

SHEET INDEX	
NO.	DESCRIPTION
1.	TITLE SHEET
2.	PLAN AND PROFILE - POLISHED STONE - 0+00 TO 5+00
3.	PLAN AND PROFILE - POLISHED STONE - 5+00 TO 10+12.10
4.	PLAN AND PROFILE - DEEP SMOKE - 0+00 TO 3+30.01
5.	SECTIONS, DETAILS, DRAINAGE AREA MAP
6.	SEDIMENT CONTROL PLAN
7.	SEDIMENT CONTROL DETAILS

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

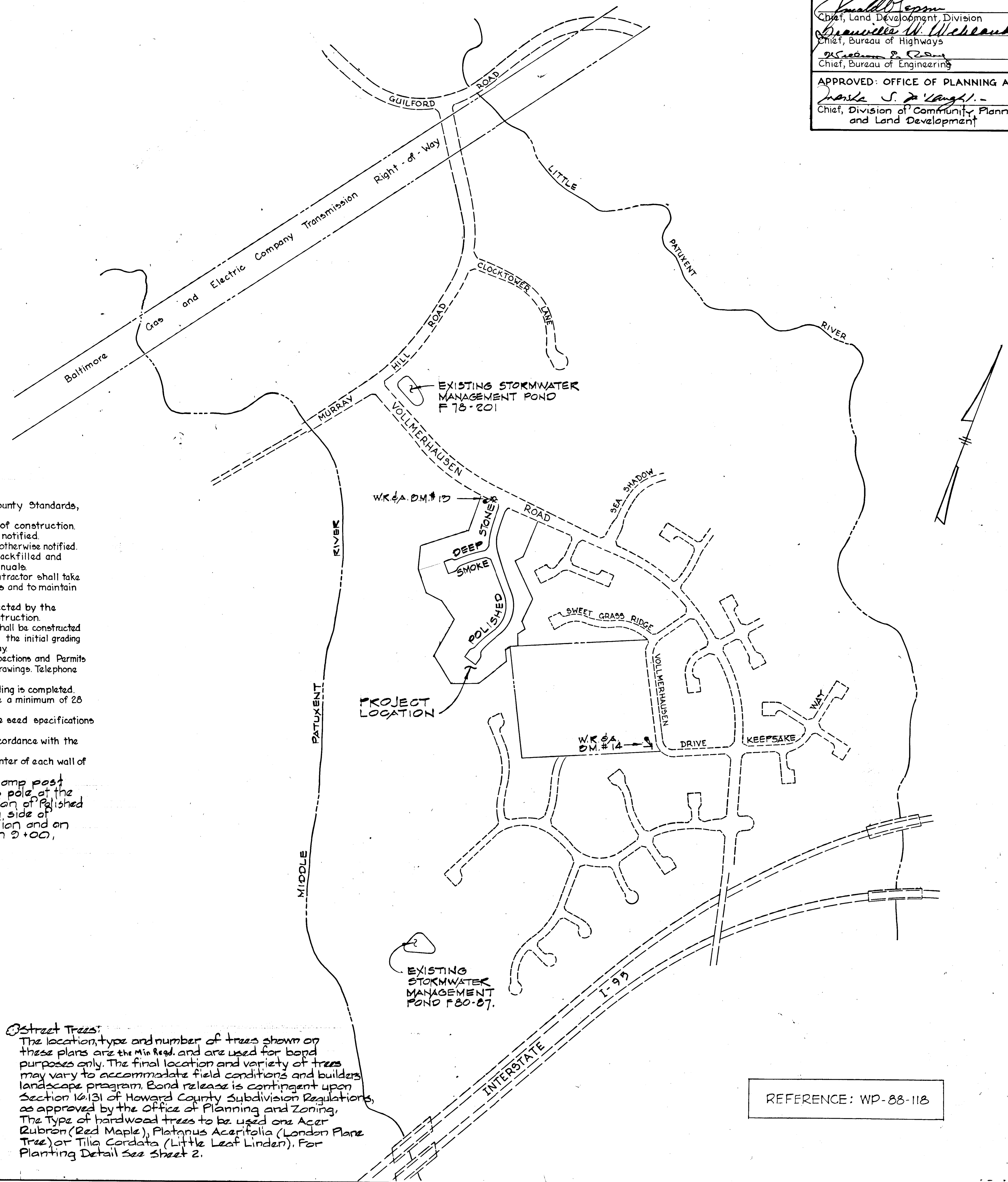
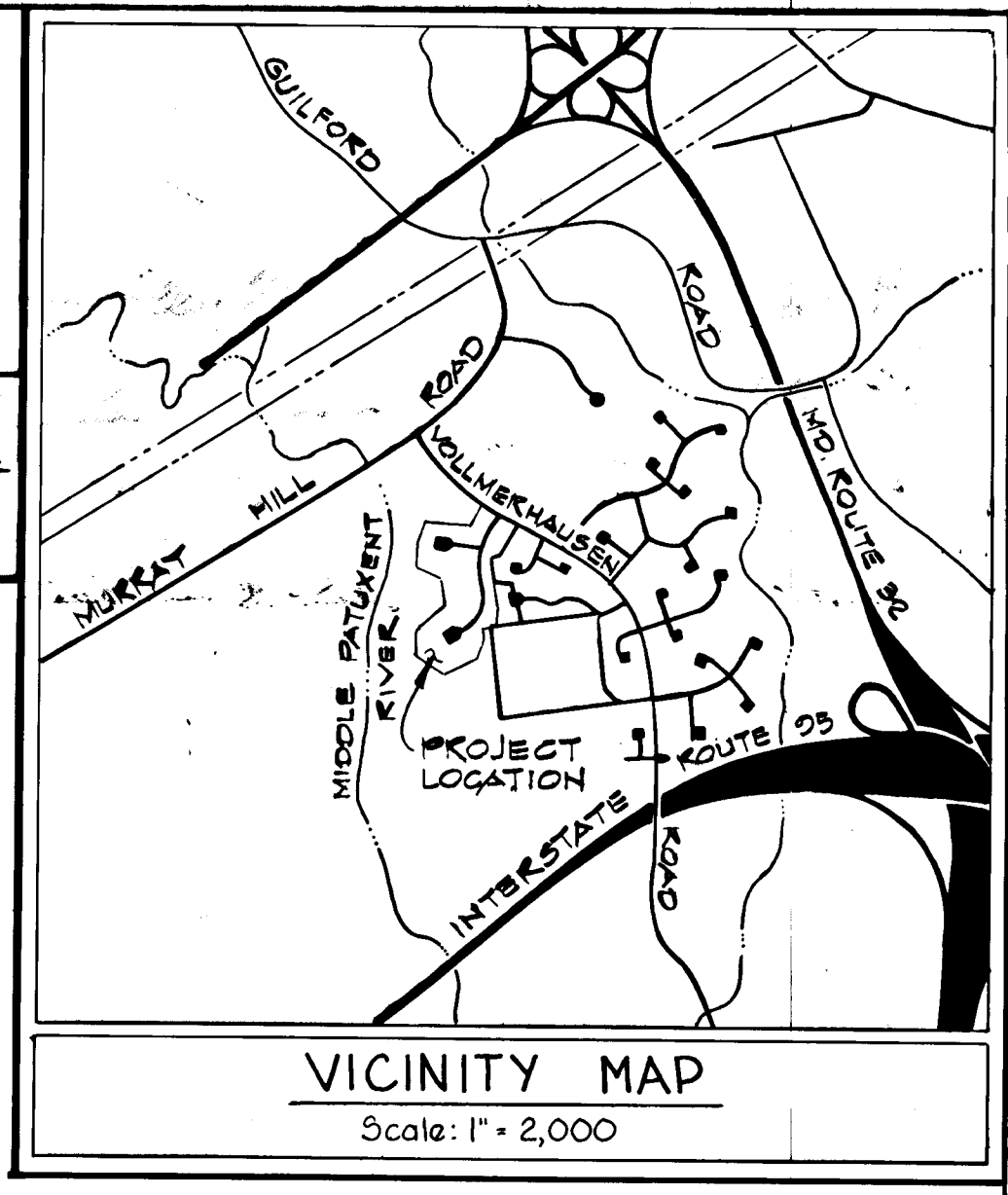
Ronald J. Seem 7/14/88
 Chief, Land Development Division Date

Donald W. Weiland 7/21/88
 Chief, Bureau of Highways Date

Robert E. Reed 7-21-88
 Chief, Bureau of Engineering Date

APPROVED: OFFICE OF PLANNING AND ZONING

Mark S. DeLong 7-25-88
 Chief, Division of Community Planning and Land Development Date



GENERAL NOTES

- All work shall be performed in accordance with Howard County Standards, Specifications and Details for Construction.
- All utility companies shall be notified 24 hours in advance of construction.
- Inlet shall be Howard County Standard unless otherwise notified.
- All street curb returns shall have a 35.0' radius unless otherwise notified.
- Storm Drain trench within road right-of-way shall be backfilled and compacted in accordance with Howard County Design Manuals.
- Approximate location of existing utilities are shown. The Contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service.
- The Contractor shall test pit existing utilities where directed by the Engineer a minimum of two weeks in advance of any construction.
- Temporary compacted 18" high earth fill diversion dikes shall be constructed above the lips of fill slopes on the R.O.W. concurrently with the initial grading and directed to undisturbed sod areas at the end of each day.
- Contractor to notify the Howard County Department of Inspections and Permits at least three days before starting work shown on these drawings. Telephone No. 992-2436.
- All disturbed slope areas to be stabilized as soon as grading is completed.
- All reinforced concrete for storm drain structures shall have a minimum of 28 days strength of 3500 psi.
- All swales and slopes shall be permanently seeded. See the seed specifications on Sheet
- Traffic control devices and their installation shall be in accordance with the manual on traffic control devices, 1978 revised edition.
- Stubs for 6" P.V.C. underdrain pipe to be installed at center of each wall of every inlet.
- Light Post - 175-watt "Modern" mercury lamp post top fixture on a 12 foot bronze fiberglass pole at the following locations: west side of the intersection of Polished Stone and Vollmerhausen Road, on the south side of Polished Stone and Deep Smoke intersection and on the east side of Polished Stone at Station 2+00.

