

PROJECT DESCRIPTION

I. General

This project involves the installation of a new traffic control signal at the intersection of Maryland Route 5 and Coventry Way in Prince George's County. Maryland Route 5 is assumed to run in a north - south direction.

II. Intersection Operation

An eight (8) phase, full-traffic-actuated, solid state digital controller with (7) two-channel loop detector amplifiers housed in a base mounted cabinet are to be installed at this location.

The intersection will operate in a NEMA, six (6) phase, full-traffic-actuated mode. All left turn movements are exclusive only. The MD 5 movements are not to operate concurrently and the Coventry Way thru movements are to operate concurrently.

EQUIPMENT LIST 'A'

EQUIPMENT SUPPLIED BY S.H.A.

960022	12 INCH ONE WAY 3 SECTION (R,Y,G) SIGNAL HEAD (MAST ARM MOUNTED)	2 EACH
960023	12 INCH ONE WAY 3 SECTION (RA,YA,GA) SIGNAL HEAD (MAST ARM MOUNTED)	2 EACH
960041	12 INCH ONE WAY 3 SECTION (R,Y,G) SIGNAL HEAD (PEDESTAL MOUNTED)	8 EACH
960048	12 INCH ONEWAY 2 SECTION PEDESTRIAN SIGNAL (PEDESTAL MOUNTED)	9 EACH
960068	12 INCH ONE WAY 2 SECTION PEDESTRIAN SIGNAL HEAD (POLE MOUNTED)	1 EACH
971017	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNT- SYSTEM READY	1 EACH
973023	SHEET ALUMINUM SIGNS	30 S.F.
900000	12 INCH ONE WAY 3 SECTION (R,Y,G) SIGNAL HEAD (BRIDGE MOUNTED)	2 EACH
900000	12 INCH ONE WAY 3 SECTION (RA,YA,GA) SIGNAL HEAD (BRIDGE MOUNTED)	2 EACH
973001	FOUR CHANNEL LOOP DETECTOR AMPLIFIER (DELAY OUTPUT)	6 EACH

EQUIPMENT LIST 'B'

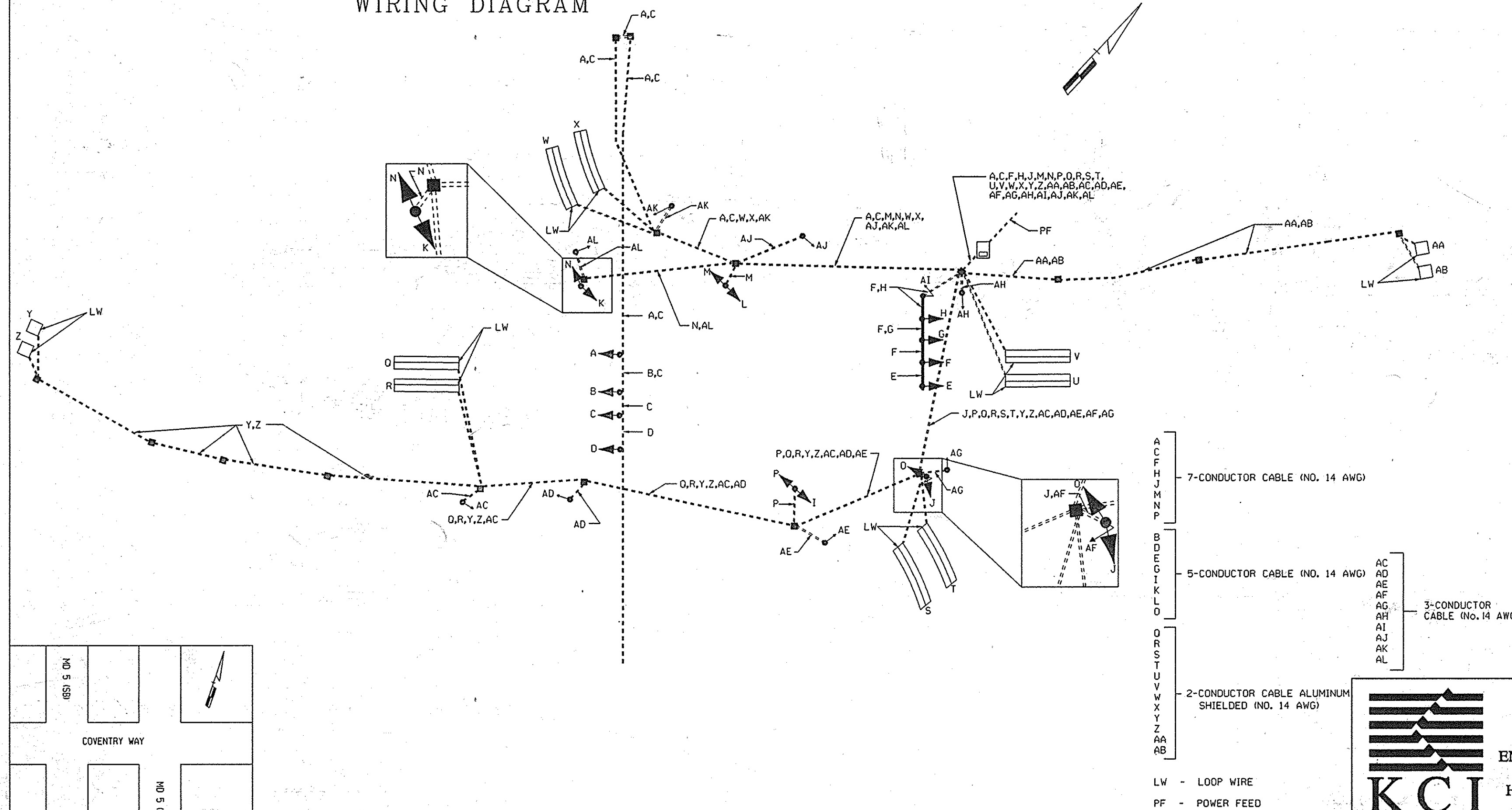
EQUIPMENT FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

