

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 2 (GOVERNOR RITCHIE HIGHWAY) AND MCKINSEY ROAD IN ANNE ARUNDEL COUNTY, MARYLAND. MODIFICATIONS INCLUDE THE INSTALLATION OF 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEADS AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS FOR THE NORTH AND SOUTH LEGS OF MD 2 AND THE EAST AND WEST LEGS OF MCKINSEY ROAD. MD 2 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH THE MD 2 APPROACHES OPERATING CONCURRENTLY AND THE MCKINSEY ROAD APPROACHES OPERATING SPLIT PHASED. PROTECTED LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND AND SOUTHBOUND MD 2.

NEW AUDIBLE PUSHBUTTON ACTUATED PEDESTRIAN PHASES WILL BE PROVIDED ACROSS THE NORTH AND SOUTH LEGS OF MD 2 AND THE EAST AND WEST LEGS OF MCKINSEY ROAD.

APS MESSAGE FOR CROSSING MD 2 (GOVERNOR RITCHIE HIGHWAY) FROM CURBSIDE:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS GOVERNOR RITCHIE AT MCKINSEY. SECOND PUSHBUTTON IN MEDIAN. WAIT".
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

APS MESSAGE FOR CROSSING MD 2 (GOVERNOR RITCHIE HIGHWAY) FROM MEDIAN:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS GOVERNOR RITCHIE AT MCKINSEY. WAIT".
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

APS MESSAGE FOR CROSSING MCKINSEY ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS MCKINSEY AT GOVERNOR RITCHIE. WAIT".
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTROLLER REQUIREMENTS

THE EXISTING NEMA SIZE '6' BASE MOUNTED CABINET AND EIGHT-PHASE CONTROLLER AND ALL ASSOCIATED EQUIPMENT WILL CONTINUE TO BE USED. A 2-WIRE CENTRAL CONTROL UNIT WILL BE ADDED TO THE CABINET.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA:

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9570	10	SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN - 10 EACH R10-3(1) (9"x15")

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
2002	4	CY	TEST PIT EXCAVATION
5005	1000	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	10	EA	FURNISH AND INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8002	7	EA	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE - ANY SIZE
8003	8	EA	FURNISH AND INSTALL 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8005	1	EA	REMOVE AND DISPOSE PER ASSIGNMENT
8007	100	LF	FURNISH AND INSTALL UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8008	100	LF	FURNISH AND INSTALL UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8012	100	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8014	1	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8015	10	SF	INSTALL GROUND MOUNTED SIGN
8018	1	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8020	2100	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8021	1900	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019

MR. MIKE HUBER
ASSISTANT DISTRICT ENGINEER - UTILITY
PHONE: (410) 841-1039

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013

MR. RICHARD L. DAFF
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7650

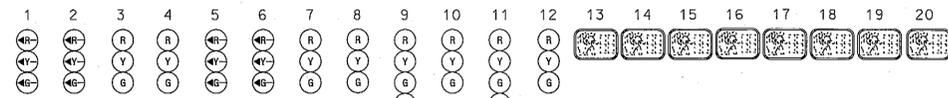
MR. ED RODENHIZER
SUPERVISOR - SIGNAL SHOP
PHONE: (410) 787-7650

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

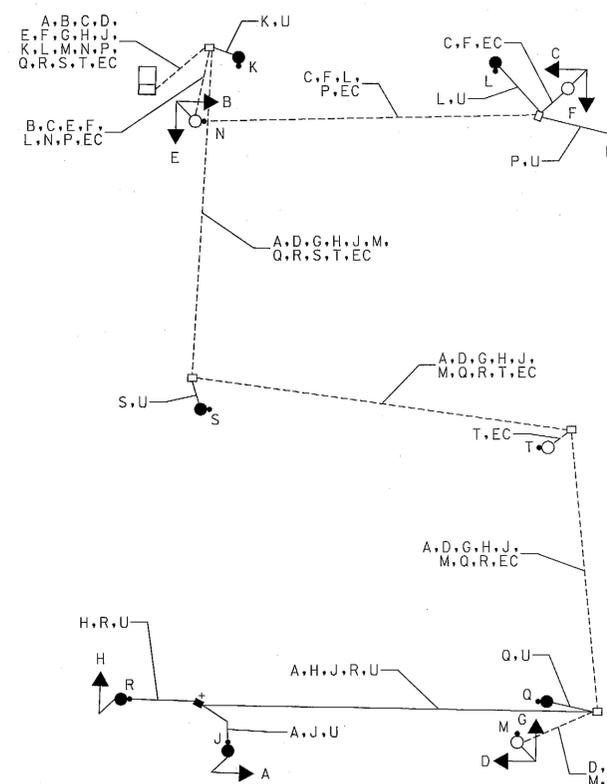
NONE.

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 + 5	←G	←G	R	R	←G	←G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 + 5 CHANGE	1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5, OR PHASE 2 + 6																			
PHASE 1 + 6	←G	←G	G	G	←R	←R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 + 6 CHANGE	←Y	←Y	Y	Y	←R	←R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 + 5	←R	←R	R	R	←G	←G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
2 + 5 CHANGE	←R	←R	R	R	←Y	←Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 + 6	←R	←R	G	G	←R	←R	G	G	R	R	R	R	W	W	W	W	DW	DW	DW	DW
PED CLEARANCE	←R	←R	G	G	←R	←R	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 + 6 CHANGE	←R	←R	Y	Y	←R	←R	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	←R	←R	R	R	←R	←R	R	R	←G	←G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 CHANGE	←R	←R	R	R	←R	←R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 ALT	←R	←R	R	R	←R	←R	R	R	←G	←G	R	R	DW	DW	DW	DW	DW	DW	W	DW
PED CLEARANCE	←R	←R	R	R	←R	←R	R	R	←G	←G	R	R	DW	DW	DW	DW	FL/DW	FL/DW	DW	DW
3 ALT CHANGE	←R	←R	R	R	←R	←R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	←R	←R	R	R	←R	←R	R	R	←G	←G	R	R	G	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	←R	←R	R	R	←R	←R	R	R	Y	Y	R	R	Y	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	←R	←R	R	R	←R	←R	R	R	←G	←G	R	R	G	DW	DW	DW	DW	W	DW	DW
PED CLEARANCE	←R	←R	R	R	←R	←R	R	R	←G	←G	R	R	G	DW	DW	DW	FL/DW	DW	DW	FL/DW
4 ALT CHANGE	←R	←R	R	R	←R	←R	R	R	Y	Y	R	R	Y	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/←R	FL/←R	FL/Y	FL/Y	FL/←R	FL/←R	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A, B, C, D, E, F, G, H } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
 J, K, L, M, N, P, Q, R, S, T } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
 U } STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
 EC } EXISTING CABLE

LEGEND

+ - 3/4 IN. X 10 FT. GROUND ROD

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

MD 2 (GOVERNOR RITCHIE HIGHWAY) AT MCKINSEY ROAD SEVERNA PARK, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE MAY 29, 2012 CONTRACT NO. AX6445378

DESIGNED BY NJM COUNTY ANNE ARUNDEL
 DRAWN BY NJM LOGMILE 02000229.13
 CHECKED BY BSH T.I.M.S. NO. L149
 F.A.P. NO. NA T.O.D. NO.

T.S. NO. 303H-GI SG-02 OF SG-02 SHEET NO. 7 OF 7

McCormick Taylor
Engineers & Planners
Since 1946

509 South Exeter Street
4th Floor
Baltimore, Maryland 21202
(410) 662-7400