Street Trees:
 The location, type and number of trees shown on these plans are the Min. Req. and are used for bond purposes only. The final location and variety of trees may vary to accommodate field conditions and builders landscape program. Bond release is contingent upon Section 16131 of Howard County Subdivision Regulations, as approved by the Office of Planning and Zoning. The type of hardwood trees to be used are Acer Rubrum (Red Maple), Platanus Acerifolia (London Plane Tree) or Tilia Cordata (Little Leaf Linden). For Planting Detail see Sheet 2.

HORIZONTAL CONTROL POINTS USED

CF#5 TRAVERSE POINT # 202 SEE SHEET 3
 DESC. TOP OF FIRE HYDRANT
 N 482.451, 8340
 E 843.789, 8517

CF#5 TRAVERSE POINT # 201 SEE SHEET 3
 DESC. TOP OF FIRE HYDRANT
 N 482.028, 6489
 E 843.655, 7822

BENCH MARKS

W.R. 1A - BM #W-13 Elev. 517.30
 X-cut in Flange Bolt of Fire Hydrant at intersection of Vollmerhausen Road and Polished Stone

W.R. 1A - BM #W-14 Elev. 355.09
 RR Spike in side of Power Pole C4D #21,
 C4E #174494, South Side Vollmerhausen Drive,
 600' Int. Vollmerhausen Road + Keepsake Way

VERTICAL CONTROL POINTS USED

CF#5 TRAVERSE POINT # 202 ELEV: 558.07
 DESC. TOP OF FIRE HYDRANT

CF#5 TRAVERSE POINT # 201 ELEV: 325.51
 DESC. TOP OF FIRE HYDRANT

STORMWATER MANAGEMENT FOR THIS PROJECT HAS BEEN PROVIDED IN THE VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 1, F 78-201 AND VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2, F 80-87.

REV. DATE	REV. NO.	REVISION DESCRIPTION
0-27-88	1	As per Planning and Zoning, D.P.W. and S.C.S. Comments

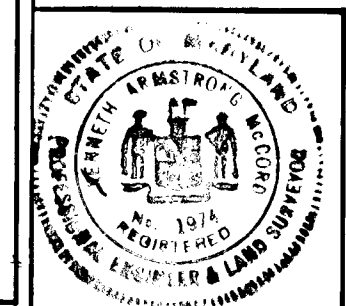
COLUMBIA
 VILLAGE OF KINGS CONTRIVANCE
 SECTION 3 AREA 2 LOTS 160 THRU 200, 202, 203 & 204
ROAD CONSTRUCTION PLANS
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER AND DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY
 COLUMBIA, MARYLAND

DATE: SCALE: AS SHOWN

WHITMAN, REQUARDT and ASSOCIATES
 ENGINEERS
 2315 SAINT PAUL STREET
 BALTIMORE, MARYLAND 21201

Kenneth A. McCord
 KENNETH A. MCCORD DATE



REFERENCE: WP-88-118

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Paul J. Pepin 7/14/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

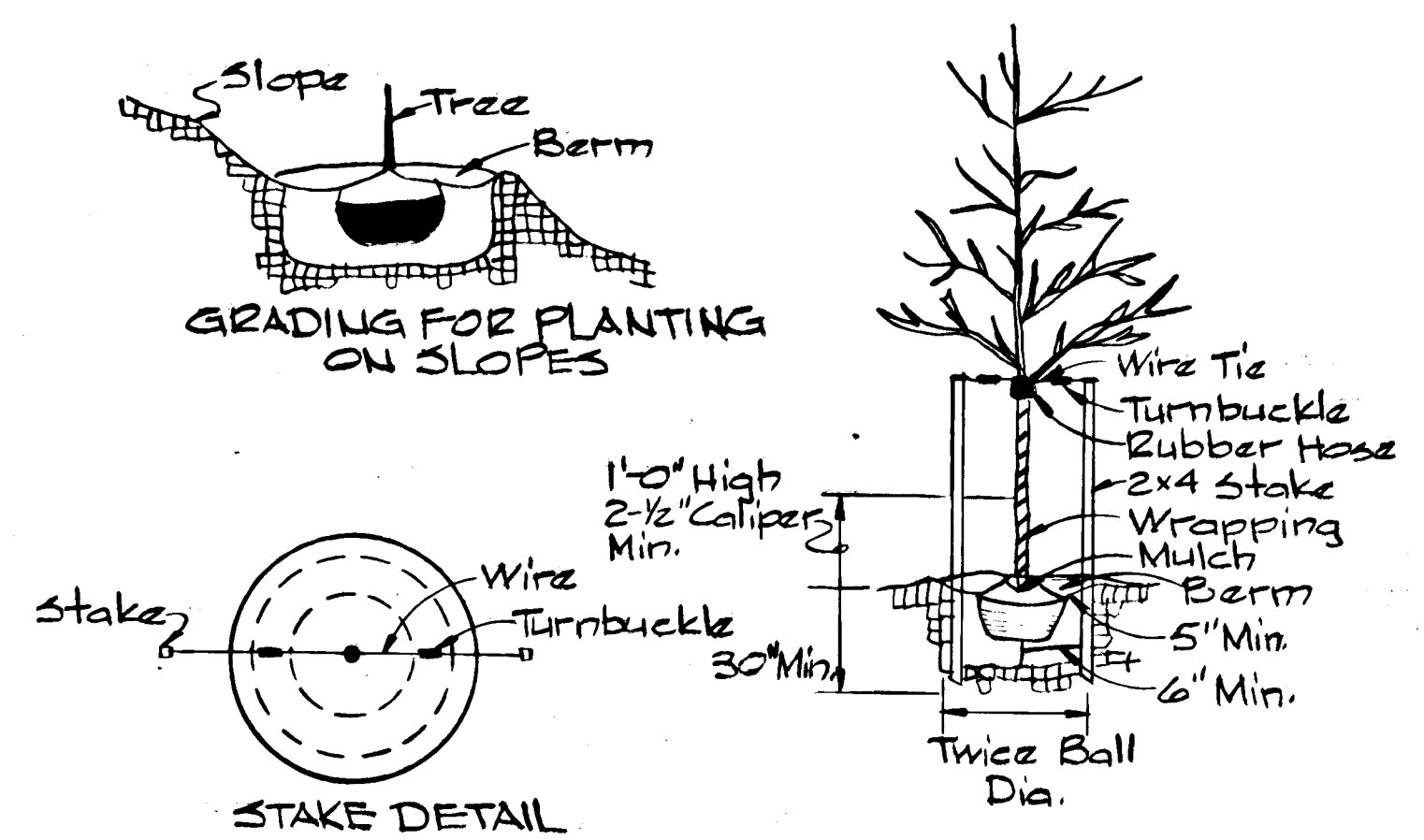
Franklin W. Wehland 7/21/88
 CHIEF, BUREAU OF HIGHWAYS DATE

James S. ... 7-21-88
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING
... 7-25-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

CURVE DATA

PC 2+13.64 to PT 4+18.10	PI 4+18.10 to PT 4+52.47
$\Delta = 89^{\circ}03'00''$ Tan. = 106.38	$\Delta = 06^{\circ}33'50''$ Tan. = 17.20'
R = 300.00' Chd. = 200.53	R = 300.00' Chd. = 34.35'
Arc = 204.46'	Brg. = 915'24'45"E Arc = 34.37' Brg. = 538'13'10"E



Note: Remove Burlap from Top 1/3 of Ball

TREE PLANTING

Wire Tie
 Turnbuckle
 Rubber Hose
 2x4 Stake
 Wrapping
 Mulch
 Berm
 5" Min.
 6" Min.
 Twice Ball Dia.

PLANTING DETAIL

Not to scale

- NOTES:**
- EXISTING POLISHED STONE AND VOLLMEKHAUSEN ROAD AND STORM DRAIN WERE CONSTRUCTED ON ROAD CONSTRUCTION DRAWINGS FOR VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 1 (P. 78-20)
 - EXISTING 8" SEWER WAS CONSTRUCTED UNDER CONTRACT NO. 30-0972-D.
 - EXISTING 8" WATER WAS CONSTRUCTED UNDER CONTRACT NO. 2517-D-WES.

