PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF EXCLUSIVE LEFT TURN PHASING ALONG MD 5, APS/CPS EQUIPMENT UPGRADES, AND SIGNAL HEAD UPGRADES AND REPLACEMENTS, TO AN EXISTING SPAN WIRE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 5 (BRANCH AVENUE) AND COLEBROOKE DRIVE IN PRINCE GEORGE'S COUNTY. EXISTING PEDESTRIAN SIGNALS, PUSH BUTTONS AND SIGNS ARE TO BE REMOVED.

MD 5 IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET EXISTS AT THIS LOCATION. THE INTERSECTION WILL CONTINUE TO OPERATE IN A SEMI-ACTUATED MODE USING 8 NEMA PHASES. THE LEFT-TURNS ALONG MD 5 WILL OPERATE WITH EXCLUSIVE LEFT-TURN PHASING. COLEBROOKE DRIVE IS SPLIT PHASED . AUDIBLE PEDESTRIAN SIGNALS, NEW CURB AND GUTTER AND SIDEWALK WITH ADA RAMPS AND DETECTABLE WARNING SURFACE MATERIAL SHALL BE INSTALLED ON EACH CORNER OF THE INTERSECTION. AUDIBLE PEDESTRIAN SIGNALS AND DETECTABLE WARNING SURFACE MATERIAL SHALL BE INSTALLED IN THE MEDIAN ON THE SOUTH LEG OF THE INTERSECTION. THE PEDESTRIAN PHASES ACROSS THE SOUTH LEG OF MD 5 WITH OPERATE WITH PUSHBUTTON ACTUATION. THE PEDESTRIAN PHASES ALONG COLEBROOKE DRIVE WILL OPERATE ON RECALL.

SPECIAL NOTES

1. THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF PROPOSED SIGNAL HEADS. IF NEW INSTALLATION CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.

2. CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES INCLUDING SINGAL CONDUIT. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.

3. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 30, 104.12 - 01, 104.13 - 01, 104.31 - 01, 104.32 - 01, 104.81- 02.

4. ALL CONTROLLER CABINET WIRING WILL BE PERFORMED BY THE SHA SIGNAL SHOP. ALSO, ALL ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. ED RODENHIZER TO COORDINATE BOTH AT (410) 787-7652.

5. APS WILL FUNCTION AS FOLLOWS:

TO CROSS MD 5 NORTHBOUND
- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS BRANCH AT COLEBROOKE." CROSSWALK IS STRAIGHT ACROSS TO MEDIAN, USE FAR PUSHBUTTON TO CROSS NEXT ROADWAY."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS MD 5 SOUTHBOUND
- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CROSS BRANCH AT COLEBROOKE." CROSSWALK ANGLES LEFT TO MEDIAN, USE FAR PUSHBUTTON TO CROSS NEXT ROADWAY."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS MD 5 NORTHBOUND FROM MEDIAN
- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CONTINUE CROSSING BRANCH; CROSSWALK IS STRAIGHT ACROSS ROADWAY."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

TO CROSS MD 5 SOUTHBOUND FROM MEDIAN
- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL BE "WAIT TO CONTINUE CROSSING BRANCH; CROSSWALK ANGLES TO THE LEFT ACROSS ROADWAY."
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

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

6. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

MR. BRIAN YOUNG, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7409

MR. AUGIE REBISH, UTILITY ENGINEER
PHONE: (301) 513-7350

MR. WAYNE MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

MR. RICHARD L. DAFF SR., CHIEF - TRAFFIC OPERATIONS DIVISIONS
PHONE: (410) 787-7630

MR. EDWARD RODENHIZER, CHIEF - SIGNAL OPERATIONS SECTION
PHONE: (410) 787-7652

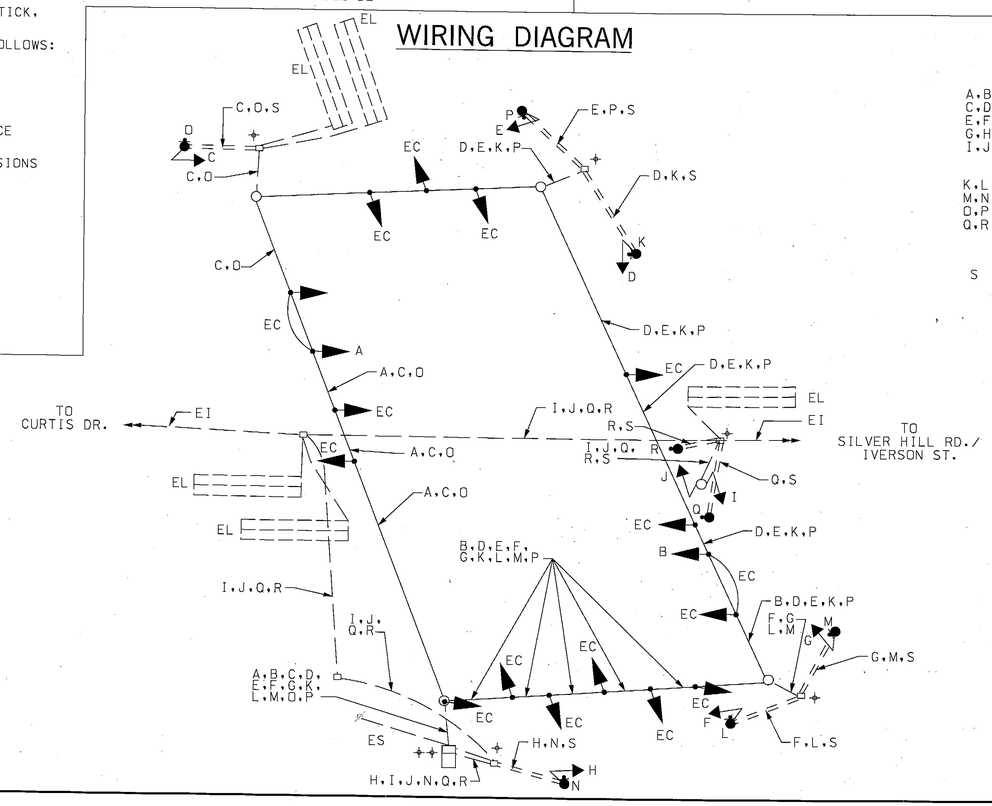
MR. EUGENE BAILEY - SIGN SHOP
PHONE: (410) 787-7676

