

F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

### PROJECT DESCRIPTION

**GENERAL**  
 THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 AND RIDGE ROAD IN HOWARD COUNTY. US 40 ASSUMED TO RUN IN AN EAST-WEST DIRECTION.  
 THE PROJECT IS NECESSARY DUE TO WIDENING ON THE NORTH LEG OF RIDGE ROAD. SIGNALIZATION WORK WILL CONSIST OF THE REPLACEMENT OF DETECTORS, CONDUIT, SIGNAL STRUCTURES, SIGNAL HEADS AND SIGNS.

**INTERSECTION OPERATION**  
 THE INTERSECTION OPERATION WILL NOT CHANGE.

**CONTROLLER REQUIREMENTS**  
 THE EXISTING FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED.

### EQUIPMENT LIST "B"

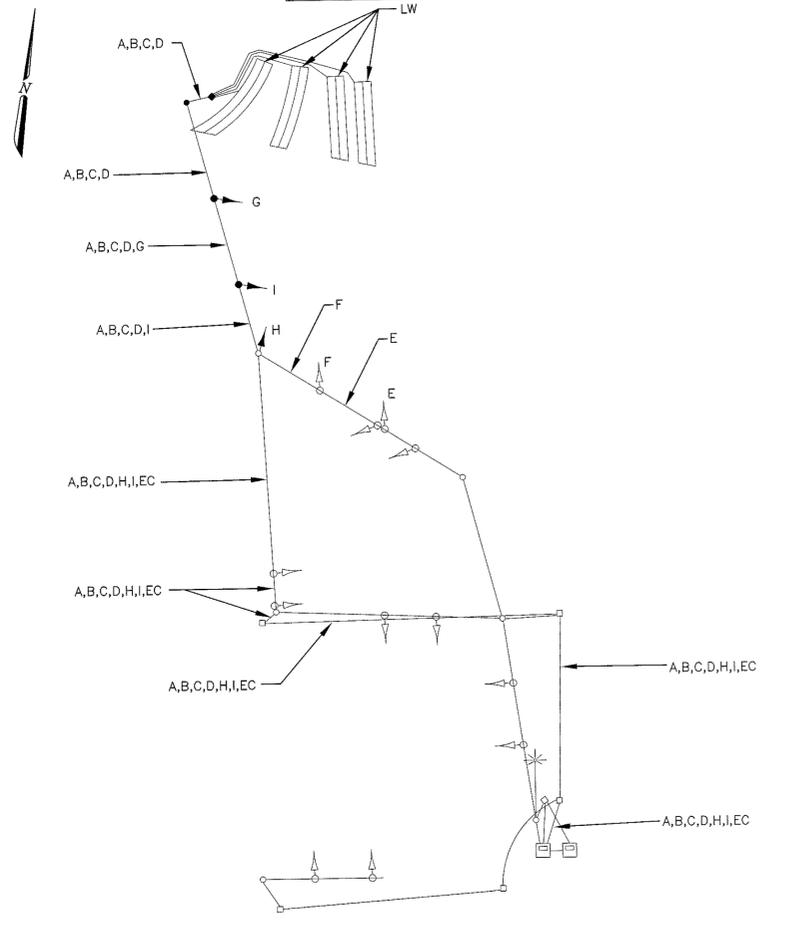
* ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	2 C.Y.	TEST PIT EXCAVATION
8001	10 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8009	120 L.F.	FURNISH AND INSTALL 3/8 IN. STEEL SPAN WIRE
8010	120 L.F.	FURNISH AND INSTALL 1/4 IN. STEEL SPAN WIRE
8021	550 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8022	40 L.F.	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE
8024	20 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8033	1 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	2 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT. LENGTH
8040	1980 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8041	2100 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)
8044	100 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 A.W.G.)
8045	820 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 A.W.G.)
8049	20 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
8058	2 EACH	REMOVE AND DISPOSE OF EXISTING FOUNDATION - 12 IN. BELOW GRADE
8061	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT

### EQUIPMENT LIST "B"

* ITEM NO.	QUANTITY	DESCRIPTION
8064	1 EACH	USE EXISTING DISK AND AS-BUILT TRAFFIC CONTROL DEVICE
8052	38 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS - 4 IN. X 6 IN.
----	3 EACH	12 IN., ONE-WAY, THREE-SECTION (R,Y,G.) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR SPAN WIRE MOUNTING AND TUNNEL VISORS.
----	1 EACH	12 IN., ONE-WAY, FIVE-SECTION (R,Y,YA,G,GA) SIGNAL HEAD WITH ADJUSTABLE BRACKET FOR POLE MOUNTING AND TUNNEL VISORS
----	2 EACH	RELOCATE EXISTING OVERHEAD SIGN
8087	1 EACH	FURNISH AND INSTALL 14 IN. X 32 FT. STRAIN POLE
----	1 EACH	FURNISH AND INSTALL "NORTH US 29/WEST US 40" DIRECTIONAL SIGN (10 FT. X 3 FT.) MAST ARM MOUNT
----	1 EACH	FURNISH AND INSTALL "SOUTH US 29" DIRECTIONAL SIGN (6.5 FT. X 3 FT.) MAST ARM MOUNTED
----	1 EACH	RELOCATE EXISTING MAST ARM
----	1 EACH	FURNISH AND INSTALL ROUTE MARKER ASSEMBLY
----		M3-4 (24 IN. X 12 IN.)
----		M1-4 (24 IN. X 24 IN.)
----		M4-5 (24 IN. X 12 IN.)
----		M3-1 (24 IN. X 12 IN.)
----		M1-4 (24 IN. X 24 IN.)
----		M6-2 (21 IN. X 15 IN.)
----	1 EACH	FURNISH AND INSTALL ROUTE MARKER ASSEMBLY
----		M3-3 (24 IN. X 12 IN.)
----		M1-4 (24 IN. X 24 IN.)
----		M6-2 (21 IN. X 15 IN.)

