REVISIONS

COLUMBIA

HOWARD COUNTY, MARYLAND

6TH ELECTION DISTRICT

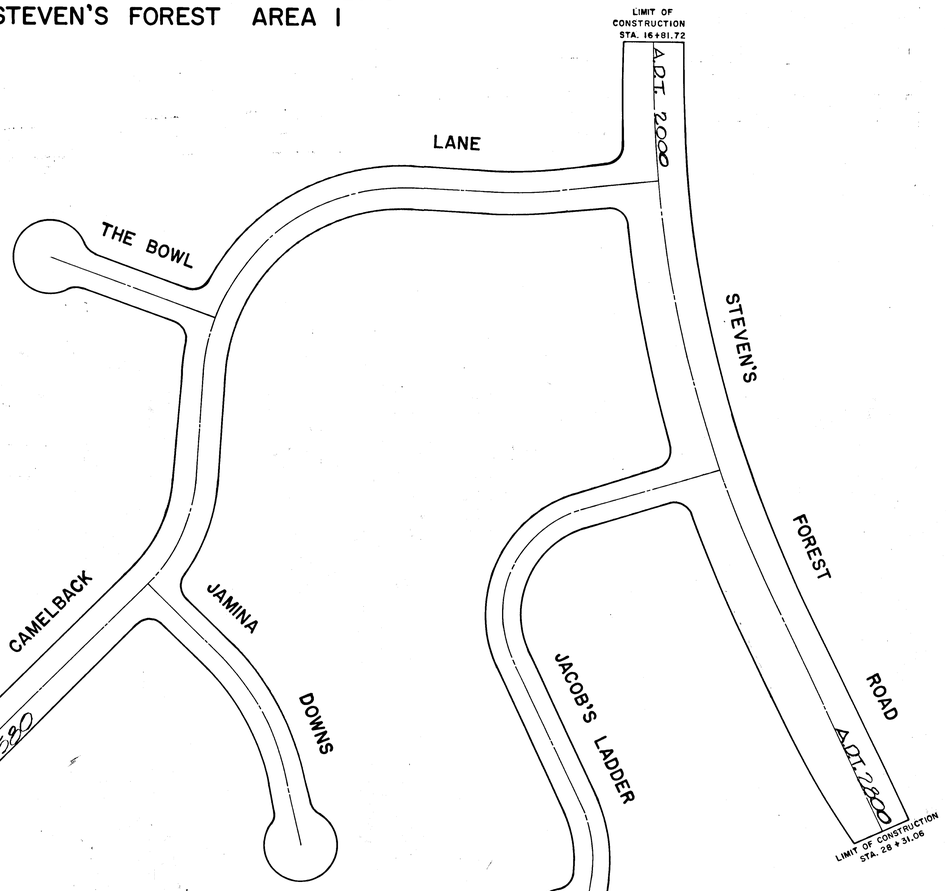
ROAD CONSTRUCTION PLANS

VILLAGE OF OAKLAND MILLS SEC. 5

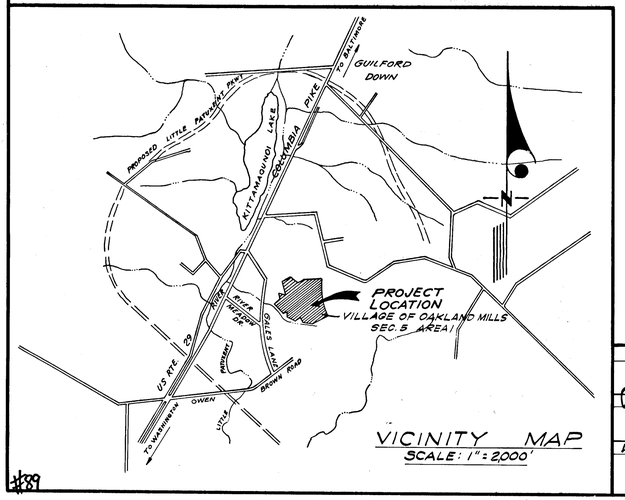
STEVEN'S FOREST AREA I

NOTES

1. ALL DETAILS ARE FROM THE "ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS" ISSUED OR APPROVED BY THE COUNTY COMMISSIONERS AND THE HOWARD COUNTY ROAD DEPARTMENT.
2. STEVEN'S FOREST ROAD IS DESIGNED FOR 35 M.P.H. TRAFFIC SPEED. ALL OTHER ROADS ARE DESIGNED FOR 25 M.P.H. TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS STANDARDS.
3. TIE DOWN OF SEEDING AND MULCHING SHOULD BE DONE AS SOON AS ROADS AND LOTS ARE DEVELOPED.
4. TOP SLOPES OF ALL FILL AREAS ON THE ROADS SHOULD BE BERMED DURING THE CONSTRUCTION TO PREVENT EXCESSIVE EROSION OF THESE FILL SLOPES. THESE BERMS SHOULD BE OUTLETED ON TO UNDISTURBED GROUND. IF THIS IS NOT POSSIBLE THEN TEMPORARY CONSTRUCTED DROP STRUCTURES (FLUMES OR CHUTES) SHOULD BE DESIGNED ON A 10 YEAR FREQUENCY STORM.



SCALE 1"= 100'



VICINITY MAP

SCALE: 1"= 2000'

APPROVED HOWARD COUNTY PLANNING COMM.	
CHIEF ENGINEER	DATE 2/6/69
APPROVED HOWARD COUNTY ROADS DEPT.	
ROADS SUPERINTENDENT	DATE 2-6-69
APPROVED HOWARD COUNTY METROPOLITAN COMM.	
ENGINEER	DATE 2-6-69

OWNER AND DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS
BALTIMORE, MARYLAND

Dwg. 1 of 12

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

11-15-68

STATE OF MARYLAND — CHARLES S. JOHNSON — No. 3908 — REGISTERED PROFESSIONAL ENGINEER

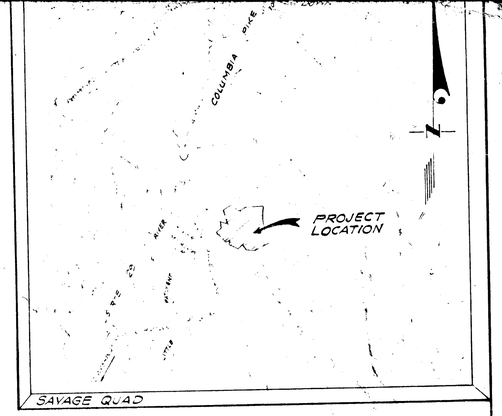
SHEET INDEX

SHEET NO.	DISCRIPTION
1.	TITLE SHEET
2.	DRAINAGE AREA MAP
	PLAN & PROFILE
3	STEVEN'S FOREST ROAD STA.16+81.72 TO STA.28+31.06
4.	JACOB'S LADDER
5.	CAMELBACK LANE STA. 0+00 TO STA. 9+52.53
6.	CAMELBACK LANE STA. 9+52.53 TO STA. 14+83.53
7.	THE BOWL
8.	JAMINA DOWNS
9.	PUSHCART WAY STA.0+00 TO STA. 1+30.29
10.	STORM DRAIN PROFILES
11.	ROADWAY DETAILS
12.	ROADWAY DETAILS

QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY

F-68-94



VICINITY MAP
SCALE 1" = 2000'

GENERAL NOTES

1. ZONING - NEW TOWN.
2. TOTAL AREA = 35.3 Ac.
   AREA OF OPEN SPACE = 2.7 Ac.
   AREA OF LOTS = 21.0 Ac
   AREA OF ROADS = 6.8 Ac
   AREA OF SINGLE ATTACHED 4.5 Ac
3. TOTAL NUMBER OF LOTS = 79 LOTS
   MIN. LOT SIZE 8,000 SQ. FT.
   DENSITY = 2.6 LOTS/Ac
4. TOPOGRAPHY TAKEN FROM PLANS COMPILED BY MAPS INCORPORATED.
5. PUBLIC WATER & SEWAGE SYSTEMS TO BE MADE AVAILABLE & UTILIZED.
6. STANDARD SYMBOLS
   - PROPOSED HEADWALLS.
   - PROPOSED INLETS.
   - PROPOSED MANHOLES.
   - PROPOSED PIPES.
   - PROPOSED CONC. SIDEWALK & MACADAM PATHWAY.

N 500,000

- OPEN SPACE
- SINGLE FAMILY ATTACHED
- RESIDENTIAL

APPROVED
PLANNING COMMISSION
DATE 2/6/69

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
KENILWORTH AVENUE RIVERDALE MD.

Rev. No. Revision Description

COLUMBIA
FIFTH ELECTION DISTRICT
HOWARD COUNTY MARYLAND

HOWARD RESEARCH AND DEVELOPMENT CORP

VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA

DRAINAGE AREA MAP

Scale 1" = 100'
Date OCT. 1968
Approved

10-31-68

STORM DRAINAGE STRUCTURE SCHEDULE

No	Type	Location	Inv. In	Inv. Out	[illegible]	Remarks
9-I	A-10 Inlet	¢ Sta. 22+95.45 - 25.25 Lt ¢		388.03	392.17	Ho. Co. Std Dwg. D64A Pg. 119-A *
J-5I	B-10 Inlet	¢ Sta. 26+78.95 - 25.25 Lt ¢		389.30	L=393.14/391.20	Ho. Co. Std Dwg. D64B Pg. 119-B *
J-4M	Std. Manhole	¢ Sta. 27+32.00 - 26.00 Lt ¢	388.10	388.00	391.76	Ho. Co. Std Dwg. D103 Pg. 158
J-4A	Std. End Support Wall	¢ Sta. 28+43.00 - 26.00 Lt ¢		385.38	—	Ho. Co. Std Dwg. D46 Pg. 101

*See Detail Sheet 11 of 12

APPROVED
PLANNING COMMISSION OF HOWARD COUNTY
DATE 2/6/69

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev Date	Rev No	Revision Description

COLUMBIA
6TH ELECTION DISTRICT
HOWARD COUNTY MARYLAND
OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS · BALTIMORE, MARYLAND 21210

Project Area: VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA 1

Project Title: PLAN & PROFILE
STEVEN'S FOREST ROAD

Des By B.J.B. Scale AS SHOWN Dwg No 3 of 12
Drn By Date NOV. 15, 1968 C.C.E. No
Chk By Approved

PLATE 1 PLAN · PROFILE B P R STANDARD
EUGENE DIETZGEN CO. CHICAGO · NEW YORK

STEVEN'S FOREST ROAD
VILLAGE OF OAKLAND MILLS SG-1354

F-68-94

PLAN
SCALE: 1" = 50'

STEVEN'S FOREST ROAD

JACOB'S LADDER

℄ CURVE DATA
Δ = 97°32'39"
R = 152.48'
L = 259.58'
T = 174.00'

℄ CURVE DATA
Δ = 37°12'20"
R = 160.75
L = 134.39'
T = 54.11'

Pavement Transition From 6½ Bit. Conc.