DATE: _____

BY: _____

NO. _____

PLAN

REVISIONS:

NO.	DATE	DESCRIPTION
1	7/21/88	As per Planning and Zoning, D.P.W. and S.C.S. Comments

DATE: _____

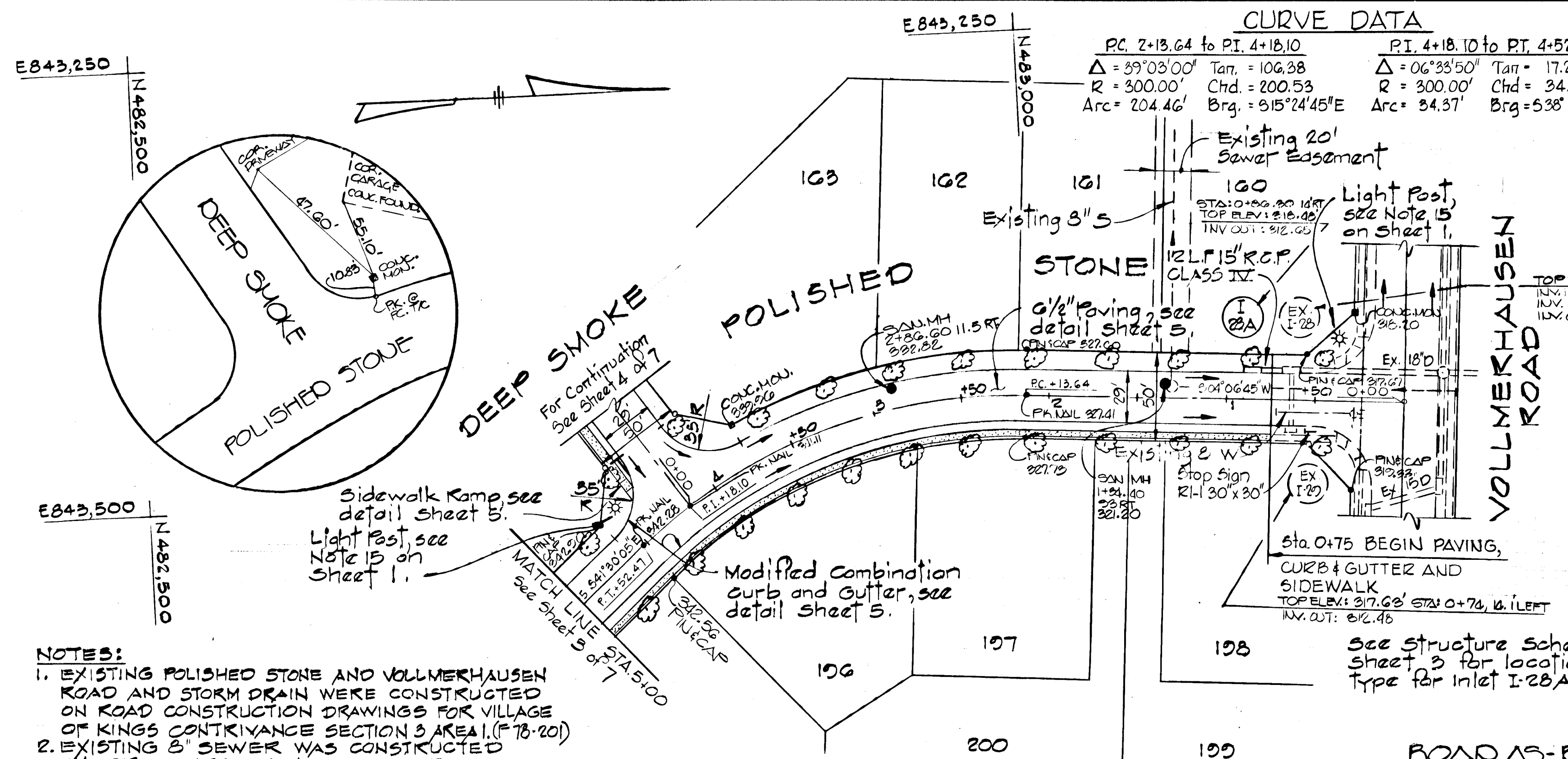
BY: _____

NO. _____

PROFILE

REVISIONS:

NO.	DATE	DESCRIPTION
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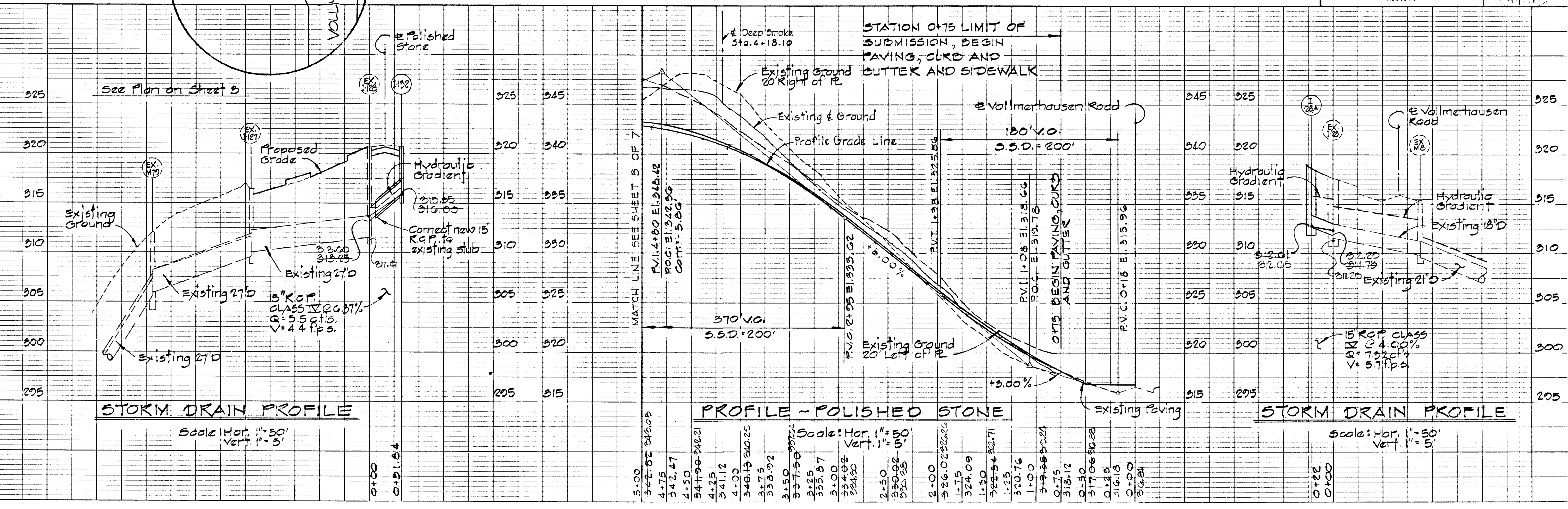


PLAN
 Scale: 1" = 50'

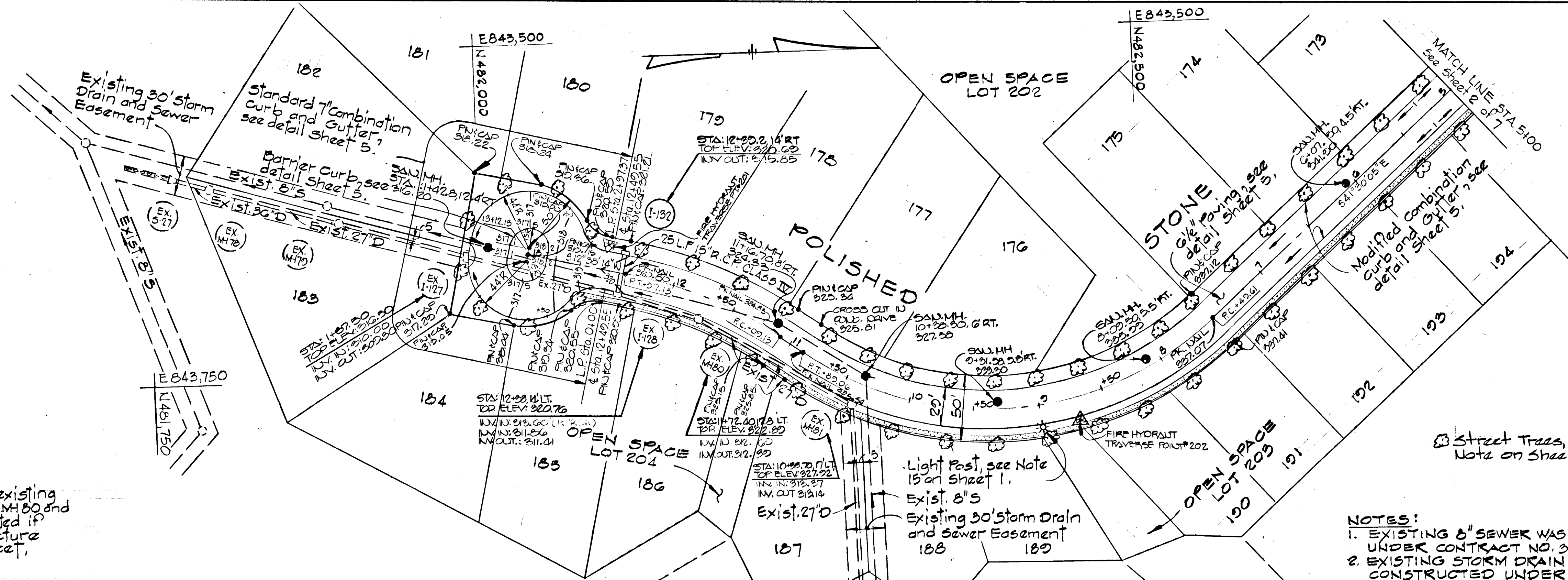
ROAD AS-BUILT
 SHAWBERGER & LAWE
 8722 TOWN & COUNTRY BLVD.
 ELLICOTT CITY, MD 21043
 (301) 461-2525

Street Trees, see Note on sheet 1.

