

PROJECT DESCRIPTION

I. GENERAL
THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 AND MD 63 IN WASHINGTON COUNTY. THIS SHEET ADDRESSES PHASE I CONSTRUCTION, US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION
THE INTERSECTION WILL OPERATE IN A NEMA SIX (6) PHASE, FULL-TRAFFIC-ACTUATED MODE. EXCLUSIVE/PERMISSIVE LEFT TURN PHASES WILL BE PROVIDED FOR THE NORTHBOUND AND WESTBOUND MOVEMENTS DURING PHASE I CONSTRUCTION.

III. CONTROLLER REQUIREMENTS
INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH THREE (3) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP, AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET.

IV. MAINTENANCE OF TRAFFIC
THE FOLLOWING WORK ZONE TRAFFIC CONTROL STANDARDS SHALL BE USED FOR THE PROJECT AND SHALL SUPPLEMENT THE PROJECT TRAFFIC CONTROL PLAN.

- STANDARD NO. MD 104.00
- STANDARD NO. MD 104.31-01 (FLAGGING OPERATION)
- STANDARD NO. MD 104.32-01 (INTERSECTION FLAGGING OPERATION)
- STANDARD NO. MD 104.33-01 (SHOULDER WORK)
- STANDARD NO. MD 104.34 (LANE SHIFT)

V. PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT SIX ARE AS FOLLOWS:

MR. LARRY HUMBERTSON
UTILITY ENGINEER
PHONE: (301)729-8439

MR. GEORGE FRANKENBERRY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301)729-8457

MR. JOHN TRUE
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301)729-8411

MR. GEORGE SMALL
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301)729-8444

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

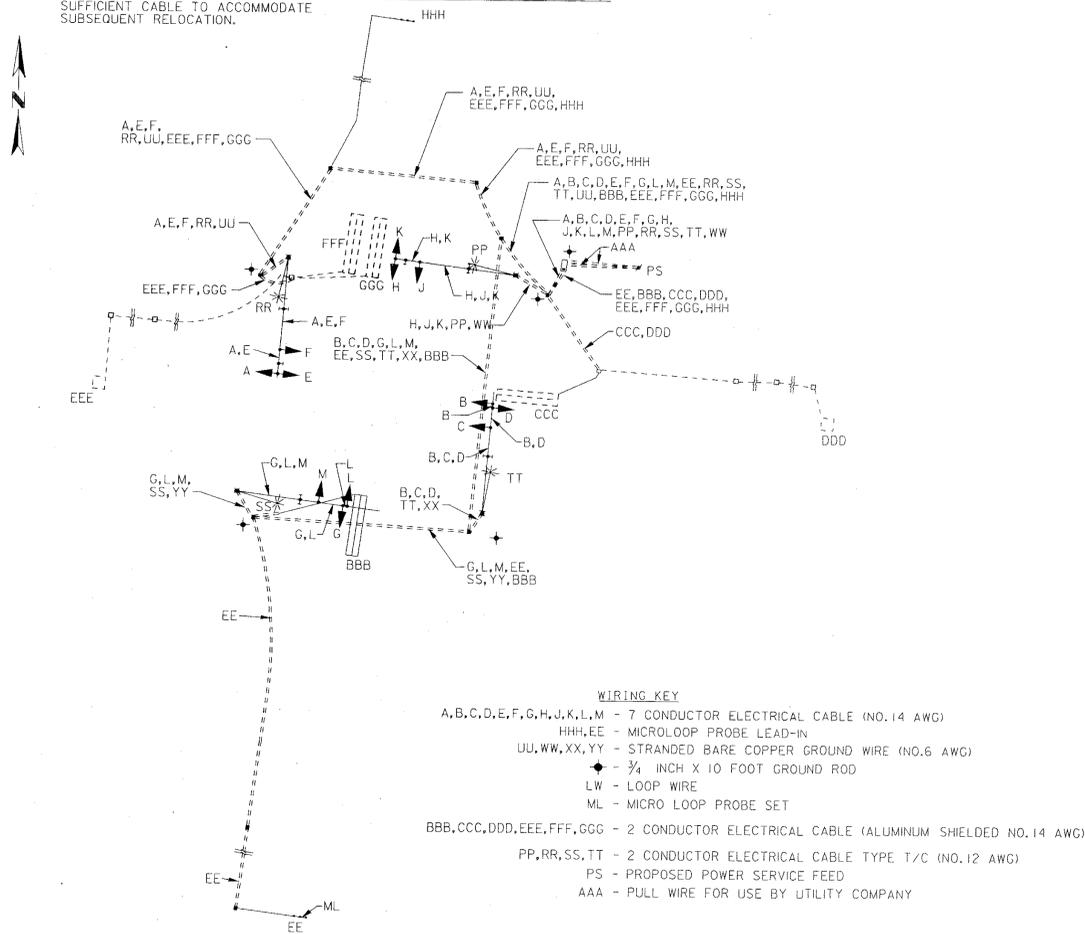
THE POWER COMPANY REPRESENTATIVE IS ALLEGHENY POWER COMPANY
MR. RAYMOND KETROW, JR.
PHONE: (301)582-5272

VI. SPECIAL NOTE

UPON COMPLETION OF THE WIRING OF THE NEW CONTROLLER, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410)787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR SHALL PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS - 12304 GREENCASTLE PIKE, HAGERSTOWN MD, 21740.

