PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES MODIFYING THE SIDE STREET PHASING FOR NORTH BESTGATE ROAD AND TIDEWATER COLONY DRIVE FROM CONCURRENT PHASING TO SPLIT PHASING. THE SIGNAL IS LOCATED ALONG MD 70 (BESTGATE ROAD/ROWE BOULEVARD) IN ANNE ARUNDEL COUNTY. ADDITIONALLY, MODIFICATION TO AN EXISTING SIDEWALK RAMP AND APS/CPS UPGRADES ARE PROPOSED TO MEET CURRENT ADA REQUIREMENTS.
MD 70 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX (6) PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS EXCLUSIVE LEFT TURN PHASING FOR BOTH THE NORTHBOUND AND SOUTHBOUND MOVEMENTS OF MD 70. THE MD 70 THROUGH MOVEMENTS OPERATE CONCURRENTLY. THE N. BESTGATE RD./TIDEWATER COLONY DR. MOVEMENTS ARE PROPOSED TO OPERATE IN SPLIT PHASE. AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED FOR CROSSING THE SOUTH LEG OF MD 70.

THE EXISTING CABINET/CONTROLLER WILL BE UTILIZED. THE INSTALLATION OF A 2 WIRE CENTRAL CONTROL UNIT AND VIDEO INTERFACE EQUIPMENT IS PROPOSED AND SHALL BE INSTALLED BY THE SHA SIGNAL SHOP. PLEASE CONTACT MR. ED RODENHIZER AT 410-787-7652 72 HOURS PRIOR TO CONSTRUCTION.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410)-787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

APS OPERATION

FOR MD 70 (ROWE BLVD) AT NORTH BESTGATE RD. / TIDEWATER COLONY DRIVE.
A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS ROWE AT BESTGATE AND TIDEWATER COLONY."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

Mr. Greg Welker
District Engineer
Phone: 410-841-1001

Ms. Kimberly Tran
Assistant District Engineer - Traffic
Phone: 410-841-1019

Mr. Joe Horty
District Utility Engineer
Phone: 410-841-1005

Mr. James Folden
Assistant District Engineer - Construction
Phone: 410-841-1031

Mr. John Mays
Assistant District Engineer - Maintenance
Phone: 410-841-1013

Office of Traffic and Safety

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
Phone: 410-787-7630

Mr. Edward Rodehizer
Team Leader Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Team Leader Sign Operations
Phone: 410-787-7670

Ms. Darlene Elde
Supply Officer IV (Signal Shop Warehouse)

The Power Company Representative is:
BGE Company
7317 Parkway Drive South
Hanover, Md 21076
Phone: 410-859-9062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
9002	1 EA	[UPDATED] (CONT/CAB/ADD) NEMA LOAD SWITCH
9086	1 EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS
9571	100 SF	[UPDATED] SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN:
		2 EACH - R10-3(I) (9 IN. x 15 IN.) POLE MOUNT, "PUSH BUTTON TO CROSS ROWE BLVD."
		1 EACH - SHIELD ASSEMBLY (24" x 51") "NORTH, MD 70, RIGHT ARROW"
		1 EACH - SHIELD ASSEMBLY (24" x 51") "SOUTH, MD 70, RIGHT ARROW"
		1 EACH - SHIELD ASSEMBLY (36" x 75") "SOUTH, MD 70, LEFT ARROW"
		1 EACH - SHIELD ASSEMBLY (36" x 75") "NORTH, MD 70, LEFT ARROW"
		2 EACH - D-3(I) (96 IN. x 32 IN.) DUAL FACED "LEFT ARROW, BESTGATE RD/ ROWE BLVD, RIGHT ARROW"
		"LEFT ARROW, ROWE BLVD/ BESTGATE RD, RIGHT ARROW"

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	1 CY	TEST PIT EXCAVATION
5003	167 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5004	120 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5005	370 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5006	3 EA	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKING LETTERS, SYMBOLS, ARROWS AND NUMBERS
6000	85 LF	10 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
6001	25 LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER 8 INCH DEPTH
6002	192 SF	4 INCH CONCRETE SIDEWALK
8001	46 EA	12 INCH LED SIGNAL HEAD SECTION (R,Y,G)
8003	1 EA	2 WIRE CENTRAL CONTROL UNIT
8010	2 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
8011	1 EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8012	1 EA	CONDUIT BEND IN EXISTING BASE
8014	2 EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8017	1 EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT PER ASSIGNMENT
8026	105 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8027	20 SF	DETECTABLE WARNING SURFACE
8033	35 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8046	100 SF	INSTALL OVERHEAD SIGN
8047	4 EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT
8058	550 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8060	630 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8061	1100 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

