PROJECT DESCRIPTION

GENERAL

This portion of the project involves the modification to the existing intersection phasing for MD 24 and US 1 (Business). The existing Southbound US 1 Exclusive/Permissive left-turn phasing will be modified to provide a new double Exclusive left-turn movement. All other existing signal phasing shall remain in operations and with no change.

INTERSECTION OPERATION

A double Exclusive left-turn movement shall be provided for US 1 Southbound to Eastbound MD 24. New signal head indications shall be provided for the through and left turn movements along with proper overhead signing.

PROJECT CONTACTS:

Mr. Dave Malkowski, District Engineer
Phone: (410) 321-2800
Mr. Randall Scott, Assistant District Engineer-Traffic
Phone: (410) 321-2781
Mr. Dave Ramsey, Assistant District Engineer-Maintenance
Phone: (410) 521-2761
Mr. Joseph McMahon, Assistant District Engineer-Utility
Phone: (410) 321-2841
Mr. Richard L. Daff, Sr., Chief Traffic Operations Division
Phone: (410) 787-7630
Mr. Edward Rodenhizer, Signal Operations Chief
Phone: (410) 787-7650

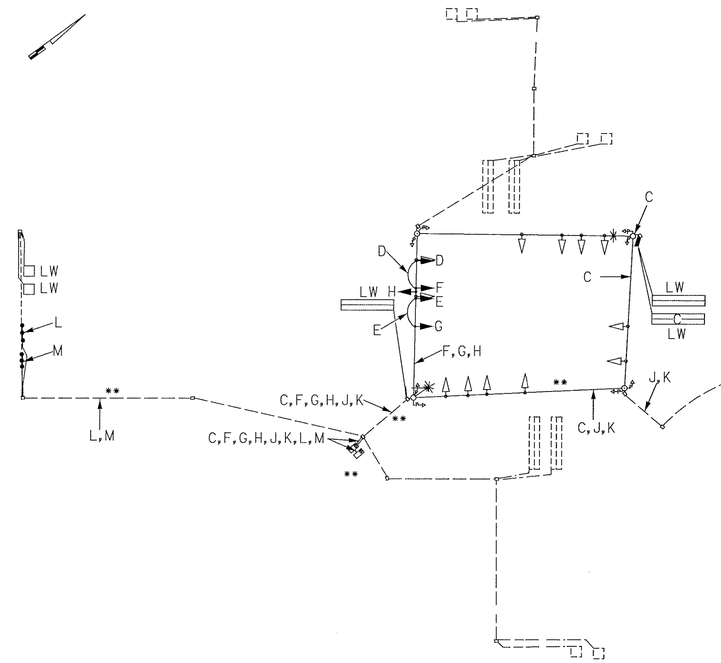
B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

CATEGORY NO.:	DESCRIPTION	QUANTITY	TOTAL SF
900000	R3-5 (30"x36") Right only arrow (span wire mounting)	2 each	15
900000	R10-12 (36"x42") Left turn yelid on green ball (span wire mounting)	2 each	21

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

CATEGORY NO.:	DESCRIPTION	SPECIFICATION SECTION	UNIT	QUANTITY
585416	Furnish and install 24 inch white thermoplastic pavement marking tape for stop line	SP	LF	90
862102	Furnish and install sawcut for signal loop detectors	815	LF	690
805160	Furnish and install 1 inch liquid tight, flexible, non-metallic conduit for detector sleeve	805	LF	70
861104	Furnish and install electrical cable 2 conductor (No.14 AWG) (Aluminium shielded)	805	LF	300
861107	Furnish and install electrical cable 5 conductor (No.14 AWG)	805	LF	60
861108	Furnish and install electrical cable 7 conductor (No.14 AWG)	805	LF	250
862101	Furnish and install loop wire encased in flexible tubing (No.14 AWG)	810	LF	1730
813015	Installation of overhead signs	813	SF	36
800000	Micro-loop Triple Probe Set (500 ft. Lead-in)	SP	EA	4
800000	Remove and Dispose of existing Material and Equipment	SP	LS	1
800000	12" One-Way, One Section Signal head - Aluminum	SP	EA	14
800000	8" One-Way, One Section Signal head - Aluminum	SP	EA	3

