

I. GENERAL

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RECONSTRUCTION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 28/MD 911 (FIRST STREET) AT MD 586/MD 28 (VEIRS MILL ROAD) IN MONTGOMERY COUNTY. THIS SIGNAL SHALL BE RECONSTRUCTED TO A MAST ARM FROM A SPAN WIRE DESIGN. COUNTDOWN PEDESTRIAN SIGNALS AND ACCESSIBLE PEDESTRIAN SIGNALS (APS) SHALL BE INSTALLED FOR THE NORTH AND SOUTH CROSSING OF MD 28/MD 911 (FIRST STREET) AND THE EAST AND WEST CROSSINGS OF MD 586/MD 28 (VEIRS MILL ROAD). OVERHEAD VIDEO DETECTION CAMERA'S SHALL BE INSTALLED FOR THE MD 28/MD 911 PRESENCE DETECTION AND FOR THE LEFT TURN LANES ON MD 586/MD 28.

II. INTERSECTION OPERATION

1. THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA 8-PHASE, SEMI-ACTUATED MODE.

NOTES

- FOR FINAL PAVEMENT MARKINGS, REFER TO THE PAVEMENT MARKING PLANS, AS APPLICABLE; OTHER THAN THOSE DETAILED ON THE PLAN. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH ADMINISTRATION STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE, EXCLUDING INTERCONNECT CABLE.
- 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.
- 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 CONSTRUCTION SO THAT ALL UTILITY LOCATIONS MAY BE LOCATED AND MARKED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 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 BY THE CONTRACTOR WITHIN 72 HOURS AT NO COST TO THE ADMINISTRATION, AFTER NOTIFICATION BY THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY ED RODENHIZER (410-787-7650), KEITH LORD (301-279-1291), MIKE KINNEY (240-777-8760), AND KAMAL HAMUD (240-777-8761) AT LEAST 72 HOURS IN ADVANCE OF BEGINNING WORK AT THE INTERSECTION.
- ALL SLOTTING SHALL BE PERFORMED PRIOR TO LAYING FINAL PAVEMENT.

APS NOTES

- THE APS PUSH BUTTONS SHALL BE DELIVERED TO KEITH LORD AT THE MONTGOMERY COUNTY TECHNICAL CENTER AT LEAST TWO (2) WEEKS PRIOR TO BEGINNING WORK, SO THAT THE PROGRAMMING MAY BE CHECKED.
- APS WILL FUNCTION AS FOLLOWS:
TO CROSS VEIRS MILL ROAD
A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE MESSAGE WILL BE "WAIT TO CROSS VEIRS MILL AT FIRST."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.
TO CROSS FIRST STREET
A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE MESSAGE WILL BE "WAIT TO CROSS FIRST AT VEIRS MILL."
B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO TWO PERCENT (2%).
- THE 10' SEPERATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT FROM CENTER OF POLE TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS 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.

CONTACTS

DISTRICT THREE

MR. JEFFREY WENTZ
ASSISTANT DISTRICT ENGINEER - TRAFFIC
301-513-7318
MR. KEVIN NOWAK
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
301-513-7336
MR. VERNON STINNETT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
301-513-7304
MR. AUGIE REBISH
UTILITY ENGINEER
301-513-7350

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630
MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
410-787-7630
MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
410-787-7650
MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7670
MS. DARLENE EIDE
SUPPLY OFFICER IV
(SIGNAL SHOP WAREHOUSE)
410-787-7668

MONTGOMERY COUNTY

MR. KEITH LORD
MONTGOMERY COUNTY
SIGNAL SHOP
301-279-1971
MR. KAMAL HAMUD
TRAFFIC ENGINEER - MCTMC
240-777-8761
MR. MIKE KINNEY
MONTGOMERY COUNTY
TRAFFIC ENGINEER
240-777-8760

INTERCONNECT NOTES

- INSTALLATION OF FIBEROPTIC AND INTERCONNECT AERIAL CABLES SHALL CONFORM TO PROVISIONS OF TECORDIA'S BLUE BOOK MANUAL OF CONSTRUCTION PROCEDURES SR-1421 LATEST ISSUE AND TO THE PROVISIONS OF ANSI NATIONAL ELECTRICAL SAFETY CODE, THE NATIONAL ELECTRICAL CODE, MONTGOMERY COUNTY ELECTRICAL SAFETY CODE, AND OSHA. WHERE CODES CONFLICT, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REQUESTING A LOCATE OF MONTGOMERY COUNTY'S EQUIPMENT TO INCLUDE BUT NOT LIMITED TO INTERCONNECT CABLE, FIBER OPTIC CALBE, AND SIGNAL EQUIPMENT: EITHER OVERHEAD OR UNDERGROUND, SEVENTY-TWO (72) HOURS IN ADVANCE OF INTENDED WORK. CONTACT MCDPW&T AT 240-777-2100 TO COORDINATE A DATE AND TIME FOR AN ON-SITE LOCATE WITH A DESIGNATED CONTRACTOR REPRESENTATIVE.
- DISCONNECTING AND SPLICING OF INTERCONNECT CABLE SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES. CONTACT KAMAL HAMUD AT 240-777-8761 SEVENTY-TWO (72) HOURS IN ADVANCE OF ANY INTENDED INTERCONNECT WORK. INTENDED WORK INCLUDES RELOCATING, INSTALLING, OR MOVING ANY INTERCONNECT CABLE.

