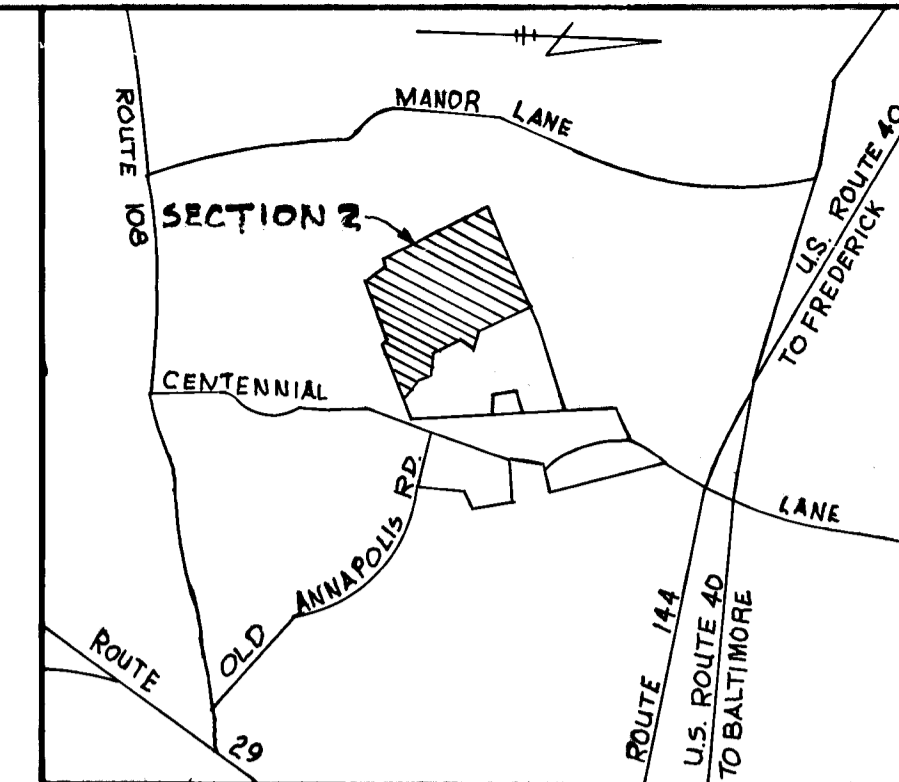


SHEET INDEX	
NO.	DESCRIPTION
1.	COVER SHEET
2.	PLAN AND PROFILE KINGSBRIDGE ROAD
3.	PLAN AND PROFILE KINGSBRIDGE ROAD
4.	PLAN AND PROFILE KINGSBRIDGE ROAD
5.	PLAN AND PROFILE KINGSBRIDGE ROAD
6.	PLAN AND PROFILE KINGSBRIDGE ROAD
7.	PLAN AND PROFILE KINGSBRIDGE ROAD
8.	PLAN AND PROFILE QUEENSWAY DRIVE
9.	PLAN AND PROFILE WHITEBROOK LANE
10.	PLAN AND PROFILE CASTLEFIELD STREET
11.	PLAN AND PROFILE PUDDING LANE
12.	ROAD AND CULVERT DETAILS
13.	CULVERT AND STORM DRAIN DETAILS
14.	STORM DRAIN PROFILES
15.	DRAINAGE AREA MAP
16.	DRAINAGE AREA MAP
17.	DRAINAGE AREA MAP
18.	DRAINAGE AREA MAP
19.	DRAINAGE AREA MAP SED. CONT.
20.	DRAINAGE AREA MAP SED. CONT.
21.	DRAINAGE AREA MAP SED. CONT.
22.	DRAINAGE AREA MAP SED. CONT.
23.	SEDIMENT CONTROL PLAN
24.	SEDIMENT CONTROL PLAN
25.	SEDIMENT CONTROL PLAN
26.	SEDIMENT CONTROL PLAN
27.	SEDIMENT CONTROL PLAN
28.	SEDIMENT CONTROL PLAN
29.	SEDIMENT CONTROL DETAILS
30.	SEDIMENT CONTROL DETAILS

BENCH MARKS:

- W.R. & A. B.M. W-303 - Iron Pipe (Traverse Point)
310' S of & Sta 7+50± Kingsbridge Rd. Elev. 472.25
- W.R. & A. B.M. W-308 - Iron Pipe (Traverse Point)
34.0' S of & Sta. 17+30± Kingsbridge Rd. Elev. 418.11
- W.R. & A. B.M. W-320 - Iron Pipe (Traverse Point)
30' E of & Sta. 30+80± Kingsbridge Rd. Elev. 427.42
- W.R. & A. B.M. W-375 - Iron Pipe (Traverse Point)
75' N of & Sta. 5+00± Pudding Lane Elev. 433.11
- W.R. & A. B.M. W-350 - Iron Pipe (Traverse Point)
100' N of & Sta. 43+50± Kingsbridge Rd. Elev. 427.32

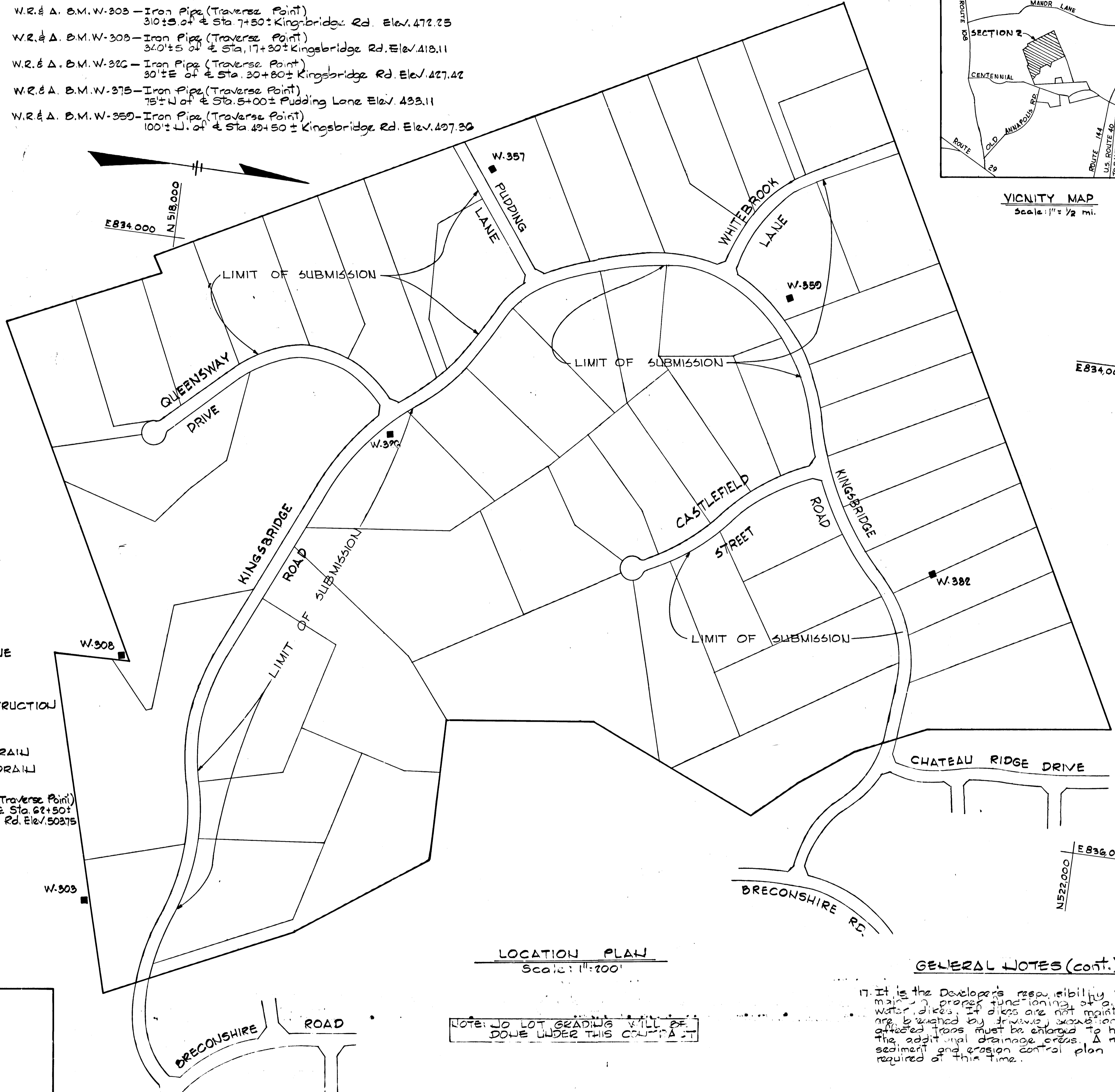


APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Paul H. Hagan</i> CHIEF, LAND DEVELOPMENT DIVISION	7/8/88 DATE
<i>Branville W. Wehner</i> CHIEF, BUREAU OF HIGHWAYS	7/15/88 DATE
<i>William S. Day</i> CHIEF, BUREAU OF ENGINEERING	7-15-88 DATE
OFFICE OF PLANNING AND ZONING	
<i>Marsha S. DeAngelis</i> CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	7-21-88 DATE

VICINITY MAP
Scale: 1" = 1/2 mi.

GENERAL NOTES

- All work shall be performed in accordance with the Howard County Standards, Specifications and details for construction.
- All utility companies shall be notified 24 hours in advance of construction.
- All inlets shall be Howard County Standards unless otherwise shown.
- All street returns shall have a 35.0' radii unless otherwise noted.
- Storm drain trenches within road rights-of-way shall be backfilled and compacted in accordance with the Howard County road code.
- Approximate location of existing utilities are shown. The contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to contractor's operations shall be repaired immediately at the contractor's expense.
- 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 Dept. of Inspections and Permits at least 5 days before starting work shown on these drawings. Telephone No. 792-2630.
- 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 P.S.I.
- All swales and slopes shall be permanently seeded. See the seed specifications on sheet 20.
- Traffic control devices and their installation shall be in accordance with the manual on uniform traffic control devices, 1984 revised edition.
- Stabilenka (Filter cloth T-100) or equal shall be placed under all stone rip-rap (full width and length of stone.)
- Stone for rip-rap shall be as specified on the drawings. All rip-rap shall be unpaved.
- All ditches at a grade of 0.0 to 5.0% shall be lined with Reed Canarygrass, and ditches at a grade of 5.1 to 10.0% shall be lined with Kentucky 31 Tall Fescue unless noted otherwise.



LEGEND

	DRAINAGE AREA LINE
	EARTH DIKE
	SILT FENCE
	STABILIZED CONSTRUCTION ENTRANCE
	LOT NUMBER
	EXISTING STORM DRAIN
	PROPOSED STORM DRAIN
	BENCH MARK

W.R. & A. B.M. W-382 - Iron Pipe (Traverse Point)
210' N of & Sta. 62+50± Kingsbridge Rd. Elev. 503.75

OWNER
THOMAS J. PELLERITO AND
STEWART J. GREENBAUM
SUITE 275 • COMMERCENTRE EAST
1777 REISTERSTOWN ROAD
BALTIMORE, MARYLAND 21208

LOCATION PLAN
Scale: 1" = 200'

NOTE: NO LOT GRADING WILL BE DONE UNDER THIS CONTRACT

GENERAL NOTES (cont.)

- It is the Developer's responsibility to maintain proper functioning of all clear-water dikes. If dikes are not maintained or are breached by driveway excavation, then affected areas must be enlarged to handle the additional drainage areas. A revised sediment and erosion control plan will be required at this time.

REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G. R. DEVELOPMENT CORP.		
PROJECT AREA: BURLEIGH MANOR SECTION 2		
PROJECT TITLE: ROAD CONSTRUCTION PLANS		
SCALE: AS SHOWN		DATE 3/4/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Kenneth A. McCord</i> KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		

From	To	Radius	Area	Δ	Tan	Ch'd Bearing	Chord
4+20.00	7+64.91	270.00	270.41'	10° 20' 12" RT	35.57	N 78° 34' 10" W	213.07
4+27.76 RT	5+25.82 RT	150.00	88.06	29° 50' 26" RT	34.65'	N 78° 34' 57" W	61.48'
5+55.82 RT	6+02.57 RT	150.00	46.75'	17° 51' 33" LT	23.37'	N 72° 32' 52" W	46.57'
6+02.57 RT	7+02.62 RT	775.00	107.11'	07° 32' 21" RT	23.64'	N 77° 52' 16" W	107.03'
7+02.62 RT	7+58.84 RT	150.00	49.16'	18° 46' 37" LT	24.20'	N 82° 52' 14" W	48.24'
7+58.84 RT	8+12.10 RT	150.00	50.25'	22° 07' 58" RT	22.08'	N 81° 06' 33" W	58.87'
8+12.10 RT	12+48.31	600.00	109.54'	34° 10' 52" LT	153.95'	N 82° 54' 24" W	354.15'
12+48.31	15+36.92 RT	150.00	46.93'	17° 56' 26" LT	23.60'	S 81° 07' 25" W	46.80'
15+36.92 RT	16+01.71 LT	150.00	47.72'	65° 52' 02" RT	24.41'	S 81° 05' 12" W	34.45'
16+01.71 LT	17+11.60 LT	621.00	112.82'	07° 52' 21" RT	56.53'	N 77° 32' 12" W	112.80'
17+11.60 LT	17+82.05 LT	130.00	64.46'	23° 37' 23" RT	32.73'	N 61° 17' 24" W	63.25'
17+82.05 LT	18+26.46 LT	150.00	84.35'	20° 25' 48" LT	27.88'	N 52° 21' 13" W	84.02'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James J. ... 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Lawrence W. McLeod 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

William B. ... 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

James J. ... 2-21-88
 CHIEF, DIVISION OF COMMUNITY DATE
 PLANNING AND LAND DEVELOPMENT

REV. DATE	REV. NO.	REVISION DESCRIPTION
8-13-91	1	AS BUILT COMMENTS

BURLEIGH MANOR
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 GR DEVELOPMENT CORPORATION

PROJECT AREA:
 BURLEIGH MANOR
 SECTION 2

PROJECT TITLE:
 PLAN AND PROFILE
 KINGSBRIDGE ROAD

SCALE: 1"=50' DATE: 3/4/88

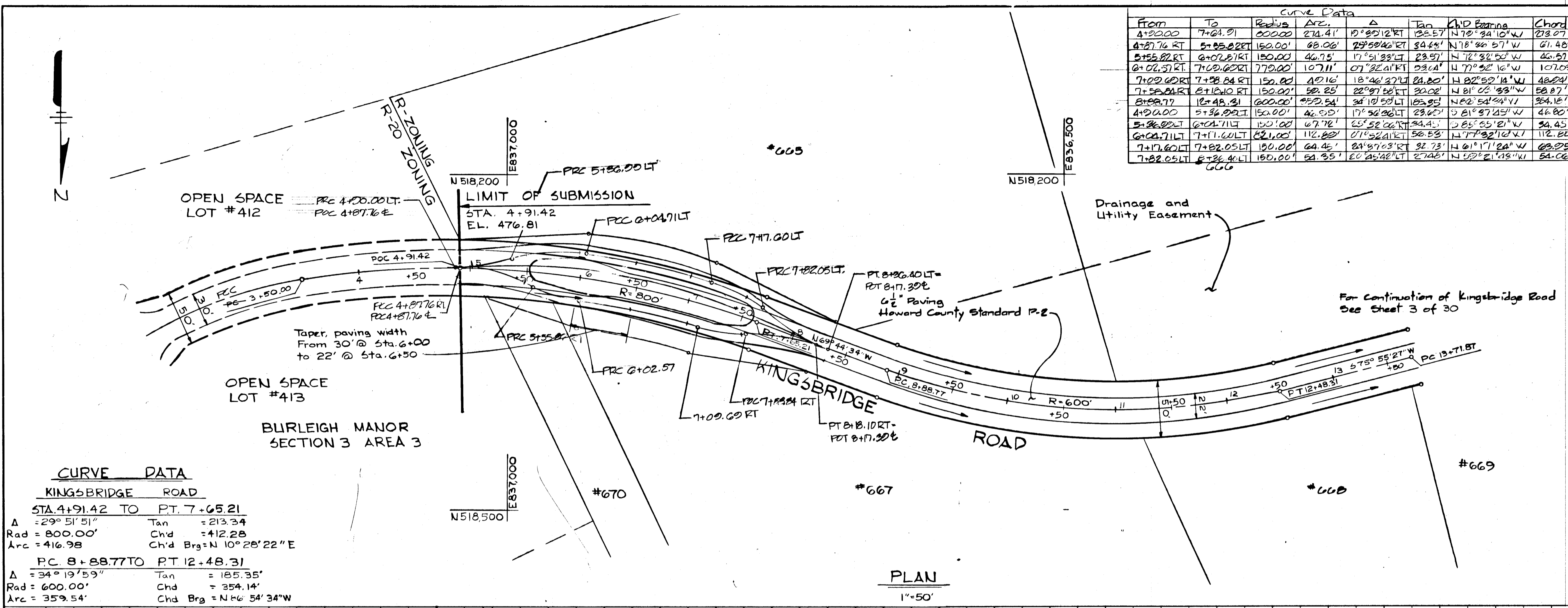
WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No. 1074



DATE	BY	REVISION

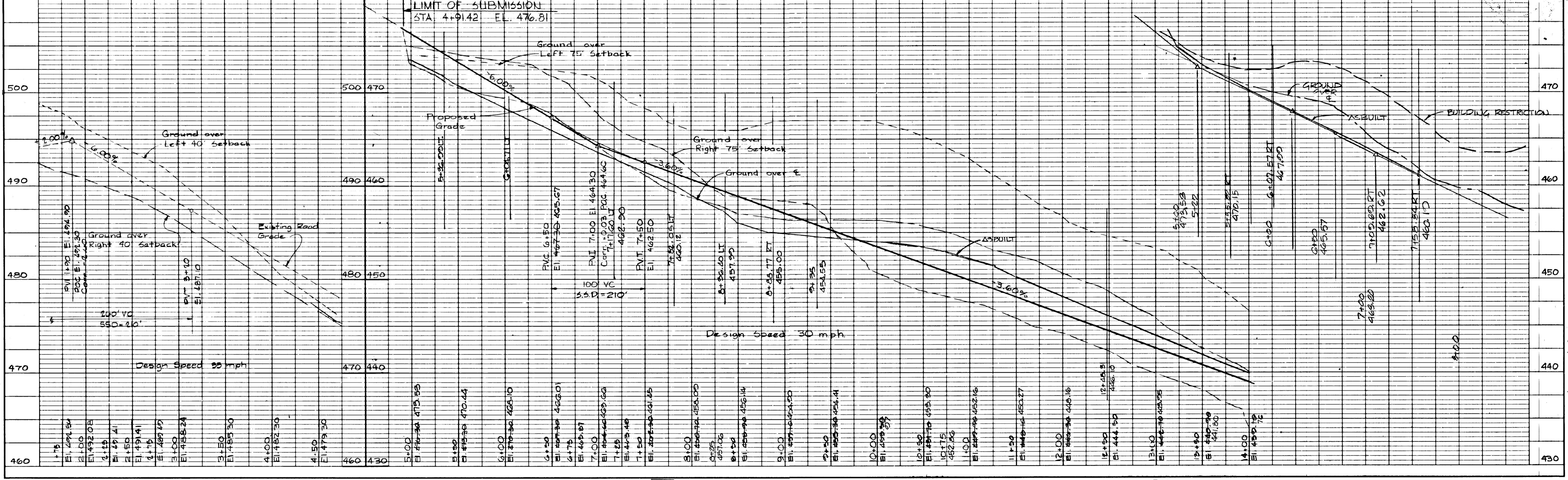
PLAN
 NOTE BOOK
 NO.



PLAN
 1"=50'

DATE	BY	REVISION

PROFILE
 NOTE BOOK
 NO.

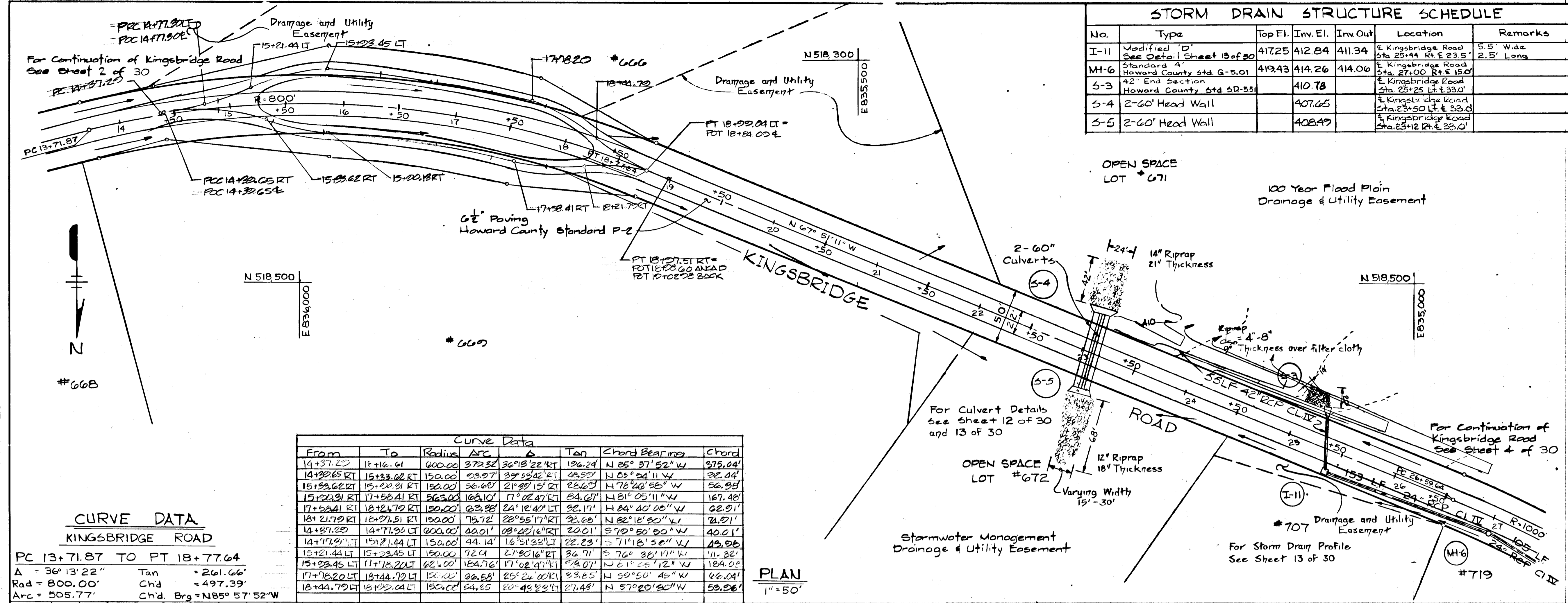


121

PLAN
 SURVEYED: _____
 PLOTTED: _____
 CHECKED: _____
 DATE: _____

PROFILE
 SURVEYED: _____
 PLOTTED: _____
 CHECKED: _____
 DATE: _____

721



No.	Type	Top El.	Inv. El.	Inv. Out	Location	Remarks
I-II	Modified D See Detail Sheet 13 of 30	417.25	412.84	411.34	Kingbridge Road Sta. 25+14.14 R.L. ± 23.5'	5.5' Wide 2.5' Long
MH-6	Standard 4' Howard County Std. G-5.01	419.43	414.26	414.06	Kingbridge Road Sta. 27+00 R.L. ± 15.0'	
S-3	42" End Section Howard County Std. SD-55		410.78		Kingbridge Road Sta. 25+25 L.R. ± 33.0'	
S-4	2-60" Head Wall		407.65		Kingbridge Road Sta. 23+50 L.R. ± 33.0'	
S-5	2-60" Head Wall		408.49		Kingbridge Road Sta. 23+12 R.L. ± 33.0'	

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature]
 CHIEF, LAND DEVELOPMENT DIVISION DATE: 7/8/88
 [Signature]
 CHIEF, BUREAU OF HIGHWAYS DATE: 7/13/88
 [Signature]
 CHIEF, BUREAU OF ENGINEERING DATE: 7-15-88

OFFICE OF PLANNING AND ZONING
 [Signature]
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE: 7-21-88

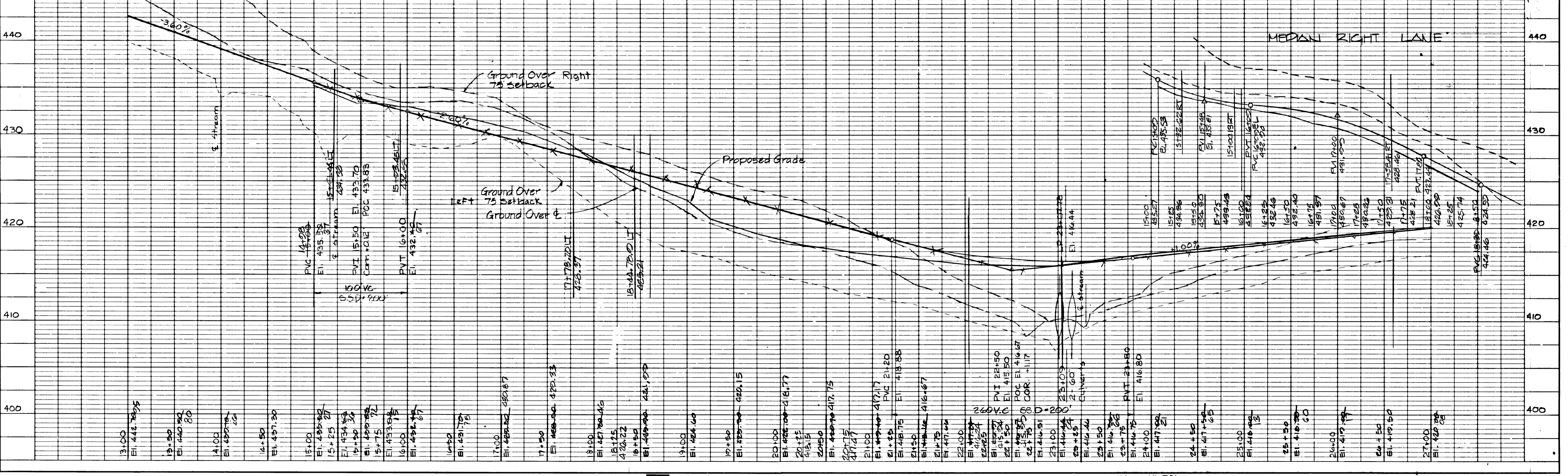
BURLEIGH MANOR
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 DEVELOPER
 G.R. DEVELOPMENT CORPORATION
 PROJECT AREA:
 BURLEIGH MANOR
 SECTION 2

PROJECT TITLE:
 PLAN AND PROFILE
 KINGSBRIDGE ROAD
 SCALE: 1" = 50' DATE: 3/4/88
 WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

[Signature]
 KENNETH A. MC CORD
 Registered Engineer
 No. 1974

From	To	Radius	Arc	Tan	Chord Bearing	Chord
14+37.25	15+16.61	600.00	372.32	36° 13' 22" RT	N 85° 57' 52" W	375.04'
14+37.25 RT	15+13.62 RT	150.00	22.97	39° 32' 42" RT	N 05° 24' 11" W	32.44'
15+13.62 RT	15+20.91 RT	150.00	36.60	21° 20' 15" RT	N 78° 20' 56" W	56.99'
15+20.91 RT	17+50.41 RT	263.00	168.10	17° 02' 47" RT	N 81° 05' 11" W	167.48'
17+50.41 RT	18+24.70 RT	150.00	93.98	24° 12' 40" RT	N 84° 40' 00" W	92.91'
18+24.70 RT	18+27.51 RT	150.00	75.72	28° 55' 17" RT	N 82° 18' 50" W	74.91'
14+37.25	14+71.90 LT	600.00	400.01	08° 40' 16" LT	S 79° 50' 50" W	400.21'
14+71.90 LT	15+21.44 LT	150.00	44.14	16° 51' 35" LT	S 71° 18' 52" W	43.96'
15+21.44 LT	15+23.45 LT	150.00	72.91	21° 00' 16" LT	S 76° 38' 11" W	71.32'
15+23.45 LT	17+78.22 LT	624.00	184.76	17° 02' 40" LT	N 81° 05' 11" W	184.00'
17+78.22 LT	18+24.70 LT	150.00	93.98	24° 12' 40" LT	N 84° 40' 00" W	92.91'
18+24.70 LT	18+27.51 LT	150.00	75.72	28° 55' 17" LT	N 82° 18' 50" W	74.91'

CURVE DATA
 KINGSBRIDGE ROAD
 PC 13+71.87 TO PT 18+77.64
 Δ = 36° 13' 22" Tan = 261.66'
 Rad = 800.00' Chd = 497.39'
 Arc = 505.77' Chd. Brg = N85° 57' 52" W



Donald Egan 7/3/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE
Lawrence W. Weiland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE
William B. Young 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE
 OFFICE OF PLANNING AND ZONING
Frank S. Langley 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

REV. DATE	REV. NO.	REVISION DESCRIPTION
8-18-91	1	11" AS-BUILT COMMENTS

BURLEIGH MANOR
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 G.R. DEVELOPMENT CORPORATION

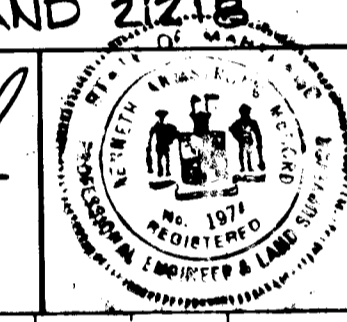
PROJECT AREA:
 BURLEIGH MANOR SECTION 2

PROJECT TITLE:
 PLAN & PROFILE
 KINGSBRIDGE ROAD

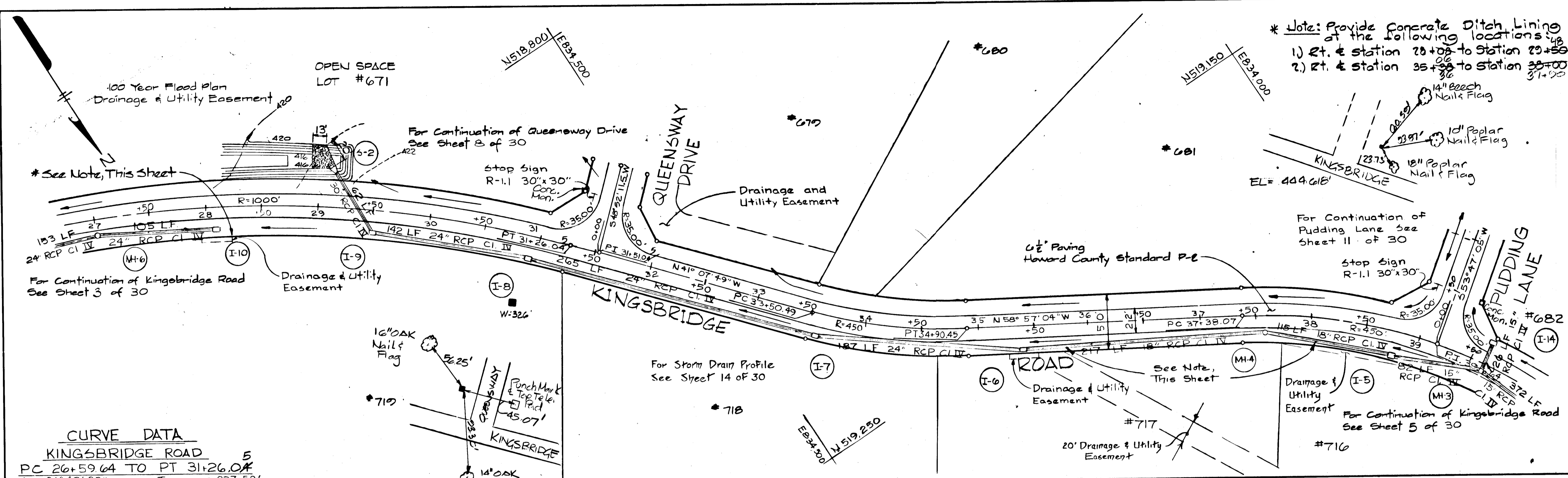
SCALE: 1" = 50' DATE: 3/4/88

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21218

Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No 1974



* Note: Provide Concrete Ditch Lining at the following locations:
 1) Rt. & station 28+00 to station 29+50
 2) Rt. & station 35+00 to station 36+00

