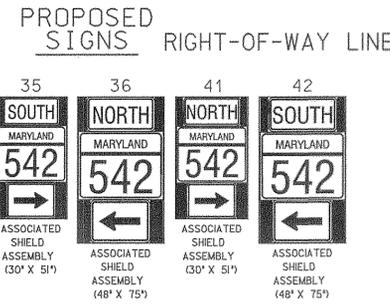
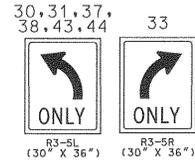


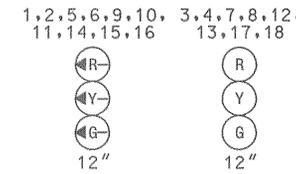
MD 542 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION



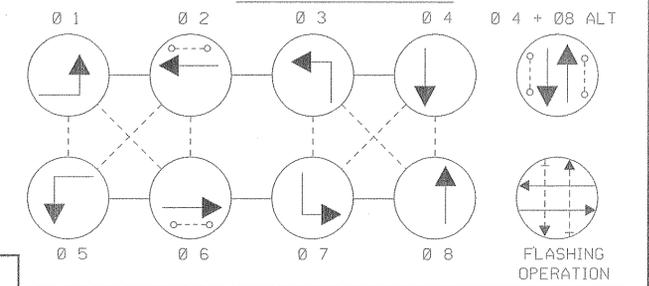
FIBER OPTIC	20'-6"
FIBER OPTIC	20'-7"
NEUTRAL	24'-1"
GUY	27'-5"
SECONDARY	29'-2"
PRIMARY	37'-0"
PRIMARY	39'-0"
PRIMARY	42'-0"

FIBER OPTIC	23'-1"
FIBER OPTIC	23'-2"
NEUTRAL	30'-4"
GUY	30'-1"
SECONDARY	35'-3"
PRIMARY	37'-0"
PRIMARY	39'-0"
PRIMARY	42'-0"

PROPOSED SIGNALS



NEMA PHASING

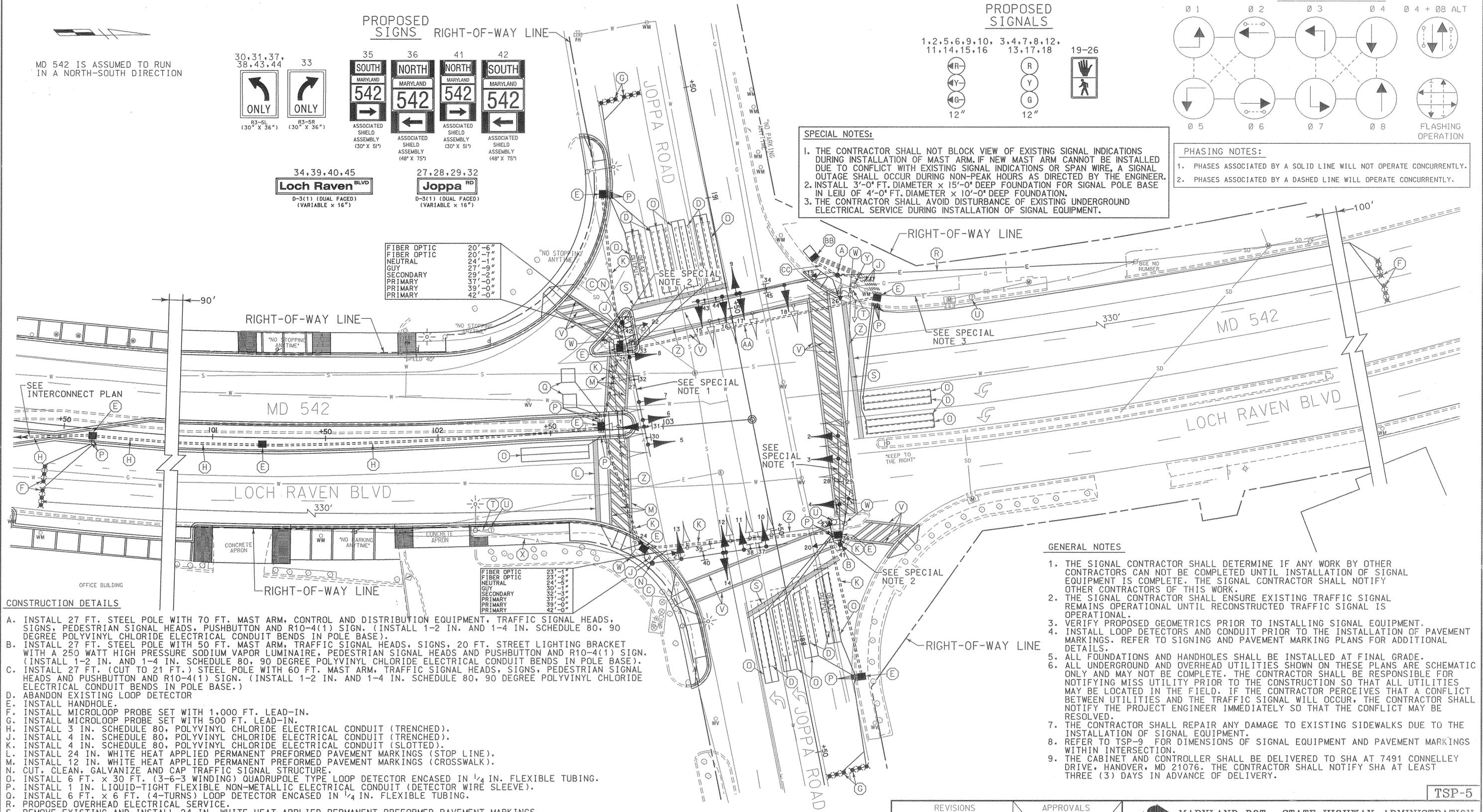


SPECIAL NOTES:

