

DRILL HOLES
 BURGER REV. DATE: March 27, 2007
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 BY: Joost Van Boekhold Division: P068 Highway Traff GMA Emp

PROJECT DESCRIPTION

- I. GENERAL
THIS PROJECT INVOLVES INSTALLATION OF APS/CPS PEDESTRIAN EQUIPMENT ON THE NORTH, SOUTH, AND EAST LEGS OF THE INTERSECTION OF MD 28 (W. MONTGOMERY AVE/KEY WEST AVE) AT WEST GUDE ROAD AND FALLSGROVE DRIVE. MD 28 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.
- II. INTERSECTION OPERATION
THIS INTERSECTION OPERATES IN A NEMA SIX-PHASE FULLY-TRAFFIC-ACTUATED MODE. THERE IS AN EXCLUSIVE/PERMISSIVE LEFT-TURN PHASE FOR EASTBOUND AND WESTBOUND MD 28. AN ALTERNATE PEDESTRIAN PHASE ACROSS THE SOUTH LEG OF THE INTERSECTION IS PROVIDED.
- III. PEDESTRIAN OPERATION
NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTONS TO CROSS THE SOUTH, EAST, AND WEST LEGS OF THE INTERSECTION ARE TO BE PROVIDED. WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:

 NORTH: "WAIT TO CROSS WEST GUDE AT MONTGOMERY, WAIT."
 SOUTH: "WAIT TO CROSS FALLSGROVE AT MONTGOMERY, WAIT."
 EAST: "WAIT TO CROSS MONTGOMERY AT WEST GUDE/FALLSGROVE, WAIT."

 WHEN THE WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.



1. CONTACT PERSONS

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

DISTRICT 3	OFFICE OF TRAFFIC AND SAFETY
MS. ANYESHA MOOKHERJEE ASSISTANT DISTRICT ENGINEER - TRAFFIC 301-513-7358	MS. CORREN JOHNSON CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. VICTOR GRAFTON UTILITY ENGINEER 301-513-7350	MR. ROBERT SNYDER ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS 410-787-7630
MR. TOM FOUNTAIN ASSISTANT DISTRICT ENGINEER - MAINTENANCE 310-513-7304	MR. ED RODENHIZER MANAGER SIGNAL OPERATIONS 410-787-7650
MR. DUANE BERNARD ASSISTANT DISTRICT ENGINEER - CONSTRUCTION 310-513-7385	MR. EUGENE BAILEY MANAGER SIGN OPERATIONS 410-787-7670
MONTGOMERY COUNTY	MR. MIKE STOCKER SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668
MR. ROBERT RICKETTS TECHNICAL CENTER SUPERVISOR PHONE NUMBER 240-876-3681	
MR. KAMAL HAMUD MONTGOMERY COUNTY-TRAFFIC ENGINEERING PHONE NUMBER 301-777-8761	

MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: MD 104.03-11, MD 104.04-13 THROUGH MD 104.04-16.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
			NONE

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
100000	1	EA	MAINTENANCE OF TRAFFIC (PER INTERSECTION)
201032	50	CY	CLASS 2 EXCAVATION
203030	3	CY	TEST PIT EXCAVATION
585621	750	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585700	630	LF	REMOVAL OF EXISTING PAVEMENT MARKING LINES, ANY WIDTH
600000	197	LF	TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH
655105	2239	SF	5 INCH CONCRETE SIDEWALK
655120	380	SF	DETECTABLE WARNING SURFACE FOR CURB RAMPS
800000	1	EA	2-WIRE APS CENTRAL CONTROL UNIT
800000	6	EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
800000	6	EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	5	EA	5 FOOT OR 10 FOOT PEDESTAL POLE WITH BREAKAWAY COUPLINGS, FOUNDATION & GROUND ROD
800000	1	EA	REMOVE & DISPOSE OF EXISTING SIGNAL EQUIPMENT (PER SIGNALIZED INTERSECTION LOCATION)
800000	90	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
800000	30	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
800000	1	EA	THIRD PARTY CONCRETE TESTING (PER INTERSECTION)
802501	90	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
861105	640	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	670	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

C. ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

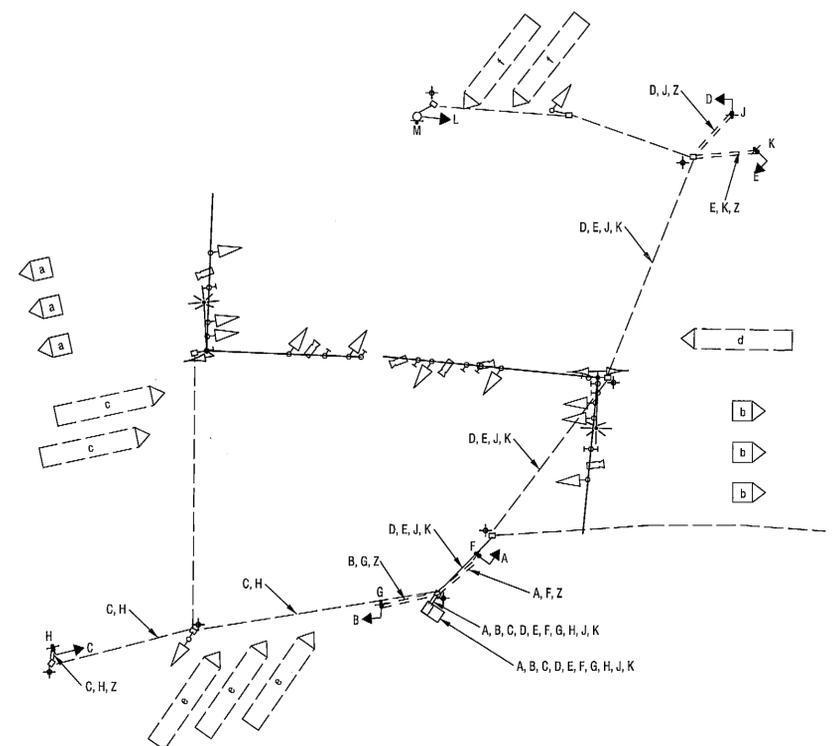


PHASING CHART

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16-19	20-21
⬅G⬅	⬅G⬅	R	R	⬅G⬅	⬅G⬅	⬅G⬅	R	R	R	R	R	R	R	R	DW	DW

PHASE 1 & 5	⬅G⬅	⬅G⬅	R	R	⬅G⬅	⬅G⬅	⬅G⬅	R	R	R	R	R	R	R	R	DW	DW
1 & 5 CHANGE to PHASE 1 & 6 OR PHASE 2 & 5 OR PHASE 2 & ALT. 5 OR PHASE 2 & 6	⬅G⬅	⬅G⬅	G	G	⬅R⬅	⬅R⬅	⬅R⬅	R	R	R	R	R	R	R	R	DW	DW
PHASE 1 & 6	⬅G⬅	⬅G⬅	G	G	⬅R⬅	⬅R⬅	⬅R⬅	R	R	R	R	R	R	R	R	DW	DW
1 CHANGE	⬅Y⬅	⬅Y⬅	G	G	⬅R⬅	⬅R⬅	⬅R⬅	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 & 5	⬅R⬅	⬅R⬅	R	R	⬅G⬅	⬅G⬅	⬅G⬅	G	G	R	R	R	R	R	R	DW	DW
5 CHANGE	⬅R⬅	⬅R⬅	R	R	⬅Y⬅	⬅Y⬅	⬅Y⬅	G	G	R	R	R	R	R	R	DW	DW
PHASE 2 & 6	⬅R⬅	⬅R⬅	G	G	⬅R⬅	⬅R⬅	⬅R⬅	G	G	R	R	R	R	R	R	WK	DW
PED CLEARANCE	⬅R⬅	⬅R⬅	G	G	⬅R⬅	⬅R⬅	⬅R⬅	G	G	R	R	R	R	R	R	FL/DW	DW
2 & 6 CHANGE	⬅R⬅	⬅R⬅	Y	Y	⬅R⬅	⬅R⬅	⬅R⬅	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 4 & 8	⬅R⬅	⬅R⬅	R	R	⬅R⬅	⬅R⬅	⬅R⬅	R	R	G	G	G	G	G	G	DW	DW
4 & 8 CHANGE	⬅R⬅	⬅R⬅	R	R	⬅R⬅	⬅R⬅	⬅R⬅	R	R	Y	Y	Y	Y	Y	Y	DW	DW
PHASE ALT 4 & 8	⬅R⬅	⬅R⬅	R	R	⬅R⬅	⬅R⬅	⬅R⬅	R	R	G	G	G	G	G	G	DW	WK
PED CLEARANCE	⬅R⬅	⬅R⬅	R	R	⬅R⬅	⬅R⬅	⬅R⬅	R	R	G	G	G	G	G	G	DW	FL/DW
ALT 4 & 8 CHANGE	⬅R⬅	⬅R⬅	R	R	⬅R⬅	⬅R⬅	⬅R⬅	R	R	Y	Y	Y	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/⬅R⬅	FL/⬅R⬅	FL/Y	FL/Y	FL/⬅R⬅	FL/⬅R⬅	FL/⬅R⬅	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

WIRING DIAGRAM



WIRING KEY

- A, B, C, D, E - ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- F, G, H, J, K - ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
- L, M - CONNECT TO EXISTING CABLE
- Z - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE.

SNA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 28 (WEST MONTGOMERY AVENUE) AT
WEST GUDE DRIVE/FALLSGROVE DRIVE
ROCKVILLE, MARYLAND

GENERAL INFORMATION SHEET

SCALE: N.T.S. ADVERTISED DATE: MARCH 2013 CONTRACT NO. XY1515185

DESIGNED BY: AMH, AF COUNTY: MONTGOMERY
DRAWN BY: AF LOGMILE: 15002819.91
CHECKED BY: JFL TMS NO. L735
F.A.P. NO. NA TOD NO.

TS NO. 3340C-GI DRAWING **SG-3** OF 3 SHEET NO. 3 OF 24