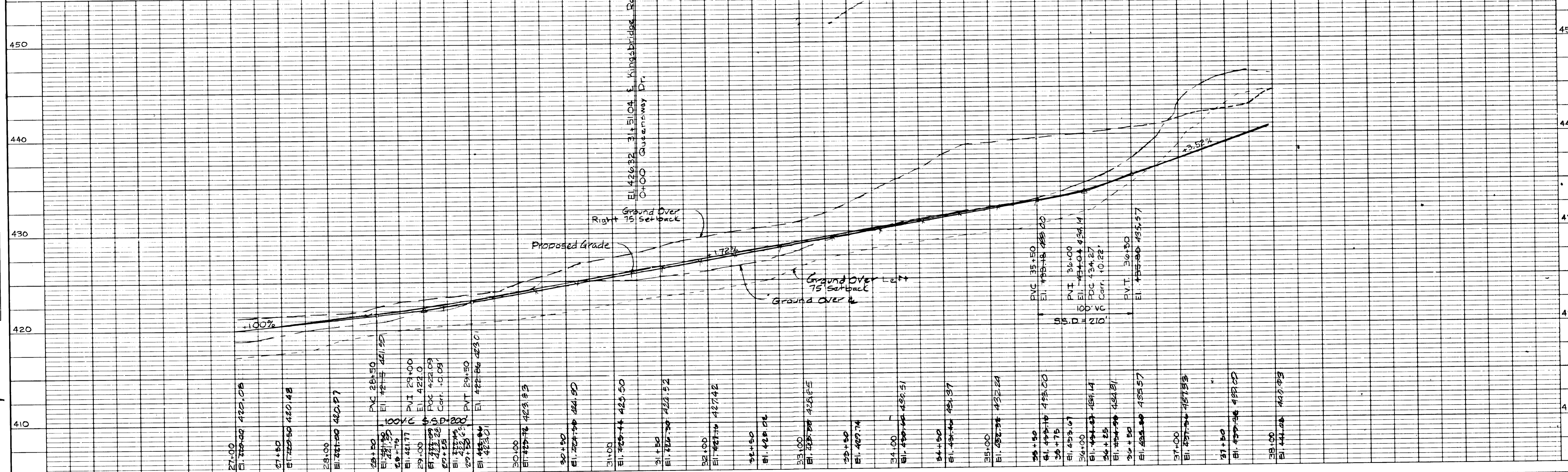


CURVE DATA
KINGSBRIDGE ROAD

Station Range	PC	PT	Delta	Tan	Rad	Ch'd	Ch'd Brg
26+59.64 TO 31+26.04	26+59.64	31+26.04	26° 43' 23"	237.52'	1000.00'	462.19'	N 54° 29' 30" W
33+50.49 TO 34+90.45	33+50.49	34+90.45	17° 49' 15"	70.55'	450.00'	139.40'	N 50° 02' 26" W
37+38.07 TO 39+16.64	37+38.07	39+16.64	22° 44' 09"	90.47'	450.00'	177.40'	N 47° 34' 56" W

STORM DRAIN STRUCTURE SCHEDULE

No.	Type	Top El.	Inv. In	Inv. Out	Location	Remarks	No.	Type	Top El.	Inv. In	Inv. Out	Location	Remarks
I-5	Modified "K"	443.66	434.37	434.12	Inlet 21.0' Rt & Sta. 38+78.76	See Detail Sheet 2 of 30	I-10	Modified "D"	420.31	434.04	434.79	Inlet 24.25' Rt & Sta. 28+08.06	See Detail Sheet 13 of 30
I-6	Modified "D"	431.78	426.83	425.73	Inlet 22.75' Rt & Sta. 35+08.36	See Detail Sheet 12 of 30	MH-3	Standard 4' Howard County Std. G-50	446.68	435.23	435.03	Sta. 39+60.00	
I-7	Modified "K"	429.00	422.55	422.35	Inlet 21.0' Rt & Sta. 33+58.54	See Detail Sheet 12 of 30	MH-4	Standard 4' Howard County Std. G-50	436.66	433.20	433.00	Sta. 37+57.55	
I-8	Modified "K"	424.55	418.05	417.85	Inlet 21.0' Rt & Sta. 30+39.27	See Detail Sheet 12 of 30	MH-6	Standard 4' Howard County Std. G-50	419.43	414.20	414.00	Sta. 27+00.00	
I-9	Modified "K"	421.61	416.60	415.90	Inlet 24.0' Rt & Sta. 29+00.48	See Detail Sheet 12 of 30	S-2	30" End Section Howard County Std. SD-55	415.40	415.40	415.40	Sta. 29+15.00 & 30.00	



PLAN
 DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 DATE: _____

PROFILE
 DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____
 DATE: _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Paul W. Seaman 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE
Lawrence W. Wellenbach 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE
William S. Ryan 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

Wanda S. J. Vaughn 7-21-88
 CHIEF, DIVISION OF COMMUNITY DATE
 PLANNING AND LAND DEVELOPMENT

5-15-82 Remove Easement on Lot #683
 8-12-81 PER AS-BUILT COMMENTS

REV. DATE REV. NO. REVISION DESCRIPTION

BURLEIGH MANOR
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 G.R. DEVELOPMENT CORPORATION

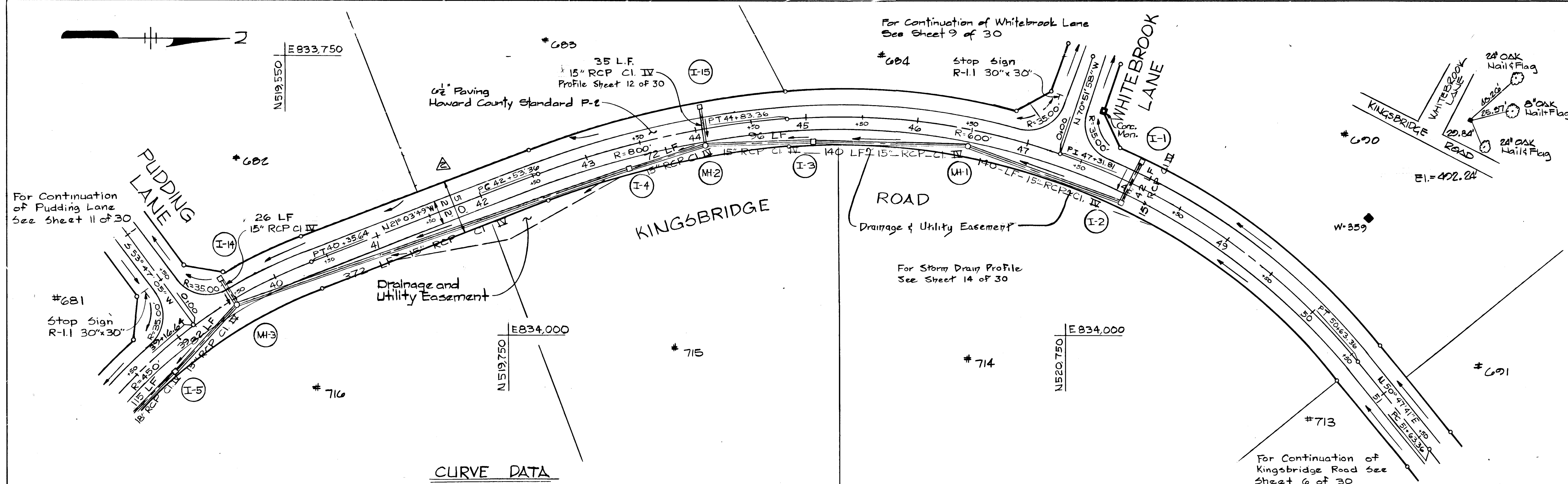
PROJECT AREA:
 BURLEIGH MANOR
 SECTION 2

PROJECT TITLE:
 PLAN & PROFILE
 KINGSBRIDGE ROAD

SCALE: 1" = 50' DATE: 3/4/88

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

Kenneth A. McCord
 KENNETH A. McCORD
 Registered Engineer
 No 1974



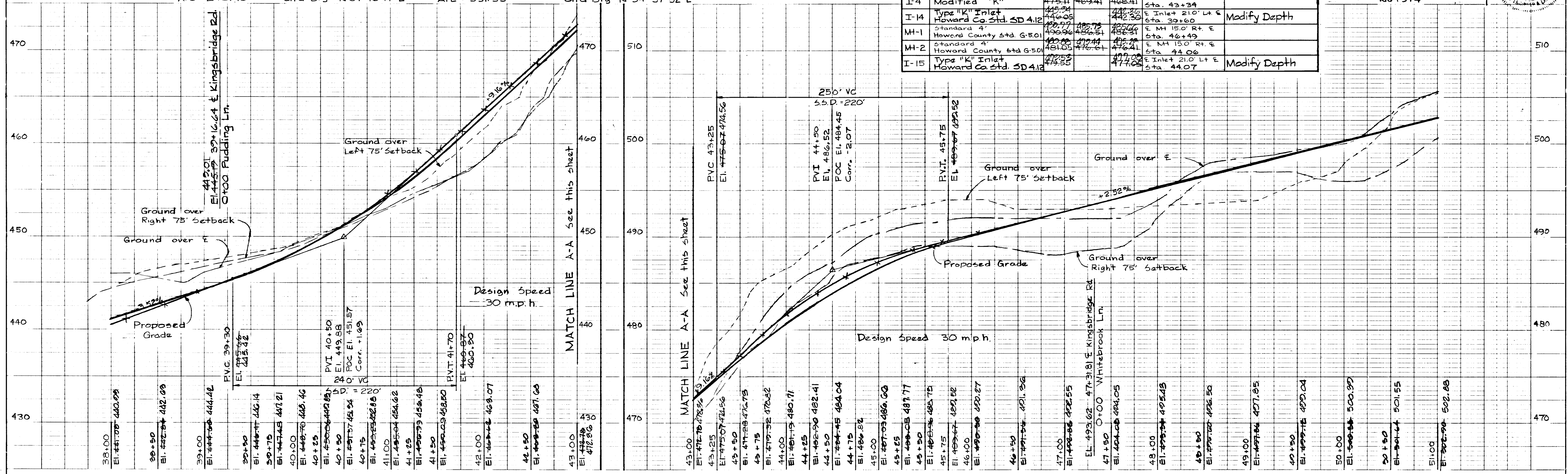
CURVE DATA

KINGSBRIDGE ROAD			
PI. 39+16.64 TO PT. 40+35.64	PC. 42+53.36 TO PT. 44+83.36		
$\Delta = 15^{\circ}09'06''$	$\Delta = 16^{\circ}28'21''$		
Tan = 59.85'	Tan = 115.80'		
Rad = 450.00'	Rad = 800.00'		
Ch'd = 118.65'	Ch'd = 229.21'		
Arc = 119.00'	Ch'd Brg = N 28° 38' 22" W		
PC. 44+83.36 TO P.I. 47+31.81	P.I. 47+31.81 TO P.T. 50+63.36		
$\Delta = 23^{\circ}43'31''$	$\Delta = 31^{\circ}39'39''$		
Tan = 126.03'	Tan = 170.13'		
Rad = 600.00'	Rad = 600.00'		
Ch'd = 246.68'	Ch'd = 327.35'		
Arc = 248.45'	Ch'd Brg = N 07° 16' 17" E		
	Arc = 331.55'		
	Ch'd Brg = N 34° 57' 52" E		

STORM DRAIN STRUCTURE SCHEDULE

No.	Type	Top El.	Inv. In	Inv. Out	Location	Remarks
I-1	Type "K" Inlet Howard Co. Std. SD 4.12	432.62	432.62	432.62	E Inlet 210' Lt. E Sta. 48+00	Modify Depth
I-2	Modified "K"	434.57	434.57	434.57	E Inlet 210' Rt. E Sta. 48+00	See Detail Sheet 12 of 30
I-3	Modified "K"	430.23	430.23	430.23	E Inlet 210' Rt. E Sta. 45+05	" " " "
I-4	Modified "K"	475.11	475.11	475.11	E Inlet 210' Rt. E Sta. 43+34	" " " "
I-14	Type "K" Inlet Howard Co. Std. SD 4.12	442.05	442.05	442.05	E Inlet 210' Lt. E Sta. 39+60	Modify Depth
MH-1	Standard 4' Howard County Std G-50	430.96	430.96	430.96	E MH 150' Rt. E Sta. 46+49	
MH-2	Standard 4' Howard County Std G-50	431.05	431.05	431.05	E MH 150' Rt. E Sta. 44+06	
I-15	Type "K" Inlet Howard Co. Std. SD 4.12	432.52	432.52	432.52	E Inlet 210' Lt. E Sta. 44+07	Modify Depth

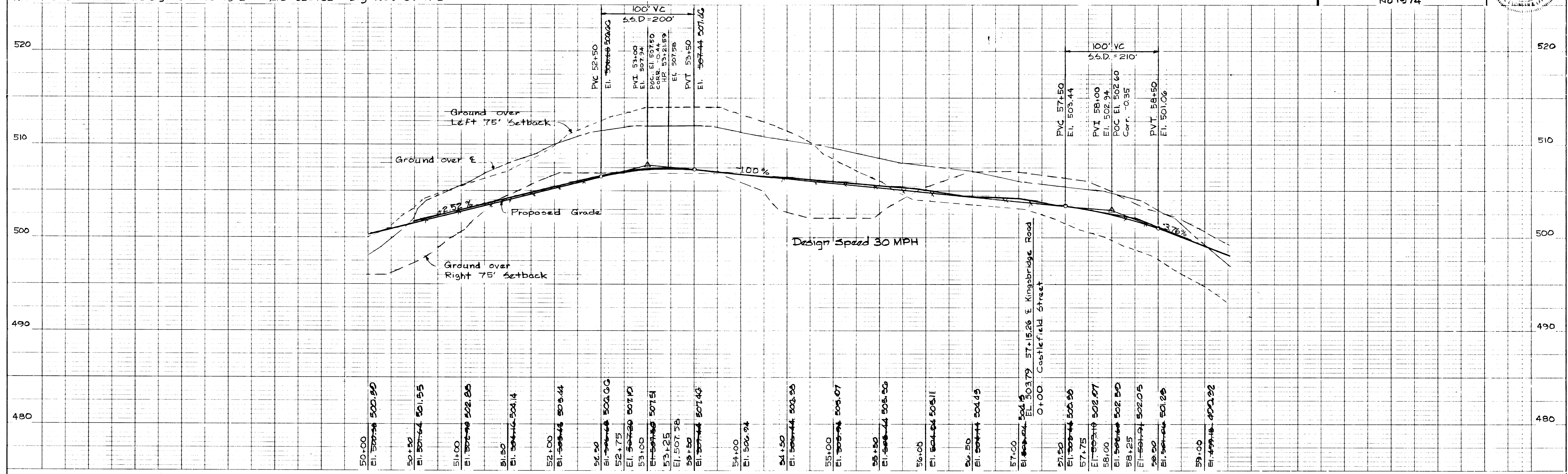
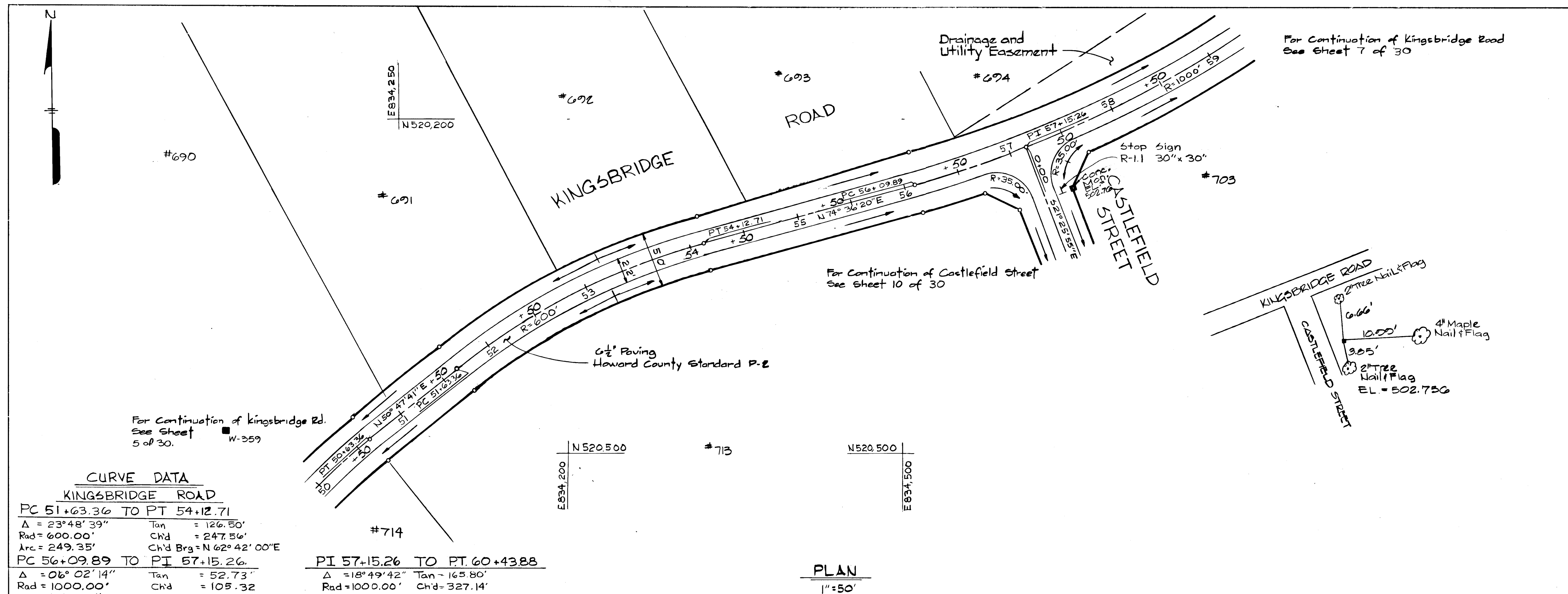
For Continuation of Kingsbridge Rd. See Sheet 4 of 30



721

PLAN
 SURVEYED BY: [Signature]
 NOTE BOOK NO. []
 CHECKED BY: [Signature]
 DATE: []

PROFILE
 SURVEYED BY: [Signature]
 NOTE BOOK NO. []
 CHECKED BY: [Signature]
 DATE: []



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature]
 CHIEF, LAND DEVELOPMENT DIVISION
 [Signature]
 CHIEF, BUREAU OF HIGHWAYS
 [Signature]
 CHIEF, BUREAU OF ENGINEERING

DATE: 7/8/88
 DATE: 7/15/88
 DATE: 7-15-88

OFFICE OF PLANNING AND ZONING
 [Signature]
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

DATE: 7-21-88

REV. DATE	REV. NO.	REVISION DESCRIPTION
8-12-81	1	PER AS-BUILT COMMENTS

BURLEIGH MANOR
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 GR. DEVELOPMENT CORPORATION

PROJECT AREA:
 BURLEIGH MANOR SECTION 2

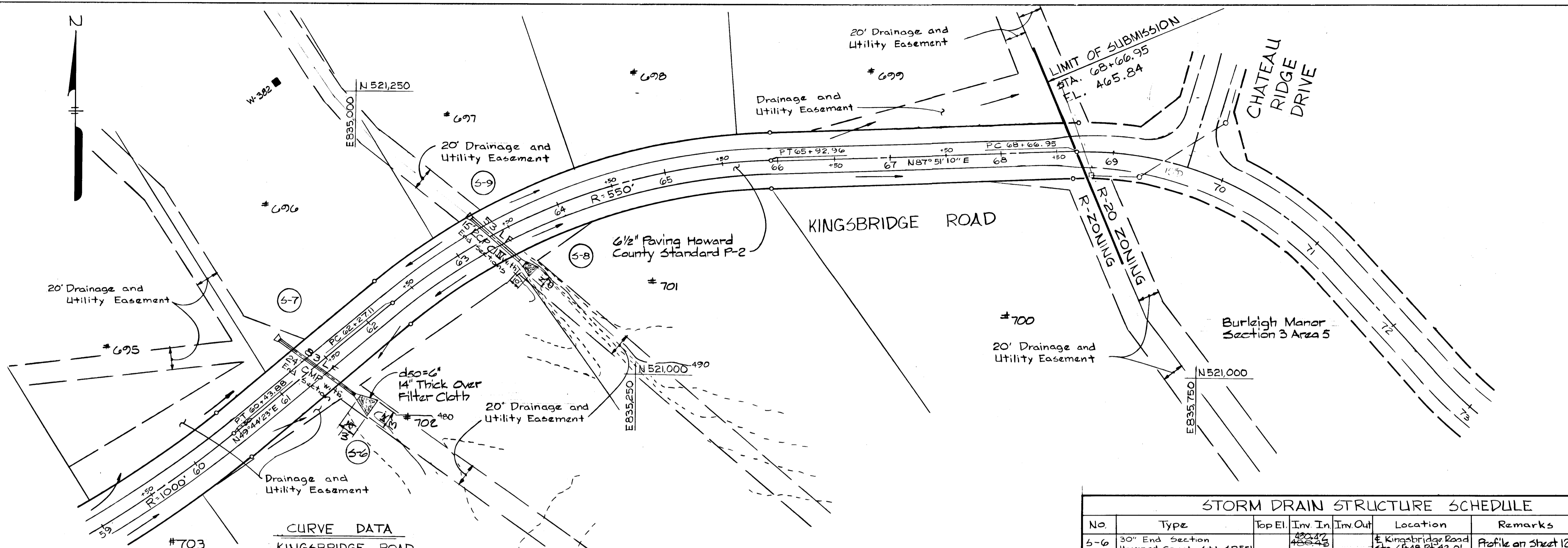
PROJECT AREA:
 PLAN & PROFILE
 KINGSBRIDGE ROAD

SCALE: 1" = 50' DATE: 3/4/88

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

[Signature]
 KENNETH A. McCORD
 Registered Engineer
 No 1974

PLAN
 SURVEYED BY: [Signature]
 CHECKED BY: [Signature]
 NOTE BOOK NO. []
 DATE []



CURVE DATA
KINGSBRIDGE ROAD
 PC 62+27.11 TO PT 65+92.96
 $\Delta = 38^{\circ}06'46''$ Tan = 189.99'
 Rad = 550.00' Ch'd = 359.15'
 Arc = 365.86' Ch'd Brg = N68°47'46"E

PLAN
 1" = 50'

For Continuation of
 Kingsbridge Road See
 Sheet 6 of 30

APPROVED: HOWARD COUNTY DEPARTMENT
 OF PUBLIC WORKS
 [Signature]
 CHIEF, LAND DEVELOPMENT DIVISION DATE 7/8/88
 [Signature]
 CHIEF, BUREAU OF HIGHWAYS DATE 7/15/88
 [Signature]
 CHIEF, BUREAU OF ENGINEERING DATE 7-15-88
 OFFICE OF PLANNING AND ZONING
 [Signature]
 CHIEF, DIVISION OF COMMUNITY DATE 7-21-88
 PLANNING AND LAND DEVELOPMENT

REV. DATE	REV. NO.	REVISION DESCRIPTION
8-12-81	1	PER AS-BUILT COMMENTS.

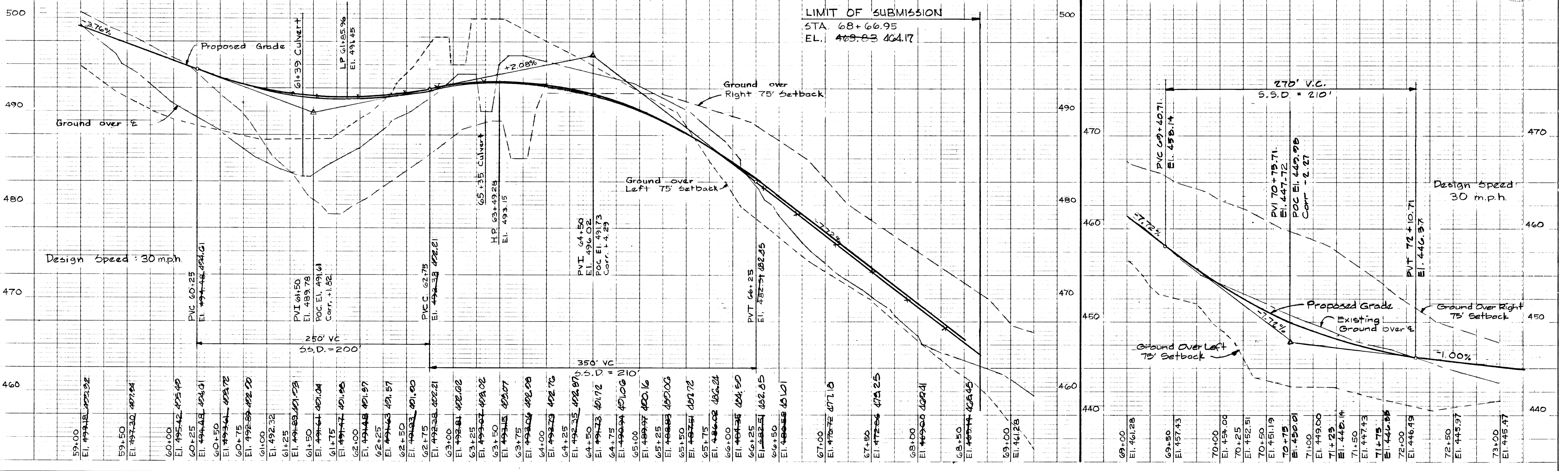
BURLEIGH MANOR
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 DEVELOPER
 G. R. DEVELOPMENT CORPORATION
 PROJECT AREA
 BURLEIGH MANOR
 SECTION 2
 PROJECT TITLE:
 PLAN & PROFILE
 KINGSBRIDGE ROAD
 SCALE: 1" = 50' DATE: 3/4/88
 WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

STORM DRAIN STRUCTURE SCHEDULE

No.	Type	Top El.	Inv. In.	Inv. Out.	Location	Remarks
5-6	30" End Section	482.47	482.43	482.43	E. Kingsbridge Road Sta. 61+45 to 61+82.0'	Profile on Sheet 12
5-7	30" End Section	482.43	482.43	482.43	Howard County Std. 5D-551 Sta. 61+30 to 61+38.0'	" " "
5-8	30" End Section	482.43	482.43	482.43	E. Kingsbridge Road Sta. 63+45 to 63+31.0'	" " "
5-9	30" End Section	482.43	482.43	482.43	Howard County Std. 5D-551 Sta. 63+25 to 63+22.0'	" " "

[Signature]
 KENNETH A. MCCORD
 Registered Engineer
 No. 1974

PROFILE
 SURVEYED BY: [Signature]
 CHECKED BY: [Signature]
 NOTE BOOK NO. []
 DATE []



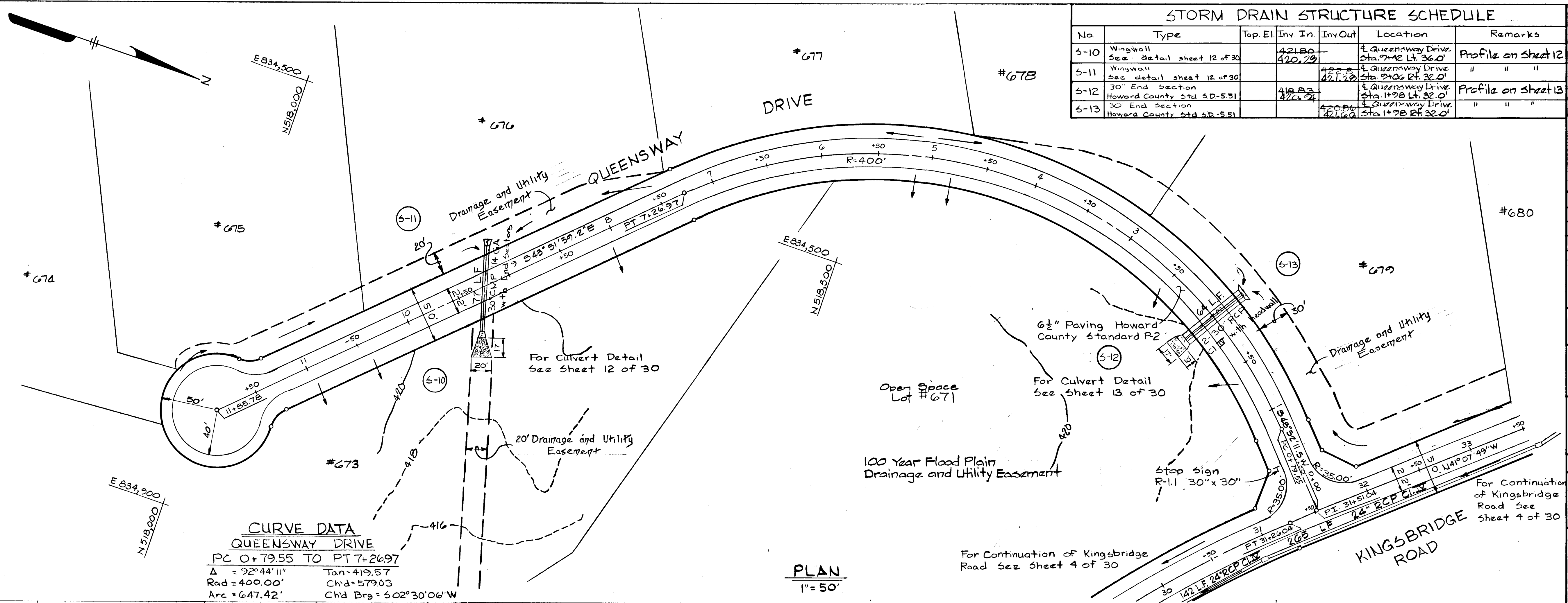
Keuffel & Esser Company
 487024 Made in U.S.A.

KINGSBRIDGE ROAD - PROFILE

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

DATE: _____
 BY: _____
 CHECKED: _____
 NO. _____

DATE: _____
 BY: _____
 CHECKED: _____
 NO. _____



CURVE DATA
QUEENSWAY DRIVE
 PC 0+79.55 TO PT 7+26.97
 $\Delta = 92^\circ 44' 11''$ $Tan = 419.57$
 Rad = 400.00' $Ch = 579.03$
 Arc = 647.42' $Chd Brg = 502^\circ 30' 06'' W$

PLAN
 1" = 50'

No	Type	Top El	Inv. In.	Inv. Out	Location	Remarks
5-10	Wingwall		421.80	420.76	E. Queensway Drive Sta. 7+42.28 Lt. 36.0'	Profile on sheet 12
5-11	Wingwall		422.00	421.28	E. Queensway Drive Sta. 2+00 Rt. 32.0'	" " "
5-12	Howard County Std 5D-551		418.83	420.24	E. Queensway Drive Sta. 1+28 Lt. 32.0'	Profile on sheet 13
5-13	30" End Section Howard County Std 5D-551		420.80	421.61	E. Queensway Drive Sta. 1+78 Rt. 32.0'	" " "

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division
 Chief, Bureau of Highways
 Chief, Bureau of Engineering

OFFICE OF PLANNING AND ZONING
 Chief, Division of Community Planning and Land Development

REV. DATE	REV. NO.	REVISION DESCRIPTION
2-16-91	1	REVISED PER REDLINE

BURLEIGH MANOR
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 G.R. DEVELOPMENT CORPORATION

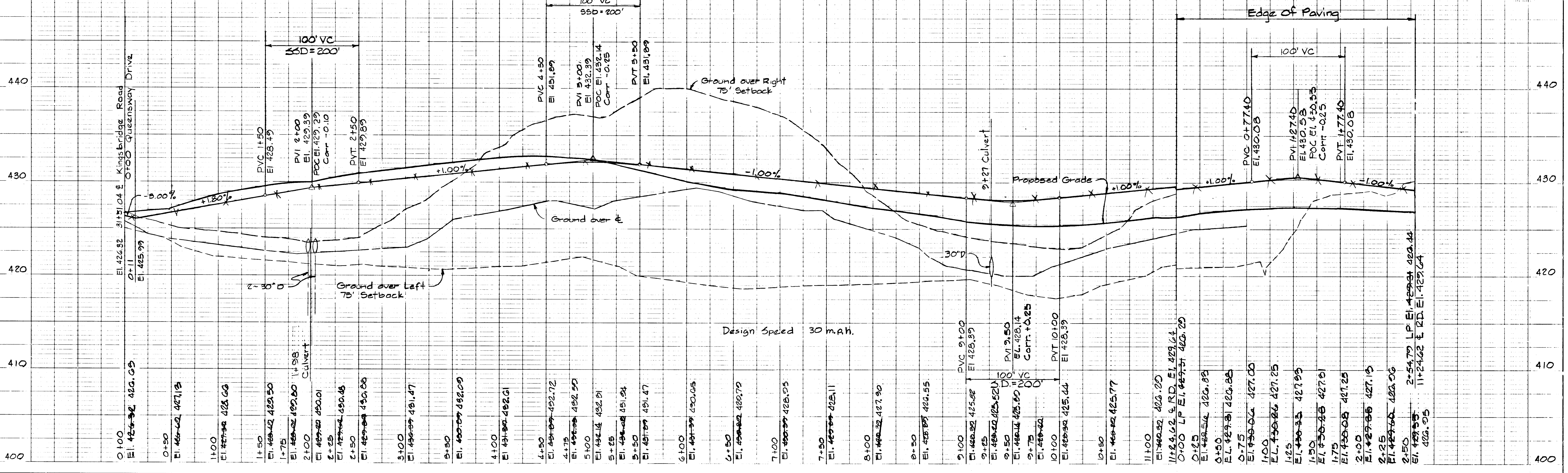
PROJECT AREA
 BURLEIGH MANOR
 SECTION 2

PROJECT TITLE
 PLAN & PROFILE
 QUEENSWAY DRIVE

SCALE: 1" = 50' DATE: 3/4/88

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND 21218

Kenneth A. McCord
 Registered Engineer
 No. 1974



Design Speed 30 m.p.h.

