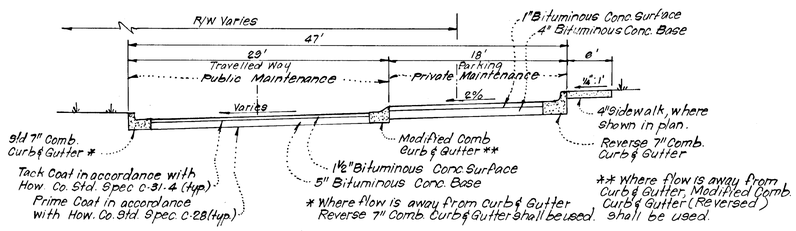


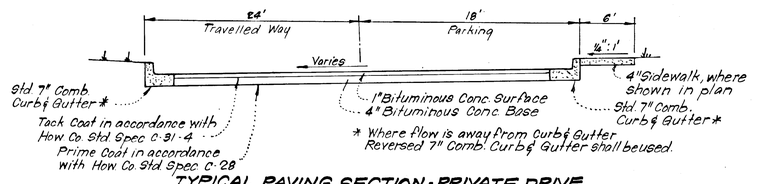
MODIFIED COMBINATION CURB & GUTTER
No Scale



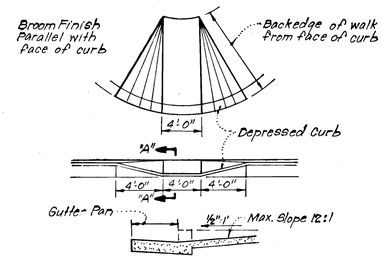
TYPICAL PARKING ADJACENT TO PUBLIC ROADS
No Scale



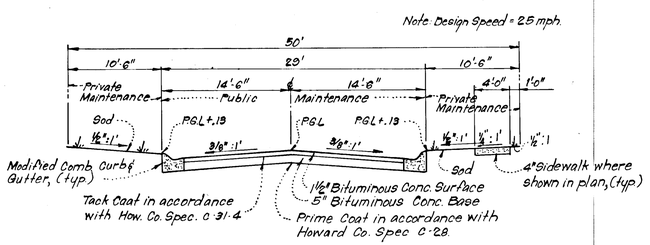
TYPICAL PAVING SECTION - PUBLIC DRIVE AND PRIVATE PARKING "HENLEY COURT"
No Scale



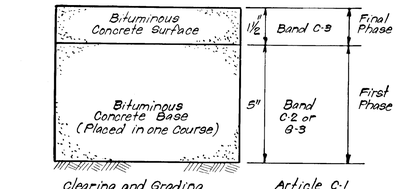
TYPICAL PAVING SECTION - PRIVATE DRIVE AND PRIVATE PARKING
No Scale



SIDEWALK RAMP DETAILS
No Scale

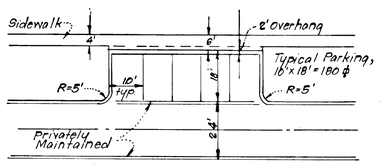


TYPICAL PAVING SECTION "HENLEY COURT"

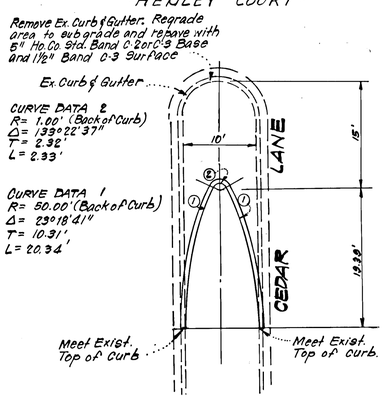


To be constructed in accordance with the Howard County Road Construction Code and Specifications.