Warp curb 1' to provide positive drainage to strs. 8-I & 7-I

4' CONC. SIDEWALK 1' OFF RW LINE

6½ Bituminous Conc. Paving, Mountable Conc. Curb & Gutter

Reverse Slope

Mountable Conc. Curb & Gutter

END SIDEWALK @ STA. 1+60 L.P.

130 L.F. 15" R.C.P. Cl. III

20' DRAINAGE & UTILITY EASEMENT

4 L.F. 15" R.C.P. Cl. III

OPEN SPACE

10' Conc. Channel SEE DETAIL SH. 11

Lot #91

106 L.F. -18" R.C.P. Cl. IV

8th Inlet

185 L.F. Fence

PC 2+05.52

29 L.F. -18" R.C.P. Cl. IV

107 L.F. -21" R.C.P. Cl. III

65 L.F. -21" R.C.P. Cl. III

61 L.F. 21" R.C.P. Cl. III

20' DRAINAGE & UTILITY EASEMENT

Drainage Easement

85 L.F. Sod Ditch SEE DETAIL SH. 11

Lot 82 OPEN SPACE

MATCH STA. 0+77.25

PC 2+91.39

PT 0+35.91

PC 0+41.75

BEGIN LINEAR PROFILE 7+96.38 = 0+00 L.P.

END OF LINEAR PROFILE 3+05.15 = 7+96.38 L.P.

RADIUS POINTS S 67°09'E

RADIUS POINT S 67°09'E

P.T. 2+81.00 L.P.

P.C. 2+42.50 L.P.

S 12°10'21" W

S 72°30'39" W

S 25°00'00" E

N 500,000 E 843,000

E 843,250 N 500,250

E 843,250 N 500,000

E 842,900 N 499,500

Property of THE HOWARD RESEARCH & DEVELOPMENT CORPORATION Liber 463 Folio 196

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev. Date	Rev. No.	Revision Description

COLUMBIA
6TH. ELECTION DISTRICT
HOWARD COUNTY MARYLAND
OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS · BALTIMORE MARYLAND 21210

PROJECT AREA: VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA 1

PROJECT TITLE: PLAN & PROFILE
JACOB'S LADDER

Des By RAB	Scale AS SHOWN	Dwg No 4 of 12
Drn By TKE/O	Date NOV. 8, 1968	C C F No
Chk By	Approved	

STORM DRAINAGE STRUCTURE SCHEDULE

№	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	REMARKS
8-I	A-5 INLET	℄ Std. 14+61.95 15.15 Lt. ℄	389.11	388.90	397.80	Ho. Co. Std. Dwg. 614.11-04 *
7-I	A-5 INLET	℄ Std. 14+78.87 15.15 Rt. ℄	388.98	388.55	397.80	" " " " " " *
3-MH	Std. Manhole	℄ Std. 14+61.95 132.00 Rt. ℄	380.31	381.01	388.40 †	Ho. Co. Std. Dwg. 104.11 to 118.11
6-EW	Std. Type 'C' Endwall	See Plan for Location		380.30		Ho. Co. Std. Dwgs. D-57 to D-67
19-I	A-10 INLET	L.P. STA. 1+35 125.80 Lt.		368.25	376.81	Ho. Co. Std. Dwg. D-68 to D-82 *
18-EW	Std. Type 'C' Endwall	L.P. STA. 1+35 142.80 Lt.		355.55		Ho. Co. Std. Dwgs. D-57 to D-67

* See detail, Sh. 11 & 12
† Top Elev. to be adjusted to meet ex. ground

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY
DATE 3/6/69

1-20-69

LEGEND
Ex. Ground @ ℄
Ex. Ground 20' Rt. R/W
Ex. Ground 20' Lt. R/W
FINISHED GRADE ℄

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

150' VC e = 1.04'
200' VC e = 1.88'
-3.00%
+2.50%
-5.00%
H 81.82 L.P. 382.90
STEVEN'S FOREST ROAD
0+00 = 22+74.65 ℄ Intersection
BEGIN LINEAR PROFILE
See Linear Profile This Street
RADIUS POINT
7+96.38 = 0+00 L.P.
8 + 67.03

TOP OF CURB PROFILE
50' V.C. 50' V.C. 50' V.C.
W. CURB BEGIN LINEAR PROFILE
0+00 = 7+96.38 ℄
E. CURB END LINEAR PROFILE
GRADE BREAK 372.03
3+05.15 = 7+96.38 ℄
H 67.81 L.P. 367.81
EX. GROUND @ 20' SET BACK LINE
EX. GROUND @ CURB LINE
-5.0% -2.5% 2.5% +1.4% 5.0%

PLATE 1 PLAN-PROFILE H.P.R. STANDARD
EUGENE DIETZGEN CO., CHICAGO-NEW YORK

JACOB'S LADDER
VILLAGE OF OAKLAND MILLS SG-1355
F-68-94

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev Date	Rev No	Revision Description

COLUMBIA
6TH. ELECTION DISTRICT
HOWARD COUNTY MARYLAND

OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS · BALTIMORE, MARYLAND 21210

PROJECT AREA
VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA 1

PROJECT TITLE
PLAN & PROFILE
CAMELBACK LANE

Des By B.J.B.	Scale AS SHOWN	Dwg No 5 of 6
Drn By TKE16	Date NOV. 15, 1968	C.C.F. No
Chk By	Approved	

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY
DATE 2/6/69

STATE OF MARYLAND · CHARLES H. JOHNSON · No. 4956 · REGISTERED PROFESSIONAL ENGINEER
1-20-69

STORM DRAINAGE STRUCTURE SCHEDULE

Nº	TYPE	LOCATION	INV. IN	INV. OUT	T.C.P. ELEV.	REMARKS
5-EW	Std. Type 'F' Endwall	¢ Sta. 6+22.50 – 81.00' Lt. ¢		[illegible]		Ho. Co. Std. Dwg. D56, Pg. 111
4-I	A-10 Inlet	¢ Sta. 6+22.50 – 19.25' Lt. ¢	[illegible]	[illegible]	355.12	Ho. Co. Std. Dwg. D47, Pg. 117 *
3-I	A-10 Inlet	¢ Sta. 6+22.50 – 19.25' Rt. ¢	[illegible]	[illegible]	355.12	" " " " " " *
2-MH	Std. Manhole	[illegible]	349.44	[illegible]	355.41	Ho. Co. Std. Dwg. 103, Pg. 158
1-EW	Std. Type 'C' Endwall	[illegible]		[illegible]		Ho. Co. Std. Dwg. D5?, Pg. 107

* [illegible] 11 & 12.

PLATE 1 PLAN - PROFILE B. P. R. STANDARD
EUGENE DIETZGEN CO. CHICAGO - NEW YORK

#89

SHEET 1 OF 2 CAMELBACK LANE SG-1353
VILLAGE OF OAKLAND MILLS

F-68-94

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev Date	Rev No	Revision Description

COLUMBIA

6TH. ELECTION DISTRICT
HOWARD COUNTY MARYLAND

OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS · BALTIMORE, MARYLAND 21210

PROJECT AREA
VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA 1

PROJECT TITLE
PLAN & PROFILE
CAMELBACK LANE

Des By B.J.B.	Scale AS SHOWN	Dwg. No 6.57 R.
Drn By TKETC	Date Nov. 15, 1968	C.C.F. No
Chk By	Approved	

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY
DATE 2/6/69

STATE OF MARYLAND · CHARLES S. JOHNSON · No. 4955 · REGISTERED PROFESSIONAL ENGINEER
1-20-69

STORM DRAINAGE STRUCTURE SCHEDULE

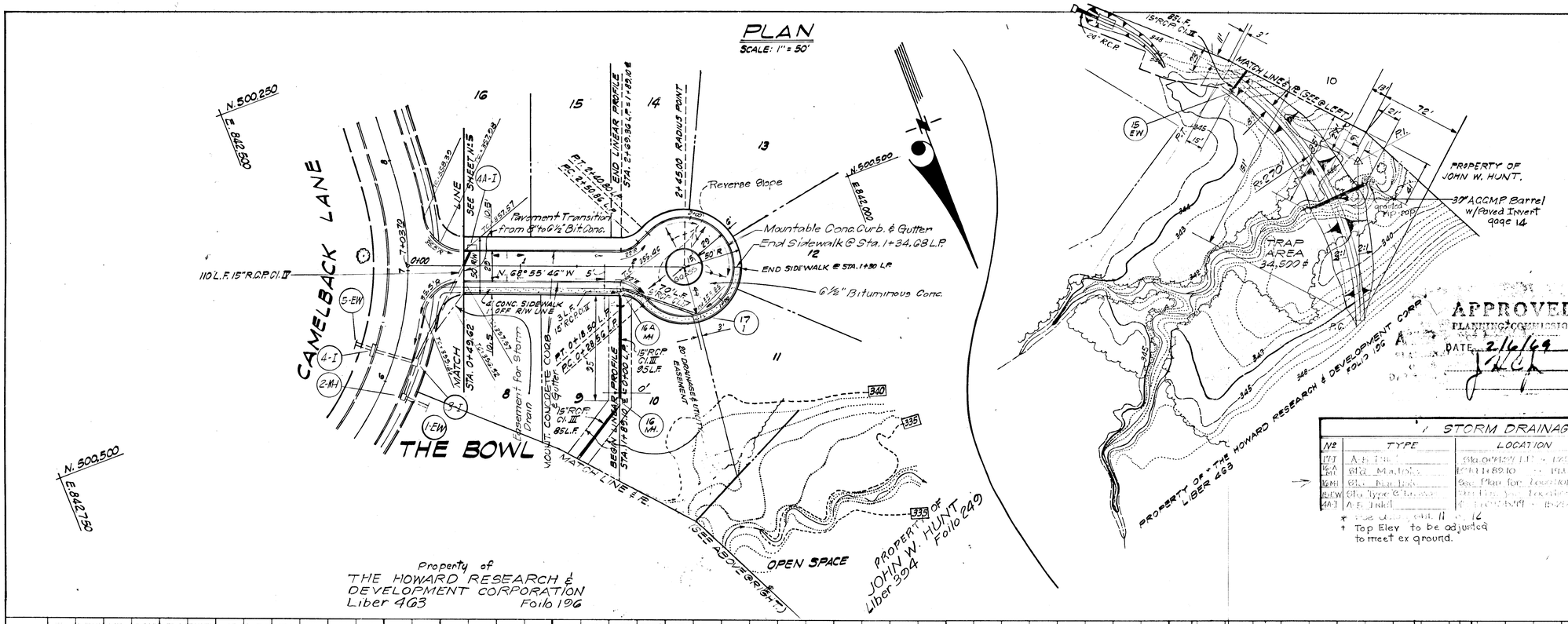
Nº	TYPE	LOCATION	INV. IN	INV. OUT	T.C. R. ELEV.	REMARKS
F-15A EW	Std Type 'L' Endwall	See Plan for location		[illegible]		[illegible]
F-14M	Std. Manhole	[illegible]	3[illegible].48	[illegible]	[illegible]	[illegible]

