

I. GENERAL

This project involves the installation of a temporary traffic signal for Stage 2 MOT at the intersection of MD 144 (Frederick Road) and I-695 NB Ramps in Baltimore county. The temporary traffic shall utilize span wire attached to temporary wood poles and a relocated mast arm pole from the intersection with Ramps 6 and 8.

II. INTERSECTION OPERATION

- The existing base mounted controller cabinet will be utilized at this location. This intersection will continue to operate in a fully actuated mode using 4 NEMA phases. Eastbound and Westbound MD 144 (Frederick Road) operates concurrently, while the side street movement operates in a Split Phase.

NOTES

- For final pavement markings, refer to MOT and/or pavement marking plans, as applicable; other than those detailed on the plan. All pavement markings shall be installed in accordance with Administration standards.
- The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly labeling each cable.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility 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 will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- The contractor shall maintain the continuous operation of all vehicular detectors, and lighting devices. If any device is damaged by the contractor, it shall be repaired within 72 hours by the contractor at no cost to the Administration after notification by the Engineer.
- The contractor shall contact the SHA Signal Shop at (410)-787-7650 at least 72 hours prior to starting construction for this phase.

CONTACTS

DISTRICT FOUR

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
410-229-2381
MR. DONALD SCHAEFER
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
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MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
410-229-2361
MR. MICHAEL PASQUARIELLO
UTILITY ENGINEER
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OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630
MR. ROBERT SNYDER
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410-787-7630
MR. ED RODENHIZER
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410-787-7650
MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7670
MS. DARLENE EIDE
SUPPLY OFFICER IV
(SIGNAL SHOP WAREHOUSE)
410-787-7668

EQUIPMENT LIST

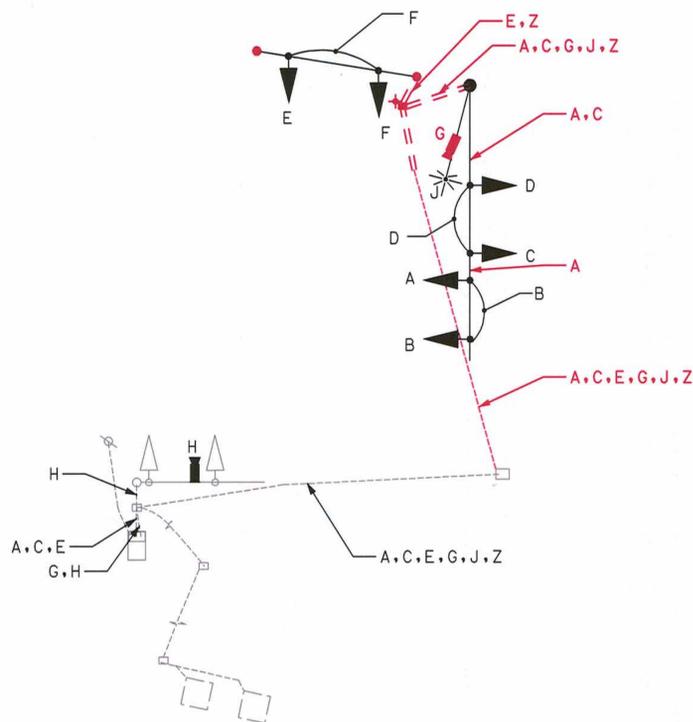
A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO./CAT CODE	QUANTITY	UNIT	DESCRIPTION
900000	1	EA	VIDEO DETECTION INTERFACE PANEL
973023	45.5	SF	SHEET ALUMINUM SIGNS CONSISTING OF:
	1	EA	R3-1 (30"x30") MAST ARM MOUNT
	1	EA	R3-2 (30"x30") MAST ARM MOUNT
	1	EA	R3-6 (L) (30"x36") SPAN WIRE MOUNT
	1	EA	D-3(1) (VARX16") MAST ARM MOUNT
	1	EA	M95-1 (MOD) (84"x24") SPAN WIRE MOUNT

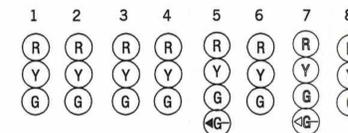
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

CAT CODE	QUANTITY	UNITS	DESCRIPTION
114245	75	LF	24 IN WHITE REMOVEABLE PAVEMENT LINE MARKINGS
203030	3	CY	TEST PIT EXCAVATION
800000	1	LS	REMOVE AND DISPOSE EXISTING SIGNAL EQUIPMENT
800000	2	EA	40 FT CLASS II WOOD POLE
801004	5	CY	CONCRETE FOR SIGNAL FOUNDATION
802051	200	LF	NO. 6 AWG. STRANDED BARE COPPER GROUND WIRE
805050	1	EA	3 IN WEATHER HEAD
805135	20	LF	3 IN PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED
813015	45.5	SF	INSTALL OVERHEAD SIGN
816001	2	EA	IP-BASED VIDEO DETECTION CAMERA AND CABLES
831010	1	EA	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
833060	30	LF	3 IN PVC SCHEDULE 80 RISERS
860284	19	EA	12 IN. LED SIGNAL HEAD SECTION.
861107	80	LF	ELECTRICAL CABLE - 5 CONDUCTOR NO. 14 AWG.
861108	800	LF	ELECTRICAL CABLE - 7 CONDUCTOR NO. 14 AWG.
866104	1	EA	20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
869101	40	LF	1/4 IN TETHER WIRE
869102	40	LF	3/8 IN SPAN WIRE
805140	30	LF	4 IN PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED
811001	1	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
837001	1	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FT. LENGTH
860292	1	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861116	270	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
866204	1	EA	INSTALL STEEL POLE AND SINGLE MAST ARM, ANY SIZE

WIRING DIAGRAM



PHASE CHART



	1	2	3	4	5	6	7	8	
PHASE 2 AND 6	G	G	G	G	R	R	R	R	↔
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	↕
PHASE 3	R	R	R	R	R	R	G	G	↕
3 CHANGE	R	R	R	R	R	R	Y	Y	↕
PHASE 4	R	R	R	R	G	R	R	R	↕
4 CHANGE	R	R	R	R	Y	R	R	R	↕
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	↕

MOT STAGE 2

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 144 (FREDERICK RD) AT I-695 NB RAMPS/WOODLAWN AVE
INTERCHANGE RECONSTRUCTION

GENERAL INFORMATION SHEET

SCALE _____ NTS _____	DATE SEPTEMBER 2010	CONTRACT NO. BA2725380
DESIGNED BY J. PALADIGLI	COUNTY BALTIMORE	
DRAWN BY J. PALADIGLI	LOGMILE 003144004.14	
CHECKED BY K. RINKER	T.I.M.S. NO. _____	
F.A.P. NO. SEE TITLE SHEET	TOD NO. _____	
TS NO. 3801B	DRAWING NO. pSG OF N004	SHEET NO. 191 OF 235

SABRA, WANG & ASSOCIATES, INC.
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3 REDLINE REVISION NO. 3
REPLACE SHEET, DECEMBER 16, 2011