PAVING SECTION FOR PUBLIC ROADS AND ENTRANCES TO PUBLIC ROADS
No Scale



TYPICAL PARKING ADJACENT TO PRIVATE ROADS
No Scale



ISLAND DETAIL
CEDAR LANE
SCALE: 1"=10'

#11

APPROVED: Department of Public Works

Chief, Bureau of Engineering — Date 9/9/79

APPROVED: Howard County Office of Planning and Zoning

Chief, Division of Land Development — Date 11-5-79

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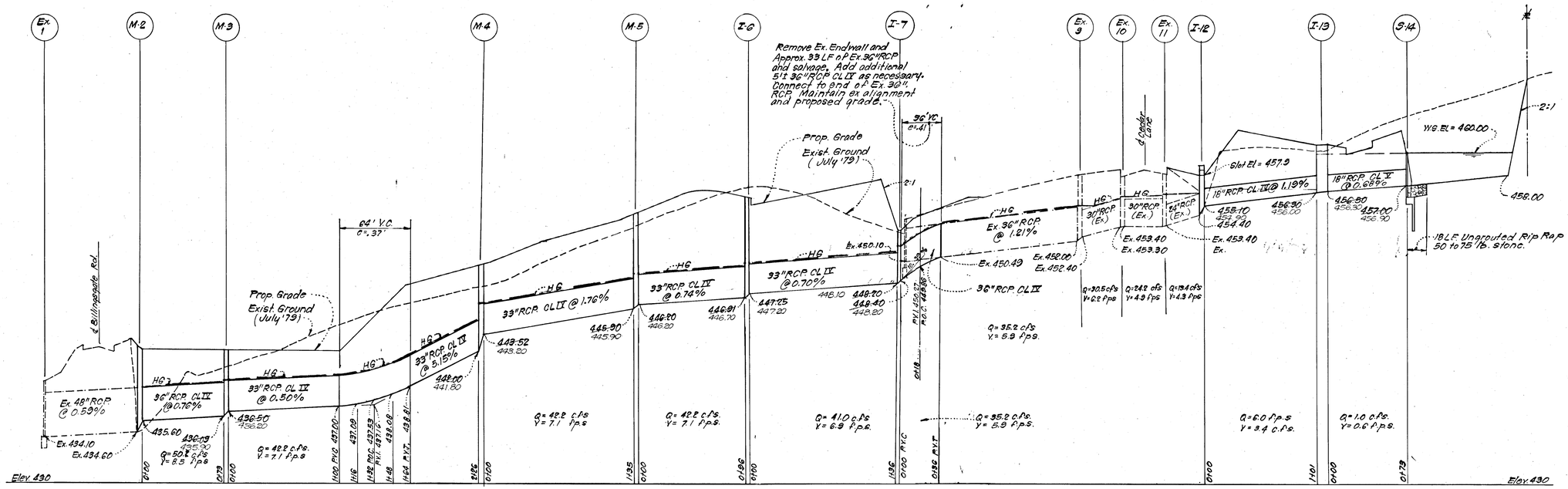
DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS A RESUBDIVISION OF PARCELS A-1 & B-1 PAVING DETAILS	SCALE As Shown
DRAWN K.I.W.	COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 4 AREA 5 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING 20 of 25
CHECKED D.A.B.		JOB NO. 79-036
DATE Aug. 1979	FOR: K & M. DEVELOPMENT Suite 314 Teachers Bldg. Columbia, Md. 21044	FILE NO. 79-039

