

PROJECT DESCRIPTION

I. GENERAL
THIS PROJECT INVOLVES THE INSTALLATION AND REMOVAL OF A TEMPORARY TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 372 (WILKENS AVENUE) AND KENWOOD AVENUE (RAMP TO I-695 INNER LOOP RAMP) IN CATONSVILLE, BALTIMORE COUNTY, MARYLAND.

II. INTERSECTION OPERATION

1. AN 8 PHASE CONTROLLER HOUSED IN A POLE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 5 NEMA PHASES, WITH AN EXCLUSIVE/PERMISSIVE EASTBOUND LEFT TURN PHASE, AND A SPLIT PHASE OPERATION FOR KENWOOD AVENUE AND RAMP 4.

NOTES

- 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.

CONTACTS

DISTRICT	OFFICE OF TRAFFIC AND SAFETY
MR. DAVE PEAK DISTRICT ENGINEER 410-229-2310	MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630
MRS. ERIN KUHN ASSISTANT DISTRICT ENGINEER - TRAFFIC 410-229-2381	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. MICHAEL PASQUARIELLO UTILITIES ENGINEER 410-229-2341	MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650
MR. DONALD SCHAEFER ASSISTANT DISTRICT ENGINEER - CONSTRUCTION 410-229-2421	MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670
MR. ANDRE FUTRELL ASSISTANT DISTRICT ENGINEER - MAINTENANCE 410-229-2361	MRS. DARLENE EIDE SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668

EQUIPMENT LIST

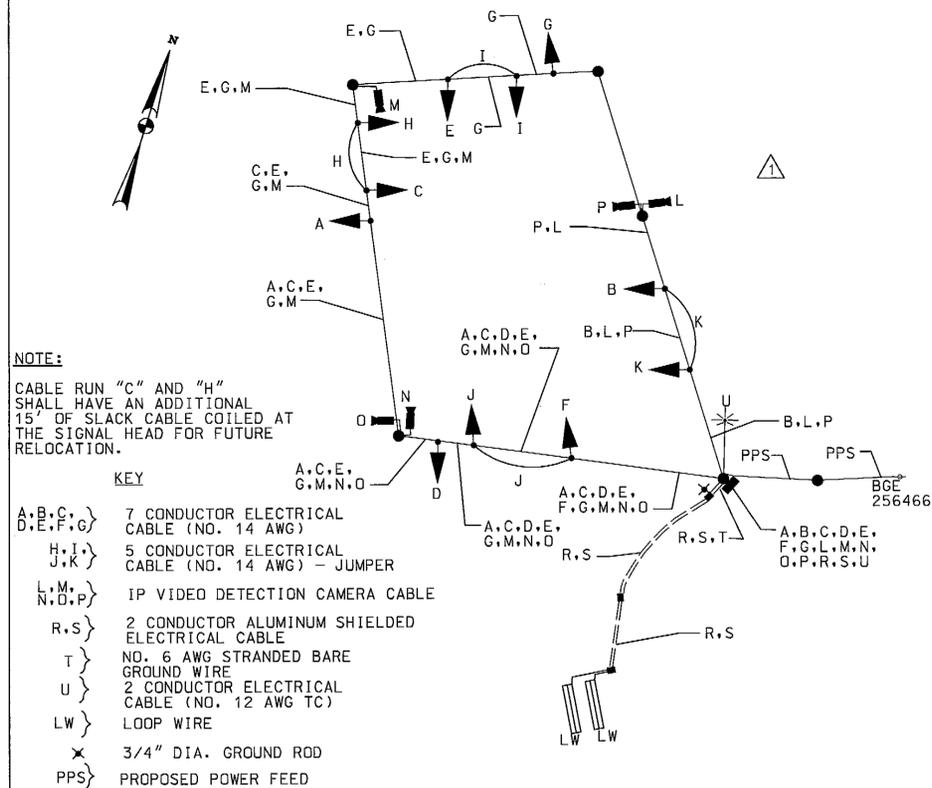
A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