8-27-88	1	As per Planning and Zoning, D.P.W. and S.C.S. Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION
COLUMBIA 6TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY PROJECT AREA: VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2 PROJECT TITLE: PLAN AND PROFILE POLISHED STONE STA. 0+00 TO STA. 5+00 SCALE: AS SHOWN DATE WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202 <i>Kenneth A. McCord</i> KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 7/14/88
 CHIEF, LAND DEVELOPMENT DIVISION
 [Signature]
 DATE 7/21/88
 CHIEF, BUREAU OF HIGHWAYS
 DATE 7-21-88
 CHIEF, BUREAU OF ENGINEERING
 DATE 7-25-88
 APPROVED: OFFICE OF PLANNING AND ZONING
 [Signature]
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE



Note:
 Top elevations of existing structures I-127, I-128, MH 80 and MH 81 are to be adjusted if required, see Structure Schedule this sheet.

NOTES:
 1. EXISTING 8" SEWER WAS CONSTRUCTED UNDER CONTRACT NO. 34-0008D.
 2. EXISTING STORM DRAIN WAS CONSTRUCTED UNDER F-80-87.

REV. DATE	REV. NO.	REVISION DESCRIPTION
6-27-88	1	As per Planning and Zoning, D.P.W. and S.C.S. Comments
COLUMBIA 6TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY		
PROJECT AREA: VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2		
PROJECT TITLE: PLAN AND PROFILE POLISHED STONE STA 5+00 TO STA. 13+12.13		
SCALE: AS SHOWN	DATE	
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202		
[Signature]		REGISTERED ENGINEER NO. 1974
KENNETH A. MCCORD		

NO.	TYPE	TOP ELEV.	INV. IN	INV. OUT	LOCATION
I-182	Standard A-5 Inlet, width 18"	310.50	310.00	310.00	Inlet 1592 Right & Sta. 12+40.30
I-127	Existing A-5 Inlet	310.50			
I-128	Existing A-5 Inlet	310.50			
MH 80	Existing Standard Manhole	322.75			
MH 81	Existing Standard Manhole	327.75			
I-28A	Standard A-10 Inlet, width 24"	318.64	318.64	318.64	Inlet 1592 Right & Sta. 0+80.80

PC	PT	Tan	Chd.	Brg
PC 7+49.61	PT 10+89.06	201.71'	313.97'	339.45'
PC 11+09.13	PT 12+37.13	64.93'	127.09'	128.00'

PLAN
 Scale: 1"=50'

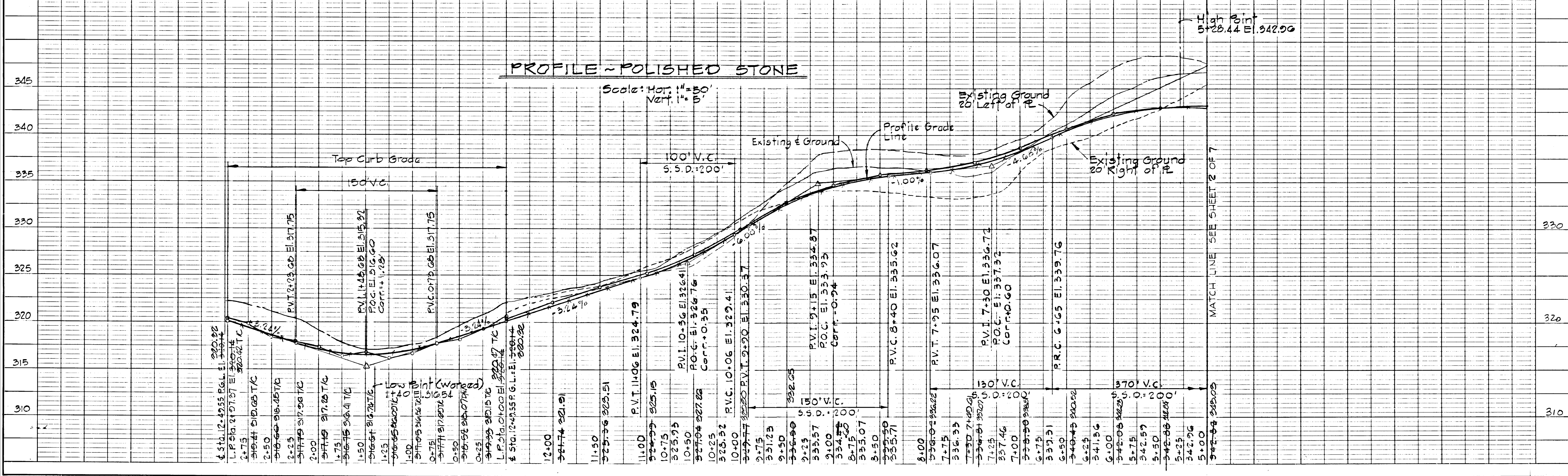


PLATE 1, PLAN-PROFILE
 REVELL & ESSER CO.
 48 7024 MADE IN U.S.A.

PLAN
 DATE
 BY
 CHECKED
 REVISIONS
 NO. 1
 NO. 2

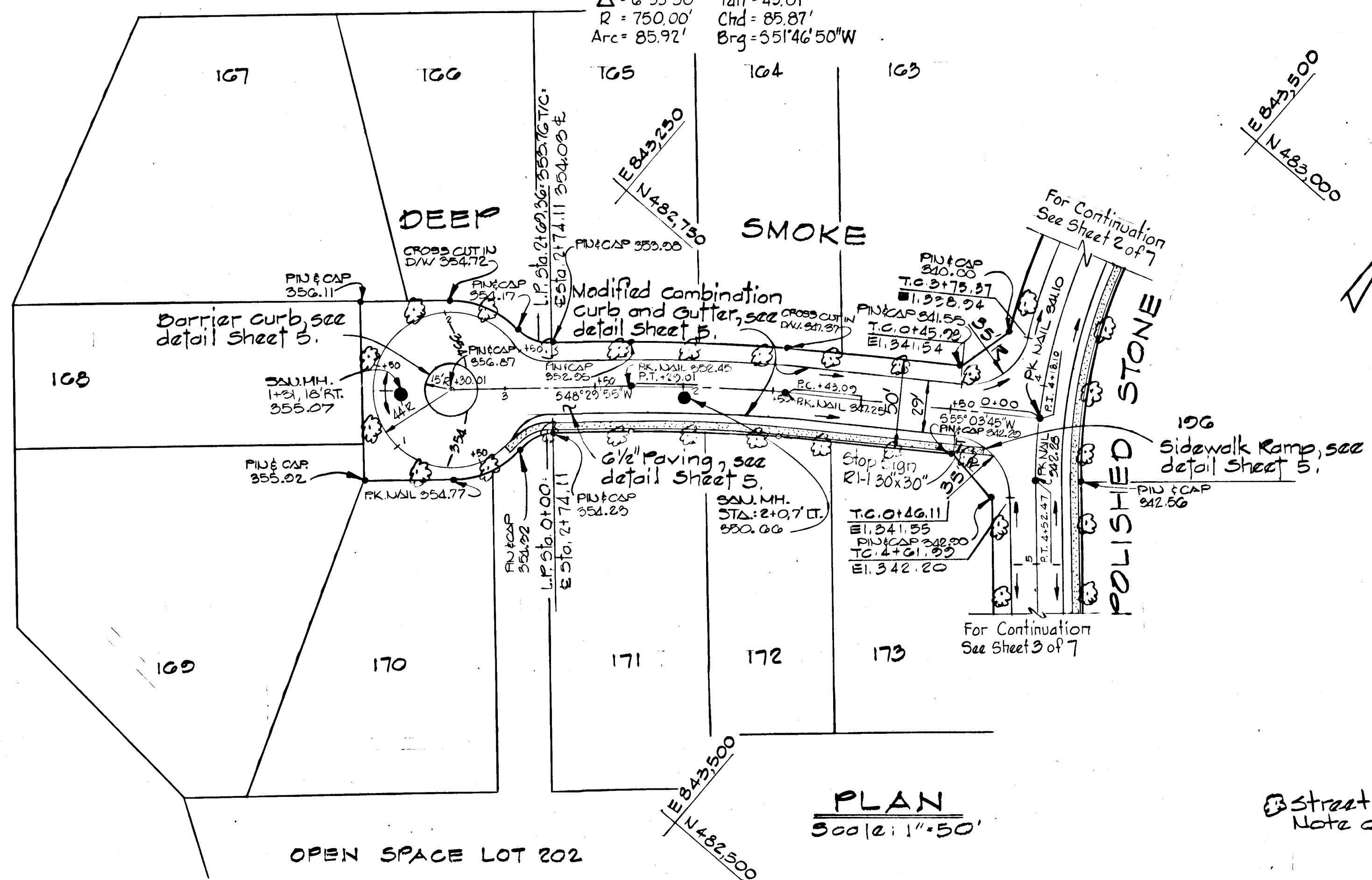
PROFILE
 DATE
 BY
 CHECKED
 REVISIONS
 NO. 1
 NO. 2

445

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 7/14/88
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE
Franklin W. Weiland
 CHIEF, BUREAU OF HIGHWAYS
 DATE
 7-21-88
 CHIEF, BUREAU OF ENGINEERING
 DATE
 APPROVED: OFFICE OF PLANNING AND ZONING
 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING
 AND LAND DEVELOPMENT
 DATE

