

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES UPGRADING THE EXISTING PEDESTRIAN CROSSINGS AT THE INTERSECTION OF MD 450 AND BOWIE HIGH SCHOOL ENTRANCE IN PRINCE GEORGE'S COUNTY TO CURRENT APS/CPS STANDARDS. THE EXISTING HANDICAP RAMPS WILL BE UPGRADED TO CURRENT STANDARDS MD 450 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION. THE MODULES IN THE EXISTING TRAFFIC SIGNAL HEADS WILL ALSO BE REPLACED WITH L.E.D. MODULES.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE IS EXCLUSIVE/PERMISSIVE LEFT TURN PHASING FOR EASTBOUND OF MD 450. MD 450 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY WITH CONCURRENT PEDESTRIAN MOVEMENTS TO CROSS BOWIE HIGH SCHOOL ENTRANCE. BOWIE HIGH SCHOOL ENTRANCE WILL OPERATE CONCURRENTLY WITH AN ALTERNATE PEDESTRIAN PHASE TO CROSS EAST LEG OF MD 450. THE INTERSECTION CONTROLLER INTERCONNECTS WITH THE CONTROLLER AT THE INTERSECTION OF MD 450 AT TRINITY/MOYLAN DRIVE AND AT THE INTERSECTION OF MD 450 AT BELAIR DRIVE.

III. SPECIAL NOTE:

ALL UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY.

EQUIPMENT LIST FOR CONTRACT NO. XX4275185

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9570	9	SF	SHEET ALUMINUM GROUND MOUNTED SIGN
	1	EA	R4-7 (24"X30") GROUND MOUNTED
	4	EA	R10-3 (1) (9"X15") GROUND MOUNTED

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2002	1	CY	TEST PIT EXCAVATION
5001	775	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5004	75	LF	5 INCH YELLOW PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5005	835	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
5006	65	LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	205	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	600	SF	5 INCH CONCRETE SIDEWALK
8002	1	EA	2 WIRE CENTRAL CONTROL UNIT
8007	4	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS
8008	3	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE)
8010	4	EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
8011	25	EA	LED SIGNAL HEAD MODULES (ANY SIZE)
8013	1	EA	REMOVE & DISPOSE OF EQUIPMENT (PER ASSIGNMENT)
8015	6025	LF	DISCONNECT, PULL-BACK & REROUTE CABLES
8016	50	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
8018	70	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8019	52	SF	DETECTABLE WARNING SURFACES
8020	255	SF	REMOVE & RESET DECORATIVE BRICK
8022	1	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8023	170	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8025	200	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8031	15	LF	NEG - APPROVED - FURNISH & INSTALL WOOD SIGN POSTS UP TO 4" X 6"
8033	70	LF	NEG - APPROVED - FURNISH & INSTALL #6 BARE COPPER GROUND WIRE
8034	9	SF	NEG - APPROVED - INSTALL OVERHEAD OR GROUND MOUNTED SIGN

CONTACTS

The contact persons for this project are as follows:

Mr. Jeffery Wentz (MO)
Assistant District Engineer - Traffic
Phone: (301) 513-7318

Mr. Vernon Stinnett
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
Utility Engineer
Phone: (301) 513-7350

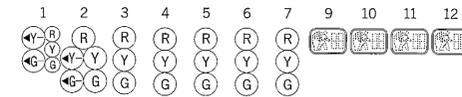
Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

