COLUMBIA

ELECTION DISTRICT 5

VILLAGE OF WILDE LAKE

SECTION 3

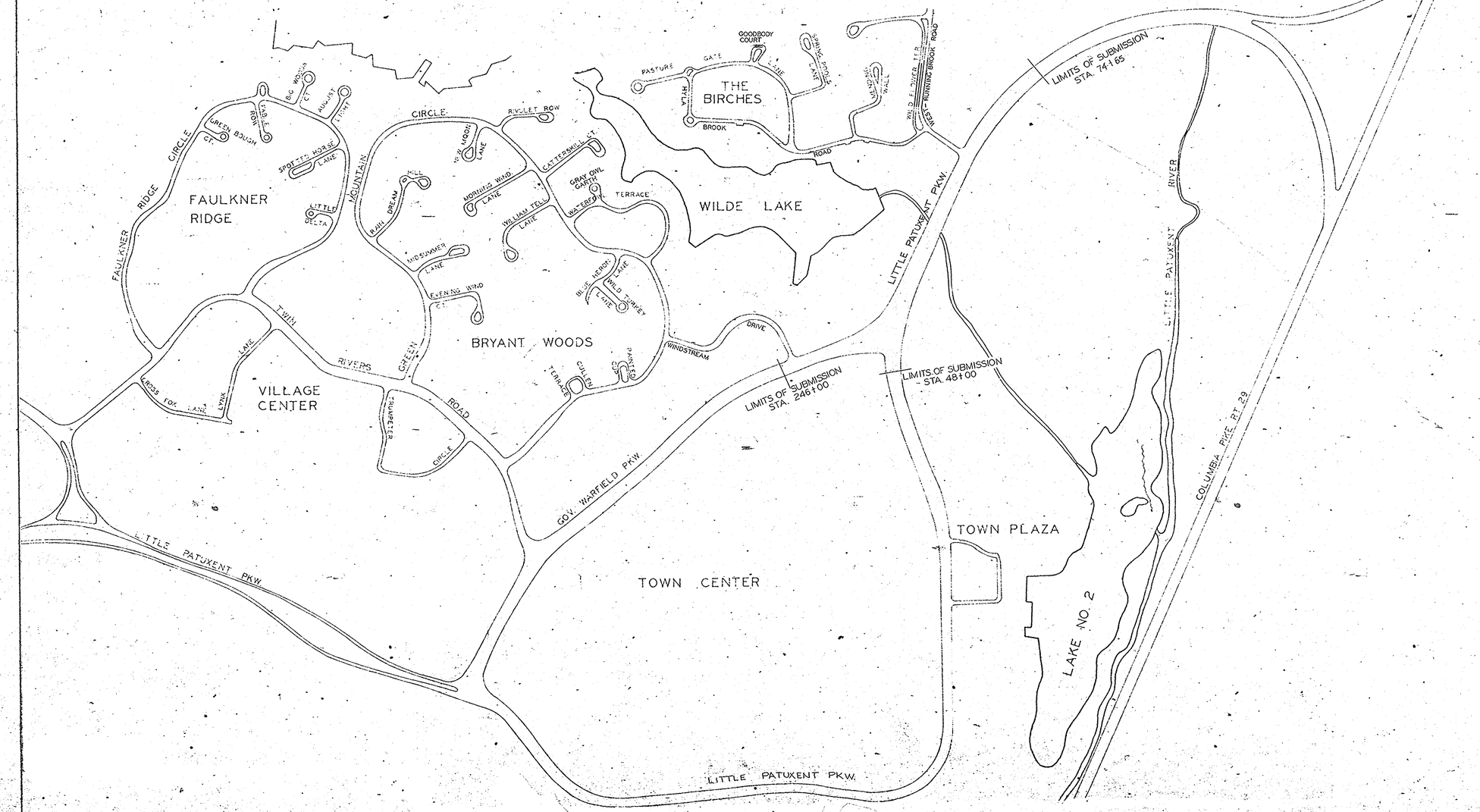
WILDE LAKE AND PORTOFINO

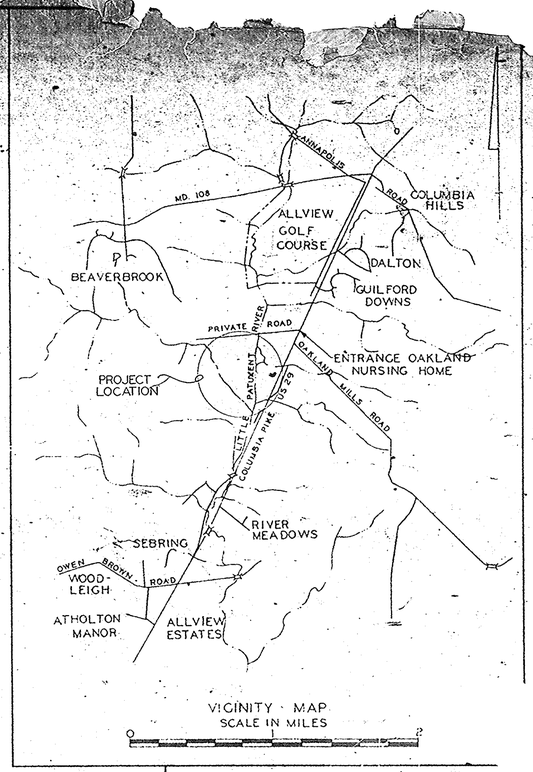
HOWARD RESEARCH & DEVELOPMENT CORP.

VILLAGE OF CROSS KEYS BALTIMORE, MARYLAND 21210

HOWARD COUNTY, MARYLAND

JANUARY 1967





INDEX

DESCRIPTION	STREET NAME	DRAWING NO.
TITLE		1
DETAILS	TYPICAL SECTIONS	2 & 3
PLAN & PROFILE	LITTLE PATUXENT PARKWAY	4, 5 & 6
PLAN & PROFILE	GOV. WARFIELD PARKWAY	7
PLAN & PROFILE	WINDSTREAM DRIVE	8
DETAILS	DRAINAGE	9
PROFILES	DRAINAGE	10, 11 & 12

APPROVED BY

HOWARD COUNTY PLANNING COMMISSION J. H. Clawson Jr. 2-2-67
SENIOR ENGINEER DATE

HOWARD COUNTY ROAD DEPARTMENT Herman S. O'Neill 2-2-67
ROAD SUPT. DATE

HOWARD COUNTY METROPOLITIAN COMMISSION W. O. Gilbert 6-19-67
CHIEF ENGINEER DATE

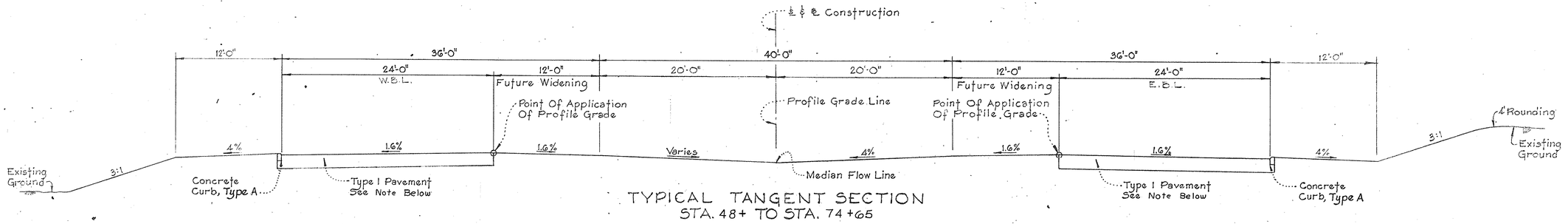
RUMMEL, KLEPPER AND KAHL
CONSULTING ENGINEERS
BALTIMORE, MARYLAND
SHEETS 2 TO 7, 9 TO 11
August W. Muchaf.

STATE OF MARYLAND AUGUST WILLIAM MUCHAF 2211 REGISTERED PROFESSIONAL ENGINEER

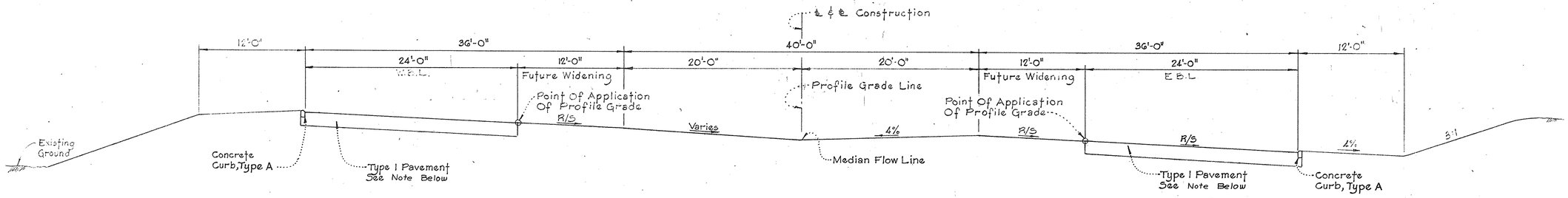
C. D. MESSICK, JR. & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
21 WEST STREET ANNAPOLIS MARYLAND
SHEETS 8 & 12
Russell E. Loveland

STATE OF MARYLAND RUSSELL E. LOVELAND 10749 REGISTERED LAND SURVEYOR

Note: 2" Topsoil, Seed (Art. 36.04) & Mulch (Art. 36.05) To Be Placed On All Median Areas, Construction Slopes & Ditches, Unless Otherwise Noted On The Plans.



TYPICAL TANGENT SECTION
STA. 48+ TO STA. 74+65



TYPICAL SUPERELEVATED SECTION
STA. 48 + TO STA. 74 + 65

Note: Type 1 Pavement
7" Crusher Run Subbase
4" Bituminous Concrete Base Course
2½" Bituminous Concrete Binder Course
2-1½ Bituminous Concrete Surface Courses
This surface type to be constructed in accordance with the Howard County Road Construction Code and specification Dwg D112 Page 165b

Pavement Spec. Amended	2/10/67
Added Note	1/10/67
Curb Type	9/22/66

Description	By	Mark	Date
REVISIONS			

LITTLE PATUXENT PARKWAY

TYPICAL SECTION

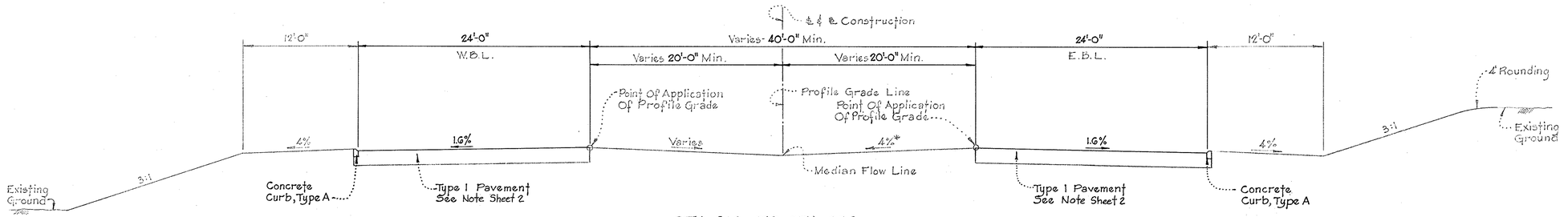
COLUMBIA

Scale 1" = 5'	Date 3-30-66
Design by	Tracks by
Checked by	Drawing No 2 of 12

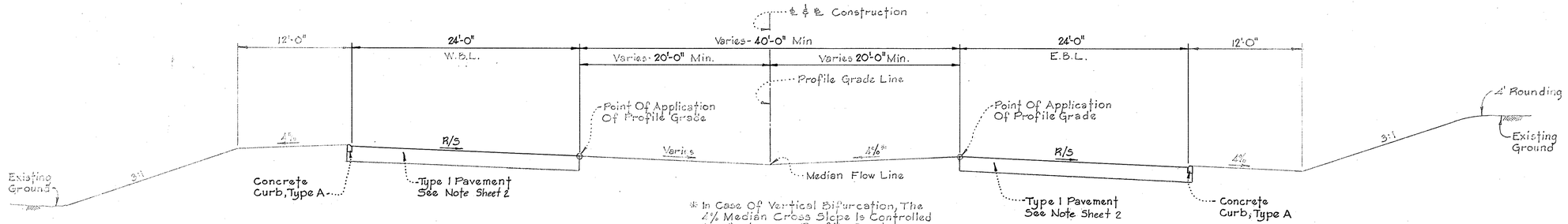
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

#14

Note: 2" Topsoil, Seed (Art. 36.04) & Mulch (Art. 36.05) To Be Placed On All Median Areas, Construction Slopes & Ditches, Unless Otherwise Noted On The Plans.

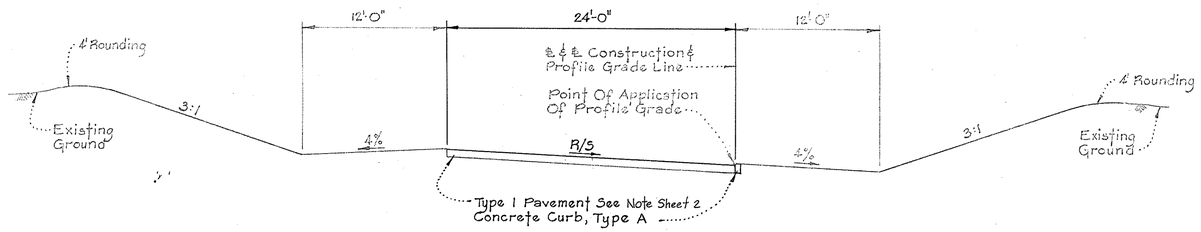


STA. 246+ TO STA. 252+
TYPICAL TANGENT SECTION



* In Case Of Vertical Bifurcation, The 4% Median Cross Slope Is Controlled By The Lower Profile Grade.