Keuffel & Esser Company
 48 7024 Made in U.S.A.

QUEENSWAY DRIVE - PROFILE

Scale: Hor: 1" = 50'
 Ver: 1" = 5'

SHEET 8 OF 30

F-88-207

721

PLAN
 SUBMITTED BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]

PROFILE
 SUBMITTED BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]

No.	Type	Top El.	Inv. In	Inv. Out	Location	Remarks
5-14	30" End Section		472.28		Whitebrook Lane Sta. 4+50 Lt. 31.0'	
5-15	30" End Section		472.28	472.28	Whitebrook Lane Sta. 4+27 Rt. 32.0'	

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

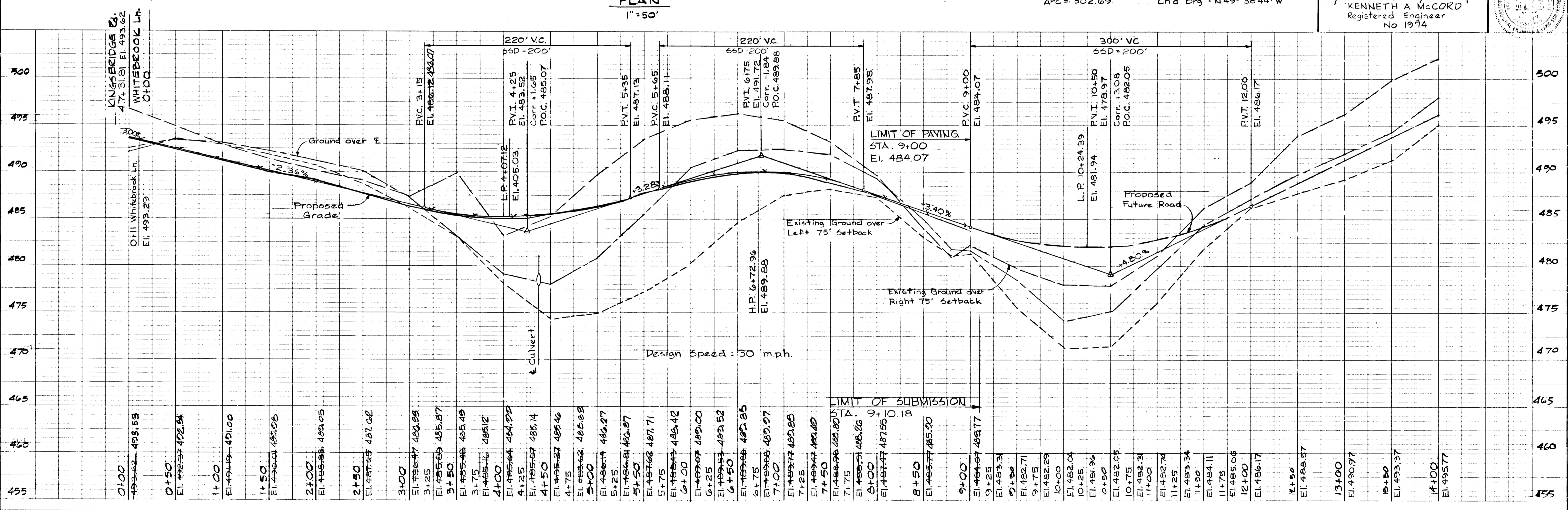
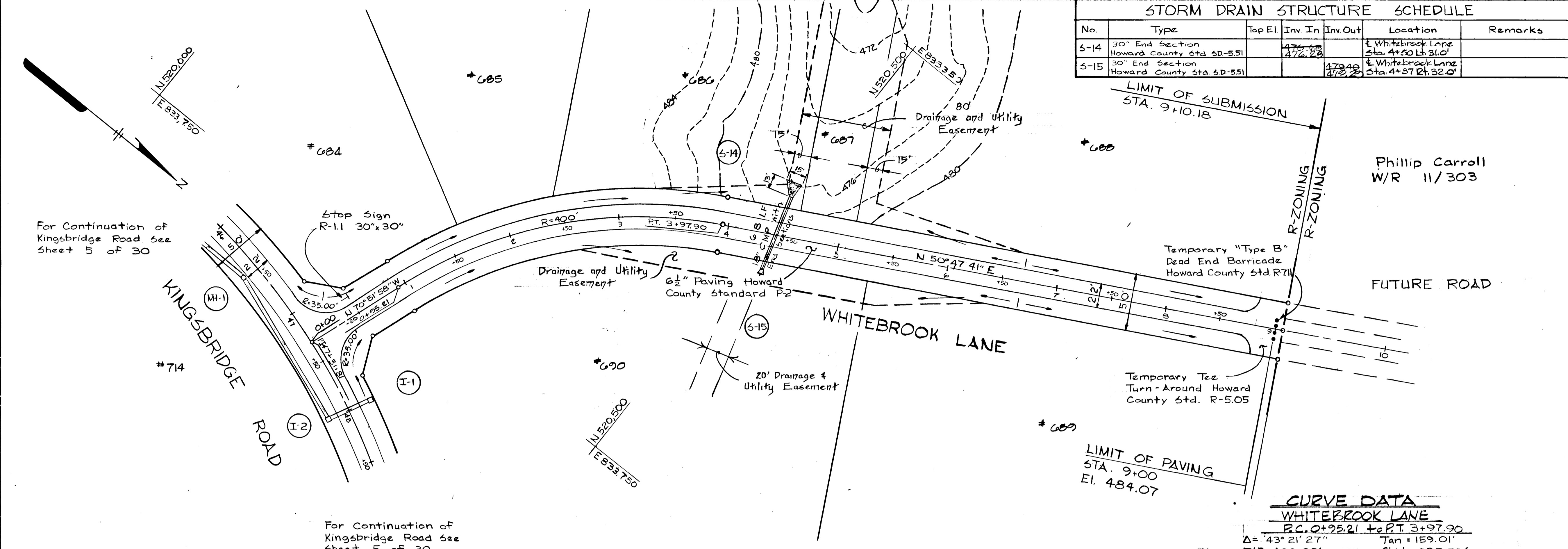
Paul D. [Name] 7/18/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Granville W. Wehland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

[Name] 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

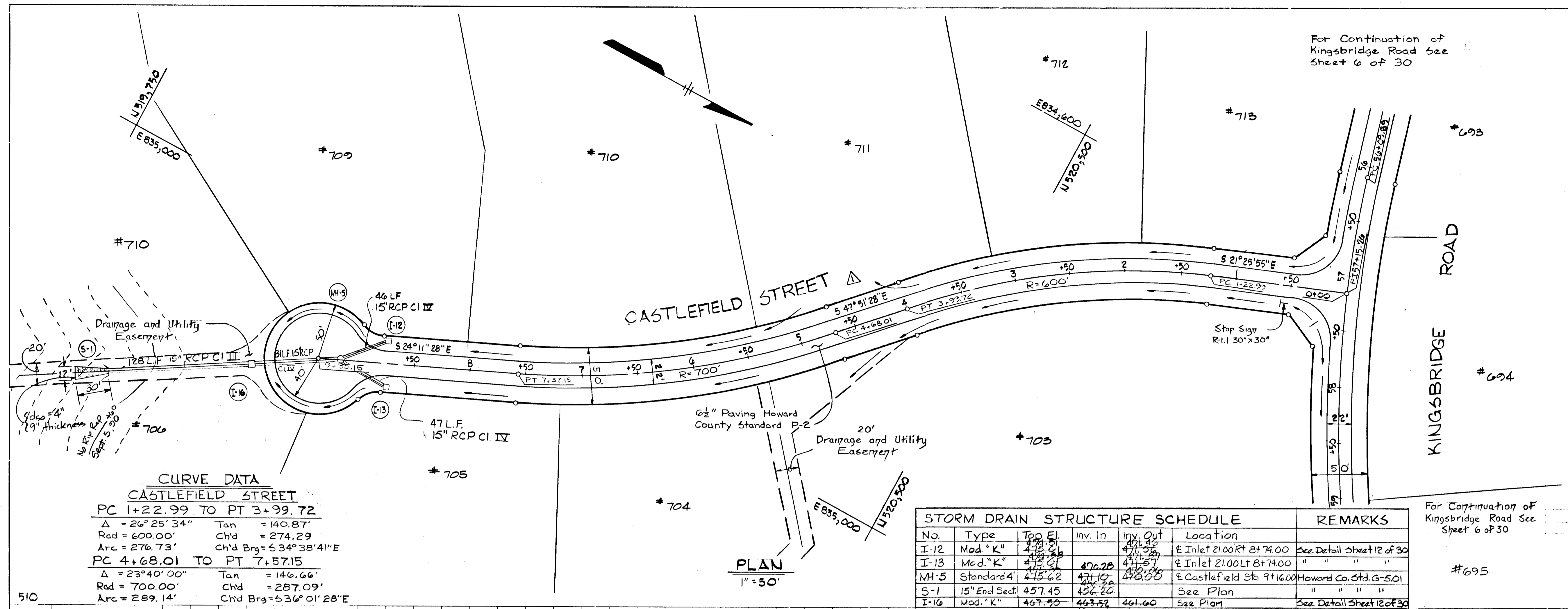
Janet S. [Name] 7/21/88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



121

PLAN
 SURVEYED BY: [Signature]
 NOTE BOOK: [Blank]
 DATE: [Blank]

PROFILE
 SURVEYED BY: [Signature]
 NOTE BOOK: [Blank]
 DATE: [Blank]



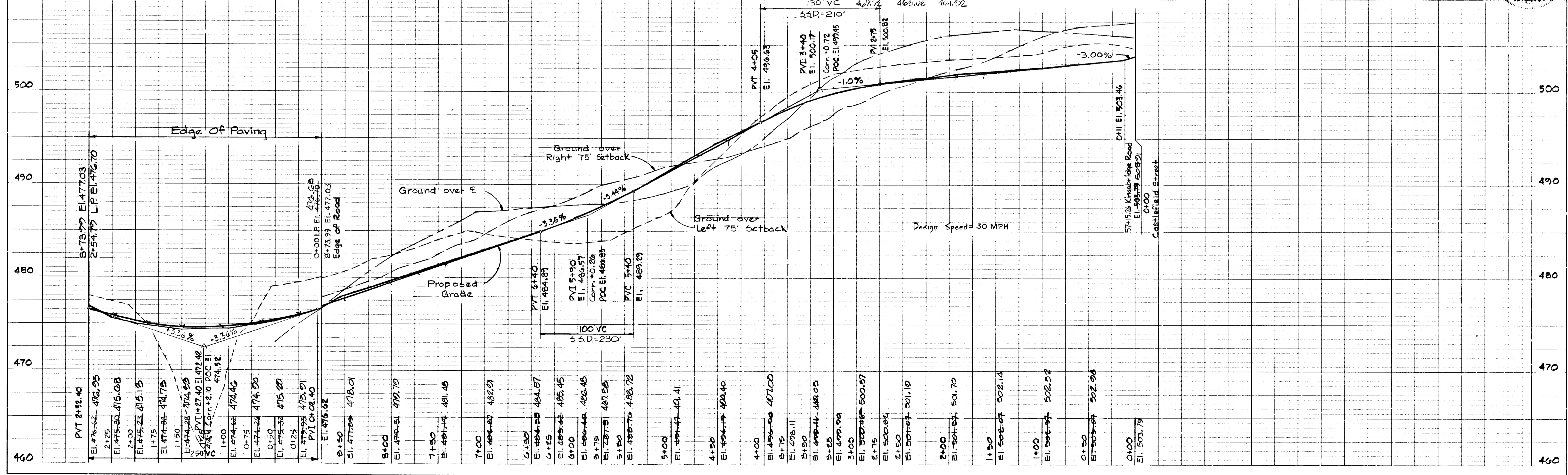
CURVE DATA
CASTLEFIELD STREET

PC 1+22.99 TO PT 3+99.72
 $\Delta = 26^\circ 25' 34''$ Tan = 140.87'
 Rad = 600.00' Chd = 274.29'
 Arc = 276.73' Chd Brg = $53^\circ 38' 41'' E$

PC 4+68.01 TO PT 7+57.15
 $\Delta = 23^\circ 40' 00''$ Tan = 146.66'
 Rad = 700.00' Chd = 287.09'
 Arc = 289.14' Chd Brg = $53^\circ 01' 28'' E$

STORM DRAIN STRUCTURE SCHEDULE

No.	Type	Top El.	Inv. In	Inv. Out	Location	REMARKS
I-12	Mod. "K"	471.52	471.52	471.52	E Inlet 2100RT 8+74.00	See Detail Sheet 12 of 30
I-13	Mod. "K"	471.52	471.52	471.52	E Inlet 2100LT 8+74.00	" " " "
MH-5	Standard 4'	475.42	471.19	475.58	E Castlefield Sta 9+16.00	Howard Co. Std. G-501
S-1	15" End Sect	457.45	457.20	457.20	See Plan	" " " "
S-16	Mod. "K"	467.50	463.52	461.60	See Plan	See Detail Sheet 12 of 30



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 7/5/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE
 [Signature] 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE
 [Signature] 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING
 [Signature] 7-21-88
 CHIEF, DIVISION OF COMMUNITY DATE
 PLANNING AND LAND DEVELOPMENT

REV. DATE	REV. NO.	REVISION DESCRIPTION
5-15-82	1	Remove Easement on Lot #111

BURLEIGH MANOR
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 G.R. DEVELOPMENT CORPORATION

PROJECT AREA
 BURLEIGH MANOR
 SECTION 2

PROJECT TITLE:
 PLAN & PROFILE
 CASTLEFIELD STREET

SCALE: 1" = 50' DATE: 3/4/88

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

[Signature]
 KENNETH A. MCCORD
 Registered Engineer
 No 1974



E 834,230
N 519,400

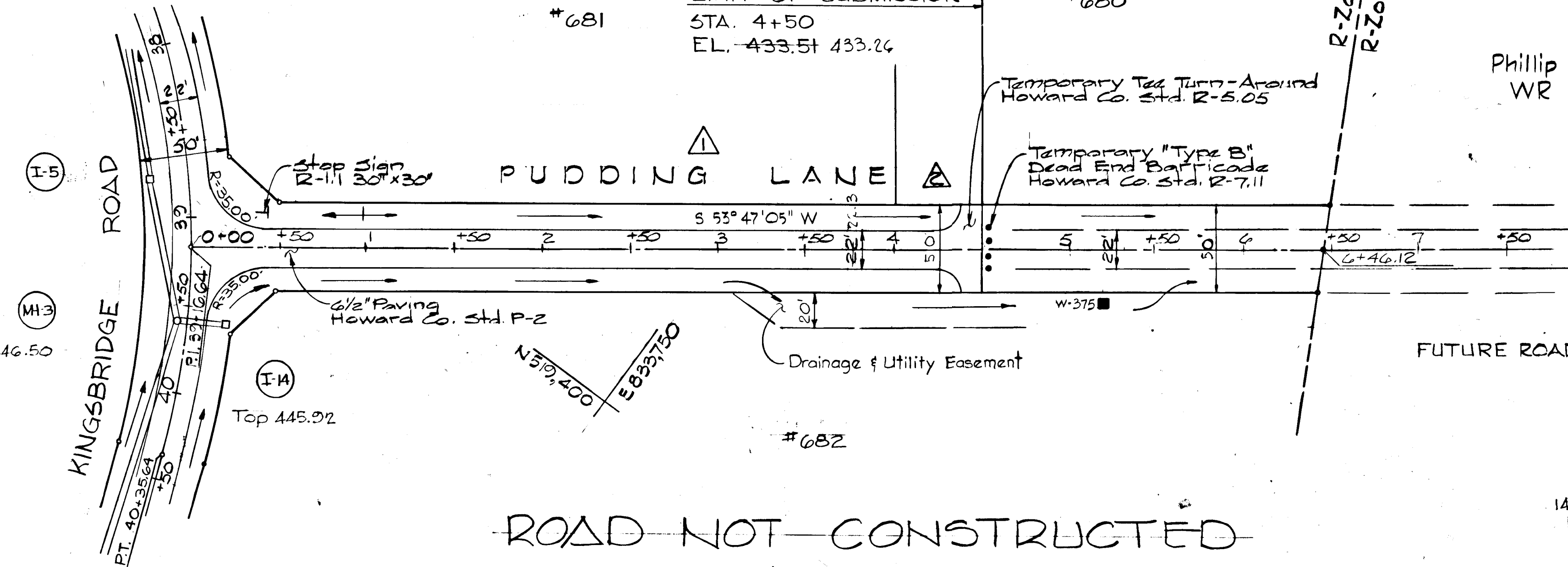
E 833,730
N 519,000

For Continuation of Kingsbridge Road See Sheet 4 of 30

#716

Top 446.50

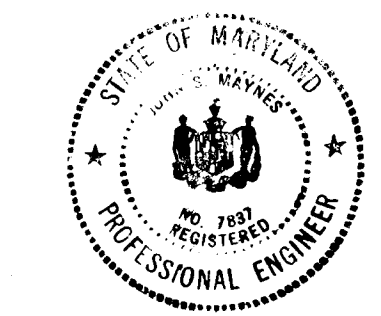
For Continuation of Kingsbridge Road See Sheet 5 of 30



ROAD NOT CONSTRUCTED

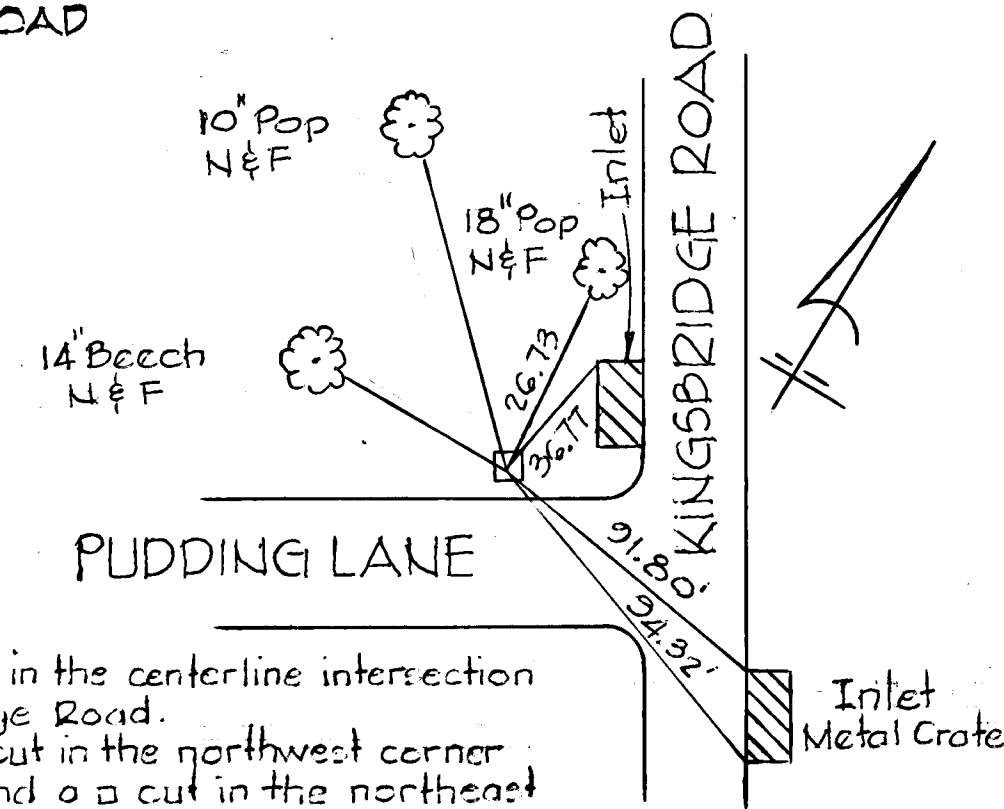
PLAN
Scale: 1" = 50'-0"

Phillip Carroll
WR 11/303



J. A. May
11/25/98

10' Pop N&F
14' Beech L&F
18' Pop N&F



Horizontal Control based on PK nail in the centerline intersection of Pudding Lane and Kingsbridge Road. Vertical Control based on a π cut in the northwest corner of Inlet I-5 elevation 442.73 and a π cut in the northeast corner of Inlet I-14.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division: *Paul J. Espar* 7/8/88
 Chief, Bureau of Highways: *Druselle W. Wehland* 7/15/88
 Chief, Bureau of Engineering: *William S. King* 7-15-88

OFFICE OF PLANNING AND ZONING
 Chief, Division of Community Planning and Land Development: *Frank S. DeLanghe* 2-21-88

REV. DATE	REV. NO.	REVISION DESCRIPTION
11/25/98	3	"As Built"
6/22/92	2	Add Roadway
3/16/92	1	Removed Paving on Pudding Lane

BURLEIGH MANOR
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 G.R. DEVELOPMENT CORPORATION

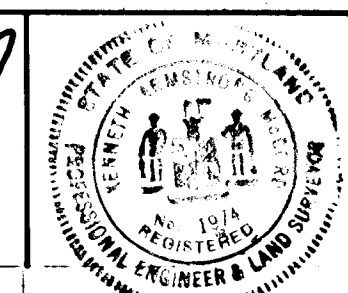
PROJECT AREA:
 BURLEIGH MANOR
 SECTION 2