CURVE DATA

PC: 1+43.09 to PT: 2+29.01
 $\Delta = 6^{\circ}33'50''$ Tan = 48.01
 $R = 750.00'$ Chd = 85.87'
 Arc = 85.92' Brg = $S51^{\circ}46'50''W$



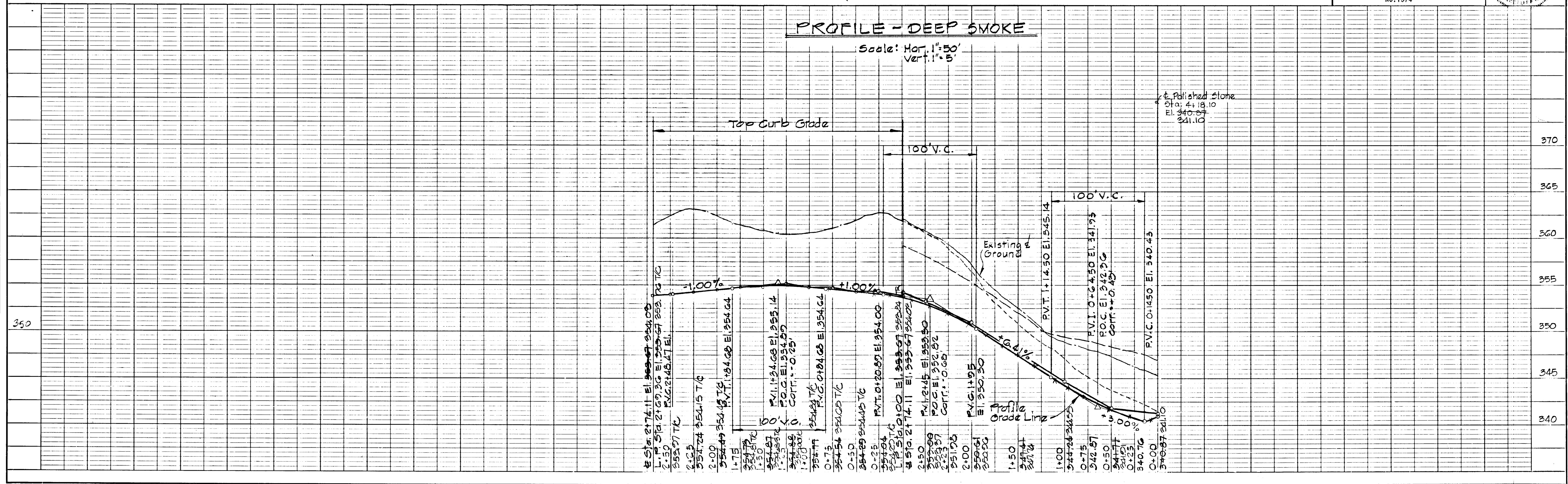
PLAN
 Scale: 1" = 50'

Street Trees, see Note on Sheet 1.

6-27-88	1	As per Planning and Zoning, D.P.W. and S.C.S. Comment 3
REV. DATE	REV. NO.	REVISION DESCRIPTION
COLUMBIA 6TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY PROJECT AREA: VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2 PROJECT TITLE: PLAN AND PROFILE DEEP SMOKE SCALE: AS SHOWN DATE WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202 KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		

PROFILE - DEEP SMOKE

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

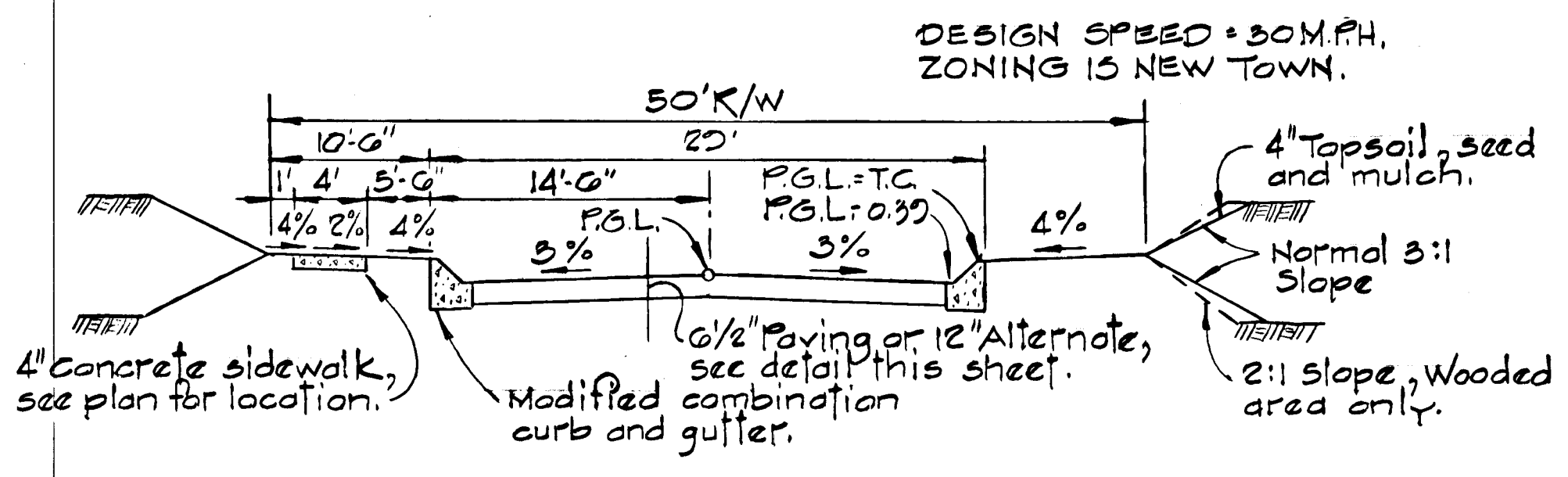


DATE
 BY
 SURVEYED
 PLotted
 NOTE BOOK
 NO.

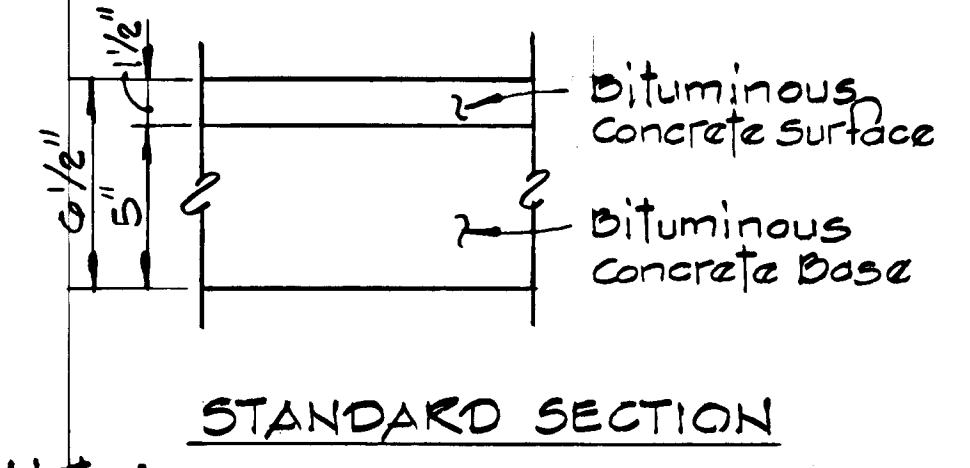
DATE
 BY
 SURVEYED
 PLotted
 NOTE BOOK
 NO.

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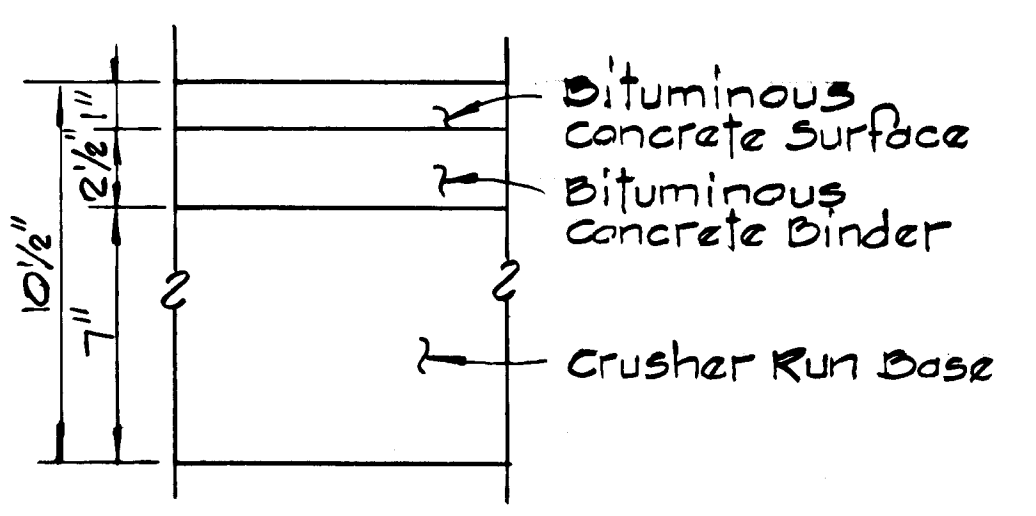
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 7/14/88
 DATE
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE
 CHIEF, BUREAU OF HIGHWAYS
 DATE
 CHIEF, BUREAU OF ENGINEERING
 DATE
 APPROVED: OFFICE OF PLANNING AND ZONING
 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