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER

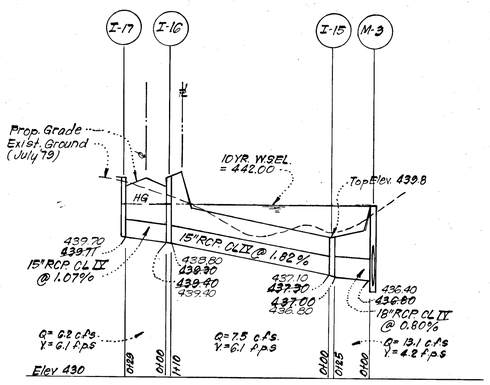
9-14-79

T-80-39C



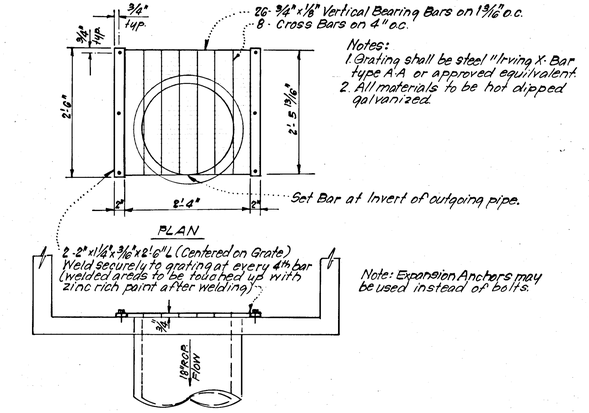
PROFILE

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



PROFILE

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



Notes:
1. Grating shall be steel "Irving X-Bar type A-A or approved equivalent.
2. All materials to be hot dipped galvanized.

PLAN

Note: Expansion Anchors may be used instead of bolts.

TRASH RACK AT STRUCTURE No. I-6

No Scale

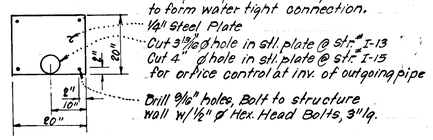
STRUCTURE SCHEDULE

No.	TYPE	INV. IN.	INV. OUT	TOP ELEVATION Upper	TOP ELEVATION Lower	REMARKS		LOCATION
M-2	B-Manhole	435.60	434.60	442.30		Ho. Co. Std. Fig. 3.03	48" Sq.	See Plan
M-3	B-Manhole	436.50, 436.80	436.09	442.00		Ho. Co. Std. Fig. 3.03	48" Sq.	" "
M-4	B-Manhole	443.62	442.00	449.30		Ho. Co. Std. Fig. 3.03	48" Sq.	" "
M-5	A-1 Manhole	446.20	445.90	454.70		Ho. Co. Std. Fig. 3.01	48" Ø.	" "
I-6	A-10 Inlet	447.25	446.91	456.20	456.10	Ho. Co. Std. Fig. 4.02	W=3'-6"	" "
* I-7	K-Inlet, Dbl. Grate Tandem	448.40	448.20	45300		S.H.A. Std. No. MD 378.02		" "
I-12	D-Inlet	455.10	454.40	458.73		Ho. Co. Std. Fig. 4.11	36" Sq.	" "
I-13	A-10 Inlet	456.60	456.30	460.80	460.70	Ho. Co. Std. Fig. 4.02	W=2'-6"	" "
S-14	A-Endwall	457.00	457.00	-		Ho. Co. Std. Fig. 8.11	Dia=18"	" "
I-15	Yard Inlet	437.30	437.00	439.80		S.H.A. Std. No. MD 381.01	W=2'-6"	" "
I-16	A-10 Inlet	439.40	439.30	443.82	443.59	Ho. Co. Std. Fig. 4.02	W=2'-6"	13.67' Rt. ℄ of 150
I-17	A-10 Inlet	-	439.71	443.82	443.59	Ho. Co. Std. Fig. 4.02	W=2'-6"	13.67' Lt. ℄ of 150

* No Concrete Ditch Required

PIPE SCHEDULE

SIZE	TYPE	LENGTH
15"	R.C.P. CL. IV	139 L.F.
18"	R.C.P. CL. V	73 L.F.
18"	R.C.P. CL. IV	126 L.F.
33"	R.C.P. CL. III	593 L.F.
36"	R.C.P. CL. III	78 L.F.