THE POWER COMPANY REPRESENTATIVE IS:
MR. RICHARD CHILCOAT
POTOMAC ELECTRIC POWER COMPANY
9300 OLD MARLBORO PIKE
UPPER MARLBORO, MARYLAND 20772
PHONE: (301) 548-4333

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	←R ←Y ←G	←R ←Y ←G	R Y G	R Y G	←R ←Y ←G	←R ←Y ←G	R Y G	R Y G	R Y G ←G	R Y G	R Y G ←G	R Y G	R Y G ←G	R Y G ←G	R Y G	R R	R R								
PHASE 1 AND 5	←G–	←G–	R	R	←G–	←G–	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
5 CHANGE	←Y–	←Y–	R	R	←Y–	←Y–	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 AND 6	←G–	←G–	G	G	←R–	←R–	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
1 AND 6 CHANGE	←Y–	←Y–	G	G	←R–	←R–	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	←R–	←R–	R	R	←G–	←G–	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
5 CHANGE	←R–	←R–	R	R	←Y–	←Y–	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	←R–	←R–	G	G	←R–	←R–	G	G	R	R	R	R	R	R	R	R	R	W/K	W/K	W/K	W/K	D/W	D/W	D/W	D/W
PED CLEARANCE	←R–	←R–	G	G	←R–	←R–	G	G	R	R	R	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
2 AND 6 CHANGE	←R–	←R–	Y	Y	←R–	←R–	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	←R–	←R–	R	R	←R–	←R–	←R–	R	G ←G–	G	G ←G–	G	R	R	R	FL/R	FL/R	DW	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	←R–	←R	R	R	←R–	←R–	←R–	R	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	←R–	←R–	R	R	←R–	←R–	←R–	R	G ←G–	G	G ←G–	G	R	R	R	FL/R	FL/R	DW	DW	DW	DW	WK	WK	WK	WK
PED CLEARANCE	←R–	←R–	R	R	←R–	←R–	←R–	R	G ←G–	G	G ←G–	G	R	R	R	FL/R	FL/R	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
4 ALT CHANGE	←R–	←R–	R	R	←R–	←R–	←R–	R	Y	Y	Y	Y	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	←R–	←R–	R	R	←R–	←R–	←R–	R	R	R	R	R	G ←G–	G ←G	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
3 CHANGE	←R–	←R–	R	R	←R–	←R–	←R–	R	R	R	R	R	Y	Y	Y	R	R	DW	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/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	R	R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



MD 5 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION

KEY

A,B, C,D, E,F, G,H, I,J	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
K,L, M,N, O,P, Q,R	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG) {PUSHBUTTON}
S	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
EC	EXISTING CABLE
EI	EXISTING INTERCONNECT
EL	EXISTING LOOP
ES	EXISTING SERVICE TO BE MAINTAINED
+	GROUND ROD

TOD NO:XX449-42
SHA NO:PG556A5C/CSC
MD 5@COLEBROOKE DR

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ARCHITECTURE ENGINEERING CONSTRUCTION

BY: mverotsky

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 5 (BRANCH AVE.)
AT COLEBROOKE DRIVE

TRAFFIC SIGNAL – GENERAL INFORMATION

SCALE NTS ADVERTISED DATE AUGUST, 2008 CONTRACT NO. XX4495185

DESIGNED BY MEV
DRAWN BY CNS
CHECKED BY JWH CJW
F.A.P. NO.
COUNTY PRINCE GEORGE'S
LOGMILE 16000514.30
TIMS NO. 1663
TOD NO.

TS NO. 1066 | DRAWING SG – 02 OF 03 | SHEET NO. 2 OF 3

PLOTTED: Friday, November 21, 2008 AT 11:38 AM
FILE: P:\20041\04005589\Drawings\DGN\cSG-N001_md5.dgn