

**PROJECT DESCRIPTION**  
 THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC SIGNAL AT MD 349 (NANTICOKE ROAD) AND PARSONS ROAD IN WICOMCO COUNTY. THE SIGNAL WILL BE RECONSTRUCTED IN ONE PHASE. MD 349 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

**INTERSECTION OPERATION**  
 I. NORMAL OPERATION  
 THE INTERSECTION WILL OPERATE IN A SEVEN PHASE, FULLY ACTUATED MODE WITH THE MD 349 APPROACHES OPERATING CONCURRENTLY AND THE PARSONS ROAD APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE / PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR THE NORTH, SOUTH AND EAST APPROACHES.

PEDESTRIAN INDICATIONS WILL BE PROVIDED ACROSS THE NORTH AND EAST LEGS OF THE INTERSECTION.

**CONTROLLER REQUIREMENTS:**

AN NEW FULLY - TRAFFIC - ACTUATED - EIGHT - PHASE TRAFFIC SIGNAL CONTROLLER IN A BASE - MOUNTED SYSTEM READY CABINET WILL BE INSTALLED AT THIS LOCATION.

**SPECIAL NOTE:**

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7631 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

APS WILL FUNCTION AS FOLLOWS:

FOR NANTICOKE ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSH BUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS NANTICOKE AT PARSONS.WAIT"
- B. WHEN PHASE WALK BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

FOR PARSONS ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSH BUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS PARSONS AT NANTICOKE.WAIT"
- B. WHEN PHASE WALK BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

**EQUIPMENT LIST**  
 A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
- 1 EA		NEMA PHASE 6 (FULLY ACTUATED CONTROLLER AND BASE MOUNTED CABINET)
- 1 EA		4-CHANNEL RACK MOUNTED AMPLIFIER
145 S.F.		SHEET ALUMINUM SIGNS
- 6 EA		D-3(I) SIGN 96"x16"
- 1 EA		R3-5(L) SIGN 30"x36"
- 2 EA		SHIELD ASSEMBLY SIGN 30"x51"
- 2 EA		SHIELD ASSEMBLY SIGN 48"x75"
- 3 EA		R10-3(I) SIGN 9"x15"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
585621	195 L.F.	FURNISH AND INSTALL 12 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING (CROSSWALK)
585625	103 L.F.	FURNISH AND INSTALL 24 IN. WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE)
120500	L.S.	MAINTENANCE OF TRAFFIC
203030	10 C.Y.	TEST PIT EXCAVATION
837001	8 EA.	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIA. X 10 FT. LENGTH.
860270	9 EA.	FURNISH AND INSTALL 8 IN. L.E.D. VEHICULAR TRAFFIC SIGNAL HEAD SECTION BLACK FACED
860272	36 EA.	FURNISH AND INSTALL 12 IN. L.E.D. VEHICULAR TRAFFIC SIGNAL HEAD SECTION BLACK FACED
861105	900 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG).
861116	400 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO.12 AWG).
861107	2900 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG).
861108	1750 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG).
800000	4 EA.	FURNISH AND INSTALL VIDEO CAMERA WITH CABLE.
811001	8 EA.	FURNISH AND INSTALL ELECTRICAL HANDHOLE.
805140	50 L.F.	FURNISH AND INSTALL 4 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.
805135	200 L.F.	FURNISH AND INSTALL 3 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.
805115	150 L.F.	FURNISH AND INSTALL 3 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - BORED.
805118	375 L.F.	FURNISH AND INSTALL 4 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - BORED.
818004	2 EA.	FURNISH AND INSTALL 10 FT. BREAKAWAY PEDESTAL POLE.
818030	1 EA.	FURNISH AND INSTALL 27 FT STEEL MAST ARM POLE WITH 38 FT MAST ARM
801004	18 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	500 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
861102	30 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3-1 WIRE NO. 8 AWG THHN/THWN
860292	1 EA.	CUT CLEAN, GALVANIZE AND CAP SIGNAL STRUCTURE
805125	80 L.F.	FURNISH AND INSTALL 2 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - TRENCHED.
805105	90 L.F.	FURNISH AND INSTALL 2 IN. DIA. PVC ELECTRICAL CONDUIT SCHEDULE 80 - BORED.