STEEL PLATE DETAIL

No SCALE

#11

APPROVED: Department of Public Works

Allen J. Brown
for Chief, Bureau of Engineering — 11/9/79 Date

APPROVED: Howard County Office of Planning & Zoning

Chief, Division of Land Development — 11-5-79 Date

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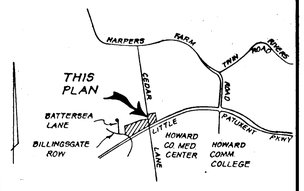
STATE OF MARYLAND — No. 1179 — REGISTERED PROFESSIONAL ENGINEER

D.A.B. 8-24-79

DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS A RESUBDIVISION OF PARCELS A-1 & B-1 STORM DRAIN DETAILS COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 4 AREA 5 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: K & M. DEVELOPMENT Suite 314 Teachers Building Columbia, Md. 21044	SCALE As Shown
DRAWN K.I.W.		DRAWING 3 of 5
CHECKED D.A.B.		JOB NO.
DATE Aug., 1979		FILE NO. 79039 D

F-80-29C AS-BUILT SEPT., 1982



VICINITY MAP
Scale: 1"=2000'

APPROVED: Department of Public Works

Chief, Bureau of Engineering — 11/9/79 Date

APPROVED: Howard County Office of Planning and Zoning

Chief, Division of Land Development — 11-5-79 Date

LEGEND:

1. Contour Interval — 2 Ft.
2. Exist. Contour — 470
3. Prop. Contour — 470
4. Prop. Storm Drain — 15" RCP
5. Perimeter Dike — P.D.
6. Straw Bale Dike or Silt Fence — S.B.D./S.F.
7. Stone Filter Inlet Protection — S.F.I.P.
8. Stabilized Construction Entrance

Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Signature 11-2-79 Date
U.S. Soil Conservation Service

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

William T. Rome — 10-2-79
Approved Date

DEVELOPER'S CERTIFICATE

I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agent as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

Peter Kirk Pace — 8/7/79
Signature Date

STATE OF MARYLAND — NO. 11178 — REGISTERED PROFESSIONAL ENGINEER

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.

G. Nelson Clark — 8-14-79
G. Nelson Clark Date

SEDIMENT BASIN #1
Type: S.D.S.T. (Pg. 20.07 Dwg. ST-3)
D.A. = 4.4 ac
Vol. Required = 7820 c.f.
Vol. Provided = 20,700 c.f.
Bottom Elev = 439.50
Bottom Dimensions: See Plan for Contours
Crest = 443.0

SEDIMENT BASIN # 2
Type: S.D.S.T. (Pg. 20.07 Dwg. ST-3)
D.A. = 2.0 ac
Vol. Required = 3600 c.f.
Vol. Provided = 3700 c.f.
Bottom Elev = 457.00
Bottom Dimensions: 50'x 16'
Crest Elev: 461.0

Note: Two Existing Trees to be removed as part of Construction

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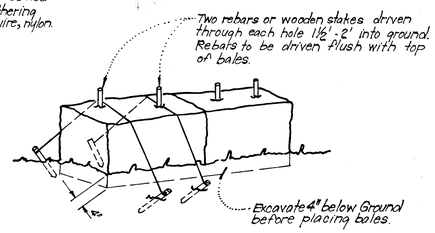
DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS A RESUBDIVISION OF PARCEL A-1 & B-1 DRAINAGE AREA MAP & SEDIMENT & EROSION CONTROL PLAN	SCALE 1"= 50'
DRAWN K.L.W.	COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 4, AREA 5	DRAWING 4 of 5
CHECKED D.A.B.	5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 79-039
DATE Aug., 1979	FOR: K & M. DEVELOPMENT Suite 314, Teachers Bldg. Columbia, Md. 21044	FILE NO. 79-039-D

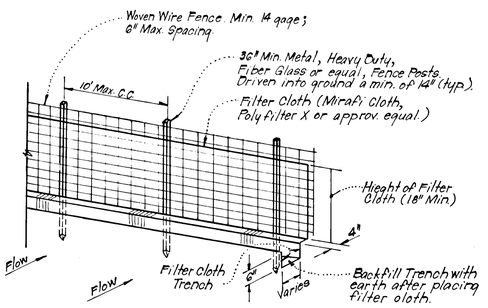
F-80-29C

All bales shall be tied with non-weathering materials, ie, wire, nylon.



