K&F 19.1253 MC.8474

JOHNS HOPKINS ROAD

HOWARD COUNTY, MARYLAND

PINDELL SCHOOL ROAD TO U.S. ROUTE 29

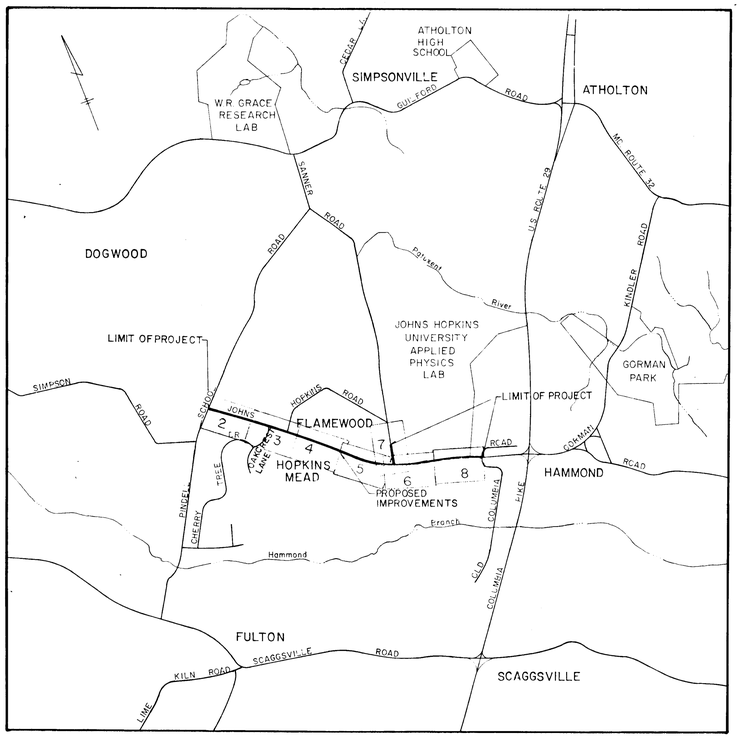
CAPITAL PROJECT NO. J-5-4014

NOTES

1. DESIGN SPEED 40 M.P.H.
2. HORIZONTAL AND VERTICAL CONTROL BASED ON MARYLAND STATE SYSTEM.
3. "ROCK/SOILS INFORMATION FURNISHED BY HARDIN ASSOCIATES, INC. OF PASADENA MD. DND ASSUMES NO RESPONIBILITY FOR THE ACCURACY THEREOF: FOR FURTHER INFORMATION REGARDING THIS ITEM, PLEASE CONTACT THE FIRM OF HARDIN ASSOCIATES, INC., PASADENA, MARYLAND.
4. ALL STRUCTURE STANDARDS REFER TO HOWARD COUNTY STANDARD SPECIFICATION. FOR CONSTRUCTION UNLESS OTHERWISE NOTED.

ABBREVIATIONS

B.C.C.M.P.A.	BITUMINOUS COATED CORRUGATED METAL PIPE ARCH	P.G.L.	PROFILE GRADE LINE
B.C.C.M.P.	BITUMINOUS COATED CORRUGATED METAL PIPE	P.I.	POINT OF INTERSECTION
BL	BASELINE	R.	PROPERTY LINE
B.W.	BOTTOM WIDTH	P.R.C.	POINT OF PEVERSE CURVE
Q	CENTERLINE	P. T.	POINT OF TANGENCY
C.M.P.	CORRUGATED METAL PIPE	P.V.C.	POINT OF VERTIVAL CURVE
DIA.	DIAMETER	PVCC	POINT OF VERTICAL COMPOUND CURVE
DR.	DRIVEWAY	P. V.I.	POINT OF VERTICAL INTERSECTION
DWG.	DRAWING	PVRC	POINT OF VERTICAL REVERSE CURVE
EL.	ELEVATION	P.V.T.	POINT OF VERTICAL TANGENCY
ELEC.	ELECTRIC	P.R.C	POINT OF REVERSE CURVE
E & T	ELECTRIC & TELEPHONE	R.C.P.	REINFORCED CONCRETE PIPE
EX.	EXISTING	R/W	RIGHT OF WAY
H.P.	HIGH POINT	S.E.	SUPER ELEVATION
INV.	INVERT	S.H.A.	STATE HIGHWAY ADMINISTRATION
I.P.	IRON PIPE	S.R.C.	STATE ROADS COMMISSION
L.P.	LOW POINT	STA.	STATION
MAX.	MAXIMUM	STD.	STANDARD
N.C.	NORMAL CROWN	TYP.	TYPICAL
P.C.	POINT OF CURVE	U.G.	UNDERGROUND
		V.C.	VERTICAL CURVE



LOCATION MAP
Scale 1" = 2,000'

SEQUENCE OF CONSTRUCTION

1. Construction of the entire length of road including provision of the sediment and erosion control measures shall be divided into various segments. Each segment being defined by the limits of surface runoff draining into the specific road culvert.
2. The culvert discharging clean surface runoff (including other stormdrain systems connecting to the culvert pipe) shall be constructed first, prior to any road grading activity within that segment.
3. Install all inlet sediment traps and stone outlet sediment traps for each segment as shown and detailed on the plan.
4. Complete all remaining sediment control measures as shown.
5. Grade all roads to subgrade along with all proposed ditches.
6. Pave roadway.
7. Stabilize drainage ditches by seeding or sodding as indicated on the plans.
8. Vegetatively stabilize all other areas which are not paved.
9. Remove all sediment control facilities ties (with inspector's approval) and stabilize the affected areas.

CONVENTIONAL SIGNS

SYMBOL	DESCRIPTION
	EXISTING ROAD OR DRIVEWAY
⊥	UTILITY POLE
	EX. RIGHT-OF-WAY OR PROPERTY LINE
	NEW RIGHT-OF-WAY OR PROPERTY LINE
	TEST BORING LOCATION
	℄ RECONSTRUCTED ROAD
	RECONSTRUCTED PAVED ROAD
	PROPOSED PAVED ROAD WITH CURB
	EXISTING PAVED ROAD WITH CURB
	NEW CULVERT
	EXISTING CULVERT
	RECONSTRUCTED SHOULDER
	DITCH CENTERLINE

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE

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

HOWARD COUNTY SOIL CONSERVATION DISTRICT

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN; AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

WILLIAM E. RILEY,
CHIEF BUREAU OF ENGINEERING

DATE

ENGINEER'S CERTIFICATE

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.

Dharam V. Kathuria

DHARAM V. KATHURIA, P.E.

8/11/81
DATE

C-093A201

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE

CHIEF BUREAU OF ENGINEERING DATE

Elizabeth Anderson Palin 6/9/83
CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION DATE

DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard, Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

Dharam V. Kathuria

REVISIONS		
DATE	BY	DESCRIPTION

COVER SHEET
JOHNS HOPKINS ROAD IMPROVEMENT
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

SHEET 1 OF 13

PLAN

Scale: 1" = 50'

JOHNS HOPKINS ROAD

DITCH SCHEDULE

DITCH NO.	FROM	DIRECTION	TO	LENGTH	SIDE OF ℄	TYPE	REMARKS
1	20+45	←	22+00	155'	LEFT	STD. B	TAPER INTO OUTLET SWALE FROM 12" B.C.C.M.P.
2	20+45	←	22+00	155'	RIGHT	STD 'B'	DRAINS INTO 'K' INLET.
3	22+00	→	24.04	204'	LEFT	STD 'B'**	TAPER INTO OUTLET SWALE FROM 36" RCP
4	22+00	→	24+04	204'	RIGHT	STD 'B'***	TAPER INTO 36" R.C.P.
5	24+04	←	28+00	396'	RIGHT	ST'D. 'B'	TAPER INTO 36" R.C.P.
6	28+30	←	30+50	220'	RIGHT	ST'D. 'B'	TAPER INTO 15" BCCMP
7	28+30	←	30+50	220'	LEFT	STD. 'B'	DRAINS INTO 'D' INLET
8	30+50	→	34+70	420'	RIGHT	STD. 'B'	TAPER INTO 30" R.C.P.
9	31+50	→	34+80	330'	LEFT	STD. 'B'	TAPER INTO OUTLET SWALE FROM 30" R.C.P.

*SEE STD. DITCH SECTION, SHEET 13 OF 13

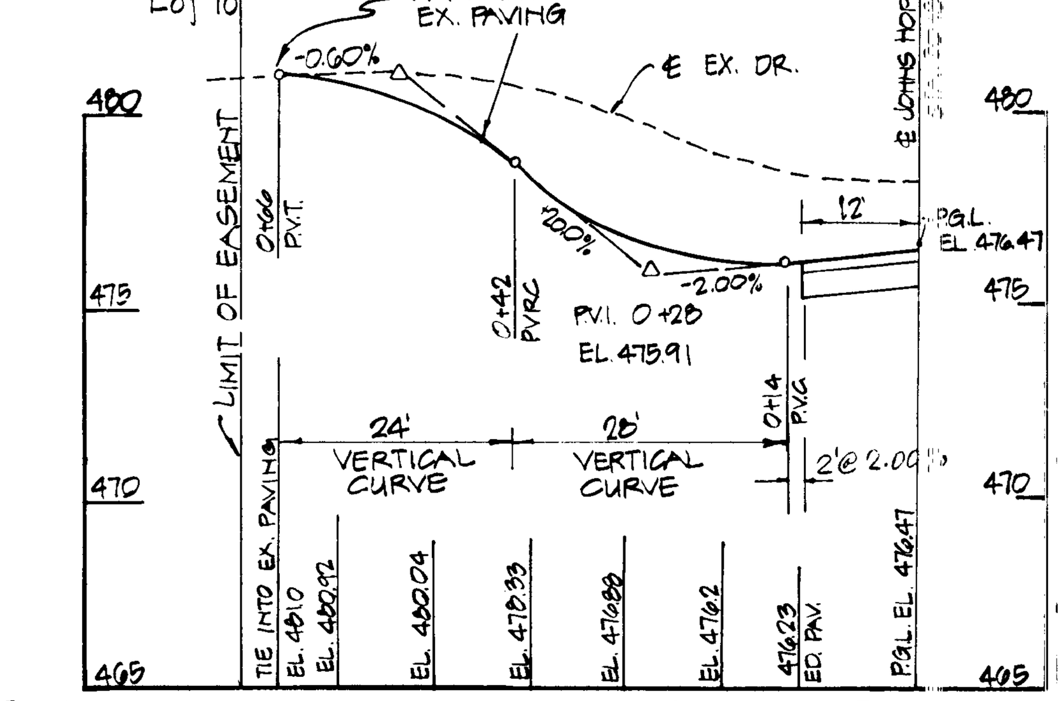
**ST'D DITCH 'B' SECTION TO BE LINED WITH SHA CL.5 LIGHT RIP-RAP OVER FILTER CLOTH FROM STA. 23+00 THRU. STA. 24+04.

***ST'D DITCH 'B' SECTION TO BE LINED WITH SHA CL5 LIGHT RIP-RAP OVER FILTER CLOTH FROM STA. 23+50 THRU STA. 24+04.

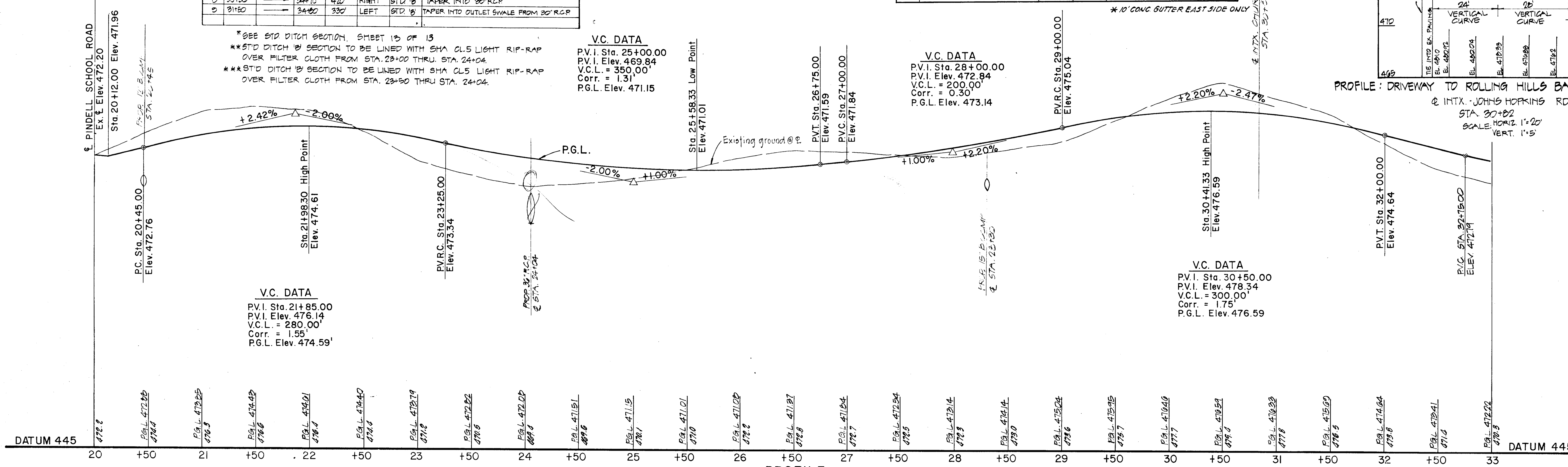
STRUCTURE SCHEDULE

NO.	TYPE	TOP EL.	INV. OUT	REMARKS
E-1	ST'D. METAL END SECTION	—	469.16'	FOR 12" BCCMP
I-1	ST'D. TYPE 'K' INLET	471.75'	469.50'	GRATE 'A' INV. OPENING = 470.50 *
E-2	ST'D. TYPE 'A' HEADWALL	—	464.44'	FOR 36" RCP
E-3	ST'D. TYPE 'C' ENDWALL	—	467.00'	FOR 36" RCP
M-1	ST'D. 'B' MANHOLE	471.50'	466.5(EX)	INV. IN = 467.25
I-2	ST'D. TYPE 'D' INLET	471.33'	468.01'	(4) SIDES OPEN INV. OPENING 470.50
E-4	ST'D. TYPE 'E' HEADWALL	—	470.00	FOR 15" BCCMP

* 10' CONC. GUTTER EAST SIDE ONLY



PROFILE: DRIVEWAY TO ROLLING HILLS BAPTIST CHURCH
℄ INTX. JOHNS HOPKINS RD.
STA. 30+82
SCALE: HORIZ. 1"=20' VERT. 1"=5'



PROFILE

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

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS — DATE CHIEF BUREAU OF ENGINEERING — DATE *Elizabeth Anderson Calia* 6/6/83 CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — DATE	DEWBERRY, NEALON & DAVIS ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS 8411 Arlington Boulevard, Fairfax Virginia 22030 2594 Riva Road, Annapolis, Maryland 21401	REVISIONS DATE / BY / DESCRIPTION	PLAN AND PROFILE JOHNS HOPKINS ROAD STA. 20+00 TO STA. 33+00 CAPITAL PROJECT NO. J-5-4014 FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE: AS SHOWN

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

PLAN

Scale: 1"= 50'

JOHNS HOPKINS ROAD

℄ CURVE DATA NO. 2

Δ = 07°19'48"
Dc= 01°00'00"
R = 5729.58'
T = 367.01'
A = 733.01'
CHD. BRG. S49°57'38"E
DIST. 732.51'

DITCH · SCHEDULE

NO.	FROM	DIR. FLOW	TO	LENGTH	SIDE OF ℄	TYPE*	REMARKS
9	34+70	←	37+00	230'	RIGHT	STD. 'B'	TAPER INTO 30" RCP
10	34+80	←	38+50	370'	LEFT	STD. 'B'	TAPER INTO OUTLET SWALE FROM 30" RCP
11	37+80	→	43+50	570'	RIGHT	STD. 'B'	UTILIZE EX. DITCH WHERE POSSIBLE FROM STA. 43+50 TO 47+10 TAPER INTO EX. INLET.
12	38+50	→	42+20	370'	LEFT	STD. 'B'	TAPER INTO STD. 'D' INLET.
13	42+90	→	43+50		LEFT	STD. 'B'	UTILIZE EX. DITCH WHERE POSSIBLE FROM STA. 43+50 TO STA. 47+10. TAPER INTO EX. INLET.