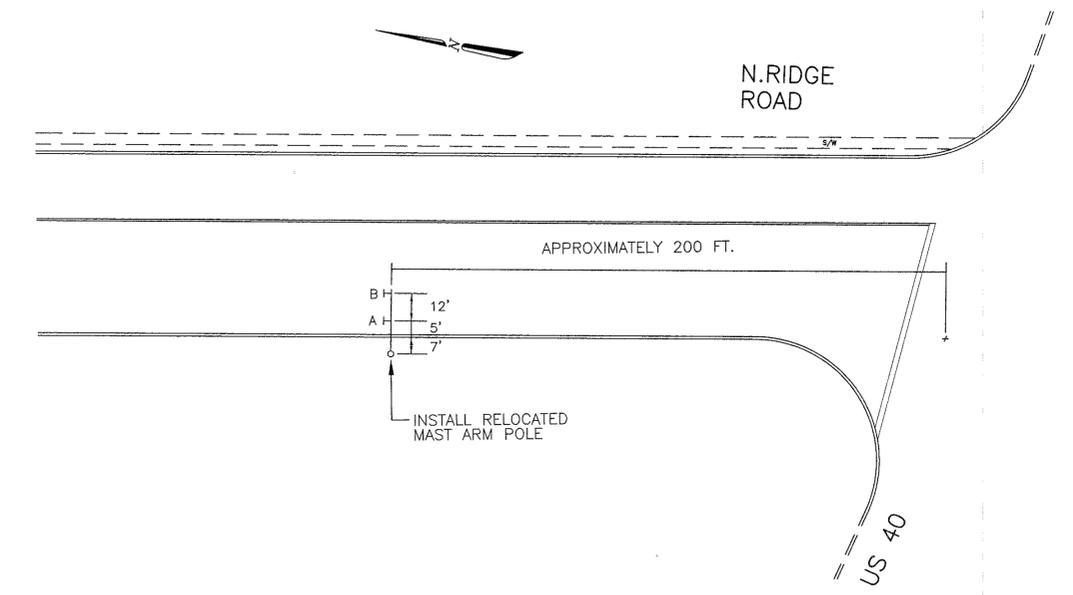
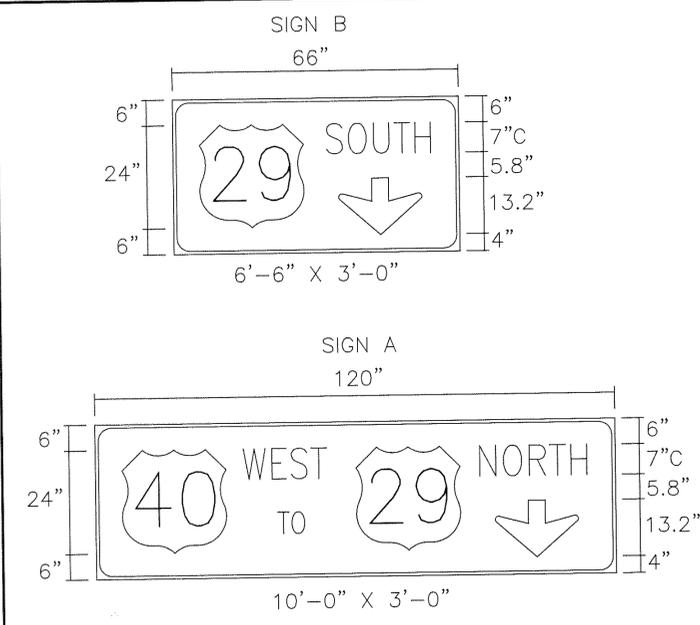
\* ITEM NO. CORRESPOND TO MSHA AREA WIDE CONTRACT

### WIRING DIAGRAM



### WIRING KEY

- A, B, C, D } 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED) NO. 14 A.W.G.
- E, F, G } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- H } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- I } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- LW } LOOP WIRE (NO. 14 A.W.G.)
- EC } EXISTING CABLE



**TRAFFIC CONCEPTS, INC.**  
 Brightview Business Center  
 8258 Veterans Highway  
 Suite 19B  
 Millersville, MD 21108  
 (410) 987-0427

REVISIONS	APPROVALS	REVISIONS
	ASSISTANT DIVISION CHIEF	
	ASST. DISTRICT ENGINEER, TRAFFIC	
	CHIEF, TRAFFIC ENGINEERING DESIGN DIV.	
	DIRECTOR, OFFICE OF TRAFFIC AND SAFETY	

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
 Office of Traffic & Safety  
 TRAFFIC ENGINEERING DESIGN DIVISION  
 GENERAL INFORMATION SHEET  
 US 40 AND RIDGE ROAD

DATE: 3-9-99	DRAWN BY: T. ZAYDEL	F.A.P. NO. _____	PLAN SHEET NO.: _____	SHEET NO. _____
SCALE: NONE	DESIGNED BY: T. ZAYDEL	S.H.A. NO. _____	TS-951# GI	OF _____
APPROVED BY: _____	CHECKED BY: K. SCHMID	COUNTY: HOWARD		