

PROJECT DESCRIPTION

I. General

This project involves the reconstruction of an existing traffic control signal in conjunction with geometric improvements at the intersection of Democracy Boulevard at MD 187 (Old Georgetown Road) in Montgomery County, Maryland. MD 187 is assumed to run in a North-South direction.

II. Intersection Operation

No change to existing operation.

III. Special Notes

1. Maintenance of traffic will be handled by the Contractor utilizing the following standard plates for traffic control: 104.00-13, 104.00-19, 104.00-21 - 104.00-24, 104.17-02, 104.39-02, 104.4-02, 104.41-02, 104.48-02, 104.49-02, 104.81-01

2. The following contact persons for District #3 are as follows:

Mr. Randy Brown
Asst. District Engineer-Maintenance
Phone #(301) 513-7304

Mr. Joe Geckel
Asst. District Engineer-Utility
Phone #(301) 513-7350

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

Mr. Lee Starkloff
Asst. District Engineer-Traffic
Phone #(301) 513-7318

A. EQUIPMENT LIST

EQUIPMENT TO BE FURNISHED BY ADMINISTRATION

QUANTITY -- None

B. EQUIPMENT LIST

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

QUANTITY	UNITS	SPECIFICATION SECTION	DESCRIPTION
LS	LS	104	Maintenance of Traffic.
LS	LS	814	Mobilization.
53	EA	814	Furnish and install 12 in. 1 way 3 vehicular traffic signal head section - mast arm mount
1	EA	817	Install pedestrian push button and R10-4(1) sign.
153	SF	814	Furnish sheet aluminum signs consisting of: 1 ea R10-4(1) (9in. X 12 in.) (Old Georgetown Rd.) 1 ea R10-11b (24in. X 24in.) 1 ea R3-5R (30in. X 36in.) 3 ea R3-5L (30in. X 36in.) 1 ea R3-6 (30in. X 36in.) 2 ea R4-7 (24in. X 30in.) 1 ea Special Guide Sign (51in. X 60in.) 1 ea Special Guide Sign (48in. X 75in.)
2	CY	205	Test pit excavation.
7	CY	801	Furnish and install concrete for signal foundation.
400	LF	555	Remove existing pavement marking any width.
350	LF	555	Furnish and install 24 in. white thermoplastic, heat-applied pavement marking tape.
450	LF	555	Furnish and install 12in. white thermoplastic, heat-applied pavement marking tape.

EQUIPMENT LIST

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

QUANTITY	UNITS	SPECIFICATION SECTION	DESCRIPTION
2	EA	814	Furnish and install 12 in., one way, 2 section (symbolic WALK/DON'T WALK) aluminum signal head, pole mount
175	LF	810	Furnish and install 2 conductor electrical cable (No.14 AWG).
350	LF	810	Furnish and install 3 conductor electrical cable (No.14 AWG).
1450	LF	810	Furnish and install 5 conductor electrical cable (No.14 AWG).
700	LF	810	Furnish and install 7 conductor electrical cable (No.14 AWG).
41	SF	813	Install overhead sign - for signals.
112	SF	813	Install ground - mounted signs.
1	EA	SP/818	Furnish and install a 12 in. X 32 ft. steel pole (Note: four - 2-1/4 in. X 96 in. anchor bolts). (Paint green to match existing poles.)
1	EA	XXX	Re-ring existing span wire.
1	EA	811	Furnish and install electrical handhole.
45	LF	805	Furnish and install 3 in. schedule 80 rigid PVC conduit (trenched).
125	LF	805	Furnish and install 3 in. schedule 80 rigid PVC conduit (bored).
LS	LS	SP	Remove and dispose of existing signal equipment.
300	LF	819	Furnish and install 3/8 in. steel span wire.
300	LF	819	Furnish and install 1/4 in. tether wire.
LS	LS	810	Reroute existing interconnect cable.
125	LF	810	Furnish and install No. 6 AWG standard bare copper ground wire.
3	EA	818	Furnish and install 20 ft. lighting arm on signal structure (for video detection).
3	EA	SP	Furnish (Montgomery County Approved) video detection unit.
2	EA	800	Furnish and install video detection co-axial cable (250 ft.)
1	EA	800	Furnish and install video detection co-axial cable (500 ft.)

