PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL. IT INVOLVES THE INSTALLATION OF NEW POLES, MAST ARMS, SIGNAL HEADS AND NEW DETECTORS AT THE INTERSECTION OF US 1 AND MOUNT VISTA ROAD IN BALTIMORE COUNTY. US 1 IS ASSUMED TO RUN IN A NORTH- SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION IS TO OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH THE NORTH AND SOUTHBOUND MOVEMENTS OF US 1. MOUNT VISTA ROAD WILL OPERATE CONCURRENTLY.

CONTROLLER REQUIREMENTS

AN EIGHT PHASE, FULL-TRAFFIC-ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER, AND INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET.

PROJECT CONTACTS

THE CONTACT PERSON FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT
ASSISTANT DISTRICT
ENGINEER - TRAFFIC
(410) 321-2781

MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT
ENGINEER - MAINTENANCE
(410) 321-2761

MS.. SUENETTE POPE
DISTRICT UTILITY ENGINEER
(410) 321-2841

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

THE POWER COMPANY REPRESENTATIVE IS :

BALTIMORE GAS ELECTRIC COMPANY
MR. JOSEPH G. BUNCH
INDUSTRIAL/COMMERCIAL SERVICES
NEW BUSINESS CONSTRUCTION
7317 PARKWAY DRIVE SOUTH
HANOVER, MD 21076
(410) 859-9030

WMS#

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

QUANTITY	UNIT	DESCRIPTION
92	SF	SHEET ALUMINUM SIGN TO CONSIST OF:
	1- EA	D-3 SIGN (VARIES x16') DUAL FACE
	1- EA	D-3 SIGN (VARIES x 16') DUAL FACE
	2- EA	ROUTE MARKER ASSEMBLY (30"x51")
	2- EA	ROUTE MARKER ASSEMBLY (48"x75")
	2- EA	R10-12 SIGN (30"x 36")
1	EA	4-CHANNEL TIMEDELAY OUTPUT DETECTOR AMPLIFIER
1	EA	EIGHT PHASE FULL - TRAFFIC - ACTUATED CONTROLLER W/INTERSECTION MONITOR HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST "B"

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

ITEM	QUANTITY	UNIT	DESCRIPTION
1009			MAINTENANCE OF TRAFFIC
2006	2.5	CY	TEST PIT EXCAVATION
5012	86	LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	1	LS	REMOVE AND DISPOSE OF EXISTING MATERIALS AND EQUIPMENT
8002	9.3	CY	CONCRETE FOR SIGNAL FOUNDATION
8003	28.3	SF	SHEET ALUMINUM SIGN-OVERHEAD
8004	257	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8005	780	LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8006	30	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8007	225	LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8008	20	LF	1 INCH LIQUID-TIGHT FLEX NON-MATALLIC CONDUIT FO DETECTOR SLEEVE
8009	4	EA	MICROLOOP PROBE, 1000 FOOT LEAD IN CABLE
8010	8	EA	ELECTRICAL HANDHOLE
8011	4	EA	VIDEO DETECTION CAMERA
8012	4	EA	CONTROL CABLE, 250 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
8013	4	EA	VIDEO INTERFACE EQUIPMENT
8014	4	EA	GROUND ROD -3/4INCH DIAMETER X 10 FOOT LENGTH
8015	70	LF	SAW CUT FOR SIGNAL
8016	32	EA	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION POLYCARBONATE AND BLACK FACE
8017	3	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8018	338	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
8019	1	EA	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNTED
8020	1	EA	20FT LIGHT ARM
8021	1	EA	250W HIGH PRESS SOD LAMP & LUM W/ PHOTO CELL
8022	20	LF	ELECTRICAL CABLE - 3 CONDUCTOR (NO.4 AWG)
8023	1635	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
8024	209	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.12 AWG)
8025	69	LF	F & 14' X 6' BREAKAWAY WOOD POST
8026	12	EA	8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION POLYCARBONATE AND BLACK FACE
8027	63.7	SF	SHEET ALUMINUM SIGN-GROUND MOUNTED
8028	1	EA	MAST ARM POLE AND 70 FT / 50 FT MAST ARM
8029	1	EA	MAST ARM POLE AND 50 FT MAST ARM
8030	1	EA	CONTROL AND DISTRIBUTION EQUIPMENT (120/240 V.1 PHASE 3 WIRE SYSTEM)
8031	20	LF	1 IN. ELECTRICAL CONDUIT - GALVANIZED RISER
8032	25	LF	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8033	1	EA	MAST ARM POLE AND 38 FT MAST ARM