* SEE STD DITCH SECTION SHEET 13 OF 13

STRUCTURE SCHEDULE

NO.	TYPE	TOP EL.	INV. OUT	REMARKS
E-5	STD. TYPE 'A' HEADWALL	—	463.27	FOR 30" RCP
E-6	STD. TYPE 'C' ENDWALL	—	466.00	FOR 30" RCP
E-7	STD. TYPE 'E' HEADWALL	—	466.69	FOR 15" BCCMP
I-3	STD. TYPE 'D' INLET	469.83	467.25	(2) SIDES OPEN, N & W
		—	—	INV. OPENING 469.00

V.C. DATA

P.V.I. Sta. 34+25.00
P.V.I. Elev. 469.08
V.C.L. = 300.00'
Corr. = 1.68'
P.G.L. Elev. 470.76

V.C. DATA

P.V.I. Sta 38+00.00
P.V.I. Elev. 476.58
V.C.L. = 250.00'
Corr. = 0.94'
P.G.L. Elev. 475.64

V.C. DATA

P.V.I. Sta. 42+60.00
P.V.I. Elev. 471.98
V.C.L. = 300.00'
Corr = 1.34'
P.G.L. Elev. 470.64

OLD JOHNS HOPKINS ROAD

PROFILE

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE
CHIEF BUREAU OF ENGINEERING DATE
Elizabeth Anderson Calia 6/9/83
CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION DATE

DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard, Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

Dv. Katlinic

REVISIONS

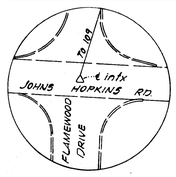
DATE	BY	DESCRIPTION

PLAN AND PROFILE
JOHNS HOPKINS ROAD
STA. 33+00 TO STA. 46+00
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

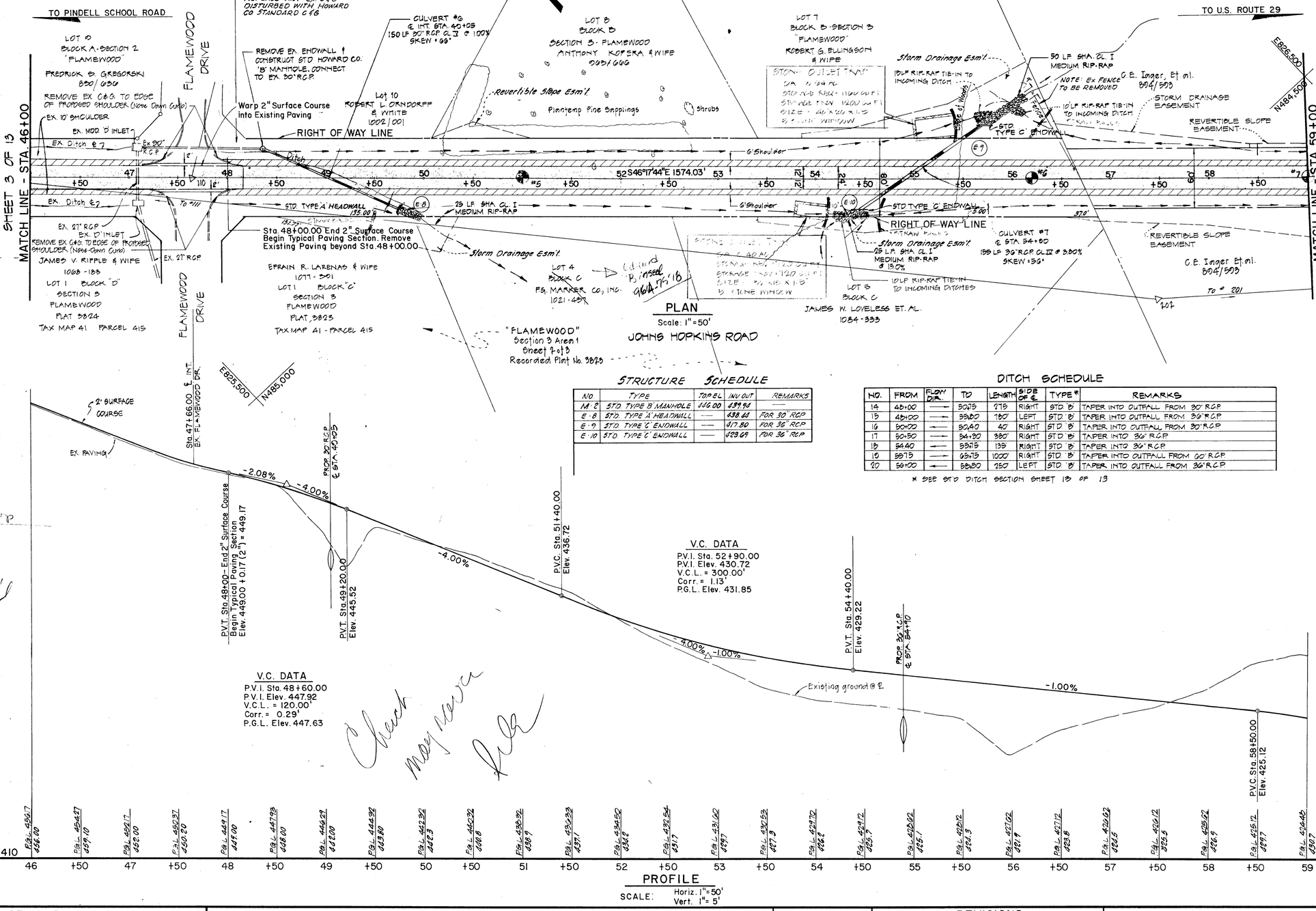
DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

SHEET 3 OF 13

K&E 19 1253 MC 847a



TRAVERSE POINT
110
N 485,208 E 825,608
EL. 449.83'



PLAN
Scale: 1" = 50'

STRUCTURE SCHEDULE

NO.	TYPE	TOP EL	INV OUT	REMARKS
M-2	STD. TYPE 'B' MANHOLE	446.00	439.94	—
E-8	STD. TYPE 'A' HEADWALL	—	438.44	FOR 30" RCP
E-9	STD. TYPE 'C' ENDWALL	—	417.80	FOR 36" RCP
E-10	STD. TYPE 'C' ENDWALL	—	423.69	FOR 36" RCP

DITCH SCHEDULE

NO.	FROM	FLOW DIR.	TO	LENGTH	SIDE OF ℄	TYPE *	REMARKS
14	46+00	→	50+75	275	RIGHT	STD 'B'	TAPER INTO OUTFALL FROM 30" R.C.P.
15	45+00	→	53+00	780	LEFT	STD 'B'	TAPER INTO OUTFALL FROM 36" R.C.P.
16	50+00	→	50+40	40	RIGHT	STD 'B'	TAPER INTO OUTFALL FROM 30" R.C.P.
17	50+50	→	54+30	380	RIGHT	STD 'B'	TAPER INTO 36" R.C.P.
18	54+40	→	55+75	135	RIGHT	STD 'B'	TAPER INTO 36" R.C.P.
19	55+75	→	65+75	1000	RIGHT	STD 'B'	TAPER INTO OUTFALL FROM 60" R.C.P.
20	56+00	←	58+50	250	LEFT	STD 'B'	TAPER INTO OUTFALL FROM 36" R.C.P.

* SEE STD DITCH SECTION SHEET 13 OF 13

V.C. DATA
P.V.I. Sta. 48+60.00
P.V.I. Elev. 447.92
V.C.L. = 120.00'
Corr. = 0.29'
P.G.L. Elev. 447.63

V.C. DATA
P.V.I. Sta. 52+90.00
P.V.I. Elev. 430.72
V.C.L. = 300.00'
Corr. = 1.13'
P.G.L. Elev. 431.85

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE

CHIEF BUREAU OF ENGINEERING — DATE

Elizabeth Anderson Cubie 6/4/87
CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — DATE

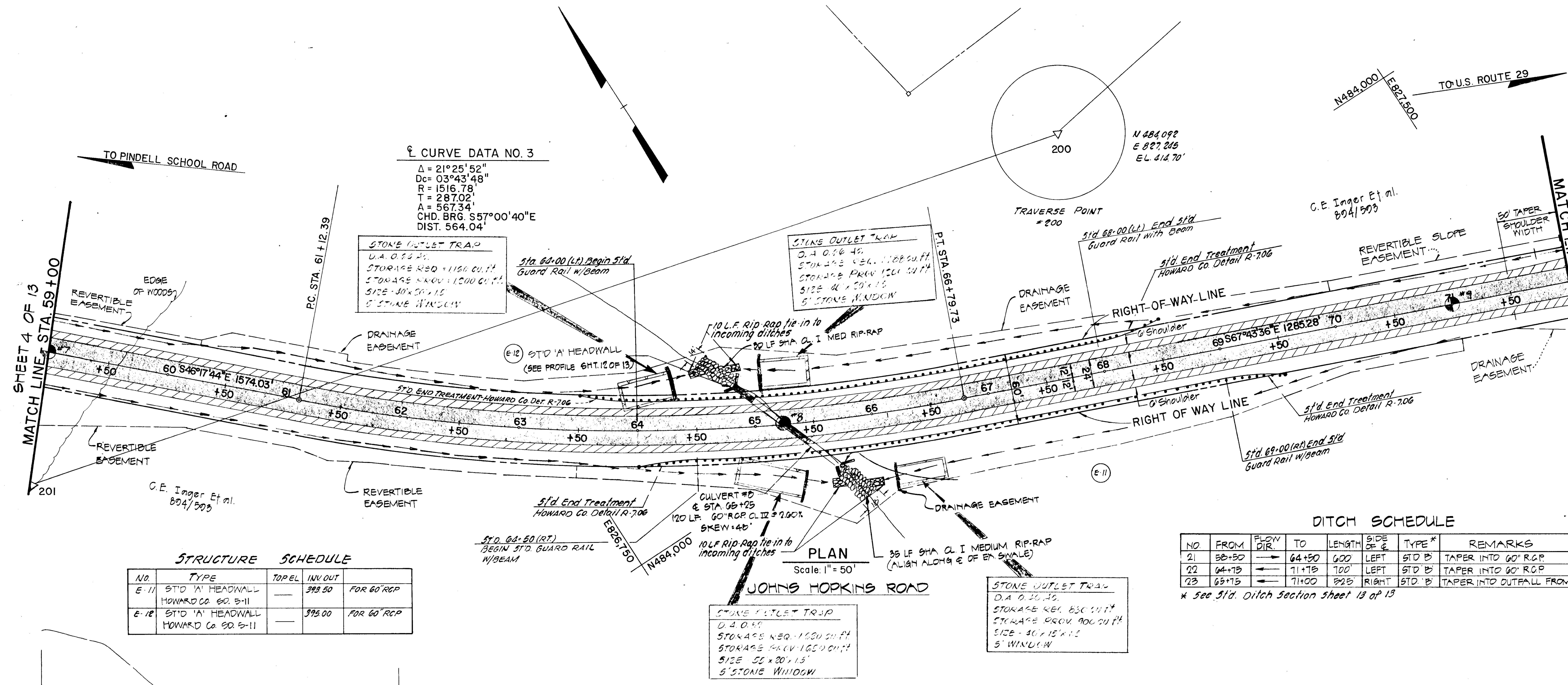
DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard, Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

REVISIONS		
DATE	BY	DESCRIPTION

PLAN AND PROFILE
JOHNS HOPKINS ROAD
STA. 46+00 TO STA. 59+00
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

SHEET 4 OF 13



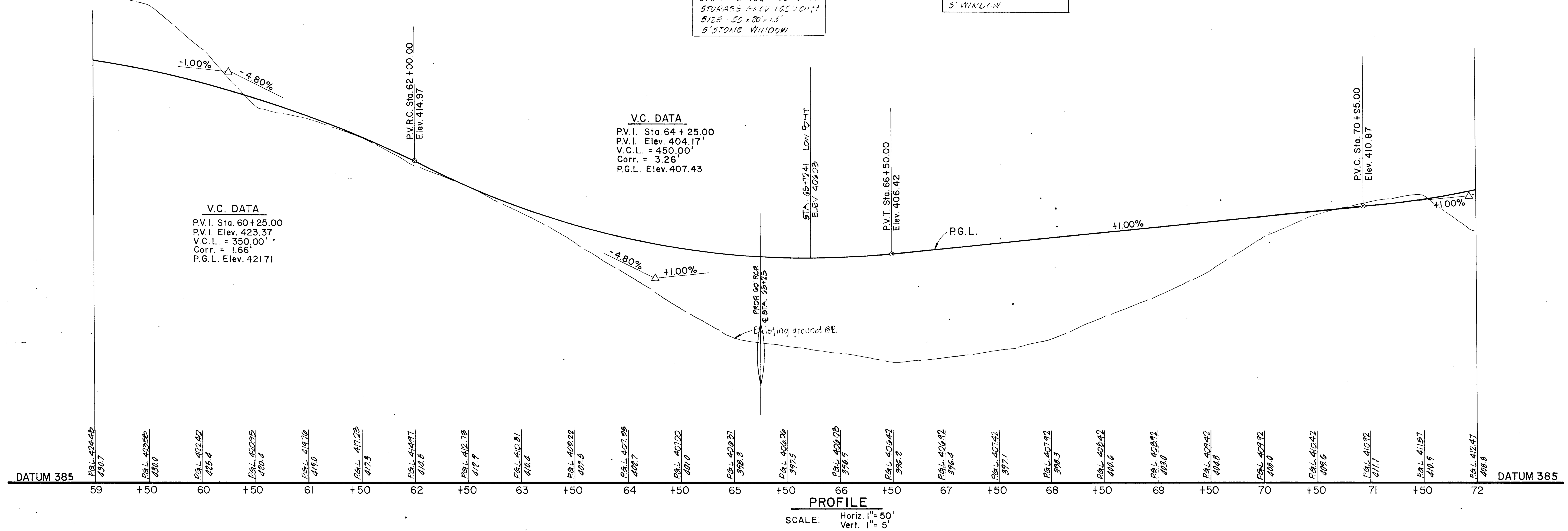
STRUCTURE SCHEDULE

NO.	TYPE	TOP EL	INV. OUT	
E-11	ST'D 'A' HEADWALL HOWARD CO. SD. 5-11	—	393.50	FOR 60" RCP
E-12	ST'D 'A' HEADWALL HOWARD Co. SD. 5-11	—	395.00	FOR 60" RCP

DITCH SCHEDULE

NO.	FROM	FLOW DIR.	TO	LENGTH	SIDE OF ℄	TYPE*	REMARKS
21	58+50	→	64+50	600'	LEFT	ST'D 'B'	TAPER INTO 60" R.C.P.
22	64+75	←	71+75	700'	LEFT	ST'D 'B'	TAPER INTO 60" R.C.P.
23	65+75	←	71+00	525'	RIGHT	STD. 'B'	TAPER INTO OUTFALL FROM 60" R.C.P.

* See St'd. Ditch Section Sheet 13 of 13



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE

CHIEF BUREAU OF ENGINEERING — DATE

CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — DATE 6/9/83

DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard, Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

REVISIONS		
DATE	BY	DESCRIPTION

PLAN AND PROFILE
JOHNS HOPKINS ROAD
STA. 59+00 TO STA. 72+00
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

PLAN

Scale: 1"= 50'

JOHNS HOPKINS ROAD & SANNER ROAD

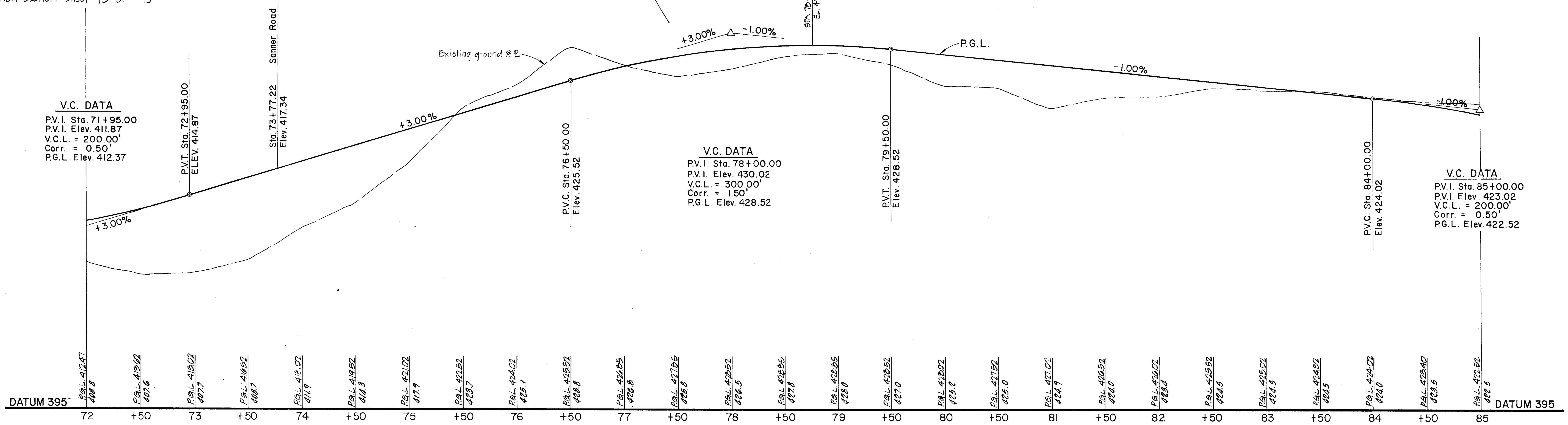
DITCH SCHEDULE

NO.	FROM	FLOW DIR.	TO	LENGTH	SIDE OF ℄	TYPE*	REMARKS
24	71+75	→	72+65	90'	LEFT	STD.'A'	GRADE INTO CONCRETE CHANNEL AT 36" R.C.P.
25	72+75	←	77+75	500'	RIGHT	STD.'A'	TAPER INTO OUTFALL FROM 36" R.C.P.
26	77+75	→	80+02	227'	RIGHT	STD.'A'	TAPER INTO OUTFALL FROM 18" R.C.P.
27	30" R.C.P.	←	76+00	315'	LEFT	STD. A	DITCH ALONG TURNING ROADWAY TO 8" WIDE CONCRETE CHANNEL @ 30" R.C.P.
28	78+00	→	80+02	202	LEFT	STD.'A'	GRADE INTO CONCRETE CHANNEL @ 18" R.C.P.
29	80+00	←	82+50	248	RIGHT	STD.'A'	TAPER INTO OUTFALL FROM 18" R.C.P.
30	80+70	←	81+50	80	LEFT	STD.'A'	GRADE INTO 15" BCCMP.
31	82+50	→	83+50	100'	RIGHT	STD. A	GRADE INTO EX. DITCH.