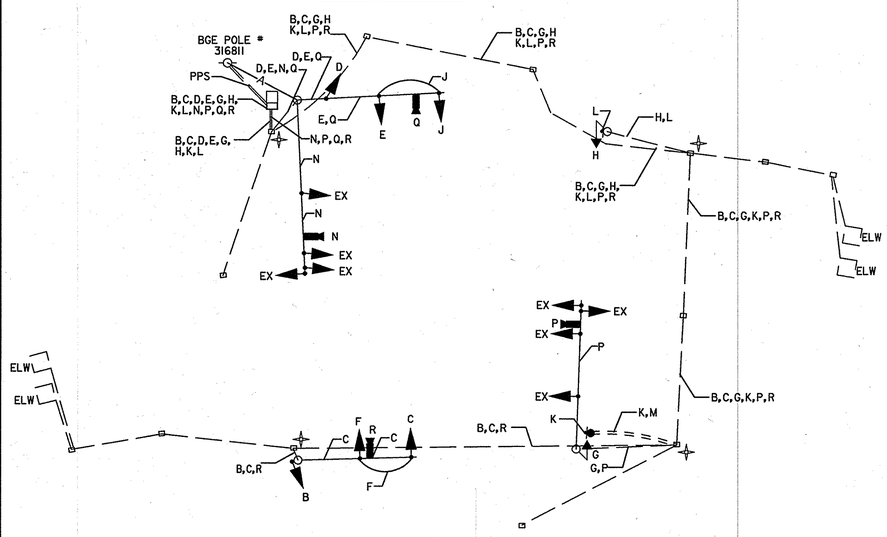
EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE	NONE	NONE

ALL REMOVED MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR

WIRING DIAGRAM



EX — EXISTING CABLE TO BE UTILIZED

B,C,D,E — ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)

F,G,H,J — ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

K,L — ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

N,P,Q,R — VIDEO DETECTION CAMERA LEAD-IN CABLE

M — NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

ELW — EXISTING LOOP DETECTOR

EXISTING GROUND ROD

PPS — PROPOSED PHONE SERVICE.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15A	16A
PHASE 1 + 5	←G—	←G—	R	R	←G—	←G—	R	R	R	R	R	R	R	R	DW	DW
1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO: 1+6, 2+5, OR 2+6														DW	DW
PHASE 1 + 6	←R—	←R—	R	R	←G—	←G—	G	G	R	R	R	R	R	R	DW	DW
1 CHANGE	←R—	←R—	R	R	←Y—	←Y—	G	G	R	R	R	R	R	R	DW	DW
PHASE 2 + 5	←G—	←G—	G	G	←R—	←R—	R	R	R	R	R	R	R	R	DW	DW
5 CHANGE	←Y—	←Y—	G	G	←R—	←R—	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 + 6	←R—	←R—	G	G	←R—	←R—	G	G	R	R	R	R	R	R	DW	DW
2 + 6 CHANGE	←R—	←R—	Y	Y	←R—	←R—	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 3	←R—	←R—	R	R	←R—	←R—	R	R	G ←G—	G ←G—	G	R	R	R	DW	DW
3 CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	Y	Y	Y	R	R	R	DW	DW
PHASE 3 ALT	←R—	←R—	R	R	←R—	←R—	R	R	G ←G—	G ←G—	G	R	R	R	WK	WK
PED CLEARANCE	←R—	←R—	R	R	←R—	←R—	R	R	G ←G—	G ←G—	G	R	R	R	FL/DW	FL/DW
3 ALT CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	Y	Y	Y	R	R	R	DW	DW
PHASE 4	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	G ←G—	G ←G—	G	DW	DW
4 CHANGE	←R—	←R—	R	R	←R—	←R—	R	R	R	R	R	Y	Y	Y	DW	DW
FLASHING OPERATION	←FL/R—	←FL/R—	FL/Y	FL/Y	←FL/R—	←FL/R—	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

TOD NO: AT936-33
SHA NO: AA522A5C/B5C
MD 70@ NORTH BESTGATE RD
TIDEWATER COLONY DR

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 70 (BESTGATE ROAD/ROWE BOULEVARD)
AT NORTH BESTGATE ROAD/TIDEWATER COLONY DRIVE

RJM ENGINEERING, INC.
CONSULTING ENGINEERS
COLUMBIA, MARYLAND

GENERAL INFORMATION

SCALE N.T.S. DATE MARCH 24, 2008 CONTRACT NO. AT9365185

DESIGNED BY P.WESTCOTT
DRAWN BY P.WESTCOTT
CHECKED BY S.YOUNG
FAP NO. N/A
COUNTY ANNE ARUNDEL
LOGMILE 02007002.06
TIMS NO. 1439
TOD NO. N/A

TS NO. 3396E-GI | DRAWING SG-02 OF 02 | SHEET NO. 2 OF 2

PLOTTED: Wednesday, April 09, 2008 AT 11:05 AM
FILE: J:\DATA\1439\PSE Package from Consultant\pSG-N000_MD70-mod.dgn

BY: Mfukui