#89

PLATE 1 PLAN-PROFILE B P R STANDARD
EUGENE DIETZGEN CO. CHICAGO · NEW YORK

SHEET 2 OF 2 CAMELBACK LANE VILLAGE OF OAKLAND MILLS SG-1353

F-68-94



GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev Date	Rev No	Revision Description

COLUMBIA
6TH. ELECTION DISTRICT
HOWARD COUNTY MARYLAND
OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS · BALTIMORE, MARYLAND 21210

PROJECT AREA: VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA 1

PROJECT TITLE: PLAN AND PROFILE THE BOWL

Des By	Scale AS SHOWN	Dwg. No 7071
Drn By TRETO	Date NOV. 1968	C.C.E. No
Chk By	Approved	

1-20-69

STORM DRAINAGE STRUCTURE SCHEDULE

Nº	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	REMARKS
17-I	A-5 Inlet	Sta. 0+49.62 L.P. + 12.5' Rt.		350.70	[illegible]	[illegible]
16A-MH	Std. Manhole	Sta. 1+89.10 + 19.5' Rt.	[illegible]	350.00	355.66	[illegible]
16-MH	Std. Manhole	See Plan for Location	[illegible]	[illegible]	350.00†	" " " "
15-EW	Std. Type "C" Inlet	See Plan for Location		[illegible]		[illegible]
4A-I	A-5 Inlet	[illegible]		[illegible]	[illegible]	[illegible]

* See Dwg. Sht. 11 of 12
† Top Elev to be adjusted to meet ex ground.

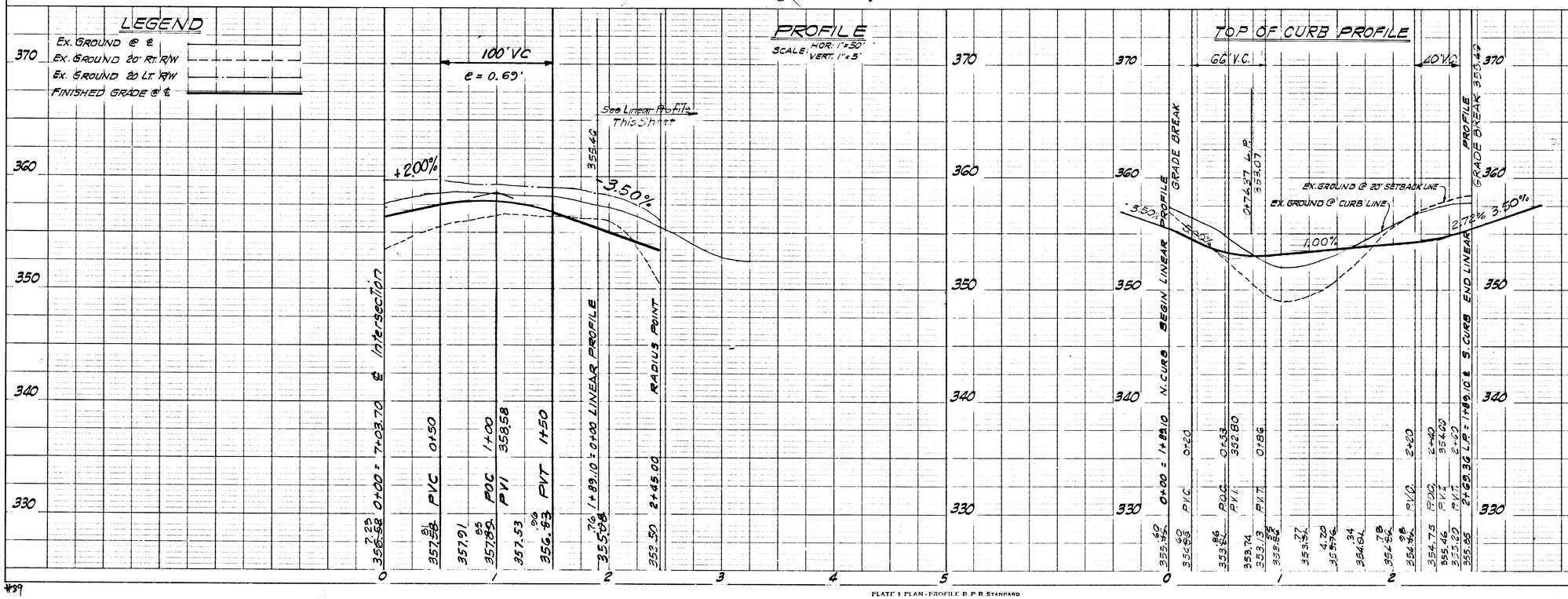


PLATE 1 PLAN-PROFILE B P R STANDARD
EUGENE DIETZGEN CO., CHICAGO - NEW YORK

THE BOWL
VILLAGE OF OAKLAND MILLS SG-1357

F-68-94

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev Date	Rev No	Revision Description

COLUMBIA
6TH ELECTION DISTRICT
HOWARD COUNTY MARYLAND

OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS · BALTIMORE, MARYLAND 21210

PROJECT AREA: VILLAGE OF OAKLAND MILLS
SECTION 5, STEVENS FOREST, AREA 1

PROJECT TITLE: PLAN & PROFILE
JAMINA DOWNS

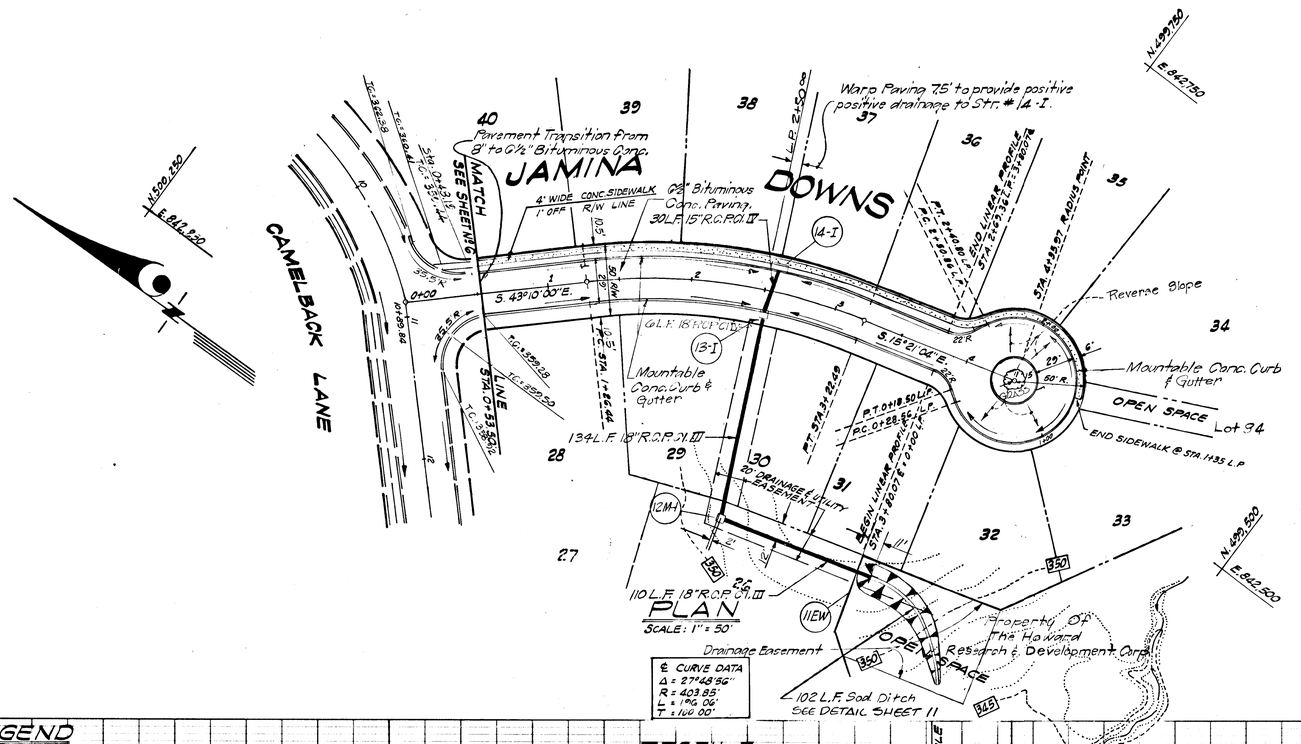
Des By B.J.S.	Scale AS SHOWN	Dwg No 8 of 11
Dtn By T.K.H.	Date NOV. 15, 1968	C.C.F. No
Chk By	Approved	