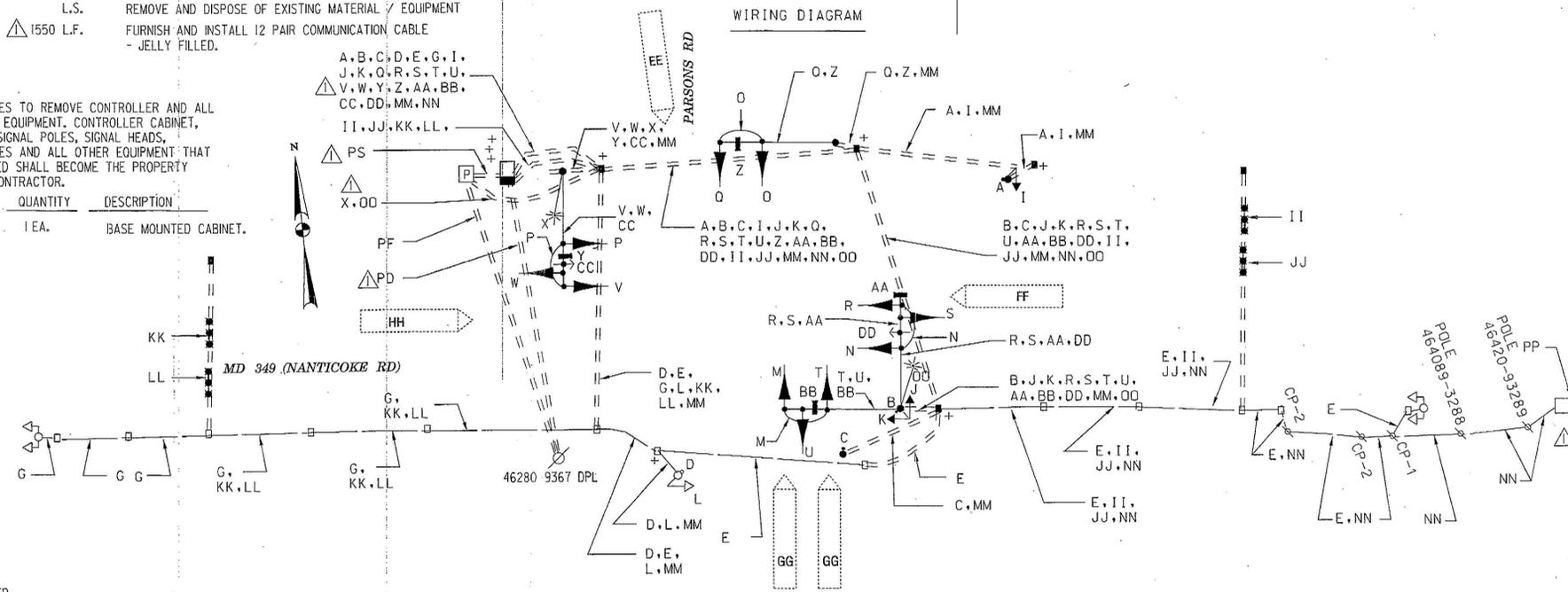
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR:

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
860288	400 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
818036	1 EA.	FURNISH AND INSTALL 27 FT STEEL MAST ARM POLE WITH A SINGLE 50 FT MAST ARM
818051	1 EA.	FURNISH AND INSTALL 27 FT STEEL MAST ARM POLE WITH A TWIN 50 FT AND 70 FT MAST ARMS
816215	2 EA.	FURNISH AND INSTALL OPTICOM NO. 721 DETECTOR EYE.
813015	145 S.F.	INSTALL OVERHEAD SIGN.
831010	2 EA.	FURNISH AND INSTALL 250 WATT HPS LAMP AND LUMINAIRE
871202	1 EA.	INSTALL CONTROLLER AND CABINET - BASE MOUNTED
866103	2 EA.	FURNISH AND INSTALL 15 FT. LIGHTING ARM ON SIGNAL STRUCTURE
807202	1 EA.	FURNISH AND INSTALL METERED SERVICE PEDESTAL.
800000	3 EA.	FURNISH AND INSTALL 16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD (PAINTED BLACK)
800000	1 EA.	FURNISH AND INSTALL TWO WIRE CONTROL UNIT.
800000	3 EA.	FURNISH AND INSTALL AUDIBLE TACTILE PEDESTRIAN PUSH BUTTON STATION AND SIGN.
810605	4 EA.	FURNISH AND INSTALL NON INVASIVE PROBE DETECTOR 1,000 FT. LEAD- IN WIRE.
800000	L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL / EQUIPMENT
822002	1550 L.F.	FURNISH AND INSTALL 12 PAIR COMMUNICATION CABLE - JELLY FILLED.