STA. 246+ TO STA. 252+
TYPICAL SUPERELEVATED SECTION



E.B.L. STA. 250+ TO STA. 252+
W.B.L. STA. 250+ TO STA. 255+
LOOKING IN DIRECTION OF TRAFFIC

GOV. WARFIELD PARKWAY

Curb Type 9/22/66

GOV. WARFIELD PARKWAY

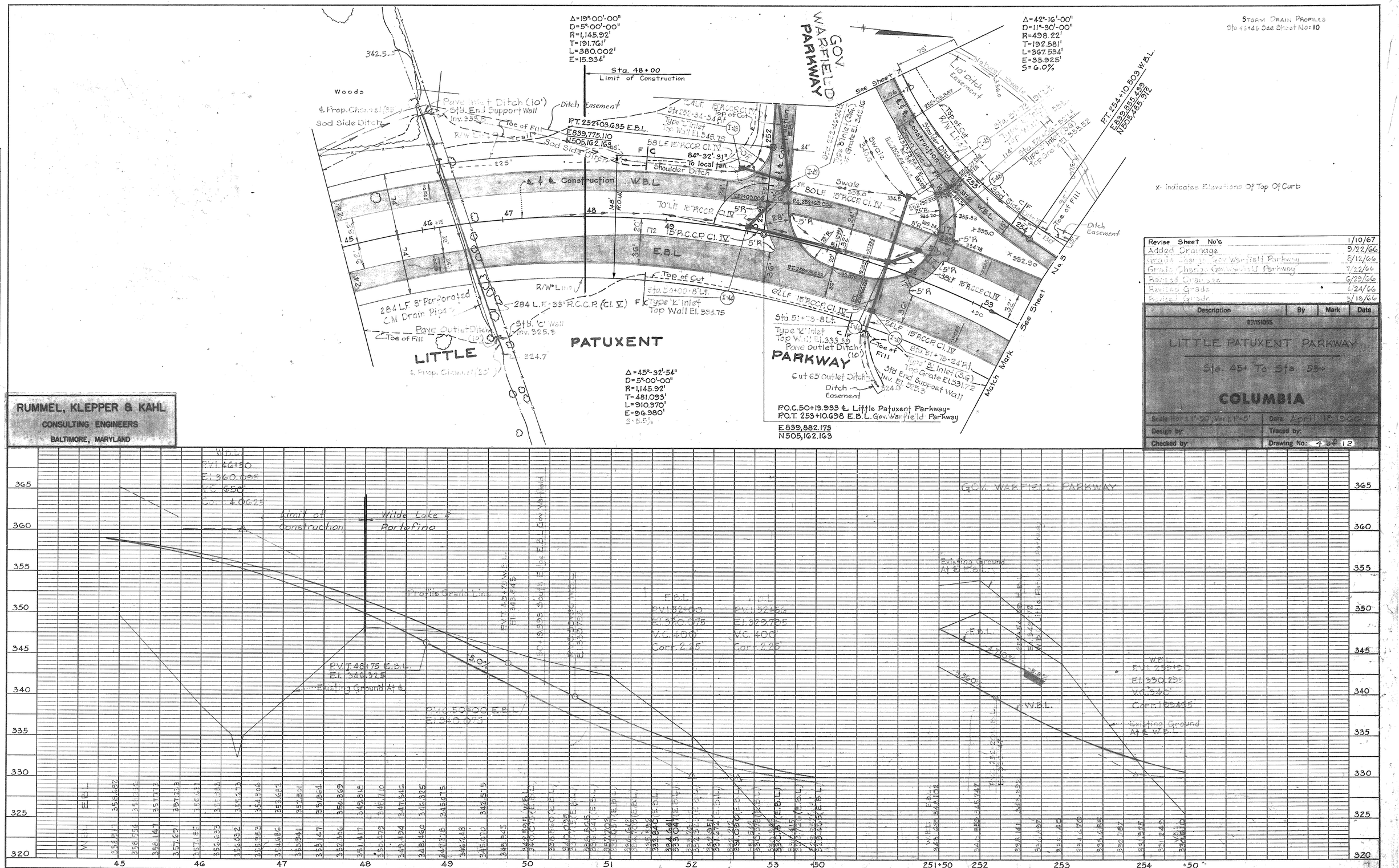
TYPICAL SECTION

COLUMBIA

3-30-66

3 of 12

#14

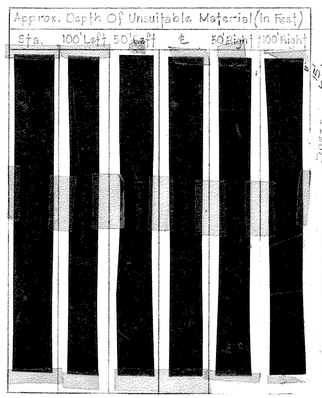


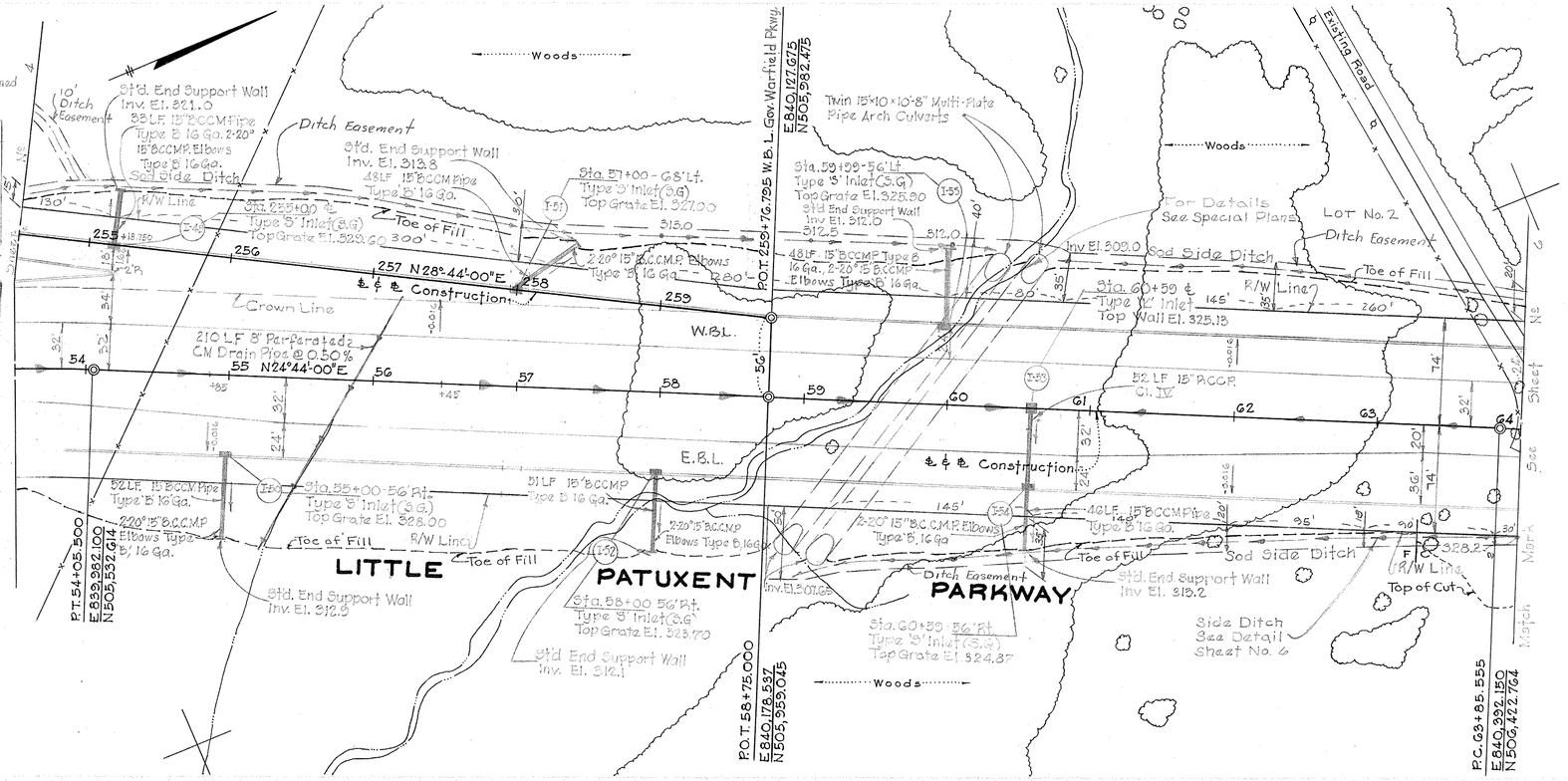
Storm Drain Profiles
Sta 46+46 See Sheet No: 10
GOV. WARFIELD PARKWAY
Δ=19°-00'-00"
D=5°-00'-00"
R=1,145.92'
T=191.761'
L=380.002'
E=15.934'
Sta. 48+00
Limit of Construction
Δ=42°-16'-00"
D=11°-30'-00"
R=498.22'
T=192.581'
L=367.534'
E=35.925'
S=6.0%
P.T. 252+03.635 E.B.L.
E839,775.110
N505,162.163
P.T. 254+10.503 W.B.L.
E839,855.439
N505,485.912
Woods
Pave Inlet Ditch (10')
Std. End Support Wall
Inv. 333.3
Sod Side Ditch
Ditch Easement
Toe of Fill
Trail
Shoulder Ditch
To local tan.
W.B.L.
E.B.L.
Construction
Swale
10' Ditch Easement
Natural Swale
Top of Cut
Sta. 50+00-8' Lt.
Type 'K' Inlet
Top Wall El. 333.75
284 L.F. 8" Perforated C.M. Drain Pipe
284 L.F. 33" R.C.C.P. (Cl. V)
Pave Outlet Ditch (10')
Std. 'C' Wall
Inv. 325.3
LITTLE
PATUXENT
PARKWAY
Δ=45°-32'-54"
D=5°-00'-00"
R=1,145.92'
T=481.093'
L=910.970'
E=96.980'
S=5.5%
Cut 65' Outlet Ditch
Ditch Easement
Type 'S' Inlet (S.G.)
Top Grate El. 331.72
Std. End Support Wall
Inv. El. 325.3
P.O.C. 50+19.933 ℄ Little Patuxent Parkway=
P.O.T. 253+10.698 E.B.L. Gov. Warfield Parkway
E839,882.173
N505,162.163
See Sheet No. 5
Match Mark
x- Indicates Elevations Of Top Of Curb
Revise Sheet No's 1/10/67
Added Drainage 9/22/66
Grade Change Gov. Warfield Parkway 8/12/66
Grade Change Gov. Warfield Parkway 7/22/66
Revised Drainage 6/29/66
Revised Grade 6/24/66
Revised Grade 5/18/66
Description By Mark Date
REVISIONS
LITTLE PATUXENT PARKWAY
Sta. 45+ To Sta. 53+
COLUMBIA
Scale Horz. 1"=50', Vert. 1"=5'
Date April 18, 1966
Design by:
Traced by:
Checked by:
Drawing No. 4 of 12
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
BALTIMORE, MARYLAND
PLAN
PROFILE
GOV. WARFIELD PARKWAY
Limit of Construction
Wilde Lake & Portofino
Profile Grade Line
P.V.T. 48+75 E.B.L.
El. 346.325
Existing Ground At ℄
P.V.C. 50+00 E.B.L.
El. 340.075
E.B.L.
P.V.I. 52+00
El. 360.075
V.C. 400'
Corr. 2.25'
W.B.L.
P.V.I. 52+56
El. 329.795
V.C. 400'
Corr. 2.25'
Existing Ground At ℄ E.B.L.
Existing Ground At ℄ W.B.L.
W.B.L.
P.V.I. 253+90
El. 330.235
V.C. 340'
Corr. 1.99495'
365
360
355
350
345
340
335
330
325
320
45
46
47
48
49
50
51
52
53
+50
251+50
252
253
254
+50
#14
K+E PLATE 1, PLAN-PROFILE
KEUFFEL & ESSER CO.
48 7012 IMPERIAL TRACING CLOTH 27790

Sta. 54 + To G7+

Remove Unsuitable Material For The Full Width Of Embankment Construction To The Depths Indicated In The Following Table And Replace With Granular Backfill. Exact Limits Of Removal To Be Determined By The Engineer

Approx. Depth Of Unsuitable Material (in Feet)					
Sta.	100' Left	50' Left	℄	50' Right	100' Right





Storm Drain Profiles
Sta. 54+ To Sta. 64+ See Sheet No. 10

Removed Pedestrian Underpass	1/10/67
Added Drainage	2/22/66
Grade Change Gov. Warfield Pkwy.	8/12/66
" " " "	7/22/66
Added Limits Of Unsuitable Material	7/15/66
Drainage	6/29/66
Grade	5/18/66

LITTLE PATUXENT PARKWAY

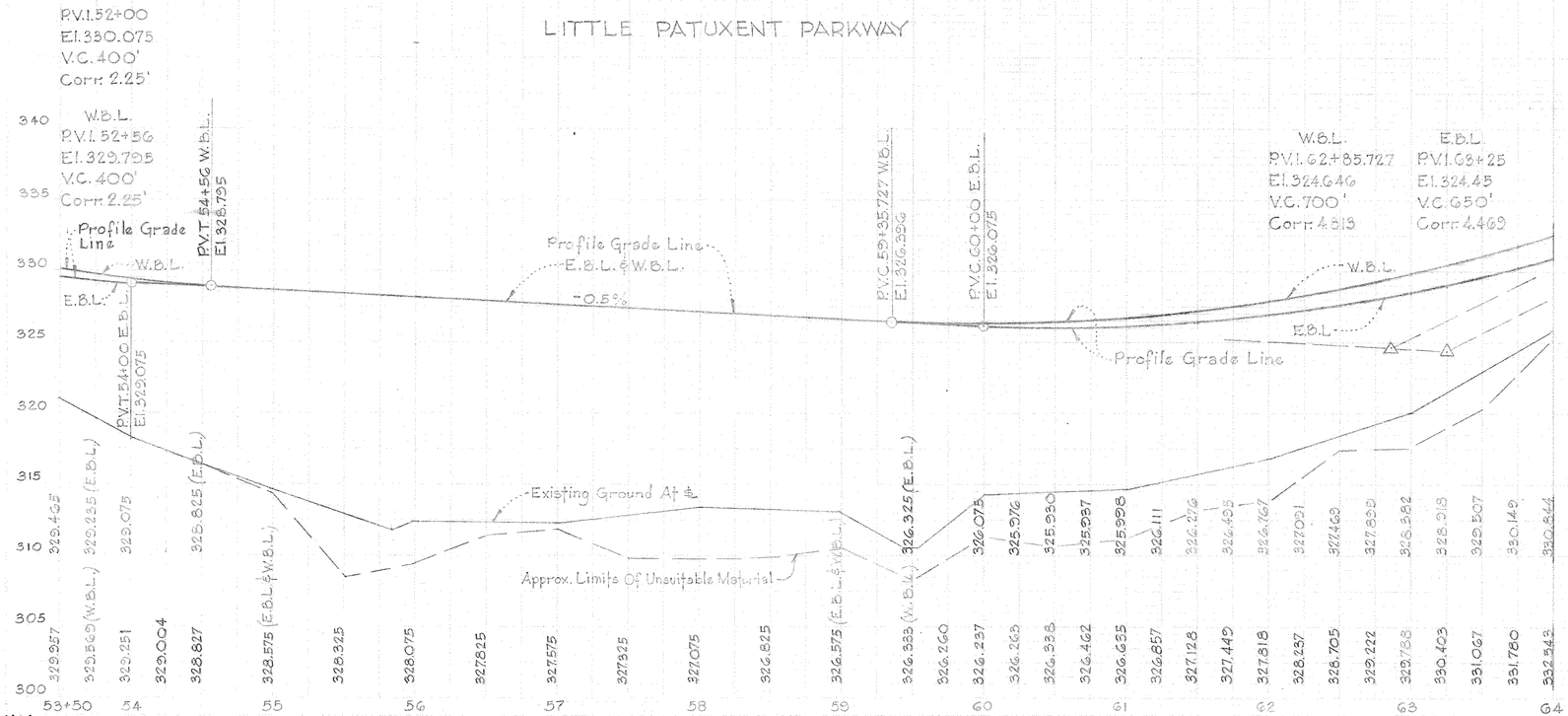
Sta. 53+ to Sta. 64+

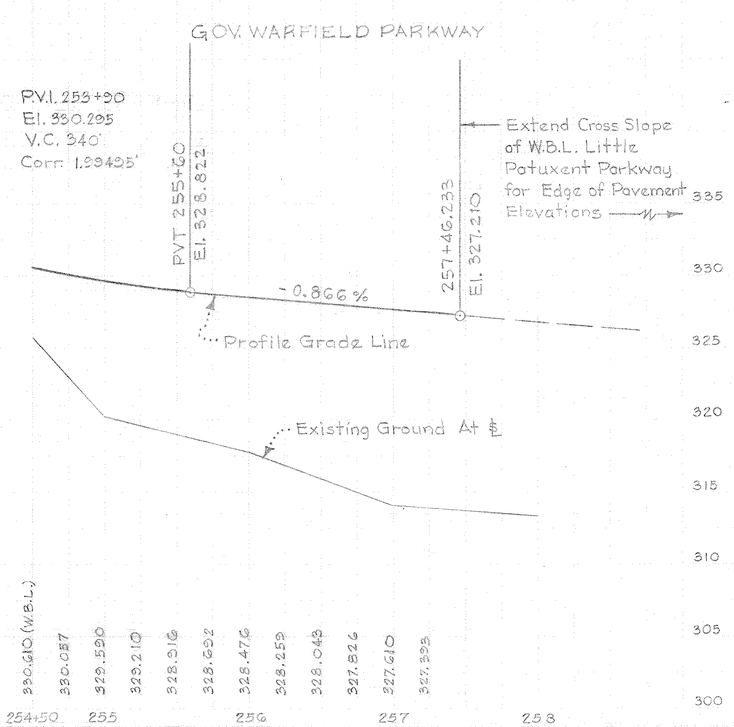
COLUMBIA

Scale: 1"=50' H., 1"=5' V. Date: April 18, 1966

Designed by: Checked by:

5-67-42





#14

LITTLE PATUXENT PARKWAY

Storm Drain Profiles
Sta G4+ To Sta. G7+ See Sheet No. C-80

Pavement 12'-0" Shoulder — Existing Ground — 4% — 3:1 Slope — 3:1 Slope — Elev. As Noted On Plans — 1.5' Bottom

SIDE DITCH IN CUT

× Indicates Elevations On Paving

Revised Sheet No.	1/10/67
W.P.&A. Comments	10/28/66
Added Spot Elevations, Intersecting Road	10/19/66
Added Drainage	9/22/66
Unsuitable Material & Spring Location	7/15/66
Entrance Road Lt. Sta. 65+	5/15/66

LITTLE PATUXENT PARKWAY
STA. G4+ TO STA. 76+

COLUMBIA

Scale 1"=50' Horiz. 1"=5' Vert. Date Apr. 11, 1966
Design by ... Traced by ... Checked by ...
Drawing No. ... Drawing No. 14 of 12

CARNELL, KLEPPER & KAHL
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

Match 20' Existing

Lot No. 2

50' R.O.W.

