PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW INTERSECTION CONTROL BEACON AT THE INTERSECTION OF MD 27 (RIDGE RD) AND MILL BOTTOM RD. IN FREDERICK COUNTY. MD 27 (RIDGE RD) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA TWO-PHASE. FLASHING YELLOW FOR MD 27 AND FLASHING RED FOR MILL BOTTOM RD AND MD 144.

SPECIAL NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLES TO THE APPROPRIATE TERMINALS AND SHALL PROPERLY LABEL EACH CABLE.

ALL CONTROLLER CABINET WIRING WILL BE PERFORMED BY THE S.H.A. SIGNAL SHOP CONTACT MR. ED RODENHIZER AT (410) 787-7650 SEVENTY-TWO HOURS IN ADVANCE OF INTENDED WORK.

THE CONTRACTOR SHALL CONTACT BOB SNYDER AT (410) 787-7630 TO ARRANGE FOR TELEPHONE DROP.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9012	1	EA	[UPDATED] 2 CIRCUIT FLASHER
9044	1	EA	CONTROLLER CABINET. SIZE 6
9570	25	SF	SHEET ALUMINUM GROUND MOUNTED SIGN
	2	EA	R6-1(L) (36" x 12") GROUND MOUNTED
	2	EA	R6-1(R) (36" x 12") GROUND MOUNTED
	2	EA	R1-1 (30" x 30") GROUND MOUNTED
9571	240	SF	SHEET ALUMINUM MAST ARM MOUNTED SIGN
	1	EA	D3-1 (VAR. x 32") (<-Frederick Rd) MAST ARM/ POLE MOUNTED
	1	EA	D3-1 (VAR. x 32") (Frederick Rd->) MAST ARM/ POLE MOUNTED
	1	EA	D3-1 (VAR. x 32") (Mill Bottom Rd->) MAST ARM/ POLE MOUNTED
	1	EA	D3-1 (VAR. x 32") (<-Mill Bottom Rd) MAST ARM/ POLE MOUNTED
	2	EA	D3-2 (VAR. x 16") (Ridge Rd) MAST ARM MOUNTED DUAL FACE
	1	EA	SHIELD ASSEMBLY (SOUTH. MD 27.->) (30" x 51") POLE MOUNTED
	1	EA	SHIELD ASSEMBLY (NORTH. MD 27.->) (30" x 51") POLE MOUNTED
	1	EA	SHIELD ASSEMBLY (TO. INTERSTATE 70.->) (30" x 51") POLE MOUNTED
	1	EA	SHIELD ASSEMBLY (TO. INTERSTATE 70.->) (48" x 75") POLE MOUNTED
	1	EA	SHIELD ASSEMBLY (SOUTH. MD 27.<-) (48" x 75") POLE MOUNTED
	1	EA	SHIELD ASSEMBLY (NORTH. MD 27.<-) (48" x 75") POLE MOUNTED

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

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1	EA	MAINTENANCE OF TRAFFIC
2002	3	CY	TEST PIT EXCAVATION
5001	60	LF	5 INCH HEAT APPLIED WHITE OR YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
8001	9	EA	12 INCH LED SIGNAL HEAD SECTION
8007	2	EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP AND LUMINAIRE
8017	3	EA	MAST ARM POLE AND 60 FT MAST ARM - ANY T DIMENSION
8019	1	EA	MAST ARM POLE AND 50 FT MAST ARM - ANY T DIMENSION
8030	800	LF	12 - PAIR COMMUNICATION CABLE. SELF-SUPPORTING OR JELLY FILLED
8033	740	LF	DISCONNECT. PULL-BACK AND REROUTE CABLES
8036	287	LF	SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8037	485	LF	SCHEDULE 80 RIGID PVC CONDUIT - BORED
8038	32	LF	WOOD SIGN SUPPORTS UP TO 4 X 6
8040	265	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN - INCLUDING ALL HARDWARE
8042	560	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8044	1	EA	METERED SERVICE PEDESTAL EMBEDDED
8046	45	LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8048	6	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8057	135	LF	ELECTRICAL CABLE - 5 CONDUCTOR NO. 14 AWG
8058	1230	LF	ELECTRICAL CABLE - 7 CONDUCTOR NO. 14 AWG
8059	395	LF	ELECTRICAL CABLE - 2 CONDUCTOR NO. 12 AWG - TC
8065	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