- THE CONTRACTOR SHALL NOT BLOCK VIEW OF EXISTING SIGNAL INDICATIONS DURING INSTALLATION OF MAST ARM. IF NEW MAST ARM CANNOT BE INSTALLED DUE TO CONFLICT WITH EXISTING SIGNAL INDICATIONS OR SPAN WIRE, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
- INSTALL 3'-0" FT. DIAMETER x 15'-0" DEEP FOUNDATION FOR SIGNAL POLE BASE IN LEIU OF 4'-0" FT. DIAMETER x 10'-0" DEEP FOUNDATION.
- THE CONTRACTOR SHALL AVOID DISTURBANCE OF EXISTING UNDERGROUND ELECTRICAL SERVICE DURING INSTALLATION OF SIGNAL EQUIPMENT.

PHASING NOTES:

- PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
- PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.



CONSTRUCTION DETAILS

- INSTALL 27 FT. STEEL POLE WITH 70 FT. MAST ARM, CONTROL AND DISTRIBUTION EQUIPMENT, TRAFFIC SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL HEADS, PUSHBUTTON AND R10-4(1) SIGN. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE.)
- INSTALL 27 FT. STEEL POLE WITH 50 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, 20 FT. STREET LIGHTING BRACKET WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE, PEDESTRIAN SIGNAL HEADS AND PUSHBUTTON AND R10-4(1) SIGN. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE.)
- INSTALL 27 FT. (CUT TO 21 FT.) STEEL POLE WITH 60 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL HEADS AND PUSHBUTTON AND R10-4(1) SIGN. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE.)
- ABANDON EXISTING LOOP DETECTOR
- INSTALL HANDHOLE.
- INSTALL MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN.
- INSTALL MICROLOOP PROBE SET WITH 500 FT. LEAD-IN.
- INSTALL 3 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
- INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
- INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED PAVEMENT MARKINGS (STOP LINE).
- INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED PAVEMENT MARKINGS (CROSSWALK).
- CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
- INSTALL 6 FT. x 30 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
- INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
- INSTALL 6 FT. x 6 FT. (4-TURNS) LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBING.
- PROPOSED OVERHEAD ELECTRICAL SERVICE.
- REMOVE EXISTING AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED PAVEMENT MARKINGS (STOP LINE).
- ABANDON EXISTING CONDUIT.
- REMOVE EXISTING HANDHOLE.
- REMOVE EXISTING AND INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED PAVEMENT MARKINGS (CROSSWALK).
- REMOVE EXISTING STEEL STRAIN POLE AND FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING OVERHEAD LOOP DETECTOR CABLE.
- REMOVE EXISTING BASE MOUNTED CABINET AND CONTROLLER, REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE.
- REMOVE EXISTING SPAN WIRE, TRAFFIC SIGNAL HEADS AND SIGNS.
- INSTALL 2-4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUITS IN COMMON SLOT.
- INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER WITH CONCRETE PAD. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUITS IN CABINET BASE)
- INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).

GENERAL NOTES

- THE SIGNAL CONTRACTOR SHALL DETERMINE IF ANY WORK BY OTHER CONTRACTORS CAN NOT BE COMPLETED UNTIL INSTALLATION OF SIGNAL EQUIPMENT IS COMPLETE. THE SIGNAL CONTRACTOR SHALL NOTIFY OTHER CONTRACTORS OF THIS WORK.
- THE SIGNAL CONTRACTOR SHALL ENSURE EXISTING TRAFFIC SIGNAL REMAINS OPERATIONAL UNTIL RECONSTRUCTED TRAFFIC SIGNAL IS OPERATIONAL.
- VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
- INSTALL LOOP DETECTORS AND CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS. REFER TO SIGNING AND PAVEMENT MARKING PLANS FOR ADDITIONAL DETAILS.
- ALL FOUNDATIONS AND HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY PRIOR TO THE CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS DUE TO THE INSTALLATION OF SIGNAL EQUIPMENT.
- REFER TO TSP-9 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.
- THE CABINET AND CONTROLLER SHALL BE DELIVERED TO SHA AT 7491 CONNELLEY DRIVE, HANOVER, MD 21076. THE CONTRACTOR SHALL NOTIFY SHA AT LEAST THREE (3) DAYS IN ADVANCE OF DELIVERY.

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

AERIAL CABLE	A
ELECTRICAL	E
TELEPHONE	T
GAS	G
SEWER	S
STORM DRAIN	SD
WATER	W
CABLE TV	TV

WR&A
Whitman, Reardon
and Associates, LLP
2315 Saint Paul Street
Baltimore, Maryland 21218
(410) 235-3450

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
TRAFFIC SIGNALIZATION PLAN
MD 542 (LOCH RAVEN BLVD.) AND JOPPA RD.

RECONSTRUCT TRAFFIC SIGNAL DUE TO GEOMETRIC IMPROVEMENTS CONTRACT NO. BA3225183 03/00

DRAWN BY: BRUCE THOMPSON
CHECKED BY: DENNIS DODA
SCALE: 1" = 20'
DATE: 9-26-84

F.A.P. NO.
S.H.A. NO.
COUNTY: BALTIMORE
LOG MILE:

TS NO.
TS-2015A
T.I.M.S. NO.
SHEET NO. OF