By Others

West Running Brook Road

N 60°47'00" W (Radial)

Springs - See Spring Control Detail, Sheet No. 9

Ditch Easement R/W Line Toe of Fill

18" C.M.P. 260'

8" C.M.P.

Sta. 65+85 - 5 Rt. Type 'K' Inlet Top Wall El. 336.65

Ditch Easement R/W Line Sod Side Ditch

Toe of Fill

F.C.

Top of Cut

Shoulder Ditch

H.P.

Sta. 74+65 LIMITS OF CONSTRUCTION

W.B.L.

E.B.L.

R.O.W.

Sta. 74+65 Limits of Construction

74 L.F. 15" RCCP Cl. IV

Sta. 65+85 Rt.

R/W Line 22 L.F. 15" B.C.M. Pipe Type S 10 Ga. 220°

Toe of Fill 150'

Sod Side Ditch

Ditch Easement

Sta. 66+25 - 56' Rt. Type S Inlet (Sag.) Top Grate El. 338.52

Sta. 66+00 - 80' Rt. Type 'K' Inlet Top Wall El. 336.24

Sta. 65+35.000 ℄ Little Patuxent Parkway = Sta. 0+00.000

E 840,459.921
N 506,555.916

Side Ditch In Cut See Detail This Sheet

R/W Line Pave Outlet Ditch (10' Cut)

Top of Cut

5'-11" End Support Wall Inv. El. 330.0

95 L.F. 21" RCCP Cl. IV

Side Ditch

Drain to Natural Swale

Δ = 32°23'-00.6"
D = 3°-00'-00"
R = 1,909.86'
T = 554.46'
L = 1,079.45'
E = 78.30'
S = 4.0%

Δ = 23°30'-33"
R = 150.00
T = 31.213'
L = 61.547'

Meet Exist. Road Pavement

Existing Road

Battle Grd. E. Co. (East Line)

Limit of Construction

Existing Ground At ℄

Profile Grade Line

W.B.L.

E.B.L.

W.B.L.
P.V.I. 62+85.727
El. 324.646
V.C. 700'
Corr. 4.813'

E.B.L.
P.V.I. 63+25
El. 324.45
V.C. 650'
Corr. 4.469'

℄ Road Sta. 65+35

337.509

335.509

P.V.T. 66+35.727 W.B.L. El. 342.146

P.V.T. 66+50 E.B.L. El. 340.700

P.V.C. 68+50 W.B.L. El. 352.860

P.V.C. 68+50 E.B.L. El. 350.700

+5.0%

Approx. Limits Of Unsuitable Material

E.B.L.
P.V.I. 73+00
El. 373.20
V.C. 900'
Corr. 11.25'

W.B.L.
P.V.I. 73+00
El. 375.36
V.C. 900'
Corr. 11.25'

℄ Little Patuxent Pkwy.

P.V.C. 0+57

V.C. 150'
Elev. 334.34

P.V.T. 1+57

+8.66%

2+50

-1.16%

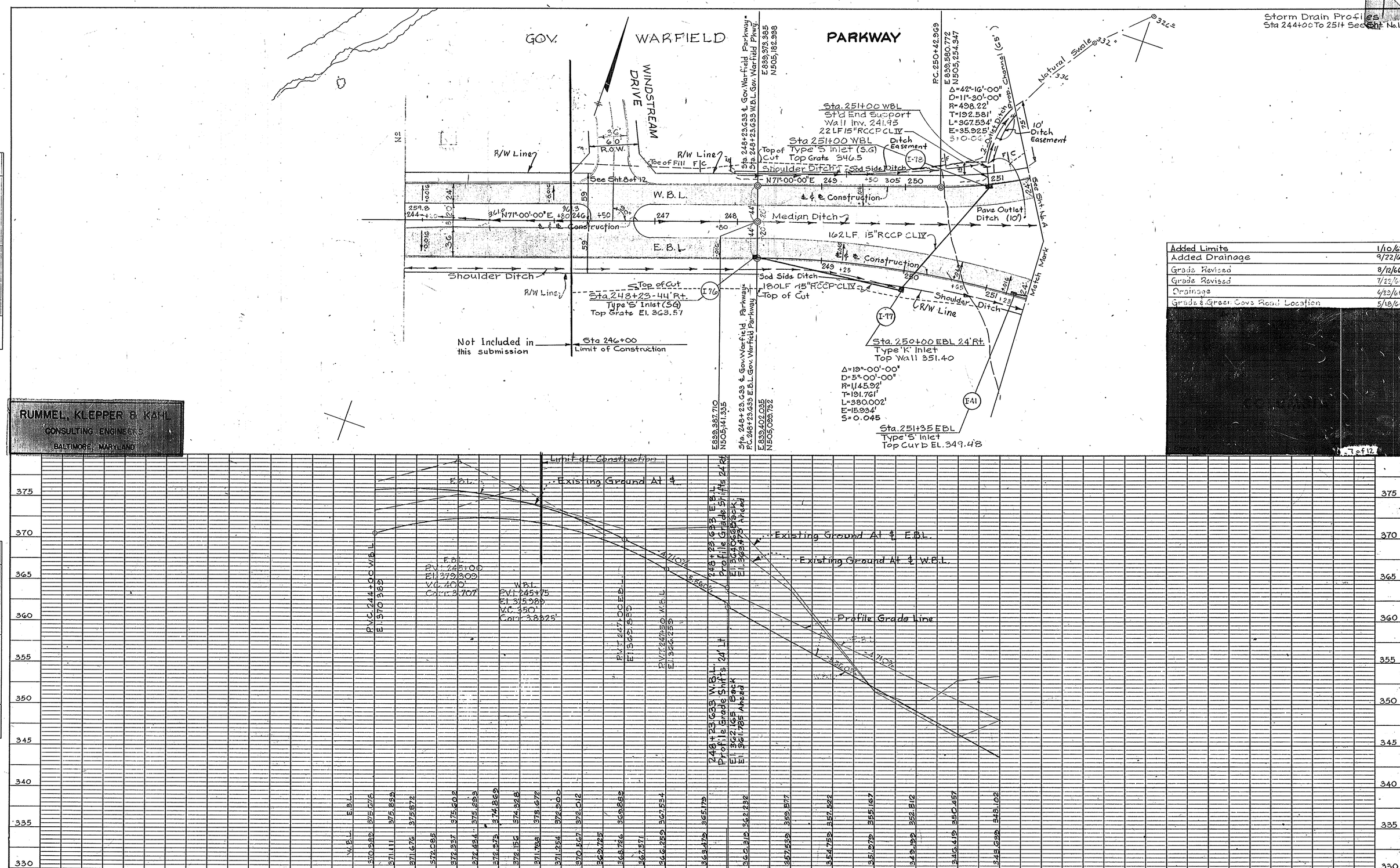
Existing Ground

ROAD RT. STA. G5+35

	64	65	66	67	68	69	70	71	72	73	74	75	76
W.B.L.	330.844	331.591	332.392	333.245	334.151	335.111	336.123	337.187	338.305	339.476	340.700	343.200	348.200
E.B.L.	332.543	333.354	334.215	335.124	336.083	337.091	338.148	339.254	340.410	341.614	342.860	345.360	350.360
W.B.L.	350.700	351.915	353.061	354.137	355.144	356.081	356.950	357.748	358.477	359.137	359.727	360.248	360.700
E.B.L.	352.860	354.075	355.221	356.297	357.304	358.241	359.110	359.908	360.637	361.297	361.887	362.408	362.860
W.B.L.	361.051	361.394	361.637	361.811	361.915	361.950	361.915	361.811	361.637	361.394	361.081	360.700	360.248
E.B.L.	363.241	363.554	363.797	363.971	364.075	364.110	364.075	363.971	363.797	363.554	363.241	362.860	362.408
W.B.L.	359.727	359.137	358.477	357.748	356.950 (E.B.L.)								
E.B.L.	361.887	361.297	360.637	359.908	359.110 (W.B.L.)								

#14

Storm Drain Profiles
Sta 244+00 To 251+ See Sht. No. 11



Added Limits	1/10/67
Added Drainage	9/22/66
Grade Revised	8/12/66
Grade Revised	7/22/66
Drainage	6/29/66
Grade & Green Cove Road Location	5/18/66

7 of 12

RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

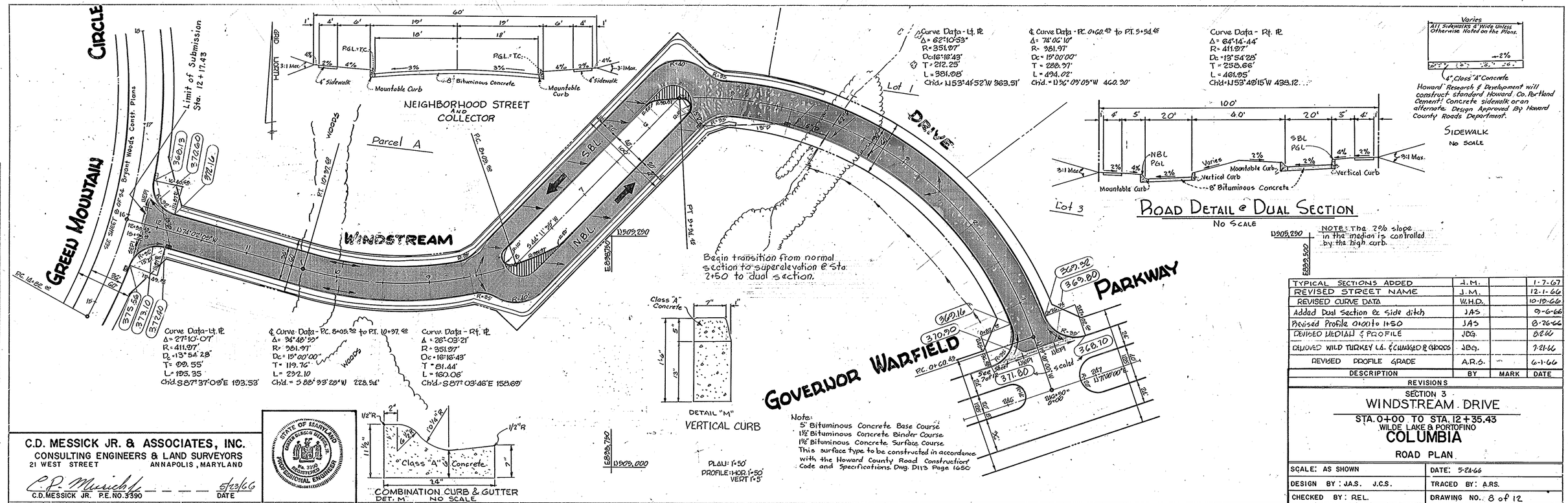
PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B. M.'s NOTED
STRUCTURE NOTAT'NS CH'KD
BY
DATE

#14

K+E PLATE 1; PLAN-PROFILE
KEUFFEL & ESSER CO.

48 7012 IMPERIAL™ TRACING CLOTH 27790



DESCRIPTION	BY	MARK	DATE
REVISIONS			
TYPICAL SECTIONS ADDED	J.M.		1-7-67
REVISED STREET NAME	J.M.		12-1-66
REVISED CURVE DATA	W.H.D.		10-19-66
Added Dual Section & Side ditch	JAS		9-6-66
Revised Profile & Add to 1+50	JAS		8-26-66
REVISED MEDIAN & PROFILE	JBG.		8.66
REMOVED WILD TURKEY LA. & CHANGED R GRADES	JBG.		7-21-66
REVISED PROFILE GRADE	A.R.S.	—	6-1-66

SECTION 3
WINDSTREAM DRIVE
STA. 0+00 TO STA. 12+35.43
WILDE LAKE & PORTOFINO
COLUMBIA
ROAD PLAN

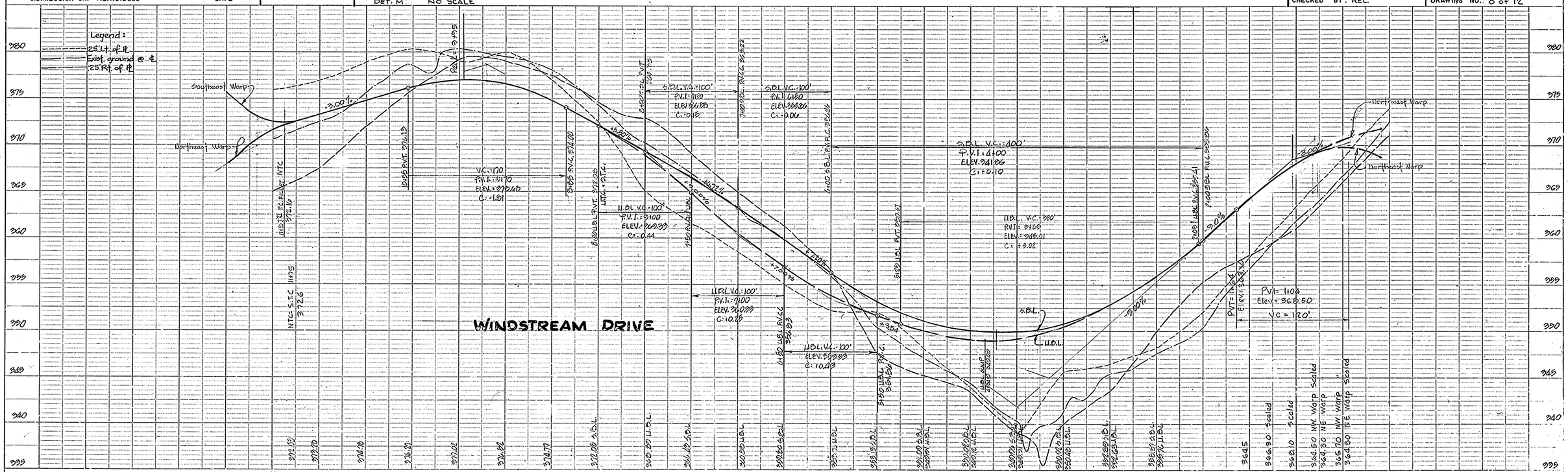
SCALE: AS SHOWN	DATE: 5-24-66
DESIGN BY: J.A.S. J.C.S.	TRACED BY: A.R.S.
CHECKED BY: R.E.L.	DRAWING NO. 8 of 12