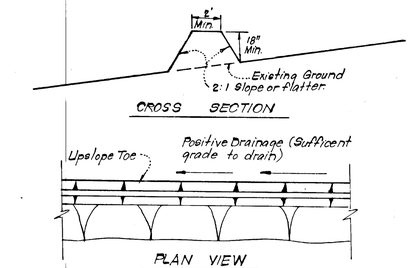
Note:
1. In lieu of the use of rebars each straw bale may be fastened to ground with pegs (4 per bale and wire or nylon as shown above.)

TYPICAL STRAW BALE DIKE DETAIL (S.B.D.)
No Scale



Notes:
1. Woven Wire Fence to be fastened securely to fence posts by use of wire ties.
2. Filter Cloth to be fastened securely to Woven Wire, by use of wire ties spaced every 24"x24"

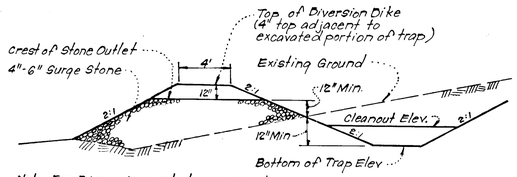
TYPICAL SILT FENCE DETAIL (S.F.)
No Scale



CROSS SECTION

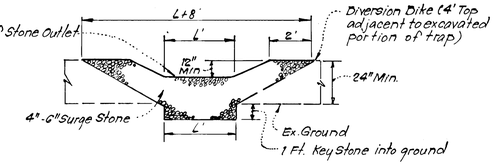
PLAN VIEW

TYPICAL PERIMETER DIKE DETAIL (P.D.)
No Scale



Note: For Dimensions not shown, see plan.

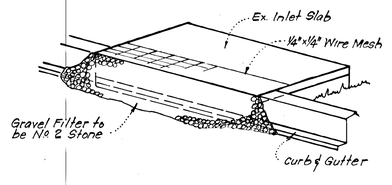
PROFILE



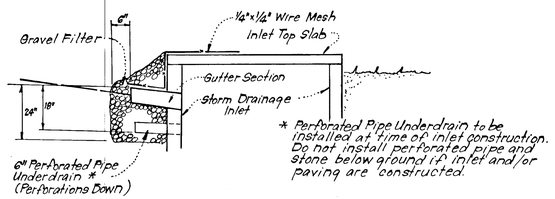
CROSS SECTION

Notes:
1. Sediment Trap to be cleaned out when sediment reaches a level of 1 Ft. below crest of stone outlet.
2. Bottom of Sediment Trap to be level and constructed to the dimensions shown on plan.
3. Stone Outlet to be constructed through diversion dike adjacent to excavated portion of sediment trap.

DETAILS OF STONE FILTER OUTLET (FOR STONE OUTLET SEDIMENT TRAP)
No Scale

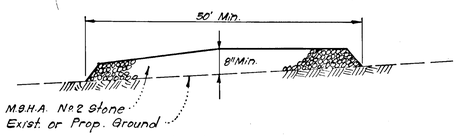


ISOMETRIC VIEW



SECTION VIEW

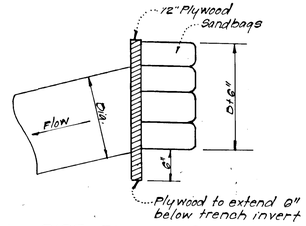
STONE FILTER INLET PROTECTION (S.F.I.P.)
No Scale