C. SHA FORCES TO REMOVE CONTROLLER AND ALL AUXILIARY EQUIPMENT, CONTROLLER CABINET, EXISTING SIGNAL POLES, SIGNAL HEADS, HAND BOXES AND ALL OTHER EQUIPMENT THAT IS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

QUANTITY	DESCRIPTION
1 EA.	BASE MOUNTED CABINET.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PHASE 1+5	-G/G	-G/G	R	-G/G	-G/G	R	R	R	R	R	R	R	R	R	R
PHASE 1+5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 1+6	R	R	R	-G/G	-G/G	G	R	R	R	R	R	R	R	R	R
PHASE 1+6 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 2+5	-G/G	-G/G	G	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 2+5 CHANGE	-Y/G	-Y/G	G	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 2+6	G	G	G	G	G	G	R	R	R	R	R	R	R	R	R
PED CLEAR	G	G	G	G	G	G	R	R	R	R	R	R	R	R	R
PHASE 2+6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	R	R
PHASE 3+8	R	R	R	R	R	R	R	R	-G/G	-G/G	G	DW	DW	DW	DW
PHASE 3+8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 4+8	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW
PHASE 4+8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 3+8 ALT	R	R	R	R	R	R	R	R	-G/G	-G/G	G	DW	DW	WK	WK
PED CLEAR	R	R	R	R	R	R	R	R	-G/G	-G/G	G	DW	DW	FL/DW	FL/DW
PHASE 3+8 ALT CHANGE	R	R	R	R	R	R	R	R	-Y/G	-Y/G	G	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	FL/R	DARK	DARK	DARK	DARK
PREEMPTION	G	G	G	G	G	G	R	R	R	R	R	DW	DW	DW	DW
PREEMPTION CHANGE TO PHASE 2+6	G	G	G	G	G	G	R	R	R	R	R	DW	DW	DW	DW



**PROJECT CONTACTS**

THE CONTACT PERSONS FOR DISTRICT I ARE AS FOLLOWS:

- MR. KENNETH CIMINO  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 677-4044
- MR. WAYNE WEICHMANN  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410) 677-4010
- MR. GREGORY HOLSEY  
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (410) 677-4020
- MR. BRUCE POOLE  
UTILITY ENGINEER  
PHONE: (410) 677-4082
- MR. EDWARD RODENHIZER  
MANAGER, SIGNAL OPERATIONS SECTION  
PHONE: (410) 787-7652
- MR. RICHARD DAFF  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

- A, B, C, D } 2-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)
- E, F, G, H, I, J, K, L, M, N, O, P } 5-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)
- Q, R, S, T, U, V, W } 7-CONDUCTOR ELECTRICAL CABLE (NO.14 A.W.G.)
- X, OO } 2-CONDUCTOR TREY CABLE (NO.12 A.W.G.)
- Y, Z, AA, BB } VIDEO CABLE FOR CAMERA
- CC, DD } OPTICOM CABLE
- EE, FF, GG, HH } VIDEO DETECTION ZONE
- II, JJ, KK, LL } PROBES

- MM } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- NN } 12 PAIR NO.9 TELEMETRY INTERCONNECT CABLE
- PP } EXISTING CONTROLLER AT US 50 / MD 349
- PF - POWER FEED - (BY OTHERS)
- PD - PROPOSED PHONE DROP (BY OTHERS)
- PS - POWER SERVICE CABLE 3-1 CONDUCTOR (NO. 8 AWG)
- + - 3/4 IN. X 10 FT. GROUND ROD

**SHA** STATE OF MARYLAND  
 DEPARTMENT OF TRANSPORTATION  
 STATE HIGHWAY ADMINISTRATION  
 OFFICE OF TRAFFIC & SAFETY  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 MD 349 AND PARSONS ROAD

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	APRIL 2010	CONTRACT NO.	W19826130
DESIGNED BY	C. MUNZ	COUNTY	WICOMICO		
DRAWN BY	C. MUNZ	LOGMILE	22034922.04		
CHECKED BY	GAB	TMS NO.	J514		
FAP NO.	SEE TITLE SHEET	TOD NO.			

ADDENDUM NO. 1 2/17/11