C.D. MESSICK JR. & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
21 WEST STREET ANNAPOLIS, MARYLAND
C.D. MESSICK JR. P.E. NO. 3390 — DATE 6/23/66

STATE OF MARYLAND — CHARLES DANIEL MESSICK JR. — No. 3390 — REGISTERED PROFESSIONAL ENGINEER

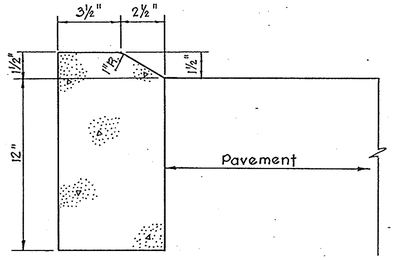
PLAN — SURVEYED, PLOTTED, GRADES CHECKED, R/W CHECKED, NOTE BOOK, NO., DATE, BY

PROFILE — SURVEYED, PLOTTED, GRADES CHECKED, R/W CHECKED, NOTE BOOK, NO., DATE, BY

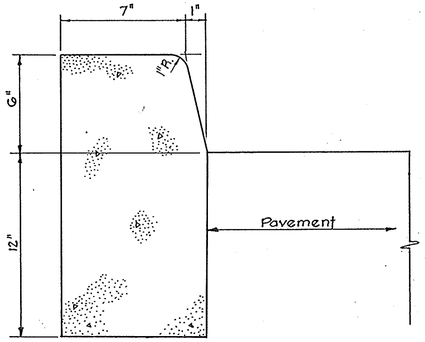


#14

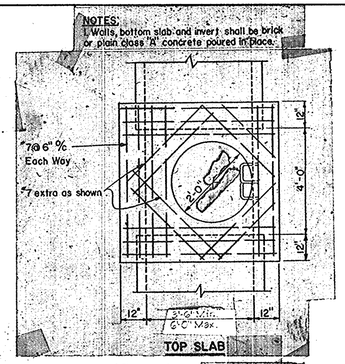
K&E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.
48 7024 HERCULENE DRAWING FILM

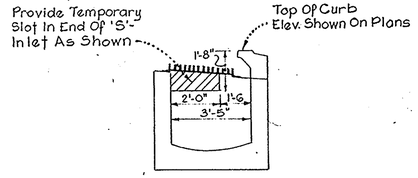


DETAIL
CONCRETE CURB ~ TYPE A
Scale: 3" = 1'-0"

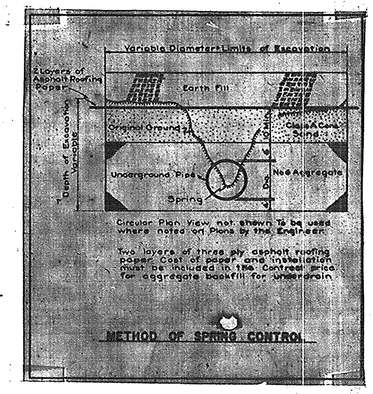


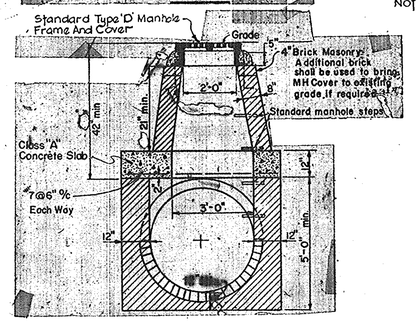
DETAIL
VERTICAL CONCRETE CURB
TYPE B
Scale: 3" = 1'-0"



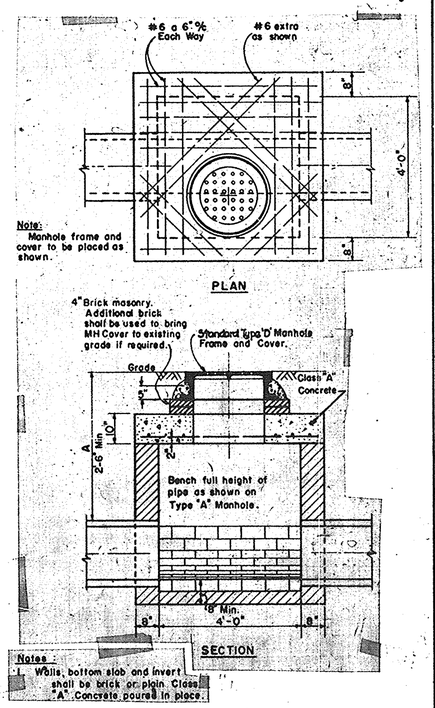


TEMPORARY DRAINAGE SLOT
'S' - INLETS
Note: To Be Constructed Where Noted On Plans

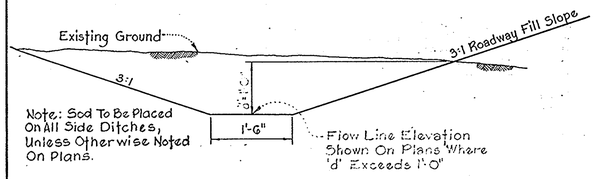




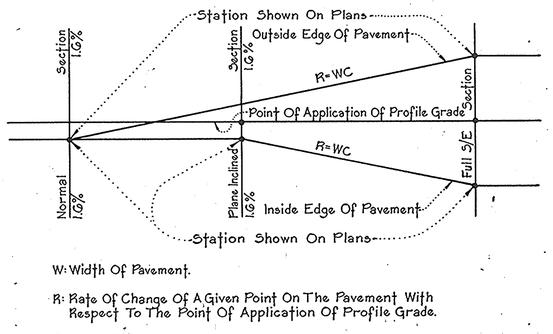
DETAIL
TYPE 'C' MANHOLE



DETAIL
TYPE 'B' MANHOLE



DETAIL
SIDE DITCH
Scale: 3/16" = 1'-0"

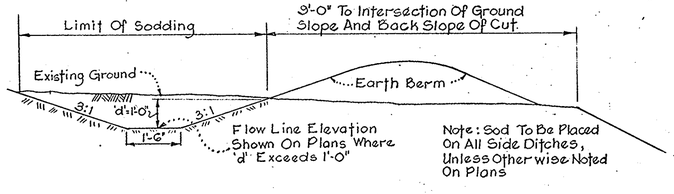


W: Width Of Pavement.

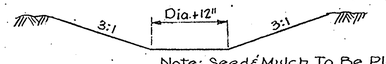
R: Rate Of Change Of A Given Point On The Pavement With Respect To The Point Of Application Of Profile Grade.

C: 0.0002 ft. per ft. Except For The Transitions Between Station 28+95 And Station 43+21.67, Which Are 0.00015 ft per ft.

DETAIL
SUPERELEVATION TRANSITION

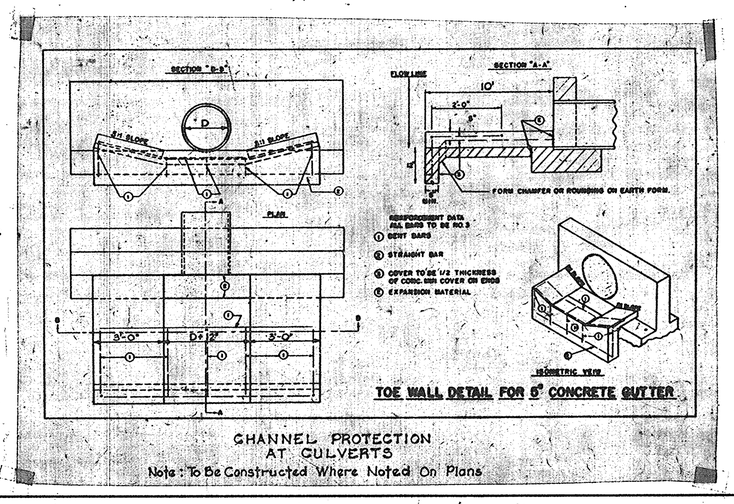


DETAIL
BERM DITCH



Note: Seed & Mulch To Be Placed On All Inlet & Outlet Ditches Unless Otherwise Noted On Plans

TYPICAL CHANNEL CONSTRUCTION
(INLET AND OUTLET DITCHES)



CHANNEL PROTECTION AT CULVERTS
Note: To Be Constructed Where Noted On Plans

Revised Sheet Number	1/10/67
Manhole & Curb Type	9/22/66

Description	By	Mark	Date
REVISIONS			

DETAIL SHEET

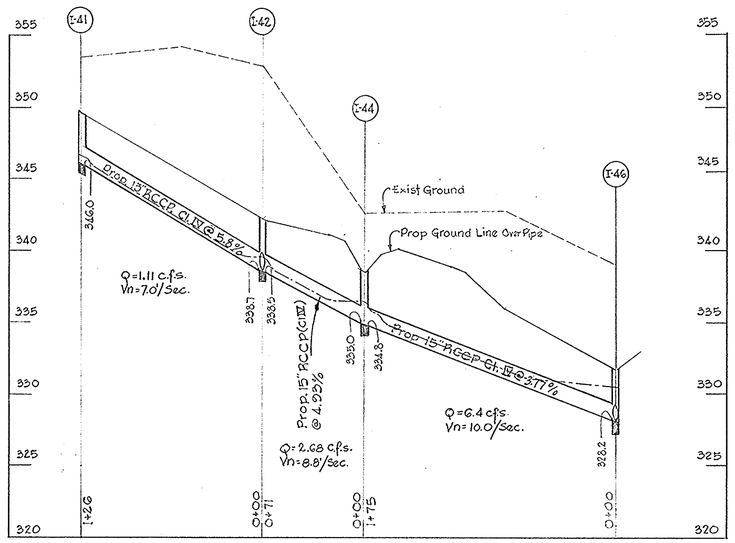
COLUMBIA

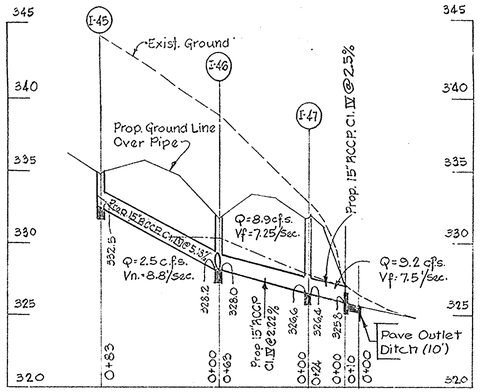
Field Book No.	Date	Apr. 1967
Designed by:	Traced by:	
Checked by:	Drawing No.	9 of 12

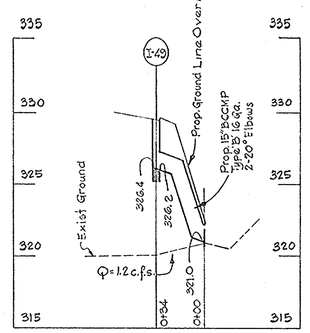
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

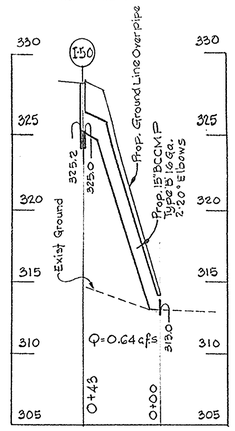
#14

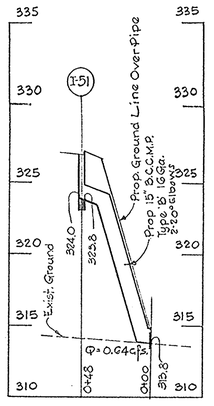
H.G. Line (10 Yr. Storm) —·—·—·—

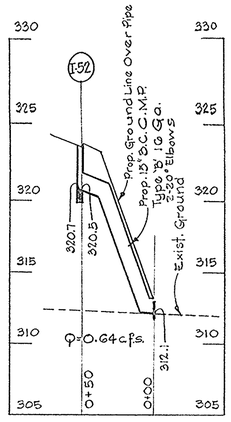


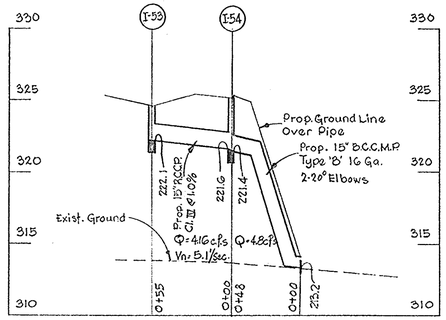












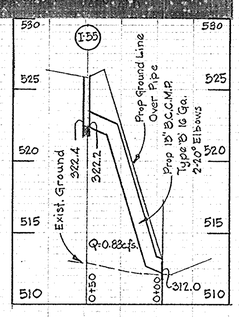
NOTE: All Pipe Elbows Shown On This Sheet Are - 20° 15" B.C.C.M.P. Type 'B' 16 Ga.

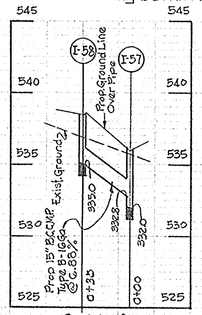
See Detail Sheet No. 9 For:
1. Typical Section Of Inlet & Outlet Ditch
2. Paving Details For Ditches

Revised Sheet Number	1-10-67
W.B.&A. Comments	10-28-66
Added H.G. Line & Profile I-79	10-19-66

LITTLE PATUXENT PARKWAY
STORM DRAIN PROFILES
COLUMBIA
Scale: H 50 Hor. 12, 1" = 5' Vert. | Dwg. No. 2601 - 22 - 1066
Designed By: | Drawn By: | Checked By:
10 of 12

TORRENCE, NEPPLE & KARL
CONSULTING ENGINEERS





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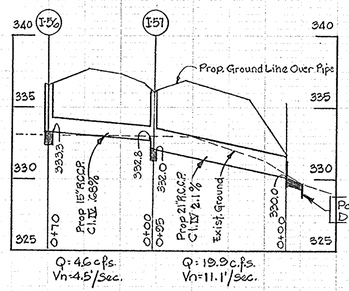

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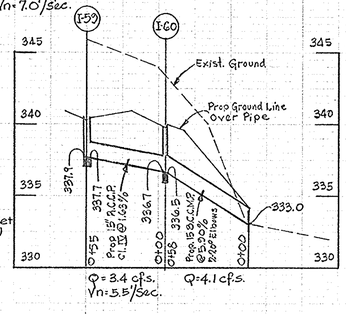

