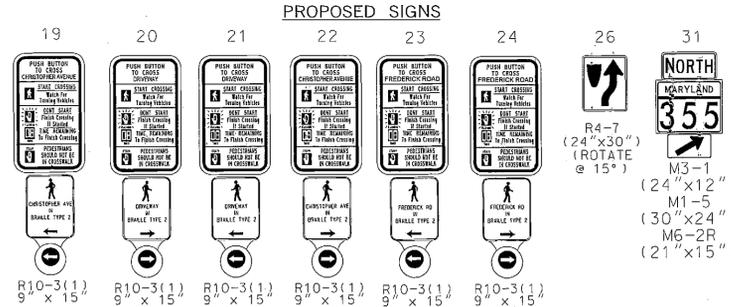


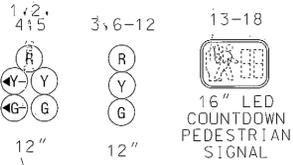
BORDER REV. DATE: June 1, 2004



MD 355 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

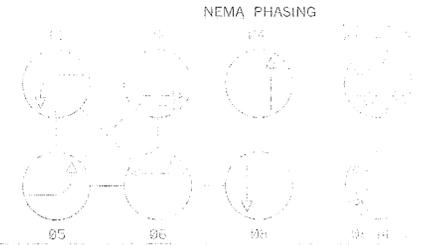


PROPOSED LED SIGNALS



PROPOSED VIDEO DETECTION CAMERAS

PROPOSED VIDEO DETECTION ZONE



NEMA PHASING

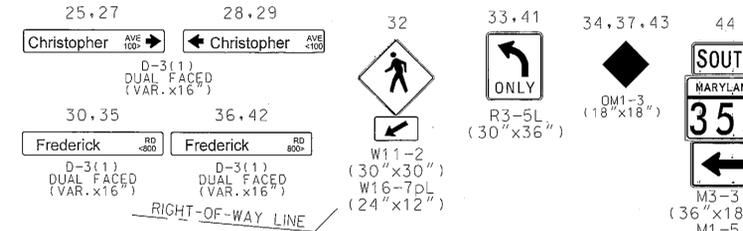
NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

GENERAL NOTES:

- 1. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE. ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES.
3. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN THE APPROPRIATE 800 SERIES STANDARD PLATES. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
4. THE CONTRACTOR SHALL MAINTAIN THE CONTINUOUS OPERATION OF ALL INTERCONNECT, VEHICULAR, PEDESTRIAN DETECTORS, AND LIGHTING DEVICES. IF ANY DEVICE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE REPAIRED WITHIN 72 HOURS BY THE CONTRACTOR AT NO COST TO THE ADMINISTRATION AFTER NOTIFICATION BY THE ENGINEER. CONTRACTOR SHALL DELIVER APS PUSHBUTTONS AND CENTRAL CONTROL UNIT TO MR. ROBERT RICKETTS AT MONTGOMERY COUNTY TECHNICAL CENTER AT 1283 SEVEN LOCKS ROAD, ROCKVILLE, MD 20854 AT LEAST 3 WEEKS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL HAVE THE APS MESSAGES PROGRAMMED FROM THE FACTORY AND DELIVER THE APS WAVE FILES TO MR. ROBERT RICKETTS.

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. THE CONTRACTOR SHALL COORDINATE WITH SHA TRAFFIC OPERATION DIVISION TO CONTACT LOCAL POWER COMPANY TO SET-UP WORK WITH TO DISCONNECT THE EXISTING ELECTRICAL SERVICE AND HAVE THE NEW SERVICE ENERGIZED.



