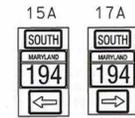
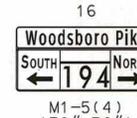


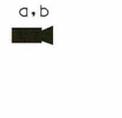
EXISTING SIGNS TO BE REMOVED



PROPOSED SIGNS



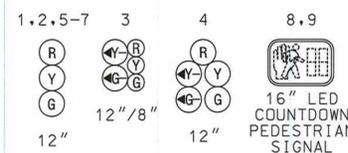
PROPOSED VIDEO DETECTION CAMERA



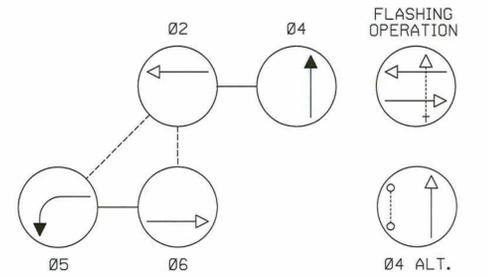
EXISTING SIGNAL TO BE REMOVED



PROPOSED SIGNALS



NEMA PHASING



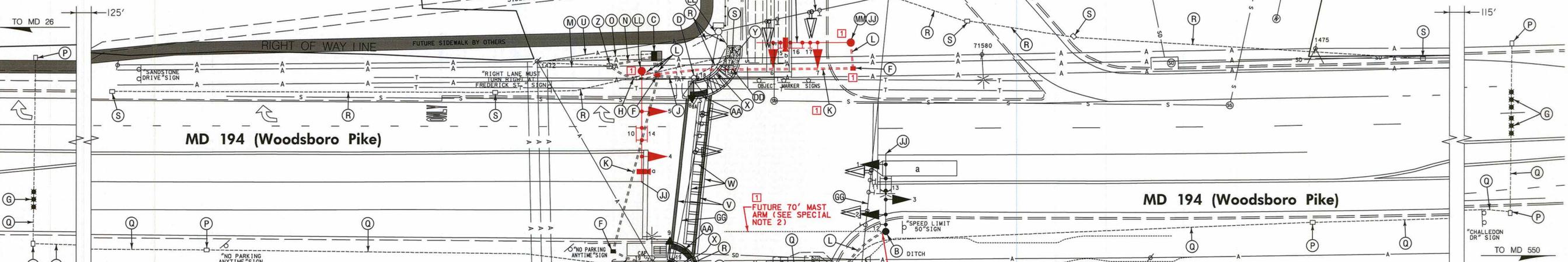
NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

PROPOSED SIDEWALK BY OTHERS
EXISTING CONCRETE SIDEWALK TO BE REMOVED

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 DELIVER THE 70 FT. MAST ARM FOR FUTURE USE TO THE OFFICE OF TRAFFIC AND SAFETY STORAGE YARD.
3. FLANGE PLATE FOR FUTURE 70 FT. MAST ARM SHALL BE COVERED.