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY, MD.
DATE 2/26/69

STATE OF MARYLAND — CHARLES JOSEPH JAHNIGEN — REGISTERED PROFESSIONAL ENGINEER

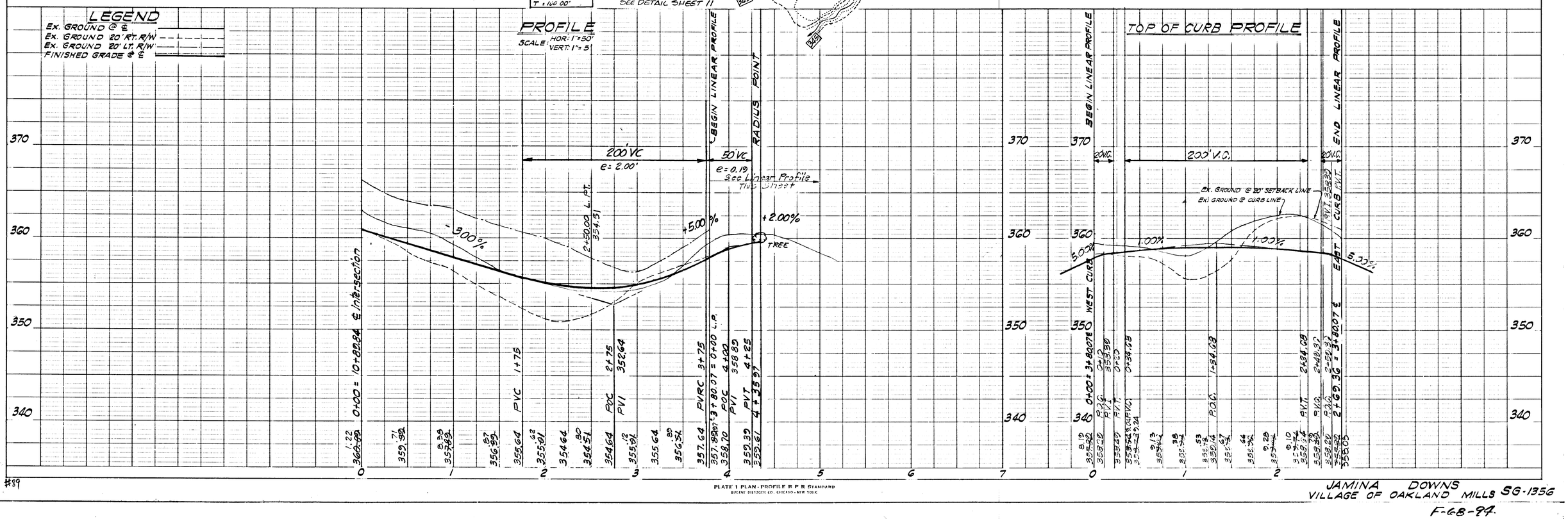
1-20-69

PLAN
DATE | BY | SURVEYED | PLOTTED | DRAWN | CHECKED | NOTE BOOK | PT. OF MAT CHECK | NO. | STRUCTURE NOTATIONS DATED



STORM DRAINAGE STRUCTURE SCHEDULE						
№	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	REMARKS
14-I	A-10 Inlet	℄ Sta. 2+92.00 - 80' Rt.		354.18	359.18	To Be Used Until Full*
13-I	A-10 Inlet	℄ Sta. 2+92.00 - 80' Rt.	354.51	354.18	359.18	" " " " " "
12M-I	5'Ø Manhole	See Plan for Location	354.64	354.64	359.64	To Be Used Until Full*
11E-W	Std. Type "C" Endwall	See Plan for Location	354.64		359.64	To Be Used Until Full*

* See Detail Sheet 11 for Details.
† Top Elev. to adjusted to meet Ex. Ground.

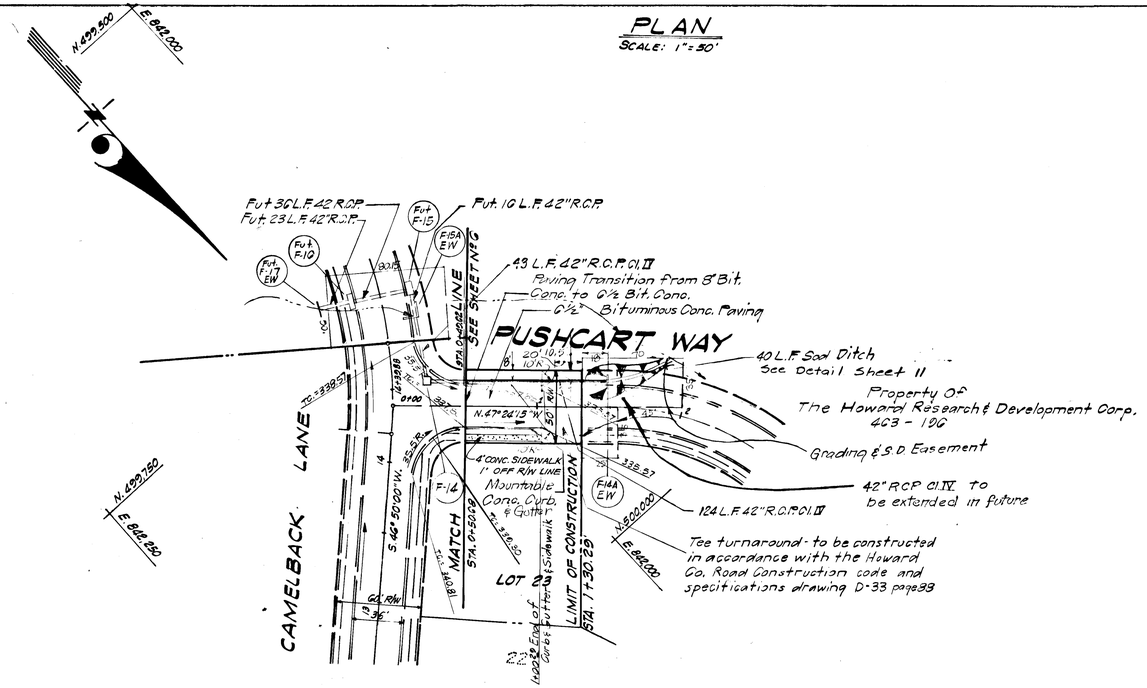


#89

PLATE 1 PLAN-PROFILE B P R Standard
EUGENE DIETZGEN CO. CHICAGO-NEW YORK

JAMINA DOWNS
VILLAGE OF OAKLAND MILLS SG-1356
F-68-84

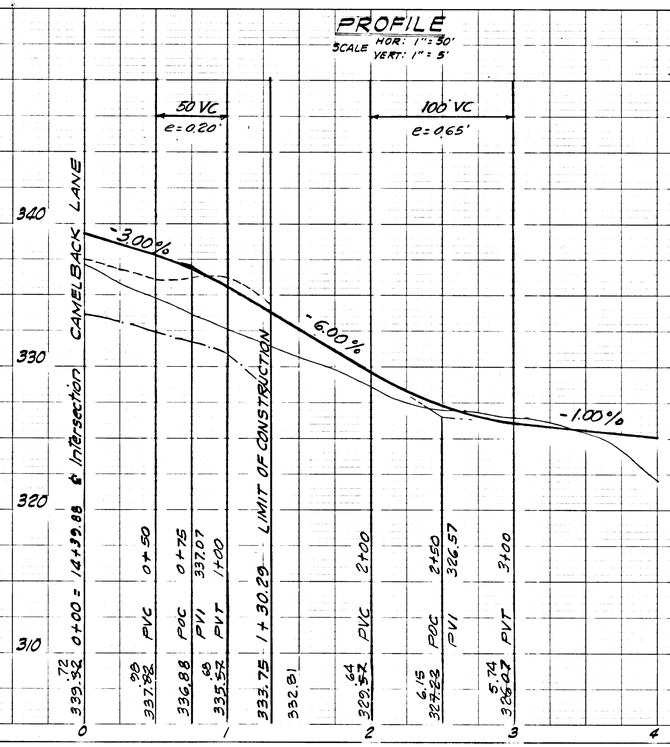
PLAN
SCALE: 1"=50'



LEGEND

Ex. Ground @ ℄
Ex. Ground 20' Rt. R/W
Ex. Ground 20' Lt. R/W
Finished Grade @ ℄

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



STORM DRAINAGE STRUCTURE SCHEDULE

No	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV	REMARKS
F-14A E.W.	Std. End Support Wall	See Plan for Location		324.24		Thick Std. Wing Wall, Right

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev Date	Rev No	Revision Description

COLUMBIA
6TH. ELECTION DISTRICT
HOWARD COUNTY MARYLAND

HOWARD RESEARCH AND DEVELOPMENT CORP
- THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21230

PROJECT AREA
VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA 1

PROJECT TITLE
PLAN & PROFILE
PUSHCART WAY

Des By B.J.B.	Scale AS SHOWN	Dwg No 9 of 12
Drn By TREES	Date NOV. 15, 1968	C.C.F. No
Chk By	Approved	

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY
DATE 2/6/69

STATE OF MARYLAND — No. 6810 — REGISTERED PROFESSIONAL ENGINEER

1-20-69

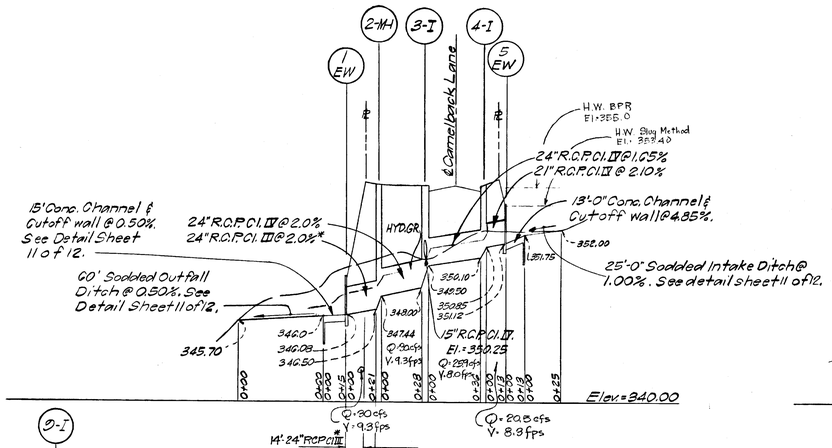
PLAN | SURVEYED | BY | DATE
NOTE BOOK | PLOTTED | CHECKED | BY
NO. | CURVES CHECKED | ALIGNMENT CHECKED
R/W MONUMENTS | R/W MONUMENTS CHECKED
STRUCTURE NOTATIONS CHK'D | ST. OF WAY CHECKED

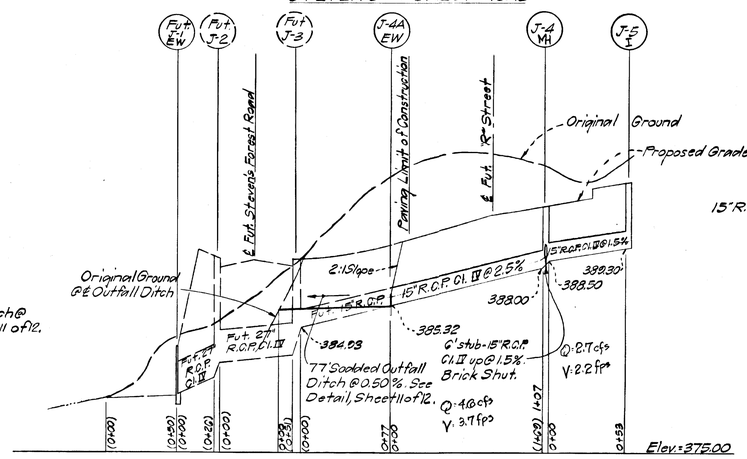
PROFILE | SURVEYED | BY | DATE
NOTE BOOK | PLOTTED | CHECKED | BY
NO. | CURVES CHECKED | ALIGNMENT CHECKED
R/W MONUMENTS | R/W MONUMENTS CHECKED
STRUCTURE NOTATIONS CHK'D | ST. OF WAY CHECKED

