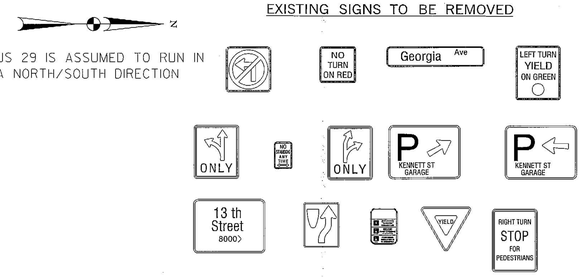
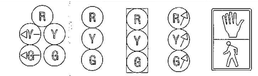
EXISTING SIGNS TO BE REMOVED



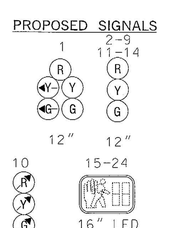
EXISTING SIGNALS TO BE REMOVED



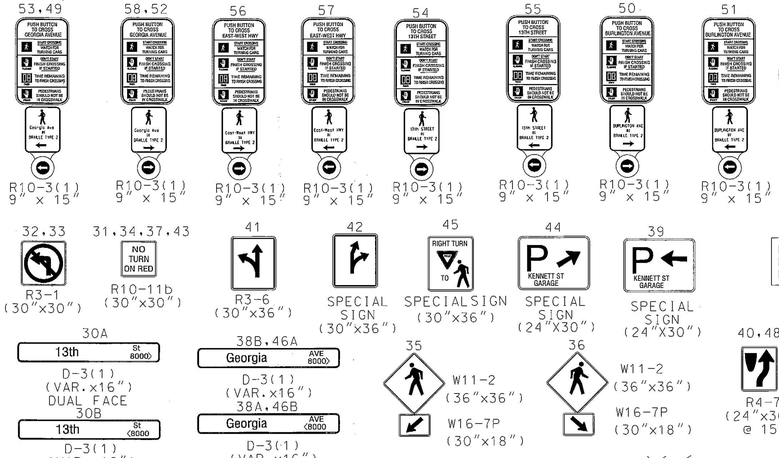
CONSTRUCTION DETAILS:

A. INSTALL A NEMA SIZE 6 BASE MOUNTED CABINET AND CONTROLLER WITH ELECTRICAL UTILITY SERVICE EQUIPMENT FOR UNDERGROUND SERVICE. (NOTE: TWO-4 IN. PVC, AND TWO-2 IN. SCHEDULE 80 CONDUIT BENDS)
B. INSTALL HANDHOLE.
C. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED
D. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. (REMOVE AND RESET BRICK AS NECESSARY)
E. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
F. INSTALL 12 IN. WHITE, HEAT APPLIED, PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
G. INSTALL 24 IN. WHITE, HEAT APPLIED, PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
H. INSTALL CONCRETE FOUNDATION FOR A 27 FT. STEEL POLE ("T" DIMENSION 15 FT. - MD STD. NO. 818.13-01) WITH 70 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, 15 FT. LIGHTING ARM, 250 WATT HPS LUMINAIRE, OVERHEAD VIDEO DETECTION CAMERA, PEDESTRIAN SIGNAL HEAD, AUDIBLE TACTILE PUSHBUTTON STATION AND SIGN (NOTE: POLE, MAST ARM, LIGHTING ARM AND STREET LIGHT HOUSING TO BE PAINTED TIGER DRYLACK GREEN RAL 6009, WITH TWO 3 IN. PVC SCHEDULE 80 CONDUIT BENDS).
J. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT FROM MANHOLE TO TRAFFIC SIGNAL CABINET (SERVICE COORDINATED BY TRAFFIC OPERATIONS DIVISION - SHA).
K. INSTALL CONCRETE FOUNDATION FOR A 27 FT. STEEL POLE ("T" DIMENSION 15' - MD STD. NO. 818.13-01) WITH 38 FT MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, PEDESTRIAN SIGNAL HEAD (NOTE: POLE AND MAST ARM TO BE PAINTED TIGER DRYLACK GREEN RAL 6009, WITH TWO 3 IN. PVC SCHEDULE 80 CONDUIT BENDS).
L. INSTALL CONCRETE FOUNDATION FOR 10 FT. STEEL PEDESTAL POLE WITH BREAKAWAY COUPLINGS (MD STD. NO. 818.16-01), COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE TACTILE PUSHBUTTON STATION AND SIGN (NOTE: POLE TO BE PAINTED TIGER DRYLACK GREEN RAL 6009) WITH ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND.
M. INSTALL CONCRETE FOUNDATION FOR 10 FT. (CUT TO 5 FT.) STEEL PEDESTAL POLE WITH BREAKAWAY COUPLINGS (MD STD. NO. 818.16-01), AUDIBLE TACTILE PUSHBUTTON STATION AND SIGN (NOTE: POLE TO BE PAINTED TIGER DRYLACK GREEN RAL 6009) WITH ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND.
N. REMOVE EXISTING POLE, MAST ARM(S) ALL ASSOCIATED EQUIPMENT AND FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
O. REMOVE EXISTING POLE, ALL ASSOCIATED EQUIPMENT AND FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
P. REMOVE EXISTING BASE MOUNTED CONTROLLER, CABINET AND FOUNDATION 12 IN BELOW GRADE AND BACKFILL.
R. REMOVE EXISTING HANDHOLE
S. REMOVE EXING PAVEMENT MARKINGS.
T. CAP AND ABANDON EXISTING CONDUIT.
U. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER. CAP AND ABANDON EXISTING EQUIPMENT.
V. INSTALL CONCRETE FOUNDATION FOR A 27 FT. STEEL POLE ("T" DIMENSION 15' - MD STD. NO. 818.13-01) WITH 70 FT MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, VIDEO DETECTION CAMERA, PEDESTRIAN SIGNAL HEAD, AUDIBLE TACTILE PUSHBUTTON STATION AND SIGN (NOTE: POLE AND MAST ARM TO BE PAINTED TIGER DRYLACK GREEN RAL 6009, WITH TWO 3 IN. PVC SCHEDULE 80 CONDUIT BENDS).
W. INSTALL GROUND MOUNT SIGN.
X. PROPOSED INTERCONNECT SHOWN FOR INFORMATION PURPOSE ONLY, SEE INTERCONNECT PLAN FOR CONDUIT DETAILS.
Y. INSTALL CONCRETE FOUNDATION FOR A 27 FT. STEEL POLE ("T" DIMENSION 15 FT. - MD STD. NO. 818.13-01) WITH 50 FT. MAST ARM, TRAFFIC SIGNAL HEADS, SIGNS, 15 FT. LIGHTING ARM, 250 WATT HPS LUMINAIRE AND OVERHEAD VIDEO DETECTION CAMERA (NOTE: POLE, MAST ARM, LIGHTING ARM AND STREET LIGHT HOUSING TO BE PAINTED TIGER DRYLACK GREEN RAL 6009, WITH TWO 3 IN. PVC SCHEDULE 80 CONDUIT BENDS).

