PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL FOR THE ULTIMATE SIGNAL AT THE INTERSECTION OF MD 212 (POWDER MILL ROAD) AND CHERRY HILL ROAD IN PRINCE GEORGE'S COUNTY. MD 212 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

INTERSECTION OPERATION

THE ULTIMATE SIGNAL WILL OPERATE IN A NEMA EIGHT-PHASE, PRE-TIMED MODE WITH THE MD 212 APPROACHES OPERATING CONCURRENTLY AND THE CHERRY HILL ROAD APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE LEFT-TURN PHASING EXISTS FOR BOTH EASTBOUND AND WESTBOUND MD 212.

EXCLUSIVE LEFT-TURN PHASING EXISTS FOR BOTH NORTHBOUND AND SOUTHBOUND CHERRY HILL ROAD.

AN ALTERNATE PEDESTRIAN PHASE EXISTS ACROSS THE EAST LEG OF MD 212. PEDESTRIANS INDICATIONS EXIST TO CROSS THE NORTH LEG OF CHERRY HILL ROAD.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED.

MAINTENANCE OF TRAFFIC

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

STANDARD NO. MD-104.00 - 104.00-12
STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)
STANDARD NO. MD-104.43-01 (SHOULDER WORK)
STANDARD NO. MD-104.37-01 (LEFT-LANE CLOSURE)
STANDARD NO. MD-104.38-01 (RIGHT-LANE CLOSURE)
STANDARD NO. MD-104.34-01 (LANE SHIFT)
STANDARD NO. MD-104.32-02 (INTERSECTION FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. CHARLES WATKINS
DISTRICT ENGINEER
PHONE: (301) 513-7311

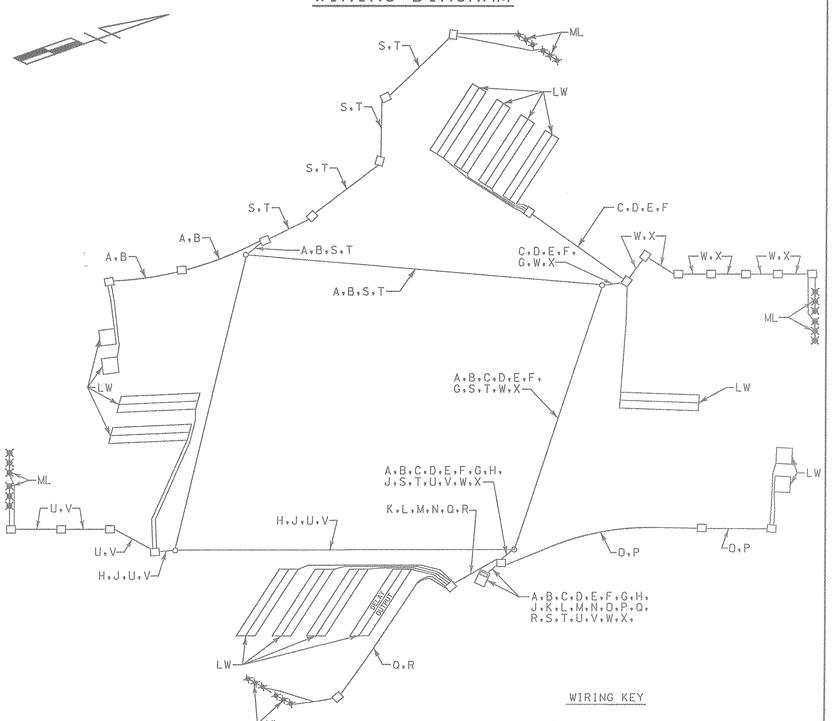
MR. MAJIB SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358

MR. RANDY BROWN
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

MR. JOE GECKLE
DISTRICT UTILITIES ENGINEER
PHONE: (301) 513-7350

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

WIRING DIAGRAM



WIRING KEY

A,B,C,D,E,F,G,H,J,K,L,M,N,O,P — 2-CONDUCTOR ELECTRICAL CABLE ALUMINUM SHIELDED (NO. 14 A.W.G.)

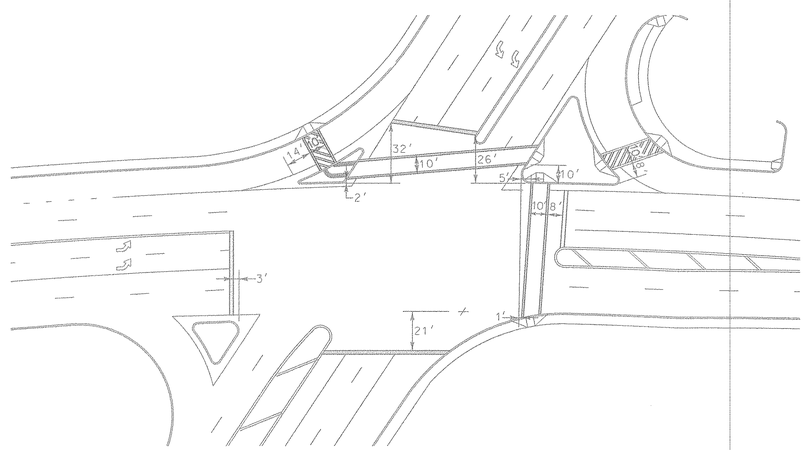
O,R,S,T,U,V,W,X — MICROLOOP PROBE LEAD-IN

LW - LOOP WIRE (NO. 14 A.W.G.)