MD 194 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION



- CONSTRUCTION DETAILS**
- INSTALL CONCRETE FOUNDATION WITH A 16.5 FT. (15' 0" T) STEEL POLE WITH A TWIN 50 FT. (CUT TO 38 FT.) 70 FT. (CUT TO 65 FT.) MAST ARMS, TRAFFIC SIGNAL HEADS, SIGNS AND VIDEO DETECTION CAMERA MOUNTED ON MAST ARM. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
 - INSTALL CONCRETE FOUNDATION WITH A 27 FT. TWIN STEEL POLE WITH A 50 FT. (CUT TO 31 FT.) MAST ARM ORIENTED AS SHOWN, WITH FLANGE PLATE FOR FUTURE MAST ARM ORIENTED SOUTH. (FOUNDATION SHALL BE INSTALLED FOR FUTURE TWIN MAST ARM CONFIGURATION. THE 70 FT. MAST ARM SHALL BE DELIVERED TO THE OFFICE OF TRAFFIC AND SAFETY STORAGE YARD). INSTALL TRAFFIC SIGNAL HEADS, SIGNS AND 15 FT. STREET LIGHTING ARM WITH A 250 WATT HIGH PRESSURE SODIUM VAPOR LUMINAIRE. (INSTALL 1-2 IN. AND 1-4 IN. SCHEDULE 80, 90 DEGREE PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
 - INSTALL NEMA SIZE "5" BASE MOUNTED CABINET AND CONTROLLER ON EXISTING CONCRETE FOUNDATION. INSTALL 5 IN. CONCRETE PAD (24" x 46") FOR ACCESS TO FRONT OF CABINET.
 - USE EXISTING PEDESTAL POLE. REMOVE EXISTING PEDESTAL SIGNAL HEAD, PUSHBUTTON AND R10-4 SIGN. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEAD AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING LEFT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WOODSBORO PIKE"). CLEAN EXISTING DRILLED HOLES WITH BRUSH AND SPRAY COLD GALVANIZING COMPOUND ON THE AFFECTED AREAS. TIE PROPOSED 2 IN. CONDUIT INTO EXISTING BEND IN FOUNDATION.
 - USE EXISTING PEDESTAL POLE FOUNDATION. REMOVE EXISTING PEDESTAL POLE, PUSHBUTTON AND R10-4 SIGN. INSTALL 10 FT. STEEL PEDESTAL POLE ON EXISTING FOUNDATION WITH COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON INSTALLED WITH VIBRATING ARROW POINTING RIGHT AND R10-3(1) SIGN. (SIGN TO READ "PUSH BUTTON TO CROSS WOODSBORO PIKE"). TIE PROPOSED 2 IN. CONDUIT INTO EXISTING BEND IN FOUNDATION.
 - INSTALL HANDHOLE.
 - INSTALL NON-INVASIVE MICROLOOP PROBE SET WITH 1,000 FT. LEAD-IN IN EXISTING 3 IN. CONDUIT.
 - INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
 - INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED. CONDUIT SHALL TIE INTO EXISTING BEND IN PEDESTAL BASE.
 - INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
 - INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
 - EXISTING 4 IN. SCHEDULE 80, POLYVINYL CHLORIDE ELECTRICAL CONDUIT FOR PROPOSED UNDERGROUND ELECTRICAL SERVICE. CONDUIT SHALL TIE INTO EXISTING BENDS IN PEDESTAL AND CABINET BASE.
 - EXISTING 2 IN. SCHEDULE 80, PVC ELECTRICAL CONDUIT FOR PROPOSED UNDERGROUND TELEPHONE FOR USE BY OTHERS.
 - USE EXISTING HANDHOLE.
 - USE EXISTING CONDUIT.
 - CAP AND ABANDON EXISTING CONDUIT.
 - REMOVE EXISTING HANDHOLE.
 - ABANDON EXISTING LOOP DETECTOR. DISCONNECT AND REMOVE LOOP DETECTOR CABLES FROM CONDUITS, HANDHOLES, SIGNAL STRUCTURES AND CONTROLLER.
 - EXISTING OVERHEAD ELECTRICAL SERVICE FEED TO BE REMOVED BY OTHERS.
 - INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALKS.
 - REMOVE EXISTING PAVEMENT MARKINGS.
 - INSTALL STANDARD TYPE A CONCRETE CURB.
 - REMOVE EXISTING SIDEWALK AND INSTALL 5 IN. CONCRETE SIDEWALK.
 - USE EXISTING METEDED SERVICE PEDESTAL.
 - REMOVE EXISTING SIDEWALK RAMP AND INSTALL SIDEWALK RAMP (SEE SHEET TSP-2 FOR DETAILS) AND DETECTABLE WARNING SURFACE STANDARD NO. MD 655.40.
 - REMOVE EXISTING SIDEWALK. BACKFILL, SEED AND MULCH.
 - INSTALL CONCRETE CURB AND GUTTER (STANDARD NO. MD 620.02 TYPE 'A').
 - REMOVE EXISTING SHIELD ASSEMBLY SIGNS AND SUPPORT AS SHOWN.
 - REMOVE EXISTING STRAIN POLE, POLE MOUNTED CABINET AND CONTROLLER AND METER AND DISCONNECT. SHA SIGNAL SHOP SHALL BE NOTIFIED TO REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
 - REMOVE EXISTING STRAIN POLE AND ALL ASSOCIATED EQUIPMENT. REMOVE FOUNDATION 12 IN. BELOW GRADE AND BACKFILL.
 - REMOVE EXISTING SPAN WIRE AND ALL ASSOCIATED EQUIPMENT.
 - USE EXISTING HANDHOLE AND REBUILD WITH NEW FRAME AND COVER.
 - CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE.
 - INSTALL HANDHOLE. HANDHOLE TO BE INSTALLED ON TOP OF EXISTING 2 IN. AND 4 IN. CONDUIT STUBS.
 - INSTALL CONCRETE FOUNDATION WITH A 16.5 FT. (15' 0" T) STEEL POLE WITH A 50 FT. (CUT TO 44 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 PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).
 - INSTALL CONCRETE FOUNDATION WITH A 27 FT. (CUT TO 21 FT.) STEEL POLE WITH A 38 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 PVC ELECTRICAL CONDUIT BENDS IN POLE BASE).