- THE CONTRACTOR SHALL PROPERLY INSTALL THE INTERCONNECT CABLE OVERHEAD OR UNDERGROUND INTO THE DESIGNATED SPLICE ENCLOSURES AND PROPERLY TAG EACH CABLE.
- MONTGOMERY COUNTY SHALL BE RESPONSILBE FOR VERIFYING THE PHYSICAL INTEGRITY OF THE INTERCONNECT CABLE AS WELL AS FOR TESTING THE OPERABILITY OF EACH CABLE CONDUCTOR. IF A PROBLEM ARISES WITH THE PHYSICAL INTEGRITY OR OPERABILITY OF THE INTERCONNECT CABLE IT SHALL BE THE RESPONSIBILITY OF THE INSTALLATION CONTRACTOR TO REPLACE OR REPAIR WITH MONTGOMERY COUNTY'S APPROVAL. FINAL (QUALITY CONTROL TESTING) WILL BE APPROVED BY MONTGOMERY COUNTY AND VERIFIED AS ACCEPTED BY KAMAL HAMUD AT 240-777-8761.
- NO ADDITIONAL SPLICES ARE TO BE INTRODUCED INTO EITHER THE INTERCONNECT CABLE OR THE FIBER OPTIC CABLE.
- POLE MOUNTED SPLICE CABINETS SHALL BE INSTALLED AT GROUND WORKING HEIGHT. SPLICE CLOSURE FOR INTERCONNECT CABLE SPLICES SHALL BE WITH 3" RISERS AND WEATHER HEADS. NO STRAND MOUNTED OR AERIAL CLOSURE WILL BE ACCEPTED.
- IN ALL CASES WHERE THERE IS A FIBER LASHED TO THE EXISTING I/C, MONTGOMERY COUNTY FORCES SHALL PERFORM THE REROUTING AND/OR INSTALLATION.

INTERSECTION DETAILS

AERIAL CABLE DETAIL

PRIMARY	35'+
SECONDARY	35'+
INSULATED	32'0"
PRIMARY	
COMMUNICATION CABLE	26'0"
COMMUNICATION CABLE	24'3"
COMMUNICATION CABLE	21'3"
	GRADE