* SEE STD DITCH SECTION SHEET 13 OF 13

STRUCTURE SCHEDULE

NO.	TYPE	TOP EL.	INV. OUT	REMARKS
E-13	STD. TYPE 'A' HEADWALL		404.75	FOR 36" RCP
E-14	STD. TYPE 'C' ENDWALL		408.50	FOR 36" RCP
E-15	STD. TYPE 'E' HEADWALL		409.68	FOR 30" RCP
I-4	STD. TYPE 'D' INLET	416.70	412.00	(4) SIDES OPEN INV. OPENING = 415.87
E-16	STD. TYPE 'C' ENDWALL		415.16	FOR 30" RCP
E-17	STD. TYPE 'A' HEADWALL		421.46	FOR 18" RCP
E-18	STD. TYPE 'C' ENDWALL		422.00	FOR 18" RCP
E-19	STD. TYPE 'E' HEADWALL		422.50	FOR 15" BCCMP
E-20	STD. TYPE 'E' HEADWALL		422.90	FOR 15" BCCMP



PROFILE

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

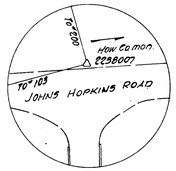
DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MARYLAND	DEWBERRY, NEALON & DAVIS	PLAN AND PROFILE
DIRECTOR OF PUBLIC WORKS — DATE	ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS	JOHNS HOPKINS ROAD
CHIEF BUREAU OF ENGINEERING — DATE	2594 Riva Road, Annapolis, Maryland 21401	STA. 72+00 TO STA. 85+00
CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — 6/9/83 DATE	8411 Arlington Boulevard, Fairfax, Virginia 22030	CAPITAL PROJECT NO. J-5-4014
	19201 Montgomery Village Ave., Gaithersburg, Md. 20760	FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND — SCALE: AS SHOWN

REVISIONS

DATE	BY	DESCRIPTION

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

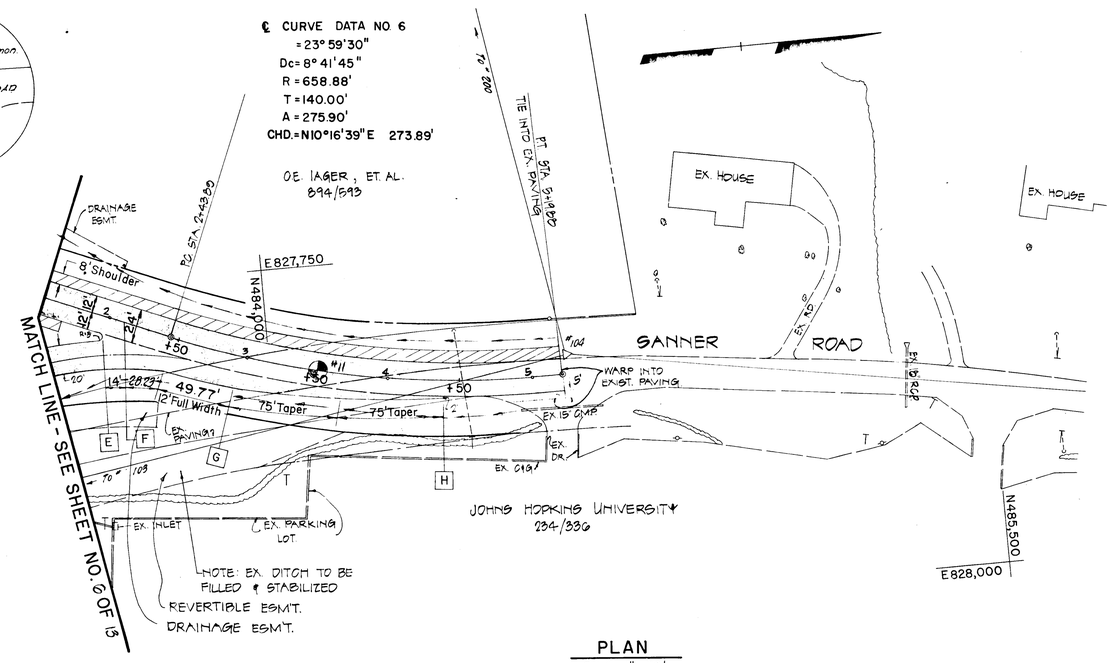
K.G.E. 19 1233 MC 8474



TRAVERSE POINT #104
N 484,205 E 827,829
EL 440.36'

℄ CURVE DATA NO. 6
= 23° 59' 30"
Dc = 8° 41' 45"
R = 658.88'
T = 140.00'
A = 275.90'
CHD. = N10° 16' 39" E 273.89'

O.E. IAGER, ET AL.
894/593



PLAN
Scale: 1" = 50'
SANNER ROAD

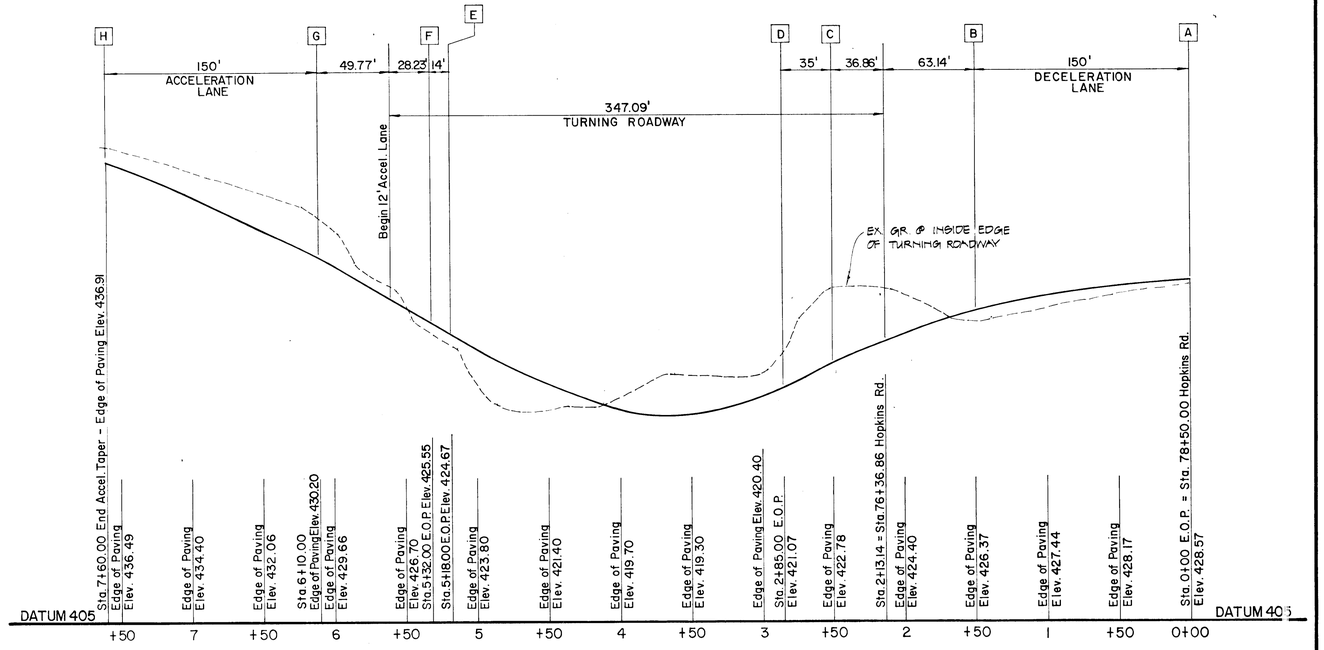
POINT	OUTSIDE E.O.P. ELEV.	SUPERELEV. RATE (%)	REMARKS
A	428.57	2.00%	Beginning of Taper – Sta. 0+00 Edge of Paving = Sta. 78+50.00 Johns Hopkins Road
B	426.37	2.00%	Begin 12' Full Width Deceleration Lane. Sta. 1+50.00 E.O.P. = Sta. 77+00.00 Johns Hopkins Road
C	422.78	5.00%	Begin 20' Full Width Turning Roadway. Sta. 2+50.00 Edge of Paving
D	421.07	5.00%	Section at Nose. Sta. 2+85.00 Edge of Paving
E	424.67	5.00%	Section at Nose. Sta. 5+18.00 Edge of Paving
F	425.55	5.00%	End 20' Full Width Turning Roadway. Sta. 5+32.00
G	430.20	2.00%	End 12' Full Width Acceleration Lane. Sta. 6+10.00
H	436.91	2.00%	End of Taper Sta. 7+60.00 Edge of Paving = Sta. 4+38.00 Sanner Road

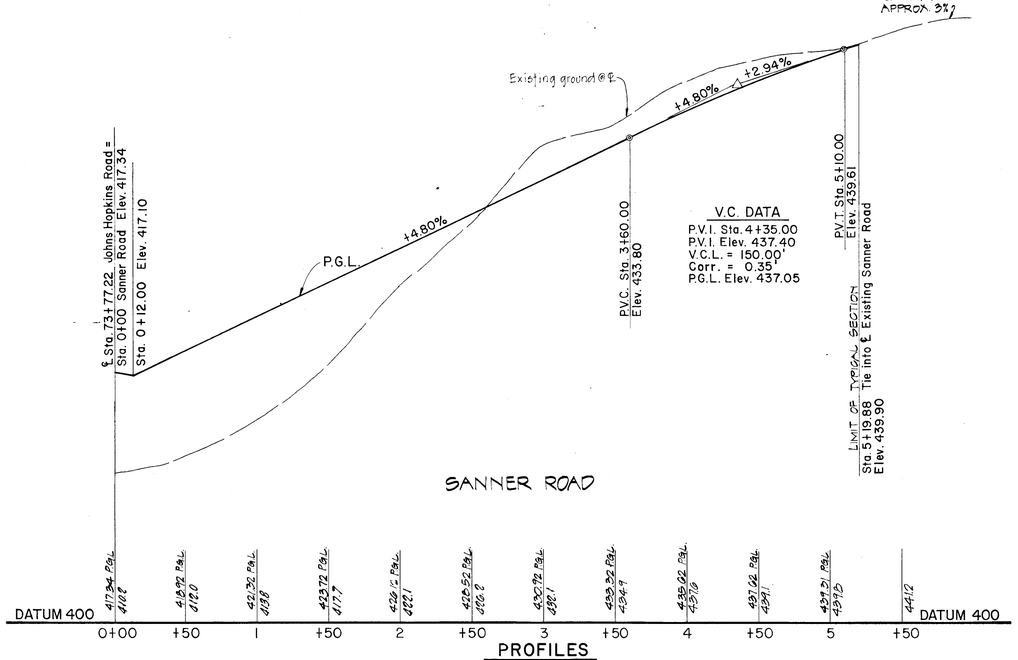
NO	FROM	FLOW DIR.	TO	LENGTH	SIDE OF ℄	TYPE*	REMARKS
32	0+00	→	5+20	460'	LEFT	STD A	SANNER RD - FROM CONC CHANNEL TO LIMIT OF PAVING.
33	30" R.C.P.	→	4+00	390'	RIGHT	STD. A	SANNER RD - DITCH ALONG TURNING ROWY FROM EX 15" CMP TO 8 WIDE CONCRETE CHANNEL AT 30" R.C.P.

* SEE STD DITCH SECTION SHEET 13 OF 13

TURNING ROADWAY AT INTERSECTION OF JOHNS HOPKINS ROAD AND SANNER ROAD

LINEAR PROFILE
(INSIDE EDGE)





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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE
CHIEF BUREAU OF ENGINEERING — DATE
CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — DATE 6/4/87

DEWBERRY, NEALON & DAVIS
ENGINEERS – ARCHITECTS – PLANNERS – SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard, Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

Dr. Katuné

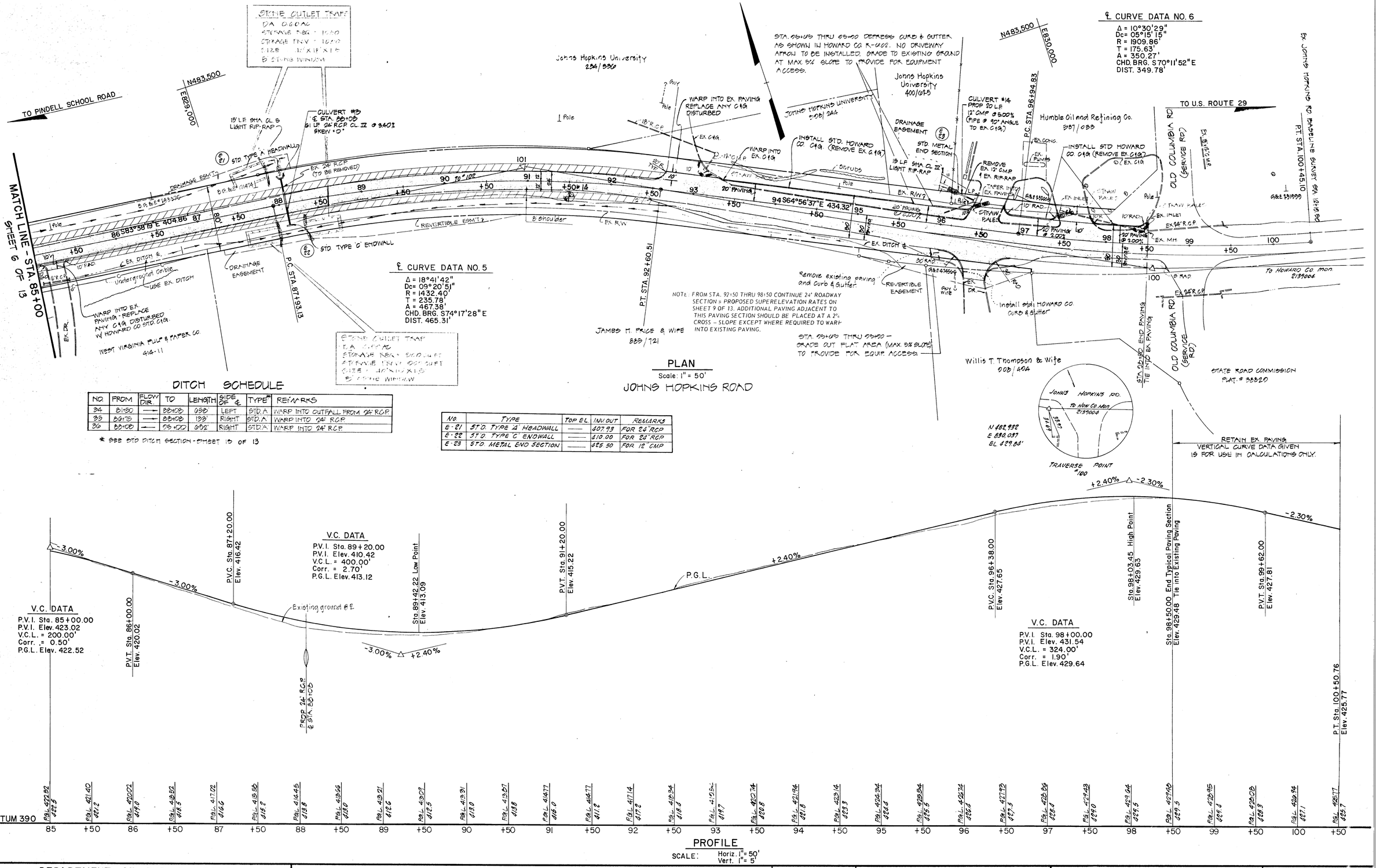
REVISIONS

DATE	BY	DESCRIPTION

PLAN AND PROFILE
JOHNS HOPKINS ROAD
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

