PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES MODIFICATION AND INSTALLATION OF TRAFFIC SIGNALS FOR THIS PHASE OF MAINTENANCE OF WORK AT THE INTERSECTION OF MD 450 AT BELAIR DRIVE IN PRINCE GEORGE'S COUNTY. MD 450 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

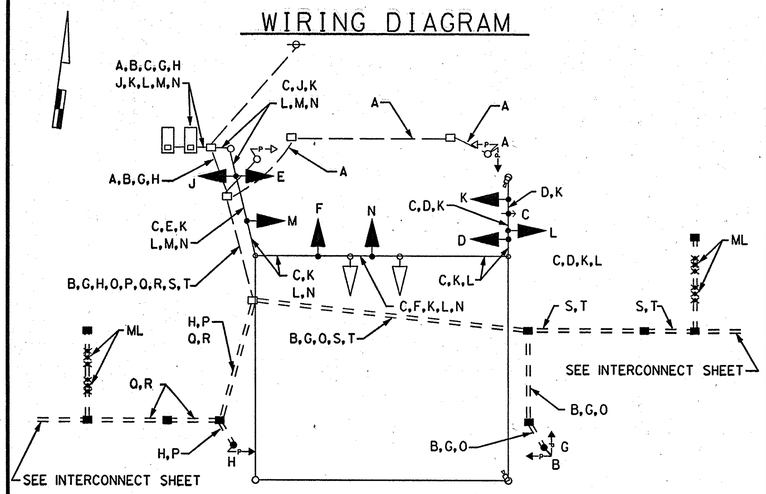
INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA-TWO-PHASE FULLY ACTUATED MODE.

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.

WIRING DIAGRAM



A,B	ELECTRICAL CABLE 2-CONDUCTOR (NO. 14 AWG)	O,P	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
C	ELECTRICAL CABLE 4-CONDUCTOR (NO. 20 AWG)	Q,R S,T	MICRO-LOOP PROBE 1000 FT. LEAD IN
D,E,F G,H	ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)	ML	MICRO-LOOP NON INVASIVE PROBE SET
J,K,L M,N	ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 AWG)		

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
965001	806	2 EA.	PUSHBUTTON AND SIGN
973023	813	△2 75 S.F.	△2 SHEET ALUMINUM SIGN TO CONSIST OF: -2 EA. R10-12 (36 IN. X 42 IN.)-SPAN MOUNT -2 EA. R10-41 (9 IN. X 12 IN.)-POLE MOUNT -2 EA. D3-2 (16 IN. X VAR.)-SPAN MOUNT -1 EA. ASSOCIATED SHIELD ASSEMBLY (30 IN. X 51 IN.)-POLE MOUNT -1 EA. ASSOCIATED SHIELD ASSEMBLY (48 IN. X 75 IN.)-POLE MOUNT

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	12	13	14	15	16	17
PHASE 1 + 5	G	G	R	G	G	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1+5 CHANGE	Y	Y	R	Y	Y	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2+6	G	G	G	G	G	G	R	R	R	R	DW	DW	WK	WK	WK	WK
	G	G	G	G	G	G	R	R	R	R	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
2+6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4+8	R	R	R	R	R	R	G	G	G	G	WK	WK	DW	DW	DW	DW
	R	R	R	R	R	R	G	G	G	G	FL/DW	FL/DW	DW	DW	DW	DW
4+8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL / Y	FL / Y	FL / Y	FL / Y	FL / Y	FL / Y	FL / R	FL / R	FL / R	FL / R	DARK	DARK	DARK	DARK	DARK	DARK

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
△2 203030	205	1 C.Y.	TEST PIT EXCAVATION
585450	555	17 L.F.	REMOVAL OF EXISTING PAVEMENT MARKING ANY WIDTH
585620	556	△2 800 L.F.	12 IN. HEAT APPLIED THERMOPLASTIC WHITE PAVEMENT MARKING
585624	556	90 L.F.	24 IN. HEAT APPLIED THERMOPLASTIC WHITE PAVEMENT MARKING
△2 801004	801	6 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
802501	805	335 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
811001	811	△2 10 EA.	ELECTRICAL HANDHOLE
813015	813	△2 73 S.F.	INSTALL OVERHEAD SIGN
818010	818	1 EA.	14 FT. BREAKAWAY PEDESTAL POLE
△2 818050	818	1 EA.	27 FT. STEEL POLE WITH TWIN 50/60 FT. MAST ARM
837001	804	2 EA.	GROUND ROD ¾ IN. X 10 FT. LENGTH
△2 860270	814	6 EA.	8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860272	814	△2 26 EA.	12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860278	814	△2 4 EA.	12 IN. PEDESTRIAN SIGNAL HEAD SECTION (POLE MOUNT)
860282	814	△2 4 EA.	12 IN. PEDESTRIAN SIGNAL HEAD SECTION (PEDESTAL MOUNT)
861107	810	550 L.F.	ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)
861108	810	755 L.F.	ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 AWG)
865001	806	2 EA.	INSTALL PUSHBUTTON
870163	805	△2 36 L.F.	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
870164	805	116 L.F.	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-BORED
870166	805	492 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
870168	805	187 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-SLOTTED
800000	807	1 EA.	OPTICOM DETECTOR EYE
800000	810	450 L.F.	ELECTRICAL CABLE 2-CONDUCTOR (NO. 14 AWG)
800000	810	230 L.F.	ELECTRICAL CABLE 4-CONDUCTOR (NO. 20 AWG)
800000	810	4 EA	MICRO-LOOP NON INVASIVE PROBE SET WITH 1000 FT. LEAD IN
800000	XXX	1 L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL

EQUIPMENT LIST "C"

C. ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR.

△2 ADDENDUM #2 10/11/2001

THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS
OWINGS MILLS, MARYLAND

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET
MD 450 - MD 193 TO STONYBROOK DRIVE
MD 450 AT BELAIR DRIVE - PHASE III

DRAWN BY: MB	F.A.P. NO. SEE TITLE SHEET	TS NO. TS-89B-2PH3A	SHEET NO.
CHECKED BY: STB	S.H.A. NO. PG9005571		
SCALE: NONE	COUNTY: PRINCE GEORGE'S	T.I.M.S. NO. D 538	
DATE: OCTOBER 2001	LOG MILE: 12.36		436 OF 545

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