PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF MID-BLOCK CROSSWALKS WITH HAZARD IDENTIFICATION BEACONS AND APS MODEL X PEDESTRIAN PUSHBUTTONS ALONG MD 320 (PINEY BRANCH ROAD) BETWEEN MD 193 (UNIVERSITY BOULEVARD) AND MD 650 (NEW HAMPSHIRE AVENUE) IN MONTGOMERY COUNTY.

MD 320 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE HAZARD IDENTIFICATION BEACONS WILL FLASH WHEN ACTIVATED BY PUSH BUTTONS.

CONTROLLER REQUIREMENTS

THE CONTRACTOR SHALL INSTALL NEMA SIZE "5" POLE MOUNTED CABINETS WITH ASSOCIATED EQUIPMENT ON PROPOSED PEDESTAL POLES. THE MONTGOMERY COUNTY SIGNAL SHOP SHALL INSTALL ONE (1) ASC/3 CONTROLLER, ONE (1) MODEL X WIRE CENTRAL CONTROL UNIT AND ALL OTHER ASSOCIATED EQUIPMENT WITHIN EACH CABINET.

APS WILL FUNCTION AS FOLLOWS:

TO CROSS PINEY BRANCH ROAD:

A. WHEN A PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON, THE MESSAGE WILL BE "YELLOW FLASHING LIGHTS ACTIVATED FOR PINEY BRANCH ROAD. WATCH FOR TRAFFIC. USE CAUTION."

SPECIAL NOTES

1. MONTGOMERY COUNTY SIGNAL SHOP SHALL INSTALL APS CONTROL UNIT INTO CONTROLLER CABINET. THE APS PUSH BUTTONS SHALL BE PROGRAMMED BY THE MANUFACTURER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND SHALL PROPERLY LABEL EACH CABLE.
3. ALL CONTROLLER CABINET WIRING WILL BE PERFORMED BY MONTGOMERY COUNTY FORCES. CONTACT MR. KAMAL HAMUD AT (240) 777-8761 72 HOURS IN ADVANCE OF INTENDED WORK.

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Cedric Ward
Assistant District Engineer - Traffic
Phone: 301-513-7498

Mr. Victor Grafton
District Utility Engineer
Phone: 301-513-7350

Mr. Vernon Stinnett
Assistant District Engineer - Maintenance
Phone: 301-513-7304

OFFICE OF TRAFFIC AND SAFETY:

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
410-787-7630

Mr. Edward Rodenhizer
Chief Signal Operations
Phone: 410-787-7650

Mr. Eugene Bailey
Chief Sign Operations
410-787-7670

MONTGOMERY COUNTY:

Mr. Kamal Hamud
Traffic Engineering
240-777-8761

Mr. Bob Ricketts
Signal Shop
301-279-1975

The Power Company is: Pepco
Mr. Paul Wilson
201 W. Gude Drive
Rockville, MD 20850
Phone: 301-548-4332