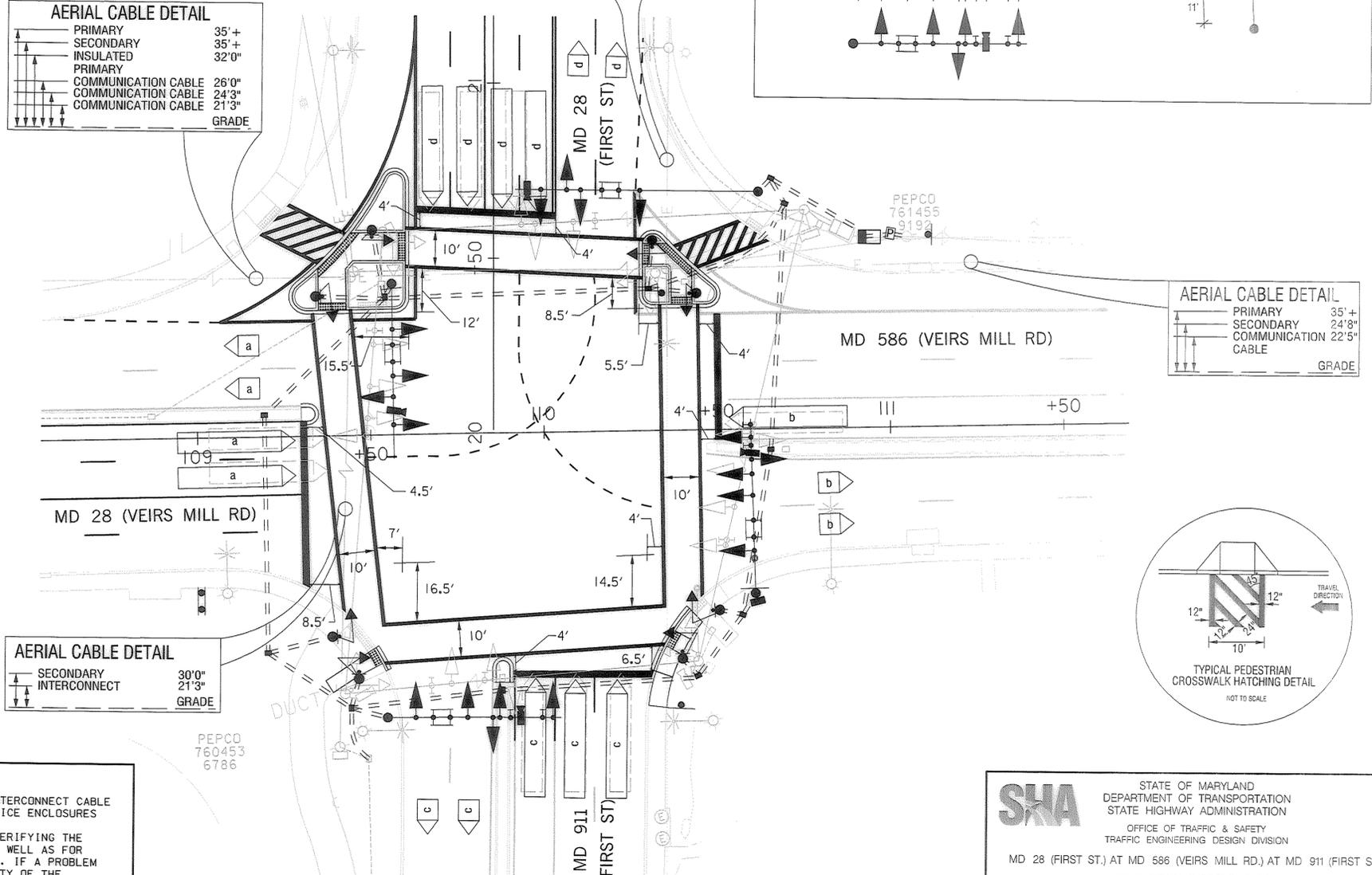
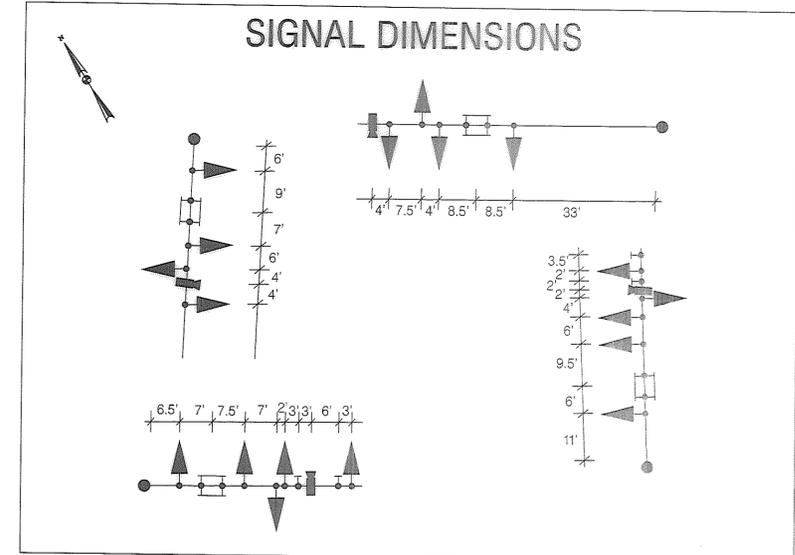
AERIAL CABLE DETAIL

SECONDARY	25'0"
	GRADE

AERIAL CABLE DETAIL

SECONDARY	30'0"
INTERCONNECT	21'3"
	GRADE

PEPCO
760453
6786



AERIAL CABLE DETAIL

PRIMARY	35'+
SECONDARY	24'8"
COMMUNICATION CABLE	22'5"
	GRADE



SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 28 (FIRST ST.) AT MD 586 (VEIRS MILL RD.) AT MD 911 (FIRST ST.)
INTERSECTION IMPROVEMENTS
ROCKVILLE, MARYLAND

GENERAL INFORMATION SHEET - 1
SCALE 1" = 20' DATE JUNE 2009 CONTRACT NO. MQ4215168
DESIGNED BY J.PALADUGU COUNTY MONTGOMERY
DRAWN BY J.PALADUGU LOGMILE 15002822.89
CHECKED BY K.RINKER TMS NO. L-980
F.A.P. NO. SEE TITLE SHEET TOD NO. MO717-01
TS NO. 51F DRAWING pSG OF N001 SHEET NO. 18 OF 28

SABRA, WANG & ASSOCIATES, INC.
1504 JOH AVENUE
SUITE 160
BALTIMORE, MD 21227
WWW.SABRA-WANG.COM