MD 193 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

VIDEO DETECTION ZONE

SPECIAL NOTES:

1. 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 WIRES, A SIGNAL OUTAGE SHALL OCCUR DURING NON-PEAK HOURS AS DIRECTED BY THE ENGINEER.
2. CONTRACTOR SHALL USE CAUTION WHEN INSTALLING SIGNAL EQUIPMENT TO AVOID DISTURBANCE OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL TEST PIT TO DETERMINE EXACT LOCATION AND DEPTH OF UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGNAL EQUIPMENT.
3. 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.
4. CLEARING AND GRUBBING WILL BE REQUIRED FOR INSTALLATION OF TRAFFIC SIGNAL EQUIPMENT.

EXISTING SIGN TO BE RELOCATED

18

S1-1 (36" x 36")

M6-2 (21" x 15")

PROPOSED SIGNS

16

R3-3(2) (36" x 36")

20,22

R3-5L (30" x 36")

14,15,17,19

Carroll AVE 8500

D-3(1) MOD. (DUAL FACED) (VARIABLE x 20") SEE SIGN DETAIL 'A' ON SHEET 2

21,23

University BLVD

D-3(1) MOD. (VARIABLE x 20") SEE SIGN DETAIL 'B' ON SHEET 2

PROPOSED SIGNAL HEADS (LED)

1 — 12"/8"

2 — 12"

3,9 — 12"

4,5,7 — 12"

6 — 12"

8 — 12"

10-13 — 16"