SHEET 7 OF 13



DITCH SCHEDULE

NO.	FROM	FLOW DIR.	TO	LENGTH	SIDE OF ℄	TYPE*	REMARKS
34	81+50	→	88+08	658'	LEFT	STD.A	WARP INTO OUTFALL FROM 24" RCP
35	86+79	→	88+08	129'	RIGHT	STD.A	WARP INTO 24" RCP
36	88+08	→	95+00	692'	RIGHT	STD.A	WARP INTO 24" RCP

* SEE STD DITCH SECTION - SHEET 13 OF 13

NO	TYPE	TOP EL.	INV. OUT	REMARKS
E-21	STD. TYPE 'A' HEADWALL	——	407.99	FOR 24" RCP
E-22	STD. TYPE 'C' ENDWALL	——	410.00	FOR 24" RCP
E-23	STD. METAL END SECTION	——	435.50	FOR 12" CMP

PLAN

Scale: 1" = 50'

JOHNS HOPKINS ROAD

PROFILE

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE

CHIEF BUREAU OF ENGINEERING — DATE

CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — DATE 6/9/03

DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard, Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

D. Kallmié

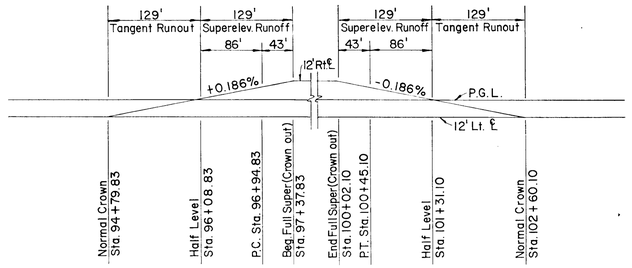
REVISIONS		
DATE	BY	DESCRIPTION

PLAN AND PROFILE
JOHNS HOPKINS ROAD
STA. 85+00 TO STA.
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

SHEET 8 OF 13

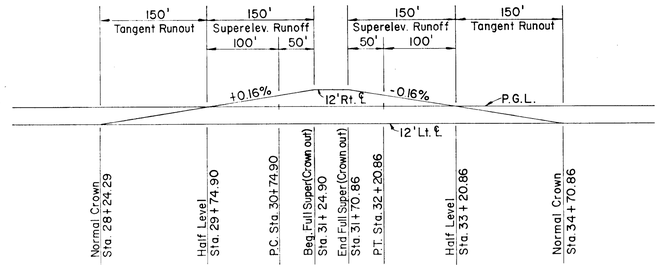
K&E 19 1253 MG 847a



CURVE NO. 6

STATION	ELEV. 12' LT.	CORR. 12' LT.	P.G.L. ELEV.	CORR. 12' RT.	ELEV. 12' RT.	REMARKS
94+79.83	423.62	-0.24'	423.86	-0.24'	423.62	Normal Crown
95+00	424.01	-0.24'	424.24	-0.20'	424.14	
95+50	426.30	-0.24'	425.54	-0.11'	425.43	
96+00	426.90	-0.24'	426.74	-0.02'	426.72	
96+08.83	426.71	-0.24'	426.95	0	426.95	Half Level
96+50	427.09	-0.24'	427.33	+0.08'	428.01	
96+94.83	428.54	-0.24'	428.78	+0.16'	428.94	P.C.
97+00	428.62	-0.24'	428.86	+0.17'	429.03	
97+37.83	429.08	-0.24'	429.32	+0.24'	429.56	BEGIN FULL SUPER (CROWN OUT)
97+50	429.19	-0.24'	429.43	+0.24'	429.67	
98+00	429.40	-0.24'	429.64	+0.24'	429.88	
98+50	429.24	-0.24'	429.48	+0.24'	429.72	
99+00	428.72	-0.24'	428.96	+0.24'	429.20	

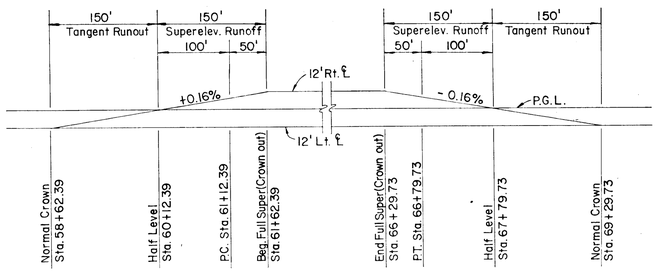
STATION	ELEV. 12' Lt.	CORR. 12' Lt.	P.G.L. ELEV.	CORR. 12' Rt.	ELEV. 12' Rt.	REMARKS
99+50	427.84	-0.24'	428.08	+0.24'	428.32	
100+00	426.10	-0.24'	426.34	+0.24'	427.18	END FULL SUPER (CROWN OUT)
100+02.10	426.05	-0.24'	426.29	+0.24'	427.13	
100+45.10	425.66	-0.24'	425.90	+0.16'	426.06	P.T.
100+50	425.55	-0.24'	425.79	+0.15'	425.94	
100+50.76	425.53	-0.24'	425.77	+0.15'	425.92	Limit of Contract
101+00	-	-0.24'	-	+0.06'	-	
101+31.10	-	-0.24'	-	0	-	Half Level
101+50	-	-0.24'	-	-0.04	-	
102+00	-	-0.24'	-	-0.13	-	
102+50	-	-0.24'	-	-0.22	-	
102+60.1	-	-0.24'	-	-0.24	-	Normal Crown

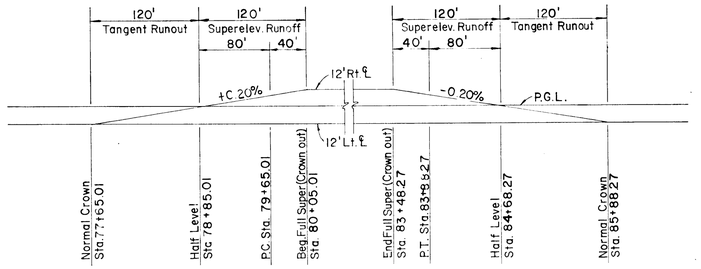


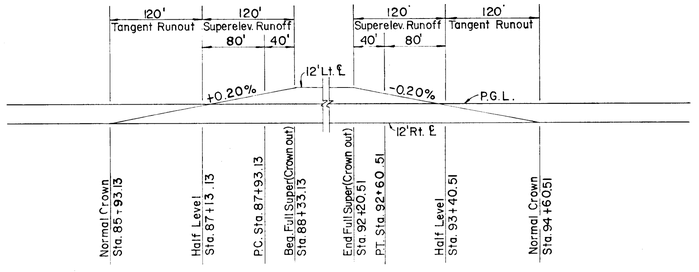
CURVE NO. 1

STATION	ELEV. 12' LT.	CORR. 12' LT.	P.G.L. ELEV.	CORR. 12' RT.	ELEV. 12' RT.	REMARKS
28+24.29	473.59	-0.24'	473.83	-0.24'	473.59	Normal Crown
28+50	473.90	-0.24'	474.14	-0.20'	473.94	
29+00	474.80	-0.24'	475.04	-0.12'	474.92	
29+50	475.71	-0.24'	475.95	-0.04'	475.91	
29+74.90	476.01	-0.24'	476.25	0	476.25	Half Level
30+00	476.22	-0.24'	476.46	+0.04'	476.50	
30+50	476.35	-0.24'	476.59	+0.12'	476.71	
30+74.90	476.27	-0.24'	476.51	+0.16'	476.67	P.C.
31+00	476.09	-0.24'	476.33	+0.20'	476.53	
31+24.90	475.01	-0.24'	476.05	+0.24'	476.29	BEGIN FULL SUPER (CROWN OUT)

STATION	ELEV. 12'LT.	CORR. 12'LT.	P.G.L. ELEV.	CORR. 12'RT.	ELEV. 12'RT.	REMARKS
31+50	475.45	-0.24'	475.69	+0.24'	475.93	Full Super.
31+70.86	475.05	-0.24'	475.29	+0.24'	475.05	END FULL SUPER (CROWN OUT)
32+00	474.46	-0.24'	474.64	+0.19'	474.83	
32+20.86	473.86	-0.24'	474.12	+0.16'	474.28	P.T.
32+50	473.17	-0.24'	473.41	-0.11'	473.52	
33+00	471.96	-0.24'	472.22	+0.02'	472.25	
33+20.86	471.56	-0.24'	471.82	0	471.82	Half Level
33+50	471.12	-0.24'	471.36	-0.05'	471.31	
34+00	470.62	-0.24'	470.86	-0.13'	470.73	
34+50	470.50	-0.24'	470.74	-0.21'	470.53	
34+70.86	470.57	-0.24'	470.81	-0.24'	470.57	Normal Crown







CURVE NO. 3

STATION	ELEV. 12' LT.	CORR. 12' LT.	P.G.L. ELEV.	CORR. 12' RT.	ELEV. 12' RT.	REMARKS
58+62.39	424.75	-0.24'	424.99	-0.24'	424.75	Normal Crown
59+00	424.24	-0.24'	424.48	-0.18'	424.30	
59+50	423.34	-0.24'	423.58	-0.10'	423.48	
60+00	422.16	-0.24'	422.40	-0.02'	422.38	
60+12.39	421.82	-0.24'	422.06	0	422.06	Half Level
60+50	420.71	-0.24'	420.95	+0.06'	421.01	
61+00	419.52	-0.24'	419.76	+0.14'	419.90	
61+12.39	418.52	-0.24'	418.76	+0.16'	418.92	P.C.
61+50	416.99	-0.24'	417.23	+0.22'	417.45	
61+62.39	416.40	-0.24'	416.70	+0.24'	416.94	BEGIN FULL SUPER (CROWN OUT)
62+00	414.73	-0.24'	414.97	-0.24'	415.21	
62+50	412.43	-0.24'	412.67	+0.24'	412.91	
63+00	410.35	-0.24'	410.59	+0.24'	410.83	
63+50	408.18	-0.24'	408.72	+0.24'	408.96	
64+00	406.82	-0.24'	407.06	+0.24'	407.30	
64+50	406.76	-0.24'	407.00	+0.24'	407.24	

STATION	ELEV. 12' LT.	CORR. 12' LT.	P.G.L. ELEV.	CORR. 12' RT.	ELEV. 12' RT.	REMARKS
65+00	406.13	-0.24'	406.37	+0.24'	406.61	
65+50	405.82	-0.24'	406.06	+0.24'	406.30	
66+00	405.84	-0.24'	406.08	+0.24'	406.32	
66+29.73	406.01	-0.24'	406.25	+0.24'	406.49	END FULL SUPER (CROWN OUT)
66+50	406.18	-0.24'	406.42	+0.21'	406.63	
66+79.73	406.48	-0.24'	406.72	+0.16'	406.88	P.T.
67+00	406.68	-0.24'	406.92	+0.13'	407.05	
67+50	407.18	-0.24'	407.42	+0.05'	407.47	
67+79.73	407.48	-0.24'	407.72	0	407.72	Half Level
68+00	407.68	-0.24'	407.92	-0.03'	407.89	
68+50	408.18	-0.24'	408.42	-0.11'	408.31	
69+00	408.68	-0.24'	408.92	-0.19'	408.73	
69+29.73	408.78	-0.24'	409.02	-0.24	408.78	Normal Crown

CURVE NO. 4

STATION	ELEV. 12' LT.	CORR. 12' LT.	P.G.L. ELEV.	CORR. 12' RT.	ELEV. 12' RT.	REMARKS
77+65.01	428.85	-0.24	429.09	-0.24	428.85	NORM. CROWN
78+00	428.78	"	428.92	-0.17	428.75	
78+50	428.61	"	428.85	-0.07	428.78	
78+85.01	428.68	"	428.85	0	428.85	HALF LEVEL
79+00	428.91	"	429.15	+0.03	429.18	
79+50	429.28	"	429.52	+0.13	429.65	
79+65.01	429.42	"	429.66	+0.19	429.85	P.C.
80+00	429.73	"	429.97	+0.24	430.21	BEGIN FULL SUPER (CROWN OUT)
80+50	427.78	"	428.02	+0.23	428.25	
80+65.01	427.73	"	427.97	+0.24	428.21	BEG. FULL SUPER (CROWN OUT)
81+00	426.18	"	426.42	"	426.66	
81+50	424.98	"	425.22	"	425.46	

STATION	ELEV. 12' LT.	CORR. 12' LT.	P.G.L. ELEV.	CORR. 12' RT.	ELEV. 12' RT.	REMARKS
82+00	423.78	-0.24	424.02	-0.24	423.78	
82+50	423.28	"	423.52	"	423.76	
82+65	423.30	"	423.54	"	423.78	
83+00	424.78	"	425.02	"	425.26	
83+48.27	424.30	"	424.54	"	424.78	END FULL SUPER (CROWN OUT)
83+50	424.28	"	424.52	+0.24	424.76	
83+98.27	423.90	"	424.14	+0.16	424.30	PT
84+00	423.78	"	424.02	+0.14	424.16	
84+50	423.16	"	423.40	+0.04	423.44	
84+98.27		"	423.11	0	423.11	HALF LEVEL
85+00	422.28	"	422.52	-0.06	422.46	
85+50	421.16	"	421.40	-0.16	421.24	
85+88.27	421.12	"	421.36	-0.24	421.12	NORM. CROWN

CURVE NO. 5

STATION	ELEV. 12' LT.	CORR. 12' LT.	P.G.L. ELEV.	CORR. 12' RT.	ELEV. 12' RT.	REMARKS
85+88.13	419.99	-0.24	420.23	-0.24	419.99	NORMAL CROWN
86+00	419.79	-0.23	420.02	"	419.78	
86+50	419.35	-0.13	419.52	"	419.28	
87+00	419.09	-0.09	419.24	"	419.15	
87+19.13	419.03	0	419.03	"	419.03	HALF LEVEL
87+50	418.85	+0.07	418.98	"	419.04	
87+93.13	418.73	+0.16	418.89	"	419.05	P.C.
88+00	418.62	+0.17	418.79	"	418.96	BEGIN FULL SUPER
88+33.13	418.13	+0.24	418.37	"	418.61	
88+50	418.01	"	418.26	"	418.42	
89+00	418.43	"	418.67	"	418.91	
89+50	418.33	"	418.57	"	418.81	
90+00	418.55	"	418.31	"	418.07	

STATION	ELEV. 12' LT.	CORR. 12' LT.	P.G.L. ELEV.	CORR. 12' RT.	ELEV. 12' RT.	REMARKS
90+50	414.11	+0.24	413.87	-0.24	413.63	
91+00	413.91	"	414.17	"	414.53	
91+50	414.18	"	413.94	"	413.70	
92+00	417.38	"	417.14	"	416.90	
92+20.51	417.87	"	417.63	"	417.39	END FULL SUPER
92+50	418.52	+0.18	418.34	"	418.10	
92+90.51	418.75	+0.16	418.59	"	418.35	PT.
93+00	419.62	+0.08	419.54	"	419.30	
93+40.51	420.91	0	420.91	"	420.67	HALF LEVEL
93+50	421.02	-0.02	421.04	"	420.80	
94+00	421.82	-0.12	421.94	"	421.70	
94+50	422.52	-0.22	422.74	"	422.50	
94+60.51	423.15	-0.24	423.39	"	423.15	NORM. CROWN

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE

CHIEF BUREAU OF ENGINEERING DATE

Elizabeth Anderson Falio 6/6/83
CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION DATE

DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard. Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