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE - ALL EQUIPMENT IS TO BE FURNISHED BY THE CONTRACTOR		

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR		

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

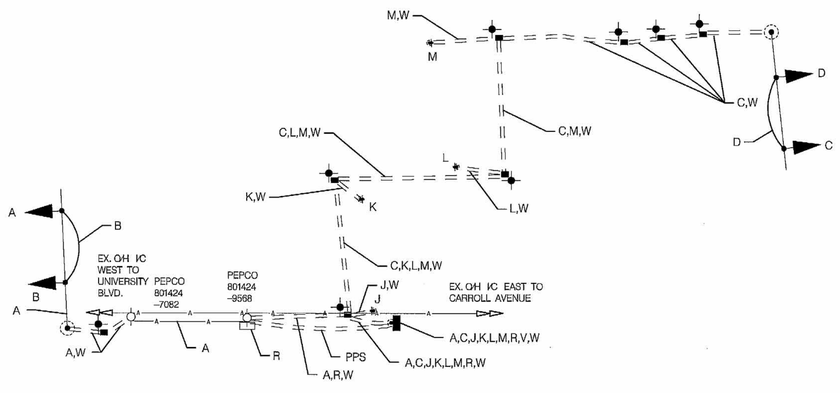
ITEM NO	QUANTITY	DESCRIPTION
1001	5 DAYS	MAINTENANCE OF TRAFFIC - FULLY CONTROLLED ACCESS HIGHWAYS
2002	8 CY	TEST PIT EXCAVATION
5000	435 LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5000	100 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5000	70 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS, ANY WIDTH
5016	100 SF	4 INCH CONCRETE SIDEWALK, MIX NO. 2
5022	40 SF	REMOVAL OF SIDEWALK
8000	2 EA	MODEL X CENTRAL CONTROL UNIT
8000	8 EA	INSTALL APS MODEL X PEDESTRIAN PUSHBUTTON
8000	8 EA	FURNISH AND INSTALL 12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION (R,Y,G)
8000	2 EA	FURNISH AND INSTALL ASC-3 2100 CONTROLLER
8000	2 EA	FURNISH AND INSTALL ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 100 AMP
8001	21 CY	CONCRETE FOUNDATION
8010	80 LF	3 INCH GALVANIZED STEEL ELECTRICAL CONDUIT (RISER)
8019	205 LF	2 INCH POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED)
8023	1,400 LF	3 INCH POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED)
8027	170 LF	4 INCH POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (TRENCHED)
8028	260 LF	4 INCH POLYVINYL CHLORIDE ELECTRICAL CONDUIT (SCHEDULE 80) (PUSHED)
8043	15 EA	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH WITH CLAMP
8049	1,080 LF	12 PAIR TELEMETRY CABLE - JELLY FILLED SELF SUPPORTING (OVERHEAD)
8052	175 LF	12 PAIR TELEMETRY CABLE - JELLY FILLED (UNDERGROUND)
8064	800 LF	2 - CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) IMSA 19-1
8066	900 LF	5 - CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) IMSA 19-1
8075	2,020 LF	1 - CONDUCTOR ELECTRICAL CABLE (NO. 6 A.W.G.) STRANDED BARE COPPER GROUND WIRE
8078	30 LF	3 - WIRE ELECTRICAL CABLE (NO. 4 A.W.G.)
8080	170 LF	1-CONDUCTOR ELECTRICAL CABLE #2/0, ALUMINUM THWN
8082	280 LF	WOOD SIGN SUPPORTS 4 INCH x 6 INCH
8087	12 EA	INSTALL SIGN >0 TO <=5 SF (OVERHEAD OR POST)
8088	20 EA	INSTALL SIGN >5 TO <=25 SF (OVERHEAD OR POST)
8108	4 EA	INSTALL MAST ARM POLE WITH MAST ARM
8111	10 EA	INSTALL PEDESTAL POLE
8114	3 EA	3 IN. WEATHER HEAD
8119	250 LF	1/4 IN. SPAN WIRE (FOR TRAFFIC SIGNAL)
8135	2 EA	INSTALL POLE-MOUNTED CABINET
8136	15 EA	TRAFFIC SIGNAL HANDBOX (PULLBOX)
8144	4 EA	CUT MAST ARM TO NEEDED LENGTH
8145	2 EA	CUT POLE TO NEEDED HEIGHT
8148	2 EA	RELOCATE SIGN

PHASE CHART	1	2	3	4	
	Y	Y	Y	Y	
FLASHING OPERATION (WHEN ACTIVATED)	FL/Y	FL/Y	FL/Y	FL/Y	

(NOTE: PHASE CHART IS THE SAME FOR BOTH LOCATIONS)

