F.H.W.A. REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD	SEE TITLE SHEET	380	465

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE FINAL EQUIPEMENT INSTALLATION AND ADJUSTMENTS FOR THE ULTIMATE SIGNAL AT THE INTERSECTION OF MD 450 AND MD 193 IN PRINCE GEORGES COUNTY. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION IS TO CONTINUE TO OPERATE IN A NEMA EIGHT PHASE, FULLY-TRAFFIC-ACTUATED MODE. THERE WILL BE A CHANGE IN THE LEFT TURNS FROM EXCLUSIVE/PERMISSIVE LEFT TURNS TO EXCLUSIVE LEFT TURNS ON THE TWO MD 450 AND MD 193 APPROACHES. THE THROUGH MOVEMENTS ON MD 450 WILL OPERATE CONCURRENTLY WITH A CONCURRENT PEDESTRIAN PHASE ACROSS THE NORTH LEG OF THE INTERSECTION. THE THROUGH MOVEMENTS ON MD 193 WILL OPERATE CONCURRENTLY.

CONTROLLER REQUIREMENTS

THE EXISTING CONTROLLER AND CABINET ARE TO BE UTILIZED.

SPECIAL NOTE

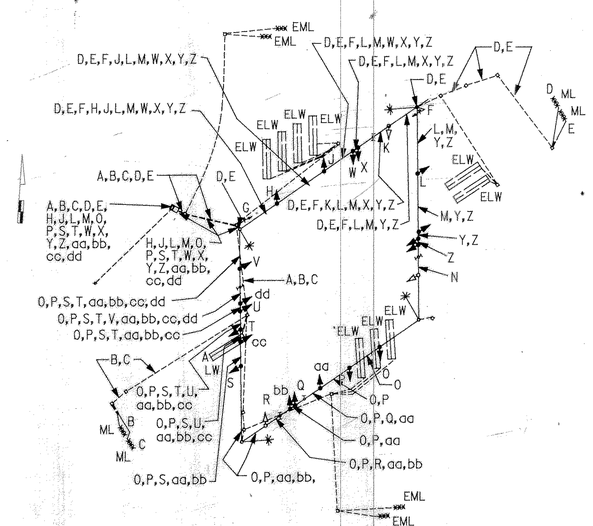
ON PLAN TS-1821B MD 193 IS NOTED AS 'OLD MD556' AND 'GLENDALE RD'.

72 HOURS PRIOR TO ANY WORK ON THE TRAFFIC SIGNALS, THE CONTRACTOR SHALL NOTIFY THE DISTRICT 3 TRAFFIC SECTION REPRESENTATIVE, MR. RICHARD BUETTNER (301-513-7316) AND THE SIGNAL OPERATIONS SUPERVISOR, MR. EDWARD RODENHIZER (410-787-7652).

ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UNDERGROUND AND OVERHEAD UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFRIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE PROJECT ENGINEER IMMEDIATELY.

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7631 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

WIRING DIAGRAM



A - 2-CONDUCTOR CABLE (ALUMINUM SHIELDED)

B, C, D, E - MICRO-LOOP PROBE LEAD-IN

F, G - 3-CONDUCTOR CABLE (NO. 14 A.W.G.)

ELW - EXISTING LOOP WIRE

EML - EXISTING MICRO-LOOP PROBE

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

ML - MICRO-LOOP PROBE

H, J, K, L, M, N, O, P, Q, R, S, T, U, V - 5-CONDUCTOR CABLE (NO. 14 A.W.G.)

W, X, Y, Z, aa, bb, cc, dd - 7-CONDUCTOR CABLE (NO. 14 A.W.G)

