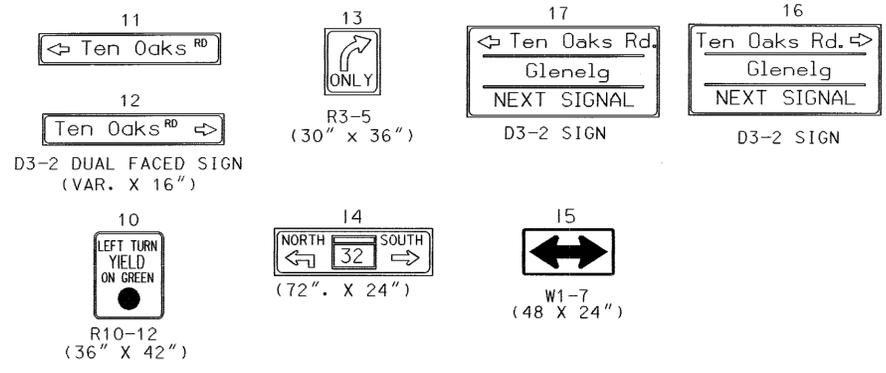
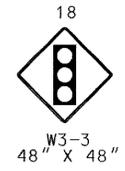


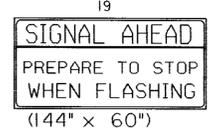
MD 32 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION



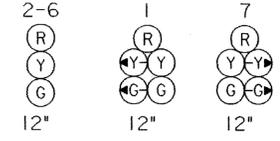
EXISTING SIGN TO BE RELOCATED



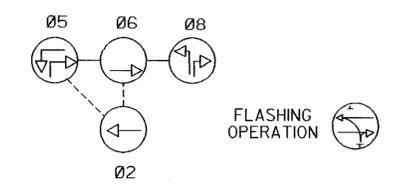
PROPOSED SIGN



EXISTING SIGNALS



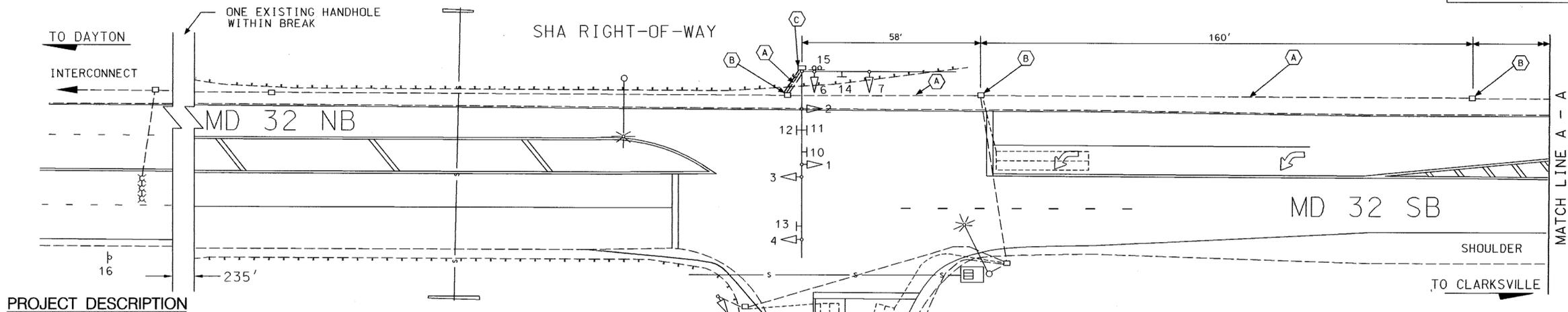
NEMA PHASING



PROPOSED HIB SIGNAL



**PHASING NOTES:**  
 1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.  
 2. PHASES ASSOCIATED BY A DASHED LINE MAY/WILL OPERATE CONCURRENTLY.



THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF NEW HIB'S (FOR RED SIGNAL AT THE INTERSECTION OF MARYLAND 32 AND TEN OAKS ROAD) ALONG NORTHBOUND MD 32 (SOUTH OF THE INTERSECTION). THE HIB'S ARE PROPOSED TO BE INTERCONNECTED TO THE EXISTING SIGNAL.