MR. DAVE COYNE
DISTRICT ENGINEER
301-624-8101/8102

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER - TRAFFIC
301-624-8140/8141

MS. ANDREA ABEND
UTILITY ENGINEER
301-624-8115/8116

MR. RAYMOND F. JOHNSON
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
301-624-8105/8106

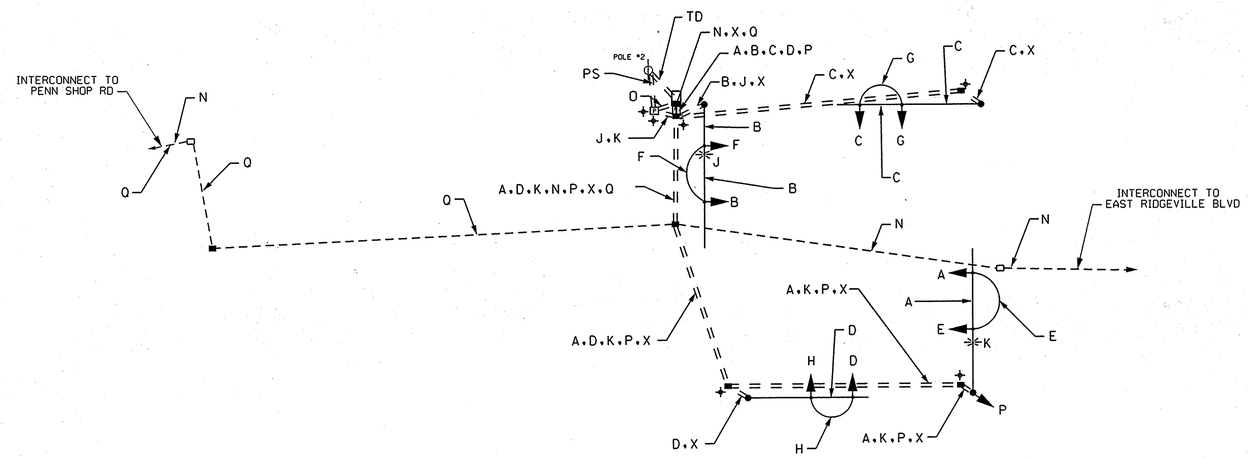
MR. RICHARD L. DAFF
CHIEF. TRAFFIC OPERATIONS DIVISION
410-787-7630

THE POWER COMPANY REPRESENTATIVE IS:
ALLEGANY POWER COMPANY
MR. JOE ELLIOTT
421 E. PATRICK STREET
FREDERICK. MARYLAND 21701
301-790-3297

PHASE CHART

	1	2	3	4	5	6	7	8	9
	Y	Y	Y	Y	R	R	R	R	R
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



WIRING KEY

A.B.C.D.P	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
E.F.G.H	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
J.K	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
N	EXISTING INTERCONNECT
O	3 WIRE 1 CONDUCTOR ELECTRICAL CABLE (NO. 4 AWG)
Q	12 PAIR COMMUNICATION CABLE. (SELF-SUPPORTING OR JELLY FILLED)
X	1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
PS	POWER SERVICE
TD	TELEPHONE DROP
+	GROUND ROD

TOD NO:AX142-14M
SHA NO:FR552A55/B55
MD 27@MD 144/MILL BOTTOM RD

BRUDIS & ASSOCIATES, INC.
Consulting Engineers
9220 Rumsey Road, Suite 110
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Phone 410-884-3607
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STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 27 at MD 144 (Frederick Road) at Mill Bottom Road

FREDERICK COUNTY, MARYLAND

GENERAL INFORMATION SHEET

SCALE N.T.S. ADVERTISED DATE 1-18-08 CONTRACT NO. AX1425185

DESIGNED BY MH
DRAWN BY MH
CHECKED BY RJM CSW
F.A.P. NO. AC-STPG-NHG-000A 212(8)
COUNTY FREDERICK
LOGMILE 10002700.14
TIMS NO. 1 630
TOD NO.

TS NO. 4635 | DRAWING - OF | SHEET NO. 2 OF 2

PLOTTED: Monday, February 18, 2008 AT 07:59 AM
FILE: P:\04-005 Signals\MD 27 @ MD 144\Drawings\CADD\Working\PGG-P000_MD27.dgn

BY: Robert