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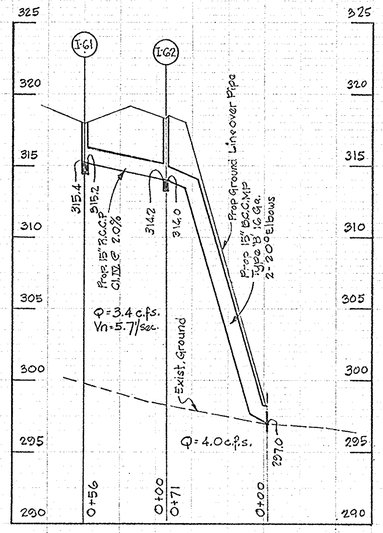
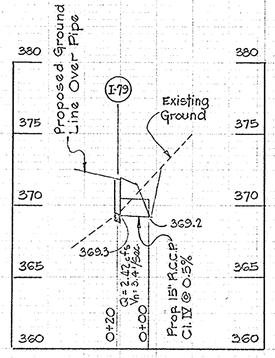
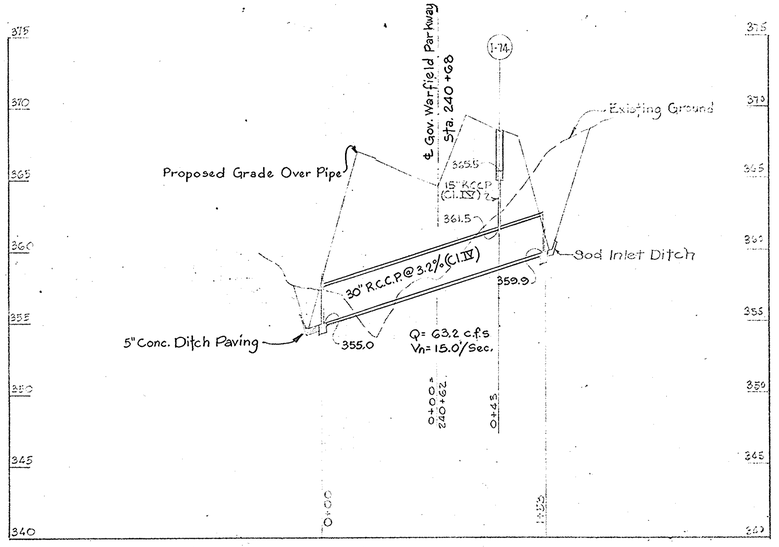
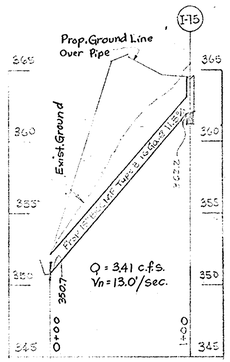
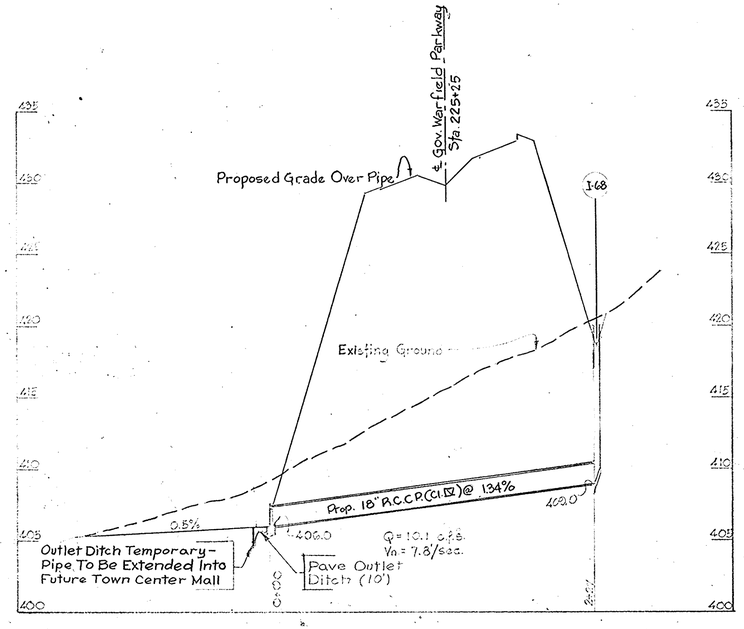


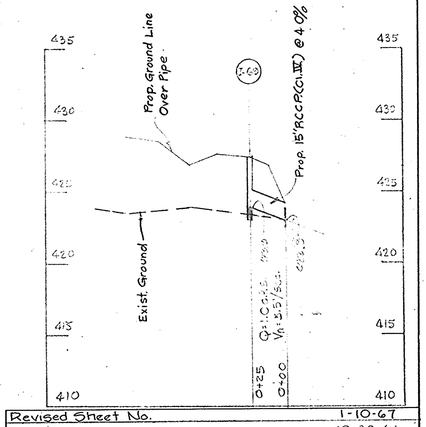


#14









RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

See Detail Sheet No. 9 For:
1. Typical Section Of Inlets & Outlet Ditch
2. Paving Details For Ditches

Revised Sheet No. 1-10-67
W.R. & A. Comments 10-28-66

Description	By	Mark	Date
REVISIONS			

GOV. WARFIELD PARKWAY

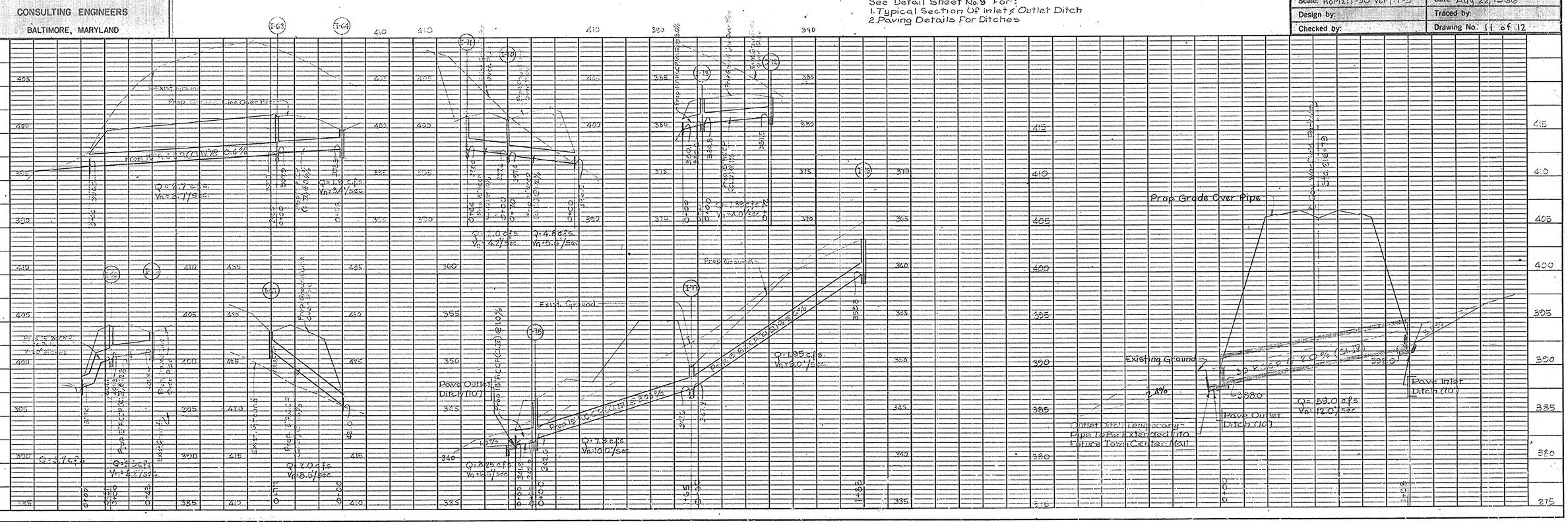
STORM DRAIN PROFILES

COLUMBIA

Scale: Horiz. 1"=50' Vert. 1"=5'	Date: Aug. 22, 1966
Design by:	Traced by:
Checked by:	Drawing No. 11 of 12

PLAN — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED. NOTE BOOK NO. — BY — DATE

PROFILE — SURVEYED, PLOTTED, CROSSES CHECKED, B. M.'s NOTED, STRUCTURE NOTATIONS CHK'D. NOTE BOOK NO. — BY — DATE

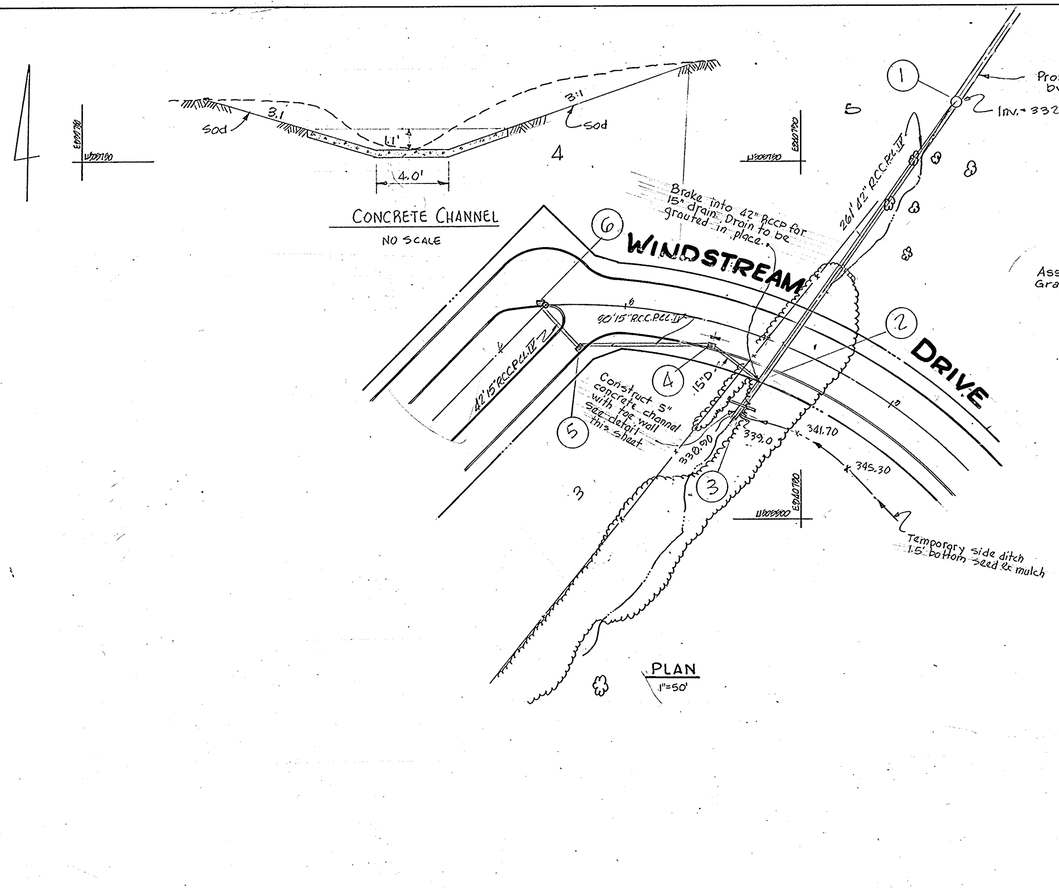


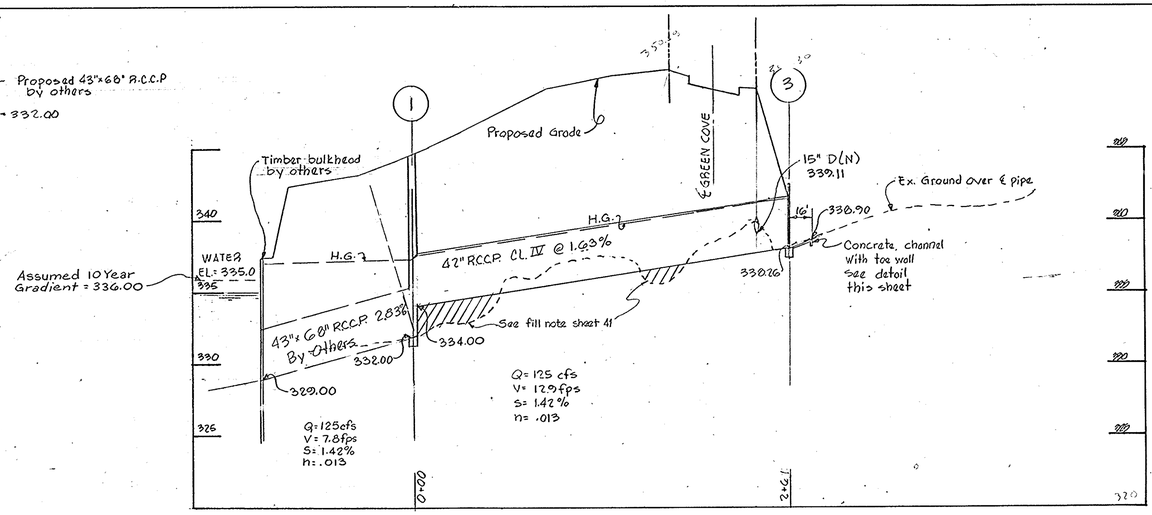
#14

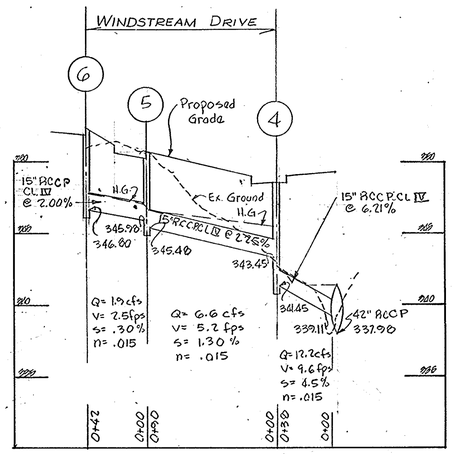
K&E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.

48 7012 IMPERIAL™ TRACING CLOTH 27790

28







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

STORM DRAIN STRUCTURE SCHEDULE

NO.	TYPE	LOCATION	T.C ELEV.	INV. IN	INV. OUT	REMARKS
6	Mod. "S" Comb. Single Gr.-Und.	Rt. - Sta. 5+54.45	352.49		346.80	See Detail Sheet 22
5	MS"Comb-Dbl. Grate- Depr.	Lt. - Sta. 5+60	350.75	345.90	345.40	Ho. Co. Road Code Pa. 157
4	Mod. "S" Comb. Single Grate Und.	Lt. - Sta. 4+34.67	349.08	343.45	341.45	See Detail Sheet 22.
3	"C" Endwall	Lt. Sta. 3+97	342.76		338.26	Ho. Co. Road Code P6.107
2	Cut-In	Lt Sta 3+95				
1	Special Manhole	See Plan		334.00	332.00	See detail-sht. 22 of 36

C.D. MESSICK JR. & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
21 WEST STREET ANNAPOLIS, MARYLAND
RUSSELL E. LOWMAN L.S. NO. 3947 9-8-66 DATE

STATE OF MARYLAND — RUSSELL E. LOWMAN — No. 3947 — REGISTERED LAND SURVEYOR

DESCRIPTION	BY	MARK	DATE
REVISED SHEET NUMBER	J.M.		1-10-67
REVISED STREET NAME	J.M.		12-1-66
GENERAL STORM DRAIN REVISIONS	JAS		10-17-66