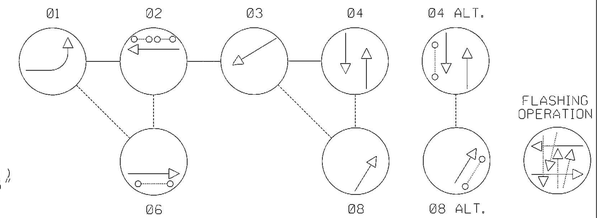
PROPOSED SIGNALS



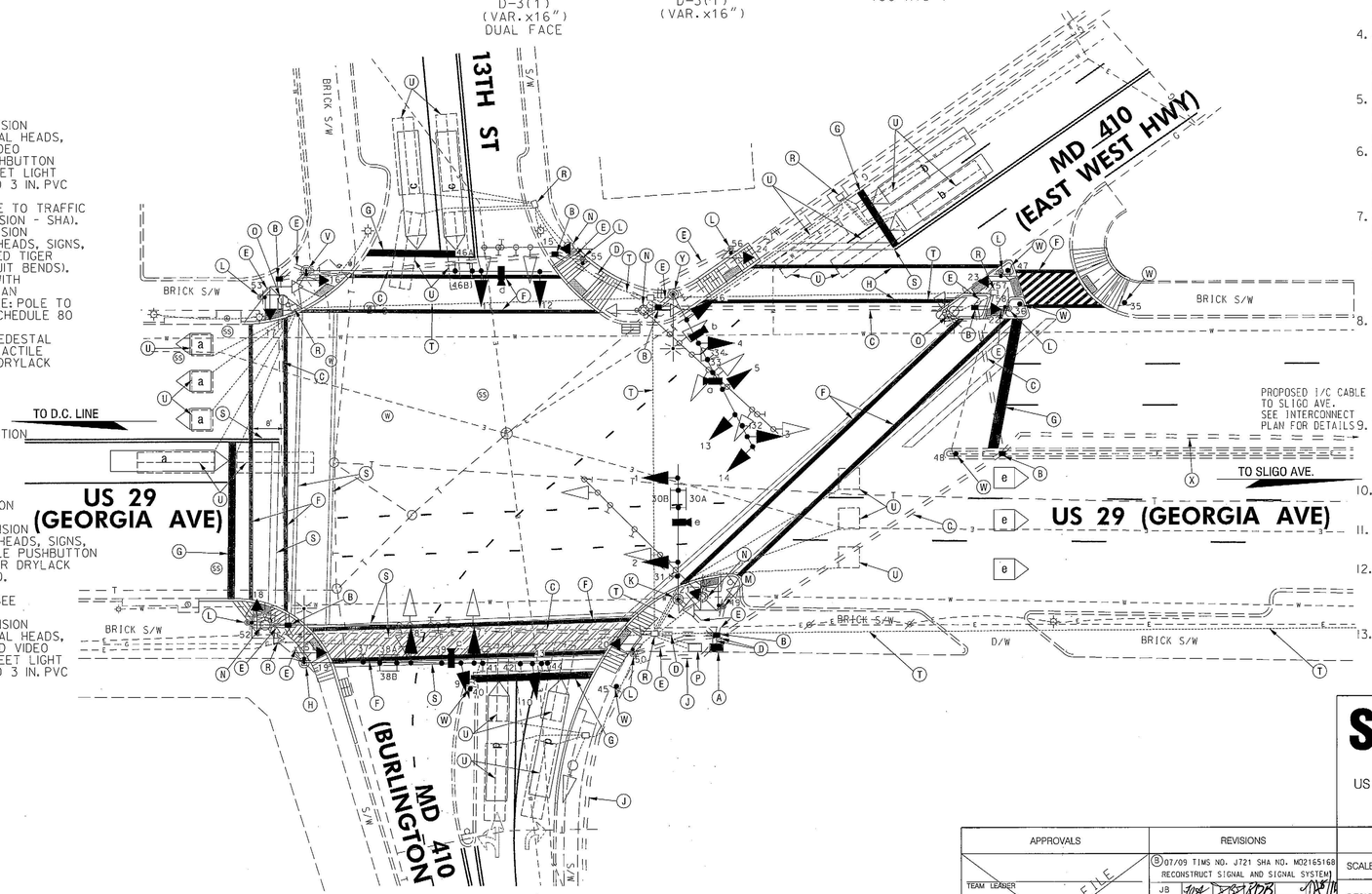
PROPOSED SIGNS



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. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE PROJECT ENGINEER.
2. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
3. FOR FINAL PAVEMENT MARKINGS REFER TO THE PAVEMENT MARKING PLANS, OTHER THAN THOSE DETAILED ON THE PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.
4. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL, EXCEPT THE ITEMS DETAILED IN EQUIPMENT LIST C.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
6. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
7. 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 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.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL SIGNAL EQUIPMENT REMOVED IN DECORATIVE BRICK SIDEWALK AREAS IS REPLACED WITH MATCHING DECORATIVE BRICK. IT IS RECOMMENDED THAT THE CONTRACTOR COORDINATE ALL DECORATIVE BRICK WORK WITH THE SILVER SPRING REGIONAL CENTER/URBAN DISTRICT. CONTACT YVETTE FREEMAN AT (240) 773-2080 OR (301) 565-7300.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PEPCO POWER SERVICE AND THEN UTILIZE AN APPROVED PEPCO CONTRACTOR TO CONNECT THE POWER FEED FROM THE PEPCO MANHOLE TO THE METER SOCKET.
10. WHEN FEASIBLE THE CABINET SHOULD BE ORIENTED TO FACE US 29. HOWEVER, THE FINAL LOCATION OF THE CABINET SHALL BE APPROVED BY THE PROJECT ENGINEER.