WIRING DIAGRAM

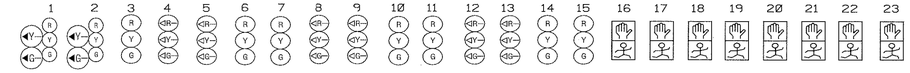


WIRING KEY

- C } 2 CONDUCTOR (ALUMINUM SHIELDED) CABLE (NO.14.AWG) LOOP DETECTOR
- D, E } 5 CONDUCTOR (ALUMINUM SHIELDED) CABLE (NO.14.AWG) LOOP DETECTOR
- F, G, H } 7 CONDUCTOR (ALUMINUM SHIELDED) CABLE (NO.14.AWG) LOOP DETECTOR
- J, K, L, M } MICRO-LOOP PROBE HOME RUN CABLE
- LW - LOOP DETECTOR WIRE (NO.14 AWG) IN FLEXIBLE TUBING

NOTE:
** REMOVE UNUSED 2 CONDUCTOR (ALUMINUM SHIELDED) CABLES FROM CONDUITS AND SPANS WHERE POSSIBLE

PHASE SEQUENCE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
PHASE 1 AND 5	R	R	R	R	R	R	R	◄G-	◄G-	R	R	◄G-	◄G-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 AND 5 MAY CHANGE TO PHASE 1 AND 6, 2 AND 5, OR 2 AND 6																							
PHASE 1 AND 6	R	R	R	◄R-	◄R-	R	R	◄G-	◄G-	G	G	◄R-	◄R-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 AND 6 CHANGE	R	R	R	◄R-	◄R-	R	R	◄Y-	◄Y-	G	G	◄R-	◄R-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	R	R	R	◄R-	◄R-	R	R	◄R-	◄R-	R	R	◄G-	◄G-	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5 CHANGE	R	R	R	◄R-	◄R-	R	R	◄R-	◄R-	R	R	◄Y-	◄Y-	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	R	R	R	◄R-	◄R-	R	R	◄R-	◄R-	G	G	◄R-	◄R-	G	G	DW	DW	DW	DW	WK	WK	WK	WK
PHASE 2 AND 6 PED CLEAR	R	R	R	◄R-	◄R-	R	R	◄R-	◄R-	G	G	◄R-	◄R-	G	G	DW	DW	DW	DW	FL/DW	FL/DW	FL/DW	FL/DW
PHASE 2 AND 6 CHANGE	R	R	R	◄R-	◄R-	R	R	◄R-	◄R-	Y	Y	◄R-	◄R-	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 AND 7	R ◄G-	R ◄G-	R	◄G-	◄G-	R	R	◄R-	◄R-	R	R	◄R-	◄R-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 AND 7 MAY CHANGE TO PHASE 3 AND 8, 7 AND 4, OR 4 AND 8																							
PHASE 3 AND 8	G ◄G-	G ◄G-	G	◄R-	◄R-	R	R	◄R-	◄R-	R	R	◄R-	◄R-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 AND 8 CHANGE	G ◄Y-	G ◄Y-	G	◄R-	◄R-	R	R	◄R-	◄R-	R	R	◄R-	◄R-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 7	R	R	R	◄G-	◄G-	G	G	◄R-	◄R-	R	R	◄R-	◄R-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 7 CHANGE	R	R	R	◄Y-	◄Y-	G	G	◄R-	◄R-	R	R	◄R-	◄R-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 AND 8	G	G	G	◄R-	◄R-	G	G	◄R-	◄R-	R	R	◄R-	◄R-	R	R	WK	WK	WK	WK	DW	DW	DW	DW
PHASE 4 AND 8 PED CLEAR	G	G	G	◄R-	◄R-	G	G	◄R-	◄R-	R	R	◄R-	◄R-	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
PHASE 4 AND 8 CHANGE	Y	Y	Y	◄R-	◄R-	Y	Y	◄R-	◄R-	R	R	◄R-	◄R-	R	R	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	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	DARK	DARK	DARK	DARK	DARK	DARK	DARK	DARK

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

US 1 BUSINESS AT MD 24

DRAWN BY: A. PATEL	F.A.P. NO.		TS NO. 1947-C	SHEET NO. ___ OF ___
CHECKED BY: S.RENZI	S.H.A. NO.	HAI542177		
SCALE: NTS	COUNTY:	HARFORD	T.I.M.S. NO. DI57	
DATE: AUGUST, 2000	LOG MILE:	121300101.98		