REVISIONS

VILLAGE OF WILDE LAKE
SECTION 3
WILDE LAKE & PORTOFINO

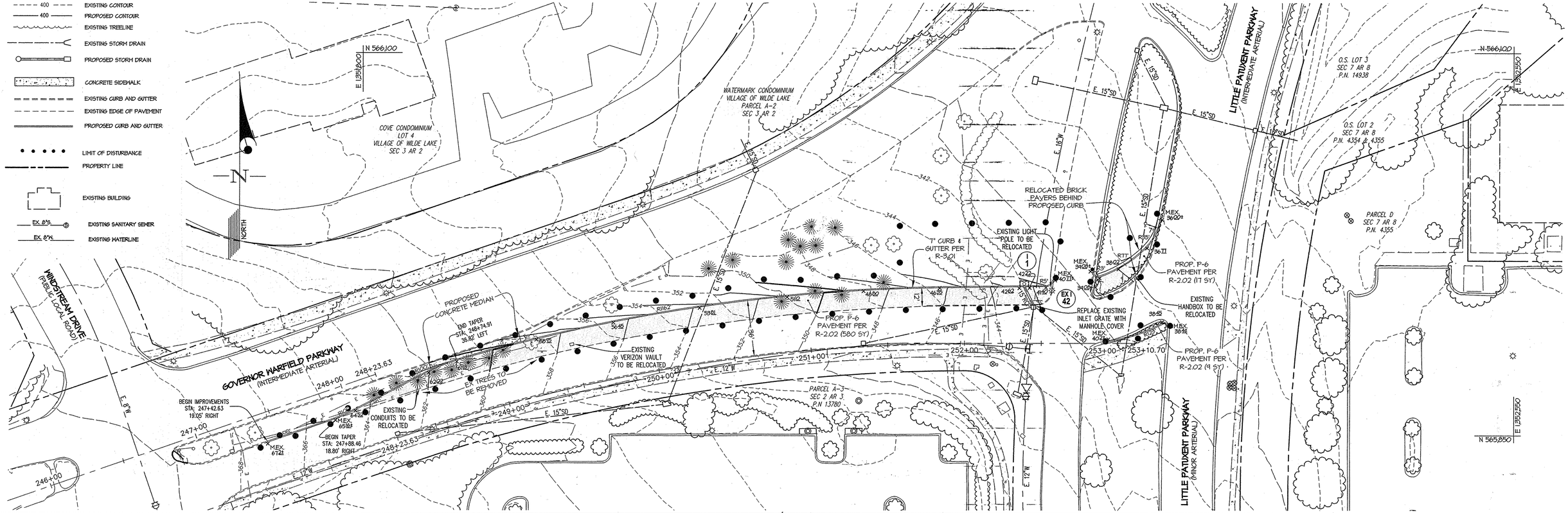
COLUMBIA
SYSTEM N°
STORM DRAIN

SCALE: As shown	DATE: NOV., 1966
DESIGNED BY: JAS	TRACED BY: JAS
CHECKED BY:	DRAWING NO. 12 of 12

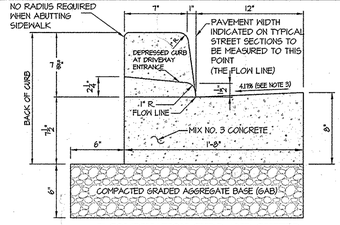
#19

LEGEND

- 400 — EXISTING CONTOUR
- 400 — PROPOSED CONTOUR
- EXISTING TREELINE
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- CONCRETE SIDEWALK
- EXISTING CURB AND GUTTER
- EXISTING EDGE OF PAVEMENT
- PROPOSED CURB AND GUTTER
- LIMIT OF DISTURBANCE
- PROPERTY LINE
- EXISTING BUILDING
- EX. 8"S — EXISTING SANITARY SEWER
- EX. 8"W — EXISTING WATERLINE



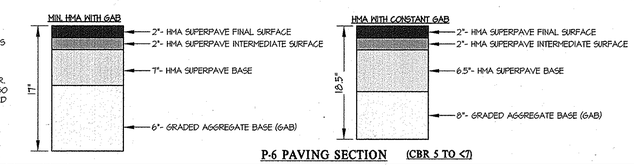
GRADING PLAN SCALE: 1" = 30'



7" COMBINATION CURB AND GUTTER
N.T.S.

NOTES:
1. A REVERSE GUTTER PAN SHALL HAVE A GUTTER SLOPE OF 4.17% AWAY FROM THE FLOW LINE, AND SHALL NOT BE USED WHERE THIS DRAINAGE CREATES A HAZARDOUS CONDITION.
2. GUTTER PAN AT MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.
3. A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB.
4. POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.

1 **CURB DETAILS** NO SCALE

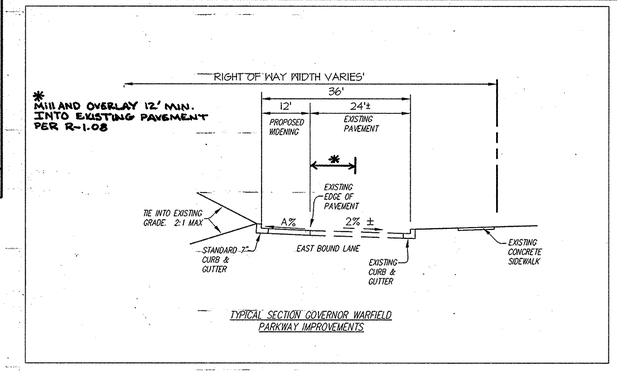


NOTE:
DEPENDING ON THE CBR VALUES OBTAINED IN THE FIELD, THE PAVING SECTIONS MAY BE REVISED, IF APPROVED BY A PROFESSIONAL SOILS ENGINEER. THESE SUBSTITUTIONS MUST ALSO BE APPROVED BY THE HOWARD COUNTY DEPT. OF PUBLIC WORKS.

P-6 PAVING SECTION (CBR 5 TO <7)

2 **PAVING SECTIONS** NO SCALE

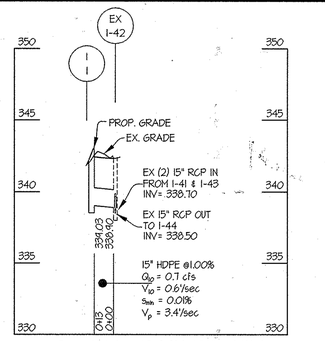
GENERAL NOTES:
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/ BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III, SECTION 5.5.A. A MINIMUM OF 20 FEET SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
5. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY BENCHMARKS 30GA AND 36AA WERE USED FOR THIS PROJECT.
6. CONTOURS SHOWN WERE TAKEN FROM AERIAL TOPOGRAPHY PREPARED BY MCKENZIE-SNYDER DURING MARCH, 2007 AND SUPPLEMENTED BY A FIELD SURVEY PREFORMED BY GUTSCHICK LITTLE AND WEBER DATED AUGUST 2014.
7. EXISTING UTILITIES WERE TAKEN FROM AVAILABLE HOWARD COUNTY RECORDS.
8. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTC). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
9. ALL PLAN DIMENSIONS ARE TO THE FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULAR OR RADIALLY BETWEEN ITEMS UNLESS OTHERWISE NOTED.
10. GUTTER PAN OF CURBS SHALL BE PITCHED TO CONFORM TO THE ADJACENT DRAINAGE PATTERN OF THE ADJOINING PAVING FOR VEHICULAR USE.
11. ALL CURB FILLETS ARE 5' RADIUS UNLESS NOTED OTHERWISE. SPOT ELEVATIONS ALONG CURB LINE ARE FOR THE FLOW LINE (BOTTOM OF CURB), UNLESS NOTED OTHERWISE.
12. CONTRACTOR MAY USE THE HOWARD SCD STANDARD SEDIMENT CONTROL PLAN TO OBTAIN PERMITS.



TYPICAL SECTION GOVERNOR WARFIELD PARKWAY IMPROVEMENTS

GOV. WARFIELD PARKWAY - INFORMATION

STATION	SECTION	CLASSIFICATION	A	PAVING SECTION
248+74.91 TO 251+84.46	TYPICAL	(INTERMEDIATE ARTERIAL)	2%	P-6
251+84.46 TO 252+58.02	TYPICAL	(INTERMEDIATE ARTERIAL)	VARIES, SEE SPOT SHOTS ON PLAN	P-6



STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

STORM DRAIN PIPE SCHEDULE

SIZE	TYPE	QUANTITY (L.F.)	REMARKS
15"	RCP	13'	

STRUCTURE SCHEDULE

NO	TYPE	WIDTH (INSIDE)	TOP ELEVATION UPPER	TOP ELEVATION LOWER	INVERT ELEVATION UPPER	INVERT ELEVATION LOWER	STD. DETAIL	LOCATIONS	REMARKS
I-1	A-5 INLET	2'-6"	343.20	342.80	-----	339.03	HO. CO. SD-4.01		

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways — Date 1/29/2015

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Chief, Division of Land Development — Date 2-19-15
Chief, Development Engineering Division — Date 2-17-15

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DES. dds	DRN. dds	CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR:
LPP INVESTORS LLC
10211 WINCOPIN CIRCLE
SUITE 100
COLUMBIA, MD 21044
Attn: DAVID COSTELLO
410-740-9500

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975 EXPIRATION DATE: MAY 26, 2016

1/14/15

GRADING PLAN FOR GOV. WARFILED IMPROVEMENTS

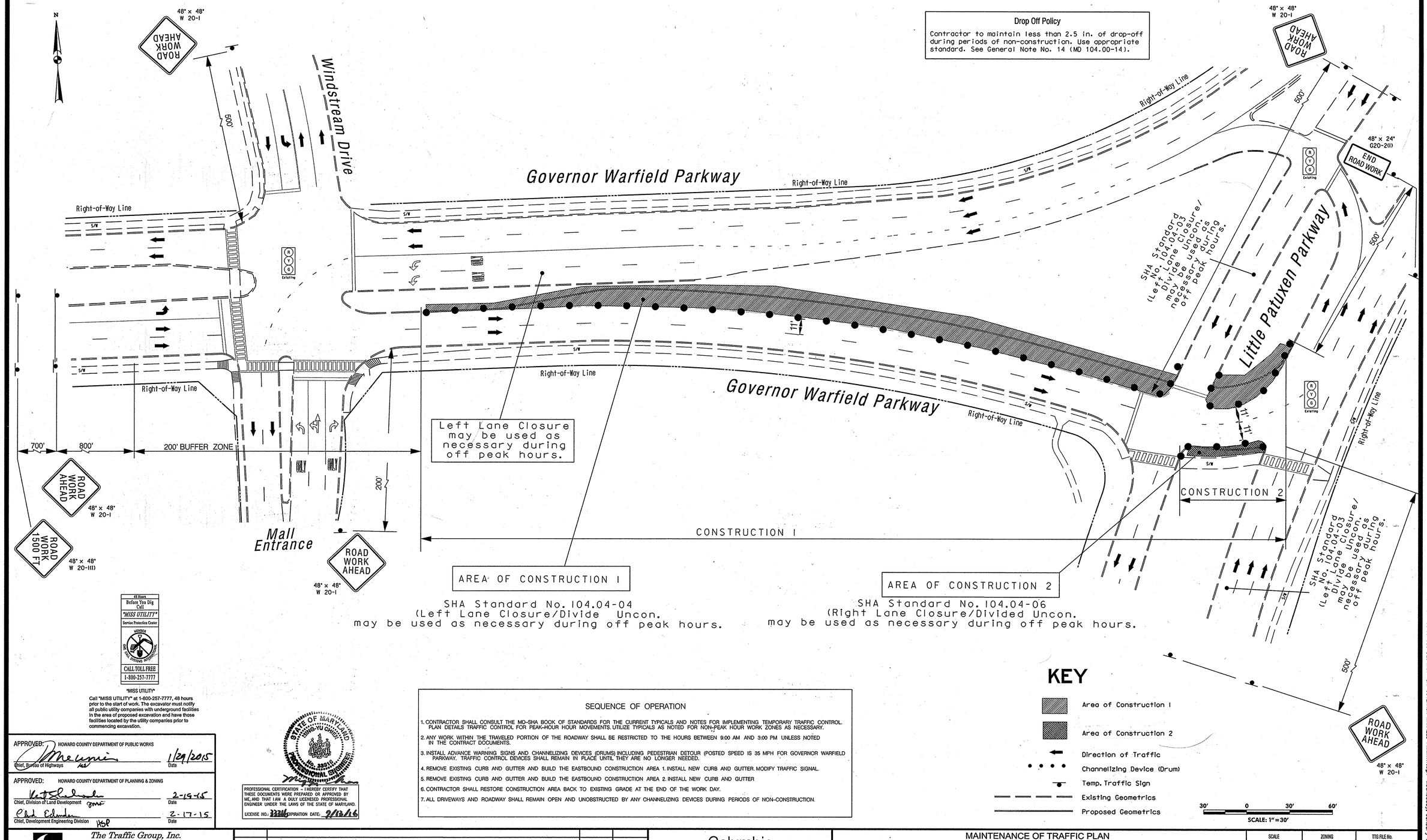
COLUMBIA
VILLAGE OF WILDE LAKE
SECTION 3

ELECTION DISTRICT No. 5 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	12069
DATE	TAX MAP – GRID	SHEET
JAN., 2015	30-20	13 OF 19

© GLW 2014

F-66-046



811 Miss Utility
Before You Dig Call
"MISS UTILITY"
Service Protection Center
CALL TOLL FREE
1-800-257-7777

"MISS UTILITY"

Call "MISS UTILITY" at 1-800-257-7777, 48 hours prior to the start of work. The excavator must notify all public utility companies with underground facilities in the area of proposed excavation and have those facilities located by the utility companies prior to commencing excavation.

APPROVED:	HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
Chief, Bureau of Highways		Date 1/29/2015
APPROVED:	HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING	
Chief, Division of Land Development		Date 2-19-15
Chief, Development Engineering Division		Date 2-17-15

STATE OF MARYLAND
TING-YU CHIEH
NO. 22210
PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO.: 22210 EXPIRATION DATE: 9/19/16

SEQUENCE OF OPERATION

1. CONTRACTOR SHALL CONSULT THE MD-SHA BOOK OF STANDARDS FOR THE CURRENT TYPICALS AND NOTES FOR IMPLEMENTING TEMPORARY TRAFFIC CONTROL PLAN DETAILS TRAFFIC CONTROL FOR PEAK-HOUR HOUR MOVEMENTS. UTILIZE TYPICALS AS NOTED FOR NON-PEAK HOUR WORK ZONES AS NECESSARY.
2. ANY WORK WITHIN THE TRAVELED PORTION OF THE ROADWAY SHALL BE RESTRICTED TO THE HOURS BETWEEN 9:00 AM AND 3:00 PM UNLESS NOTED IN THE CONTRACT DOCUMENTS.
3. INSTALL ADVANCE WARNING SIGNS AND CHANNELIZING DEVICES (DRUMS) INCLUDING PEDESTRIAN DETOUR (POSTED SPEED IS 35 MPH FOR GOVERNOR WARFIELD PARKWAY. TRAFFIC CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THEY ARE NO LONGER NEEDED.
4. REMOVE EXISTING CURB AND GUTTER AND BUILD THE EASTBOUND CONSTRUCTION AREA 1. INSTALL NEW CURB AND GUTTER. MODIFY TRAFFIC SIGNAL.
5. REMOVE EXISTING CURB AND GUTTER AND BUILD THE EASTBOUND CONSTRUCTION AREA 2. INSTALL NEW CURB AND GUTTER
6. CONTRACTOR SHALL RESTORE CONSTRUCTION AREA BACK TO EXISTING GRADE AT THE END OF THE WORK DAY.
7. ALL DRIVEWAYS AND ROADWAY SHALL REMAIN OPEN AND UNOBSTRUCTED BY ANY CHANNELIZING DEVICES DURING PERIODS OF NON-CONSTRUCTION.

KEY

- Area of Construction 1
- Area of Construction 2
- Direction of Traffic
- Channelizing Device (Drum)
- Temp. Traffic Sign
- Existing Geometrics
- Proposed Geometrics

30' 0 30' 60'
SCALE: 1" = 30'

The Traffic Group, Inc.
Suite H
9900 Franklin Square Drive
Baltimore, Maryland 21236
410-931-6600 1-800-583-8411 Fax: 410-931-6601
www.trafficgroup.com
"Merging Innovation and Excellence"

DES. FJH DRN. FJH CHK. JJD

DATE	REVISION	BY	APPR.