CAT CODE	QUANTITY	UNITS	DESCRIPTION
900000	1	EA	NEMA SIZE 5 POLE MOUNT CABINET AND CONTROLLER WITH ALL NECESSARY EQUIPMENT AND VIDEO DETECTION INTERFACE EQUIPMENT
900000	1	EA	4 CHANNEL VEHICULAR DETECTOR AMPLIFIER
973023	223	SF	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:
	1	EA	D-3(1) (16" X VAR.) "KENWOOD AVE RIGHT ARROW" SPAN WIRE MOUNTED
	1	EA	D-3(1) (16" X VAR.) "LEFT ARROW KENWOOD AVE" SPAN WIRE MOUNTED
	1	EA	D-3(1) (16" X VAR.) "WILKENS AVE" DUAL FACED SPAN WIRE MOUNTED
	4	EA	W16-14(1) (24" X 24") AND W3-3 B/FO (36" X 36") GROUND MOUNT SIGN ASSEMBLY
	1	EA	R4-7 (24"X30") GROUND MOUNT
	1	EA	R3-5R (30" X 36") SPAN MOUNTED
	1	EA	R3-6L (30" X 36") SPAN MOUNTED
	2	EA	R5-1 (30" X 30") GROUND MOUNTED
	2	EA	R3-B(MOD.) (48" X 48") GROUND MOUNTED
	1	EA	M1-5 (48" X 72") "WEST, MD 372, LEFT ARROW" POLE MOUNTED
	1	EA	M1-5 (48" X 72") "EAST, MD 372, LEFT ARROW" POLE MOUNTED
	1	EA	M1-5 (48" X 72") "EAST, MD 372, RIGHT ARROW" POLE MOUNTED
	1	EA	R3-2 (24" X 24") SPAN MOUNTED
	1	EA	R3-2 (24" X 24") GROUND MOUNTED
	2	EA	R1-5G (24" X 36") GROUND MOUNTED

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

CAT CODE	QUANTITY	UNITS	DESCRIPTION
114245	135	LF	24 INCH WHITE PERMANENT PERFORMED HEAT APPLIED PAVEMENT MARKINGS
203030	4	CY	TEST PIT EXCAVATION
800000	6	EA	40 FOOT CLASS II WOOD POLE WITH BACKGUY ANCHOR
800000	1	EA	ANY SIZE LIGHTING ARM ON SIGNAL STRUCTURE WITH 250 WATT HPS LUMINAIRE
800000	5	EA	IP-BASED VIDEO DETECTION CAMERA AND CABLE
801104	44	LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
801106	200	LF	WOOD SIGN SUPPORTS 4 INCH X 6 INCH
802501	10	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805011	10	LF	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
805015	10	LF	2 INCH ELECTRICAL CONDUIT - GALVANIZED RISER
805050	3	EA	3 INCH WEATHER HEAD
805125	310	LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
807405	1	EA	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 100 AMPS
811001	3	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	190	SF	INSTALL GROUND MOUNTED SIGN
813015	33	SF	INSTALL OVERHEAD SIGN
833060	95	LF	3 INCH DIAMETER POLYVINYL CHLORIDE CONDUIT, SCHEDULE 80, RISER
837001	1	EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860284	41	EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
861104	1000	LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861107	120	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	1400	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	40	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG TC)
862101	650	LF	LOOPWIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
862102	180	LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)
869101	330	LF	STEEL SPAN WIRE - 1/4 INCH
869102	400	LF	STEEL SPAN WIRE - 3/8 INCH
871201	1	EA	INSTALL CONTROLLER AND CABINET - POLE MOUNTED

WIRING DIAGRAM



PHASE CHART

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

SIGNAL HEADS 9,10, & 11 SHALL REMAIN BAGGED IN THIS STAGE.

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

MD 372 (WILKENS AVE) AT KENWOOD AVE (TO I-695 RAMPS)

CATONSVILLE, MARYLAND

STAGE 1 MOT - GENERAL INFORMATION SHEET

REVISIONS	SCALE _____ NTS _____ ADVERTISED DATE FEBRUARY 2011 CONTRACT NO. BA6015180
ADDENDUM NO. 1 4/5/11 MODIFIED WIRING DIAGRAM	
DESIGNED BY B. RINKER	COUNTY BALTIMORE
DRAWN BY B. RINKER/ENB	LOGMILE 03037201.47
CHECKED BY TMH	TMS NO. _____
F.A.P. NO. SEE TITLE SHEET	TOD NO. _____
TS NO. 4471-GI	DRAWING TTP - 2 OF 4 SHEET NO. 181 OF 220

SABRA, WANG & ASSOCIATES, INC.
1504 JOH AVENUE
SUITE 160
BALTIMORE, MD 21227
(410) 737-6864
WWW.SABRA-WANG.COM

GREENHORNE & O'MARA, INC. / CENTURY ENGINEERING, INC.
A JOINT VENTURE
Baltimore, MD