CONSTRUCTION DETAILS

- A. INSTALL CABLE IN EXISTING CONDUIT.
- B. USE EXISTING HANDHOLE.
- C. INSTALL CABLE IN CONTROLLER CABINET.
- D. INSTALL 21' STEEL POLE WITH 50' MAST ARM, SIGNAL HEADS, AND SIGN. (NOTE: 1-3" PVC 90 DEGREE CONDUIT BEND, AND 4-2" X 90" ANCHOR BOLTS).
- E. FURNISH AND INSTALL ELECTRICAL HANDHOLE.
- F. FURNISH AND INSTALL 3" SCHEDULE 80 PVC RIGID ELECTRICAL CONDUIT-TRENCHED.
- G. REMOVE EXISTING SIGN AND RELOCATE TO UPRIGHT OF PROPOSED HIB (UNDER CONSTRUCTION DETAIL NOTE "D")
- H. FURNISH AND INSTALL W-BEAM TRAFFIC BARRIER (STD. NO. MD. 660.01) WITH TYPE A TRAFFIC BARRIER END TREATMENT (STD. NO. MD. 605.01).

EQUIPMENT LIST A

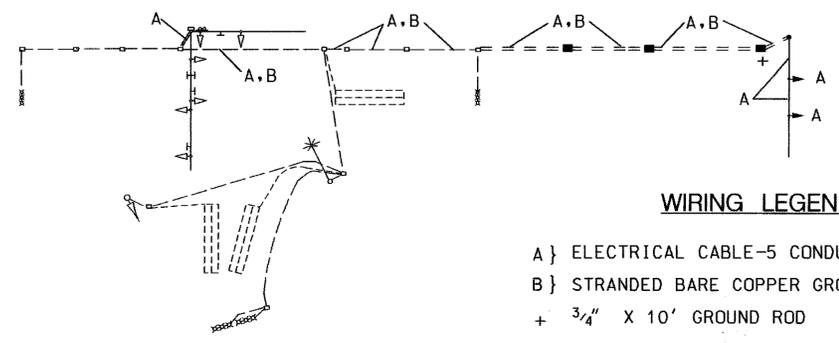
ITEM NO.	QUANTITY	DESCRIPTION
9000	1 EACH	21' "USED" POLE WITH 50' "USED" MAST ARM (TAGGED IN THE YARD)
9089	60 S.F.	SHEET ALUMINUM SIGNS, 1 EACH SIGN (12' X 5') "SIGNAL AHEAD- PREPARE TO STOP WHEN FLASHING" MAST ARM MOUNT

EQUIPMENT LIST B

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

ITEM NO.	QUANTITY	DESCRIPTION
2001	1 C.Y.	TEST PIT EXCAVATION
6003	140 L.F.	TRAFFIC BARRIER W-BEAM
8001	5 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
8027	525 L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8034	1 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8033	3 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8053	76 S.F.	INSTALL OVER HEAD SIGN
8048	1150 L.F.	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER WIRE
8074	1 EACH	INSTALL STEEL POLE WITH SINGLE MAST ARM (ANY SIZE)
8084	2 EACH	FURNISH AND INSTALL 12" VEHICULAR TRAFFIC SIGNAL HEAD SECTIONS
NEG	2 EACH	TRAFFIC BARRIER END TREATMENT (TYPE A)
NEG	1250 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 12 AWG)

WIRING DIAGRAM



WIRING LEGEND

- A) ELECTRICAL CABLE-5 CONDUCTOR (NO. 12 AWG)
- B) STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
- + 3/4" X 10' GROUND ROD

UTILITY LEGEND	
T	TELEPHONE CABLES
G	GAS MAIN
W	WATER MAIN
S	SEWER MAIN
E	ELECTRIC CABLES
A	AERIAL CABLES
BC	BURIED CABLE
SD	STORM DRAIN

GEOMETRIC LEGEND	
---	EXISTING GEOMETRICS
---	PROPOSED GEOMETRICS

**DCI**  
 CONSULTING ENGINEERS  
 COLUMBIA, MARYLAND

REVISIONS	APPROVALS
	ASST. TRAFFIC ENGINEERING DESIGN DIVISION
	ASST. DISTRICT ENGINEER, TRAFFIC
	CHEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, TRAFFIC & SAFETY

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

HAZARDOUS IDENTIFICATION BEACON (HIB) PLAN  
 MD. 32 AND TEN OAKS ROAD

DRAWN BY: I. ZAYDEL	F.A.P. NO. N/A	TS NO.
CHECKED BY: K. SCHMIDT	S.H.A. NO. A1010545 & A1010578	SHEET NO.
SCALE: 1"=20'	COUNTY: HOWARD	T.I.M.S. NO.
DATE: 5/6/97	LOG MILE: 130+3215.71	D-973

1 OF 2

H:\P\TRANS\9612554\NEW\0373003.DWG