PROJECT TITLE:
 PLAN & PROFILE
 PUDDING LANE

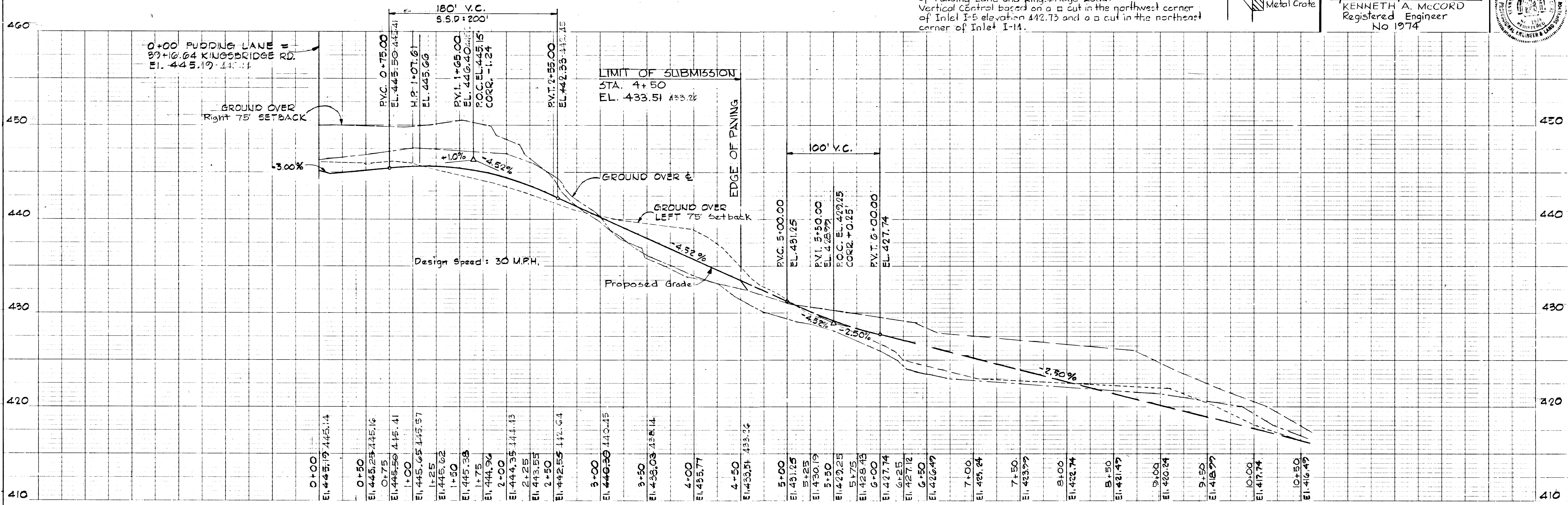
SCALE: 1" = 50' DATE: 3/4/88

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND 21218

Kenneth A. McCord
 KENNETH A. MCCORD
 Registered Engineer
 No 1974



PROFILE
 SHEETED
 NOTED
 GRADES CHECKED
 NO. 2 INSTRUCTIONS CHECKED



PUDDING LANE ~ PROFILE Scale: 1" = 5' V, 1" = 50' H

SHEET 11 OF 30

721

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

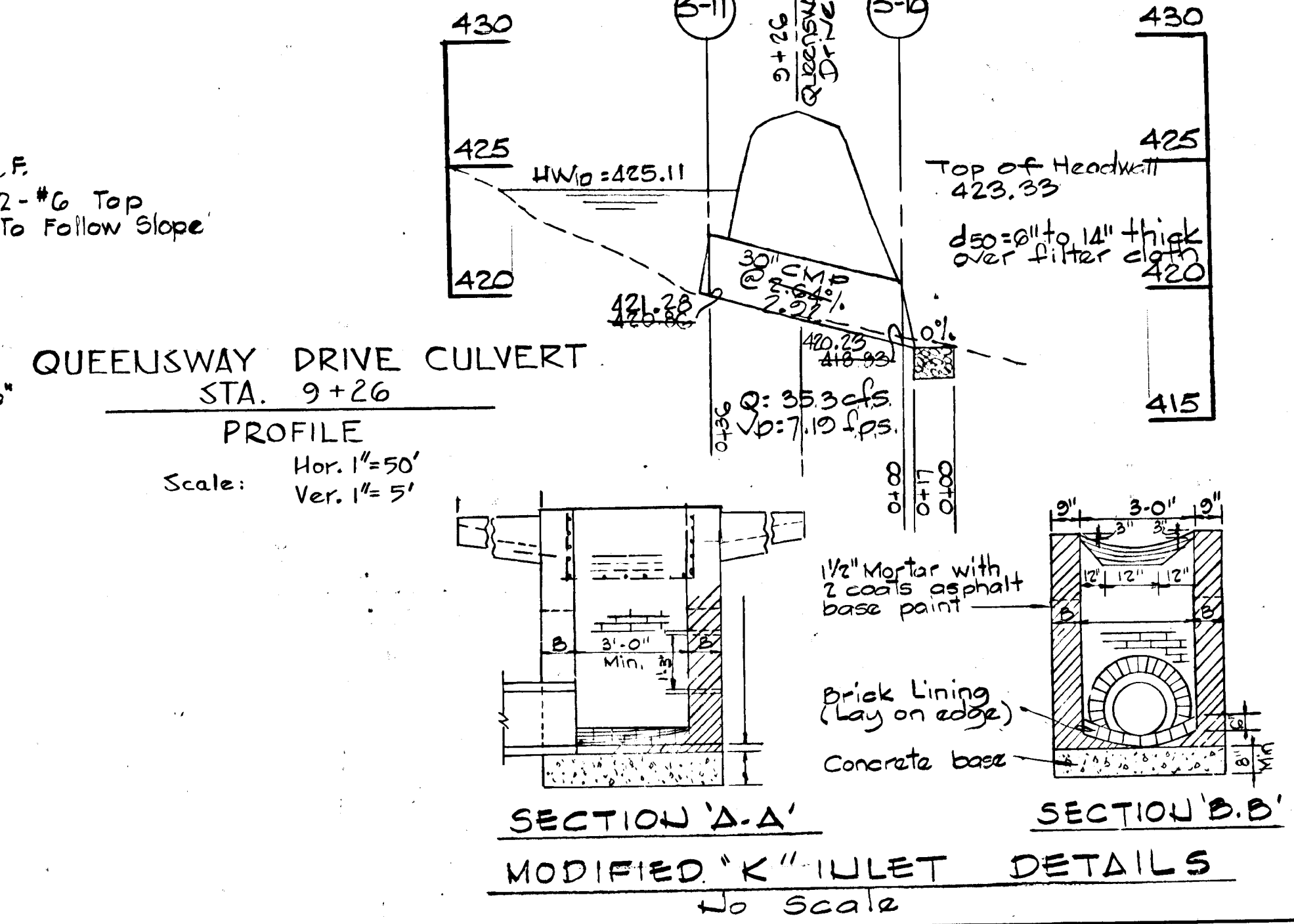
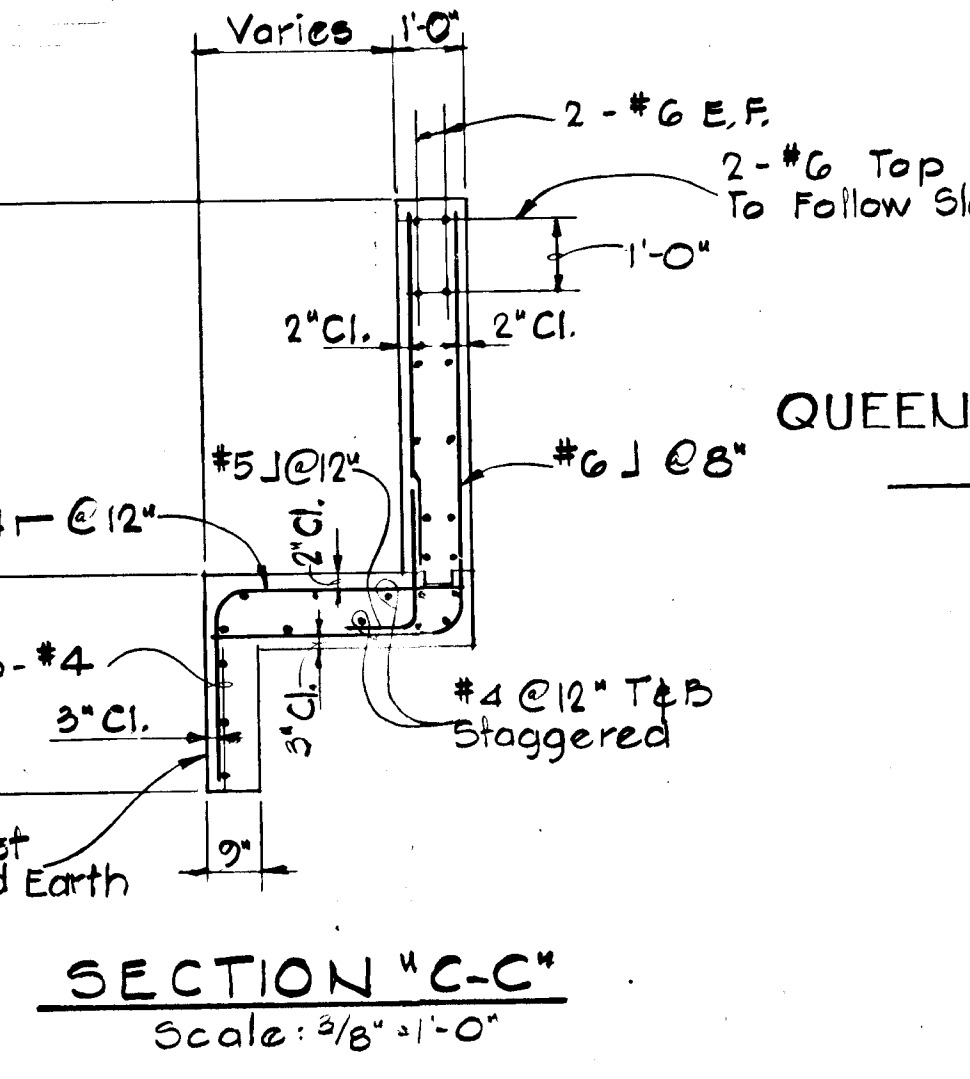
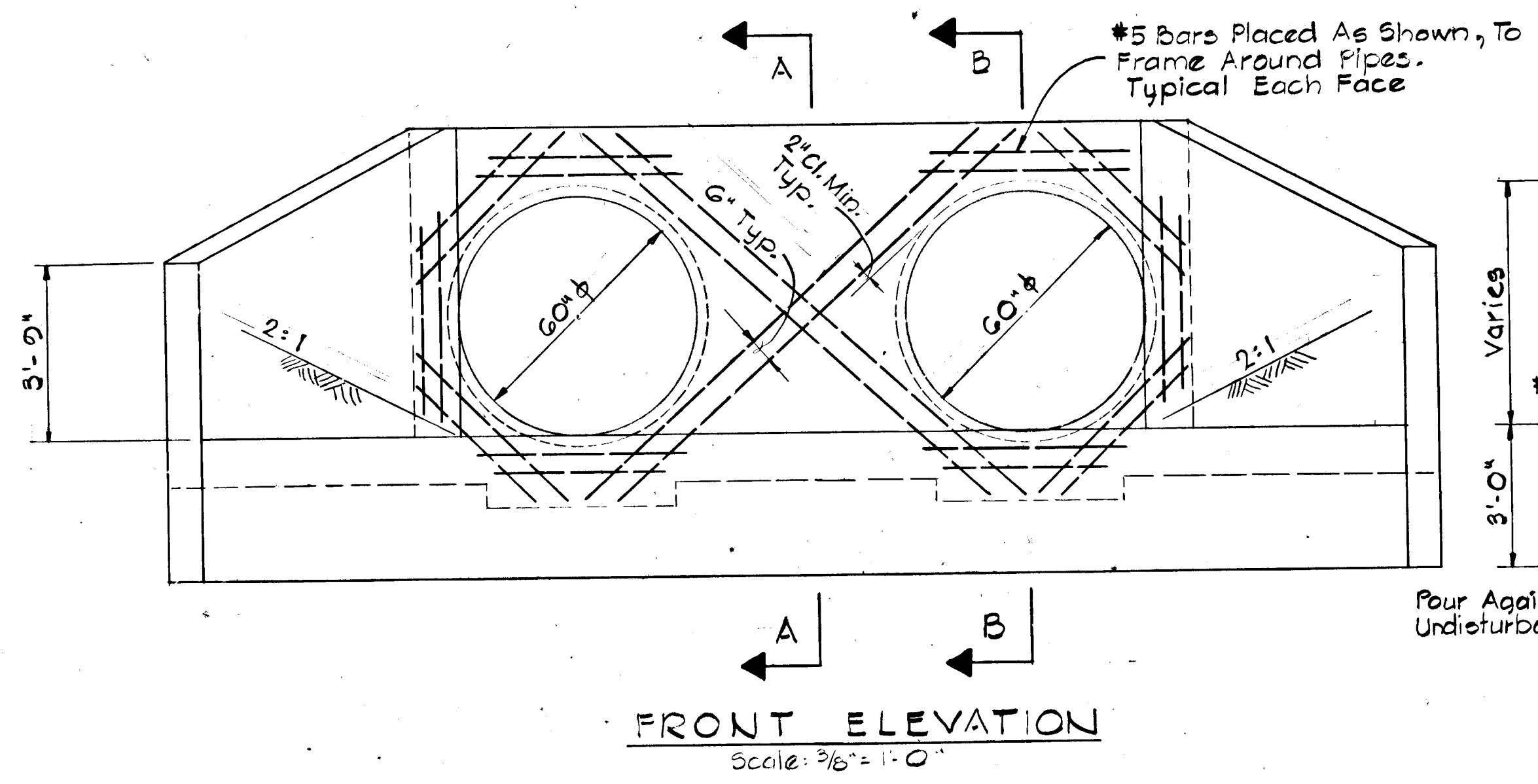
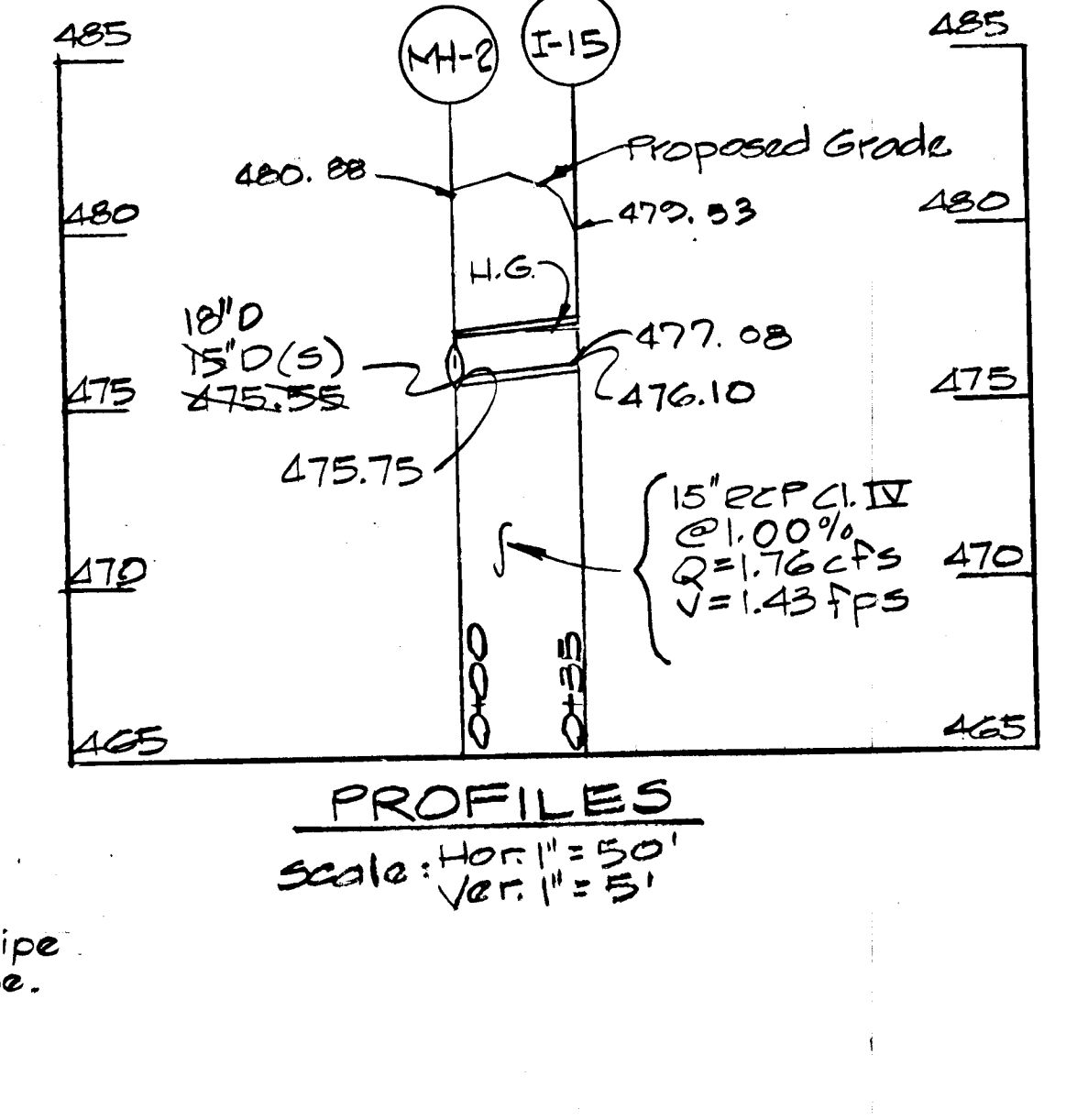
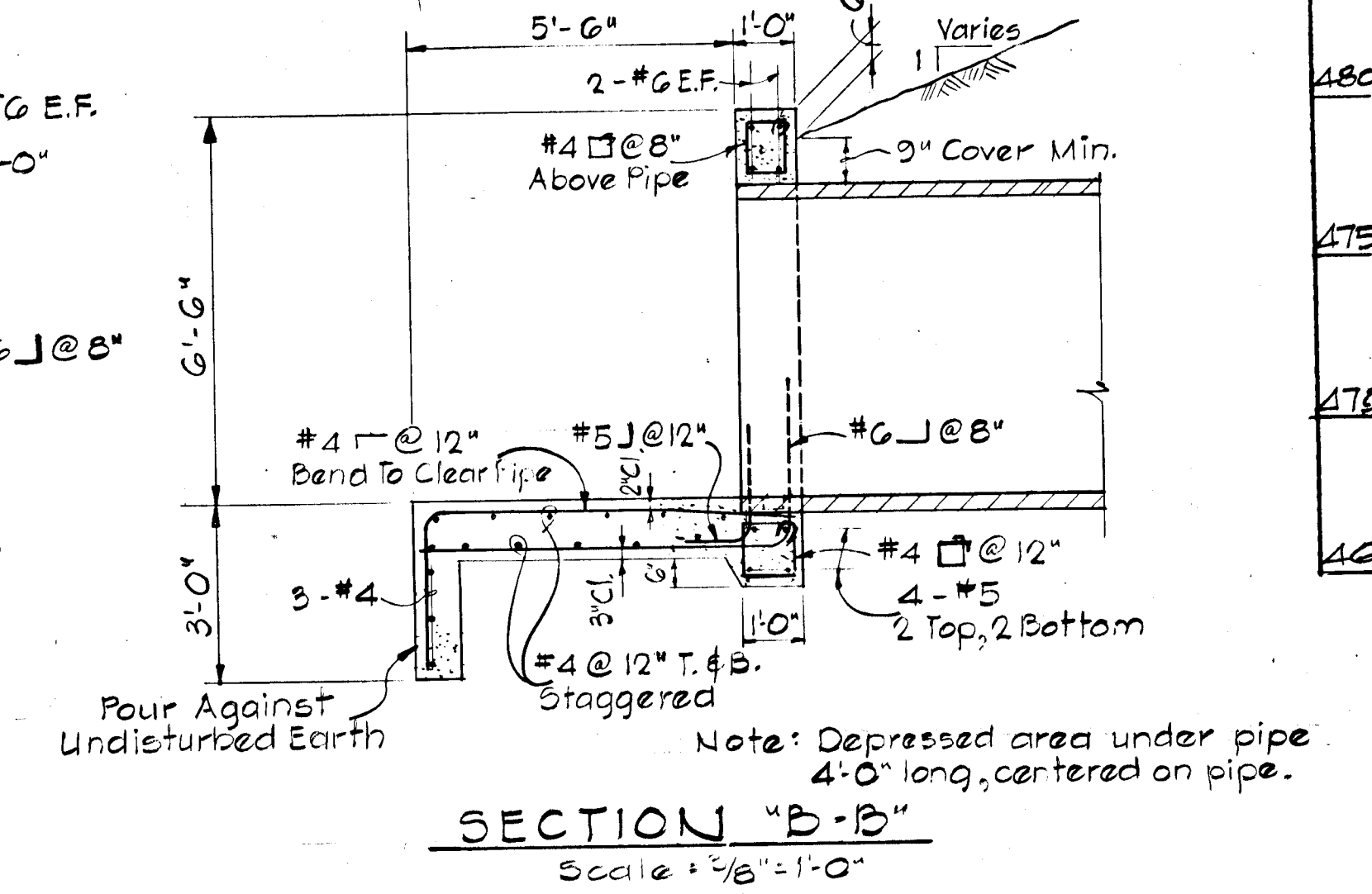
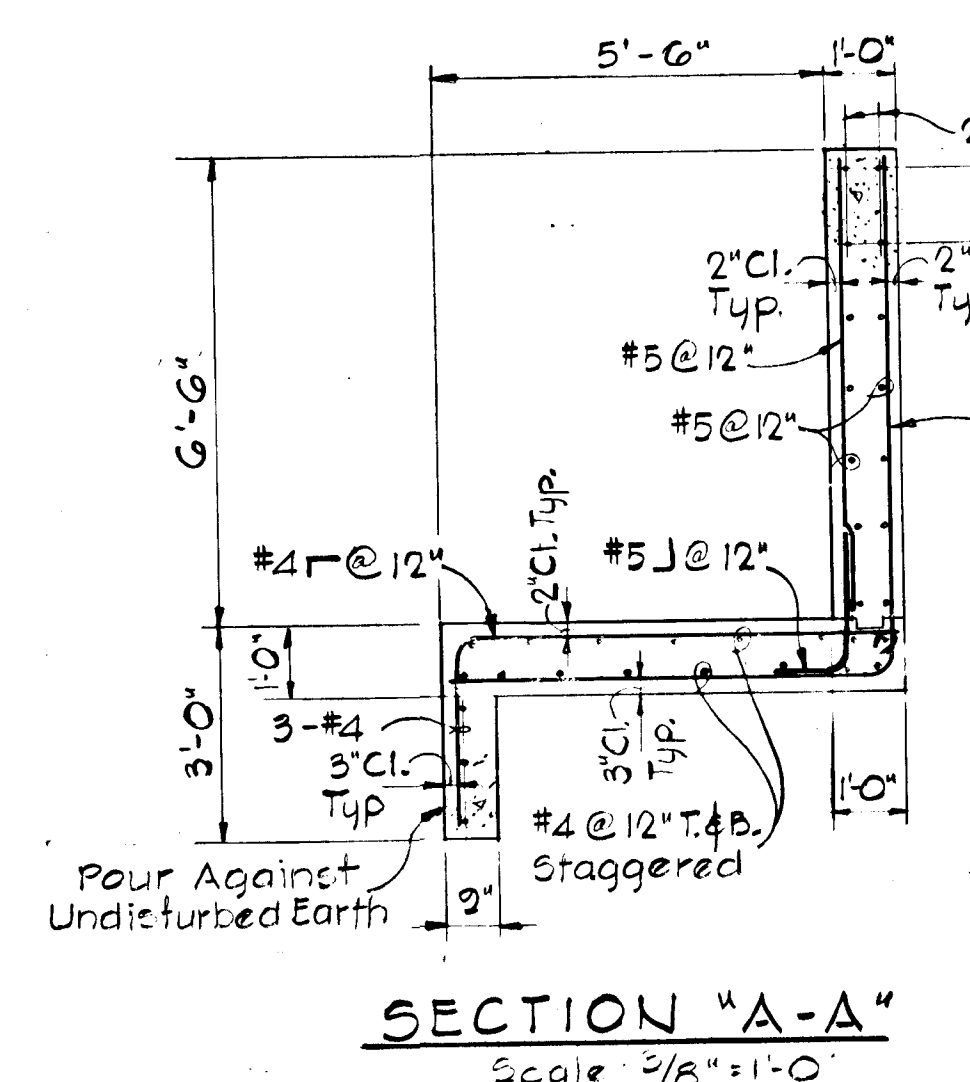
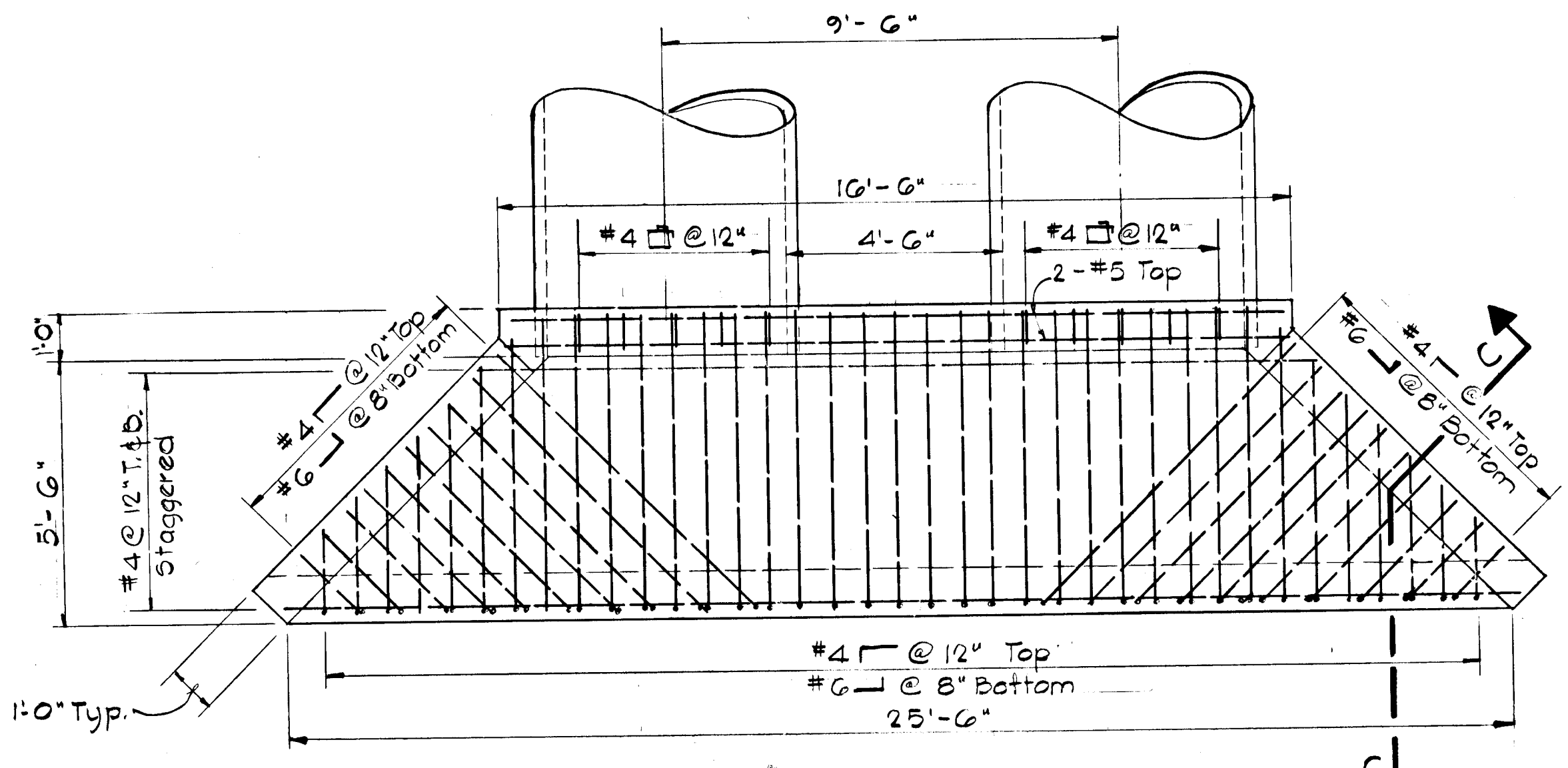
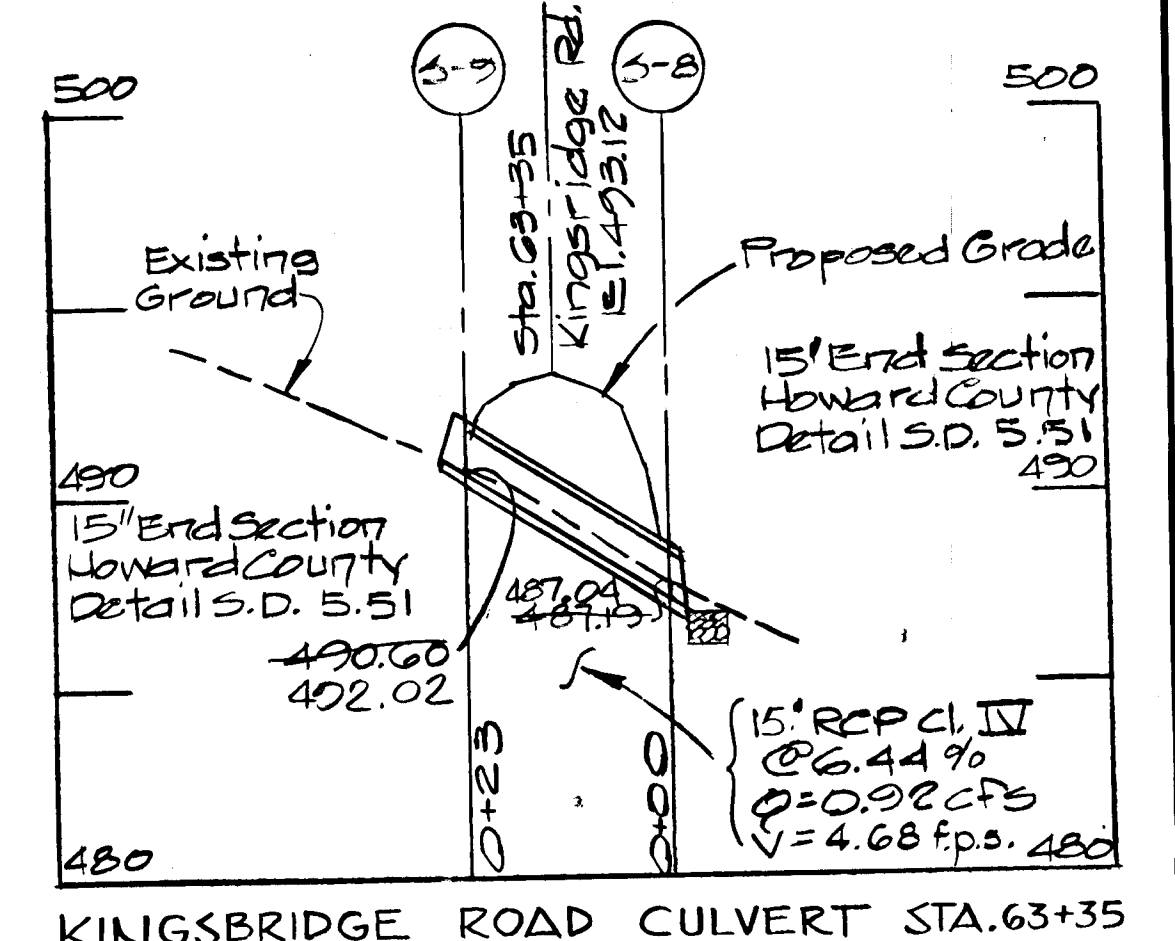
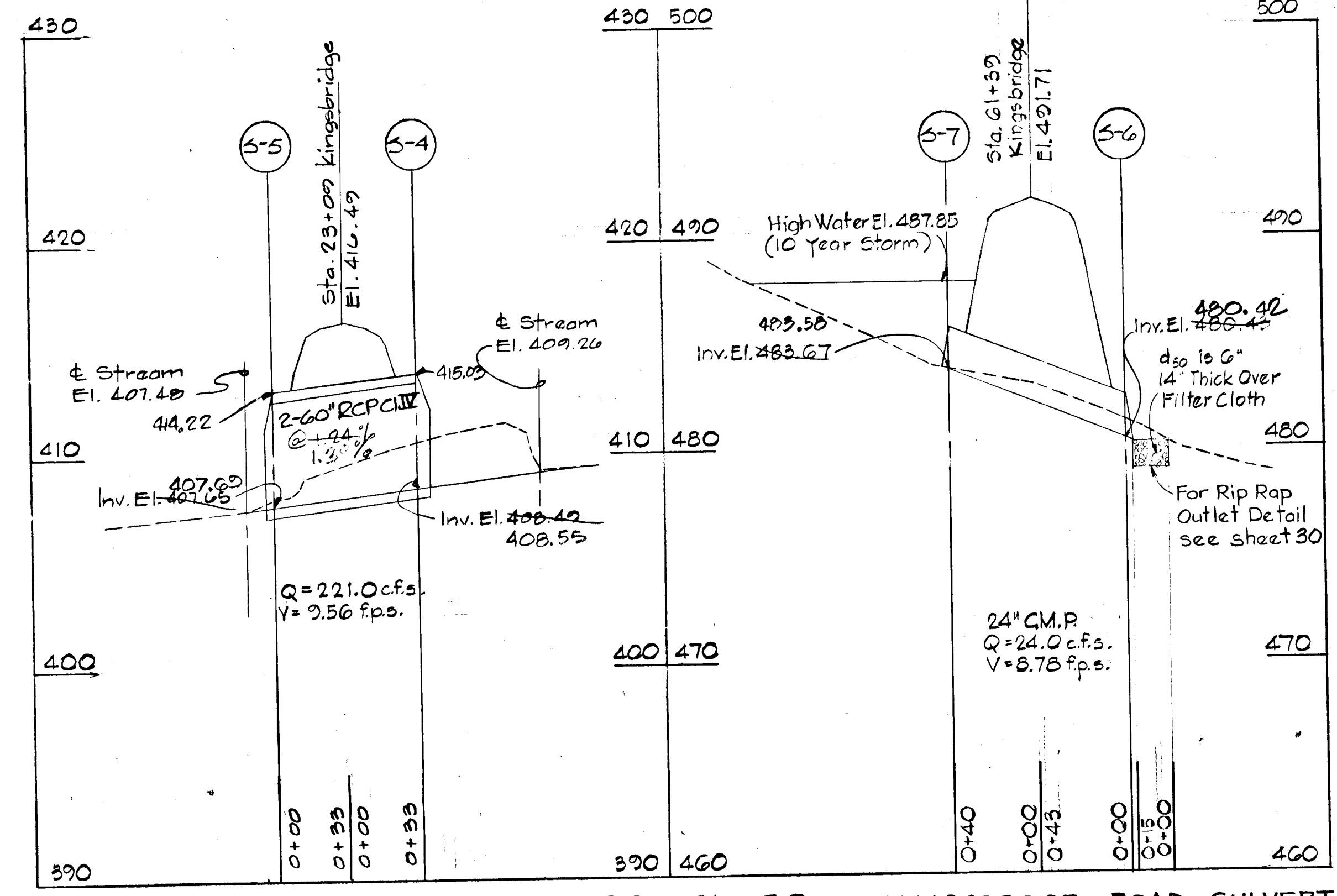
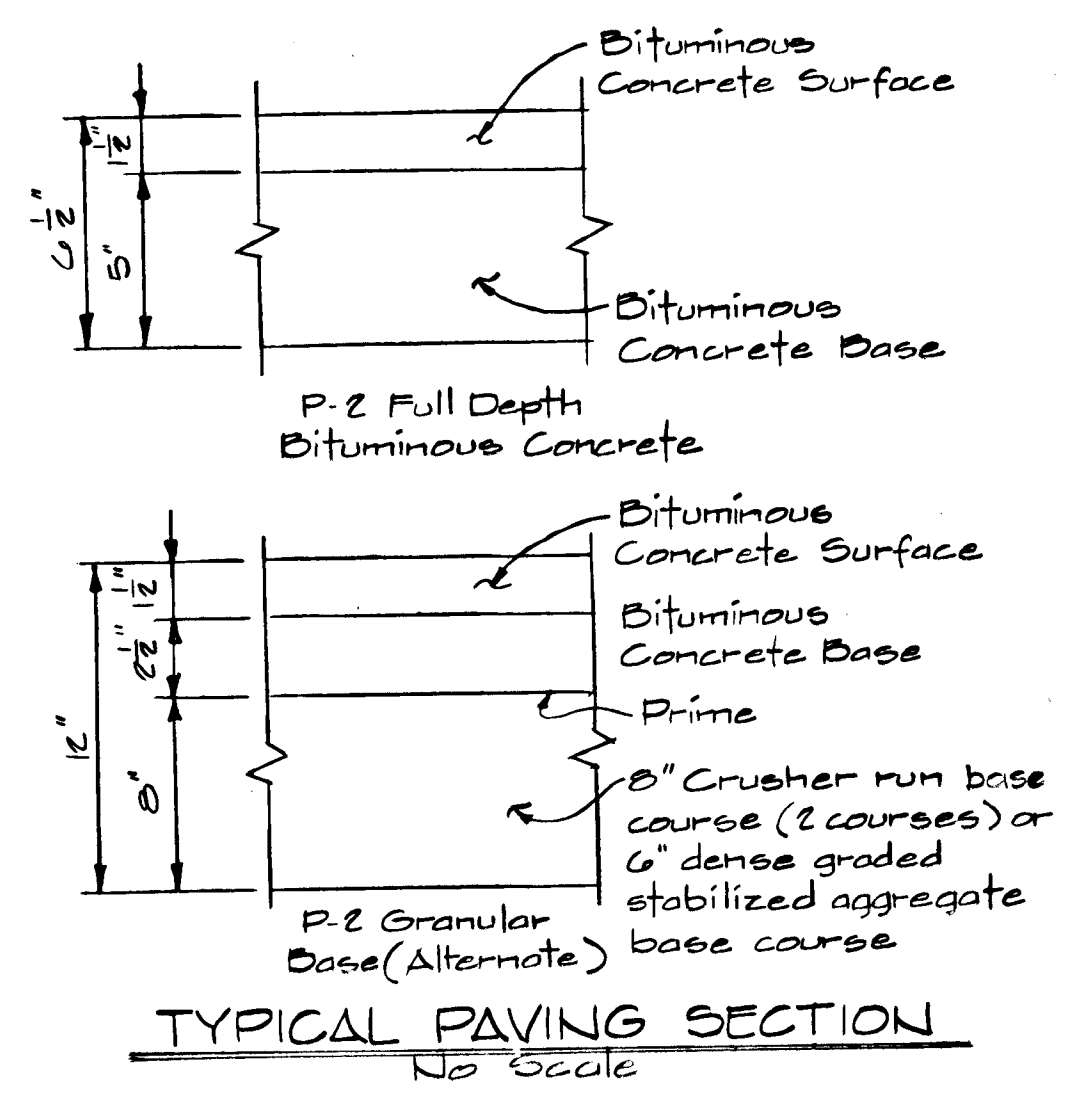
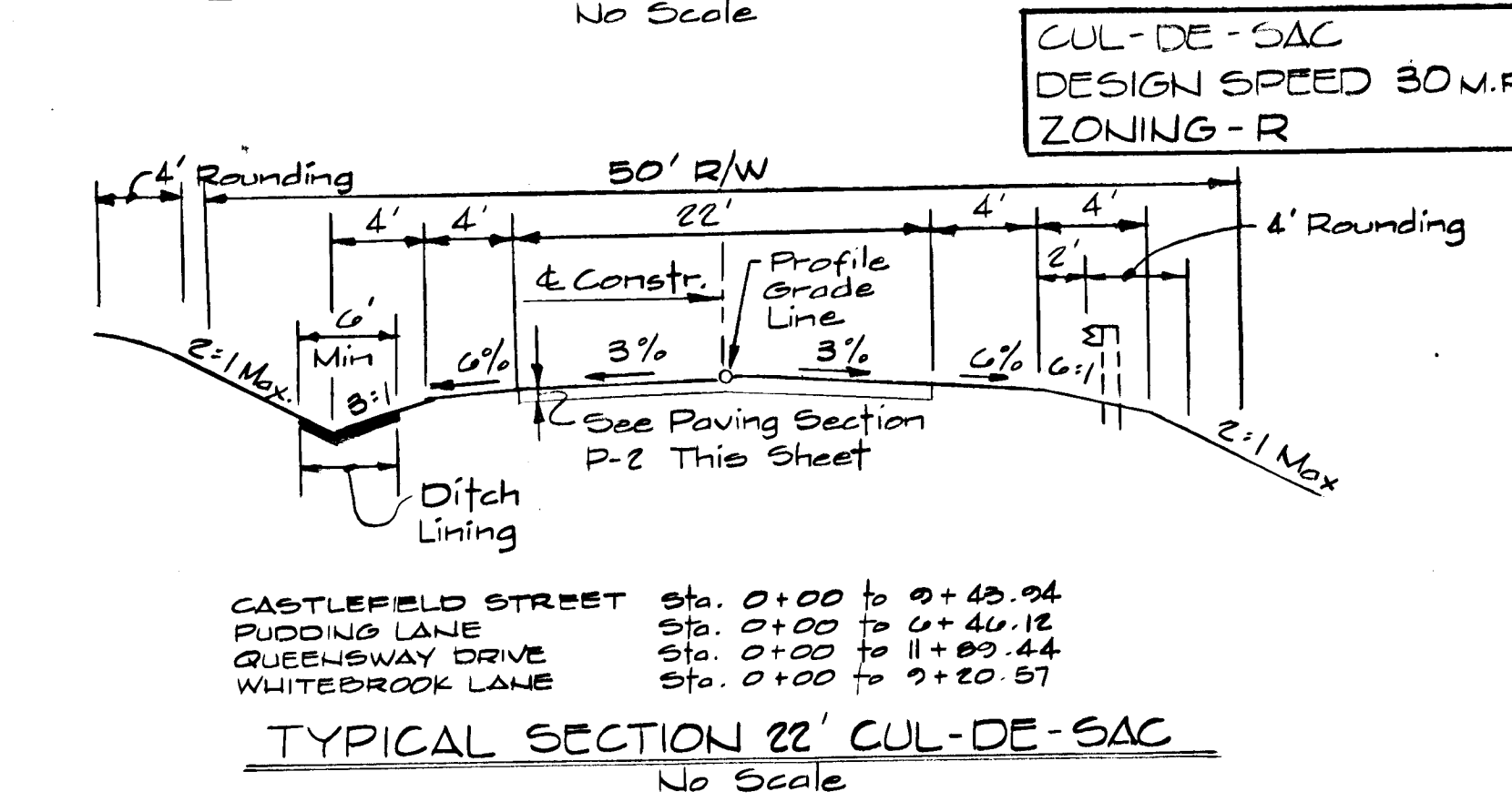
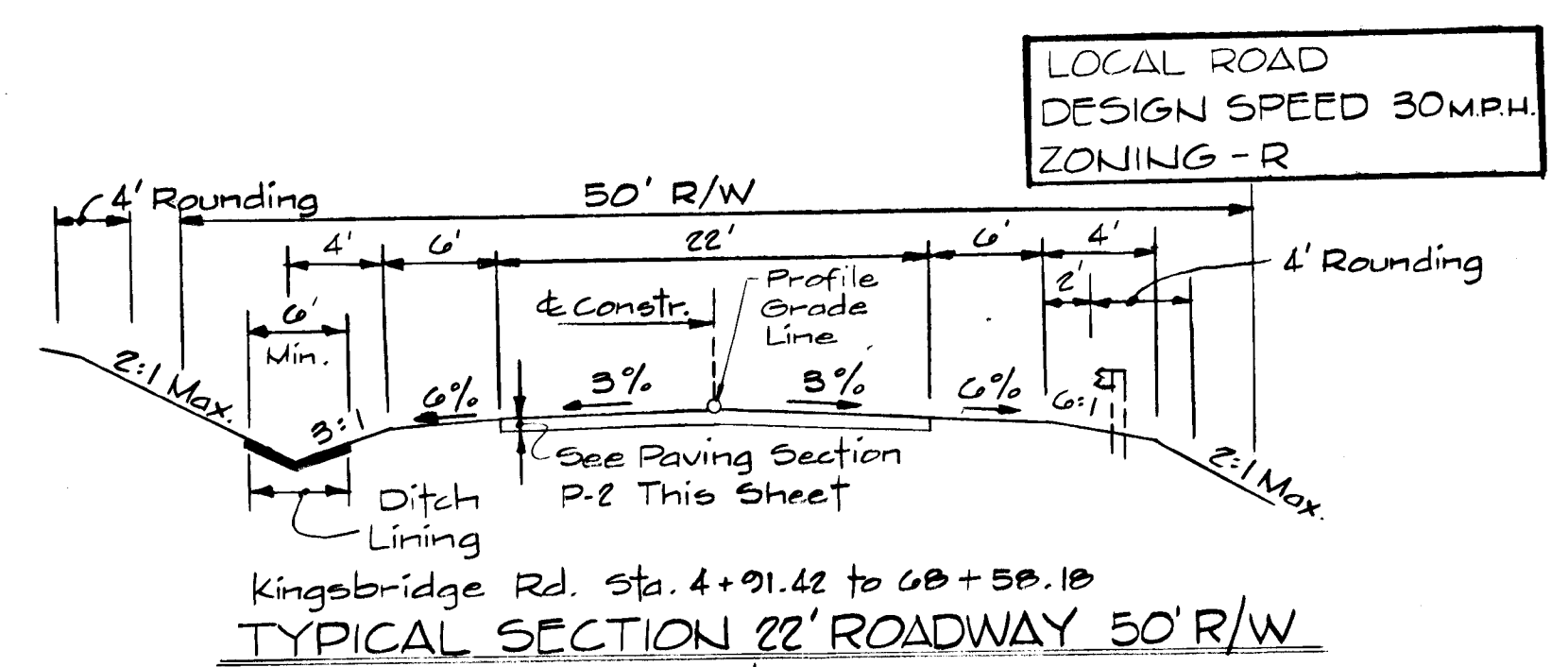
Paul D. Sporn 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Drumville W. Weiland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