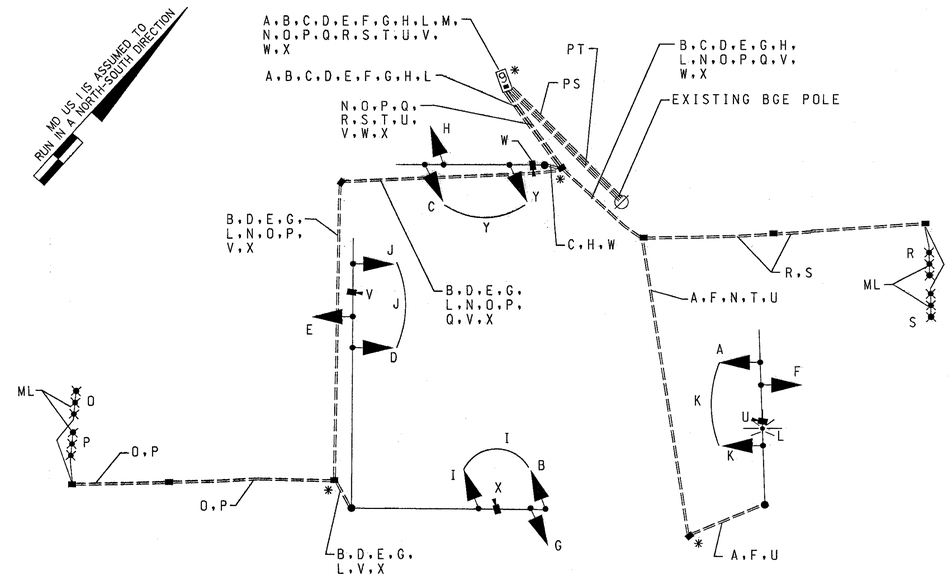
WIRING KEY

A,D,E,F	- 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
B,C,G,H, I,J,K,Y	- 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
L	- 2 CONDUCTOR ELECTRICAL CABLE TYPE T/C (NO. 12 AWG)
M	- 3 CONDUCTOR ELECTRICAL CABLE (NO. 4 AWG)
N	- STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
O,P, R,S,	-INVASIVE MICRO-LOOP PROBE LEAD-IN
U,V,W,X	-VIDEO CAMERA CABLE
ML	-INVASIVE MICRO-LOOP PROBE SET WITH 1000 FT LEAD-IN
PS	- PROPOSED UNDERGROUND ELECTRICAL SERVICE
PT	- PROPOSED UNDERGROUND TELEPHONE SERVICE
*	-3/4IN. X 10 FT. GROUND ROD

PHASE CHART

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

WIRING DIAGRAM



GENERAL NOTES

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

TRAFFIC SIGNAL PLAN
US 1 AT MOUNT VISTA ROAD

DRAWN BY: K.J.S.	F.A.P. NO.		TS NO. 338 E	SHEET NO.	
CHECKED BY: T.A.R.	S.H.A. NO.	BA4025I87			
SCALE: NO SCALE	COUNTY:	BALTIMORE	T.I.M.S. NO. F377	OF	
DATE: 07-2004	LOG MILE:	03000III.45			

PREPARED BY
URS
HUNT VALLEY, MARYLAND

01:20828223\CAD\dr-cft\gp02usl.dgn HAHN 09/17/2004 02:58:54 PM