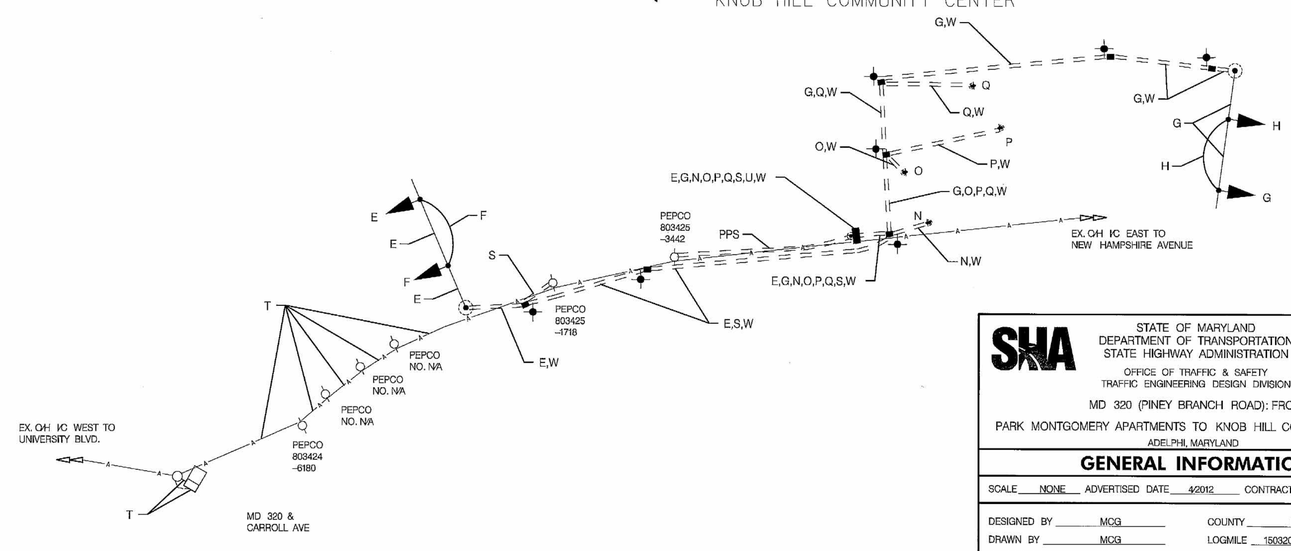
WIRING DIAGRAM

MD 320 (PINEY BRANCH ROAD) AT PARK MONTGOMERY APARTMENTS



WIRING DIAGRAM

MD 320 (PINEY BRANCH ROAD) AT KNOB HILL COMMUNITY CENTER



A B C D E F G H — ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

J K L M N O P Q — ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)

R S — 12 PAIR TELEMETRY CABLE - JELLY FILLED (UNDERGROUND)

T — 12 PAIR TELEMETRY CABLE - JELLY FILLED SELF SUPPORTING (OVERHEAD)

U V — PROPOSED POWER SERVICE FEED, 3 - WIRE ELECTRICAL CABLE (NO. 4 A.W.G.)

W — NO. 6 STRANDED BARE COPPER GROUND WIRE

PPS — PROPOSED POWER SERVICE - (1 CONDUCTOR NO. 2/0, ALUMINUM THWN) FINAL CONNECTION TO BE DONE BY PEPCO.

PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH

STV
STV Incorporated
7125 Ambassador Road, Suite 200
Baltimore, MD 21244
www.stvinc.com

BY: tarnovk -

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 320 (PINEY BRANCH ROAD): FROM

PARK MONTGOMERY APARTMENTS TO KNOB HILL COMMUNITY CENTER

ADELPHI, MARYLAND

GENERAL INFORMATION

SCALE NONE ADVERTISED DATE 4/2012 CONTRACT NO. MONT. COUNTY

DESIGNED BY MCG — COUNTY MONTGOMERY
DRAWN BY MCG — LOGMILE 15032002.20 TO 15032002.58
CHECKED BY MTS — TIMS NO. K288
F.A.P. NO. — TOD NO.

TS NO. | DRAWING SG-03 OF 03 | SHEET NO. 03 OF 03

PLOTTED: Thursday, April 05, 2012 AT 03:24 PM
FILE: I:\PROJECTS\4013393\4013393_0019\Drawings\TRA\pSG-N003_MD320.dgn