PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AND INSTALLATION OF AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTONS AT THE INTERSECTION OF MD 190 AND POST OFFICE ENTRANCE/GIANT FOOD STORE ENTRANCE IN MONTGOMERY COUNTY. MARYLAND. MD 190 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION OPERATION WILL REMAIN THE SAME.

CONTROLLER REQUIREMENTS

USE EXISTING BASE MOUNTED CABINET AND CONTROLLER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING MINUMUM TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.04-01 (SHOULDER WORK)
STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)
STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)
STANDARD NO. MD-104.04-07 (CENTER LANE CLOSURE)
STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)
STANDARD NO. MD-104.04-15 (INTERSECTION LEFT LANE. TURN BAY)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. LEE STARKLOFF. MONTGOMERY
PHONE: (301) 513-7359
ASSISTANT DISTRICT ENGINEER - TRAFFIC

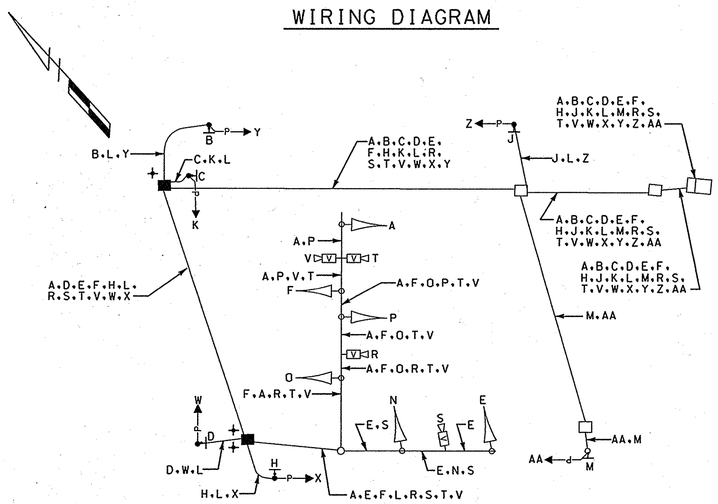
MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7305

MR. AUGIE REBISH
DISTRICT UTILITY ENGINEER
PHONE: (301) 513-7350

MR. WILHELM DERMINASSIAN
MONTGOMERY COUNTY TMC
PHONE: (240) 777-8795

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

WIRING DIAGRAM



WIRING KEY

A E F K N O P W X Y Z AA } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

R S T V } VIDEO DETECTION LEAD-IN CABLE

B C D H J M } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

L } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

+ - 3/4 IN. X 10 FT. GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

QUANTITY	DESCRIPTION
6 S.F.	SHEET ALUMINUM SIGNS
	- 2 EACH R10-4(1) SIGN (9 IN. x 12 IN.) TO READ "PUSHBUTTON TO CROSS RIVER ROAD"
	- 4 EACH R10-4(1) SIGN (9 IN. x 12 IN.) TO READ "PUSHBUTTON TO CROSS" (NO STREET NAME)

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST "B"

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

QUANTITY	DESCRIPTION
1 EACH	MAINTENANCE OF TRAFFIC
2 C.Y.	TEST PIT EXCAVATION
2300 L.F.	5 INCH WHITE LEAD FREE THERMOPLASTIC PAVEMENT MARKINGS
1400 L.F.	5 INCH YELLOW LEAD FREE THERMOPLASTIC PAVEMENT MARKINGS
1190 L.F.	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
40 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8 EACH	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LETTERS
4 EACH	HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
5 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
5 EACH	PED POLE (10 FT. BREAKAWAY)
1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
350 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
160 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
95 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
25 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
4 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
5 EACH	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
1100 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G)
2200 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G)
1 EACH	CONDUIT BEND IN EXISTING FOUNDATION
6 EACH	16 INCH COUNT DOWN PEDESTRIAN SIGNAL HEAD SECTION
12 EACH	RELOCATE EXISTING SIGNAL HEAD
4 EACH	CONTROL CABLE. 400 FT. VIDEO DETECTION CAMERA TO CONTROLLER
1 EACH	2-WIRE CENTRAL CONTROL UNIT
6 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON
6 S.F.	INSTALL OVERHEAD SIGN

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	W 20	W 20	W 20	W 20	W 20	W 20
PHASE 2 + 6	G	G	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	R	R	R	R	WK	WK	WK	WK	DW	DW
PHASE 2 + 6 ALT.	G	G	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW
2 + 6 ALT. CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW	WK	WK
4 + 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	WK	WK
PHASE 4 + 8 ALT	R	R	R	R	G	G	G	G	DW	DW	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW
4 + 8 ALT CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

TSP-5

WR&A
Whitman, Requardt and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 190 AND GIANT SHOPPING CENTER

DRAWN BY:	B. DONOWAY	F.A.P. NO.	SEE TITLE SHEET	TS NO. 2697-GI	SHEET NO.
CHECKED BY:	N. LEARY	S.H.A. NO.	SEE TITLE SHEET		
SCALE:	NONE	COUNTY:	MONTGOMERY	T.I.M.S. NO. H 186	48 OF 51
DATE:	1/18/2006	LOG MILE:	15019008.19		