NOTE: WIRE NEW SIGNAL HEADS WITH SUFFICIENT CABLE TO ACCOMMODATE SUBSEQUENT RELOCATION.

WIRING DIAGRAM



EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	SPECIFICATION SECTION	DESCRIPTION
9001	1 EA.	816	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH INTERSECTION MONITOR WITH BATTERY BACK-UP FOR PHONE DROP, HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET
9002	3 EA.	816	FOUR-CHANNEL, TIME DELAY OUTPUT, LOOP DETECTOR AMPLIFIER - RACK MOUNT
9003	178 SF	813	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: - 2 EACH R10-I2 (36" X 42")-MAST ARM MOUNT - 4 EACH ASSOCIATED SHIELD ASSEMBLY (24" X 51")-POLE MOUNT - 4 EACH ASSOCIATED SHIELD ASSEMBLY (36" X 75")-POLE MOUNT - 2 EACH D-3(I) (Dual Faced) (National Pike) (VAR. X 16")-MAST ARM MOUNT - 2 EACH D-3(O) (Dual Faced) (Greencastle Pike) (VAR. X 16")-MAST ARM MOUNT

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	SPECIFICATION SECTION	DESCRIPTION
1009	15 LF	104	24 INCH WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE
2006	5 CY	205	TEST PIT EXCAVATION
8001	1100 LF	810	2-CONDUCTOR TRAY CABLE (NO 12 AWG)
8002	1 LS	SP	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8003	450 LF	805	2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8004	22 CY	801	CONCRETE FOR SIGNAL FOUNDATION
8009	590 LF	810	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8010	20 LF	805	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8011	275 LF	805	3" SCHEDULE 80, RIGID PVC CONDUIT - TRENCHED
8012	175 LF	805	4" SCHEDULE 80, RIGID PVC CONDUIT - TRENCHED
8014	250 LF	805	4" SCHEDULE 80, RIGID PVC CONDUIT - SLOTTED
8016	1 EA	807	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 100 AMPS
8018	2 EA	810	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
8019	9 EA	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8021	8 EA	813	BAND SIGN TO SUPPORT
8022	66 SF	813	INSTALL OVERHEAD SIGN
8024	3 EA	818	STEEL POLE WITH A SINGLE 60-FOOT MAST ARM
8025	1 EA	818	STEEL POLE WITH A SINGLE 70-FOOT MAST ARM
8027	4 EA	806	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE WITH PHOTOCELL
8028	20 LF	805	3" DIAMETER PVC CONDUIT, SCHEDULE 80 RISER
8029	5 EA	804	GROUND ROD-3/4 INCH DIAMETER X 10-FOOT LENGTH
8031	12 EA	814	8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8032	48 EA	814	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8034	1275 LF	810	ELECTRICAL CABLE- 2 CONDUCTOR (ALUMINUM SHIELDED)
8037	3750 LF	810	ELECTRICAL CABLE- 7 CONDUCTOR (NO 14 AWG)
8038	500 LF	810	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO 14 AWG)
8039	250 LF	815	SAWCUT FOR SIGNAL (LOOP DETECTOR)
8041	4 EA	SP	20-FOOT LIGHTING ARM ON SIGNAL STRUCTURE
8042	1 EA	SP	INSTALL EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNT

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 2 & 5	R	R	R	R	G/G	G	R	R	R	R	R	R
5 CHANGE	R	R	R	R	Y/G	Y/G	G	R	R	R	R	R
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	R	R
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3 & 8	R	R	R	R	R	R	G/G	G	R	R	R	R
3 CHANGE	R	R	R	R	R	R	Y/G	Y/G	G	R	R	R
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	G	G
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL	FL
	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R

EQUIPMENT LIST "C"

C. MATERIAL TO BE REMOVED AND RETURNED TO SHA.
SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

TSP-5

PLOTED: 10:13 AM on Friday, January 04, 2002
FILE: \\AN989\098751\SCHEM\TSP5.DWG

KCI TECHNOLOGIES
10 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
21030-1888
(410) 316-7800

REVISIONS	APPROVALS
(C) INTERSECTION RECONSTRUCTION (2/2002) WA1245176 JFL D ADD LEAD LT FOR WB US 40 & RELOCATE SIGNAL HEADS C 4-6-95 ADD NB MD 63 E/P LT B NOVEMBER 1, 1990 INSTALL NEW LOOP DETECTORS FOR SB AND EB APPROACHES	TEAM LEADER TRAFFIC ENGINEERING DESIGN DIVISION ASST. DIR. TRAFFIC ENGINEERING DESIGN DIVISION CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNAL PLAN
US 40 AND MD 63
GENERAL INFORMATION SHEET-PHASE I CONSTR.

DRAWN BY: B.T./J.G.	F.A.P. NO. N/A	TS NO. 1199E-GI-XI	SHEET NO. 68 OF 102
CHECKED BY: A.B.	S.H.A. NO. W-657-501-685	T.I.M.S. NO. E486	
SCALE: 1" = 20'	COUNTY: WASHINGTON	LOG MILE: #1004014.54	
DATE: 2/01/77			