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

PROPOSED SIGNS

15 — ← Mussula RD / Joan AVE →
D-3(1) (~~DUAL FACED~~) (VARIABLE x 32")

17 — ← Mussula RD / Joan AVE →
D-3(1) (~~DUAL FACED~~) (VARIABLE x 32") BACK TO BACK

22,25 — Loch Raven BLVD.
D-3(1) (DUAL FACED) (VARIABLE x 16")

20 — ← Joan AVE / Mussula RD →
D-3(1) (~~DUAL FACED~~) (VARIABLE x 32")

18 — ← Joan AVE / Mussula RD →
D-3(1) (~~DUAL FACED~~) (VARIABLE x 32")

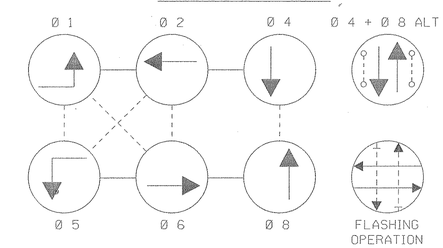
16,19 — LEFT TURN YIELD ON GREEN
R10-12 (36" X 42")

21 — NORTH MARYLAND 542 ←
23 — SOUTH MARYLAND 542 →
24 — SOUTH MARYLAND 542 ←
26 — NORTH MARYLAND 542 →
ASSOCIATED SHIELD ASSEMBLY (30" X 51")

PROPOSED SIGNALS

1,4 — 12"/8"
2,5 — 12"
3,6-10 — 12"
11-14

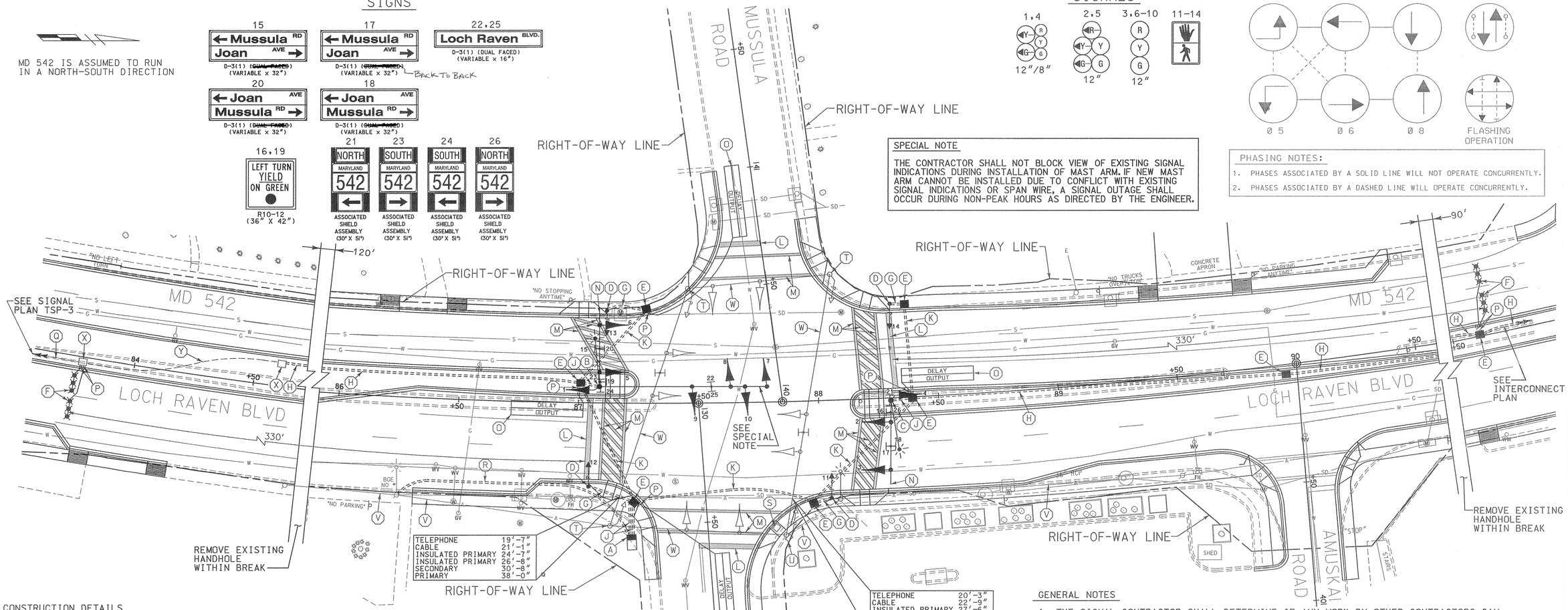
NEMA PHASING



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

SPECIAL NOTE

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.