TYPICAL SECTION
 POLISHED STONE
 DEEP SMOKE
 NO SCALE



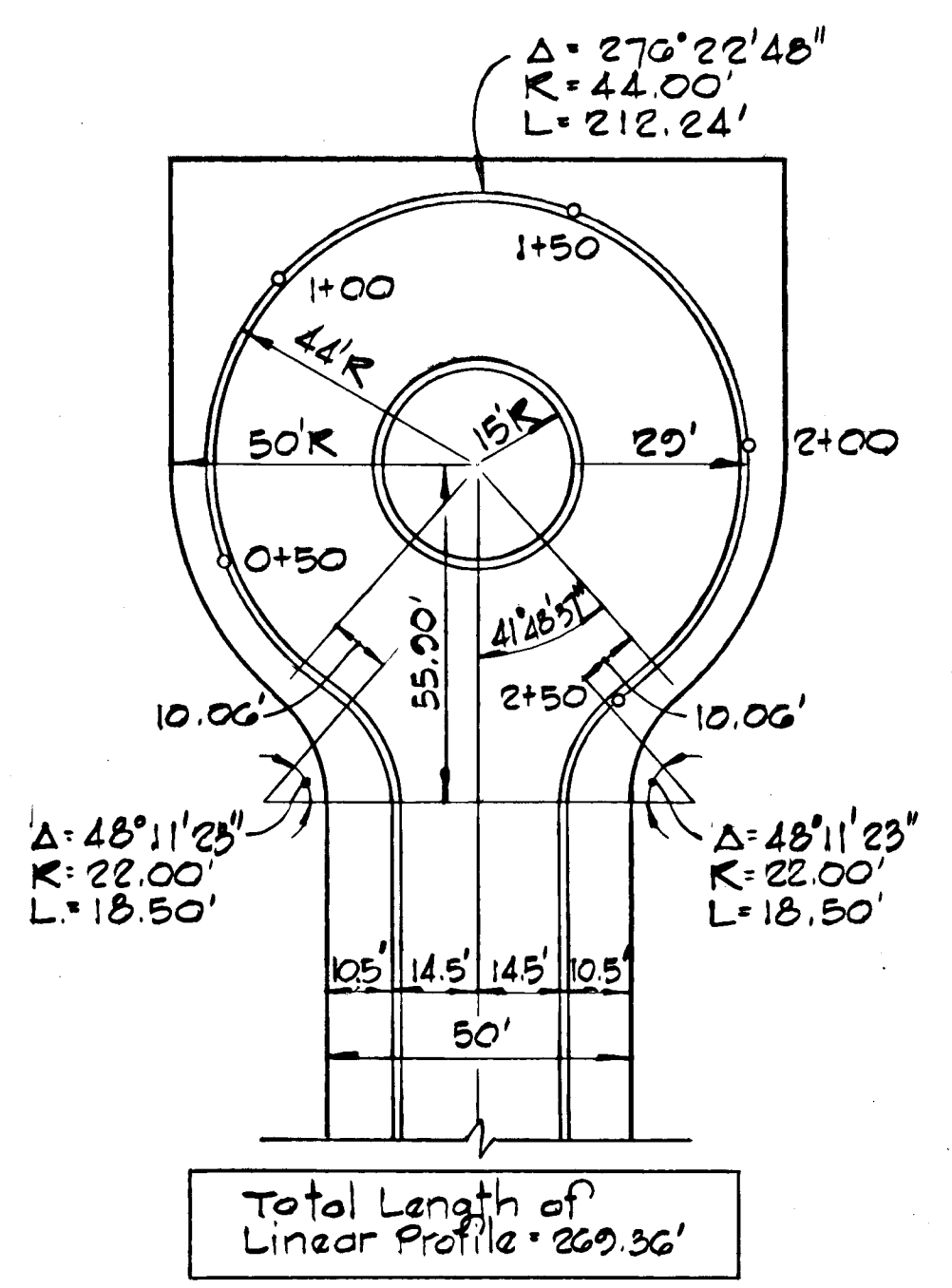
STANDARD SECTION



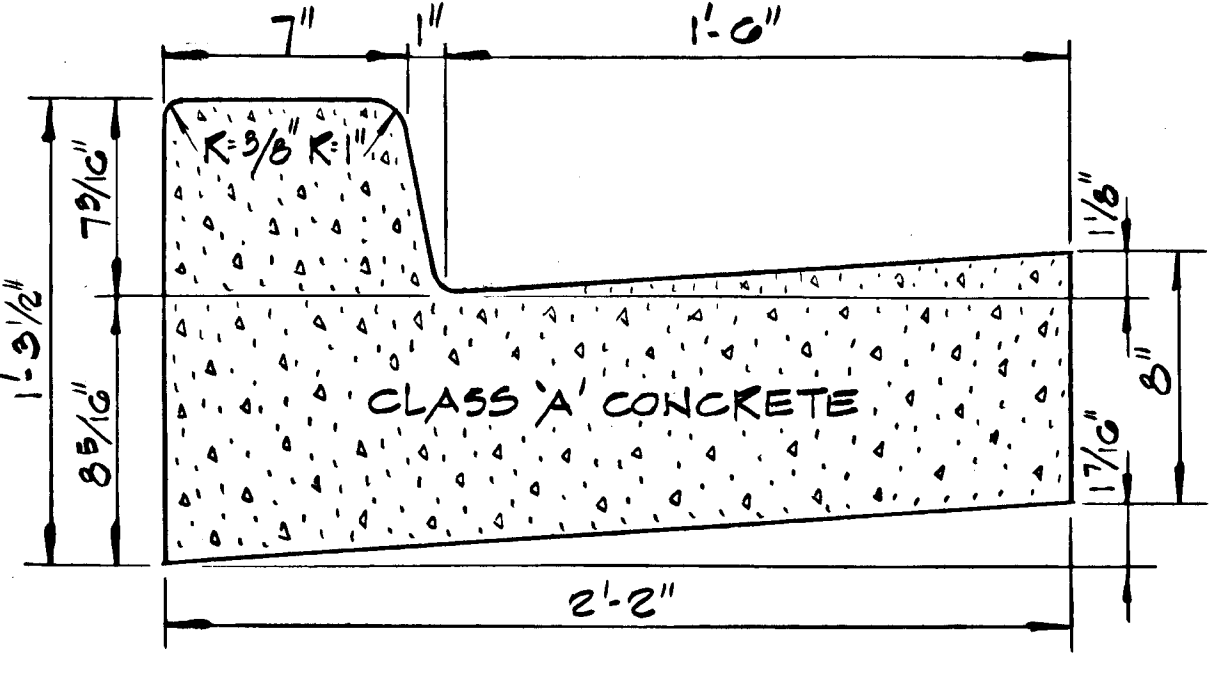
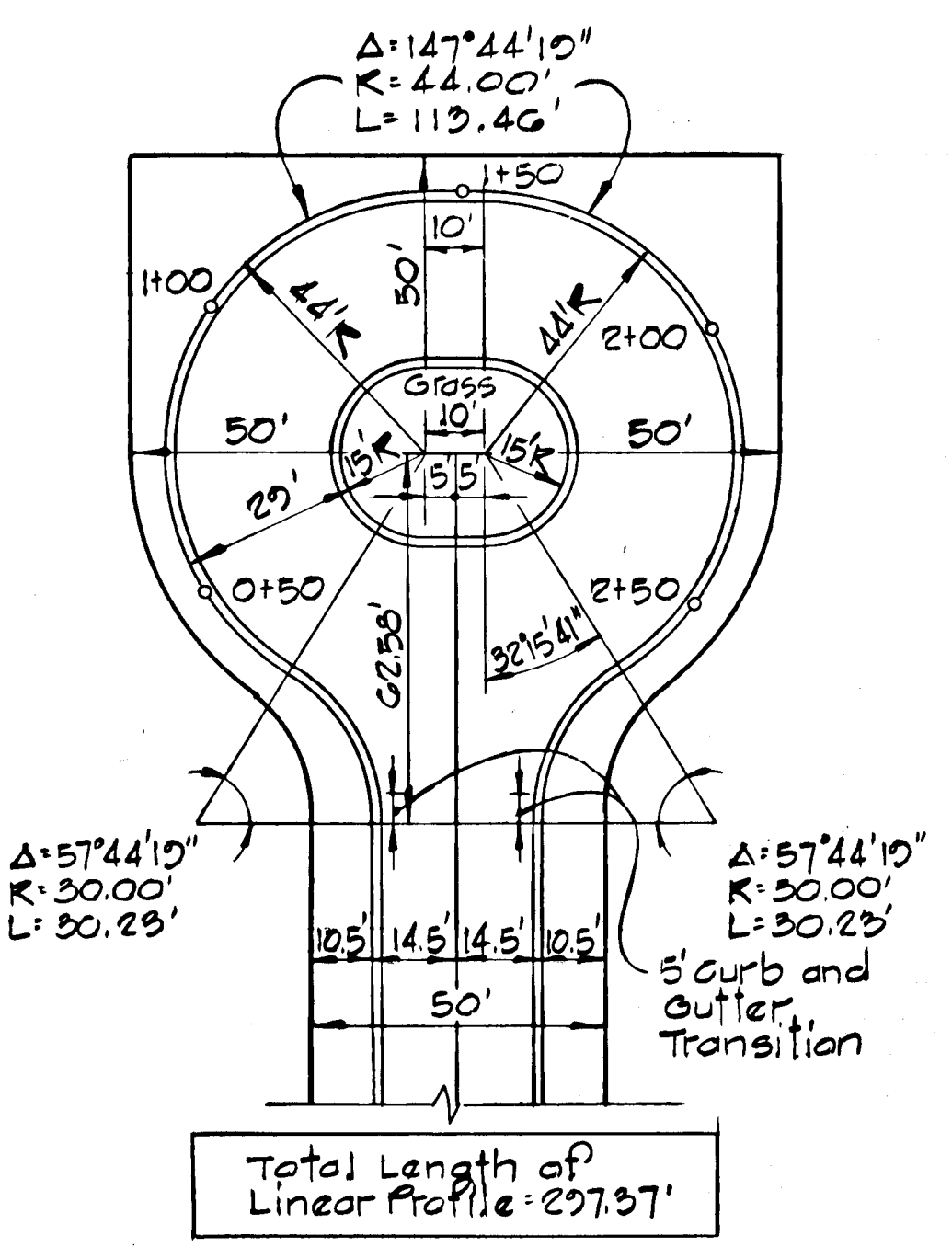
ALTERNATE SECTION

Note: Only one of the paving sections shown shall be used for the road construction proposed under this submission.