CHRISTOPHER AVENUE

I.B.M. ENTRANCE

MD 355 (FREDERICK RD) SB

MD 355 (FREDERICK RD) NB

CONSTRUCTION DETAILS:

- A. INSTALL NEMA 'S' TYPE CABINET AND CONTROLLER AND ALL ASSOCIATED EQUIPMENT.
B. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH A 60 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS, SIGNS, AND VIDEO DETECTION CAMERA.
C. INSTALL 10 FT. PEDESTAL POLE ON MODIFIED BASE WITH BREAKAWAY COUPLINGS (MD 801-01-01), COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON AND SIGN.
D. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH A 60 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, 15 FT. LIGHTING ARM WITH LED LUMINAIRE AND PHOTOCELL, AND COUNTDOWN PEDESTRIAN LED SIGNAL HEADS.
E. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH A 70 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, AND COUNTDOWN PEDESTRIAN LED SIGNAL HEADS.
F. INSTALL CONCRETE FOUNDATION AND 27 FT. STEEL POLE WITH A 60 FT. MAST ARM, LED TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, 15 FT. LIGHTING ARM WITH LED LUMINAIRE AND PHOTOCELL, AND COUNTDOWN PEDESTRIAN LED SIGNAL HEADS.
G. INSTALL EMBEDDED METERED SERVICE PEDESTAL.
H. INSTALL 2 IN. PVC (SCHEDULE 80) ELECTRICAL CONDUITS - TRENCHED.
I. INSTALL 1-3 IN. AND 1-2 IN. PVC (SCHEDULE 80) ELECTRICAL CONDUITS - TRENCHED.
J. INSTALL 4 IN. PVC (SCHEDULE 80) ELECTRICAL CONDUIT - BORED.
K. INSTALL ELECTRICAL HANDHOLE.
L. USE EXISTING HANDHOLE. PULL BACK EXISTING INTERCONNECT CABLES TO EXISTING HANDHOLE AND REROUTE TO PROPOSED SPLICE CABINET.
M. INSTALL 4 IN. PVC (SCHEDULE 80) ELECTRICAL CONDUIT - TRENCHED.
N. REMOVE EXISTING PAVEMENT MARKINGS.
O. INSTALL PROPOSED RAMP PER DETAIL SHEET SG-02.
P. ABANDON EXISTING LOOP DETECTORS AND REMOVE ALL ASSOCIATED WIRING.
Q. REMOVE EXISTING HANDHOLE, CAP AND ABANDON EXISTING CONDUIT. REMOVE ALL UNUSED WIRES.
R. REMOVE EXISTING SIGNAL STRAIN POLE, SPAN WIRE, AND ALL ASSOCIATED EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.

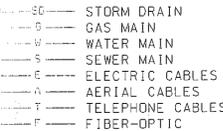
GENERAL NOTES CONTINUED:

- 6. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE MONTGOMERY COUNTY ENGINEER.
7. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
8. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
9. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALK RAMPS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
10. REFER TO SHEET SG-02 FOR DIMENSIONS OF SIGNAL EQUIPMENT, SIDEWALK RAMPS AND PAVEMENT MARKINGS WITHIN INTERSECTION.
11. REMOVE EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED CROSSWALKS AND STOP LINES.
12. ALL PAVEMENT MARKINGS SHALL BE INSTALLED PER SHA STANDARDS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERING THE SIGNAL CABINET VIDEO INTERFACE EQUIPMENT TO THE MONTGOMERY COUNTY SIGNAL SHOP.
14. CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD AND MR. ROBERT RICKETTS 72 HOURS IN ADVANCE OF INTENDED WORK.

GEOMETRIC LEGEND



UTILITY LEGEND



APPROVALS



REVISIONS

Table with columns for revision number, description, and date. Includes revisions for traffic signal reconstruction, geometric modifications, and rebuild to new geometrics.



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 355 (FREDERICK RD) @ CHRISTOPHER AVENUE GAITHERSBURG, MD

SIGNALIZATION PLAN SHEET

Table with project information: SCALE 1" = 20', DATE SEPTEMBER 26, 1986, CONTRACT NO. BW-890-801-312, DESIGNED BY, DRAWN BY T. ZAYDEI, CHECKED BY D. DODA, F.A.P. NO., TS NO. 2230, DRAWING SG-01 OF 03, SHEET NO. 01 OF 03.

PARSONS BRINCKERHOFF 100 S. Charles Street Tower 1, 10th Floor Baltimore, MD 21201 (Ph) 410-787-5050 (Fax) 410-727-4608 http://www.pbworld.com