

**PROJECT DESCRIPTION
GENERAL**

THIS PROJECT INVOLVES RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 124 (WOODFIELD ROAD) AT CYPRESS HILL DRIVE/RICKENBACKER DRIVE IN MONTGOMERY COUNTY. MD 124 IS ASSUMED TO RUN IN A NORTH SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A SEMI-ACTUATED MODE USING FOUR NEMA PHASES. SEMI-ACTUATED MODE WITH THE MD 124 APPROACHES RUNNING CONCURRENTLY. THE RICKENBACKER DRIVE/CYPRESS HILL DRIVE APPROACHES WILL ALSO RUN CONCURRENTLY. ALL APPROACHES HAVE PERMISSIVE LEFT TURN PHASING.

PEDESTRIAN OPERATION

NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTON MOVEMENTS TO CROSS THE WEST AND SOUTH LEGS OF THE INTERSECTION ARE TO BE PROVIDED. WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSH BUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:
WEST: "WAIT TO CROSS RICKENBACKER AT WOODFIELD."
SOUTH: "WAIT TO CROSS WOODFIELD AT RICKENBACKER/CYPRESS HILL."

SPECIAL NOTES

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JEFFREY WENTZ, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 513-7358
MR. DUANE BERNDARD, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (301) 513-7336
MR. WAYNE A. MOWDY, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304
MR. AUGIE REBISH, UTILITY ENGINEER
PHONE: (301) 513-7350
MR. ROBERT SNYDER, SR. CHIEF TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. KAMAL HAMUD
MONTGOMERY COUNTY
240-777-8761

MR. STEVE CUSTER
PEPCO CUSTOMER DESIGN
201 W. GUIDE DR.
ROCKVILLE, MD 20850
PHONE: (301) 548-4333

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 30, 104.12 - 01, 104.13 - 01, 104.31 - 01, 104.32 - 01, 104.81 - 02

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY	DESCRIPTION	UNITS	QUANTITY
973023	FLAT SHEET ALUMINUM SIGNS CONSISTING OF: R10-3(1) (9"x15") POLE MOUNT SIGN TO READ "PUSH BUTTON TO CROSS" - 1 EACH D3-1(1) (VAR. "X16") MAST ARM MOUNT - 4 EACH (DUAL FACED) ASSOCIATED SHIELD ASSEMBLY (30"x51") 4"x4" WOOD POST MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY (48"x75") 4"x4" WOOD POST MOUNT - 1 EACH	SF	90

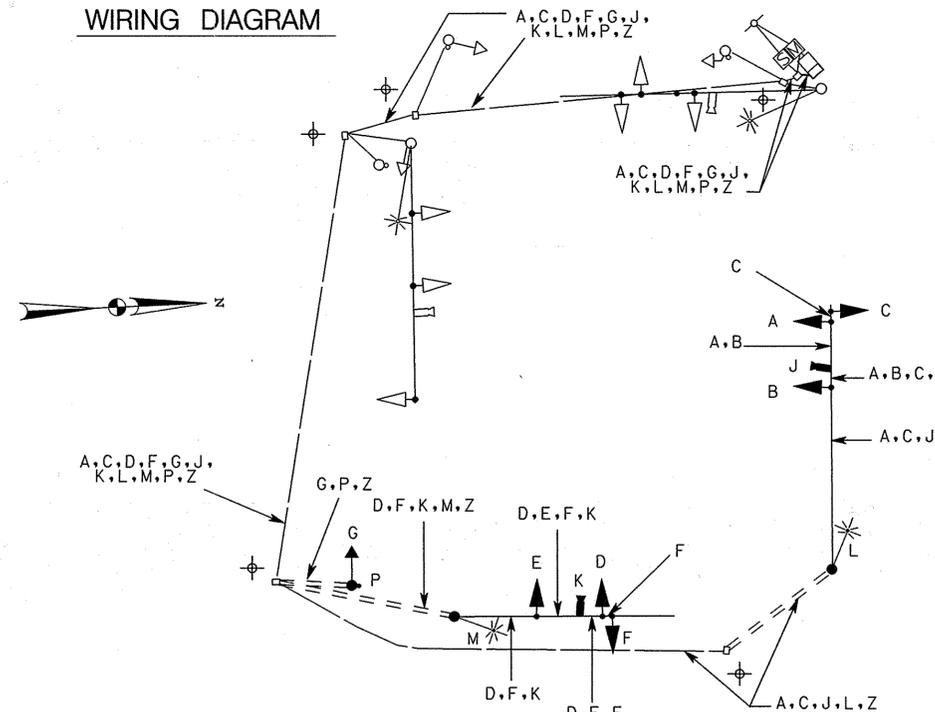
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY	DESCRIPTION	UNITS	QUANTITY
120500	MAINTENANCE OF TRAFFIC	EA	1
203030	TEST PIT EXCAVATION	CY	2
585452	24 INCH WHITE PERMANENT PREFORMED PAVEMENT MARKINGS	LF	60
800000	AUDIBLE/TACTILE PEDESTRIAN PUSH BUTTON STATION AND SIGN (5"X7" WITH BRAILLE DENOTING CROSSING STREET)	EA	1
800000	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNT	EA	2
800000	RELOCATE EXISTING SIGNAL HEAD	EA	1
800000	RELOCATE EXISTING SIGNS	EA	1
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	9
801607	INSTALL SHEET ALUMINUM SIGN	SF	43
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	100
805135	3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	120
813015	INSTALL OVERHEAD SIGN	SF	47
816001	VIDEO DETECTION CAMERA	EA	2
816010	VIDEO DETECTION CABLE, 500 FT	EA	2
818004	10 FOOT BREAKAWAY PEDESTAL POLE	EA	1
818030	STEEL PLOE WITH A SINGLE 50 FOOT MAST ARM	EA	1
818052	STEEL POLE WITH A SINGLE 70 FOOT MAST ARM	EA	1
831010	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE	EA	2
837001	GROUND ROD - 3/4 INCH DIAMETER X 10-FOOT LENGTH	EA	3
860284	12" VEHICULAR LED TRAFFIC SIGNAL HEAD SECTION	EA	18
861105	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	350
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	400
861116	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TRAY CABLE	LF	800
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	2100
866101	10 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2

KEY

A.C.D.F	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
B.E.G	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
L.M	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
P	2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
J.K	VIDEO DETECTION CONTROL CABLE
Z	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
⊕	GROUND ROD

WIRING DIAGRAM



PHASE CHART

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	R	R	R	WK	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	R	FL/DW	FL/DW	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 4 AND 8	R	R	R	R	R	R	G	G	G	G	G	G	G	DW	DW	DW	DW
4 AND 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 AND 8 ALT	R	R	R	R	R	R	G	G	G	G	G	G	G	DW	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	G	G	G	DW	DW	FL/DW	FL/DW
PHASE 4 AND 8 CHANGE ALT	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLR	DARK	DARK	DARK	DARK						

BY: Aaron Hottenstein Division: 0101 Transportation

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SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 124 (WOODFIELD RD) AND CYPRESS HILL DRIVE /RICKENBACKER DRIVE
STAGE IV

GENERAL INFORMATION SHEET

SCALE	1" = 20'	DATE	NA	CONTRACT NO.	M06325171
DESIGNED BY	AH	COUNTY	MONTGOMERY		
DRAWN BY	AF	LOGMILE	15012407.96		
CHECKED BY	JFL	TIMS NO.	H079		
FAP NO.		TOD NO.			
TS NO.	4104-A	DRAWING	SP-20 OF 39	SHEET NO.	278 OF 377