- GENERAL NOTES**
1. 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.
 2. 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.
 3. VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
 4. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
 5. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
 6. ALL PROPOSED LUMINAIRES SHALL BE SUPPLIED WITH A PHOTOCELL.
 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
 8. REMOVE AND DISPOSE OF ALL UNUSED SIGNAL CABLE.
 9. THE CONTRACTOR SHALL NOT CUT MAST ARM AS INDICATED ON PLANS UNTIL MAST ARM POLE LOCATION IS FINALIZED.
 10. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" TO A 60" x 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
 11. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
 12. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
 13. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNALS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND FIG. 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
 14. ALL SIDEWALK RAMP SHALL BE INSTALLED AS PER STANDARDS MD 655.11 AND MD 655.12.
 15. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING SIDEWALKS CAUSED BY THE INSTALLATION OF SIGNAL EQUIPMENT.
 16. REFER TO SHEET 2 FOR UTILITY HEIGHTS AND DIMENSIONS OF SIGNAL EQUIPMENT AND PAVEMENT MARKINGS WITHIN INTERSECTION.

WR&A
WHITMAN, REQUARDT & ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

GEOMETRIC LEGEND	
---	EXISTING
---	PROPOSED

UTILITY LEGEND	
SD	STORM DRAIN
G	GAS MAIN
W	WATER MAIN
S	SEWER MAIN
E	ELECTRIC CABLES
A	AERIAL CABLES
T	TELEPHONE CABLES
F	FIBER-OPTIC

APPROVALS	
TEAM LEADER	(Signature)
ASST. DIR. CHIEF	(Signature)
DIRECTOR CHIEF	(Signature)
OFFICE DIRECTOR	(Signature)

REVISIONS	
1	REDLINE NO. 1 ADDED SIGNAL ON NW CORNER AND REVISE SIGNAL POLE TO 1270 CONTRACT NO. XX6505185 8/02/2012
2	RECONSTRUCT TRAFFIC SIGNAL AND INSTALL APS/CPS, TIMSP L270 CONTRACT NO. XX6505185 5/08/2012
3	ADD N/E/C LEFT TURN PHASE. SHA NO. BPS8862. TIMSP L270 REVISION NEVER INSTALLED 4/22/2010

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 194 (Woodsboro Pike) and Glade Blvd.
Walkersville, Maryland

TRAFFIC SIGNALIZATION PLAN			
SCALE	1" = 20'	DATE	2/28/1985
DESIGNED BY	D. Miller	COUNTY	Frederick
DRAWN BY	D. Miller	LOGMILE	10019402.83
CHECKED BY	G. Cook	TIMS NO.	
F.A.P. NO.		TOD NO.	
TS NO.	2064G	DRAWING	TSP-1 OF 3
		SHEET NO.	1 OF 3

BY: sbloss

PLOTTED: August 08, 2012
FILE: N:\31669-195\CADD\redline_2012\07\PSG-P001_L270-RL1.dgn