Note: see Plan View for Limits

SECTION VIEW

STABILIZED CONSTRUCTION ENTRANCE
No Scale



PIPE BLOCKING DETAIL
No Scale

GENERAL NOTES

1. Grading Permits shall be obtained prior to installation of Sediment Control & Grading.
2. All Sediment and Erosion Control Measures will be installed and stabilized according to this plan prior to any other grading, clearing or disturbance of the existing surface of the site. See note #6 for stabilization except that the seed mixture will be annual rye applied at a rate of 1.4 lbs/1000 s.f.
3. Notify the Bureau of Inspections and Permits at least 24 hrs before starting any work.
4. All Sediment Control Practices to conform to the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas" and shall be adjusted to meet actual field conditions.
5. Stabilization of Disturbed ground to be done as soon after construction as possible.
6. All grading shall be treated in accordance with the following Specifications:
   A. Seed - certified 85% germination applied at the rate of 3 lbs/1000 s.f. Mixture - 40% Kentucky Blue, 20% chewing Fescue, 20% Kentucky 31 and 20% annual rye.
   B. Fertilizer - 10-10-10 applied at a rate of 23 lbs/1000 s.f. Ground Agricultural Lime or Dolomatic Lime applied at a rate of 46 lbs/1000 s.f.
   C. Mulch - Weed free grain straw applied at a rate of 46 lbs/1000 s.f. Mulch shall be secured to the ground by any approved method ie; asphalt tacks, chemical binder, etc.
   D. All Sod used shall be Maryland State Certified.
7. All Structural Sediment Control Measures are to remain in place until permission for their removal has be obtained from the Bureau of Inspections and Permits.
8. On-Site Inspection and Maintenance of all Sediment Control Measures including clean out of Sediment Traps and dikes, and proper establishment of all planned vegetative measures will be the responsibility of the developer or his representative on the site, on a continuing day to day basis.
9. It will be the developers responsibility to provide additional Sediment & Erosion Control Devices to protect stabilized areas during construction.
10. The Contractor shall keep all public roads free of sediment deposits left from traffic leaving construction site.
11. Stabilized Construction Entrances shall be placed at all construction entrances.
12. SITE ANALYSIS:
    A. Total Area: 6.46 Acres
    B. Total Area Paved: 1.2 Acres
    C. Total Area Seeded: 5.26 Acres
13. CONSTRUCTION SEQUENCE:
    A. Install Perimeter Dike, Stabilized Construction Entrance & Sediment Basin #1 & 2
    B. Construct Storm Drainage M-2 to M-7 & I-15 to I-17
    C. Install storm Drainage I-12 to I-14.
    D. Construct S.W.M. Basin #2 and Stabilize.
    E. Rough Grade for Paving.
    F. Construct Curb & Gutter, paving and sidewalks
    G. Final Grade and Stabilize in accordance with general note #6.
14. Storm Drainage Shall be block at the end of each Day in accordance with Pipe Blocking Detail.

Reviewed for ..... HOWARD ..... S.C.D.
Name
and meets Technical Requirements
Signature ..... 11-2-79 ..... Date
U.S. Soil Conservation Service

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

William T. Rome — 11-2-79
Approved — Date

DEVELOPER'S CERTIFICATE

I certify that all development and/or construction will be done according to this plan of development and plan for Erosion and Sediment Control, and I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.

Peter Kirk, Pres. — 10-17-79
Signature — Date

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

E. Nelson Clark — 8-14-79
E. Nelson Clark — Date

STATE OF MARYLAND — E. NELSON CLARK — No. 11791 — REGISTERED PROFESSIONAL ENGINEER

APPROVED: Department of Public Works

for Chief, Bureau of Engineering — 11/9/79 Date

APPROVED: Howard County Office of Planning and Zoning

Chief, Division of Land Development — 11-5-79 Date

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

DESIGNED D.A.B.	ROAD CONSTRUCTION PLANS SEDIMENT & EROSION CONTROL PLAN A RESUBDIVISION OF PARCEL A-1 & B-1	SCALE As Shown
DRAWN K.I.W.	COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 4 AREA 5	DRAWING 5 of 5
CHECKED D.A.B.	6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 79039
DATE Aug., 1979	FOR: K & M. DEVELOPMENT Suite 314 Teachers Building Columbia, Md 21044	FILE NO. 79039 D

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