

PROJECT DESCRIPTION

GENERAL

This project involves the modification to the existing signal to provide exclusive/permisive left turn movements at the intersection of US 301 at MD 381 in Prince George's county, Maryland.

INTERSECTION OPERATION

The intersection is to operate in a NEMA six (6) phase mode with exclusive/permisive left turn movements provided for the northbound and southbound movements of US 301. MD 381 shall operate concurrently.

PROJECT CONTACTS:

1. The following contact persons for District #3 are as follows:

- Mr. Charlie Watkins, District Engineer  
Phone: (301) 513-7300
- Mr. Waljo Shukib, Assistant District Engineer-Traffic  
Phone: (301) 513-7300
- Mr. Dennis McMahan, Assistant District Engineer-Maintenance  
Phone: (301) 513-7300
- Mr. Augie Rebish, Assistant District Engineer-Utility  
Phone: (301) 513-7300
- Mr. Richard L. Daff, Sr., Chief Traffic Operations Division  
Phone: (410) 787-7630

2. Maintenance of traffic will be handled by the Contractor utilizing the following standard plates for traffic control: 104.00 - 104.30, 104.44.01, 104.45.01, 104.48.01.

EQUIPMENT LIST

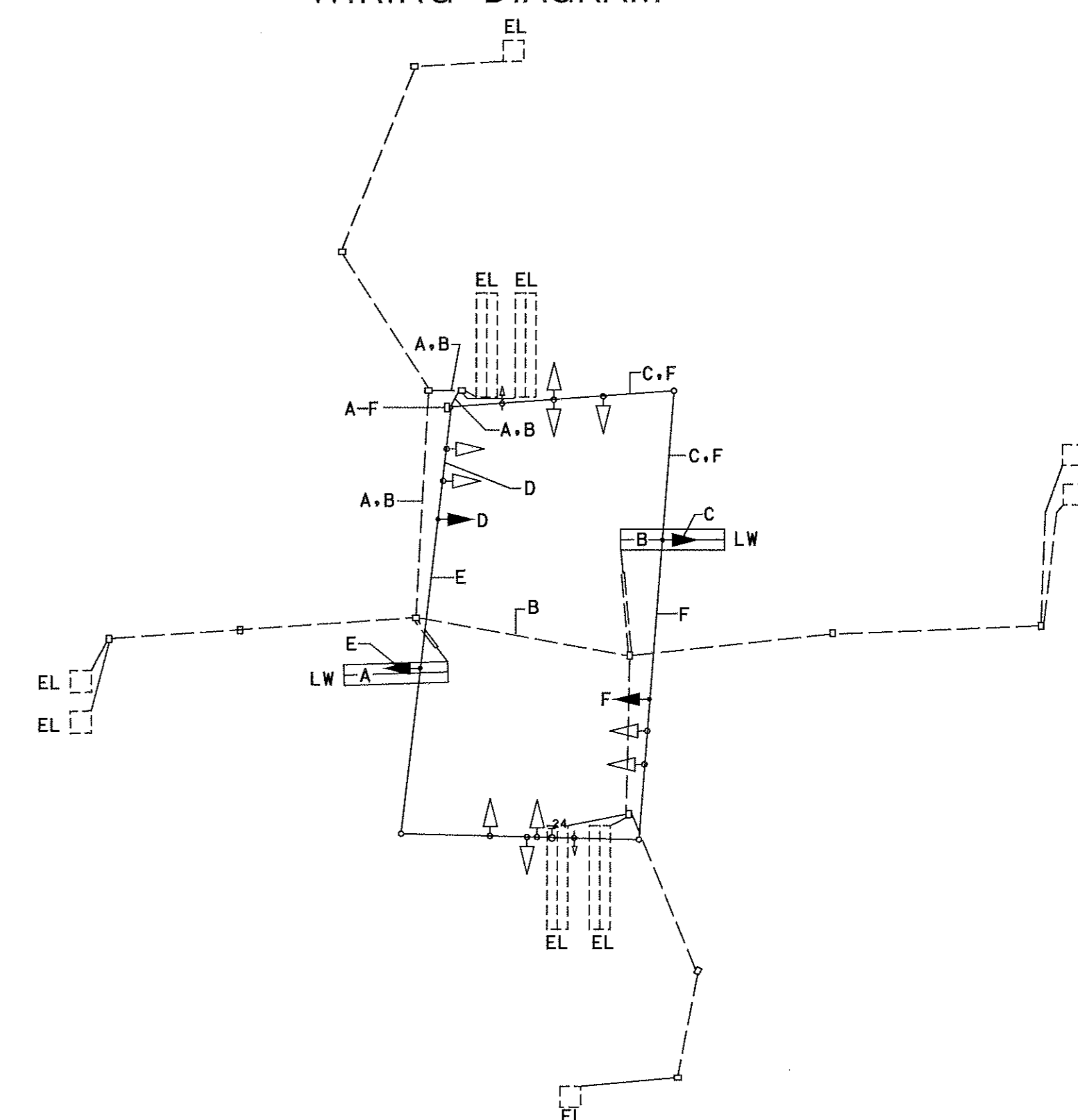
A. Equipment to be supplied by the Administration.