11. ALL CONCRETE WORK THAT REQUIRES THE INSTALLATION OF A GROUND MOUNTED SIGN SHALL USE 'SLEEVES' IN ACCORDANCE WITH MD 812.05-1 AND MD 812.05-2.
12. MONTGOMERY COUNTY DPW&T WILL BE RESPONSIBLE FOR ALL SURVEILLANCE CAMERAS IN THE PROJECT LIMITS. THE CONTRACTOR SHALL CONTRACT MR. KAMAL HAMUD AT (240) 777-8761 72 HOURS PRIOR TO WORKING ON A SURVEILLANCE CAMERA LOCATION.
13. SEE GEOMETRIC PLAN SHEET FOR THIS INTERSECTION: FOR APS NOTE, GEOMETRIC AND HANDICAP RAMP CONSTRUCTION DETAILS.

GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
G GAS MAIN
W WATER MAIN
SAN SEWER MAIN
E ELECTRIC CABLES
T TELEPHONE CABLES
FO FIBER-OPTIC

BY: xiaoyu

BRUDIS & ASSOCIATES, INC.
Consulting Engineers
6240 Rumsey Road, Suite C
Columbia, Maryland 21045
Phone 410-884-3607
www.brudis.com

APPROVALS
TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR
ORIGINAL ON FILE

REVISIONS
B 07/09 TIMS NO. J721 SHA NO. MO2165168 RECONSTRUCT SIGNAL AND SIGNAL SYSTEM
JB
A 03/28/96 XX4455185 RE-CUT LOOPS, ADD SAMPLING AND ADJUST PHASING DUE WIDENING
NML | GW | RAR | DAB | DAB/BK

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 29 (GEORGIA AVE) AT MD 410 (BURLINGTON AVE/13TH ST)
TRAFFIC SIGNAL DESIGN
SILVER SPRING, MD

SIGNALIZATION PLAN SHEET

SCALE 1" = 20' | DATE 0396 | CONTRACT NO. XX4455185

DESIGNED BY | COUNTY MONTGOMERY
DRAWN BY | LOGMILE 15041000.18
CHECKED BY | TIMS NO. J721
F.A.P. NO. 1713B | TOD NO.

TS NO. 1713B | DRAWING – 1 OF 3 | SHEET NO. 17 OF 26

PLOTTED: Wednesday, July 15, 2009 AT 02:27 PM
FILE: p:\04-005 signals\us 29 thru silver spring\MD 410\Drawings\CADD\Working\pSG-P001_US29@MD410.dgn