120500	MAINTENANCE OF TRAFFIC	LUMP SUM
120610	ARROW PANEL	5 U.D.
130850	MOBILIZATION	LUMP SUM
230030	TEST PIT EXCAVATION	2 C.Y.
585445	24 INCH WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE	155 L.F.
801004	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION	20.45 C.Y.
802501	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE	120 L.F.
805105	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	225 L.F.
805115	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	200 L.F.
805125	FURNISH AND INSTALL 2 INCH SCHEDULE 40 RIGID PVC CONDUIT - TRENCHED	1000 L.F.
805135	FURNISH AND INSTALL 3 INCH SCHEDULE 40 RIGID PVC CONDUIT - TRENCHED	75 L.F.
805140	FURNISH AND INSTALL 4 INCH SCHEDULE 40 RIGID PVC CONDUIT - TRENCHED	390 L.F.
805160	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	380 L.F.
807205	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (3-15)	1 EACH
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	21 EACH
813015	INSTALL OVERHEAD SIGN	30 S.F.
818041	FURNISH AND INSTALL STEELPOLE WITH A SINGLE 60 FOOT MAST ARM	1 EACH
822500	AS-BUILT FOR TRAFFIC SIGNAL	1 EACH
837001	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIA. X 10 FEET LENGTH	8 EACH
860022	INSTALL 12 INCH ONE WAY 3 SECTION (R,Y,G) SIGNAL HEAD (MAST ARM MOUNTED)	2 EACH
860023	INSTALL 12 INCH ONE WAY 3 SECTION (RA,YA,GA) SIGNAL HEAD (MAST ARM MOUNTED)	2 EACH
860041	INSTALL 12 INCH ONE WAY 3 SECTION (R,Y,G) SIGNAL HEAD (PEDESTAL MOUNTED)	8 EACH
861104	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (ALUM. SHIELDED)	5000 L.F.
861106	FURNISH AND INSTALL ELECTRICAL CABLE 3 CONDUCTOR (NO. 14 AWG)	1850 L.F.
861107	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 A.W.G.)	1500 L.F.
861108	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 A.W.G.)	2500 L.F.
861117	FURNISH AND INSTALL ELECTRICAL CABLE 3-WIRE (NO. 4 A.W.G.)	125 L.F.
862101	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEX. TUBING (NO. 14 A.W.G.)	3000 L.F.
862102	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)	1400 L.F.
860048	INSTALL 12 INCH ONE WAY 2 SECTION PEDESTRIAN SIGNAL HEAD (PEDESTAL MOUNT)	9 EACH
860068	INSTALL 12 INCH ONE WAY 2 SECTION PEDESTRIAN SIGNAL HEAD (POLE MOUNT)	1 EACH
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	1 EACH
800000	FURNISH AND INSTALL 14 FOOT BREAKAWAY PEDESTAL POLE	12 EACH