Dr. Katleni

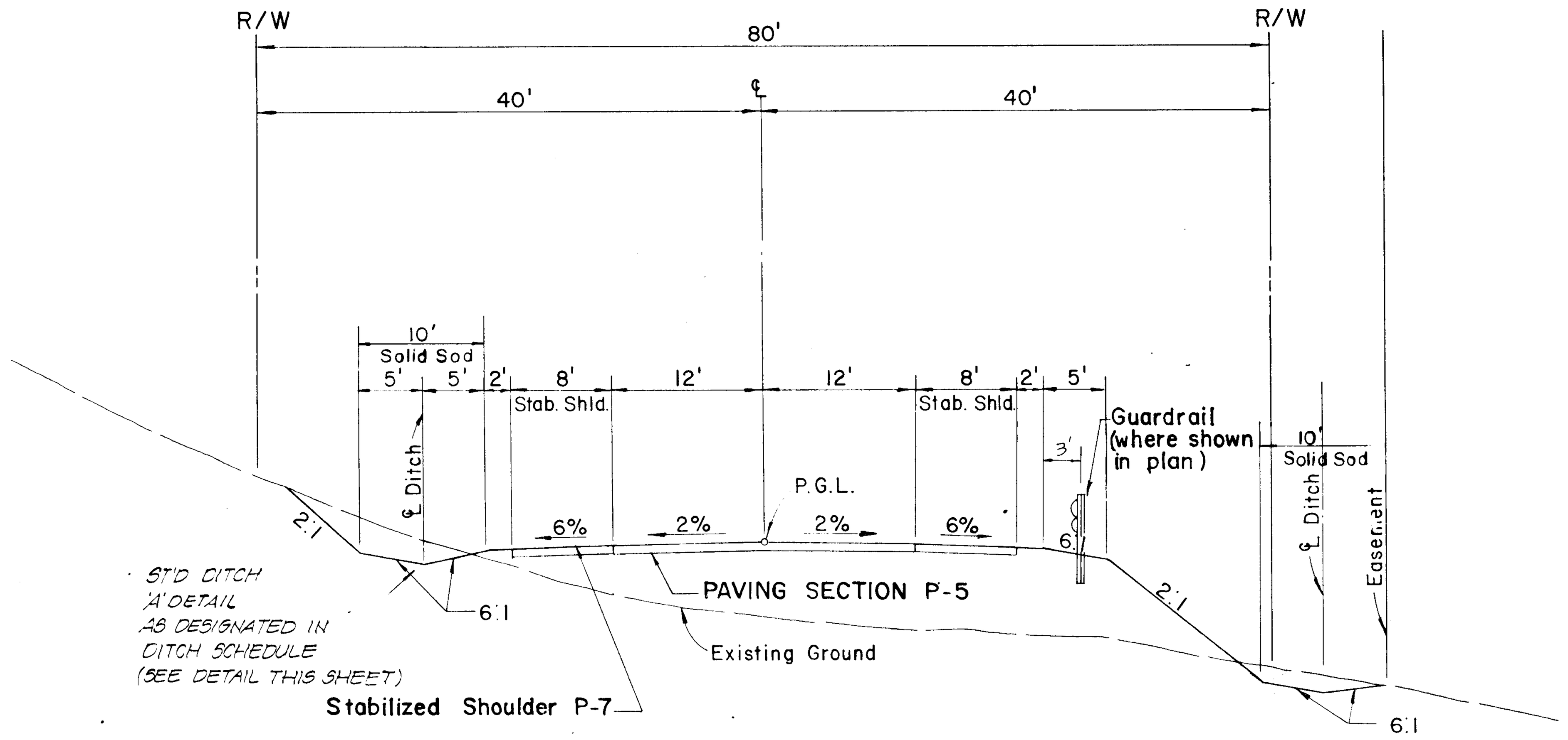
REVISIONS

DATE	BY	DESCRIPTION

SUPERELEVATION DIAGRAMS
JOHNS HOPKINS ROAD
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: NONE

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

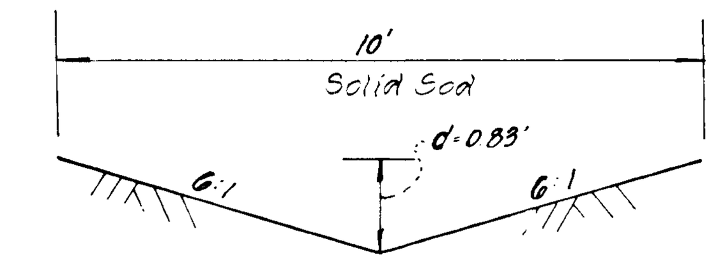
SHEET 9 OF 13



TYPICAL CROSS SECTION – JOHNS HOPKINS ROAD (STA. 72+00 THRU STA. 98+50)

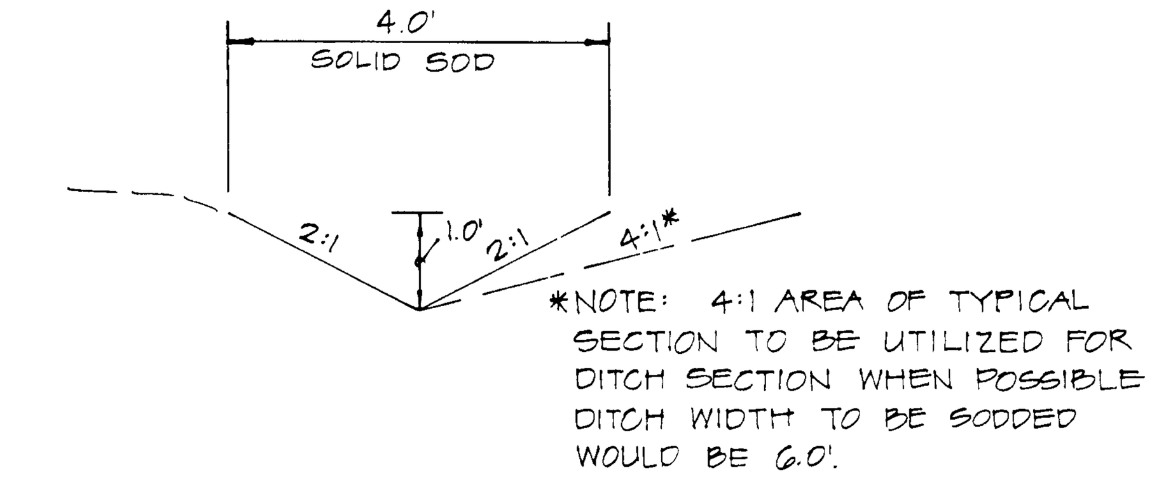
& SANNER ROAD

NO SCALE



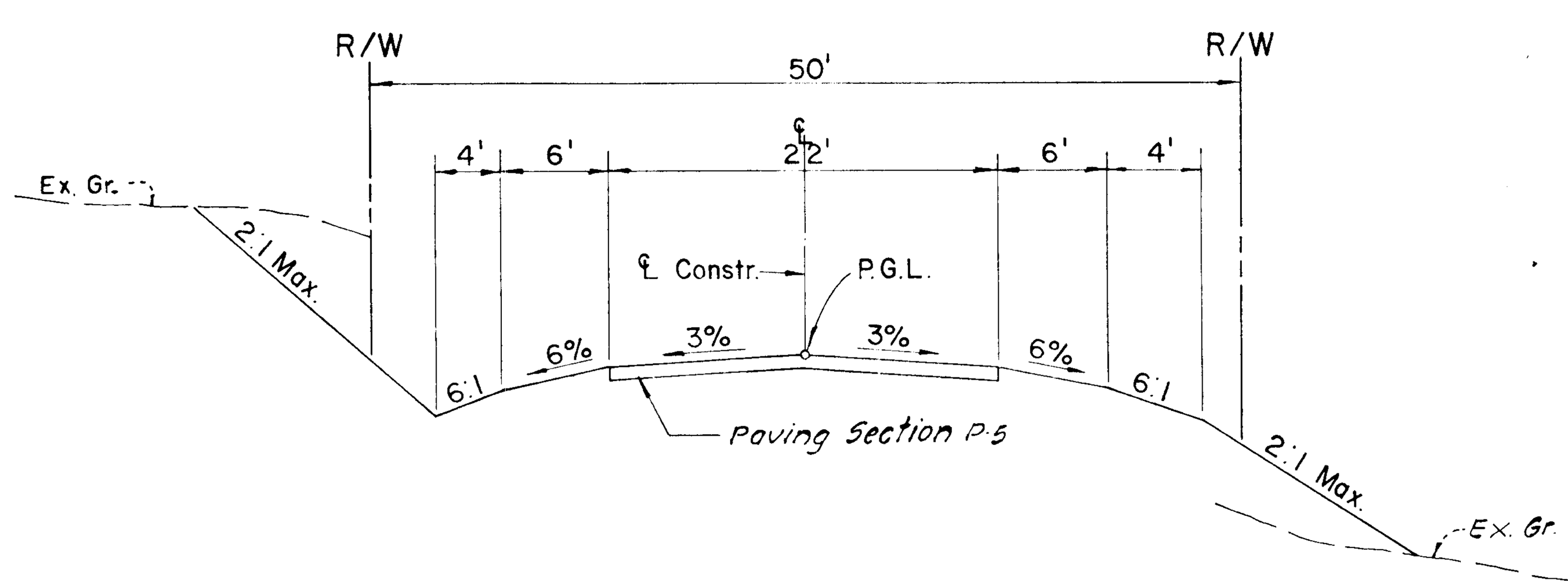
STANDARD DITCH 'A'

no scale



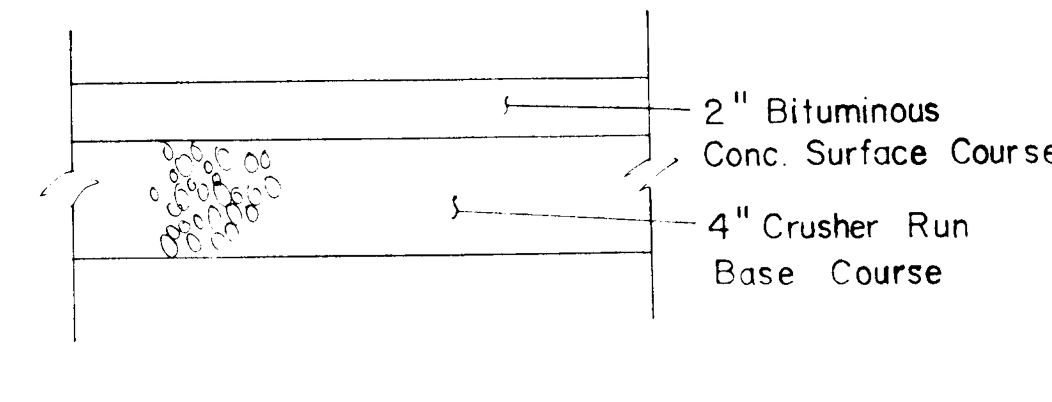
STANDARD DITCH 'B'

no scale



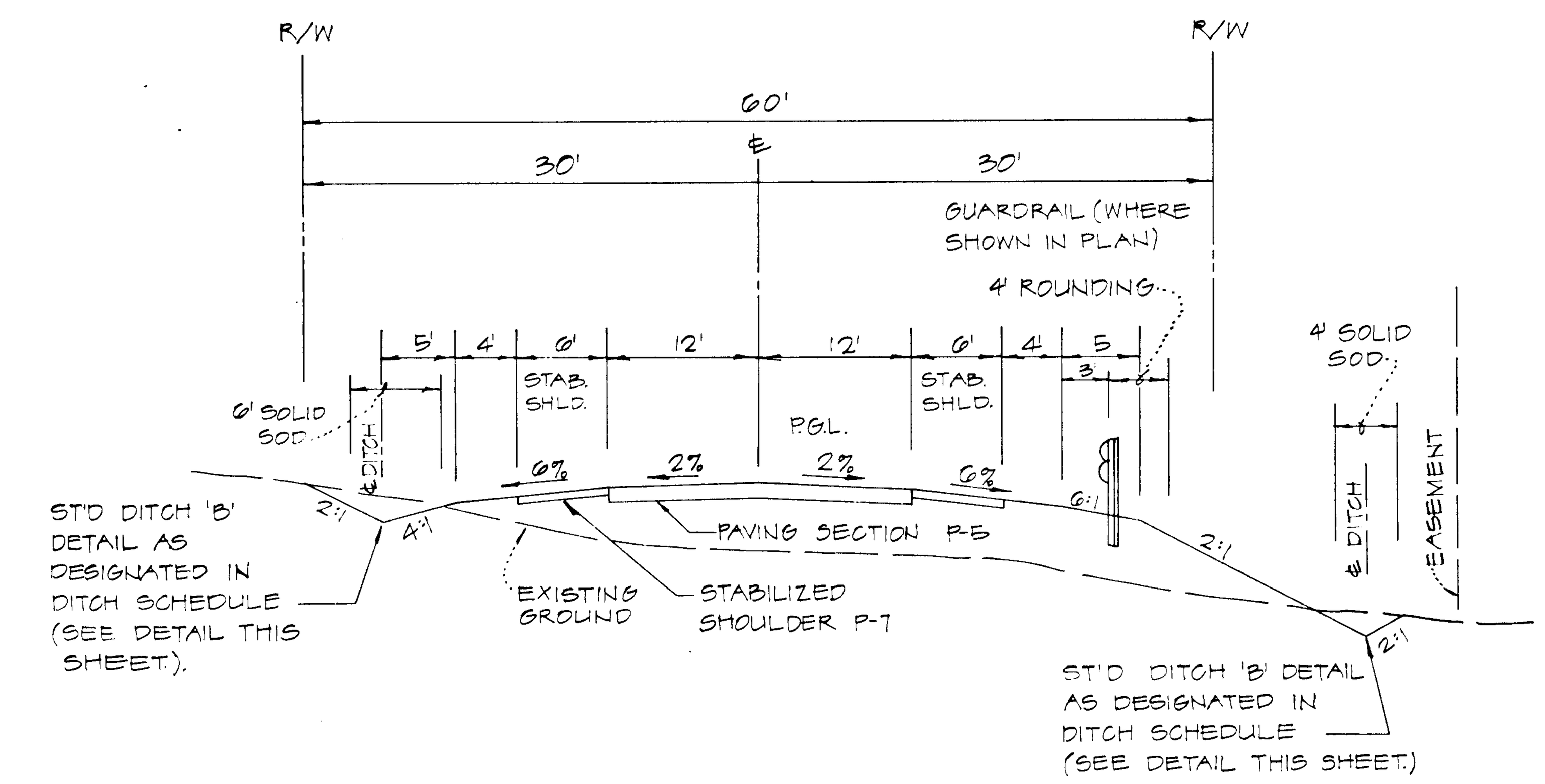
TYPICAL CROSS SECTION – OLD JOHNS HOPKINS ROAD