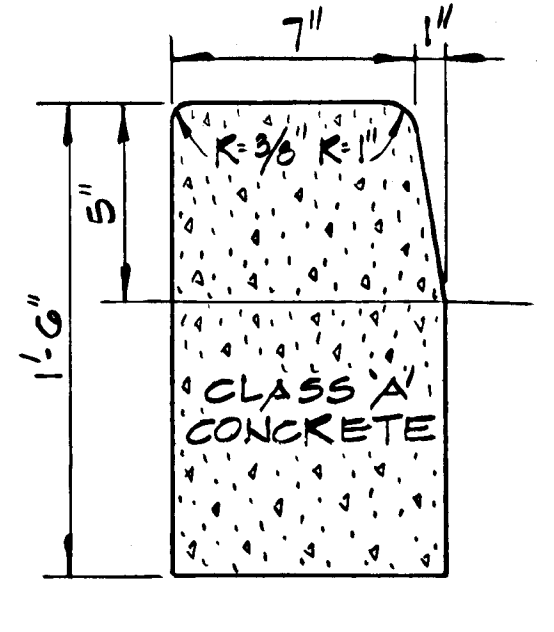
TYPICAL PAVING SECTION
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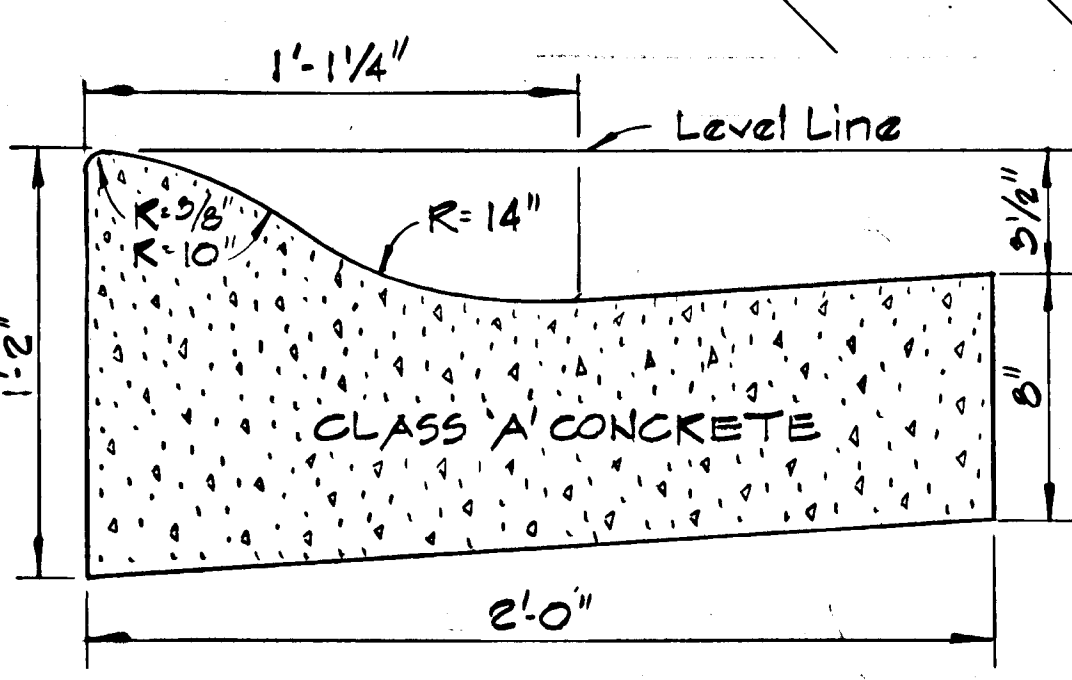
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STANDARD CURB