Mr. Ed Rodenhizer
Supervisor, Signal Operations
Phone: 410-787-7650

Mr. Sonny Bailey
Supervisor, Sign Shop
Phone: 410-787-7676

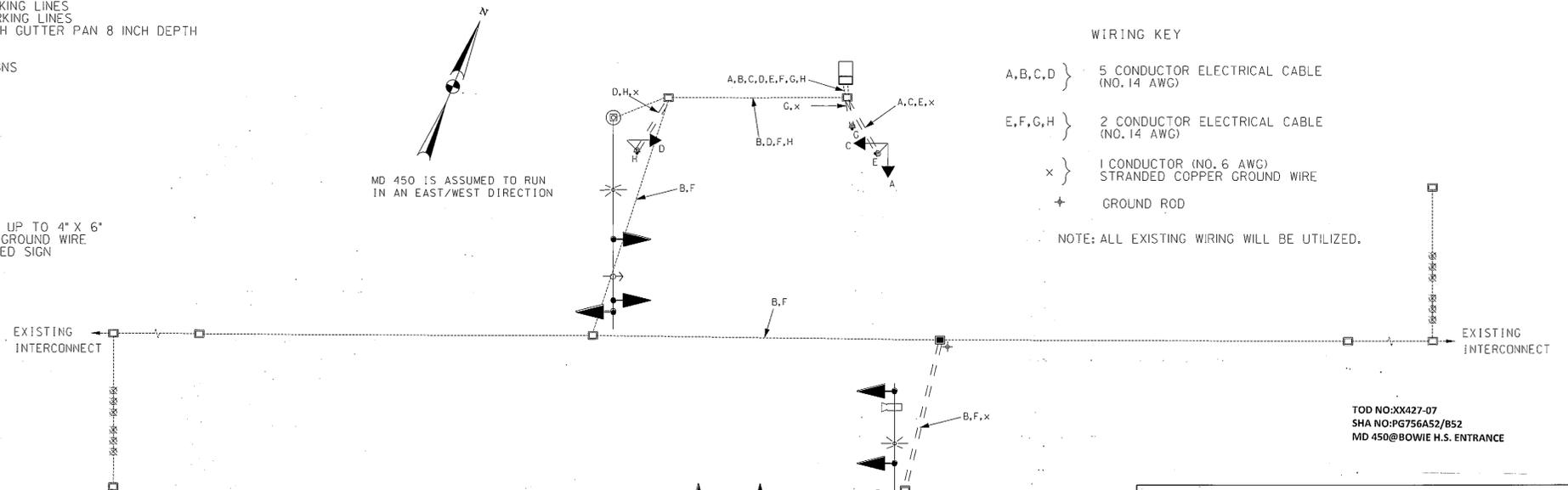
Mr. Darlene Eide
Supervisor, Signal Warehouse
Phone: 410-787-7668

PHASE CHART



PHASE 1 AND 6 (LAG LEFT)	←GG	←YG	G	R	R	R	R	DW	DW	DW	DW	
1 AND 6 CHANGE	←YG	←YG	G	R	R	R	R	DW	DW	DW	DW	
PHASE 2 AND 6	G	G	G	G	G	R	R	DW	DW	WK	WK	
PED CLEAR	G	G	G	G	G	R	R	DW	DW	FLDW	FLDW	
2 AND 6 CHANGE	Y	Y	Y	Y	Y	R	R	DW	DW	DW	DW	
PHASE 4	R	R	R	R	R	G	G	DW	DW	DW	DW	
4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	
PHASE 4 ALT	R	R	R	R	R	G	G	WK	WK	DW	DW	
PED CLEAR	R	R	R	R	R	G	G	FLDW	FLDW	DW	DW	
4 CHANGE	R	R	R	R	R	Y	Y	DW	DW	DW	DW	
PRE-EMPTION	R	R	R	G	G	R	R	DW	DW	DW	DW	
PRE-EMPTION CHANGE	R	R	R	Y	Y	R	R	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	

WIRING DIAGRAM



WIRING KEY

A, B, C, D	} 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
E, F, G, H	} 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
x	} 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
+	} GROUND ROD

NOTE: ALL EXISTING WIRING WILL BE UTILIZED.

TOD NO: XX427-07
SHA NO: PG756A52/B52
MD 450@BOWIE H.S. ENTRANCE

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 450 AT ENTRANCE TO BOWIE HIGH SCHOOL
TRAFFIC SIGNAL MODIFICATION
BOWIE, MD

GENERAL INFORMATION PLAN SHEET

SCALE: NTS ADVERTISED DATE: 6/20/09 CONTRACT NO.: XX4275185

DESIGNED BY: COUNTY: PRINCE GEORGE'S
DRAWN BY: D.T. LOGMILE: 16045011.69
CHECKED BY: J.B. TMS NO.: J734
F.A.P. NO.: TOD NO.:

BAI BRUDIS & ASSOCIATES, INC.
Consulting Engineers
4220 Runway Road, Suite 110
Columbia, Maryland 21045
Phone: 410-884-3697
www.brudis.com

TS NO. 4406B DRAWING - OF SHEET NO. 3 OF 3

BY: xiaoyu