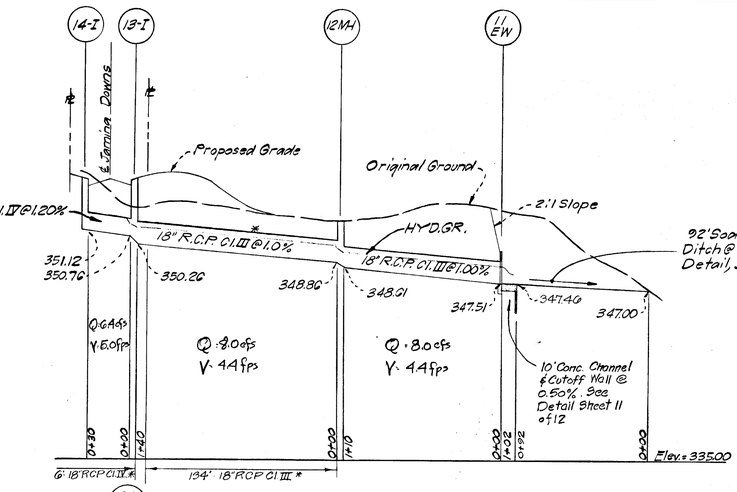
PLATE 1 PLAN-PROFILE B P R STANDARD
EUGENE DIETZGEN CO. CHICAGO · NEW YORK

PUSHCART WAY
VILLAGE OF OAKLAND MILLS SG-1358
F-68-94

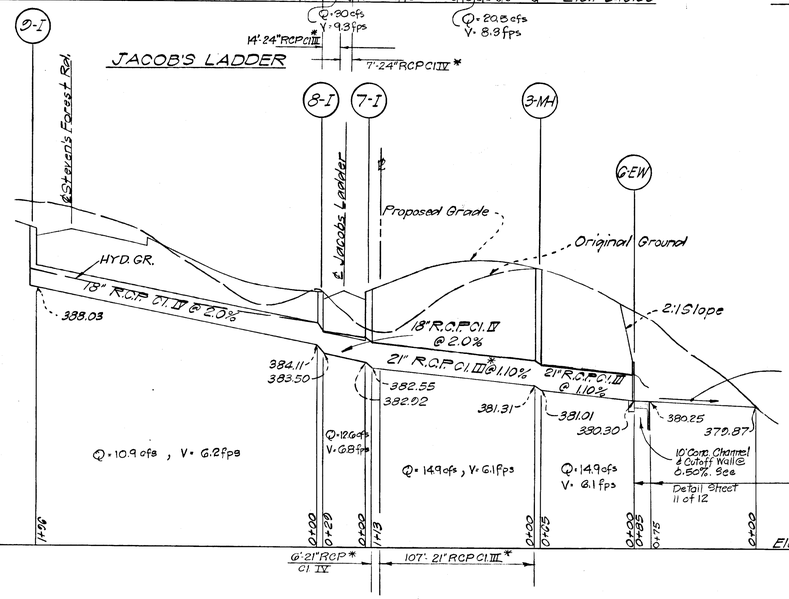
STEVEN'S FOREST ROAD

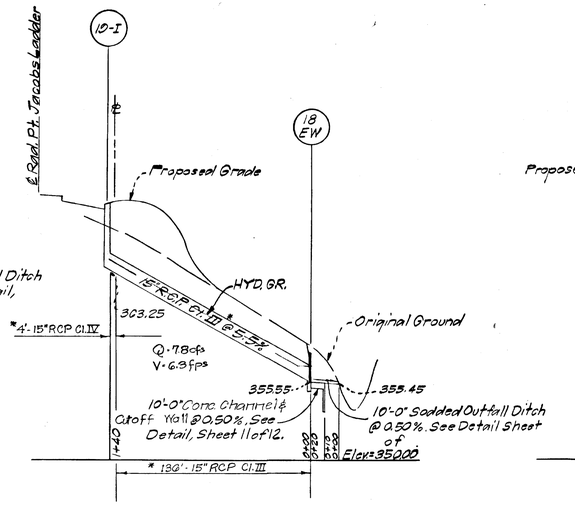


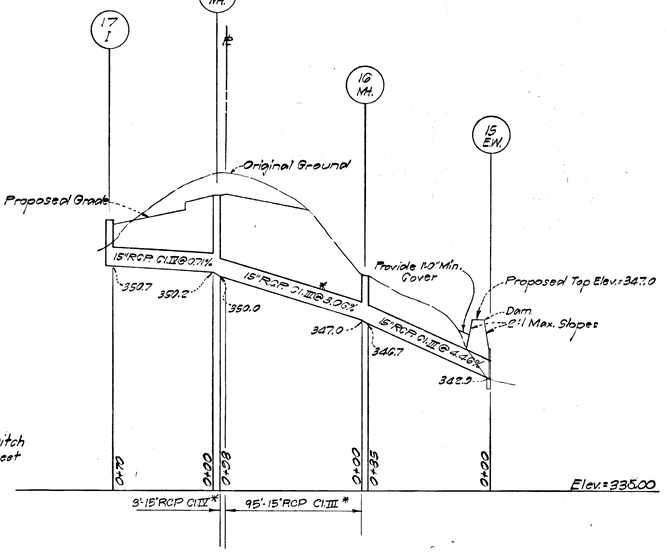




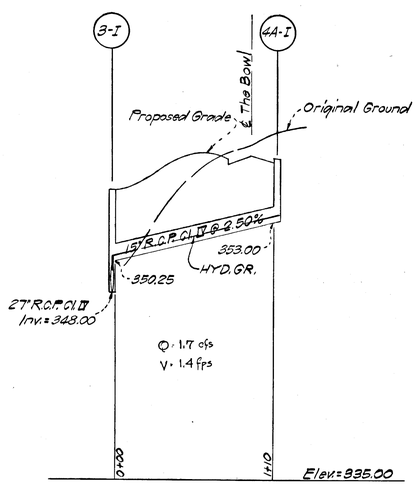
JACOB'S LADDER

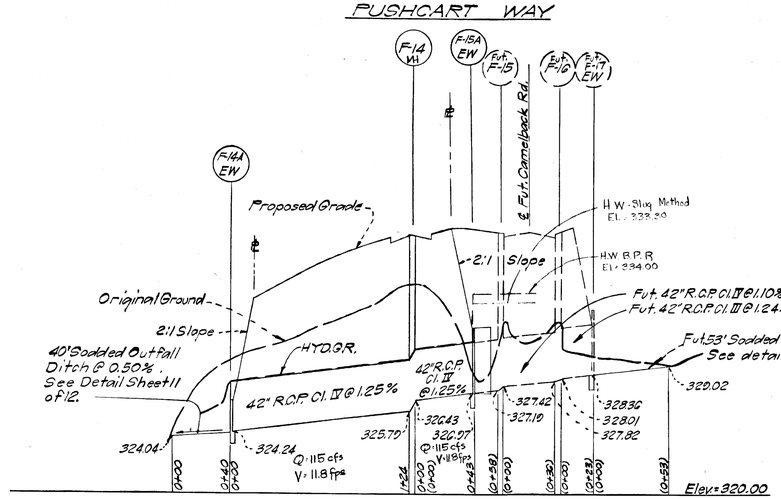


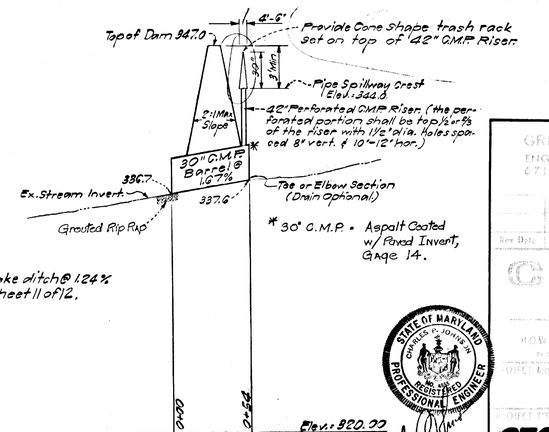




PUSHCART WAY







STORM DRAIN PROFILES

Scale: Hor. 1"=50', Vert. 1"=5'

PROFILE OF SILT BASIN

SCALE: Hor. 1"=30', Vert 1"=5'

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY
DATE 2/6/69

GREENHORNE AND O'MARA, INC.
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev. Date	Rev. No.	Revision Description

COLUMBIA
GLEN E. SECTION DISTRICT
HOWARD COUNTY MARYLAND

OWNER
HOWARD RESEARCH AND DEVELOPMENT CORP.

PROJECT NAME
VILLAGE OF OAKLAND MILLS
SECTION 5, STEVENS FOREST AREA

SHEET TITLE
STORM DRAIN PROFILES

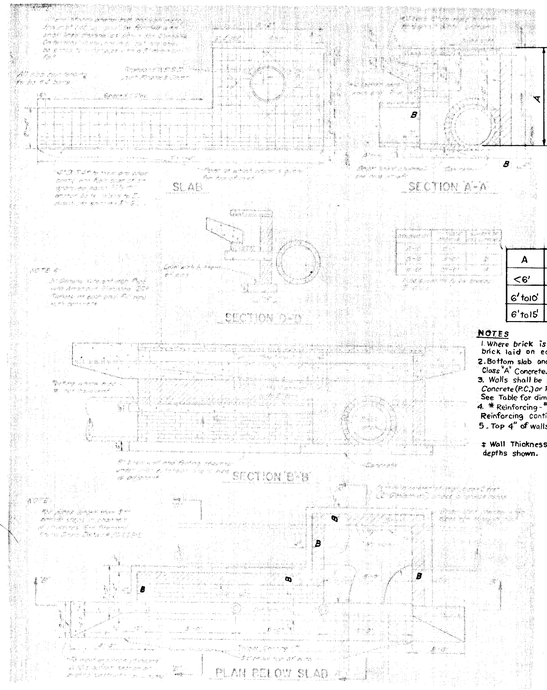
B.J.B	As Shown	10 of 12
D.M.T.	Nov. 15, 1968	

#99

1-20-69

F-68-94

NOTE:
TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS DRAWING G4B PAGE 119-B



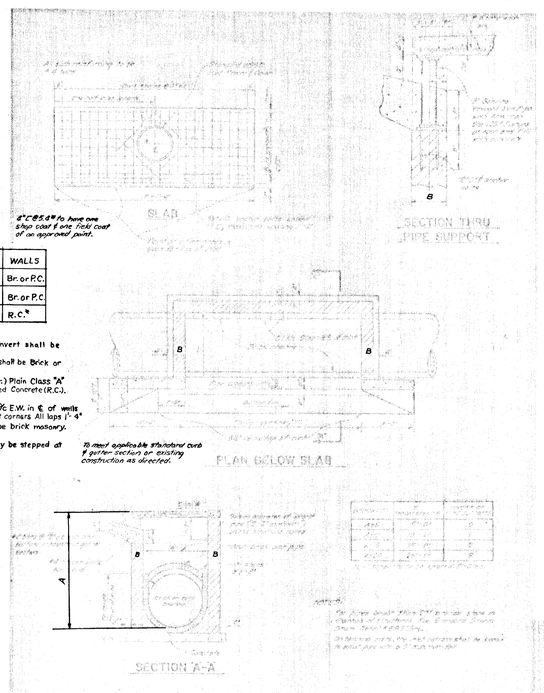
A	B ‡	WALLS
<6'	8"	Br. or P.C.
6' to 10'	12"	Br. or P.C
6' to 15'	8"	R.C.*

NOTES
1. Where brick is used, invert shall be brick laid on edge.
2. Bottom slab and invert shall be Brick or Class 'A' Concrete.
3. Walls shall be Brick (Bc) Plain Class "A" Concrete (P.C.) or Reinforced Concrete (R.C.). See Table for dimensions.
4. * Reinforcing - #4 @ 10" % E.W. in ℄ of walls. Reinforcing continues at corners. All laps 1'-4"
5. Top 4" of walls shall be brick masonry.