PROPOSED VIDEO DETECTION CAMERA

a,b,c

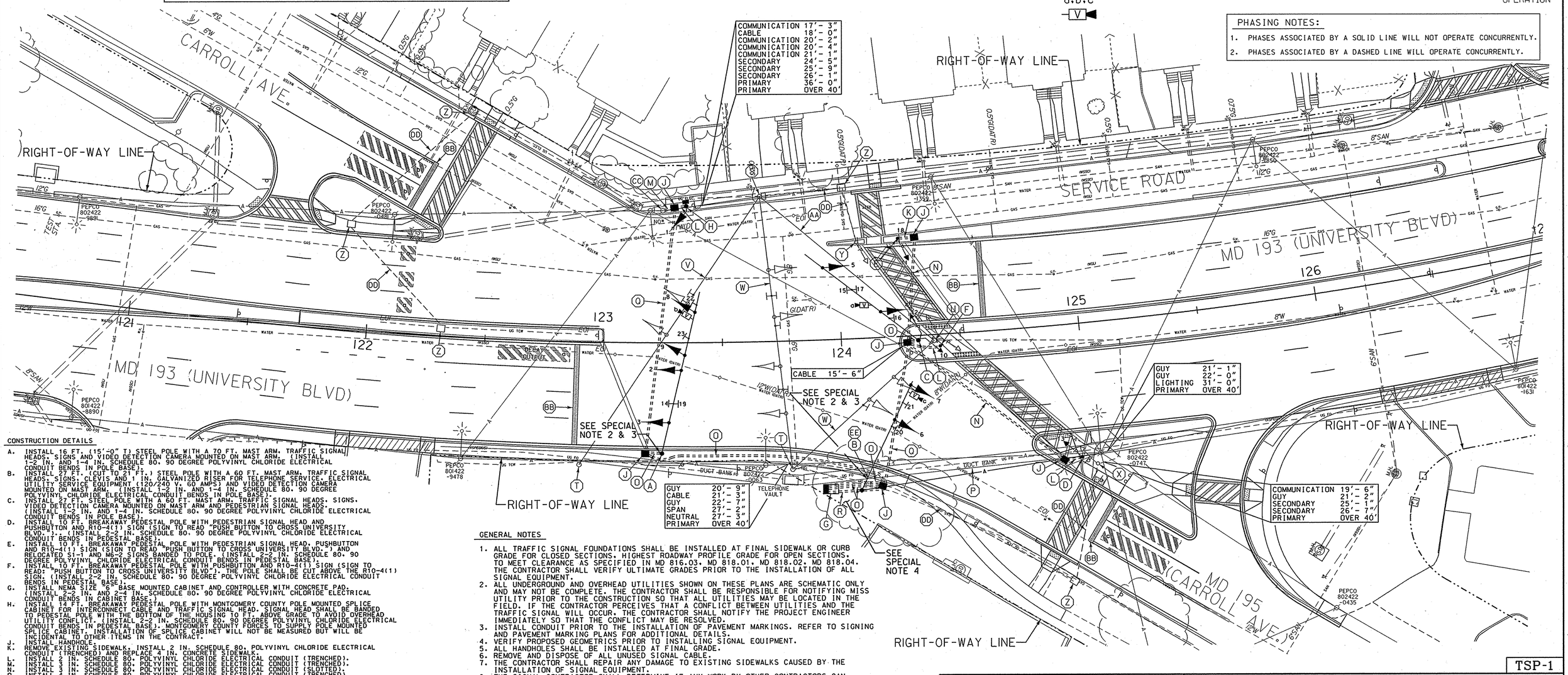
NEMA PHASING

Ø1 Ø2 Ø3 Ø4 Ø3 ALT Ø6

FLASHING OPERATION

PHASING NOTES:

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



CONSTRUCTION DETAILS

A. INSTALL 16 FT. (15'-0" T) STEEL POLE WITH A 70 FT. MAST ARM. TRAFFIC SIGNAL HEADS. SIGNS AND VIDEO DETECTION CAMERA MOUNTED ON MAST ARM. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80. 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN POLE BASE).
B. INSTALL 27 FT. (CUT TO 21 FT.) STEEL POLE WITH A 60 FT. MAST ARM. TRAFFIC SIGNAL HEADS. SIGNS. CLEVIS AND 1 IN. GALVANIZED RISER FOR TELEPHONE SERVICE. ELECTRICAL UTILITY SERVICE EQUIPMENT (120/240 V. 60 AMPS) AND VIDEO DETECTION CAMERA MOUNTED ON MAST ARM. (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 60 FT. MAST ARM. TRAFFIC SIGNAL HEADS. SIGNS. VIDEO DETECTION CAMERA MOUNTED ON MAST ARM AND PEDESTRIAN SIGNAL HEADS. (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 (SIGN TO READ "PUSH BUTTON TO CROSS UNIVERSITY BLVD.") . (INSTALL 2-2 IN. SCHEDULE 80. 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
E. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEAD. PUSHBUTTON AND R10-4(1) SIGN (SIGN TO READ "PUSH BUTTON TO CROSS UNIVERSITY BLVD.") AND RELOCATED S1-1 AND M6-2 SIGNS BANDED TO POLE. (INSTALL 2-2 IN. SCHEDULE 80. 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
F. INSTALL 10 FT. BREAKAWAY PEDESTAL POLE WITH PUSHBUTTON AND R10-4(1) SIGN (SIGN TO READ: "PUSH BUTTON TO CROSS UNIVERSITY BLVD" THE POLE SHALL BE CUT ABOVE THE R10-4(1) SIGN. (INSTALL 2-2 IN. SCHEDULE 80. 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE).
G. 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 CONDUIT BENDS IN CABINET BASE).
H. INSTALL 14 FT. BREAKAWAY PEDESTAL POLE WITH MONTGOMERY COUNTY POLE MOUNTED SPLICE CABINET FOR INTERCONNECT CABLE AND TRAFFIC SIGNAL HEAD. SIGNAL HEAD SHALL BE BANDED TO PEDESTAL POLE WITH THE BOTTOM OF THE HOUSING 10 FT. ABOVE GRADE TO AVOID OVERHEAD UTILITY CONFLICT. (INSTALL 2-2 IN. SCHEDULE 80. 90 DEGREE POLYVINYL CHLORIDE ELECTRICAL CONDUIT BENDS IN PEDESTAL BASE). MONTGOMERY COUNTY FORCES TO SUPPLY POLE MOUNTED SPLICE CABINET. INSTALLATION OF SPLICE CABINET WILL NOT BE MEASURED BUT WILL BE INCIDENTAL TO OTHER ITEMS IN THE CONTRACT.
J. INSTALL HANDHOLE.
K. REMOVE EXISTING SIDEWALK. INSTALL 2 IN. SCHEDULE 80. POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED) AND REPLACE 4 IN. CONCRETE SIDEWALK.
L. INSTALL 2 IN. SCHEDULE 80. POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
M. INSTALL 3 IN. SCHEDULE 80. POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
N. INSTALL 3 IN. SCHEDULE 80. POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
O. INSTALL 4 IN. SCHEDULE 80. POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED).
P. PROPOSED OVERHEAD ELECTRICAL AND TELEPHONE SERVICE.
Q. INSTALL 4 IN. SCHEDULE 80. POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SLOTTED).
R. INSTALL 2-2 IN. SCHEDULE 80. POLYVINYL CHLORIDE ELECTRICAL CONDUIT (TRENCHED) FOR PROPOSED UNDERGROUND ELECTRICAL AND TELEPHONE SERVICE.
S. REMOVE EXISTING STRAIN POLE AND POLE MOUNTED CABINET AND CONTROLLER. REMOVE FOUNDATION 12 IN. BELOW GRADE.
T. REMOVE EXISTING STRAIN POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE.
U. REMOVE EXISTING STRAIN POLE AND PEDESTRIAN SIGNAL HEADS. REMOVE FOUNDATION 12 IN. BELOW GRADE.
V. REMOVE EXISTING SPAN WIRE. TETHER WIRE. SIGNAL HEADS AND SIGN.
W. REMOVE EXISTING SPAN WIRE AND SIGNAL HEADS AND SIGN(S).
X. REMOVE EXISTING PEDESTAL POLE AND PEDESTRIAN SIGNAL HEAD. REMOVE FOUNDATION 12 IN. BELOW GRADE.
Y. REMOVE EXISTING PEDESTAL POLE AND PEDESTRIAN SIGNAL HEAD. RELOCATE EXISTING S1-1 (36" x 36") AND M6-2 (21"x 15") SIGNS TO NEW PEDESTRIAN POLE. REMOVE FOUNDATION 12 IN. BELOW GRADE.
Z. REMOVE EXISTING HANDHOLE.
AA. REMOVE EXISTING SPAN WIRE.
BB. INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING (STOP LINE).
CC. INSTALL 3 IN. PVC RISER ON EXISTING UTILITY POLE. DISCONNECT AND PULL BACK EXISTING INTERCONNECT CABLE HEADING EAST AND RE-FEED IN NEW RISER TO PROPOSED POLE MOUNTED SPLICE CABINET.
DD. CAP AND ABANDON EXISTING CONDUIT.
EE. CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.