F. H. WA. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
	MD.			

800000	FURNISH AND INSTALL 4 INCH SCHEDULE 40 RIGID PVC CONDUIT - IN BRIDGE PARAPET	300 L.F.
800000	12 INCH ONE WAY 3 SECTION (R,Y,G) SIGNAL HEAD (BRIDGE MOUNTED)	2 EACH
800000	12 INCH ONE WAY 3 SECTION (RA,YA,GA) SIGNAL HEAD (BRIDGE MOUNTED)	2 EACH

WIRING DIAGRAM



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	26	
PHASE 1 & 6	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	W	W	W	W	DW	DW	DW	DW	W	W	
PED CLEAR	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	FL/DW	FL/DW	W	W	DW	DW	DW	DW	W	W	
1 CHANGE	Y	Y	G	G	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	W	W	DW	DW	DW	DW	W	W	
PHASE 2 & 5	R	R	R	R	G	G	G	G	R	R	R	R	R	R	R	R	W	W	W	W	DW	DW	DW	DW	W	W	
PED CLEAR	R	R	R	R	G	G	G	G	R	R	R	R	R	R	R	R	DW	DW	W	W	DW	DW	DW	DW	W	W	
5 CHANGE	R	R	R	R	Y	Y	G	G	R	R	R	R	R	R	R	R	DW	DW	W	W	DW	DW	DW	DW	W	W	
PHASE 2 & 6	R	R	G	G	R	R	G	G	R	R	R	R	R	R	R	R	W	W	W	W	DW	DW	DW	DW	W	W	
PED CLEAR	R	R	G	G	R	R	G	G	R	R	R	R	R	R	R	R	W	W	FL/DW	FL/DW	DW	DW	DW	DW	W	W	
2 & 6 CHANGE	R	R	Y	Y	R	R	Y	Y	R	R	R	R	R	R	R	R	W	W	DW	DW	DW	DW	DW	DW	W	W	
PHASE 4	R	R	R	R	R	R	R	G	G	G	G	R	R	R	R	R	W	W	DW	DW	W	W	W	W	W	W	
PED CLEAR	R	R	R	R	R	R	R	G	G	G	G	R	R	R	R	R	W	W	DW	DW	W	W	W	W	FL/DW	FL/DW	
4 CHANGE	R	R	R	R	R	R	R	Y	Y	Y	Y	R	R	R	R	R	W	W	DW	DW	DW	DW	DW	DW	W	W	
PHASE 8	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	W	W	W	W	DW	DW	FL/DW	FL/DW	DW	DW	
PED CLEAR	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	W	W	W	W	DW	DW	FL/DW	FL/DW	DW	DW	
8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	Y	W	W	W	W	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	FL R	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK	

TS-2 OF TS-16

REVISIONS	APPROVALS
11/96 RECONSTRUCTION OF SIGNAL FOR INTERCHANGE	PROJECT MANAGER, SIGNAL DESIGN SECTION
	ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION LOG MILE: 12002408.75

DRAWN BY: TCC
DES. BY: TCC/GWC
CHK. BY: *James Thompson* 12-20-96

DATE: NOVEMBER, 1996 F.A.P. NO. SEE TITLE SHEET TS/STD. NO. 1761 E SHEET NO. 324 OF 395

SCALE: N.A. S.H.A. NO. PG3915370

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