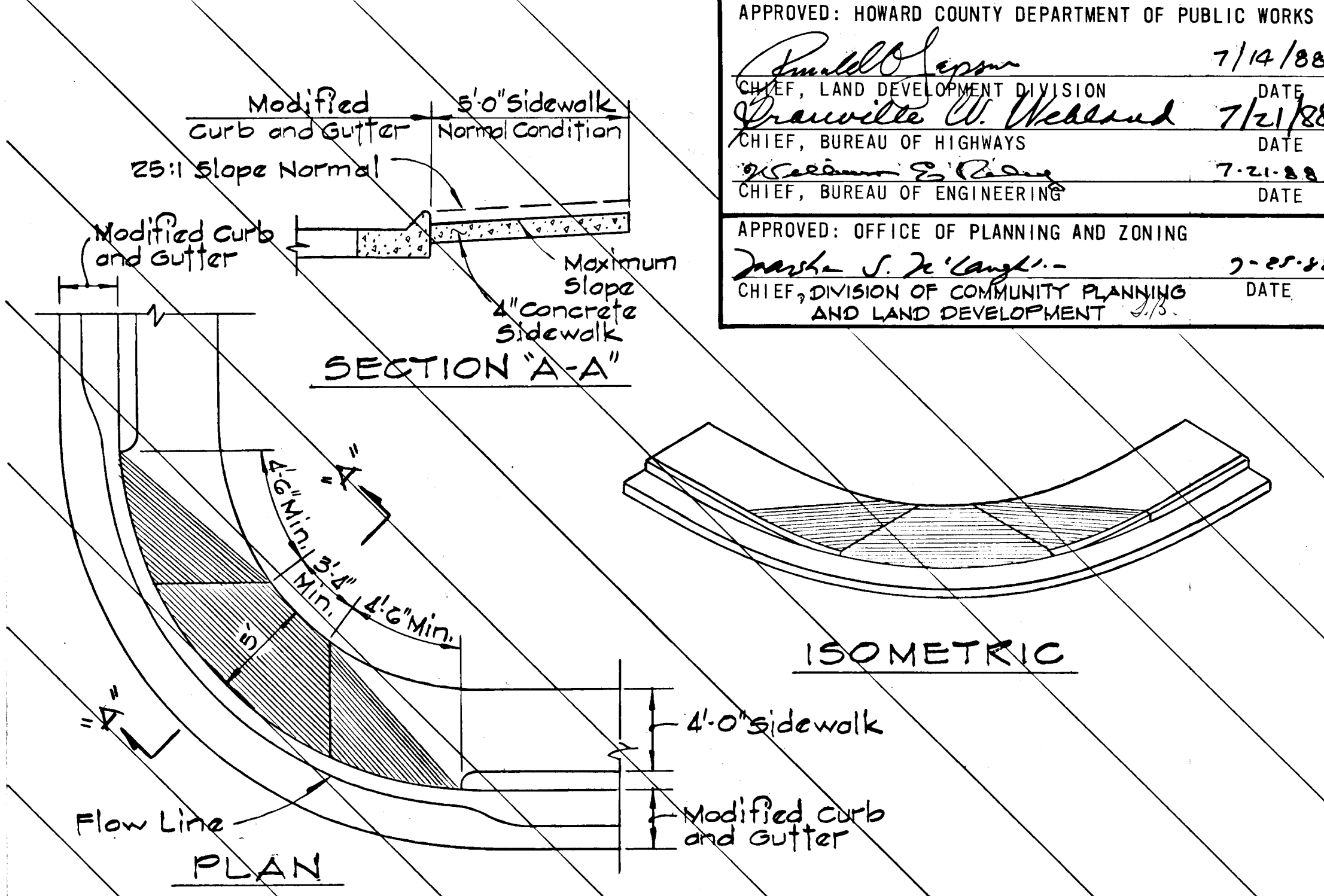


BARRIER CURB

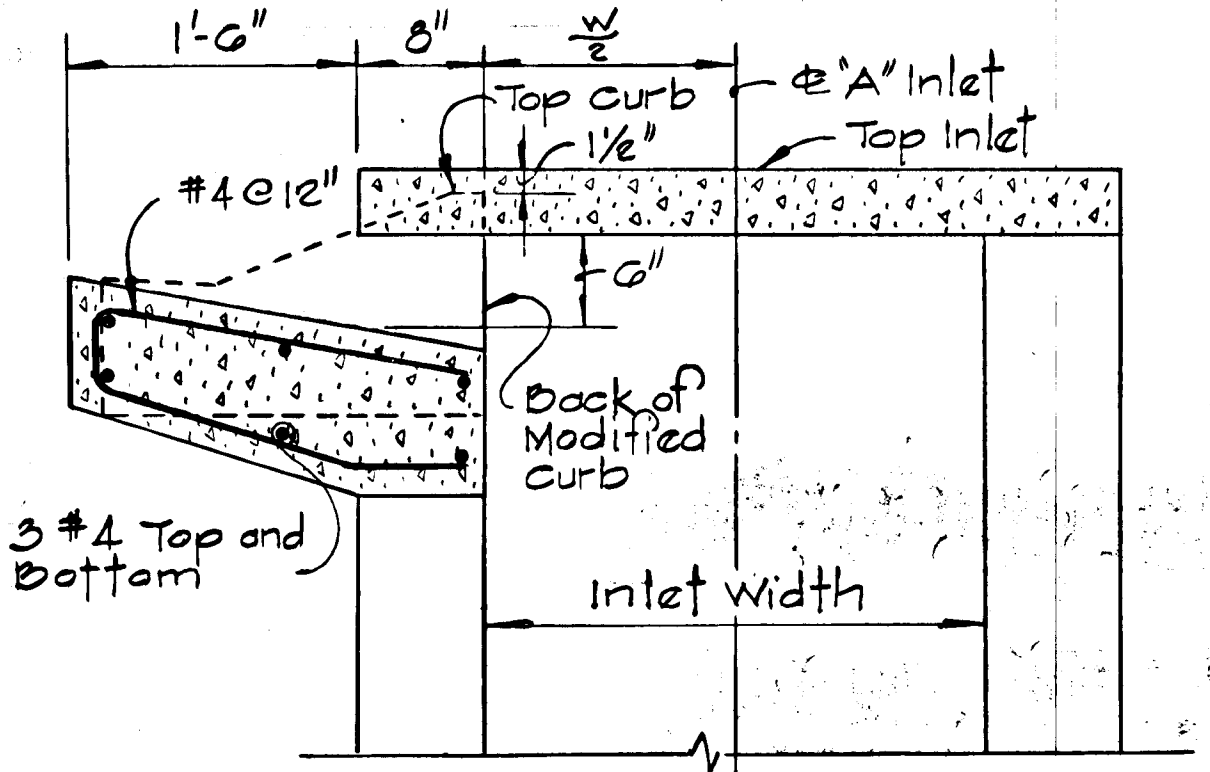


MODIFIED CURB

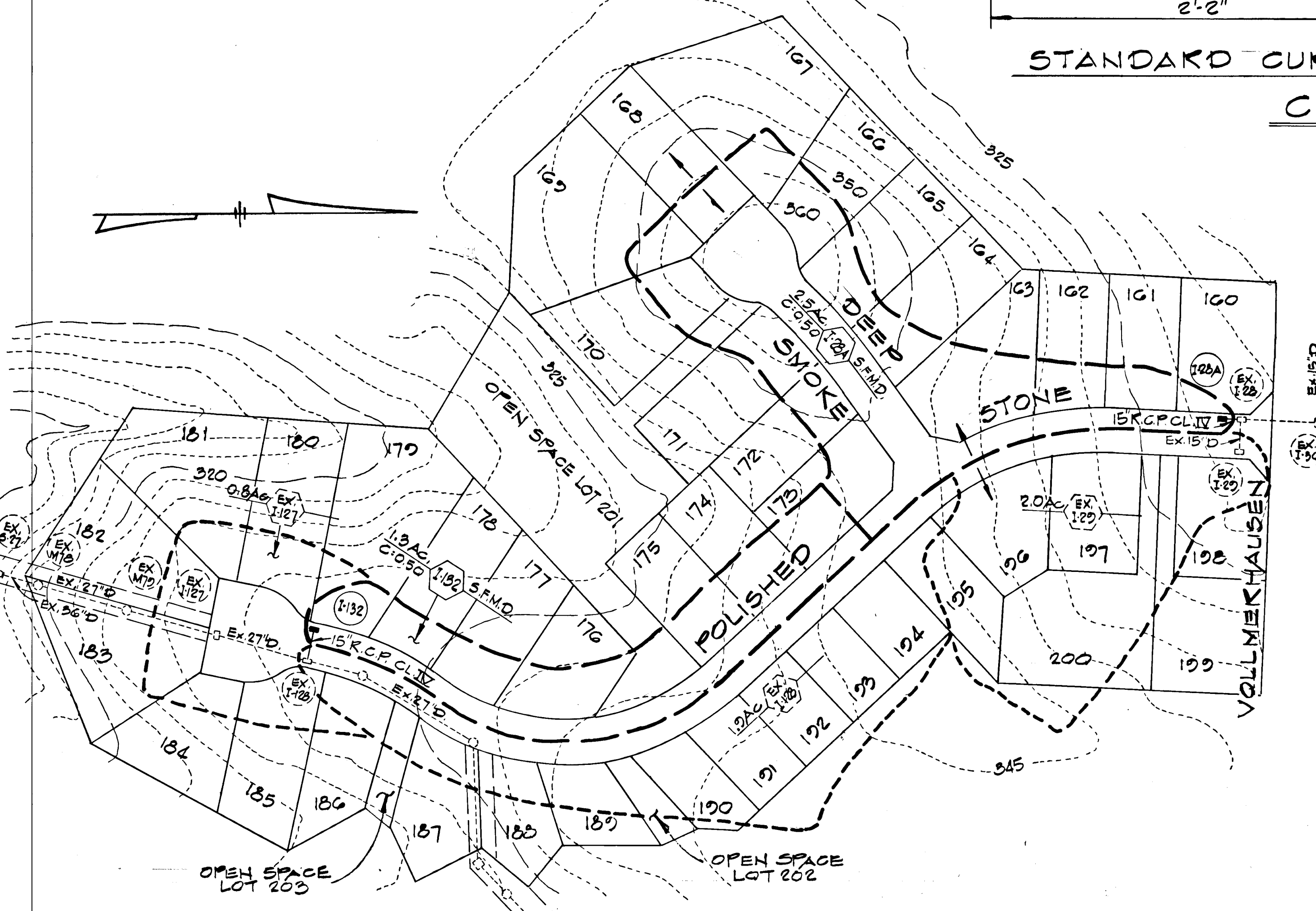
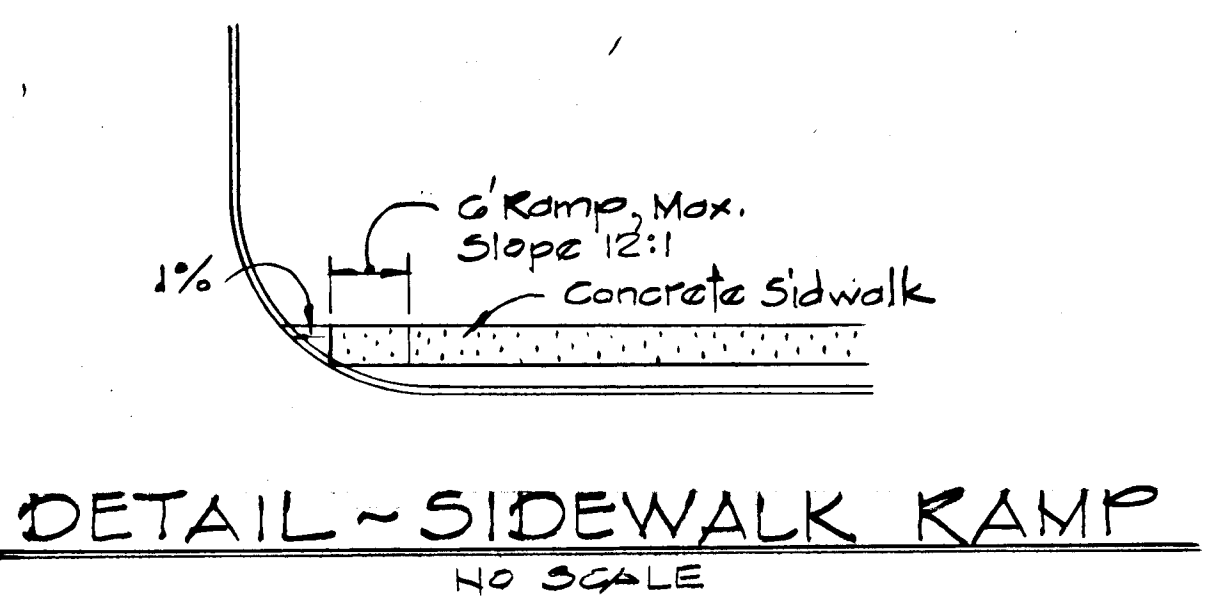
CURB AND GUTTER DETAILS
 NO SCALE



DETAIL - SIDEWALK RAMP
 NO SCALE



SECTION "A" INLET MODIFIED CURB
 NO SCALE



DRAINAGE AREA MAP
 SCALE: 1" = 100'

0-27-88	1	As per Planning and Zoning, D.P.W. and S.C.S. Comments
REV. DATE	REV. NO.	REVISION DESCRIPTION
COLUMBIA 6TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT LAND COMPANY		
PROJECT AREA: VILLAGE OF KINGS CONTRIVANCE SECTION 3 AREA 2		
PROJECT TITLE: ROADWAY DETAILS AND DRAINAGE AREA MAP		
SCALE: AS SHOWN		DATE:
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND 21202		
 KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		

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