GENERAL NOTES

1. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS. TO MEET CLEARANCE AS SPECIFIED IN MD 816.03. MD 818.01. MD 818.02. MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
2. 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.
3. INSTALL CONDUIT PRIOR TO THE INSTALLATION OF PAVEMENT MARKINGS. REFER TO SIGNING AND PAVEMENT MARKING PLANS FOR ADDITIONAL DETAILS.
4. VERIFY PROPOSED GEOMETRICS PRIOR TO INSTALLING SIGNAL EQUIPMENT.
5. ALL HANDHOLES SHALL BE INSTALLED AT FINAL GRADE.
6. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
7. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
8. 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.
9. CALL MONTGOMERY COUNTY TRANSPORTATION MANAGEMENT CENTER (TMC) 72 HOURS PRIOR TO ANY DIGGING TO MARK THE EXISTING TRAFFIC SIGNAL EQUIPMENT.

LEGEND OF UNDERGROUND AND OVERHEAD UTILITIES

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

WR&A

Whitman, Requardt and Associates, LLP

801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

REVISIONS				APPROVALS
				TEAM LEADER - TRAFFIC ENGINEERING DESIGN DIVISION
				ASST. TRAFFIC ENGINEERING DESIGN DIVISION
				CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
(A) REBUILD TRAFFIC SIGNAL CONTRACT NO. M03375177			9/2/05	DIRECTOR, TRAFFIC & SAFETY
SRB	NML	CJW		

ORIGINAL ON FILE

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

TRAFFIC SIGNALIZATION PLAN
MD 193 (UNIVERSITY BLVD) AND MD 195 (CARROLL AVE)

TSP-1

DRAWN BY:	F.A.P. NO.		TS NO. 4478	SHEET NO.
CHECKED BY:	S.H.A. NO.	M03375177		
SCALE: 1" = 20'	COUNTY:	MONTGOMERY	T.I.M.S. NO. G237A	25 OF 35
DATE: 2/17/2006	LOG MILE:	15.01.93.06.58		

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