NO SCALE



PAVING SECTION SP-1 – To be used for driveways designated SP-1 in plan

NO SCALE

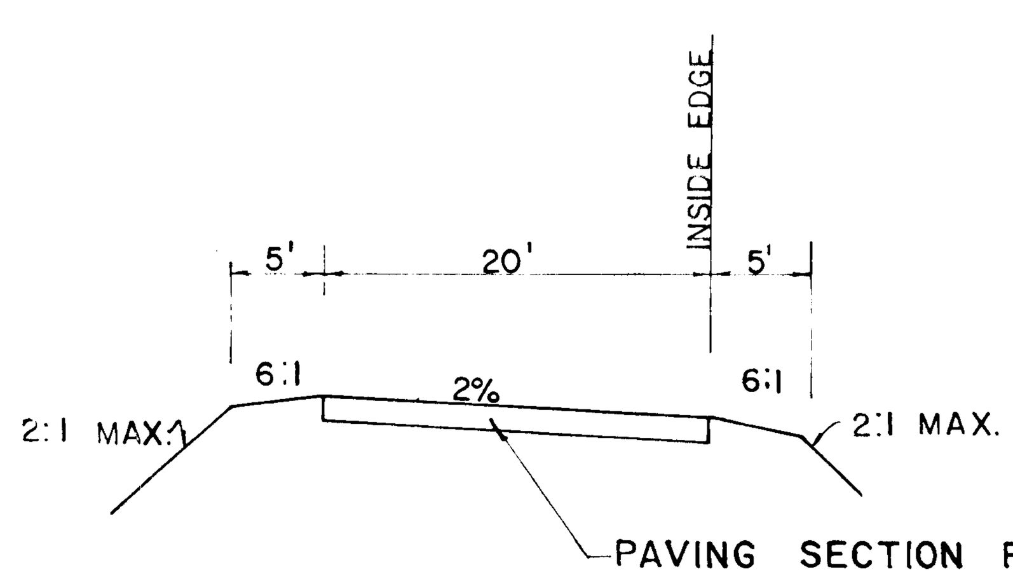


TYPICAL CROSS SECTION ~ JOHNS HOPKINS ROAD

STA. 20+00 THRU STA. 42+50

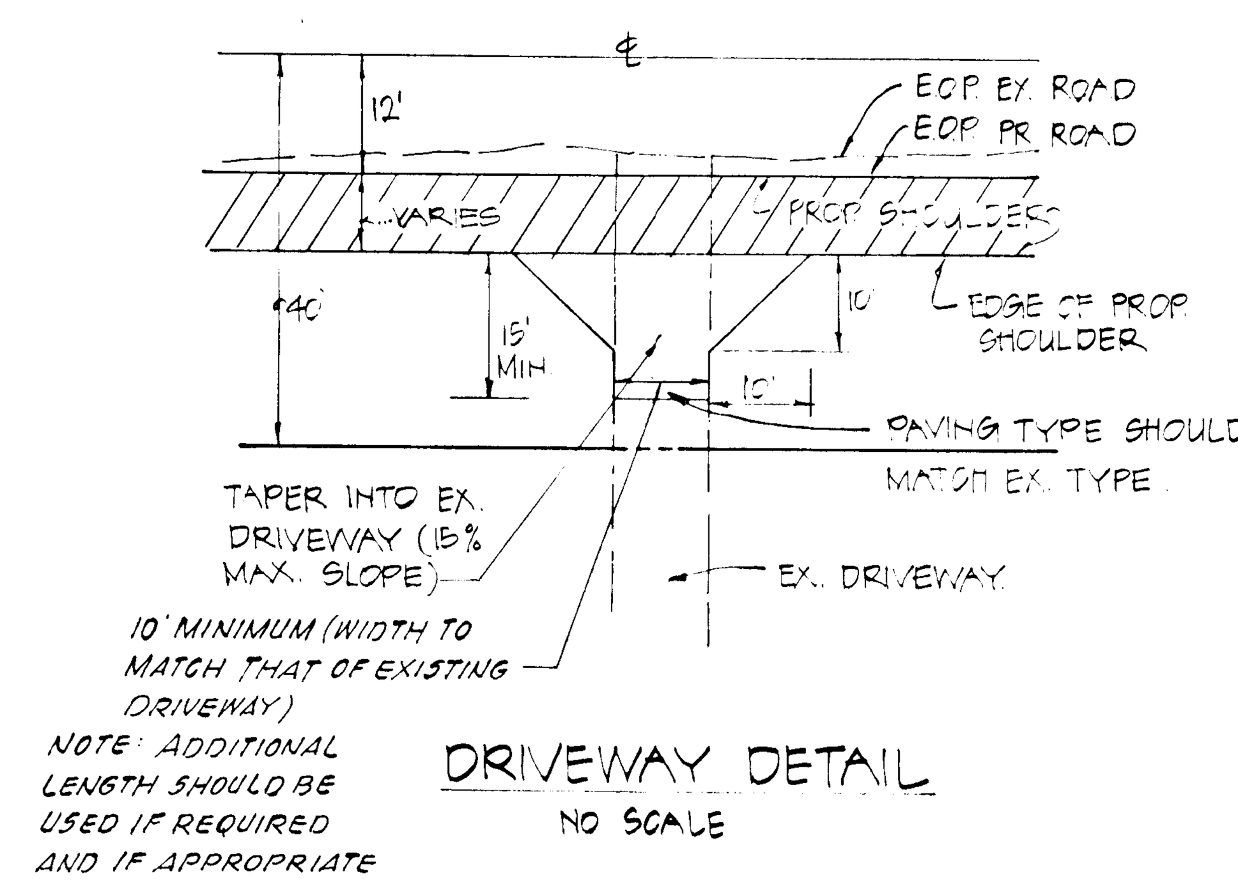
STA. 56+70 THRU. STA. 72+00

no scale



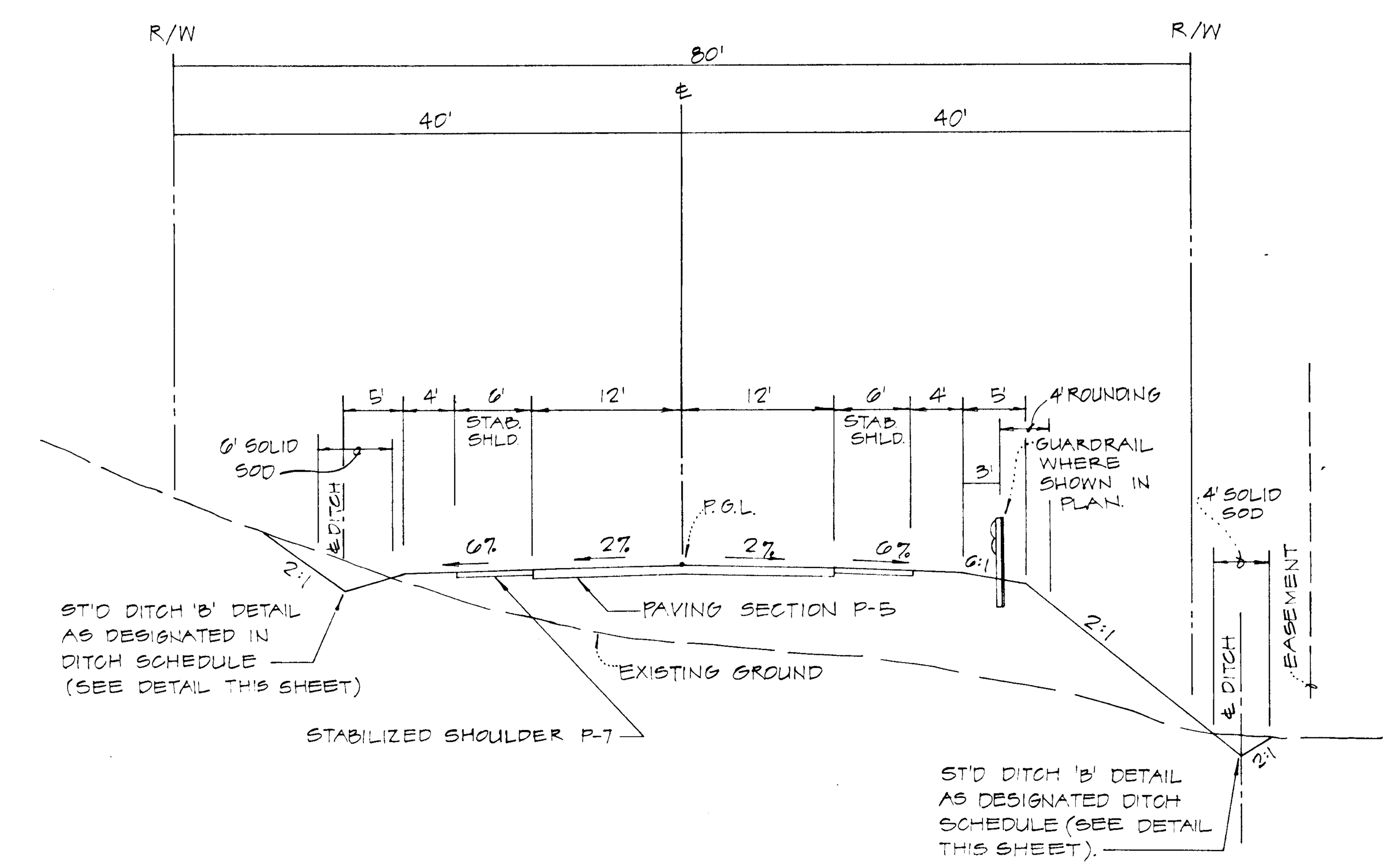
TYPICAL HALF SECTION-TURNING ROADWAY AT INTERSECTION OF JOHNS HOPKINS ROAD AND SANNER ROAD

NO SCALE



DRIVEWAY DETAIL

NO SCALE

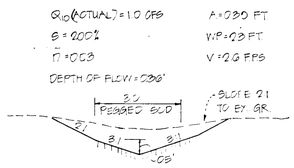


TYPICAL CROSS SECTION ~ JOHNS HOPKINS ROAD

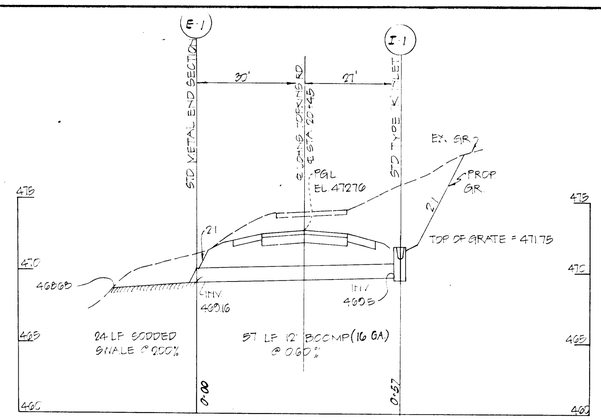
STA. 42+50 THRU STA. 56+70

no scale

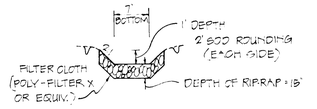
DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MARYLAND	DEWBERRY, NEALON & DAVIS	REVISIONS	PAVING SECTIONS & DETAILS	DESIGNED: P.L.
DIRECTOR OF PUBLIC WORKS — DATE	ENGINEERS-ARCHITECTS-PLANNERS-SURVEYORS	DATE / BY / DESCRIPTION	JOHNS HOPKINS ROAD	DRAFTED: L.B.
CHIEF BUREAU OF ENGINEERING — DATE	2594 Riva Road, Annapolis, Maryland 21401		CAPITAL PROJECT NO. J-5-4014	CHECKED: V.K.
Elizabeth Anderson Calia 9/7/83 CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — DATE	8411 Arlington Boulevard, Fairfax, Virginia 22030; 19201 Montgomery Village Ave., Gaithersburg, Md. 20760		FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE: AS SHOWN	SHEET 10 OF 13



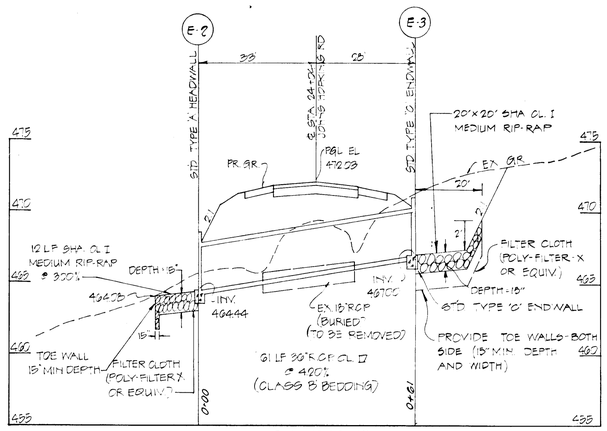
SODDED SWALE
(OUTFALL - 12" BCCMP - STA. 20+45)



CULVERT #1
PROPOSED 12" BCCMP
@ STA. 20+45
SKEW=12°

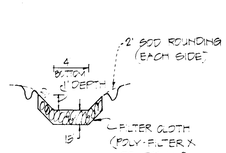


RIP-RAP CHANNEL
NO SCALE

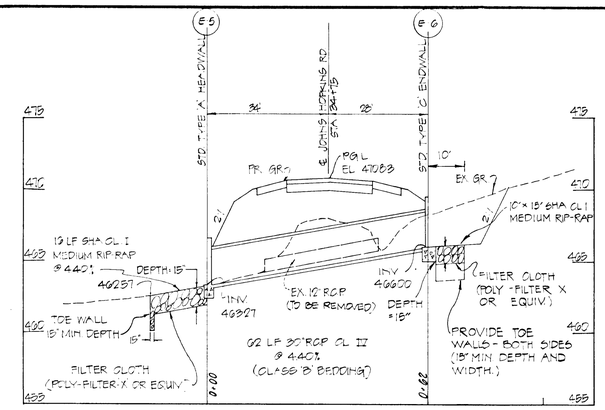


CULVERT #2
PROPOSED 30" RCP
@ STA. 24+04
SKEW=0°

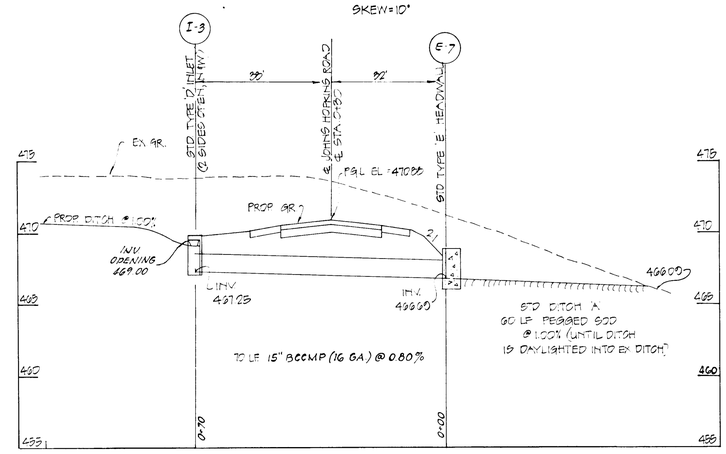
SCALES: HORZ: 1" = 20'
VERT 1" = 5'



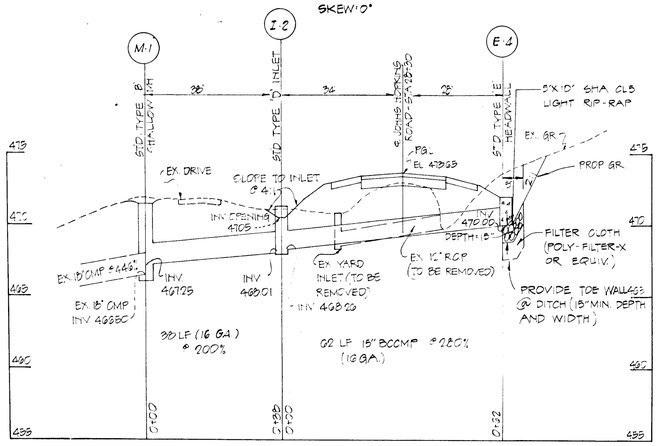
RIP-RAP CHANNEL
NO SCALE



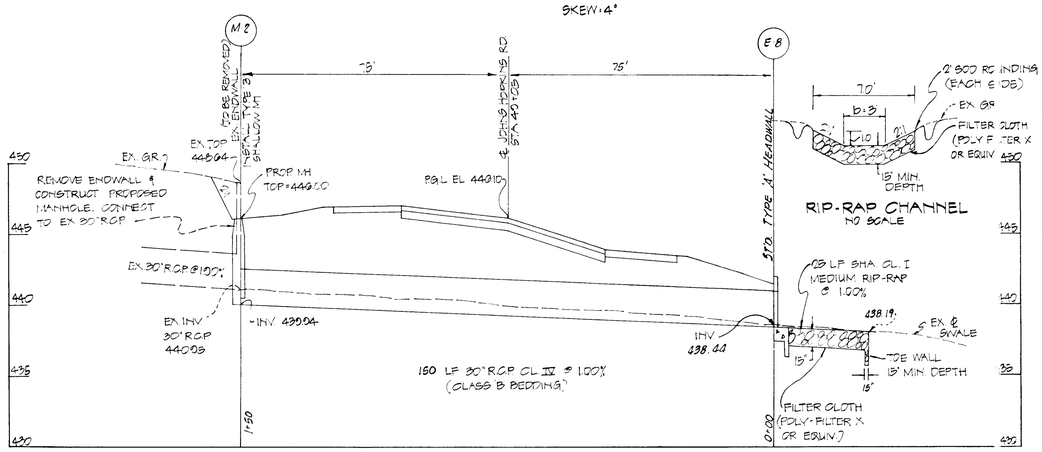
CULVERT #4
PROPOSED 30" RCP
@ STA. 34+75
SKEW=10°



CULVERT #5
PROPOSED 15" BCCMP
@ STA. 0+30 (OLD JOHNS HOPKINS RD)
SKEW=4°



CULVERT #3
PROPOSED 15" AND 18" BCCMP
@ STA. 28+30
SKEW=0°



CULVERT #6
PROPOSED 30" RCP
@ STA. 40+05
SKEW=66°

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE

CHIEF BUREAU OF ENGINEERING — DATE

CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — DATE 4/9/03

DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard, Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

