

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF PRE-EMPTION DEVICES AT THE EXISTING TRAFFIC CONTROL SIGNALS AT THE INTERSECTIONS OF MD 213 (NORTH) AND WATER STREET, MD 213 (SOUTH) AND WATER STREET, AND MD 213 (SOUTH) AND BROADWAY. IN ADDITION, A HARDWARE CONNECTION IS PROVIDED BETWEEN THE GOODWILL FIRE COMPANY AND THE INTERSECTION OF MD 213 (SOUTH) AND BROADWAY IN QUEEN ANNES COUNTY.
MD 213 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

INTERSECTION OPERATION

INTERSECTION OPERATION WILL REMAIN THE SAME AT ALL INTERSECTIONS EXCEPT FOR EMERGENCY PRE-EMPTION BEING ADDED

CONTROLLER REQUIREMENTS

THE EXISTING POLE MOUNTED CABINET AND CONTROLLERS WILL BE USED AT EACH INTERSECTION. THE DETECTOR RACK SHALL BE RETROFITTED AND TWO (2) FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIERS SHALL BE INSTALLED IN EACH CABINET.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9001	3 EACH	DETECTOR RACK POWER SUPPLY
9016	6 EACH	FOUR CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
9046	3 EACH	DETECTOR RACK RETROFIT

THE UPGRADE OF THE DETECTOR RACK SHALL BE CHARGED TO STATEWIDE DETECTION UPGRADE NUMBER.

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2002	2 C.Y.	TEST PIT EXCAVATION
8016	3 EACH	FURNISH AND INSTALL 3M #764 DISCRIMINATOR MODULE
8017	3 EACH	FURNISH AND INSTALL 3M OPTICOM EMITTER SYSTEM 700 SERIES
8018	7 EACH	FURNISH AND INSTALL 3M OPTICOM #721 DETECTOR EYE
8048	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT AS PER ASSIGNMENT
8056	400 L.F.	FURNISH AND INSTALL 4-CONDUCTOR OPTICOM CABLE
8060	390 L.F.	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8066	240 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8070	40 L.F.	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR WIRE SLEEVE
8074	2 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8084	390 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 4 A.W.G.)
8089	1300 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8090	400 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
NEG.	LUMP SUM	EMERGENCY SERVICE PUSHBUTTON

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

- STANDARD NO. MD-104.00 - 104.00-30
- STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)
- STANDARD NO. MD-104.32-01 (INTERSECTION FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. ROBERT L. KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 810-3240

MR. BARRY CLOTHIER
DISTRICT UTILITY ENGINEER
PHONE: (410) 810-3275

MS. TERRY O. WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 810-3250

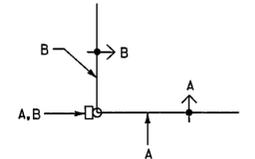
MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

WIRING DIAGRAMS

MD 213 (LIBERTY ST.) SOUTH AND MD 304 (WATER ST.)

WIRING KEY

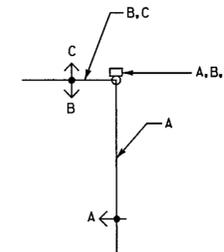
A } 4-CONDUCTOR OPTICOM
B } DETECTOR CABLE



MD 213 (LIBERTY ST.) NORTH AND WATER STREET

WIRING KEY

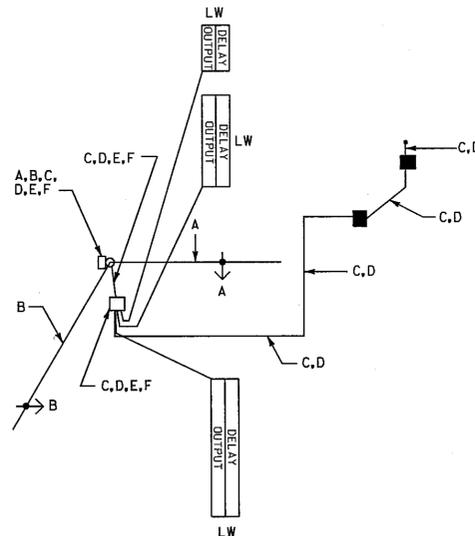
A } 4-CONDUCTOR OPTICOM
B } DETECTOR CABLE
C }



MD 213 (LIBERTY ST.) SOUTH AND BROADWAY

WIRING KEY

- A } 4-CONDUCTOR OPTICOM
B } DETECTOR CABLE
- C } 5- CONDUCTOR ELECTRICAL CABLE
(NO. 14 A.W.G.)
- D } STRANDED BARE COPPER
GROUND WIRE (NO. A.W.G.)
- LW - LOOP WIRE (NO. 14 A.W.G.)



Whitman, Reardon
and Associates, LLP
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MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
MD 213 @ WATER STREET AND BROADWAY

DRAWN BY: B. DONOWAY	F.A.P. NO.	TS NO.
CHECKED BY: N. LEARY	S.H.A. NO.	SHEET NO.
SCALE: NONE	COUNTY: QUEEN ANNES	T.I.M.S. NO.
DATE: 4/9/2003	LOG MILE:	F612