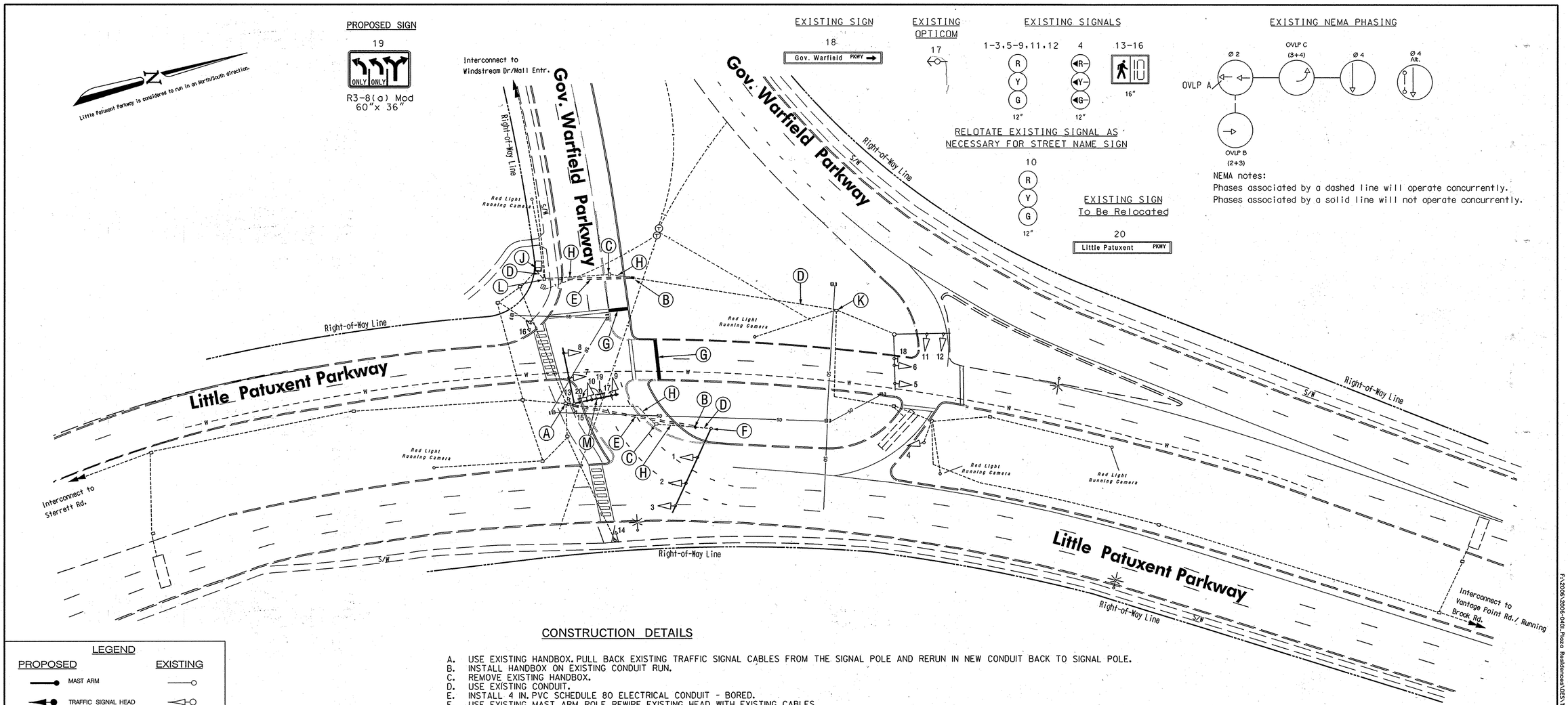
Columbia
Village of Wilde Lake
Section 3

MAINTENANCE OF TRAFFIC PLAN

Governor Warfield Parkway and Llittle Patuxent Parkway

SCALE	ZONING	TTG FILE No.
1" = 30'		
DATE	TAX MAP - GRID	SHEET
Jan 16, 2015		14 of 19

F:\2006\2006-040\Plaza Residences\DES\MOT- SH GOVERNOR WARFIELD PARKWAY.dgn Wednesday, January 14, 2015 12:02:05 PM



CONSTRUCTION DETAILS

A. USE EXISTING HANDBOX. PULL BACK EXISTING TRAFFIC SIGNAL CABLES FROM THE SIGNAL POLE AND RERUN IN NEW CONDUIT BACK TO SIGNAL POLE.
B. INSTALL HANDBOX ON EXISTING CONDUIT RUN.
C. REMOVE EXISTING HANDBOX.
D. USE EXISTING CONDUIT.
E. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
F. USE EXISTING MAST ARM POLE. REWIRE EXISTING HEAD WITH EXISTING CABLES.
G. PAVEMENT MARKING FOR STOP LINE INSTALL SHOWN ON PAVEMENT MARKING PLAN.
H. CAP AND ABANDON EXISTING CONDUIT.
J. USE EXISTING CABINET.
K. USE EXISTING HANDBOX. PULL BACK EXISTING TRAFFIC SIGNAL CABLES FROM CABINET AND RERUN IN NEW CONDUIT BACK TO CABINET.
L. USE EXISTING HANDBOX.
M. RELOCATE EXISTING STREET NAME SIGN AND SIGNALS. INSTALL NEW SIGN AS SHOWN.

LEGEND

PROPOSED		EXISTING
	MAST ARM	
	TRAFFIC SIGNAL HEAD	
	PEDESTRIAN SIGNAL HEAD	
	SIGN	
	STREET LIGHT	
	HANDBOX	
	CONDUIT	
	LOOP DETECTOR	
	CONTROLLER WITH PAD	
	WOOD POLE	
	FIRE HYDRANT	
	MANHOLE	
W.V.	WATER VALVE	W.V.
G.V.	GAS VALVE	G.V.
	GEOMETRICS	

UTILITY LEGEND

G	G	GAS MAIN
W	W	WATER MAIN
S	S	SEWER MAIN
SD	SD	STORM DRAIN
TV	TV	CABLE TELEVISION
E	E	ELECTRIC CABLES
T	T	TELEPHONE CABLES
A	A	AERIAL CABLES

PROFESSIONAL CERTIFICATION - I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENESED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO.: 33316 EXPIRATION DATE: 2/13/16

STATE OF MARYLAND LING-YU CHIEN No. 33316 PROFESSIONAL ENGINEER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Chief, Division of Land Development — Date 2-19-15
Chief, Development Engineering Division — Date 2. 18. 15

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS — DATE 2/10/15
CHIEF, TRAFFIC ENGINEERING DIVISION — DATE 2/2/15
CHIEF, BUREAU OF HIGHWAYS — DATE 1/29/2015

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9900 Franklin Square Dr.
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1-800-583-8411
Fax: 410-931-6601

DES: FJH
DRN: FJH
CHK: J.J.D.
DATE: Jan 16, 2015

BY	NO.	REVISION	DATE
FJH	2	GEOMETRIC CHANGES	1/16/2015
SED	1	AS-BUILT	4/4/2006

Columbia
Village of Wilde Lake
Section 3
600' SCALE MAP NO. _____ DATE: _____

TRAFFIC SIGNAL PLAN
Little Patuxent Parkway at Governor Warfield Parkway

SCALE: 1"=30'
SHEET 15 OF 19

F-66-046

F:\2006\2006-040\Plaza Residences\DES\TS-SH\Little Patuxent Pky @ Gov. Warfield Pky.dgn Wednesday, January 14, 2015 AT 02:33 PM

PROJECT DESCRIPTION

GENERAL

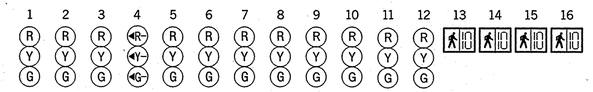
THIS PROJECT INVOLVES THE MODIFICATION OF THE GEOMETRICS FOR EASTBOUND GOVERNOR WARFIELD PARKWAY
THE SIGNAL OPERATION WILL REMAIN UNCHANGED.
LITTLE PATUXENT PARKWAY IS CONSIDERED TO RUN IN A NORTH/ SOUTH DIRECTION.

EQUIPMENT LIST

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

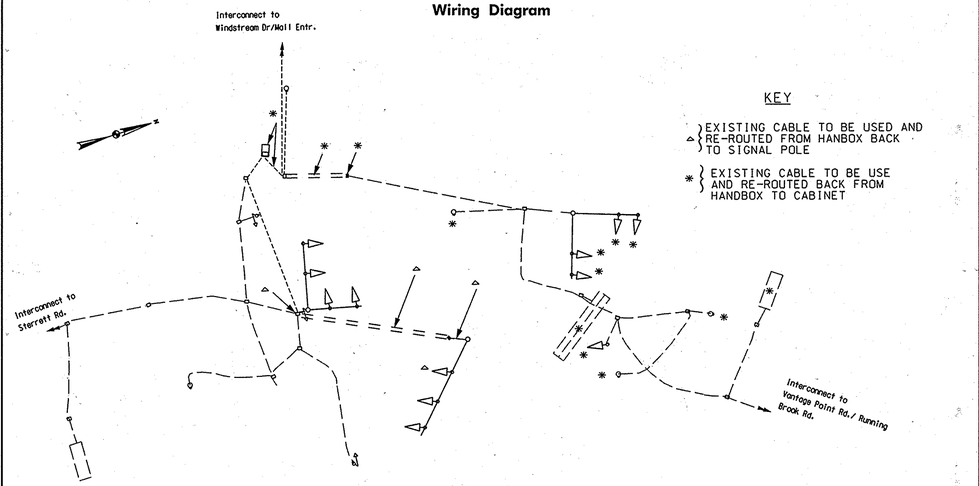
QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MAINTENANCE OF TRAFFIC
LUMP SUM	LS	MOBILIZATION
1	EA	60" x 36" R3-8(a) MOD SIGN WITH MAST ARM MOUNTING HARDWARE
2	EA	HANDBOX
145	LF	4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED
1	EA	RELOCATE EXISTING MAST ARM MOUNTED SIGN
1	EA	RELOCATE SIGNAL HEAD
LUMP SUM	LS	REMOVE EXISTING SIGNAL EQUIPMENT
LUMP SUM	LS	RE-ROUTE EXISTING CABLES (APROX 1200 LF)

Phase Chart



PHASE 2 AND OVLP B	G	G	G	←R—	G	G	G	G	R	R	R	R	DW	DW	DW	DW
2 CHANGE	G	G	G	←R—	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW
OVLP B AND OVLP C	G	G	G	←G—	R	R	R	R	R	R	G	G	DW	DW	DW	DW
OVLP B CHANGE	Y	Y	Y	←G—	R	R	R	R	R	R	G	G	DW	DW	DW	DW
OVLP C AND PHASE 4	R	R	R	←G—	R	R	R	R	G	G	G	G	DW	DW	DW	DW
OVLP C AND 4 CHANGE	R	R	R	←Y—	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
OVLP C AND PHASE ALT 4	R	R	R	←G—	R	R	R	R	G	G	G	G	W/K	W/K	W/K	W/K
PED CLEARANCE	R	R	R	←G—	R	R	R	R	G	G	G	G	FL/DW	FL/DW	FL/DW	FL/DW
OVLP C AND ALT 4 CHANGE	R	R	R	←Y—	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/ ←R—	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

Wiring Diagram



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 2-19-15

Chief, Development Engineering Division — Date 2-18-15

PROFESSIONAL CERTIFICATION - I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO.: 33216 EXPIRATION DATE: 2/13/16

STATE OF MARYLAND — MING-YU CHEN — NO. 33216 — PROFESSIONAL ENGINEER

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 2/16/15

CHIEF, TRAFFIC ENGINEERING DIVISION — DATE 2/2/2015

CHIEF, BUREAU OF HIGHWAYS — DATE 1/29/2015

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Fax 410-931-6601

DES: FJH
DRN: FJH
CHK: J.J.D.
DATE: Jan 16, 2015

BY	NO.	REVISION	DATE
FJH	2	GEOMETRIC CHANGES	1/21/2015
SED	1	AS-BUILT	4/4/2006

Columbia
Village of Wilde Lake
Section 3

600' SCALE MAP NO. _____ DATE: _____

GENERAL INFORMATION PLAN

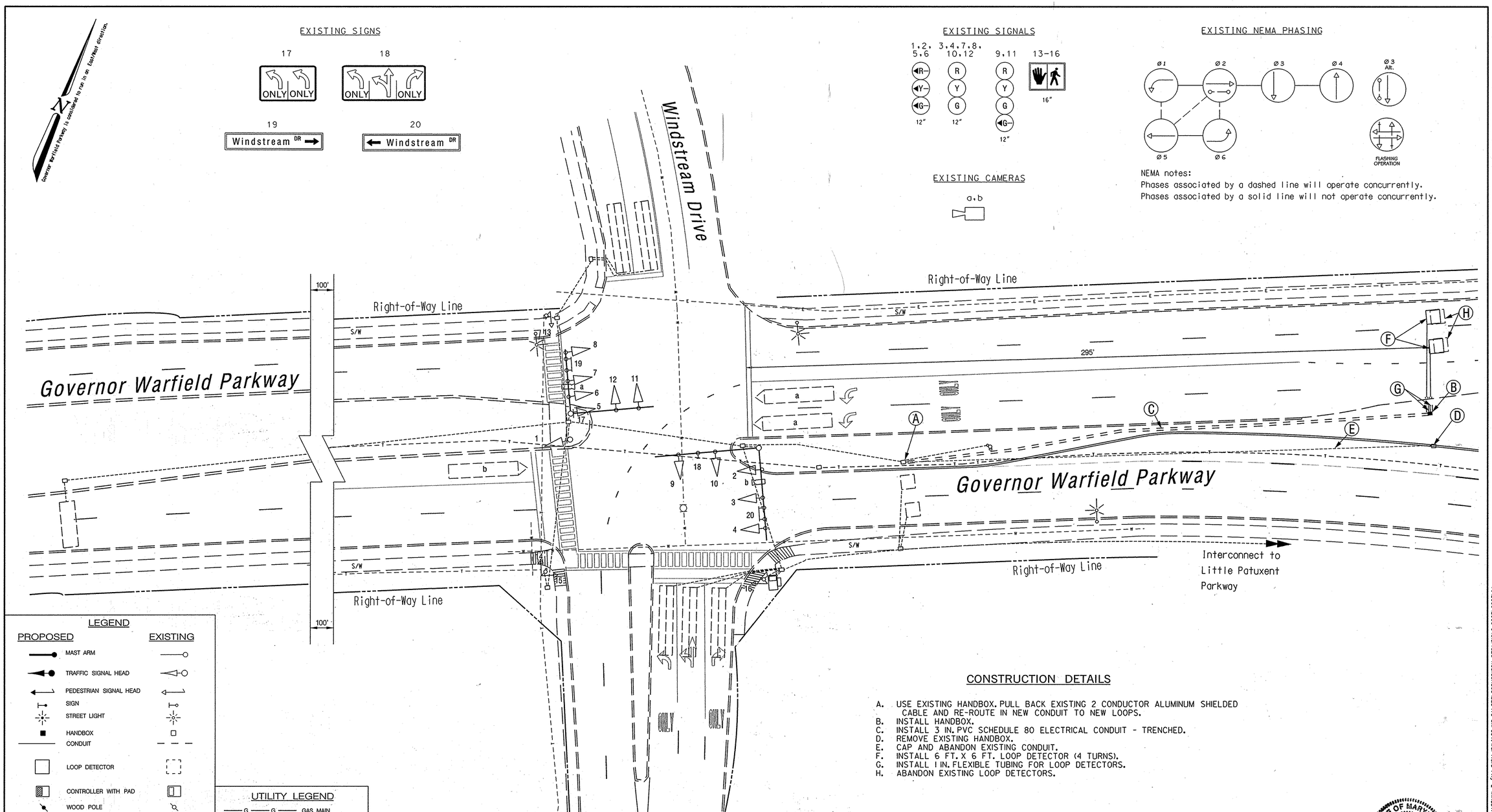
Little Patuxent Parkway
at
Governor Warfield Parkway