K. S. ... 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

Mark S. ... 2-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORP.		
PROJECT AREA: BURLEIGH MANOR SECTION 2		
PROJECT TITLE: ROAD DETAILS, CULVERT and STORM DRAIN PROFILES		
SCALE: AS SHOWN		DATE: 3/4/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Kenneth A. McCord</i> KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

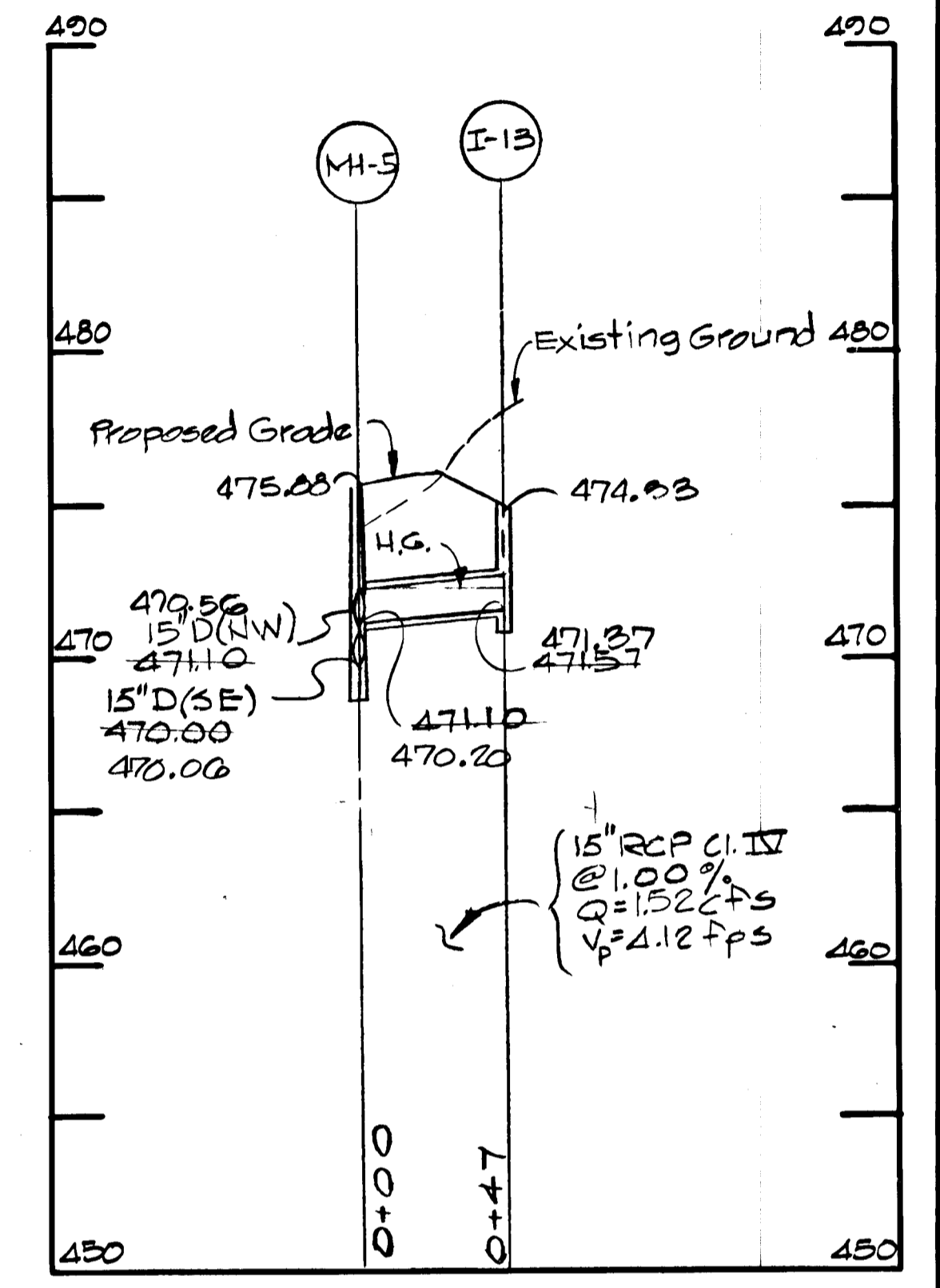
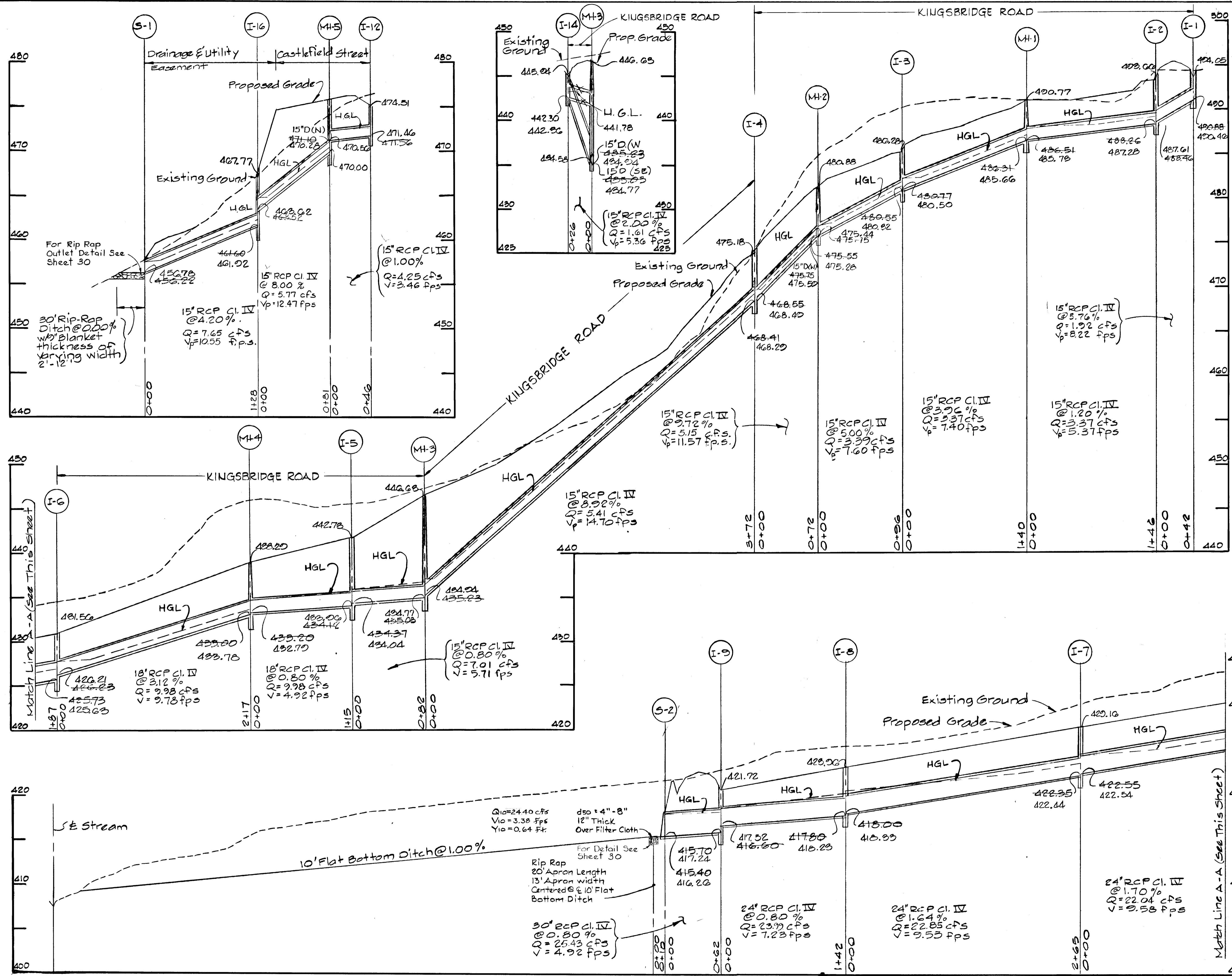
Paul J. ... 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Drew ... 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

... 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

... 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



PROFILES
 SCALE; HOR. 1" = 50'
 VER. 1" = 5'

REV. DATE	REV. NO.	REVISION DESCRIPTION
010.01	1	REVISED PER COMMENTS

BURLEIGH MANOR
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 G.R. DEVELOPMENT CORP.

PROJECT AREA:
BURLEIGH MANOR
 SECTION 2

PROJECT TITLE:
STORM DRAIN PROFILES

SCALE: Hor. 1"=50', Vert. 1"=5' DATE: 3-4-88

WHITMAN, REQUARDT AND ASSOCIATES
 ENGINEERS
 BALTIMORE, MARYLAND

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER NO. 1974

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

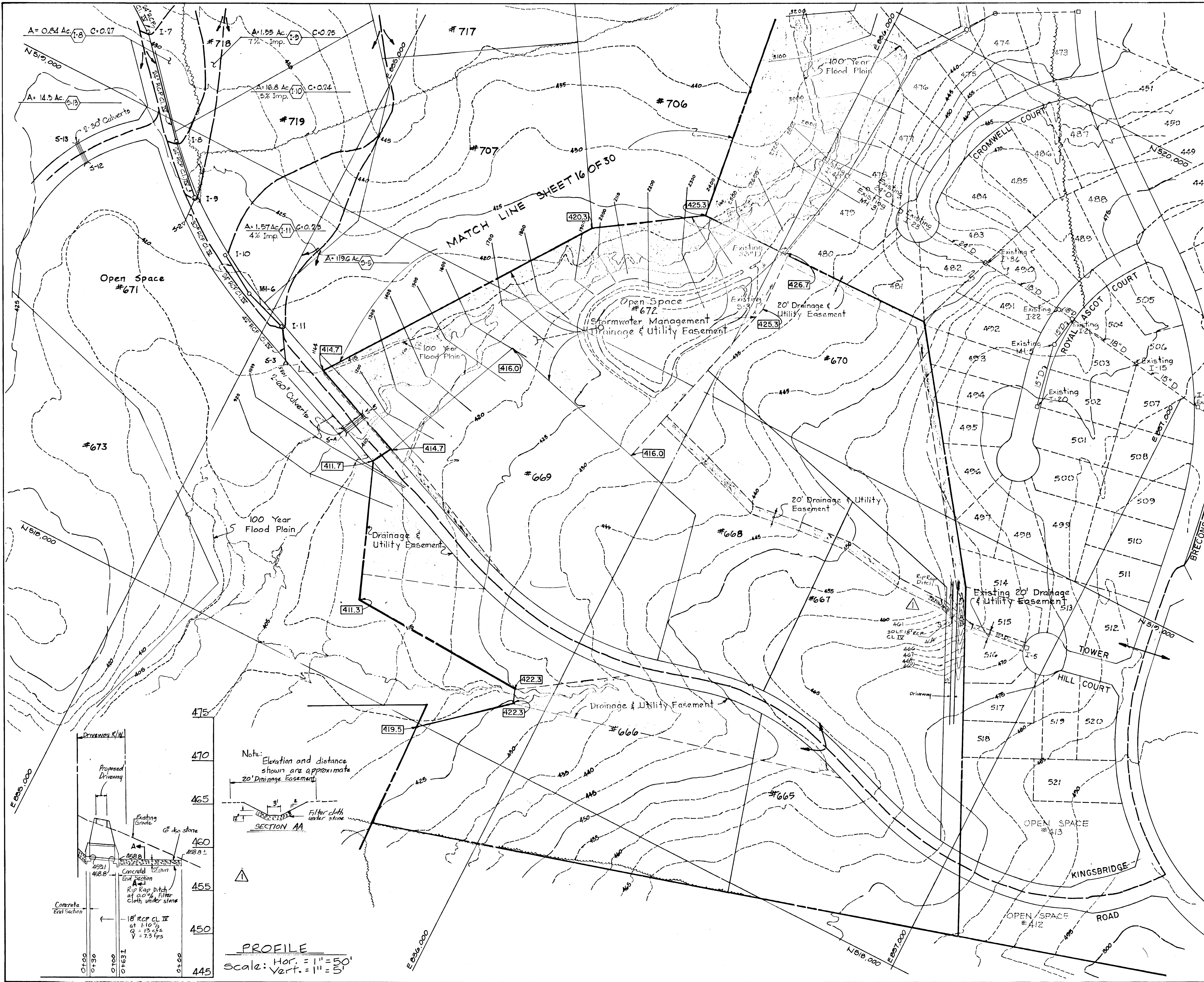
Paul D. Deppa 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Lawrence W. Welland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

William E. Reilly 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

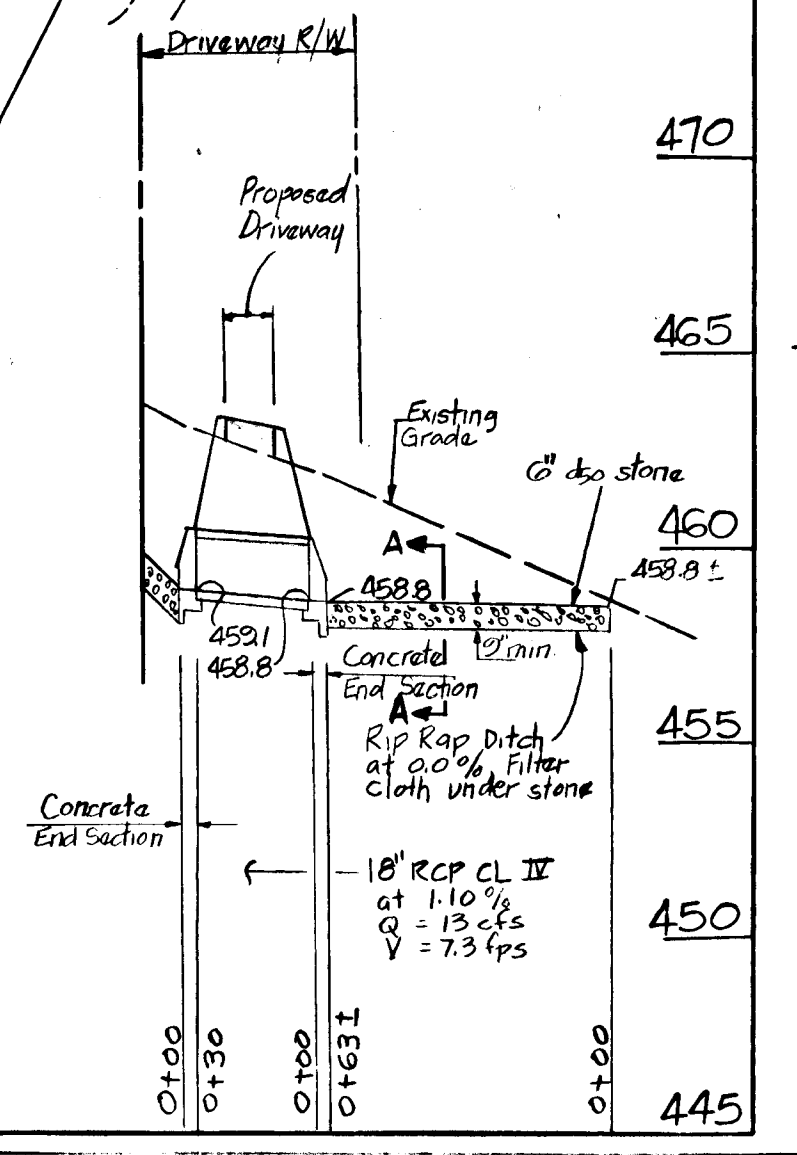
OFFICE OF PLANNING AND ZONING

Janice S. McLaughlin 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



Note: Elevation and distance shown are approximate 20' Drainage Easement

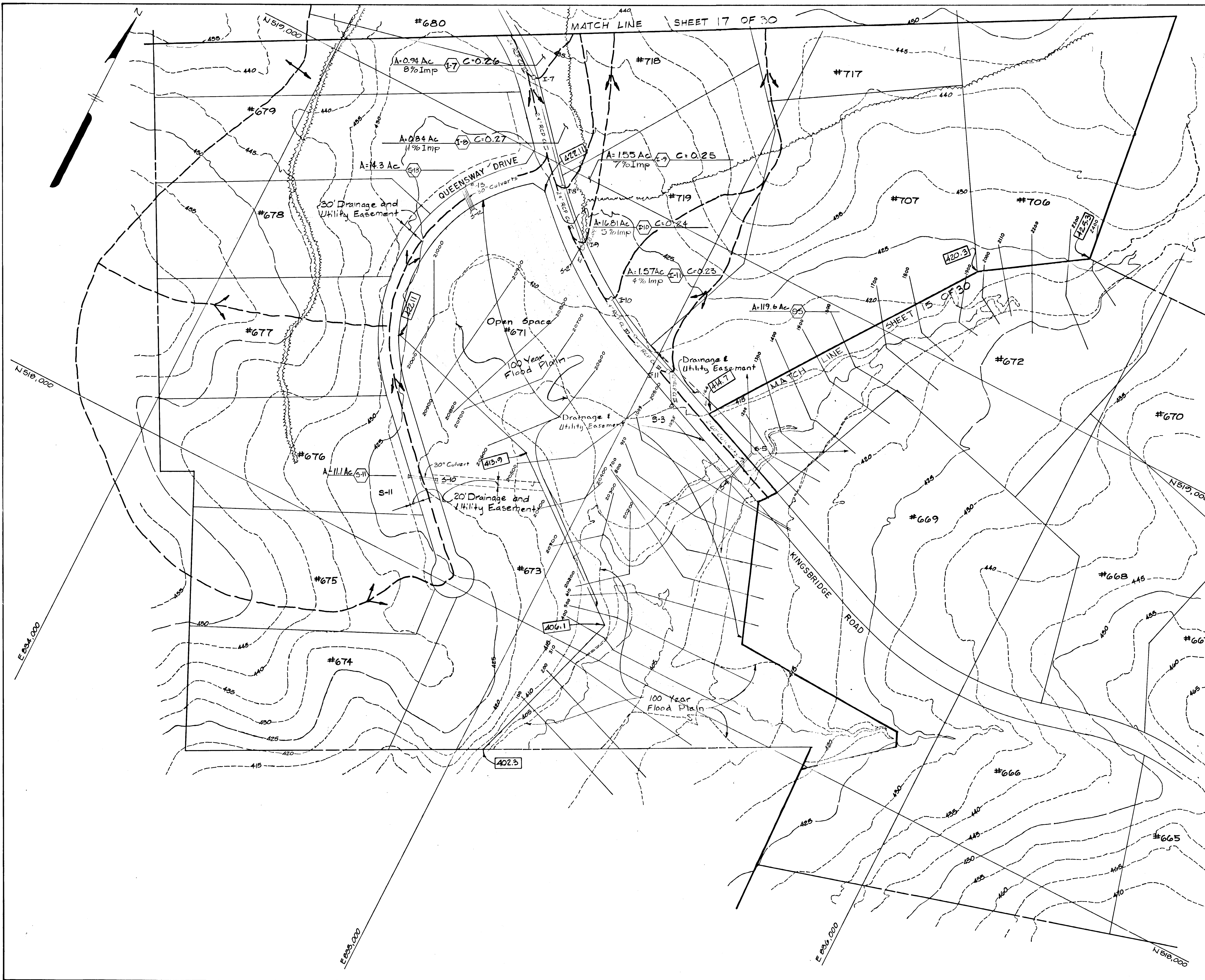
SECTION AA



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

6/12/92	1	Added Storm Drain
REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR		
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT TITLE DRAINAGE AREA MAP		
SCALE: 1" = 100'		DATE 3/4/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Fennell D. McLaughlin</i> REGISTERED ENGINEER NO. 1974		

122



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Paul J. [Signature] 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Orville W. Weiland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

William E. [Signature] 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

Mark S. [Signature] 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT TITLE DRAINAGE AREA MAP		
SCALE 1" = 100'		DATE 3-14-88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Kenneth A. [Signature]</i> REGISTERED ENGINEER NO. 1974		

122

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

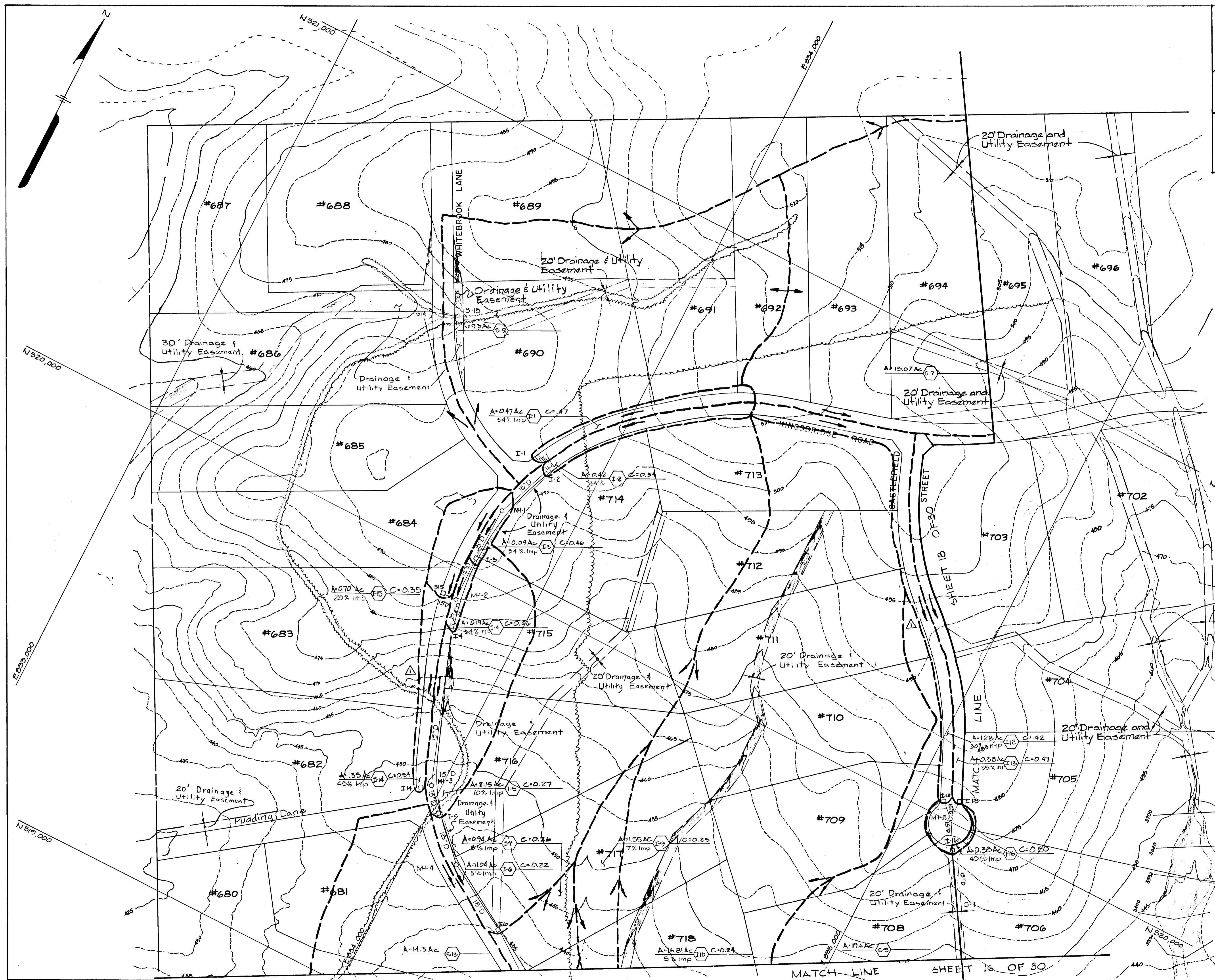
Paul D. Lyon 7/8/88
 CALLS: LAND DEVELOPMENT DIVISION DATE

Drumville W. Wileland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

William S. R. Day 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

Frank S. Langley 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



5-15-82	△	Remove Easement on Lots #683/711
REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR		
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORPORATION		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT 11111 DRAINAGE AREA MAP		
SCALE: 1"=100'		DATE 3/14/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Kenneth D. McLeod</i>		REGISTERED ENGINEER NO 1974

MATCH LINE SHEET 16 OF 30

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Paul J. Gagnon 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Devonville W. Welland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

William B. Ray 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

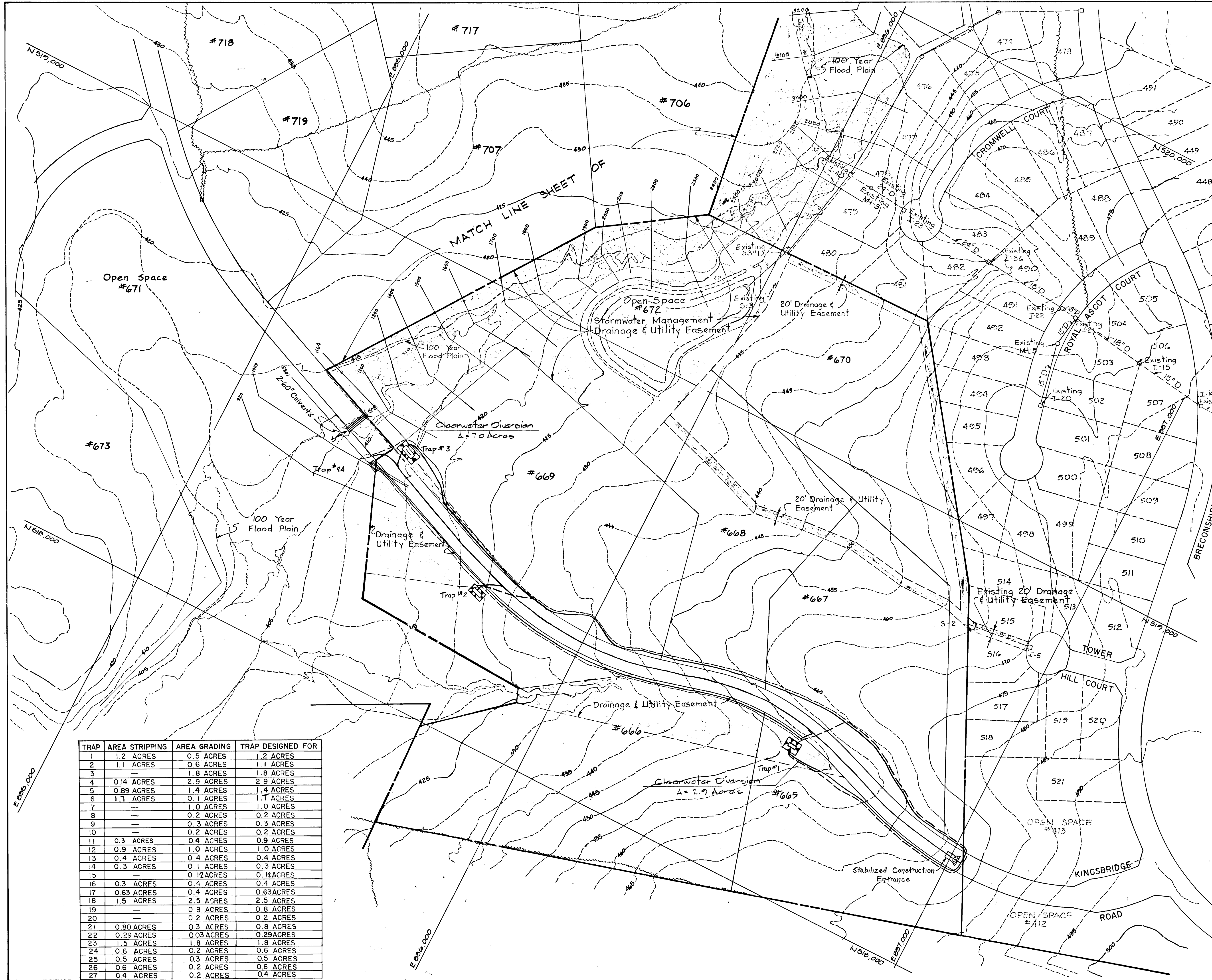
Frank J. J. Layton 7-2-88
 CHIEF, DIVISION OF COUNTY PLANNING AND LAND DEVELOPMENT DATE



5-15-88	Remove Easement on Lot #711
REV. DATE	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
DEVELOPER G.R. DEVELOPMENT CORPORATION	
PROJECT AREA BURLEIGH MANOR SECTION 2	
PROJECT TITLE DRAINAGE AREA MAP	
SCALE 1"=100'	DATE 3/14/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND	
<i>Jennett A. McLeod</i> REGISTERED ENGINEER NO. 1974	

121

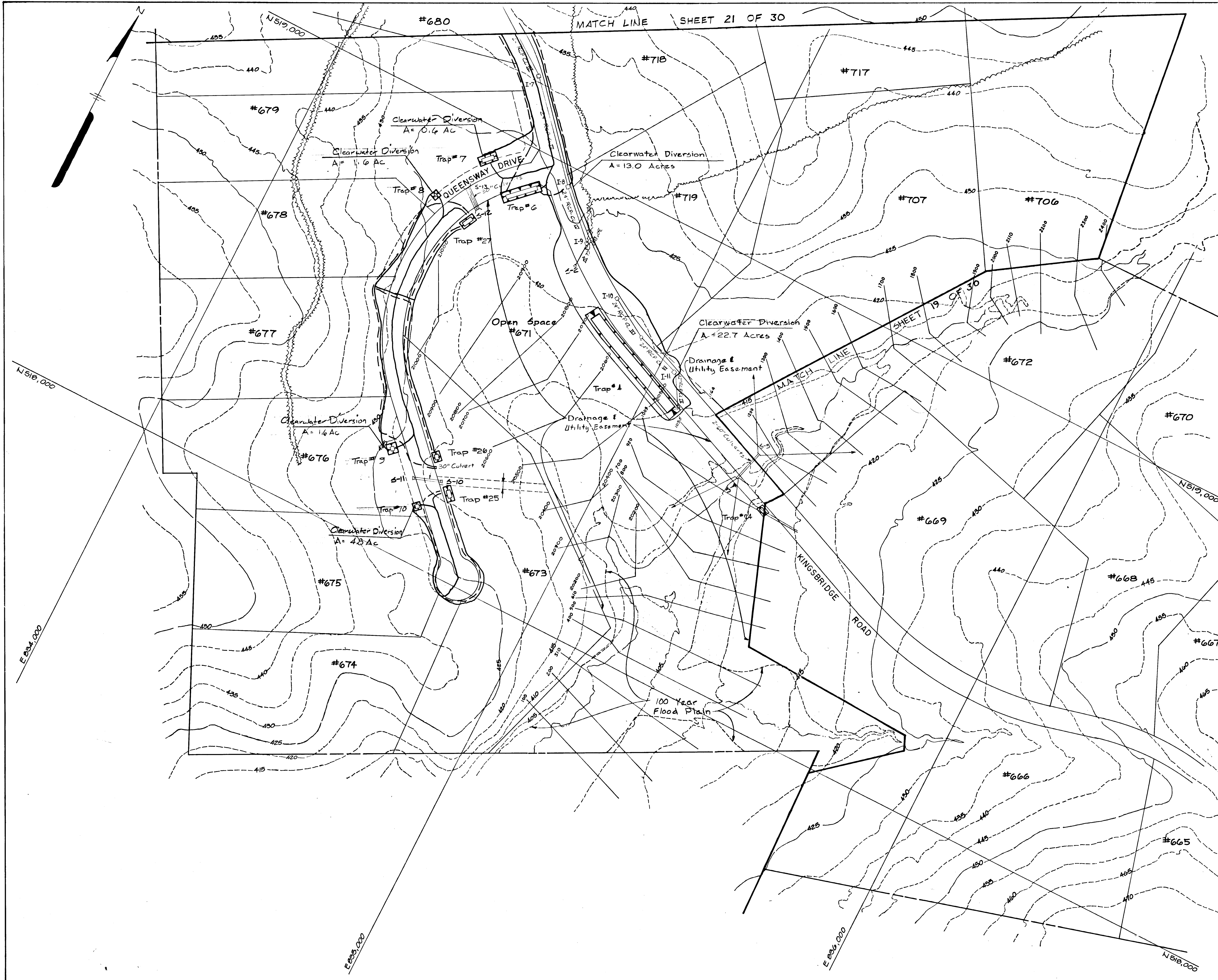
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Phillip Legum 7/8/88 DATE
 CHIEF, LAND DEVELOPMENT DIVISION
Drewille W. Wellwood 7/15/88 DATE
 CHIEF, BUREAU OF HIGHWAYS
Kenneth E. Row 7-15-88 DATE
 CHIEF, BUREAU OF ENGINEERING
 OFFICE OF PLANNING AND ZONING
Janice S. J. Langley 7-21-88 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