ML - MICROLOOP PROBE SET

PAVEMENT MARKING DETAIL

SCALE: 1" = 40'

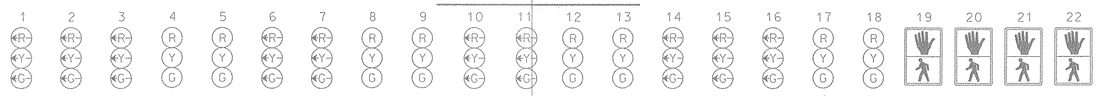


EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
120500	LUMP SUM	MAINTENANCE OF TRAFFIC
120610	1 U.D.	ARROW PANEL
585416	210 L.F.	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING
500000	500 L.F.	10 IN. WHITE THERMOPLASTIC PAVEMENT MARKING
800000	8 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 LEAD-IN
800000	LUMP SUM	REMOVAL AND DISPOSAL OF EXISTING MATERIAL AND EQUIPMENT
862101	6000 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
862102	1800 L.F.	FURNISH AND INSTALL SAWCUT FOR SIGNAL
861104	4200 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
PHASE 1 + 5	←G—	←G—	←G—	R	R	←G—	←G—	R	R	←R—	←R—	R	R	←R—	←R—	←R—	R	R	DW	DW	DW	DW
1 + 5 CHANGE	1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6																					
PHASE 1 + 6	←G—	←G—	←G—	G	G	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	←R—	R	R	DW	DW	DW	DW
1 + 6 CHANGE	←Y—	←Y—	←Y—	G	G	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	←R—	R	R	DW	DW	DW	DW
PHASE 2 + 5	←R—	←R—	←R—	R	R	←G—	←G—	G	G	←R—	←R—	R	R	←R—	←R—	←R—	R	R	WK	WK	DW	DW
2 + 5 CHANGE	←R—	←R—	←R—	R	R	←Y—	←Y—	G	G	←R—	←R—	R	R	←R—	←R—	←R—	R	R	WK	WK	DW	DW
PHASE 2 + 6	←R—	←R—	←R—	G	G	←R—	←R—	G	G	←R—	←R—	R	R	←R—	←R—	←R—	R	R	WK	WK	DW	DW
PED. CLEARANCE	←R—	←R—	←R—	G	G	←R—	←R—	G	G	←R—	←R—	R	R	←R—	←R—	←R—	R	R	FL/DW	FL/DW	DW	DW
2 + 6 CHANGE	←R—	←R—	←R—	Y	Y	←R—	←R—	Y	Y	←R—	←R—	R	R	←R—	←R—	←R—	R	R	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
3 + 7 CHANGE	3 + 7 MAY CHANGE TO PHASE 3 + 8, PHASE 4 + 7 OR PHASE 4 + 8																					
PHASE 3 + 8	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	R	R	←G—	←G—	←G—	G	G	DW	DW	DW	DW
3 + 8 CHANGE	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	R	R	←Y—	←Y—	←Y—	G	G	DW	DW	DW	DW
PHASE 4 + 7	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←G—	←G—	G	G	←R—	←R—	←R—	R	R	DW	DW	DW	DW
4 + 7 CHANGE	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←Y—	←Y—	G	G	←R—	←R—	←R—	R	R	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
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
PHASE 4 + 8 ALT	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	G	G	←R—	←R—	←R—	G	G	DW	DW	WK	WK
PED. CLEARANCE	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	G	G	←R—	←R—	←R—	G	G	DW	DW	FL/DW	FL/DW
4 + 8 ALT CHANGE	←R—	←R—	←R—	R	R	←R—	←R—	R	R	←R—	←R—	Y	Y	←R—	←R—	←R—	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	←FL/R—	←FL/R—	←FL/R—	FL/Y	FL/Y	←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

ULTIMATE SIGNAL (TSP-14)

REVISIONS

APPROVALS

ASST. TRAFFIC ENGINEERING DESIGN DIVISION

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

WR&A
Whitman, Requardt and Associates, LLP
2315 Saint Paul Street
Baltimore, Maryland 21218
(410) 235-3450

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 212 (POWDER MILL ROAD) AT CHERRY HILL ROAD

DRAWN BY: K.LITZ	F.A.P. NO.		TS NO. TS-1923D	SHEET NO.
CHECKED BY: N.LEARY	S.H.A. NO. PG 244 5171			
SCALE: 1" = 20'	COUNTY: PRINCE GEORGES		T.I.M.S. NO.	70 OF
DATE: 7-1-99	LOG MILE:			