Item No.	Description	Units	Quantity
9001	Load switch	EA	2
9001	4-channel rack mounted amplifier	EA	1
9003	Sheet aluminium signs consisting of:	SF	53.4
	R10-12	2	EA
	GUIDE SHIELD ASSEMBLY 30"x75"	2	EA
	GUIDE SHIELD ASSEMBLY 21"x51"	2	EA

B. Equipment to be furnished and installed by the Contractor.

Item No.	Description	Units	Quantity
1001	Maintenance of Traffic	EA	EA
1002	Mobilization (per assignment)	EA	EA
8001	Adjust & Rering Existing Span Wire	EA	3
8015	Furnish and Install 12" Vehicular Traffic Signal Head Section	EA	14
8020	Furnish and Install 8" Vehicular Traffic Signal Head Section	EA	6
8028	Removal and Disposal of Equipment (per assignment)	EA	1
8039	Furnish and Install 1" Electrical Conduit Galvanized - Sleeve	LF	20
8050	Install Ground Mounted Sign	SF	33
8051	Install Overhead Sign	SF	21
8059	Furnish and Install Electrical Cable 2 Conductor (aluminium shielded)	LF	425
8063	Furnish and Install Electrical Cable-7 Conductor (No. 14 AWG)	LF	550
8064	Furnish and Install Loop Wire Encased in Flexable Tubing (No. 14 AWG)	LF	950
8065	Furnish and Install Sawcut for Signal Loop Detector	LF	590

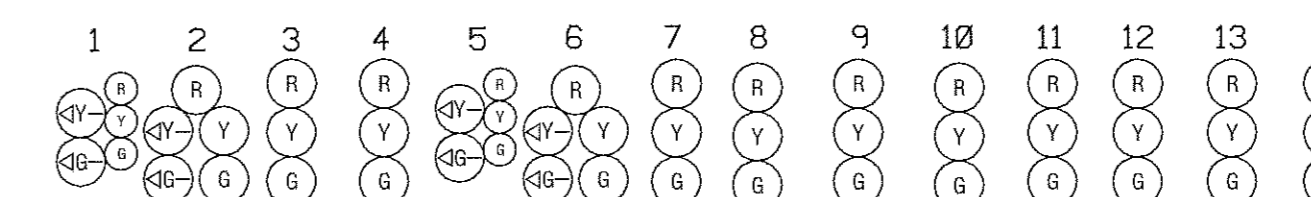
WIRING DIAGRAM



WIRING KEY

- A } 2 CONDUCTOR (ALUMINUM SHIELDED)
- B } CABLE (NO. 14.AWG) LOOP DETECTOR
- C } 7 CONDUCTOR CABLE (NO. 14 AWG)
- D } E }
- F }
- LW - LOOP DETECTOR WIRE (NO. 14 AWG) IN FLEXIBLE TUBING
- EL - EXISTING LOOP

PHASE SEQUENCE CHART



Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 AND 5	←G/R	←G/R	R	R	←G/R	←G/R	R	R	R	R	R	R	R	R
PHASE 1 AND 5 CHANGE	PHASE 1 AND 6, 2 AND 5, OR 2 AND 6													
PHASE 1 AND 6	←G/G	←G/G	G	G	R	R	R	R	R	R	R	R	R	R
PHASE 1 CHANGE	←Y/G	←Y/G	G	G	R	R	R	R	R	R	R	R	R	R
PHASE 2 AND 5	R	R	R	R	←G/G	←G/G	G	G	R	R	R	R	R	R
PHASE 5 CHANGE	R	R	R	R	←Y/G	←Y/G	G	G	R	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	G	G	G	G	R	R	R	R	R	R
PHASE 2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 4 AND 8	R	R	R	R	R	R	R	R	G	G	G	G	G	G
PHASE 4 AND 8 CHANGE	R	R	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/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

FIRE HOUSE PRE-EMPTION

PRE EMPTION 1	R	R	R	R	R	R	R	R	R	G	G	G	R	R	R
PRE EMPTION 1 CLEARANCE	R	R	R	R	R	R	R	R	R	Y	Y	Y	R	R	R
PHASE 2 AND 6 NORMAL OPERATION	G	G	G	G	G	G	G	G	R	R	R	R	R	R	

FIRE HOUSE PRE-EMPTION

PRE EMPTION 2	R	R	R	R	R	R	R	R	R	R	R	G	G	G
PRE EMPTION 2 CLEARANCE	R	R	R	R	R	R	R	R	R	R	R	Y	Y	Y
PHASE 2 AND 6 NORMAL OPERATION	G	G	G	G	G	G	G	G	R	R	R	R	R	R

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
*Office of Traffic & Safety*  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
 GENERAL INFORMATION SHEET  
**US 301 (ROBERT S. CRAIN HIGHWAY)**  
**AT MD 381 (BRANDYWINE ROAD)**

**SABRA, WANG & ASSOCIATES, INC.**  
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DRAWN BY: M. RAFFLE	F.A.P. NO.	TS NO.	
CHECKED BY: D. PETERS/Z.SABRA	S.H.A. NO.	596-E	SHEET NO.
SCALE: NTS	COUNTY: PRINCE GEORGE'S	T.I.M.S. NO.	
DATE: SEPTEMBER, 2000	LOG MILE: 16030103.12	D-900	OF