TRAP	AREA STRIPPING	AREA GRADING	TRAP DESIGNED FOR
1	1.2 ACRES	0.5 ACRES	1.2 ACRES
2	1.1 ACRES	0.6 ACRES	1.1 ACRES
3	—	1.8 ACRES	1.8 ACRES
4	0.14 ACRES	2.9 ACRES	2.9 ACRES
5	0.89 ACRES	1.4 ACRES	1.4 ACRES
6	1.7 ACRES	0.1 ACRES	1.1 ACRES
7	—	1.0 ACRES	1.0 ACRES
8	—	0.2 ACRES	0.2 ACRES
9	—	0.3 ACRES	0.3 ACRES
10	—	0.2 ACRES	0.2 ACRES
11	0.3 ACRES	0.4 ACRES	0.9 ACRES
12	0.9 ACRES	1.0 ACRES	1.0 ACRES
13	0.4 ACRES	0.4 ACRES	0.4 ACRES
14	0.3 ACRES	0.1 ACRES	0.3 ACRES
15	—	0.12 ACRES	0.12 ACRES
16	0.3 ACRES	0.4 ACRES	0.4 ACRES
17	0.63 ACRES	0.4 ACRES	0.63 ACRES
18	1.5 ACRES	2.5 ACRES	2.5 ACRES
19	—	0.8 ACRES	0.8 ACRES
20	—	0.2 ACRES	0.2 ACRES
21	0.80 ACRES	0.3 ACRES	0.8 ACRES
22	0.29 ACRES	0.03 ACRES	0.29 ACRES
23	1.5 ACRES	1.8 ACRES	1.8 ACRES
24	0.6 ACRES	0.2 ACRES	0.6 ACRES
25	0.5 ACRES	0.3 ACRES	0.5 ACRES
26	0.6 ACRES	0.2 ACRES	0.6 ACRES
27	0.4 ACRES	0.2 ACRES	0.4 ACRES

REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT TITLE DRAINAGE AREA MAP FOR SEDIMENT CONTROL		
SCALE: 1" = 100'		DATE 3/4/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Kenneth O. McCord</i> KENNETH O. MCCORD REGISTERED ENGINEER NO. 1974		

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APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Paul B. Egan 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Lawrence W. Wescott 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

William E. Pugh 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

Janice S. McLaughlin 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR		
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT TITLE DRAINAGE AREA MAP FOR SEDIMENT CONTROL		
SCALE 1" = 100'		DATE 3/14/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Kenneth C. McLaughlin</i>		REGISTERED ENGINEER NO. 1974
REGISTERED ENGINEER NO. 1974		

121

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

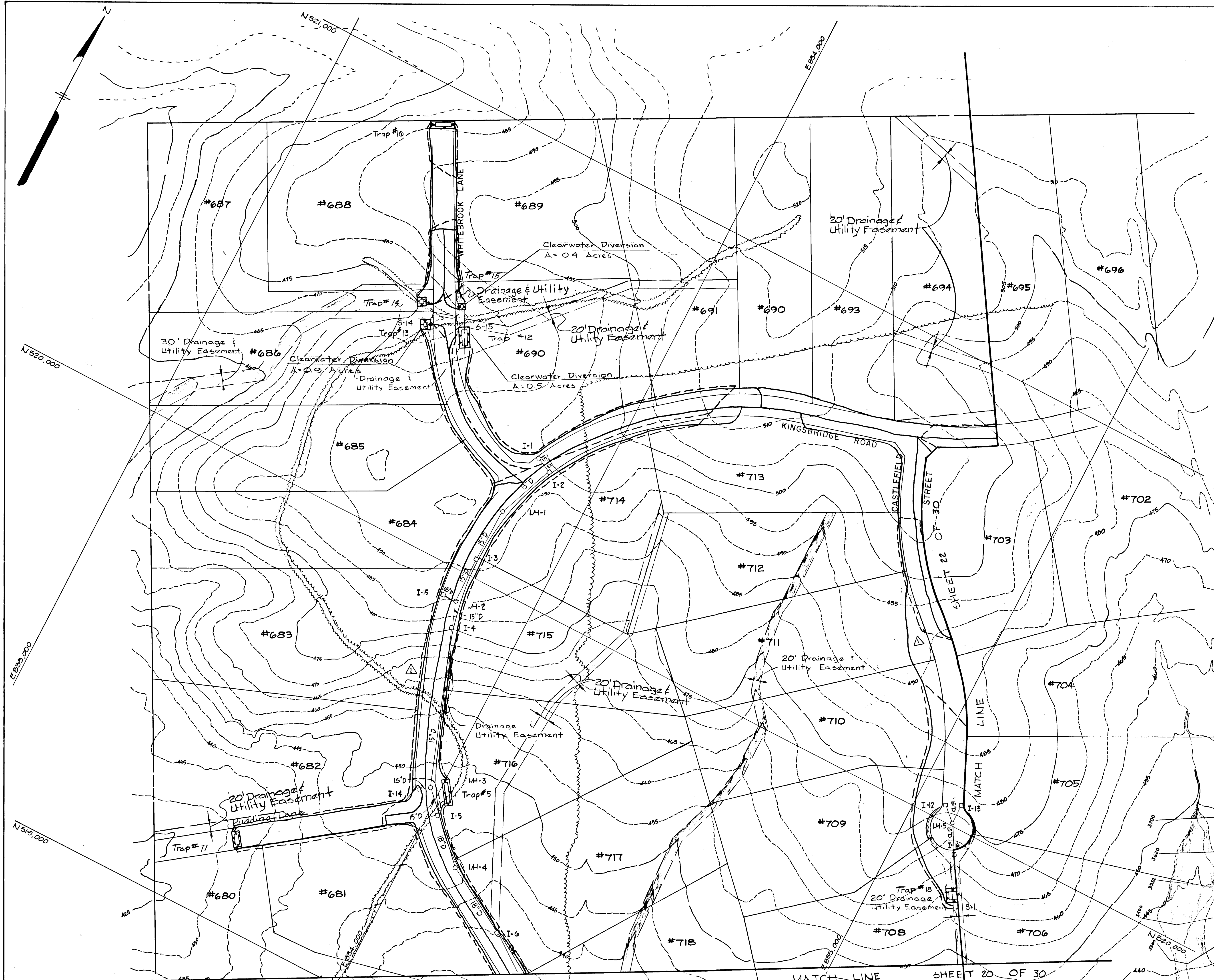
Paul J. Ryan 7/8/88
 CHIEF, LAND DIVISION DATE

Lawrence W. Welstead 1/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

William E. Raley 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

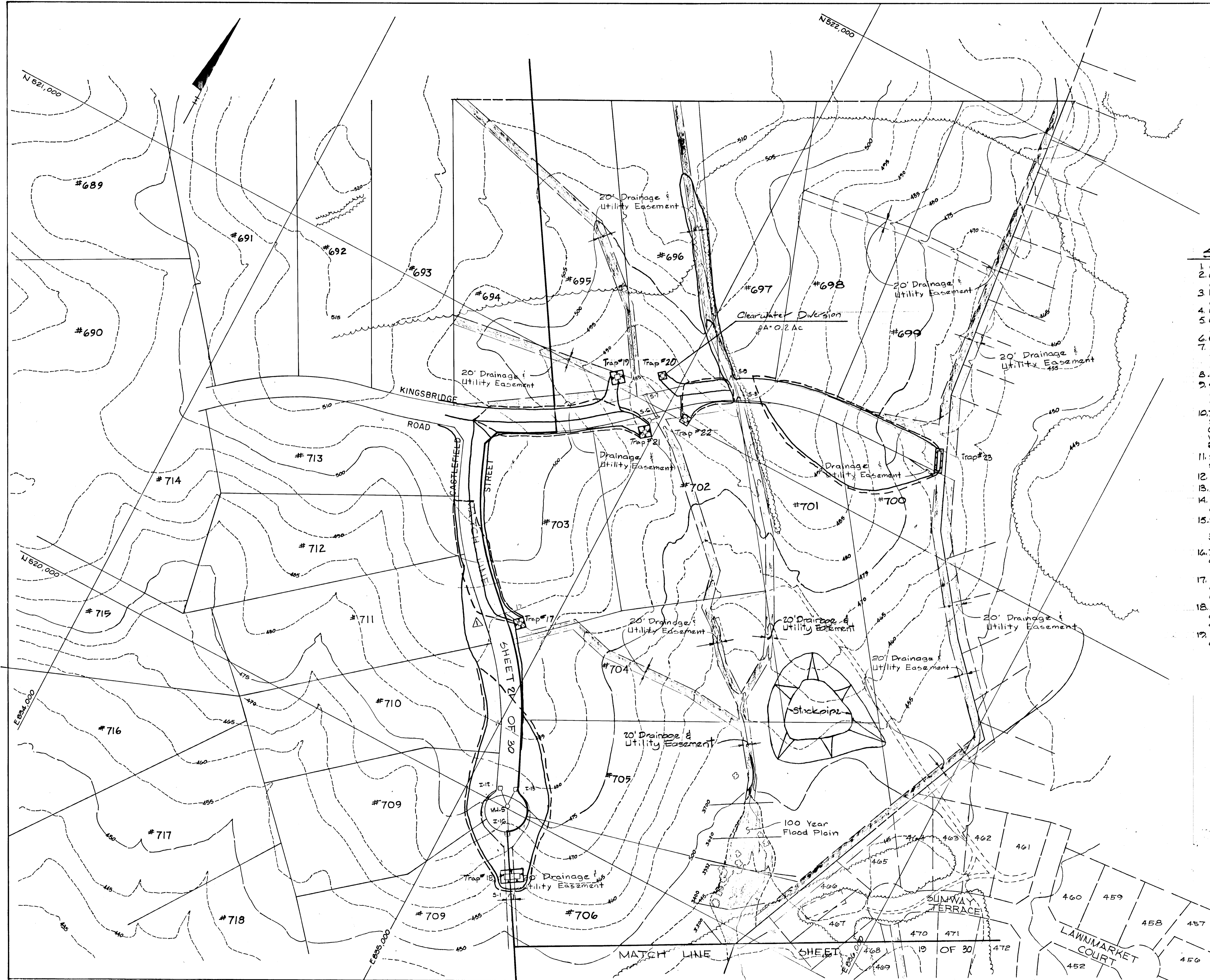
Janice S. Langley 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



5-15-92	Remove Easement on Lots 680/711
REV. DATE	REVISION DESCRIPTION
BURLEIGH MANOR	
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
DEVELOPER G.R. DEVELOPMENT CORPORATION	
PROJECT AREA: BURLEIGH MANOR SECTION 2	
PROJECT TITLE DRAINAGE AREA MAP FOR SEDIMENT CONTROL	
SCALE: 1"=100'	DATE 3/14/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND	
<i>Annist C. McLeod</i> REGISTERED ENGINEER NO. 1974	

122

MATCH LINE SHEET 20 OF 30



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>Paul J. Ryan</i> CHIEF, LAND DEVELOPMENT DIVISION	7/8/88 DATE
<i>Draville W. Weiland</i> CHIEF, BUREAU OF HIGHWAYS	7/15/88 DATE
<i>William J. Ray</i> CHIEF, BUREAU OF ENGINEERING	7-15-88 DATE
OFFICE OF PLANNING AND ZONING	
<i>Frank J. McLaughlin</i> CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	7-21-88 DATE

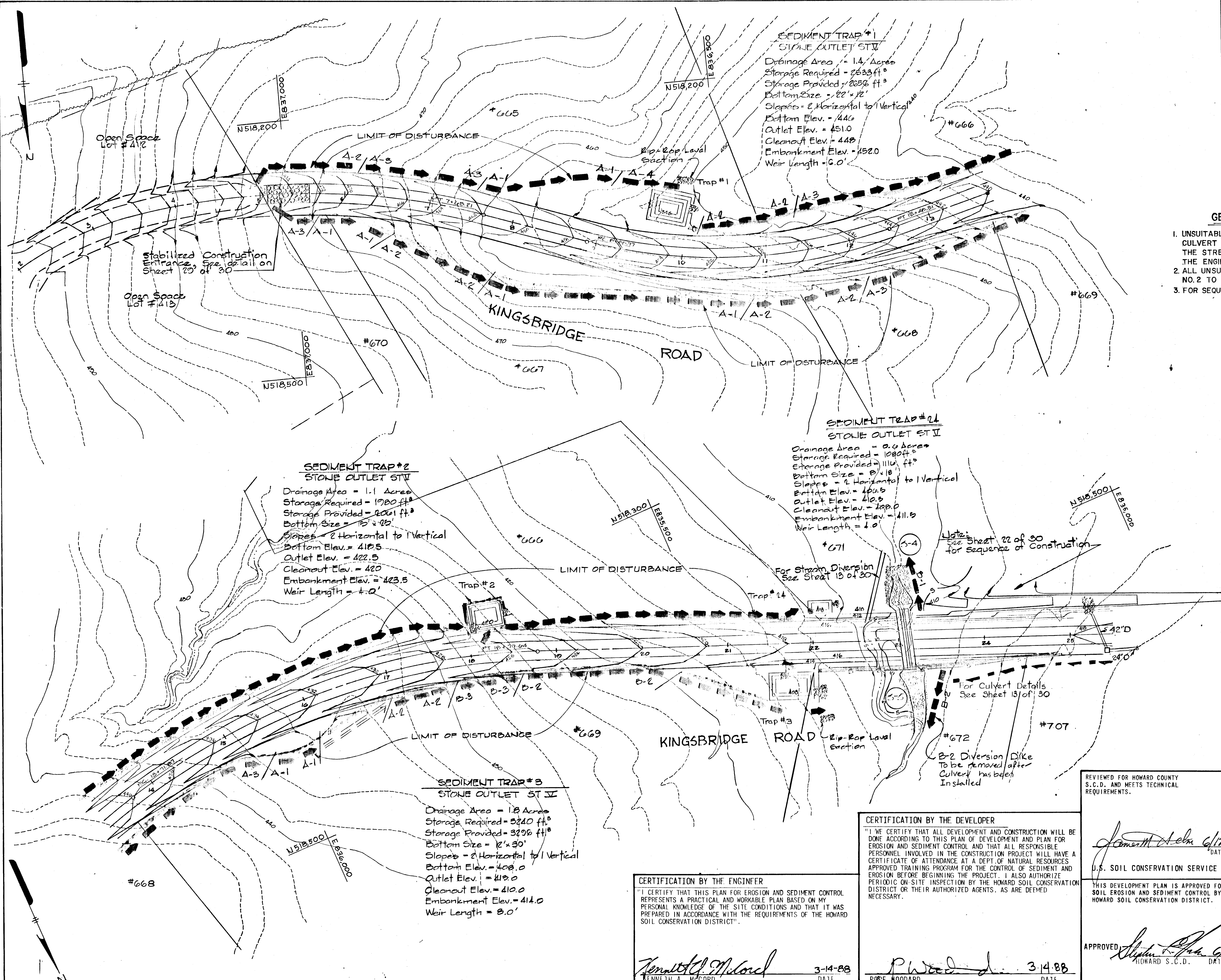
SEQUENCE OF CONSTRUCTION

1. Obtain Grading Permit.
2. Clear and grub for sediment and erosion control measures and devices. (2 Weeks)
3. Install and stabilize all sediment and erosion control measures and devices. (4 Weeks)
4. Clear and grub for all culverts. (1 Week)
5. Construct stream diversion for dual 60" culvert on Kingsbridge Road. (1 Week)
6. Construct dual 60" culvert. (6 Week)
7. Construct all remaining culverts, with silt fence at culvert outlet and diversion dikes at the culvert inlet. (4 Weeks)
8. Clear and grub limits of construction. (4 weeks)
9. Strip and rough grade limits of construction, except for 10' flat bottom ditch from left of Sta. 23+30 to Sta. 25+00. (8 Weeks)
10. Install temporary swales at Sta. 25+50 Sta. 29+82 Kingsbridge Road, Sta. 1+00 Queensway Drive, Sta. 3+00 and Sta. 5+10 Whitebrook Lane and Sta. 62+15 Kingsbridge Road. (1 day)
11. Seed all slopes with temporary seeding, see seeding notes on sheet 29 of 30. (1 week)
12. Construct storm drain system. (3 weeks)
13. Remove temporary swales. (1 day)
14. Fine grade paved areas and construct ditches and paving. (8 Weeks)
15. Seed disturbed areas with permanent seeding, see seeding notes on sheet 29 of 30. (2 weeks)
16. Install silt fence at end of 10' flat bottom ditch, and construct remainder of ditch from left of Sta. 23+30 to Sta. 25+00. (3 days)
17. Seed 10' flat bottom ditch with permanent seeding, see ditch detail and seeding notes on sheet 29 of 30. (1 week)
18. Remove sediment trap #4 after 10' flat bottom ditch along Kingsbridge Road is stabilized and complete grading of ditch. (1 day)
19. Remove temporary sediment control measures, and stabilize any remaining areas. (2 weeks)

5-15-82 REV. DATE	△ REV. NO.	Remove Easement on Lot #11 REVISION DESCRIPTION
BURLEIGH MANOR		
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORPORATION		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT TITLE DRAINAGE AREA MAP FOR SEDIMENT CONTROL		
SCALE: 1"=100'		DATE 3/14/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Kenneth A. McLeod</i> REGISTERED ENGINEER NO. 1974		

122

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 7/8/88
 DATE
 CHIEF, LAND DEVELOPMENT DIVISION
 7/5/88
 DATE
 CHIEF, BUREAU OF HIGHWAYS
 7-15-88
 DATE
 CHIEF, BUREAU OF ENGINEERING
 OFFICE OF PLANNING AND ZONING
 7-21-88
 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



- GENERAL CONSTRUCTION NOTES**
- UNSUITABLE MATERIAL SHALL BE REMOVED FROM BELOW CULVERT FOUNDATION, CULVERT PIPE AND ROAD FILLS IN THE STREAM AREA TO A DEPTH TO BE DETERMINED BY THE ENGINEER.
 - ALL UNSUITABLE MATERIAL SHALL BE REPLACED BY NO. 2 TO NO. 4 STONE.
 - FOR SEQUENCE OF CONSTRUCTION, SEE SHEET 22 OF 30.

REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2 AREA		
PROJECT TITLE SEDIMENT CONTROL		
SCALE: 1" = 50'		DATE: 3/4/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		

CERTIFICATION BY THE ENGINEER
 "I 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".
 Kenneth A. McCord
 3-14-88
 DATE

CERTIFICATION BY THE DEVELOPER
 "I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
 Kenneth A. McCord
 3-14-88
 DATE

REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
 Kenneth A. McCord
 6/17/88
 DATE
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Kenneth A. McCord
 3-14-88
 DATE

122

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Paul H. Hagan 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Francis W. Welland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE

William E. Ray 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING

Frank S. J. Long 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

SEDIMENT TRAP #10
 STONE OUTLET ST V
 Drainage Area 0.2 Acres
 Storage Required 360 ft³
 Storage Provided 407 ft³
 Bottom Size 11.0' x 11.0'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 419.0'
 Outlet Elev. 421.8
 Cleanout Elev. 419.9
 Embankment Elev. 422.8
 Weir Length 4.0'

SEDIMENT TRAP #9
 STONE OUTLET ST V
 Drainage Area 0.3 Acres
 Storage Required 540 ft³
 Storage Provided 555 ft³
 Bottom Size 16.0' x 16.0'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 421.0
 Outlet Elev. 423.5
 Cleanout Elev. 421.8
 Embankment Elev. 424.5
 Weir Length 4.0'

SEDIMENT TRAP #27
 STONE OUTLET ST V
 Drainage Area 0.4 Acres
 Storage Required 720 ft³
 Storage Provided 756 ft³
 Bottom Size 6' x 12'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 417.8
 Outlet Elev. 421.8
 Cleanout Elev. 419.3
 Embankment Elev. 422.8
 Weir Length 4.0'

SEDIMENT TRAP #8
 STONE OUTLET ST V
 Drainage Area 0.2 Acres
 Storage Required 360 ft³
 Storage Provided 407 ft³
 Bottom Size 11.0' x 11.0'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 420.7
 Outlet Elev. 423.5
 Cleanout Elev. 421.6
 Embankment Elev. 424.5
 Weir Length 4.0'

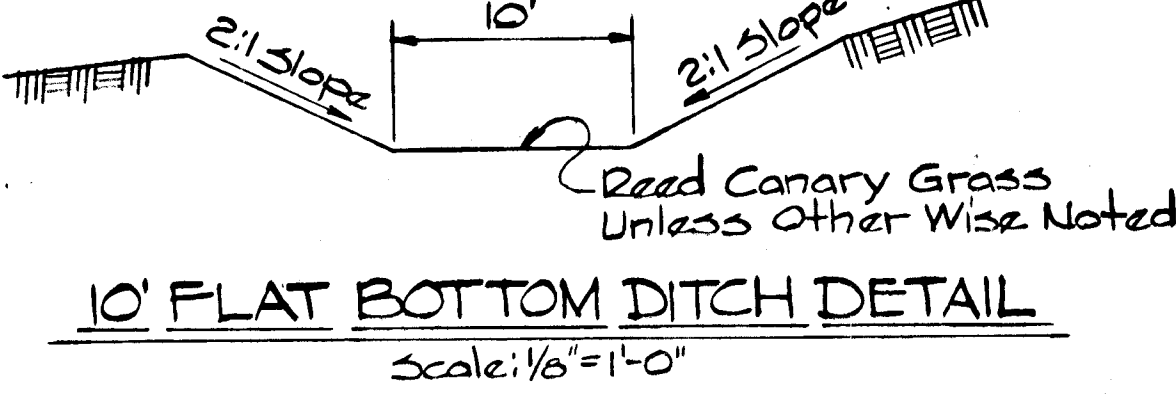
SEDIMENT TRAP #25
 STONE OUTLET ST V
 Drainage Area 0.5 Acres
 Storage Required 900 ft³
 Storage Provided 972 ft³
 Bottom Size 6.0' x 18.0'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 415.0'
 Outlet Elev. 419.0
 Cleanout Elev. 416.5
 Embankment Elev. 420.0
 Weir Length 4.0'

SEDIMENT TRAP #26
 STONE OUTLET ST V
 Drainage Area 0.6 Acres
 Storage Required 1080 ft³
 Storage Provided 1116 ft³
 Bottom Size 8.0' x 18.0'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 415.0
 Outlet Elev. 419.0
 Cleanout Elev. 416.5
 Embankment Elev. 420.0
 Weir Length 4.0'

SEDIMENT TRAP #6
 STONE OUTLET ST V
 Drainage Area 1.7 Acres
 Storage Required 2040 ft³
 Storage Provided 2580 ft³
 Bottom Size 8.0' x 70.0'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 418.0
 Outlet Elev. 422.0
 Cleanout Elev. 417.5
 Embankment Elev. 423.0
 Weir Length 8.0'

SEDIMENT TRAP #7
 STONE OUTLET ST V
 Drainage Area 1.0 Acres
 Storage Required 1800 ft³
 Storage Provided 1832 ft³
 Bottom Size 16.0' x 41'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 420.5
 Outlet Elev. 423.5
 Cleanout Elev. 422.0
 Embankment Elev. 424.5
 Weir Length 4.0'

SEDIMENT TRAP #4
 STONE OUTLET ST V
 Drainage Area 2.0 Accs.
 Storage Required 5220 ft³
 Storage Provided 5372 ft³
 Bottom Size 10'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 411.35
 Outlet Elev. 415.0
 Cleanout Elev. 412.35
 Embankment Elev. 416.00
 Weir Length 12.0'



Seed Canary Grass
 Unless Other Wize Noted.

10' Flat Bottom Ditch
 See Detail This Sheet

CERTIFICATION BY THE DEVELOPER
 "I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

James M. McLean 6/17/88
 DATE

CERTIFICATION BY THE ENGINEER
 "I 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."

Kenneth A. McCord 3-14-88
 DATE

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

James M. McLean 6/17/88
 DATE

U.S. SOIL CONSERVATION SERVICE

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

APPROVED *James M. McLean* 6/17/88
 HOWARD S.C.D. DATE

REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2' AREA		
PROJECT TITLE SEDIMENT CONTROL		
SCALE: 1" = 50'		DATE 3/4/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
APPROVED <i>Kenneth A. McCord</i> KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		

James Woodard 3-14-88
 DATE

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

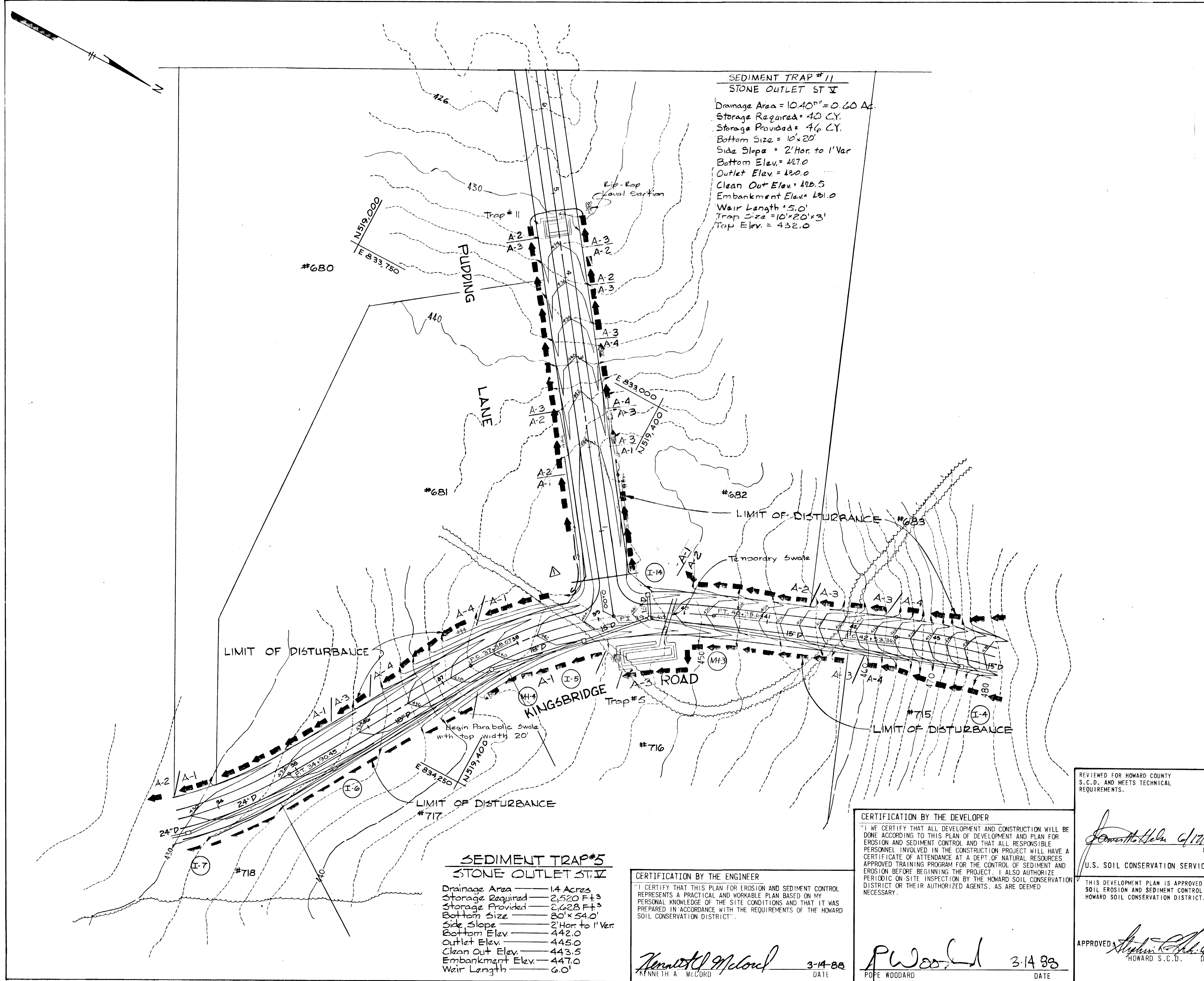
Paul L. Egan 7/8/88
 LAND DEVELOPMENT DIVISION DATE

Drewville W. Weiland 7/15/88
 CHIEF BUREAU OF HIGHWAYS DATE

William B. Riley 7-15-88
 CHIEF BUREAU OF ENGINEERING DATE

PLANNING AND ZONING

Marsha S. McLaughlin 7-21-88
 PLANNING AND ZONING DATE



122

8/21/82	△	Revise Sediment Control
REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G. R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT TITLE SEDIMENT CONTROL		
SCALE 1"=50'		DATE 3/4/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
APPROVED <i>Kenneth A. McCord</i> KENNETH A. MCCORD REGISTERED ENGINEER NO 1974		<i>Kenneth A. McCord</i> DATE

CERTIFICATION BY THE DEVELOPER

"I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

John H. Glick 6/17/88
 DATE

U.S. SOIL CONSERVATION SERVICE

CERTIFICATION BY THE ENGINEER

"I 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."