‡ Wall Thickness (B) may be stepped at depths shown.

STANDARD B-INLET
NO SCALE

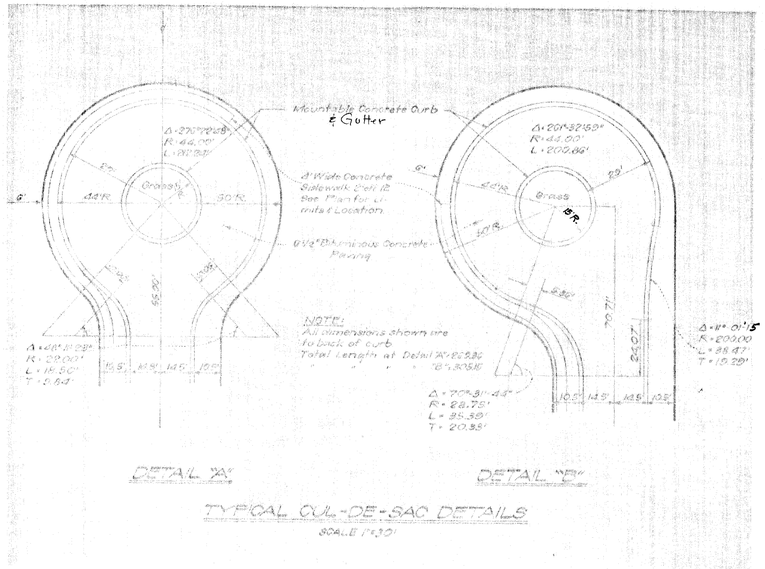
NOTE:
TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS DRAWING G4-A PAGE 119-A



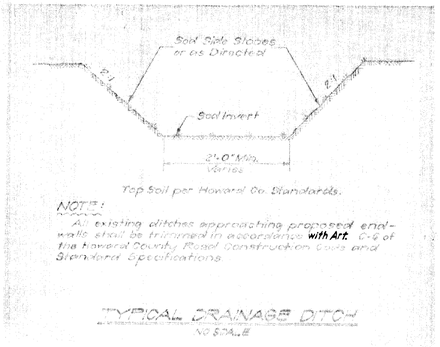
4"CRS.& # to have one shop coat & one field coat of an approved paint.

To meet applicable standard curb & gutter section or existing construction as directed.

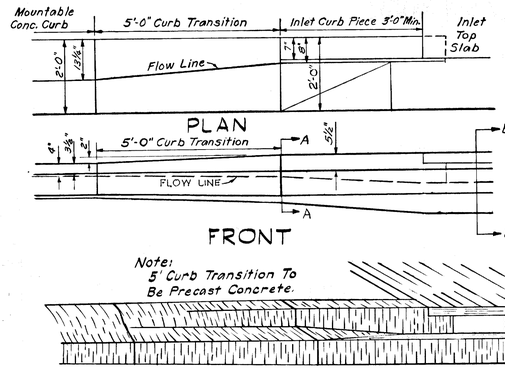
STANDARD A-INLET
NO SCALE



TYPICAL CUL-DE-SAC DETAILS
SCALE 1"=30'

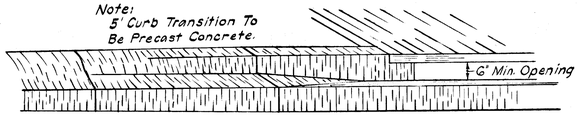


TYPICAL DRAINAGE DITCH
NO SCALE



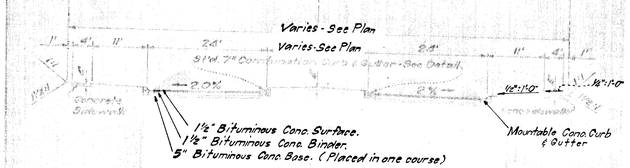
Note:
For Section 'B-B' Refer To 'Section Thru. Pipe Support' Std. A Inlet & 'Section 'A-A'- Std. B-Inlet. See Detail, this sheet

Note:
5' Curb Transition To Be Precast Concrete.



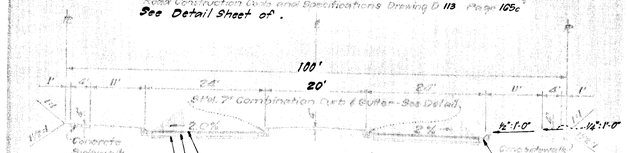
5' CURB TRANSITION
No Scale

NOTE: Pavement to be constructed in accordance with the Howard County Road Construction Data and Specifications Drawing D. 113 Page 105c
See Detail Sheet of .

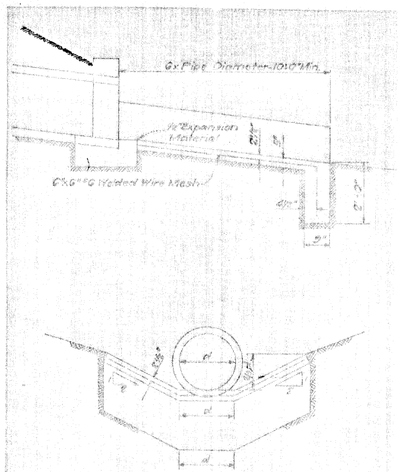


STEVENS FOREST ROAD
STA. 19+51.90 TO STA. 22+06.31
STA. 23+43.85 TO STA. 24+77.11
STA. 25+62.25 TO STA. 26+70.95
NO SCALE

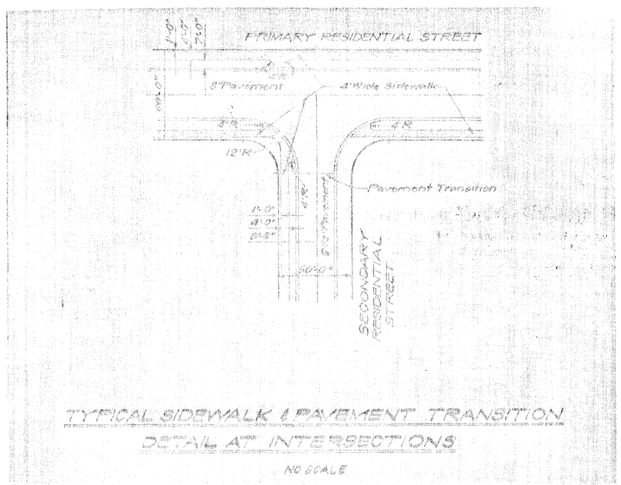
NOTE: Pavement to be constructed in accordance with the Howard County Road Construction Data and Specifications Drawing D. 113 Page 105c
See Detail Sheet of .



STEVENS FOREST ROAD
STA. 24+77.11 TO STA. 25+62.25
NO SCALE



TYPICAL CONCRETE CHANNEL & OUTFALL WALL
NO SCALE



TYPICAL SIDEWALK & PAVEMENT TRANSITION DETAIL AT INTERSECTIONS
NO SCALE

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY
DATE 2/6/69

STATE OF MARYLAND
CHARLES P. JOHNSON
REGISTERED PROFESSIONAL ENGINEER

1269

GREENHORNE AND O'MARA, INC.
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

No.	Date	Rev. No.	Revision Description

COLUMBIA
8TH ELECTION DISTRICT
HOWARD COUNTY MARYLAND

HOWARD RESEARCH AND DEVELOPMENT CORP.

PROJECT NAME
VILLAGE OF OAKLAND MILLS
SECTION 5, STEVENS FOREST, AREA 1

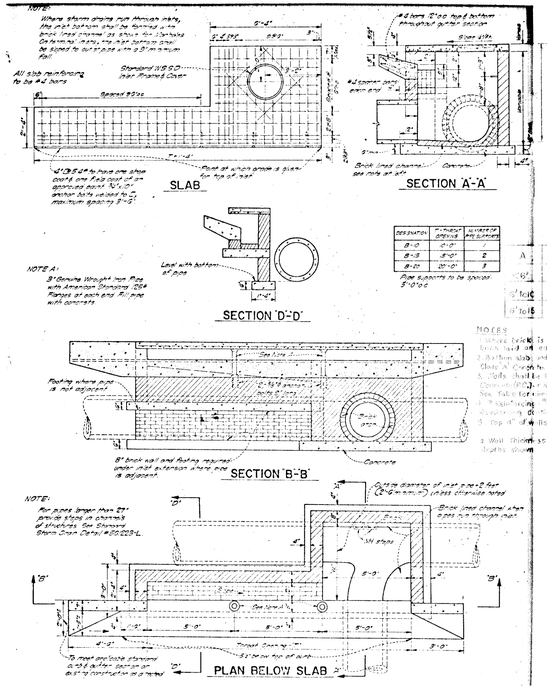
PROJECT TITLE
ROADWAY DETAILS

Des. By	Scale	Sheet
B.J.B.	As Shown	11 of 12
Drn. By	Date	
D.M.T.	Nov. 15, 1968	
Chk. By		