REVISIONS

DATE	BY	DESCRIPTION

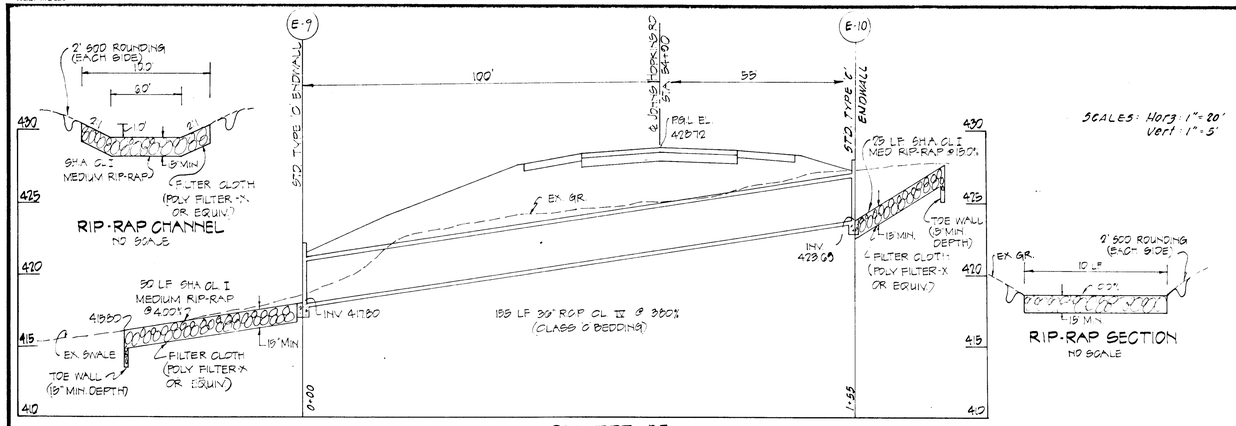
CULVERT PROFILES & OUTFALL DETAILS
JOHNS HOPKINS ROAD

CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

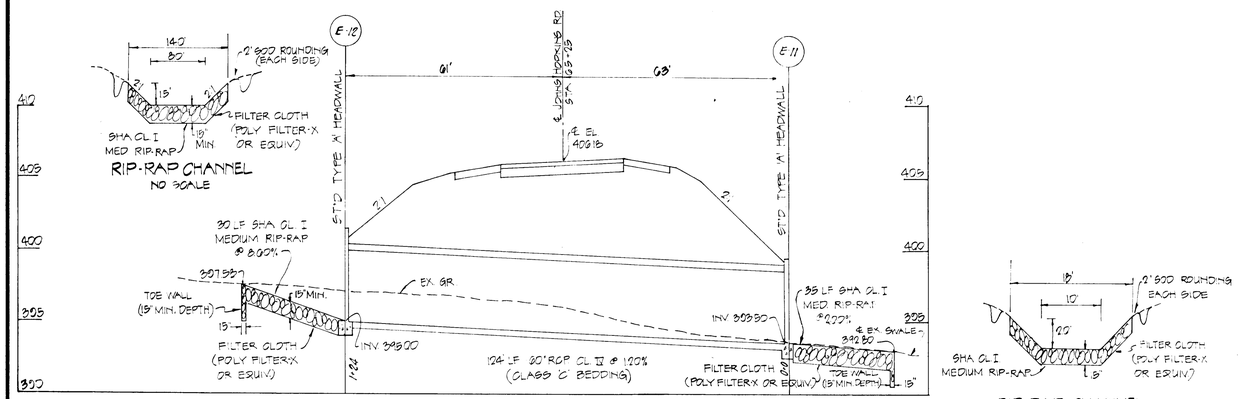
DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

SHEET 11 OF 13

K&E# MC 224

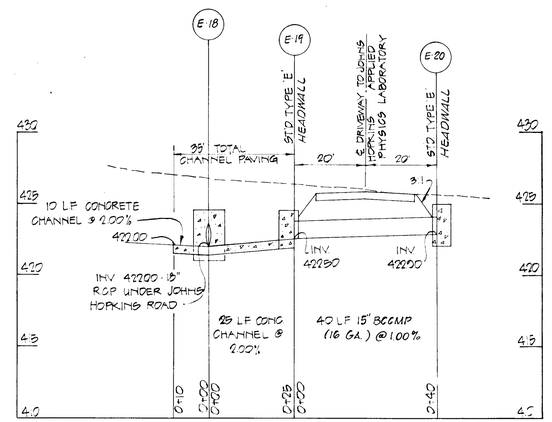


CULVERT #7
PROPOSED 30" RCP
℄ STA 94+00
SKEW: 36°

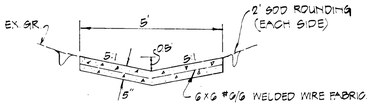


CULVERT #10
PROPOSED 36" RCP
℄ STA 72+78
SKEW: 10°

CULVERT #8
PROPOSED 60" RCP
℄ STA 65+23
SKEW: 45°

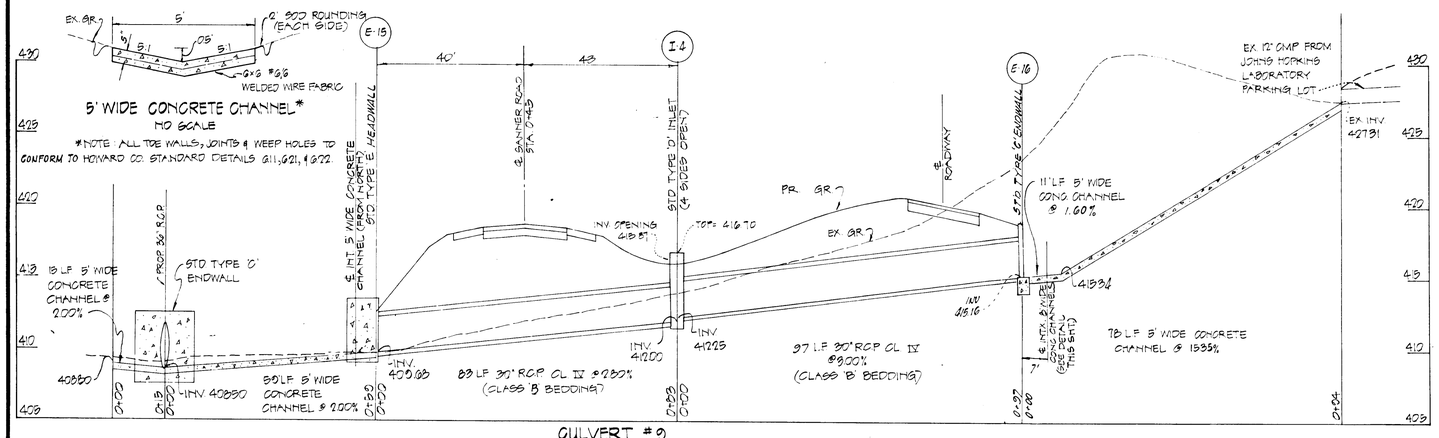


CULVERT #11
PROPOSED 15" BCCMP
UNDER DRIVEWAY TO JOHNS HOPKINS APPLIED PHYSICS LAB, (87' OFF ℄ JOHNS HOPKINS ROAD)
SKEW: 0°

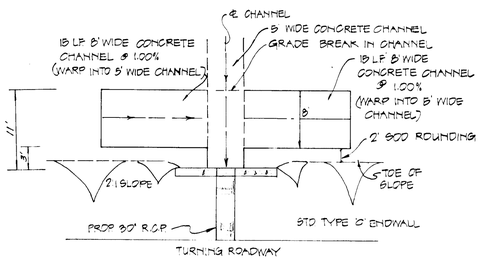


5' WIDE CONCRETE CHANNEL*
NO SCALE

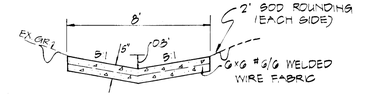
*NOTE: ALL TOE-WALLS, JOINTS, AND WEEP HOLES TO CONFORM TO HOWARD CO STANDARD DETAILS G.11, G21, AND G22.



CULVERT #9
PROPOSED 30" RCP's
(2) UNDER BANNER RD INTERSECTION



DETAIL OF CONCRETE CHANNELS @ 30" RCP
PLAN VIEW
SCALE 1"=10'



8' WIDE CONCRETE CHANNEL*
NO SCALE

*NOTE: ALL TOE-WALLS, JOINTS, & WEEP HOLES TO CONFORM TO HOWARD COUNTY STANDARD DETAILS G.11, G21, AND G22.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE

CHIEF BUREAU OF ENGINEERING — DATE
Elizabeth Anderson Colin 6/9/83
CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION — DATE

DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
8411 Arlington Boulevard, Fairfax Virginia 22030
2594 Riva Road, Annapolis, Maryland 21401

De Cattuno

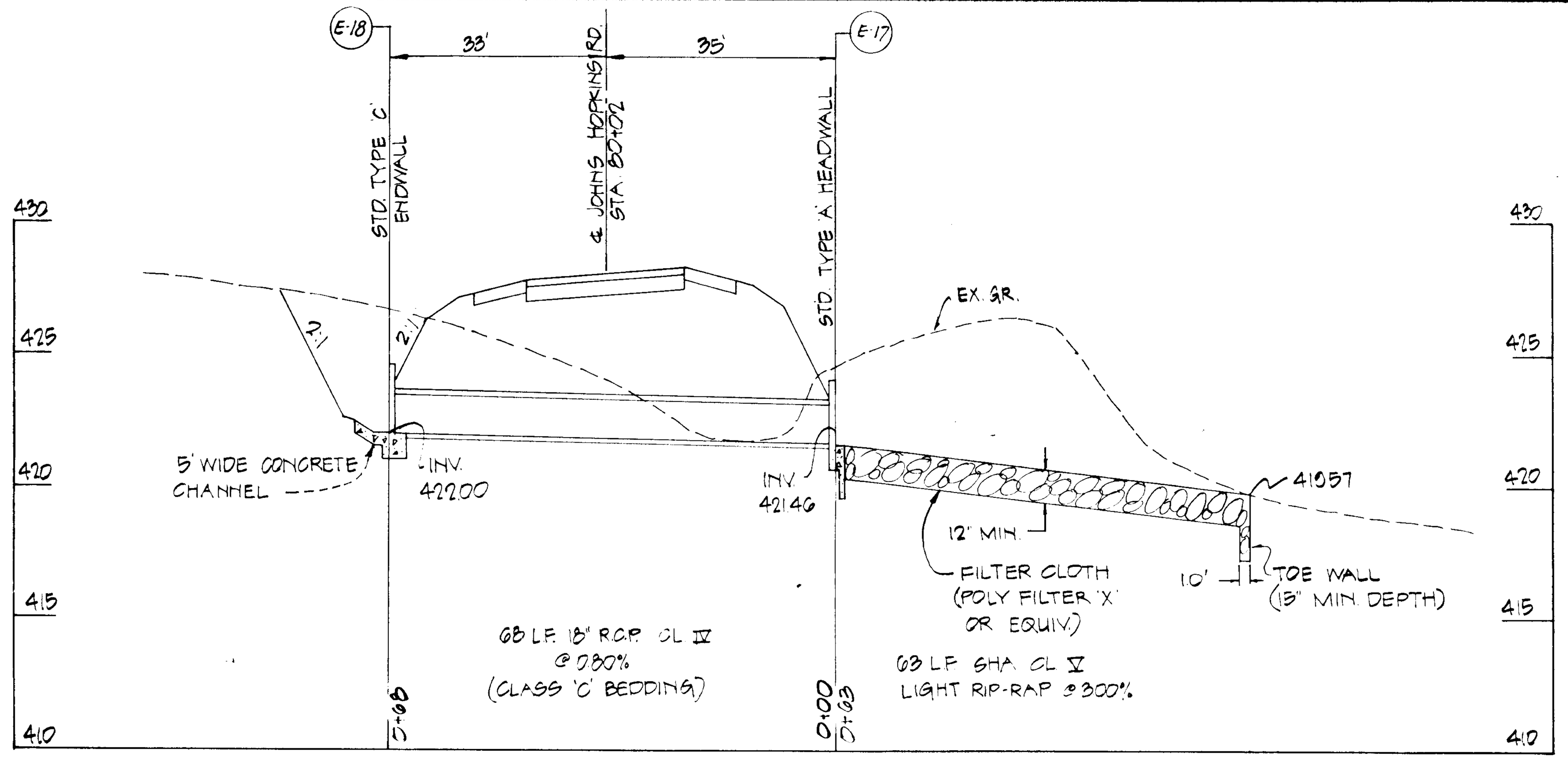
REVISIONS		
DATE	BY	DESCRIPTION

CULVERT PROFILES & OUTFALL DETAILS
JOHNS HOPKINS ROAD

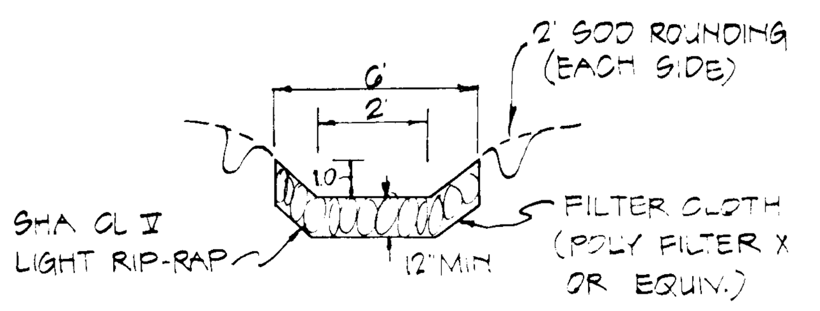
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

DESIGNED: P.L.
DRAFTED: L.H.
CHECKED: V.K.

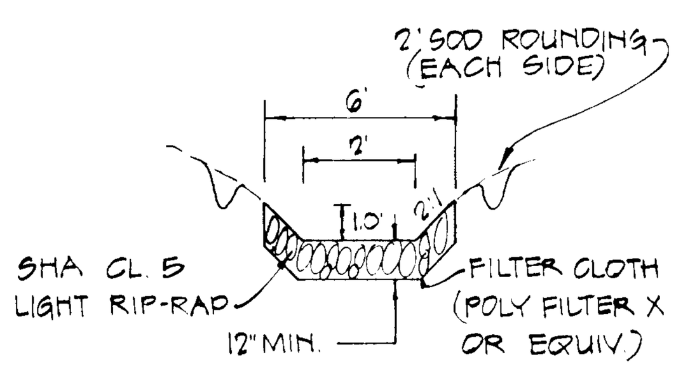
SHEET 12 OF 13



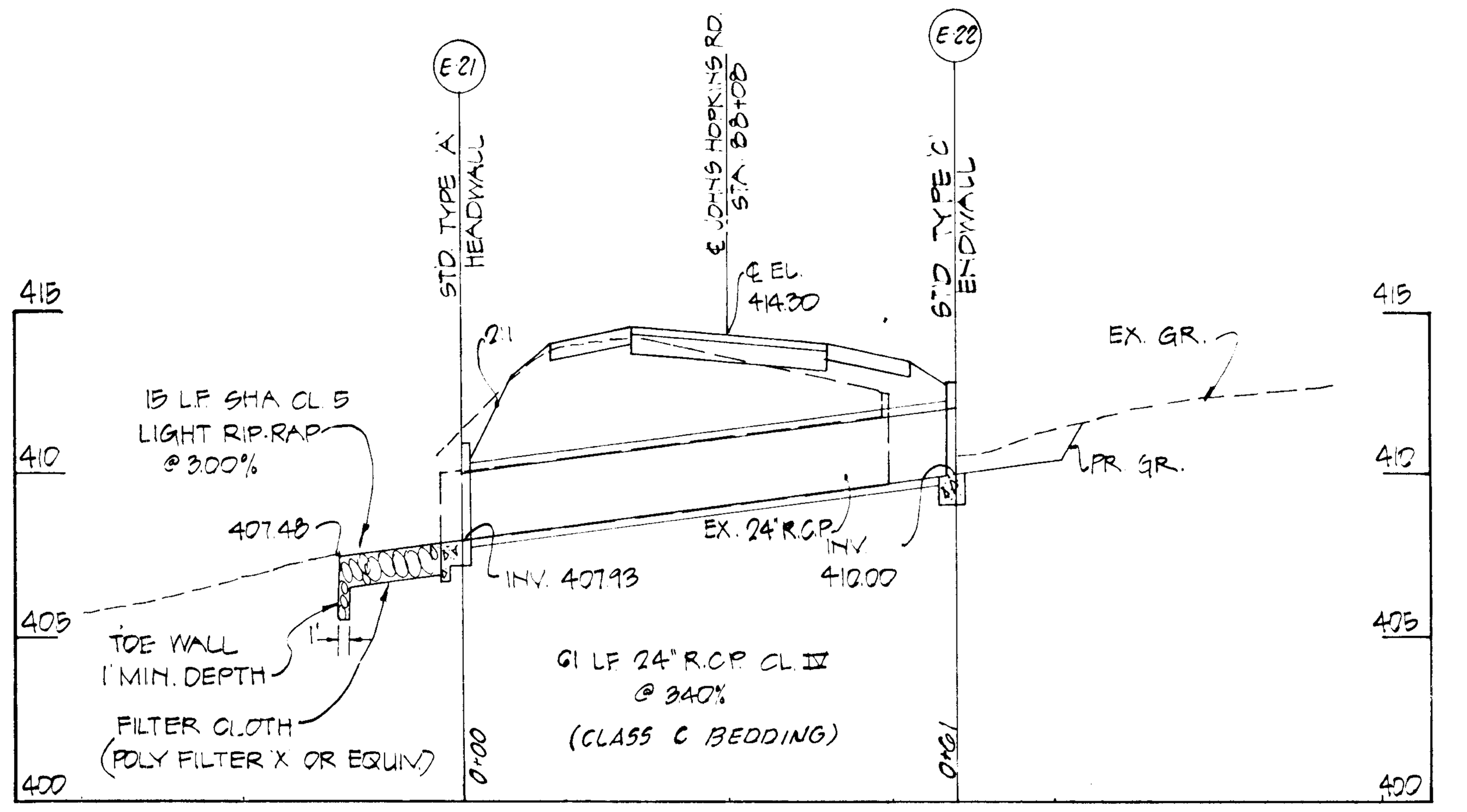
CULVERT #12
PROPOSED 15" RCP
STA. 80+02
SKEW=0°