Kenneth A. McCord 3-14-88
 KENNETH A. MCCORD DATE

P. Woodard 3-14-88
 POPE WOODARD DATE

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

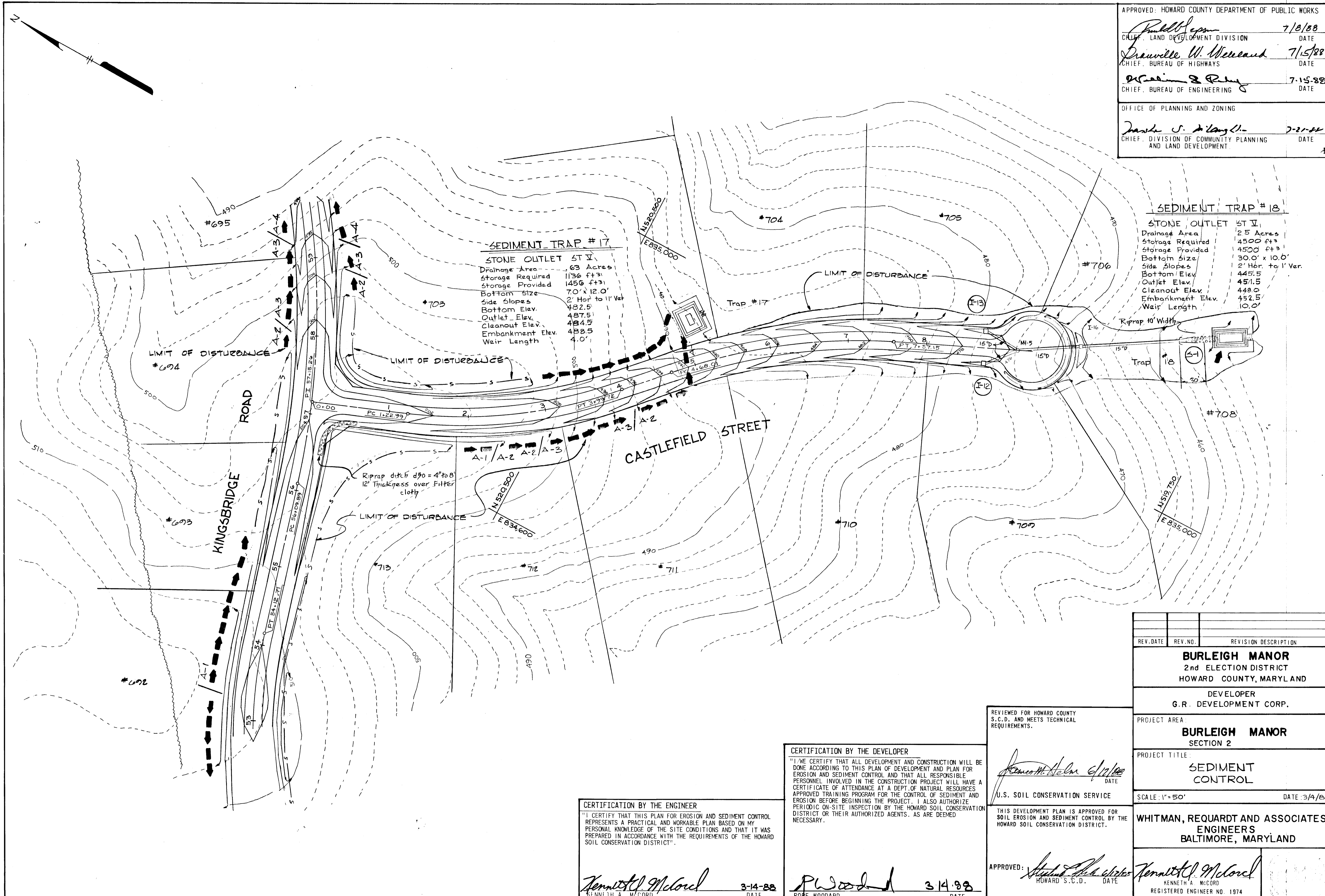
John H. Glick 6/17/88
 DATE

U.S. SOIL CONSERVATION SERVICE

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

Paul H. Egan 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE
David W. Welleand 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE
Michael S. Reilly 7-15-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING
Janet S. Langley 7-21-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



SEDIMENT TRAP #17
STONE OUTLET ST V
 Drainage Area 63 Acres
 Storage Required 1136 ft³
 Storage Provided 1456 ft³
 Bottom Size 7.0' x 12.0'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 482.5
 Outlet Elev. 484.5
 Cleanout Elev. 488.5
 Embankment Elev. 488.5
 Weir Length 4.0'

SEDIMENT TRAP #18
STONE OUTLET ST V
 Drainage Area 25 Acres
 Storage Required 4500 ft³
 Storage Provided 4500 ft³
 Bottom Size 30.0' x 10.0'
 Side Slopes 2' Hor. to 1' Ver.
 Bottom Elev. 445.5
 Outlet Elev. 451.5
 Cleanout Elev. 448.0
 Embankment Elev. 452.5
 Weir Length 10.0'

CERTIFICATION BY THE ENGINEER
 "I 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".
Kenneth A. McCord 3-14-88
 KENNETH A. MCCORD DATE

CERTIFICATION BY THE DEVELOPER
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."
James M. Helm 6/12/88
 U.S. SOIL CONSERVATION SERVICE DATE

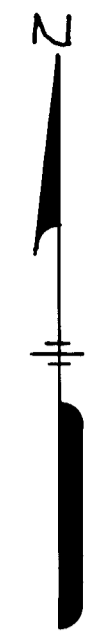
REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
James M. Helm 6/12/88
 U.S. SOIL CONSERVATION SERVICE DATE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: *Kenneth A. McCord*
 HOWARD S.C.D. DATE

REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G.R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT TITLE: SEDIMENT CONTROL		
SCALE: 1"=50'		DATE 3/4/88
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		
<i>Kenneth A. McCord</i> KENNETH A. MCCORD REGISTERED ENGINEER NO. 1974		

122

Russell H. Jenson 7/8/88
 CHIEF, LAND DEVELOPMENT DIVISION DATE
Lawrence W. Wickland 7/15/88
 CHIEF, BUREAU OF HIGHWAYS DATE
William E. Kelly 7-13-88
 CHIEF, BUREAU OF ENGINEERING DATE

OFFICE OF PLANNING AND ZONING
Janice S. McLaughlin 7-22-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



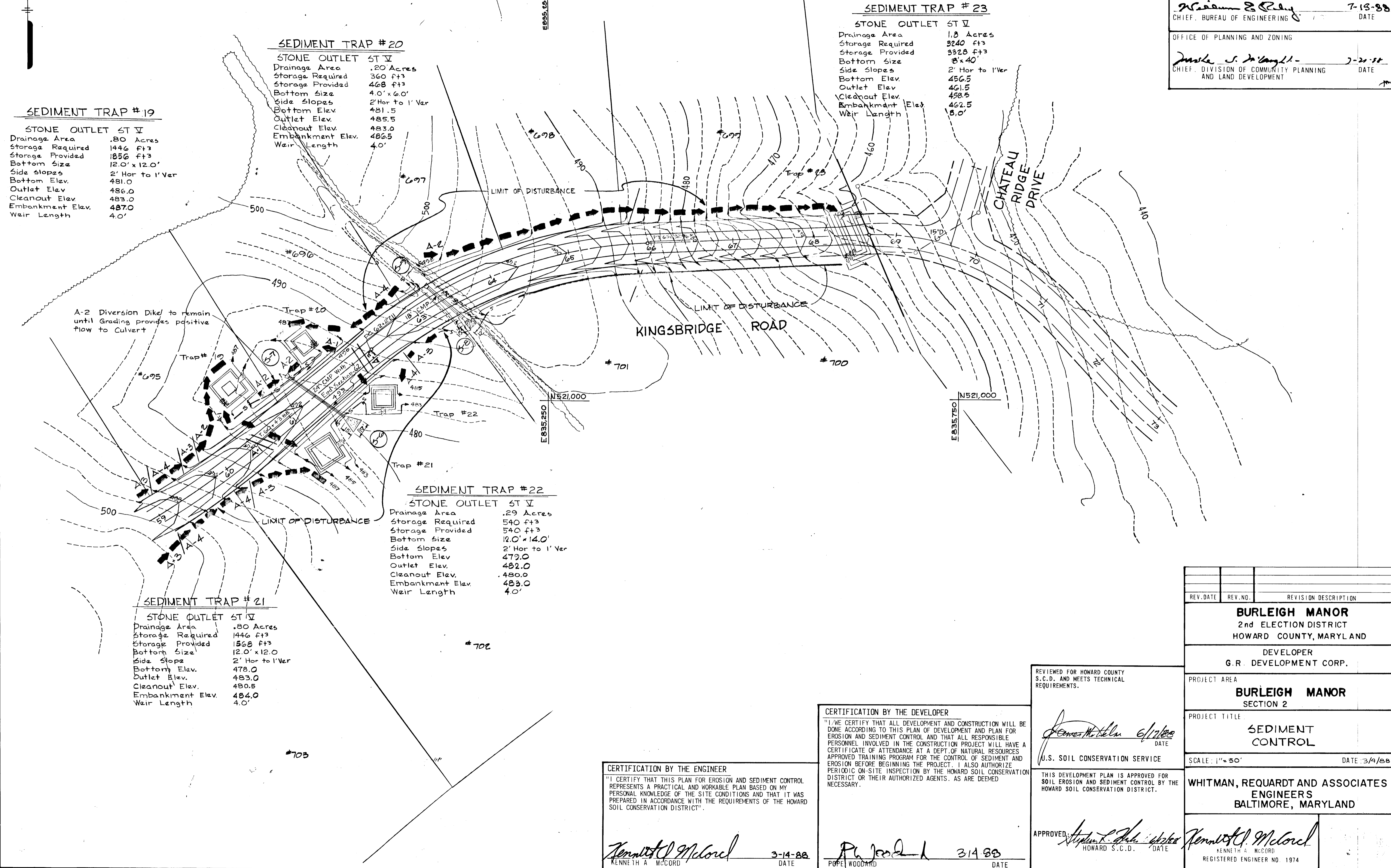
SEDIMENT TRAP #19
 STONE OUTLET ST V
 Drainage Area .80 Acres
 Storage Required 1446 ft³
 Storage Provided 1856 ft³
 Bottom Size 12.0' x 12.0'
 Side Slopes 2' Hor to 1' Ver
 Bottom Elev. 481.0
 Outlet Elev. 486.0
 Cleanout Elev. 483.0
 Embankment Elev. 487.0
 Weir Length 4.0'

SEDIMENT TRAP #20
 STONE OUTLET ST V
 Drainage Area .20 Acres
 Storage Required 360 ft³
 Storage Provided 468 ft³
 Bottom Size 4.0' x 6.0'
 Side Slopes 2' Hor to 1' Ver
 Bottom Elev. 481.5
 Outlet Elev. 485.5
 Cleanout Elev. 483.0
 Embankment Elev. 486.5
 Weir Length 4.0'

SEDIMENT TRAP #23
 STONE OUTLET ST V
 Drainage Area 1.8 Acres
 Storage Required 3240 ft³
 Storage Provided 3328 ft³
 Bottom Size 8' x 40'
 Side Slopes 2' Hor to 1' Ver
 Bottom Elev. 456.5
 Outlet Elev. 461.5
 Cleanout Elev. 458.5
 Embankment Elev. 462.5
 Weir Length 8.0'

SEDIMENT TRAP #22
 STONE OUTLET ST V
 Drainage Area .29 Acres
 Storage Required 540 ft³
 Storage Provided 540 ft³
 Bottom Size 12.0' x 14.0'
 Side Slopes 2' Hor to 1' Ver
 Bottom Elev. 479.0
 Outlet Elev. 482.0
 Cleanout Elev. 480.0
 Embankment Elev. 483.0
 Weir Length 4.0'

SEDIMENT TRAP #21
 STONE OUTLET ST V
 Drainage Area .80 Acres
 Storage Required 1446 ft³
 Storage Provided 1568 ft³
 Bottom Size 12.0' x 12.0'
 Side Slopes 2' Hor to 1' Ver
 Bottom Elev. 478.0
 Outlet Elev. 483.0
 Cleanout Elev. 480.5
 Embankment Elev. 484.0
 Weir Length 4.0'



REV. DATE	REV. NO.	REVISION DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
DEVELOPER G. R. DEVELOPMENT CORP.		
PROJECT AREA BURLEIGH MANOR SECTION 2		
PROJECT TITLE SEDIMENT CONTROL		
SCALE: 1" = 30'		DATE: 3/4/88
WHITMAN, REQUARD AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND		

CERTIFICATION BY THE DEVELOPER
 "I, WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

CERTIFICATION BY THE ENGINEER
 "I 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."

REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
James M. Bell 6/17/88
 DATE
 U.S. SOIL CONSERVATION SERVICE

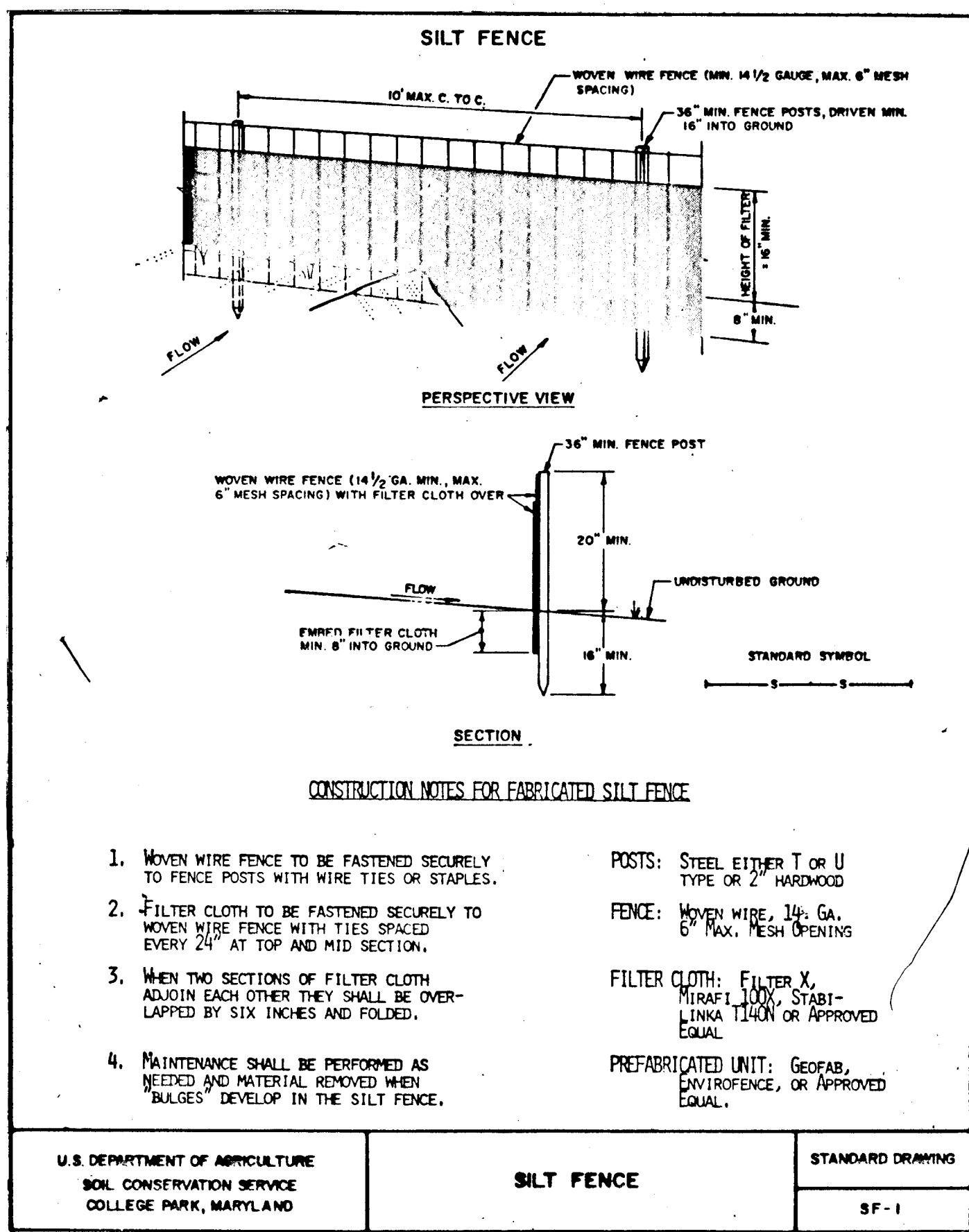
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Kenneth A. McCord 3-14-88
 KENNETH A. MCCORD DATE

Robert Woodard 3-14-88
 ROBERT WOODARD DATE

APPROVED: *Stephen L. J...*
 HOWARD S.C.D. DATE

Kenneth A. McCord
 KENNETH A. MCCORD
 REGISTERED ENGINEER NO. 1974



PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

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

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

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

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

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

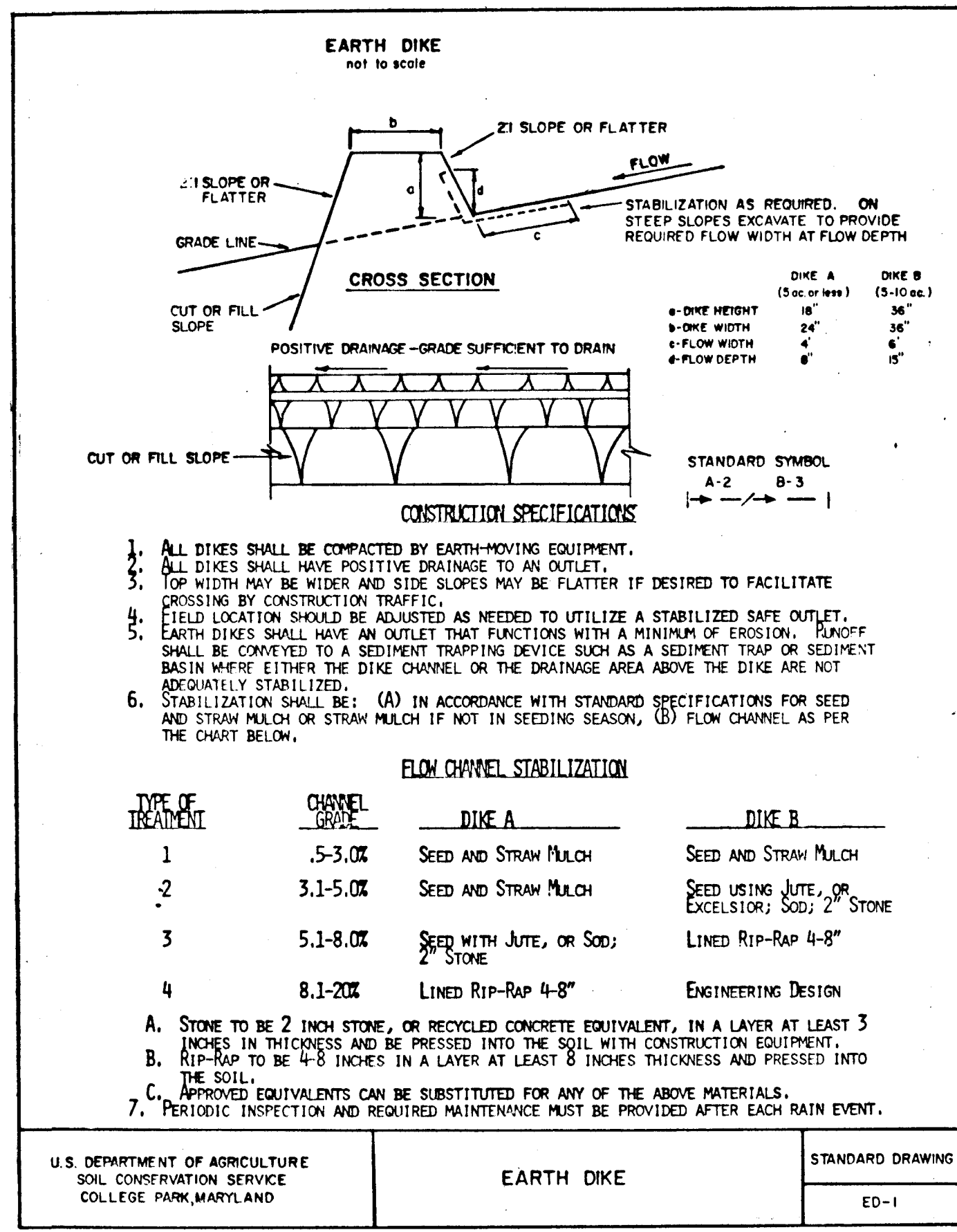
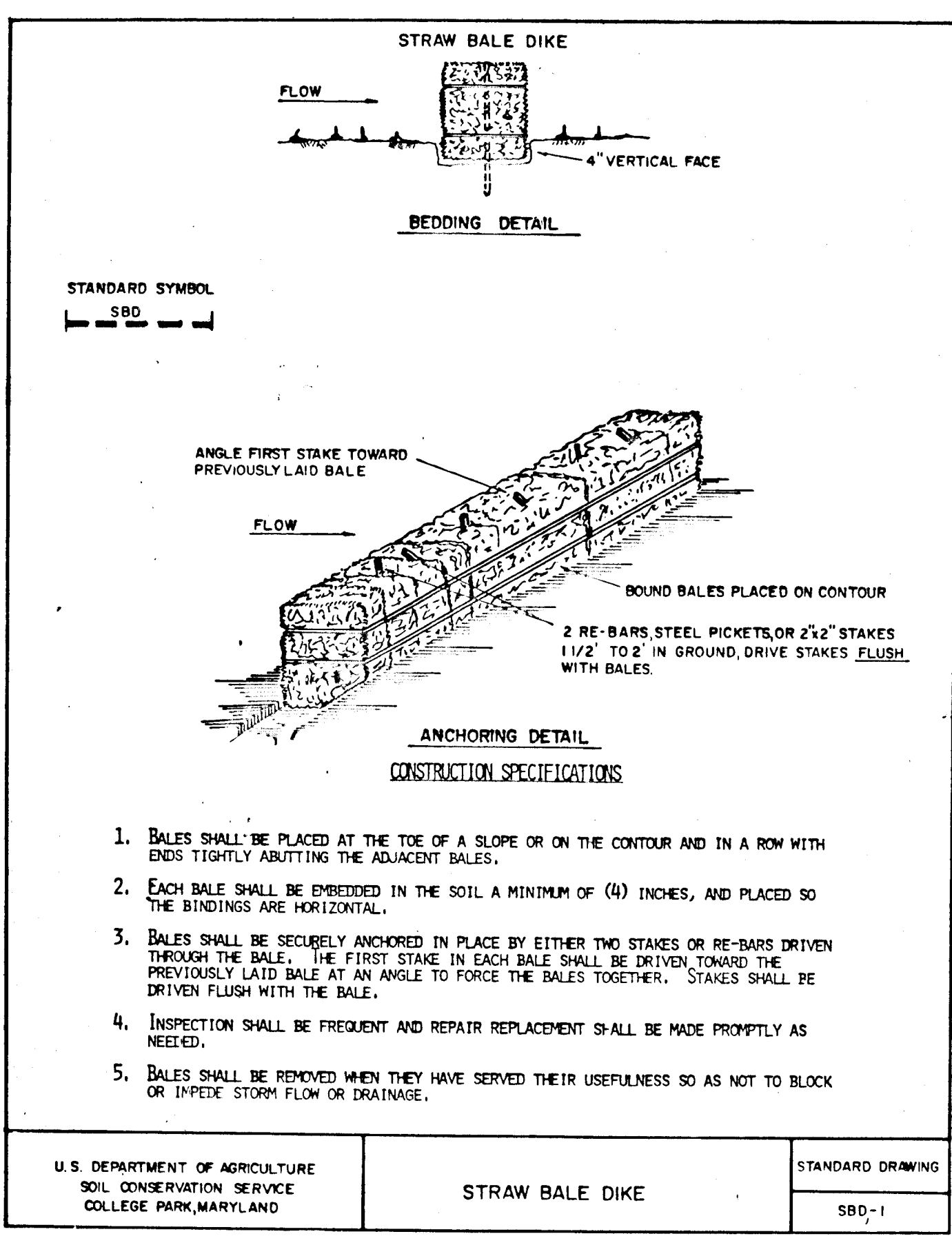
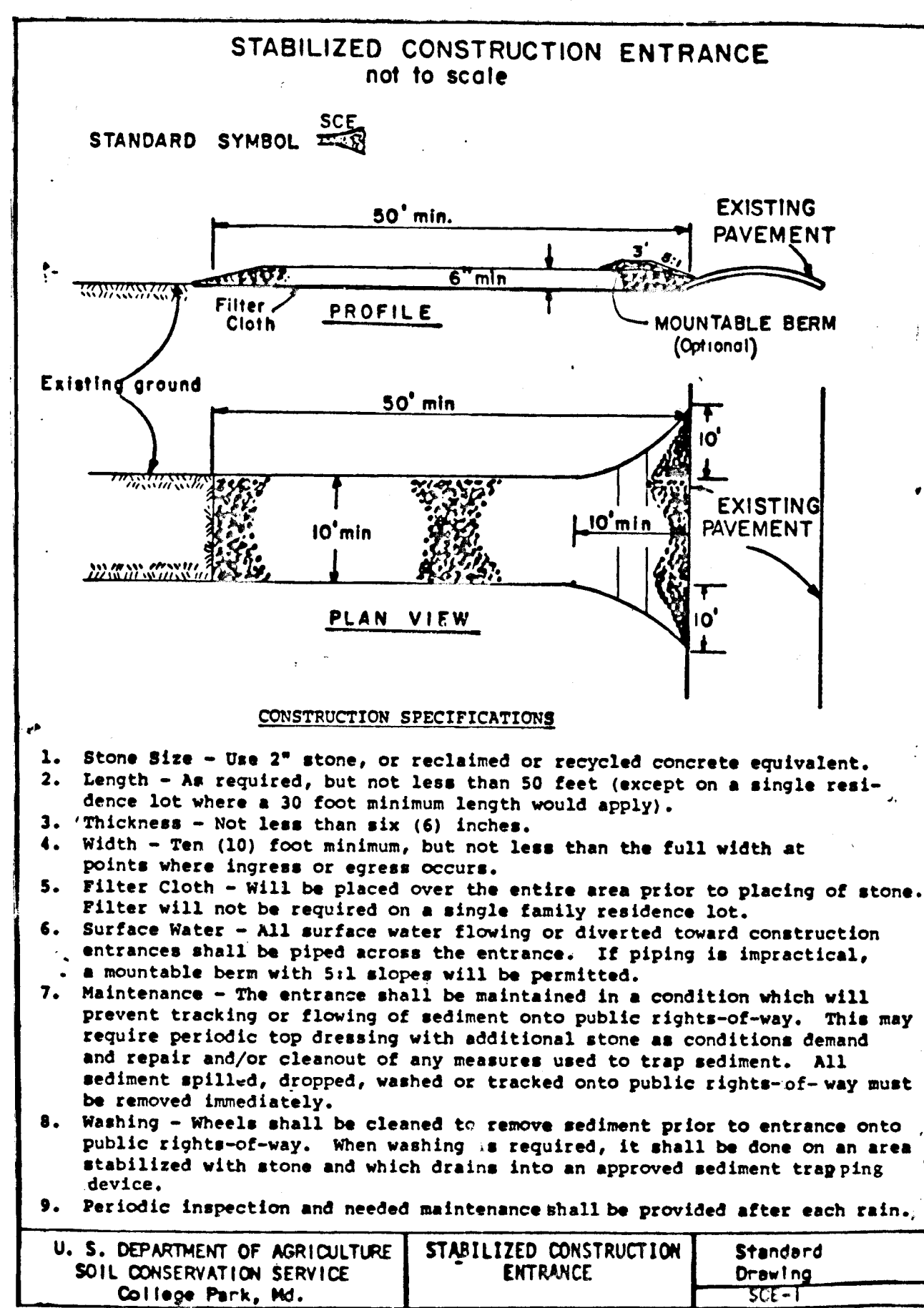
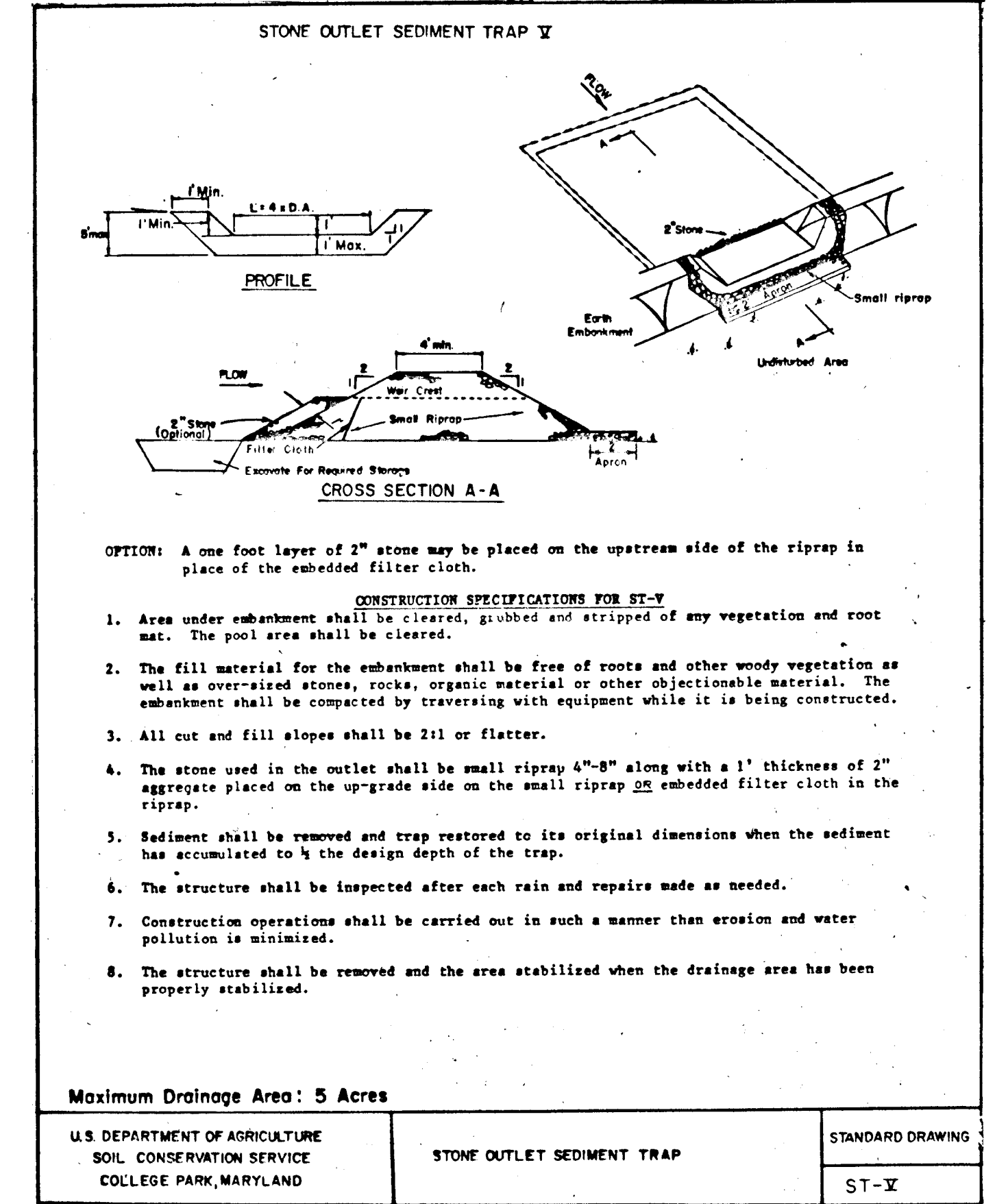
Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:

Total Area of Site	244.94 Acres
Area Disturbed	14.27 Acres
Area to be roofed or paved	5.16 Acres
Area to be vegetatively stabilized	211.51 Acres
Total Cut	37,540 Cu. yds.
Total Fill	24,220 Cu. yds.
Offsite waste/borrow area location	
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.



OFFICE OF PLANNING AND ZONING

Mark S. McCay 7-21-88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Franklin W. McCreary 7/15/88
CHIEF, LAND DEVELOPMENT DIVISION

William E. McCreary 7-15-88
CHIEF, BUREAU OF ENGINEERING

CERTIFICATION BY THE ENGINEER

"I 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 COUNTY SOIL CONSERVATION DISTRICT."

