PROJECT DESCRIPTION

I. GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US ROUTE 1 (BALTIMORE AVE) AND MD 175 (WATERLOO RD) IN HOWARD COUNTY. US ROUTE 1 (BALTIMORE AVE) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT (8) PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE WILL BE AN EXCLUSIVE LEFT TURN PHASE FOR SOUTHBOUND AND NORTHBOUND US 1 MOVEMENT. THE US 1 THROUGH MOVEMENTS ARE TO OPERATE CONCURRENTLY. THERE WILL BE AN EXCLUSIVE LEFT TURN PHASE FOR EASTBOUND AND WESTBOUND MD 175. THE MD 175 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY.. CONCURRENT PEDESTRIAN PHASES WILL BE PROVIDED ACROSS THE EAST AND WEST LEGS OF MD 175. A CONCURRENT PEDESTRIAN PHASES IS ADDITIONALLY PROVIDED ACROSS THE SOUTH LEG OF US ROUTE 1.

A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH FOUR (4) FOUR-CHANNEL, AND TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS AND TELEMETRY HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET EXISTS AT THIS LOCATION. ADDITIONALLY A TRAFFIC RESPONSIVE MASTER CONTROLLER HOUSED IN A NEMA SIZE '5' BASE MOUNTED CABINET EXISTS AT THIS LOCATION.

III. INTERCONNECTION

THE EXISTING 12 PAIR VOICE GRADE INTERCONNECT CABLE BETWEEN THE INTERSECTIONS OF US ROUTE 1 AT POCOMOKE AVE AND US ROUTE 1 AT MONTEVIDEO ROAD IS TO BE MAINTAINED.

IV. PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT SEVEN ARE AS FOLLOWS:

ROBERT FISHER
DISTRICT ENGINEER
PHONE: 301-624-8101

JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: 301-624-8140

JAMES BUCKALEW
UTILITY ENGINEER
PHONE: 301-624-8115

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

V. MAINTENANCE OF TRAFFIC

THE FOLLOWING STANDARD TRAFFIC CONTROL NUMBERS SHALL BE REFERENCED:

STANDARD NO. 104.00
STANDARDS NO. 104.37, 104.38 (LANE CLOSURE)
STANDARDS NO. 104.39, 104.40 (INTERSECTION FAR SIDE CLOSURE)
STANDARD NO. 104.43 (SHOULDER WORK)

THE POWER COMPANY REPRESENTATIVE IS
BALTIMORE GAS AND ELECTRIC
JOSEPH G. BUNCH
PHONE: 410-859-9030

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

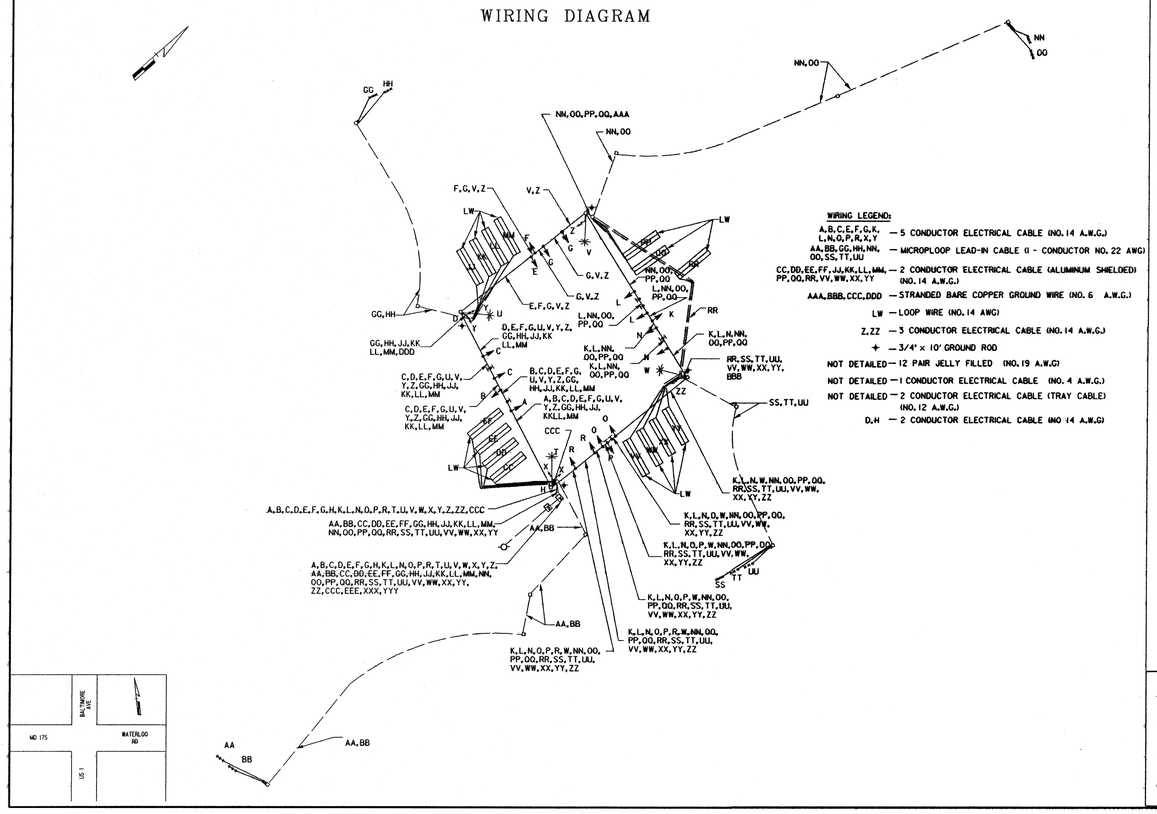
QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
2	EA	SP	PEDESTRIAN PUSH BUTTON AND SIGN
330	SF	813	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:
			- 4 EACH R3-5L (30"X36") SPAN WIRE MOUNT
			- 8 EACH WW1-A2 (36"X36") GROUND MOUNT
			- 8 EACH M6-2 (21"X15") GROUND MOUNT
			- 4 EACH WW1-2 (36"X36") GROUND MOUNT
			- 2 EACH D-3(1) (WATERLOO ROAD) VARSX16' DUAL FACED SPAN WIRE MOUNT
			- 2 EACH 24"X51" ASSOCIATED SHIELD ASSEMBLY
			- 2 EACH 30"X51" ASSOCIATED SHIELD ASSEMBLY
			- 2 EACH 36"X75" ASSOCIATED SHIELD ASSEMBLY
			- 2 EACH 48"X75" ASSOCIATED SHIELD ASSEMBLY