F-68-94

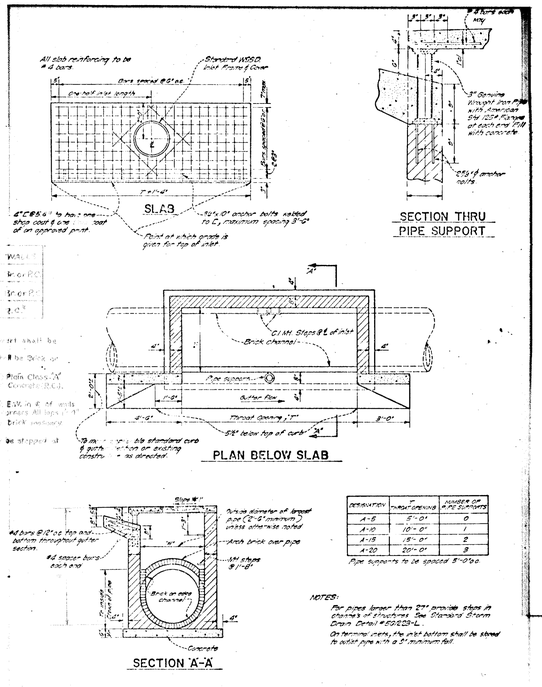
*84

NOTE:
TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS DRAWING S4.9 PAGE 119-B

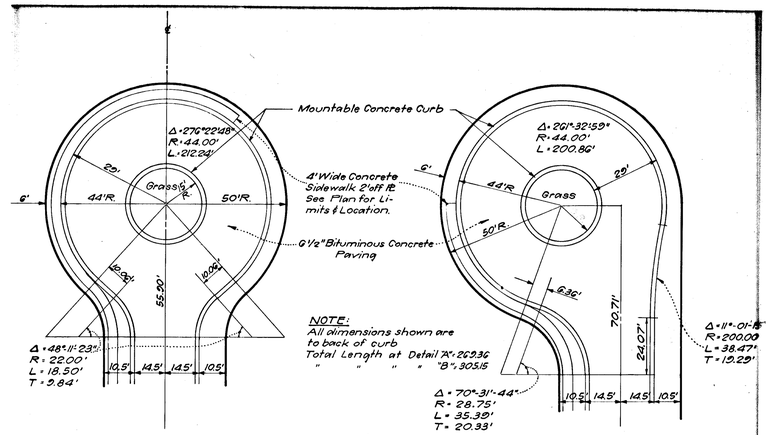


STANDARD B-INLET
NO SCALE

NOTE:
TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS DRAWING G4-A PAGE 119-A

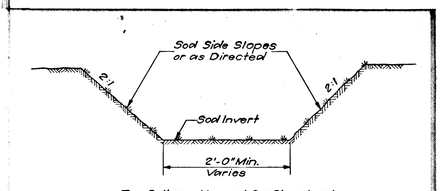


STANDARD A-INLET
NO SCALE



DETAIL "A" DETAIL "B"

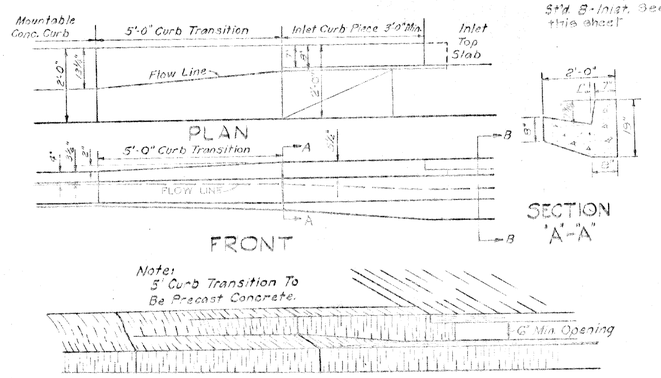
TYPICAL CUL-DE-SAC DETAILS
SCALE 1"=30'



Top Soil per Howard Co. Standards.

NOTE:
All existing ditches approaching proposed end-walls shall be trimmed in accordance C-6 of the Howard County Road Construction Code and Standard Specifications.

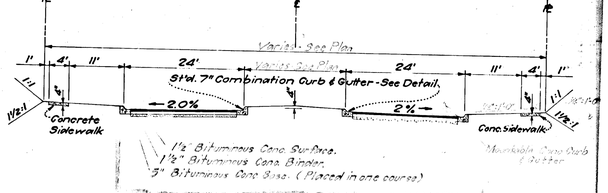
TYPICAL DRAINAGE DITCH
NO SCALE



5' CURB TRANSITION
NO SCALE

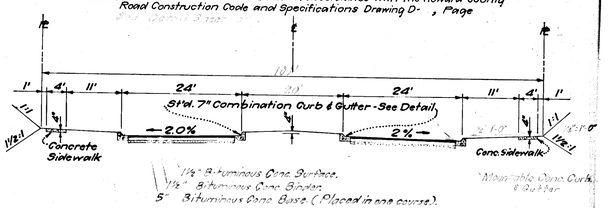
Note:
For Section 'B-B' Refer To "Section Thru Pipe Support" Std. A Inlet & "Section 'A'-'A'" Std. B-Inlet, See Detail, this sheet.

NOTE: Pavement to be constructed in accordance with the Howard County Road Construction Code and Specifications Drawing D- , Page .

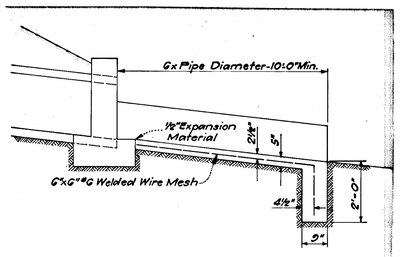


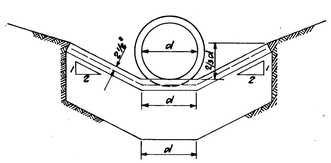
STEVENS FOREST ROAD
STA. TO STA.

NOTE: Pavement to be constructed in accordance with the Howard County Road Construction Code and Specifications Drawing D- , Page .

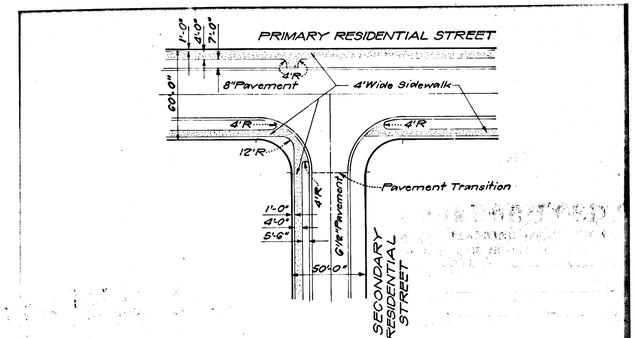


STEVENS FOREST ROAD
STA. TO STA.
NO SCALE





TYPICAL CONCRETE CHANNEL & CUTOFF WALL
NO SCALE



TYPICAL SIDEWALK & PAVEMENT TRANSITION DETAIL AT INTERSECTIONS
NO SCALE

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY, MD.
DATE 2/16/69

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev Date	Rev No	Revision Description

COLUMBIA
6TH. ELECTION DISTRICT
HOWARD COUNTY MARYLAND

OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS · BALTIMORE, MARYLAND 21210

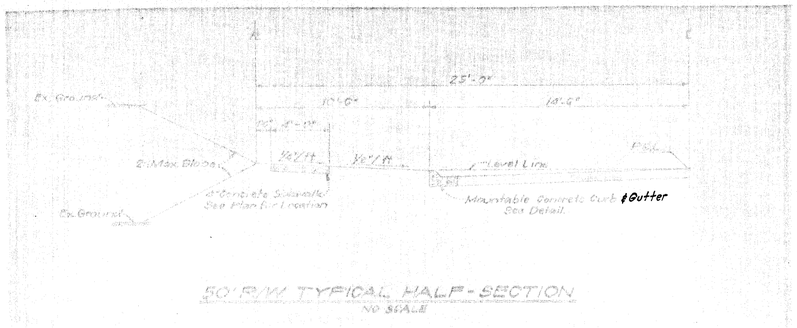
PROJECT AREA
VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA

PROJECT TITLE
PRIMARY DETAILS

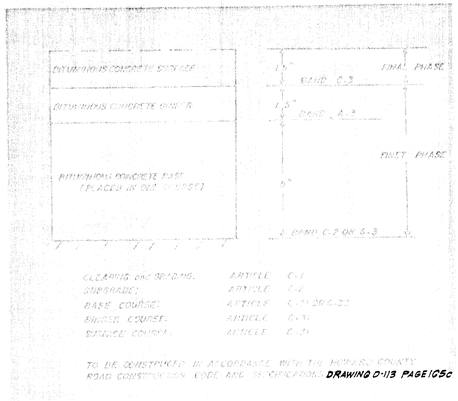
Des By	Scale	Dwg. No
Drn By	Date	C.C.F. No
Chk By	Approved	