Kenneth A. McCord 3-14-88
KENNETH A. MCCORD

CERTIFICATION BY THE DEVELOPER

"I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

John Wood 3-14-88
JOHN WOOD

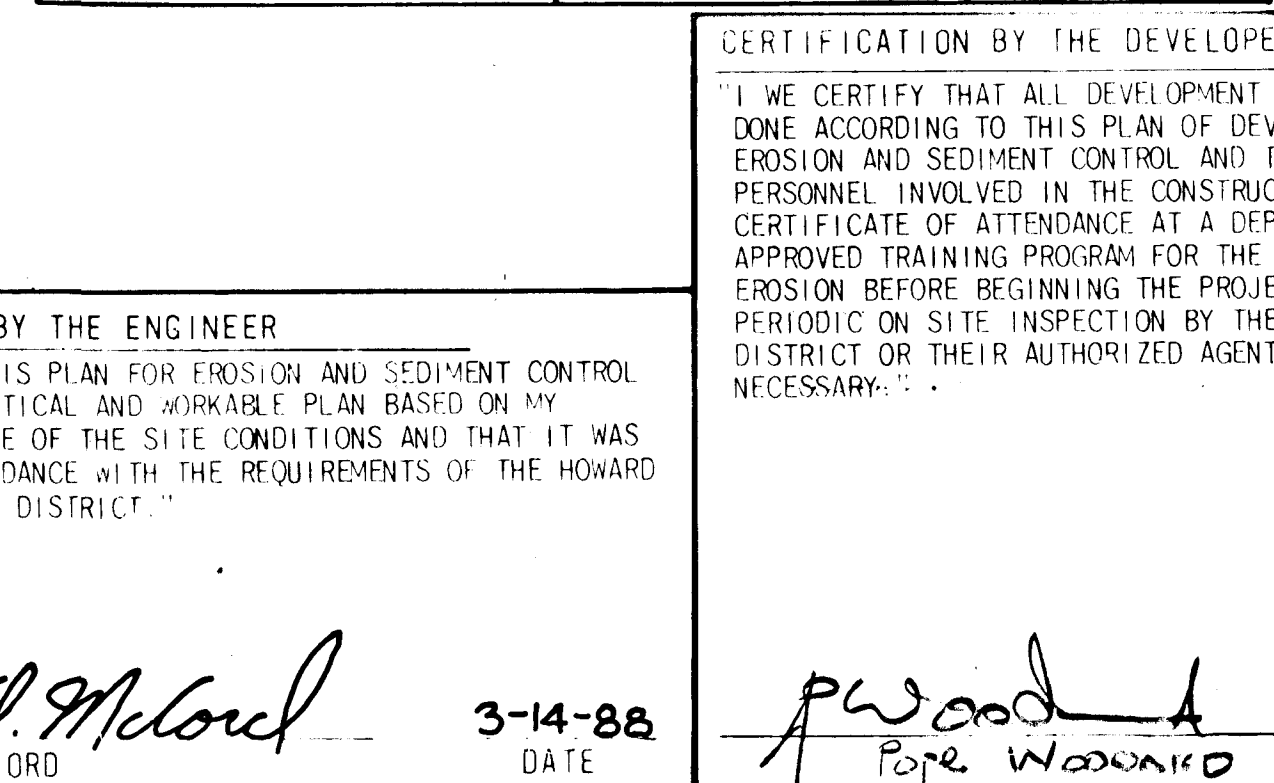
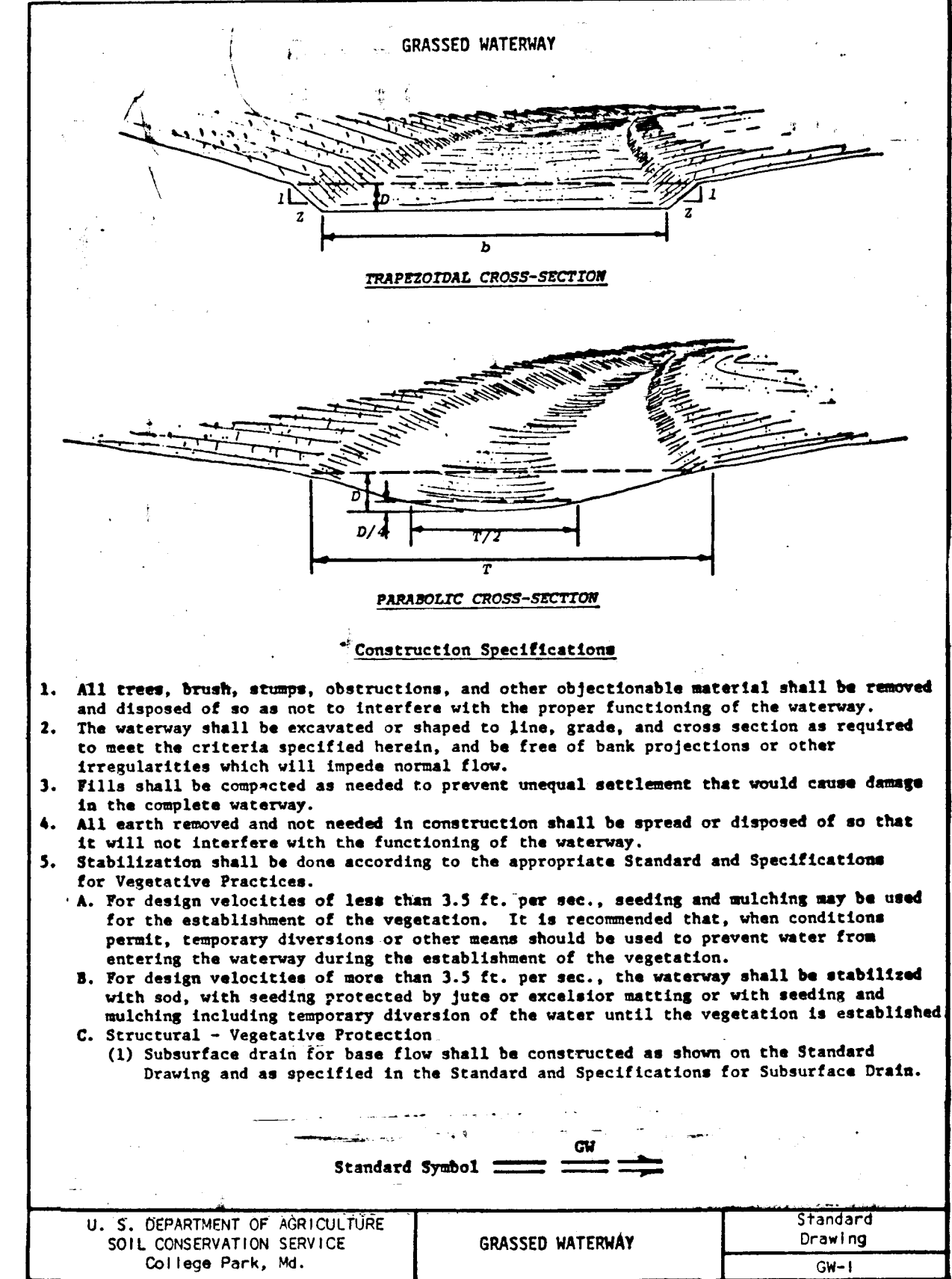
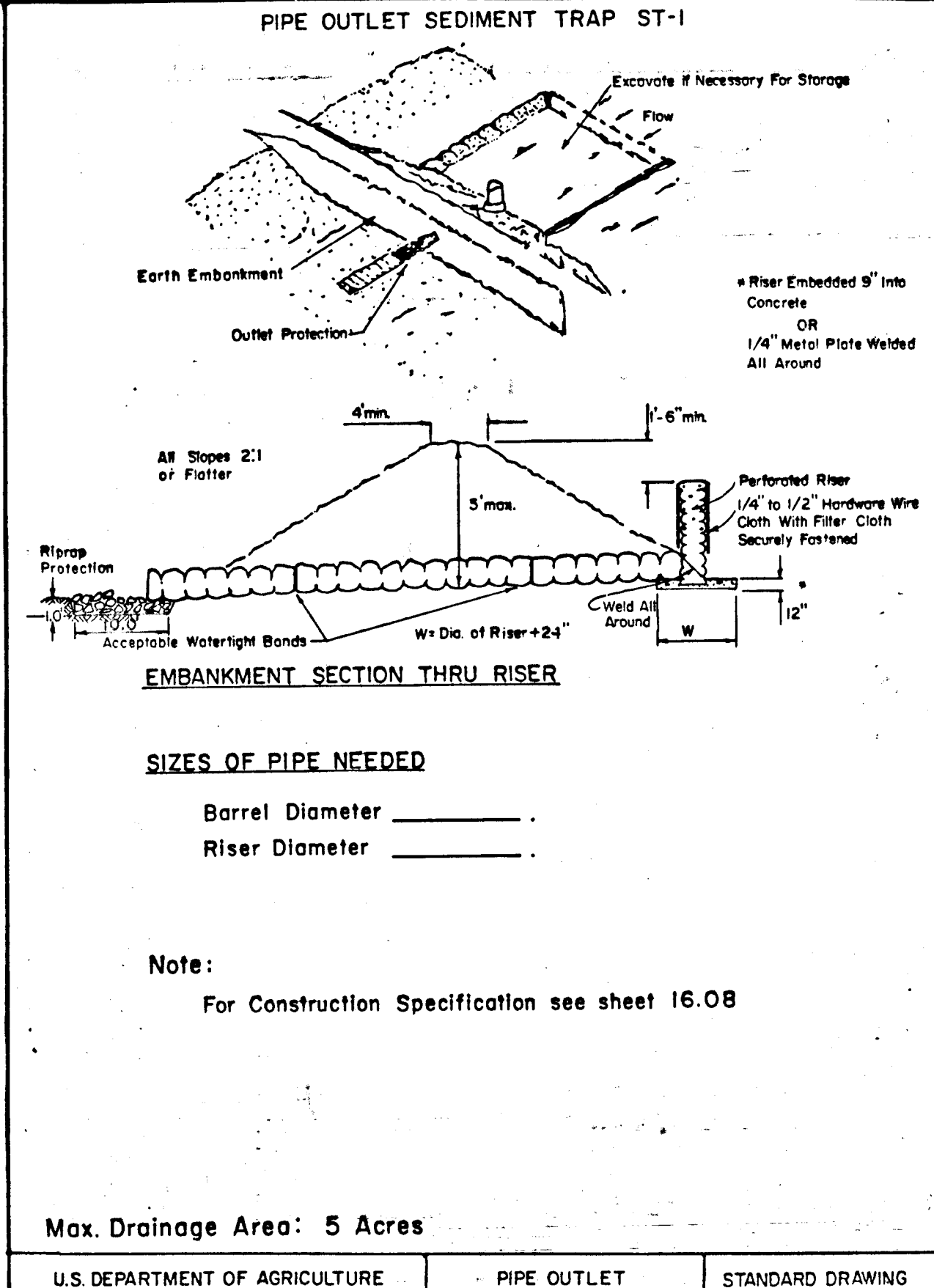
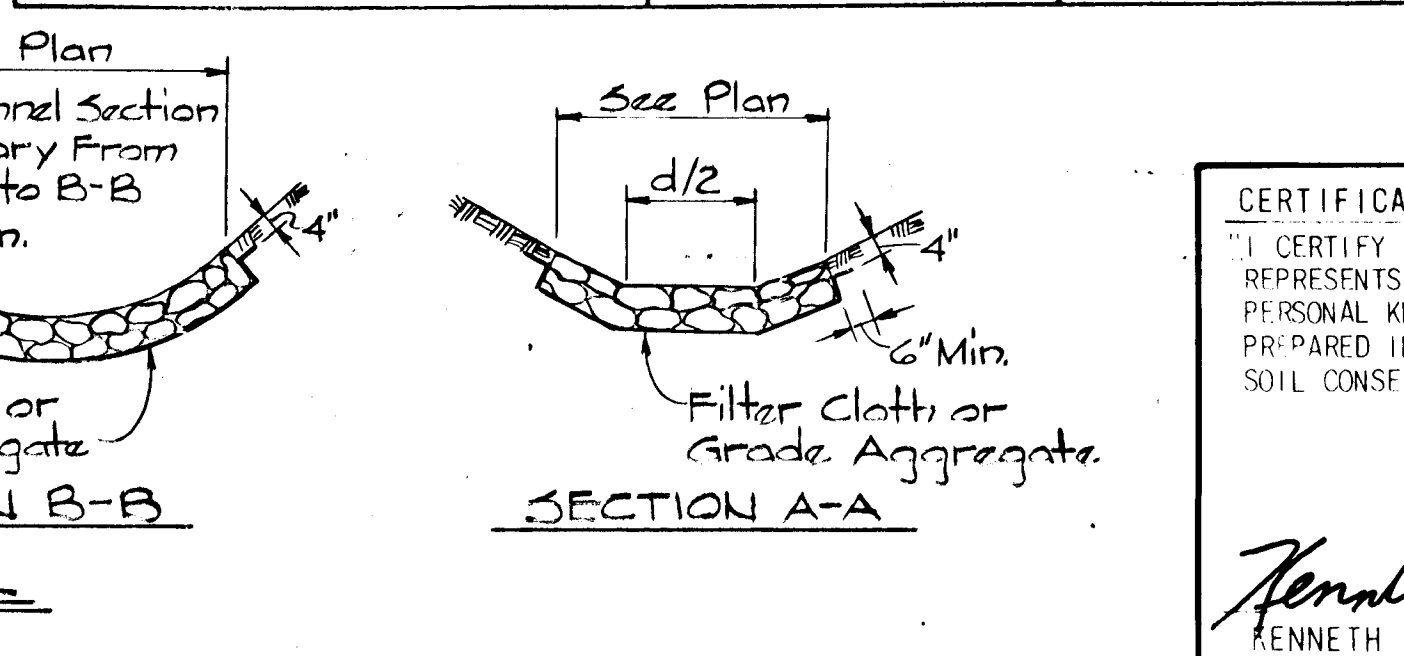
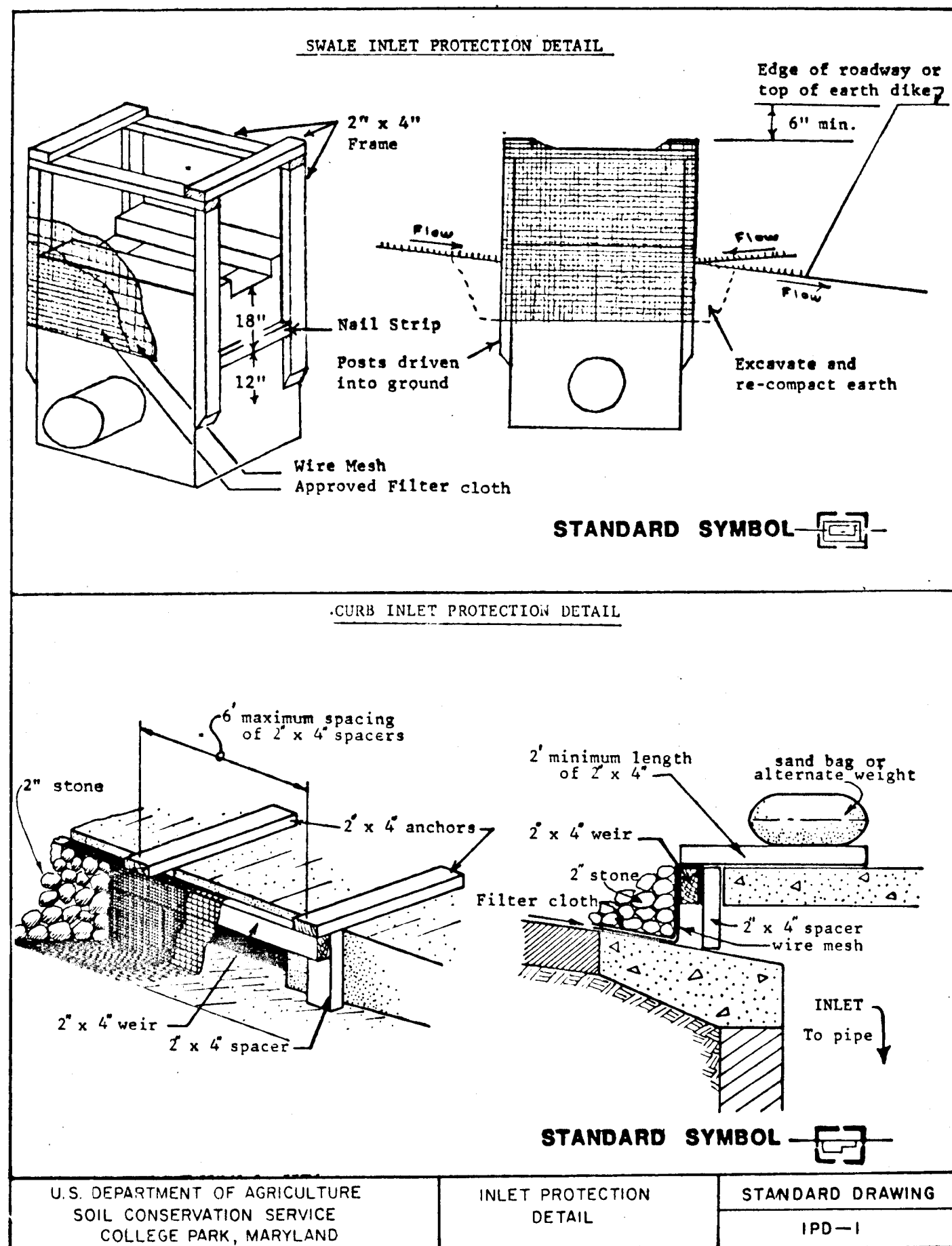
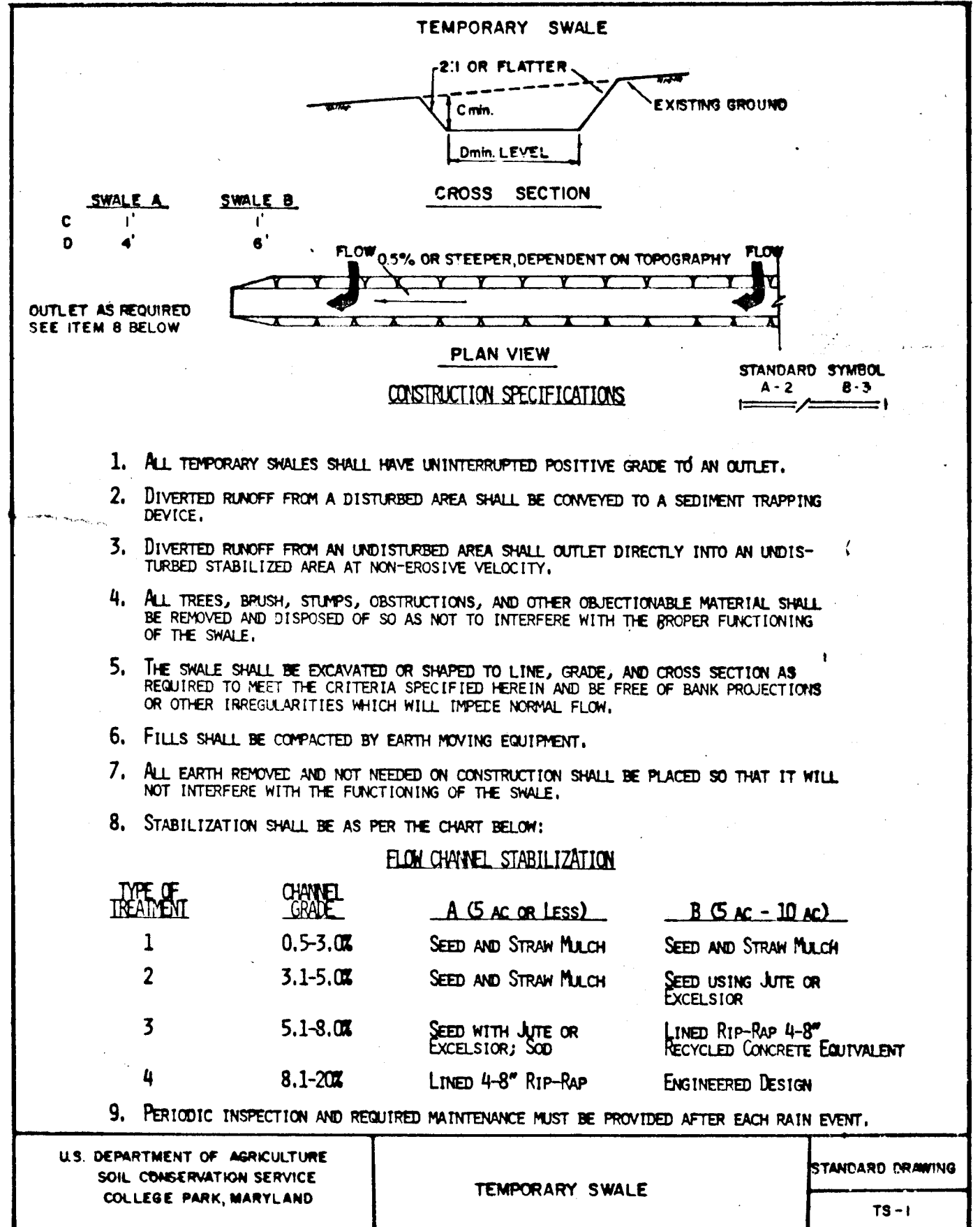
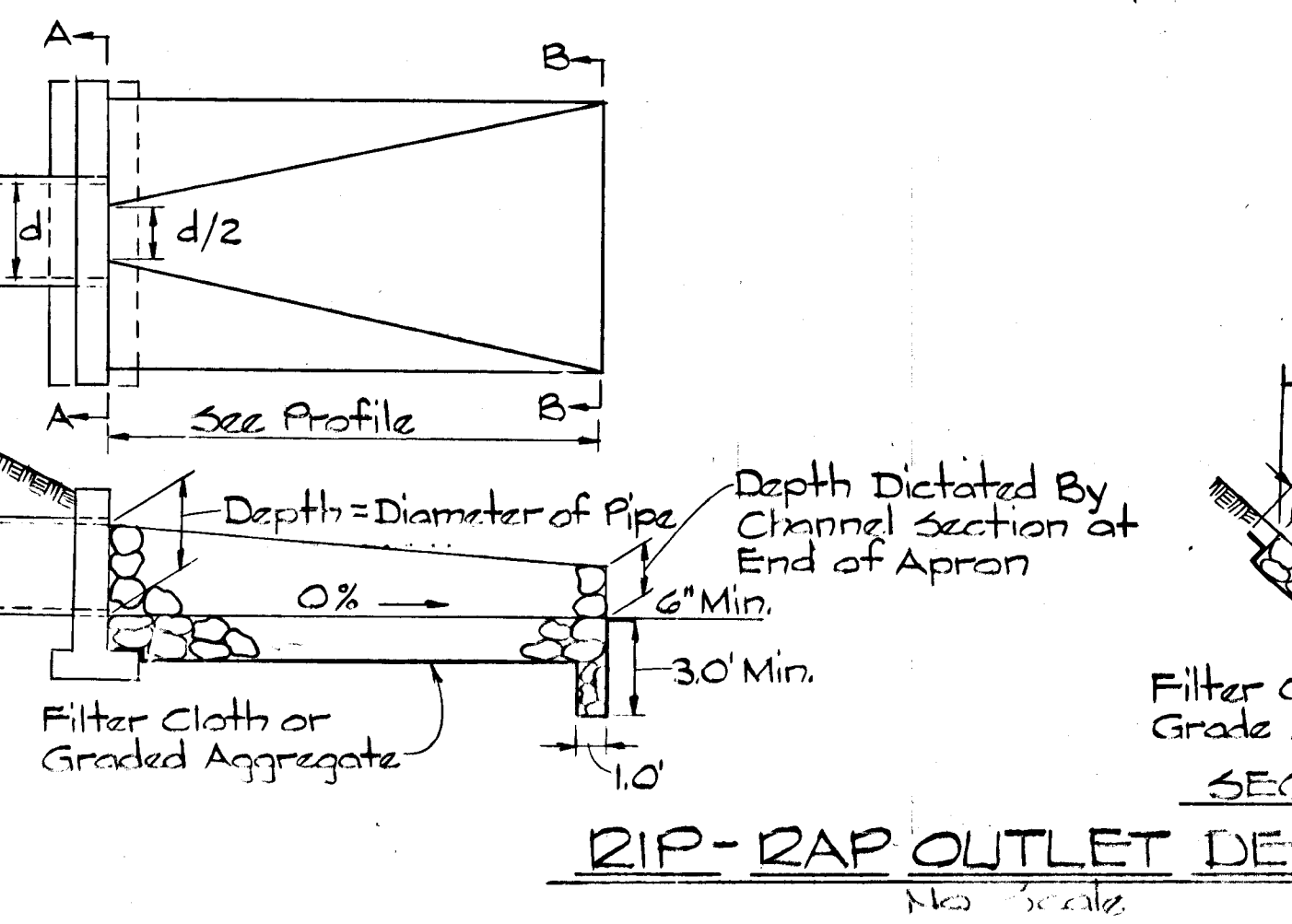
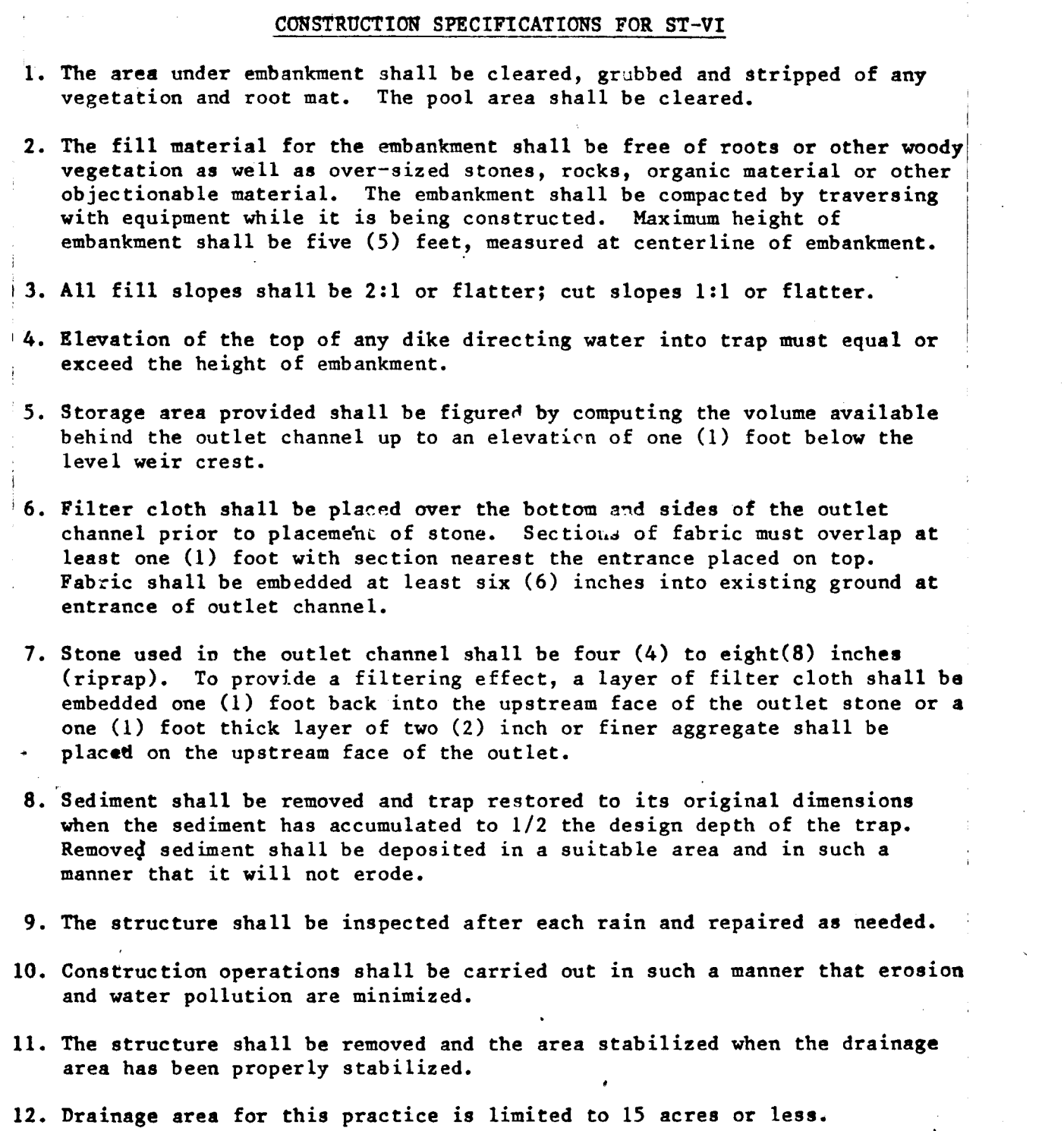
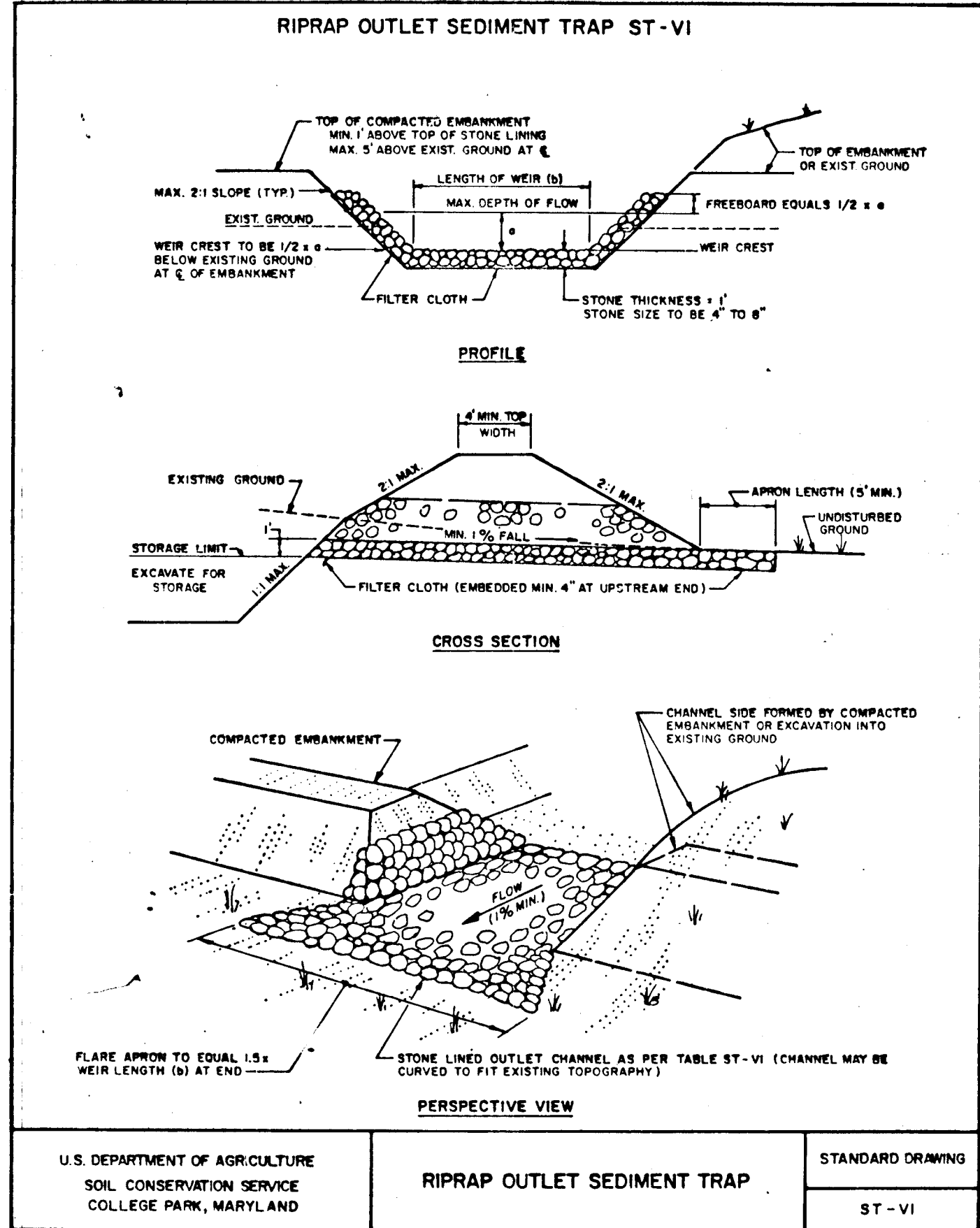
REVIEWED FOR HOWARD COUNTY S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

James H. Hahn 6/17/88
JAMES H. HAHN
S.O. SOIL CONSERVATION SERVICE

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

APPROVED: *Kenneth A. McCord*
KENNETH A. MCCORD
REGISTERED ENGINEER NO. 1974

REV. DATE	REV. NO.	REVISION	DESCRIPTION
BURLEIGH MANOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND			
DEVELOPER G. R. DEVELOPMENT CORP.			
PROJECT AREA BURLEIGH MANOR SECTION 2			
PROJECT TITLE SEDIMENT CONTROL DETAILS			
SCALE: NO SCALE		DATE: 3/4/88	
WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS BALTIMORE, MARYLAND			
REGISTERED ENGINEER NO. 1974			



OFFICE OF PLANNING AND ZONING
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, LAND USE ADJUSTMENT DIVISION
 DATE: 7/8/88
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 7/15/88
 CHIEF, BUREAU OF ENGINEERING
 DATE: 7-15-88

CONSTRUCTION SPECIFICATIONS FOR ST-I

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots or other woody vegetation as well as oversized stones, rocks, organic material, or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. Volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
4. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
5. The structure shall be inspected after each rain and repairs made as needed.
6. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
7. The structure shall be removed and area stabilized when the drainage area has been properly stabilized.
8. All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
9. All pipe connections shall be watertight.
10. The top 2/3 of the riser shall be perforated with one (1) inch diameter holes or slits spaced six (6) inches vertically and horizontally and placed in the concave portion of pipe. No holes will be allowed within six (6) inches of the horizontal barrel.
11. The riser shall be wrapped with 1/4 to 1/2 inch hardware cloth wire then wrapped with filter cloth (having an equivalent sieve size of 40 - 80). The filter cloth shall extend six (6) inches above the highest hole and six (6) inches below the lowest hole. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent bypass.
12. Straps or connecting bands shall be used to hold the filter cloth and wire fabric in place. They shall be placed at the top and bottom of the cloth.
13. Fill material around the pipe spillway shall be hand compacted in four (4) inch layers. A minimum of two (2) feet of hand-compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment.
14. The riser shall be anchored with either a concrete base or steel plate base to prevent flotation. For concrete bases the depth shall be 12 inches with the riser embedded nine (9) inches. A 1/4 inch minimum thickness steel plate shall be attached to the riser by a continuous weld around the bottom to form a watertight connection and then place two (2) feet of stone, gravel, or tamped earth on the plate.

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

James W. Helm 6/17/88
 U.S. SOIL CONSERVATION SERVICE

APPROVED: *Kenneth A. McCord* 6/17/88
 REGISTERED ENGINEER NO. 1974

BURLEIGH MANOR
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER
 G. R. DEVELOPMENT CORP.

PROJECT AREA
 BURLEIGH MANOR SECTION 2

PROJECT TITLE
 SEDIMENT CONTROL DETAILS

SCALE: NO SCALE DATE: 3/4/88

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 BALTIMORE, MARYLAND

REGISTERED ENGINEER NO. 1974