FILE NO. SS2S9450.DGN
04/23/96 AS

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

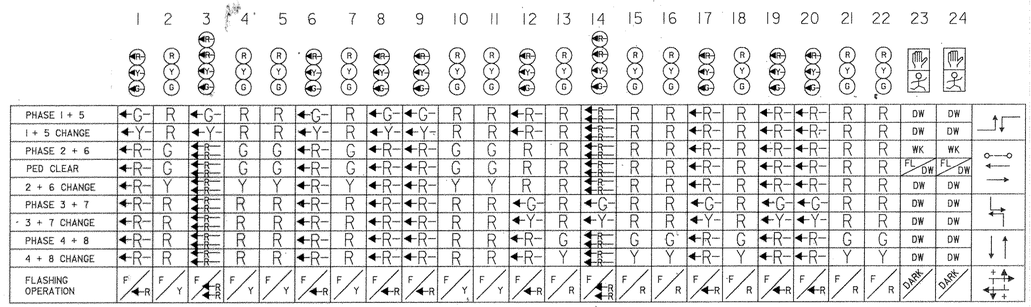
CATEGORY CODE NO.	SPEC. SECTION	QUANTITY	DESCRIPTION
960015	814	8 EA.	12 IN. 1 WAY 3 SECTION (R,Y,G) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
960017	814	8 EA.	12 IN. 1 WAY 3 SECTION (RA,YA,GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
960068	814	2 EA.	12 IN. 1 WAY 2 SECTION PEDESTRIAN SIGNAL WITH POLE MOUNTING HARDWARE AND TUNNEL VISORS
973023	813	21.5 S.F.	SHEET ALUMINUM SIGNS - 2 EACH R10-3 (9" X 12") - 4 EACH R10-10L (24" X 30")
900000	814	2 EA.	12 IN. 1 WAY 4 SECTION (RA,RA,YA,GA) ADJUSTABLE POLYCARBONATE VEHICLE SIGNAL HEAD WITH SPAN MOUNTING HARDWARE AND TUNNEL VISORS
900000	810	4 EA.	MICRO-LOOP PROBE SET WITH 1000 FT. LEAD-IN

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	SPEC. SECTION	QUANTITY	DESCRIPTION
585443	XXX	800 L.F.	12 IN. WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE
585445	XXX	202 L.F.	24 IN. WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE
805011	805	50 L.F.	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED STEEL
811001	811	1 EA.	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813010	813	2 EA.	BAND SIGN TO SIGN SUPPORT
813015	813	20 S.F.	INSTALL OVERHEAD SIGN
822500	XXX	1 EA.	AS-BUILT FOR TRAFFIC SIGNAL
860015	814	8 EA.	INSTALL 12 IN. 1 WAY 3 SECTION (R,Y,G) POLYCARBONATE SIGNAL HEAD - POLE MOUNT
860017	814	8 EA.	INSTALL 12 IN. 1 WAY 3 SECTION (RA,YA,GA) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT
860068	814	2 EA.	INSTALL 12 IN. 1 WAY 2 SECTION PEDESTRIAN SIGNAL HEAD - POLE MOUNT
860265	814	1 EA.	RELOCATE EXISTING SIGNAL HEAD
861104	810	150 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861106	810	381 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 A.W.G.)
861107	810	2500 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
861108	810	2350 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
862101	810	425 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
862102	815	200 L.F.	FURNISH AND INSTALL SAWCUT FOR SIGNAL (LOOP DETECTOR)
800000	814	2 EA.	INSTALL 12 IN. 1 WAY 4 SECTION (RA,RA,YA,GA) POLYCARBONATE SIGNAL HEAD - SPAN MOUNT
800000	810	4 EA.	INSTALL MICRO-LOOP PROBE SET
800000	XXX	LUMP SUM	REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

PHASE DIAGRAM



ULTIMATE SIGNAL	DWG. NO. TS-34

THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS
OWINGS MILLS, MARYLAND

REVISIONS

© AUGUST 1996 - WTB MODIFY EXISTING SIGNAL. SHA NO. PG9005171
JDM

Ⓑ 10-29-86 INSTALL E/P L/T ON ALL APPROACHES + LOOP DETS.
JJD | SR | XX | ETP | TH

Ⓐ 10-23-86 AS BUILT
JJD

APPROVALS

ASST. DIVISION CHIEF, TEOD

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, OFFICE OF TRAFFIC & SAFETY

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

MD 450 (ANNAPOLIS ROAD) AT MD 193 (GLENN DALE BLVD / ENTERPRISE ROAD)

LOC MILE NO. 16019312.85 DATE 4/21/81

DRAWN BY: SR	F.A.P. NO. RR 18(49)	PLAN SHEET NO.:	SHEET NO.
CHECK BY: STEVE RENZI	S.H.A. NO. P 170-501-382	TS-1821C-G1	380 OF 465
SCALE: NONE	COUNTY PRINCE GEORGES		