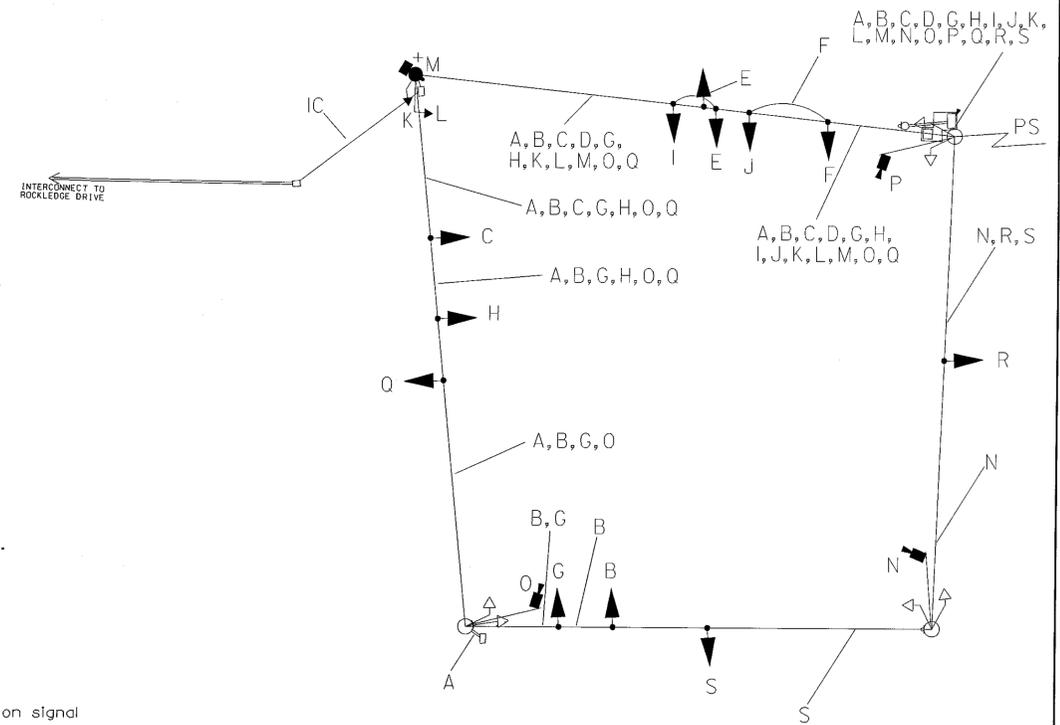
C. EQUIPMENT TO BE RETURNED TO THE ADMINISTRATION

ALL EQUIPMENT THAT IS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASING SEQUENCE CHART

NO CHANGE IN EXISTING OPERATIONS

WIRING DIAGRAM



WIRING KEY

- A-F, Q-S - 5 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
- G-J - 7 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG)
- K,L - 3 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG) (FOR PEDS)
- M - 2 CONDUCTOR ELECTRICAL CABLE (NO.14 AWG) (FOR PUSH BUTTON)
- N-P - CO-AXIAL CABLE FOR VIDEO DETECTION
- PS = POWER SOURCE
- IC = INTERCONNECT CABLE
- + = Ground Rod

WELLS & ASSOCIATES, LLC
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
1420 Spring Hill Rd., Suite 600
McLean, VA 22102
Phone: (703) 917-6620 Fax: (703) 917-0739
170 Jennifer Rd., Suite 260
Annapolis, MD 21401
Phone: (301) 970-2402 Fax: (410) 266-9189

REVISIONS	

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
DEMOCRACY BOULEVARD AND
MD 187 (OLD GEORGETOWN ROAD)

DRAWN BY: JAW	F.A.P. NO.:	TS NO.:	SHEET NO.:
CHECKED BY: LES	S.H.A. NO.:	4131A	
SCALE: NTS	COUNTY: MONTGOMERY	T.I.M.S. NO.:	
DATE: 9/27/02	LOG MILE: 15018703.36	E482	2 OF 2