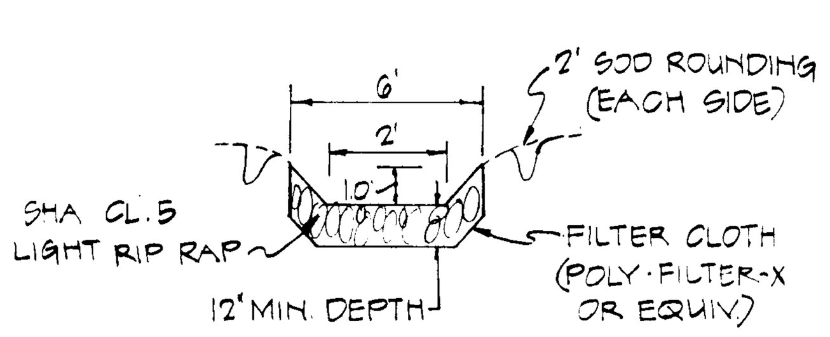
RIP-RAP CHANNEL
NO SCALE



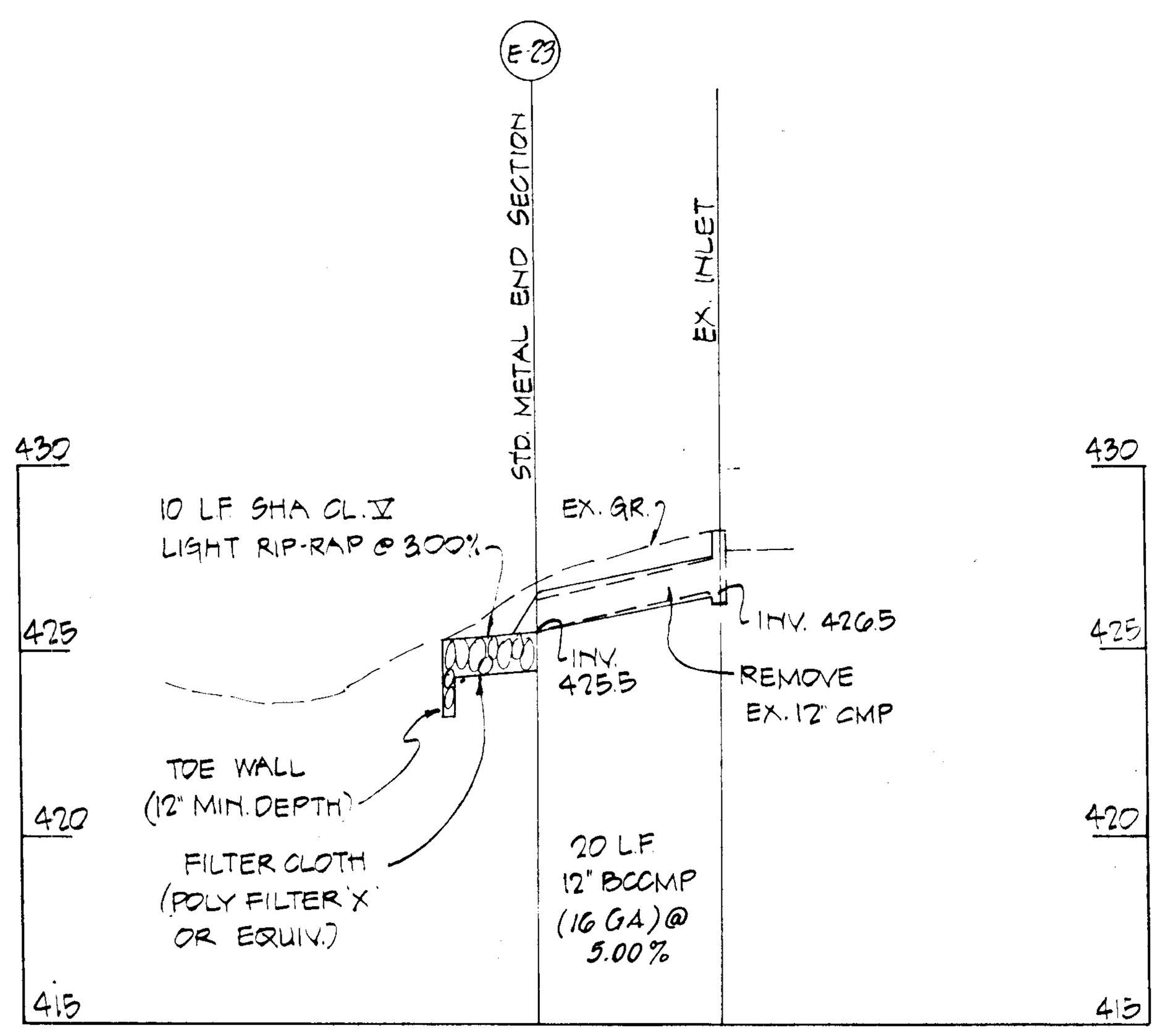
RIP-RAP CHANNEL
NO SCALE



CULVERT #13
PROPOSED 24" RCP
℄ STA. 88+08
SKEW=0°



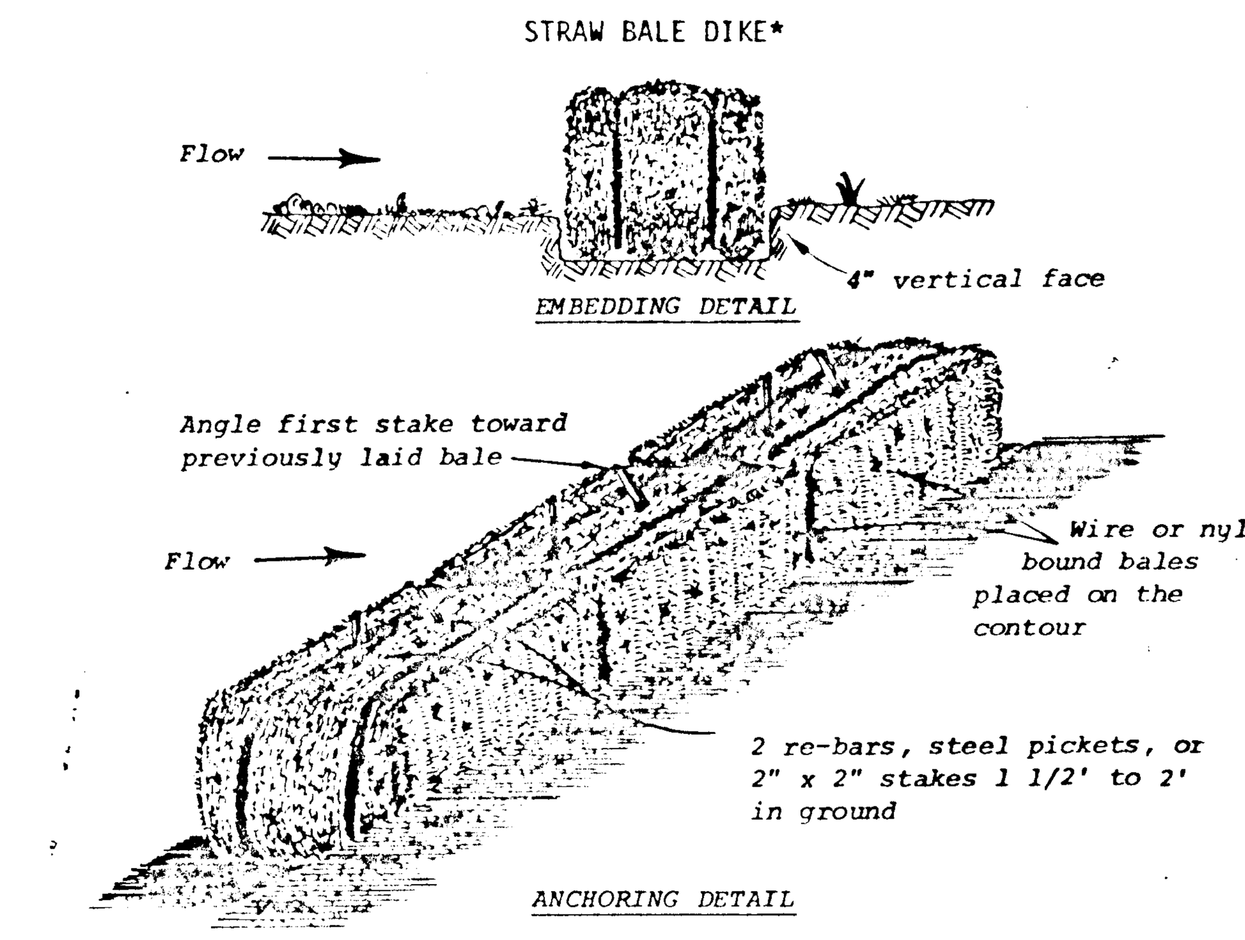
RIP-RAP CHANNEL
NO SCALE



CULVERT #14
PROPOSED 12" BCCMP
LOCATED AT DRIVEWAY TO
EX. HUMBLE OIL & REFINING CO.

SCALES: HORZ 1"=20'
VERT 1"=5'

STRAW BALE DIKE*

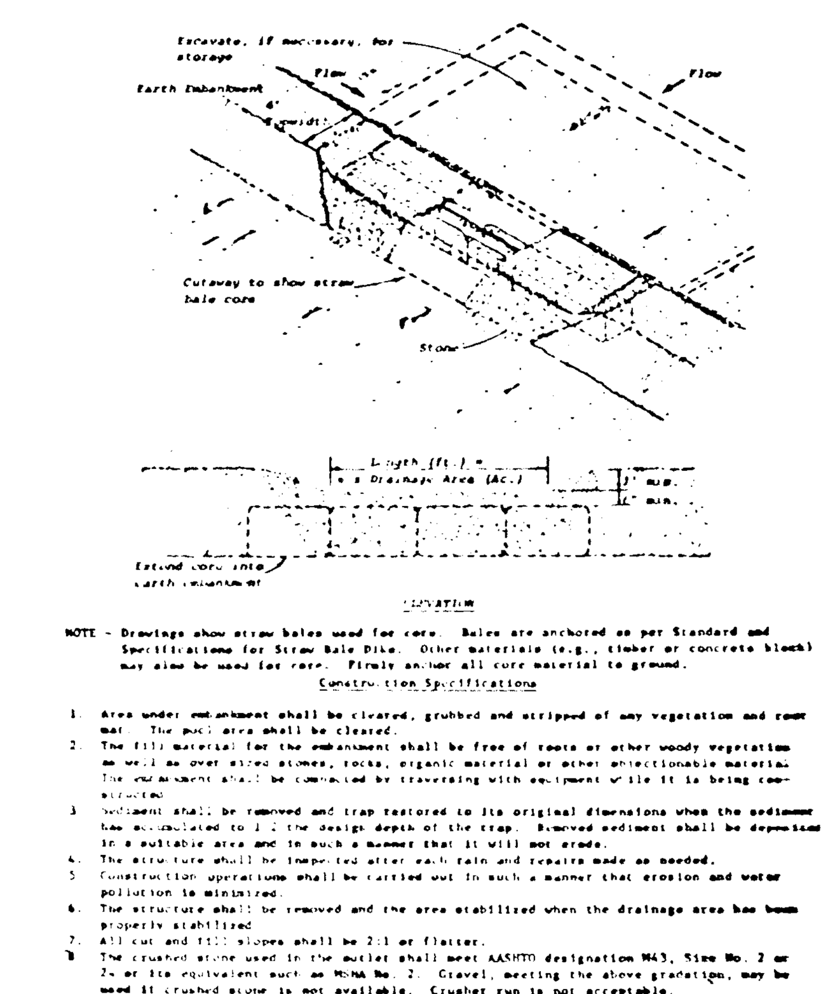


Construction Specifications

1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

Standard Symbol SBD

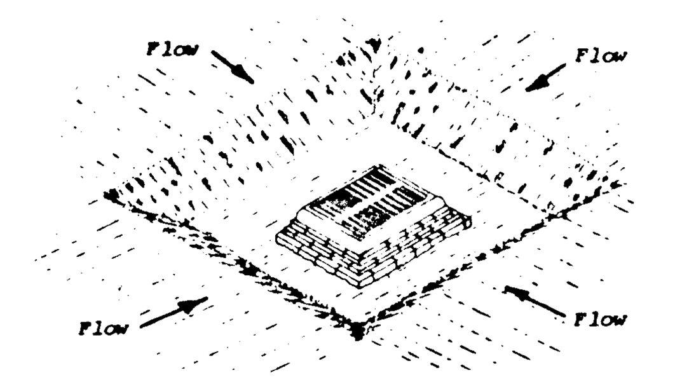
STONE OUTLET SEDIMENT TRAP

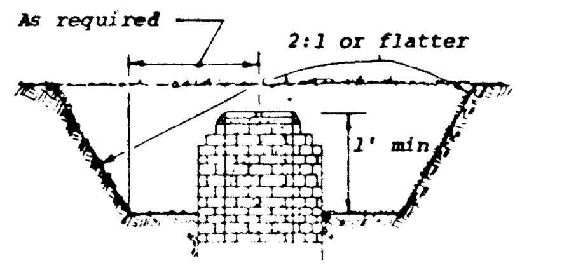


SEDIMENT CONTROL NOTES

1. THE DEVELOPER SHALL NOTIFY THE HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS AT LEAST 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION SHOWN HEREON. (992-2435).
2. BERMS, SEDIMENT TRAPS, ETC., TO BE CONSTRUCTED PRIOR TO ANY ON-SITE GRADING OR DISTURBANCE TO ANY EXISTING SURFACE MATERIAL, AND ARE TO BE STABILIZED AS SOON AS CONSTRUCTED.
3. ALL SEDIMENT CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS. (992-2435).
4. ALL GRADED AREAS NOT TO BE SODDED SHALL BE STABILIZED BY SEEDING AND MULCHING IN ACCORDANCE WITH SECTION 15.10 AND 15.11 OF THE "STANDARD SPECIFICATIONS & DETAILS FOR CONSTRUCTION" FOR HOWARD COUNTY. USE SEED MIX SPECIFIED FOR " UNIMPROVED AREAS NOT TO BE MOVED" AS DESCRIBED IN SECTION 15.10-2(C).
   ALL AREAS REMAINING OR INTENDED TO REMAIN DISTURBED FOR LONGER THEN 45 DAYS SHALL BE STABILIZED BY TEMPORARY SEEDING.
5. A GRADING PERMIT SHALL BE OBTAINED PRIOR TO ANY EARTH MOVING.

STORM INLET SEDIMENT TRAP





CROSS-SECTION

YARD DRAIN

CONSTRUCTION SPECIFICATIONS

1. 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.
2. The structure shall be inspected after each rain and repairs made as needed.
3. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
4. The sediment trap shall be removed and area stabilized when the remaining drainage area has been properly stabilized.
5. All cut and fill slopes shall be 2:1 or flatter.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE
CHIEF BUREAU OF ENGINEERING DATE
CHIEF, ROADS, BRIDGES, STORM DRAINS DIVISION DATE 6/9/83

DEWBERRY, NEALON & DAVIS
ENGINEERS - ARCHITECTS - PLANNERS - SURVEYORS
2594 Riva Road, Annapolis, Maryland 21401
8411 Arlington Boulevard, Fairfax, Virginia 22030
19201 Montgomery Village Ave., Gaithersburg, Md. 20760

REVISIONS		
DATE	BY	DESCRIPTION

CULVERT PROFILES & OUTFALL DETAILS & SEDIMENT CONTROL DETAILS
JOHNS HOPKINS ROAD
CAPITAL PROJECT NO. J-5-4014
FIFTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN

DESIGNED: P.L.
DRAFTED: L.B.
CHECKED: V.K.

SHEET 13 OF 13