STATE OF MARYLAND
CHARLES O'MARA
REG. NO. 5383
PROFESSIONAL ENGINEER

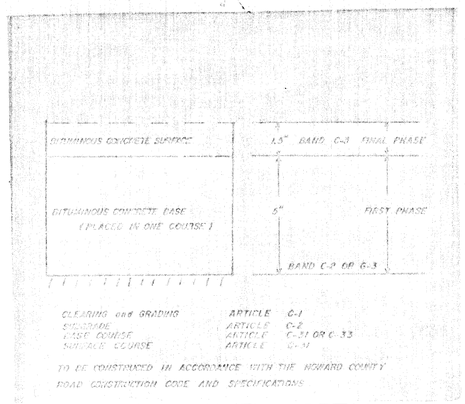
1 of 1



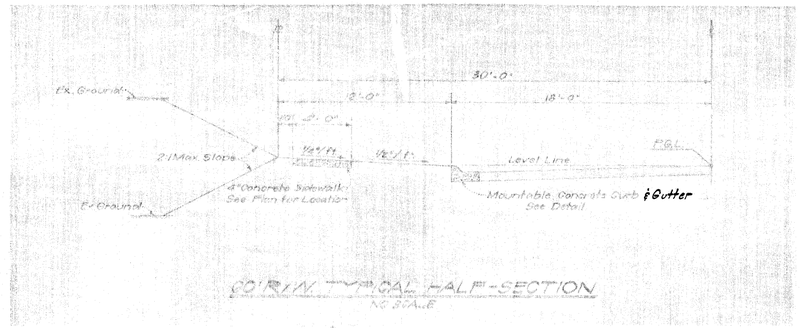
50' R/W TYPICAL HALF-SECTION
NO SCALE



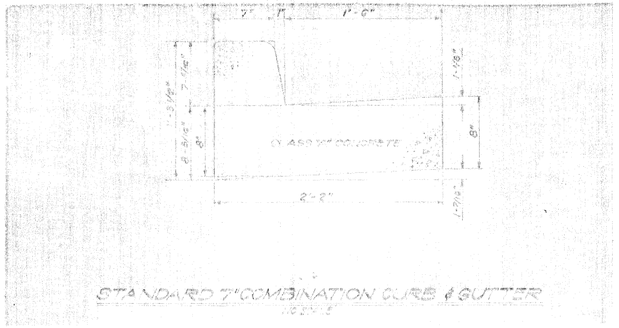
8" PAVEMENT DETAIL
NO SCALE



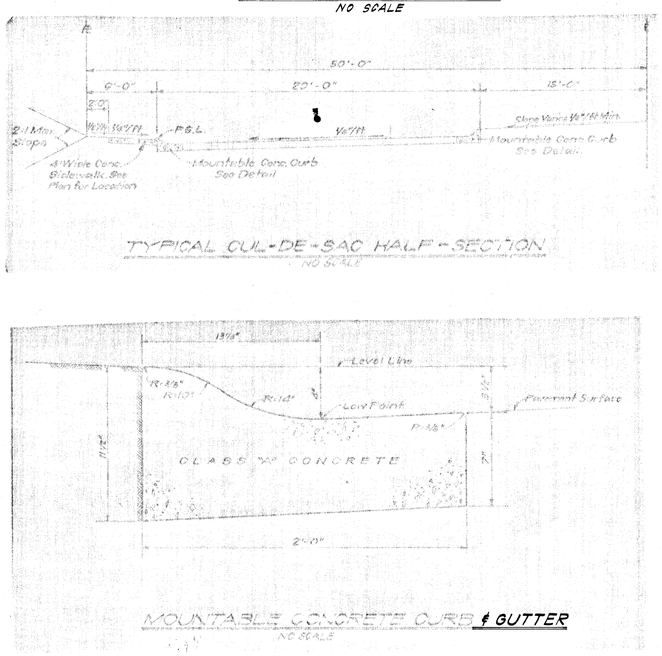
6½" PAVEMENT DETAIL
NO SCALE



60' R/W TYPICAL HALF-SECTION
NO SCALE



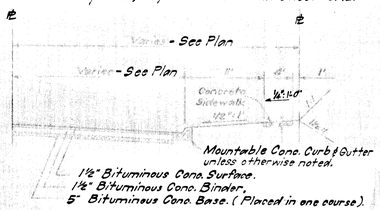
STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE



TYPICAL CUL-DE-SAC HALF-SECTION
NO SCALE

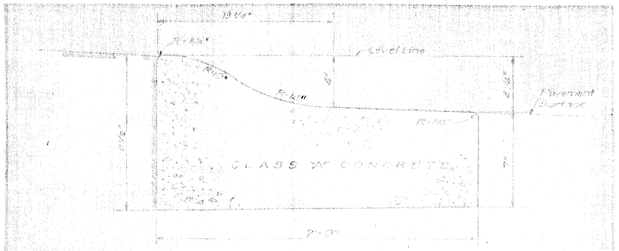
MOUNTABLE CONCRETE CURB & GUTTER
NO SCALE

Note: Pavement to be constructed in accordance with the Howard County Road Construction Code & Specifications Drawing D-113, Page 165c. See Detail Sheet 11 of 12.



TYPICAL HALF-SECTION
STEVENS FOREST ROAD

STA. 10+81.72 TO STA. 10+51.00
STA. 22+06.91 TO STA. 23+43.83
STA. 26+70.25 TO STA. 28+31.00
NO SCALE



MOUNTABLE CONCRETE CURB & GUTTER
FOR CUL-DE-SAC ISLANDS
NO SCALE

APPROVED
PLANNING COMMISSION
OF HOWARD COUNTY
DATE 2/6/69

STATE OF MARYLAND
CHARLES P. JOHNSON
No. 6706
REGISTERED
PROFESSIONAL ENGINEER

GREENHORNE AND O'MARA, INC.
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev. Date	Rev. No.	Revision Description

COLUMBIA
6TH ELECTION DISTRICT
HOWARD COUNTY MARYLAND

OWNER
HOWARD RESEARCH AND DEVELOPMENT CORP.

PROJECT NAME
VILLAGE OF OAKLAND MILLS
SECTION 5, STEVENS FOREST, AREA 1

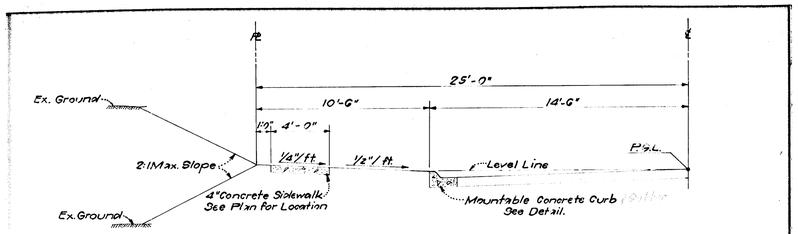
ROADWAY DETAILS

Des. B.J.B.	As Shown	12 of 12
Dra. By D.M.T.	Nov. 15, 1968	
Ck'd By		

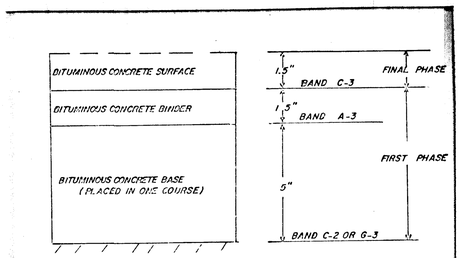
12060

#89

F-68-94



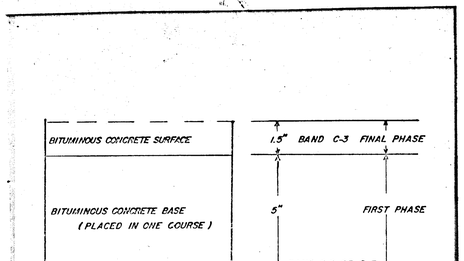
50' R/W TYPICAL HALF-SECTION
NO SCALE



CLEARING and GRADING:	ARTICLE	C-1
SUBGRADE:	ARTICLE	C-2
BASE COURSE:	ARTICLE	C-31 OR C-33
BINDER COURSE:	ARTICLE	C-31
SURFACE COURSE:	ARTICLE	C-31

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

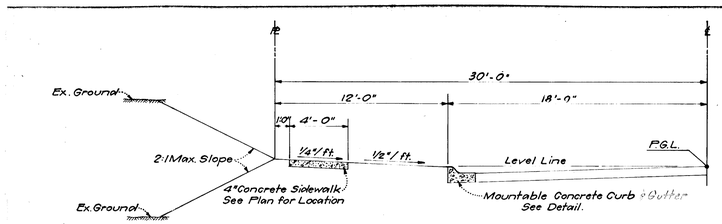
6" PAVEMENT DETAIL
NO SCALE



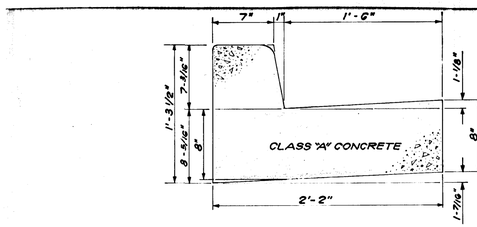
CLEARING and GRADING	ARTICLE	C-1
SUBGRADE	ARTICLE	C-2
BASE COURSE	ARTICLE	C-31 OR C-33
SURFACE COURSE	ARTICLE	C-31

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

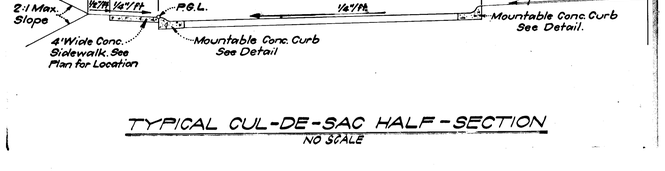
8" PAVEMENT DETAIL
NO SCALE



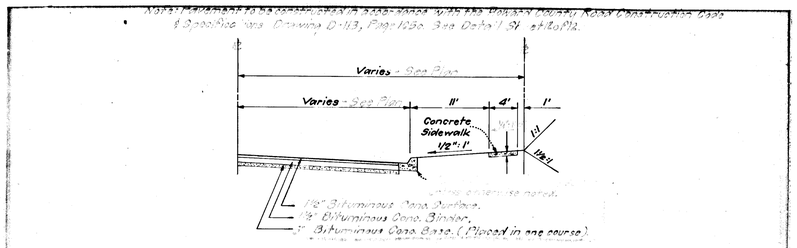
60' R/W TYPICAL HALF-SECTION
NO SCALE



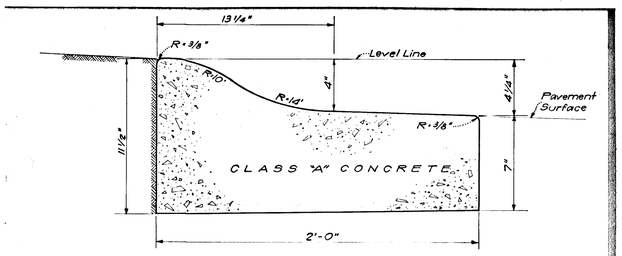
STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE



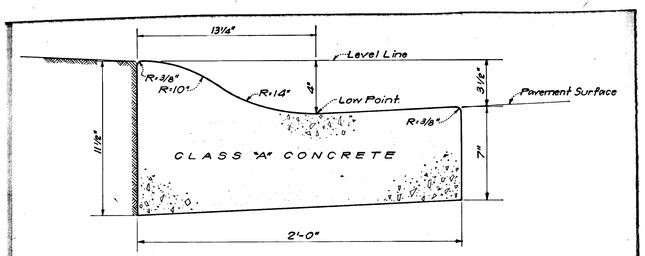
TYPICAL CUL-DE-SAC HALF-SECTION
NO SCALE



TYPICAL HALF-SECTION
STEVENS FOREST ROAD
STA. TO STA.



MOUNTABLE CONCRETE CURB & GUTTER
FOR CUL-DE-SAC ISLANDS
1/10 SCALE



MOUNTABLE CONCRETE CURB & GUTTER
NO SCALE

APPROVED
PLANNING COMMISSION
OF
DATE 2/22/69

GREENHORNE AND O'MARA, INC.
ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS
6715 KENILWORTH AVENUE RIVERDALE, MD.

Rev Date	Rev No	Revision Description

COLUMBIA
6TH. ELECTION DISTRICT
HOWARD COUNTY MARYLAND

OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
THE VILLAGE OF CROSS KEYS - BALTIMORE, MARYLAND 21210

PROJECT AREA
VILLAGE OF OAKLAND MILLS
SECTION 5, STEVEN'S FOREST, AREA

PROJECT TITLE
ROADWAY DETAILS

Des By	Scale	Dwg. No
Drn By	Date	C.C.F. No
Chk By	Approved	