SCALE: N/A

SHEET 16 OF 19

F-66-046

F:\2005\2005-040\Plaza Residences\DES\TS-SHT\Little Patuxent Pkwy & Gov. Warfield Pkwy.dgn Wednesday, January 14, 2015 AT 02:28 PM



LEGEND

PROPOSED		EXISTING
	MAST ARM	
	TRAFFIC SIGNAL HEAD	
	PEDESTRIAN SIGNAL HEAD	
	SIGN	
	STREET LIGHT	
	HANDBOX	
	CONDUIT	
	LOOP DETECTOR	
	CONTROLLER WITH PAD	
	WOOD POLE	
	FIRE HYDRANT	
	MANHOLE	
W.V.	WATER VALVE	W.V.
G.V.	GAS VALVE	G.V.
	GEOMETRICS	

UTILITY LEGEND

G	G	GAS MAIN
W	W	WATER MAIN
S	S	SEWER MAIN
SD	SD	STORM DRAIN
TV	TV	CABLE TELEVISION
E	E	ELECTRIC CABLES
T	T	TELEPHONE CABLES
A	A	AERIAL CABLES

CONSTRUCTION DETAILS

A. USE EXISTING HANDBOX. PULL BACK EXISTING 2 CONDUCTOR ALUMINUM SHIELDED CABLE AND RE-ROUTE IN NEW CONDUIT TO NEW LOOPS.
B. INSTALL HANDBOX.
C. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
D. REMOVE EXISTING HANDBOX.
E. CAP AND ABANDON EXISTING CONDUIT.
F. INSTALL 6 FT. X 6 FT. LOOP DETECTOR (4 TURNS).
G. INSTALL 1 IN. FLEXIBLE TUBING FOR LOOP DETECTORS.
H. ABANDON EXISTING LOOP DETECTORS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 2-19-15

Chief, Development Engineering Division — Date 2.18.15

PROFESSIONAL CERTIFICATION - I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 33316 EXPIRATION DATE: 2/13/16

STATE OF MARYLAND — MING-YU CHIEN — No. 33316 — PROFESSIONAL ENGINEER

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 2/10/15

CHIEF, TRAFFIC ENGINEERING DIVISION — DATE 2/2/2015

CHIEF, BUREAU OF HIGHWAYS — DATE 1/29/2015

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410-931-6600
1-800-583-8411
Fax: 410-931-6601

The Traffic Group

DES: FJH
DRN: FJH
CHK: J.J.D.
DATE: Jan 16, 2015

BY	NO.	REVISION	DATE
FJH	1	REPLACE LOOPS ON GOV. WARFIELD PARKWAY WEST BOUND	1/16/2015

600' SCALE MAP NO. _____ DATE: _____

Columbia
Village of Wilde Lake
Section 3

TRAFFIC SIGNAL PLAN
Governor Warfield Parkway
at
Windstream Dr/Mall Entrance

SCALE: 1"=20'

SHEET 17 OF 19

F-66-046

F:\2006\2006-040_Plaza Residences\DES\TS-SHI Gov. Warfield Pky @ WindStream Dr .dgn Wednesday, January 14, 2015 AT 02:01 PM

PROJECT DESCRIPTION

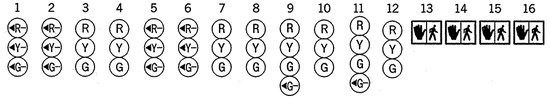
GENERAL

THIS PROJECT INVOLVES THE REPLACEMENT OF THE LOOP DETECTION FOR WESTBOUND GOVERNOR WARFIELD PARKWAY.
THE SIGNAL OPERATION IS TO REMAIN UNCHANGED.
GOVERNOR WARFIELD PARKWAY IS CONSIDERED TO RUN IN A EAST/ WEST DIRECTION.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

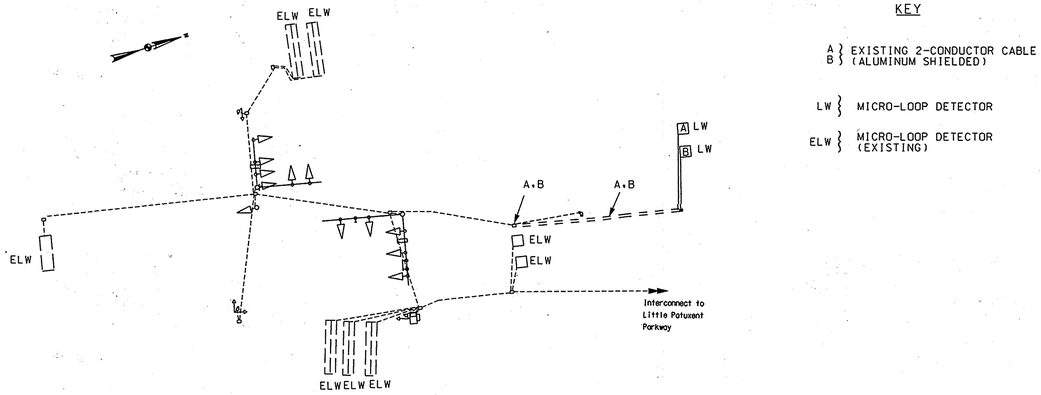
QUANTITY	UNITS	DESCRIPTION
LUMP SUM	EA	MAINTENANCE OF TRAFFIC
LUMP SUM	EA	MOBILIZATION
1	EA	HANDBOX
160	LF	3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED
10	LF	1 IN. LIQUID TIGHT FLEXIBLE CONDUIT FOR DETECTOR SLEEVE
155	LF	SAWCUT FOR SIGNAL LOOP DETECTOR
225	LF	LOOP DETECTOR WIRE ENCASED IN FLEXIBLE TUBING
LUMP SUM	LS	RE-ROUTE EXISTING CABLES (APPROX 500LF)

Phase Chart



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
PHASE 1 and 5	←R–	←R–	R	R	←G–	←G–	G	G	R	R	R	R	DW	DW	DW	DW	
1 CHANGE	←R–	←R–	R	R	←Y–	←Y–	Y	Y	R	R	R	R	DW	DW	DW	DW	
PHASE 2 AND 5	←R–	←R–	G	G	←R–	←R–	G	G	R	R	R	R	DW	DW	DW	DW	
2 CHANGE	←R–	←R–	G	G	←R–	←R–	G	G	R	R	R	R	DW	DW	DW	DW	
PHASE 2 AND 6	←G–	←G–	G	G	←G–	←G–	G	G	R	R	R	R	WK	WK	DW	DW	
PED CLEARANCE	←G–	←G–	G	G	←R–	←R	R	R	R	R	R	R	FL DW	FL DW	DW	DW	
2 AND 6 CHANGE	←Y–	←Y–	Y	Y	←R–	←R	R	R	R	R	R	R	DW	DW	DW	DW	
PHASE 3	←R–	←R–	R	R	←R–	←R–	R	R	R	R	←G G	G	DW	DW	DW	DW	
3 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	R	R	Y	Y	DW	DW	DW	DW	
PHASE ALT 3	←R–	←R–	R	R	←R–	←R–	R	R	R	R	←G G	G	DW	DW	WK	WK	
PED CLEARANCE	←R–	←R–	R	R	←R–	←R–	R	R	R	R	←G G	G	DW	DW	FL DW	FL DW	
ALT 3 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	R	R	Y	Y	DW	DW	DW	DW	
PHASE 4	←R–	←R–	R	R	←R–	←R–	R	R	←G G	G	R	R	DW	DW	DW	DW	
4 CHANGE	←R–	←R–	R	R	←R–	←R–	R	R	Y	Y	R	R	DW	DW	DW	DW	
FLASHING OPERATION	FL ←R–	FL ←R–	FL Y	FL Y	FL Y	FL ←R–	FL Y	FL Y	FL R	FL R	FL R	FL R	DARK	DARK	DARK	DARK	

Wiring Diagram



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chief, Division of Land Development — Date 2-19-15

Chief, Development Engineering Division — Date 2-18-15

PROFESSIONAL CERTIFICATION - I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO.: 23316 EXPIRATION DATE: 7/13/16

STATE OF MARYLAND — KING-YU CHIEN — NO. 23316 — PROFESSIONAL ENGINEER

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 2/6/15

CHIEF, TRAFFIC ENGINEERING DIVISION — DATE 2/2/2015

CHIEF, BUREAU OF HIGHWAYS — DATE 1/29/2015

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21236
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1-800-583-8411
Fax: 410-931-6601

DES: FJH
DRN: FJH
CHK: J.J.D.
DATE: Jan 16, 2015

BY	NO.	REVISION	DATE
FJH	1	REPLACE LOOPS ON GOV. WARFIELD PARKWAY WEST BOUND	9/16/2015

Columbia
Village of Wilde Lake
Section 3

600' SCALE MAP NO. _____ DATE: _____

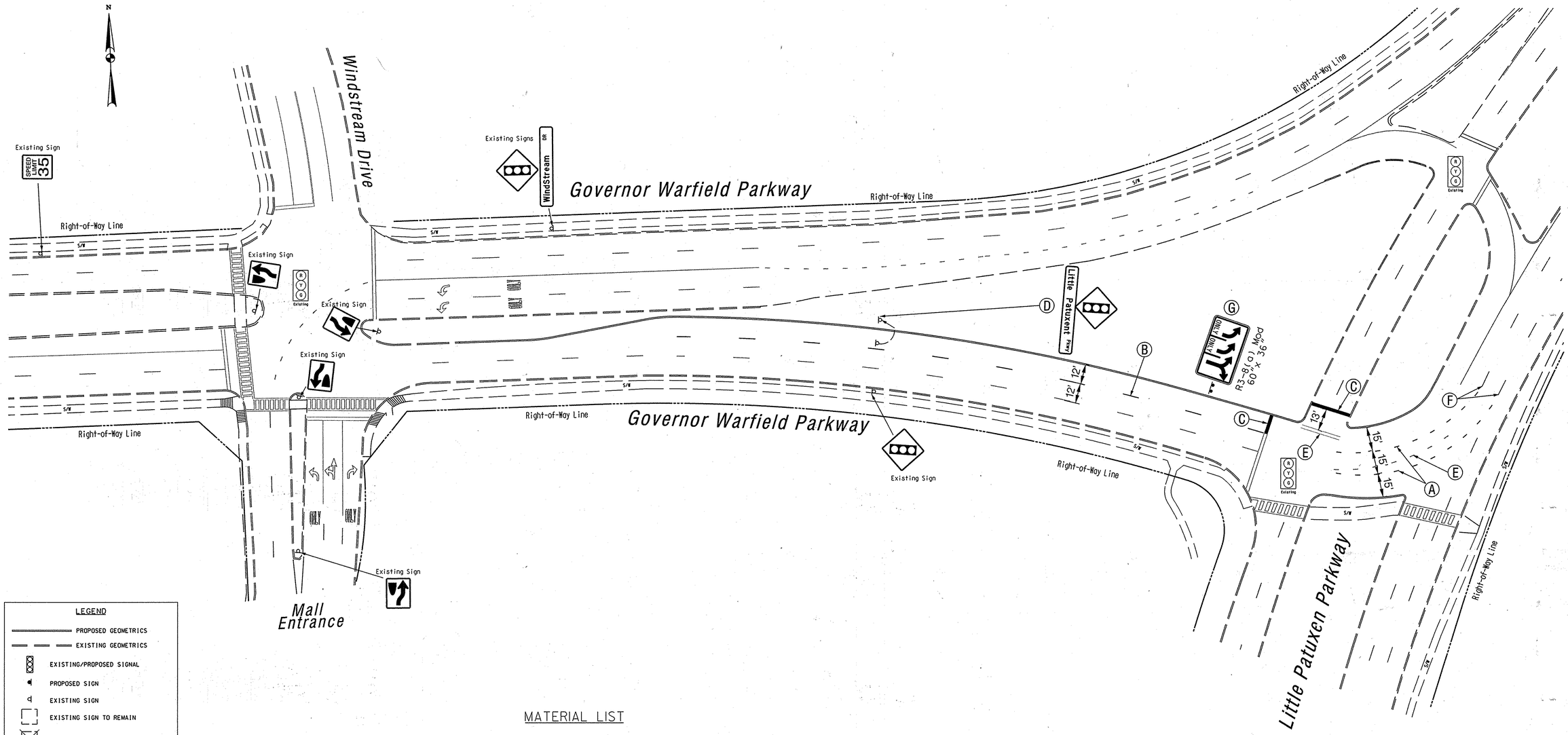
GENERAL INFORMATION PLAN
Governor Warfield Parkway
at
Windstream Dr/Mall Entrance

SCALE: N/A

SHEET 18 OF 19

F-66-046

F:\2006\2006-040_Rizzo Residences\DES\15-SH Gov. Warfield Pky @ Windstream Dr .dgn Wednesday, January 14, 2015 11:08:20 PM



LEGEND

- PROPOSED GEOMETRICS
- EXISTING GEOMETRICS
- EXISTING/PROPOSED SIGNAL
- PROPOSED SIGN
- EXISTING SIGN
- EXISTING SIGN TO REMAIN
- EXISTING SIGN TO BE REMOVED
- EXISTING PAVEMENT MARKING SYMBOL
- PROPOSED PAVEMENT MARKING SYMBOL

MATERIAL LIST

Equipment to be furnished and installed by the Contractor.
All equipment in this list shall have catalog cuts submitted for approval prior to installation.

QUANTITY	UNITS	DESCRIPTION
375	LF	5 IN. WIDE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING - WHITE.
40	LF	24 IN. WIDE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING - WHITE.
1	EA	RELOCATE GROUND MOUNTED SIGN.
75	LF	REMOVE EXISTING PAVEMENT MARKINGS BY GRINDING.
1	EA	60" x 36" R3-8(a) Mod GROUND MOUNTED SIGN.
30	LF	GALVANIZED STEEL 'U' CHANNEL SIGN POST.

CONSTRUCTION DETAILS

A. INSTALL 5 IN. DOTTED (3 FT. SEGMENT, 3 FT. GAP) WHITE THERMOPLASTIC PAVEMENT MARKING FOR LANE LINE.
B. INSTALL 5 IN. BROKEN (10 FT. SEGMENT, 30 FT. GAP) WHITE THERMOPLASTIC PAVEMENT MARKING FOR LANE LINE.
C. INSTALL 24 IN. SOLID WHITE THERMOPLASTIC PAVEMENT MARKING FOR STOP BAR.
D. RELOCATE EXISTING GROUND MOUNTED SIGN.
E. REMOVE EXISTING PAVEMENT MARKING BY GRINDING.
F. TIE TO EXISTING PAVEMENT MARKING.
G. INSTALL GROUND MOUNTED SIGN ON TWO STEEL 'U' CHANNEL POST.

30' 0 30' 60'
SCALE: 1" = 30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways — Date 11/29/2015

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Chief, Division of Land Development — Date 2-19-15
Chief, Development Engineering Division — Date 2.17.15

STATE OF MARYLAND — HING YU CHIEN — NO. 39011 — PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION - I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO.: 39011 EXPIRATION DATE: 9/13/16

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www.trafficgroup.com
"Merging Innovation and Excellence"

DES. FJH | DRN. FJH | CHK. JJD

DATE	REVISION	BY	APP'R.

Columbia
Village of Wilde Lake
Section 3

SIGNAGE AND PAVEMENT MARKING PLAN

Governor Warfield Parkway and Llittle Patuxent Parkway

SCALE	ZONING	TTG FILE No.
1" = 30'		
DATE	TAX MAP - GRID	SHEET
Jan 16, 2015		19 of 19

F:\2006\2006-040\Plaza Residences\DES\PW- SHT GOVERNOR WARFIELD PARKWAY.dgn Wednesday, January 14, 2015 at 02:02

F-66-046