EQUIPMENT LIST 'B'

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

QUANTITY	UNIT	SPECIFICATION SECTION	DESCRIPTION
650	LF	556	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
200	LF	556	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
225	LF	813	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4INCH X4 INCH
150	LF	810	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
160	LF	805	FURNISH AND INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
25	LF	805	FURNISH AND INSTALL 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
125	LF	805	FURNISH AND INSTALL 1" GALVANIZED ELECTRICAL CONDUIT FOR DETECTOR SLEEVE.
1	EA	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE
10	SF	813	INSTALL OVERHEAD SIGN
5	EA	804	FURNISH AND INSTALL GROUND ROD-3/4 INCH DIAMETER X 10-FOOT LENGTH
54	EA	SP	FURNISH AND INSTALL 12 INCH POLYCARBONATE VEHICULAR TRAFFIC SIGNAL HEAD SECTION -BLK
12	EA	SP	FURNISH AND INSTALL 12 INCH PEDESTRIAN SIGNAL HEAD SECTION - YELLOW
1500	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (ALUMINUM SHIELDED)
250	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE -2 CONDUCTOR (NO 14 AWG))
600	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 3 CONDUCTOR (NO 14 AWG)
2200	LF	810	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO 14 AWG)
1750	LF	810	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO 14 AWG)
1000	LF	815	FURNISH AND INSTALL SAWCUT FOR SIGNAL
9	EA	SP	FURNISH AND INSTALL MICROLOOP TRIPLE PROBE SET (1000 FT)
1	LS	SP	REMOVE AND DISPOSE OF EXISTING EQUIPMENT

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
PHASE 1 & 5	G	G	R	R	G	G	G	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 & 5 CHANGE	TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6																							
PHASE 1 & 6	G	G	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 CHANGE	Y	Y	G	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	R	G	G	G	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
5 CHANGE	R	R	R	R	Y	Y	Y	G	G	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	R	R	G	G	R	R	R	G	G	R	R	R	R	R	R	R	R	R	DW	DW	W	W	W	W
PED CLEAR	R	R	G	G	R	R	R	G	G	R	R	R	R	R	R	R	R	R	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
2 & 6 CHANGE	R	R	Y	Y	R	R	R	Y	Y	R	R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3 & 7	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	G	R	R	DW	DW	DW	DW	DW	DW
3 & 7 CHANGE	TO PHASES 3 & 8 OR 4 & 7 OR 4 & 8																							
PHASE 3 & 8	R	R	R	R	R	R	R	R	R	G	G	G	G	R	R	R	R	R	DW	DW	DW	DW	DW	DW
3 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	G	G	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 & 7	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	G	DW	DW	DW	DW	DW	DW
7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y	G	G	DW	DW	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	G	G	DW	DW	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW
ALT. PHASE 4 & 8	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	G	G	W	W	DW	DW	DW	DW
PED CLEAR	R	R	R	R	R	R	R	R	R	R	R	G	G	R	R	R	G	G	FL/DW	FL/DW	DW	DW	DW	DW
ALT. 4 & 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	Y	Y	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

TS-2 OF TS-2

REVISIONS	
E	NEW US 1 GEOMETRICS REVISED PHASING SHA CONT. NO. HO810A21
6-00	
PS	

APPROVALS

ASST. TRAFFIC ENGINEERING DESIGN DIVISION

ORIGINAL

ASST. DISTRICT ENGINEER, TRAFFIC

ON

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

FILE

DIRECTOR, TRAFFIC & SAFETY

REVISION 'E'
KCI TECHNOLOGIES INC.
ENGINEERS AND PLANNERS
10 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
21030-1888
(410) 316-7800

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
US 1 (BALTIMORE AVE) AT MD 175 (WATERLOO RD)

DRAWN BY:	W. F. FITCH	F.A.P. NO.		TS NO. 199E	SHEET NO.
CHECKED BY:	W. F. FITCH	S.H.A. NO.			
SCALE:	NONE	COUNTY:	HOWARD	T.I.M.S. NO.	____ OF ____
DATE:	3-6-72	LOG MILE:	13000105.59		

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