CONSTRUCTION DETAILS

A. INSTALL NEMA SIZE "6" BASE MOUNTED CABINET AND CONTROLLER WITH CONCRETE PAD AND CONTROL AND DISTRIBUTION EQUIPMENT. (INSTALL 2-2 IN. AND 2-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN CABINET BASE.)
B. INSTALL 27 FT. STEEL POLE WITH TWIN 70 FT./50 FT. (CUT TO 31 FT.) MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNS AND 20 FT. STREET LIGHTING BRACKET WITH A 250 WATT HIGH PRESSURE SODIUM LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
C. INSTALL 27 FT. STEEL POLE WITH A 38 FT. (CUT TO 35 FT.) MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS AND 20 FT. STREET LIGHTING BRACKET WITH A 250 WATT HIGH PRESSURE SODIUM LUMINAIRE (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
D. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON AND R10-4(1) SIGN. (INSTALL 1-2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BEND IN PEDESTAL BASE).
E. INSTALL HANDHOLE.
F. INSTALL MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN.
G. INSTALL 2 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
H. INSTALL 3 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
J. INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
K. INSTALL 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
L. INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED PAVEMENT MARKINGS (STOP LINE).
M. INSTALL 12 IN. WHITE HEAT APPLIED PERMANENT PREFORMED PAVEMENT MARKINGS (CROSSWALK).
N. CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
O. INSTALL 6 FT. x 30 FT. (3-6-3 WINDING) QUADRUPOLE TYPE LOOP DETECTOR ENCASED IN 1/4 IN. FLEXIBLE TUBUNG.
P. INSTALL 1 IN. LIQUID-TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE).
Q. USE PREVIOUSLY INSTALLED CONDUIT (SEE TSP-3).
R. INSTALL 3 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED) FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CAP AND MARK CONDUIT AT UTILITY POLE FOR USE BY OTHERS.
S. REMOVE EXISTING HANDHOLE.
T. REMOVE EXISTING STEEL STRAIN POLE AND FOUNDATION 12 IN. BELOW GRADE.
U. REMOVE EXISTING STEEL STRAIN POLE, AND POLE MOUNTED CABINET AND CONTROLLER. REMOVE EXISTING FOUNDATION 12 IN. BELOW GRADE.
V. REMOVE EXISTING OVERHEAD LOOP DETECTOR CABLE.
W. REMOVE EXISTING SPAN WIRE, TRAFFIC SIGNAL HEADS AND SIGNS.
X. USE PREVIOUSLY INSTALLED HANDHOLE (SEE TSP-3).

GENERAL NOTES

1. 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.
2. THE SIGNAL CONTRACTOR SHALL ENSURE EXISTING TRAFFIC SIGNAL REMAINS OPERATIONAL UNTIL RECONSTRUCTED TRAFFIC SIGNAL IS OPERATIONAL.
3. THE CONTRACTOR SHALL NOT CUT MAST ARMS AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
4. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
5. INSTALL LOOP DETECTORS AND CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS. REFER TO SIGNING AND PAVEMENT MARKING PLANS FOR ADDITIONAL DETAILS.
6. ALL FOUNDATIONS AND HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
7. 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.
8. THE CABINET AND CONTROLLER SHALL BE DELIVERED TO SHA AT 7491 CONNELLEY DRIVE, HANOVER, MD 21076. THE CONTRACTOR SHALL NOTIFY SHA AT (410) 787-2652 AT LEAST THEREE (3) DAYS IN ADVANCE OF DELIVERY.
9. REFER TO TSP-8 FOR DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

TSP-4

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, Requardt and Associates, LLP
2315 Saint Paul Street
Baltimore, Maryland 21218
(410) 235-3450

REVISIONS		
(B)	RECONSTRUCT TRAFFIC SIGNAL DUE TO GEOMETRIC IMPROVEMENTS CONTRACT NO. BA3325193.	3/00 NML
(A)	REVISED DETECTION	03/86 BT

APPROVALS
ASST. TRAFFIC ENGINEERING DESIGN DIVISION
ASST. DISTRICT ENGINEER, TRAFFIC
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY
ORIGINAL ON FILE

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNALIZATION PLAN
MD 542 (LOCH RAVEN BLVD.)
AND JOAN AVE./MUSSULA ROAD

DRAWN BY: BRUCE THOMPSON	F.A.P. NO	TS NO. TS-2014B	SHEET NO.
CHECKED BY: DENNIS DODA	S.H.A. NO. B 785-501-485	T.I.M.S. NO.	OF
SCALE: 1" = 20'	COUNTY: BALTIMORE		
DATE: 9-26-84	LOG MILE:		