

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF ACCESSIBLE PEDESTRIAN PUSHBUTTON STATIONS AND LED COUNTDOWN PEDESTRIAN HEADS TO THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 213 (WASHINGTON AVENUE/MAPLE STREET) AND SPRING AVENUE IN KENT COUNTY, MARYLAND. A PEDESTRIAN MOVEMENT IS TO BE ADDED TO CROSS MD 213 ON THE SOUTH SIDE OF THE INTERSECTION. EXISTING SIGNAL HEADS ARE TO BE REPLACED WITH LED SIGNAL HEADS. MD 213 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

AN EXISTING CONTROLLER HOUSED IN A POLE MOUNTED CABINET SHALL REMAIN IN USE AT THIS LOCATION. THE INTERSECTION OPERATES IN NEMA 5 PHASES, FULL ACTUATED MODE. THE LEFT TURN PHASING ALONG NORTHBOUND MD 213 OPERATES AS EXCLUSIVE/PERMISSIVE PHASING. THE EASTBOUND AND WESTBOUND SPRING AVENUE/SHOPPING CENTER ENTRANCE MOVEMENTS OPERATE AS CONCURRENT PHASING. EXISTING FIRE PRE-EMPTION PHASING SHALL REMAIN FOR THE MD 213 APPROACHES.

III. ACCESSIBLE PEDESTRIAN PUSHBUTTON STATION OPERATION:

WHEN THE PEDESTRIAN LOCATES AND PASSES THE PUSHBUTTON FOR AN EXTENDED TIME; THE STATION UNIT WILL ANNOUNCE THE FOLLOWING MESSAGES FOR EACH LEG OF THE INTERSECTION:

- NORTH AND SOUTH LEGS OF MD 213
WAIT: "WAIT TO CROSS WASHINGTON AT SPRING"
WALK: "RAPID TICK"
- WEST LEG OF SPRING AVE.
WAIT: "WAIT TO CROSS SPRING AT WASHINGTON"
WALK: "RAPID TICK"

THE WALK MESSAGE WILL LAST FOR THE DURATION OF THE "WALK PHASE"

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR.

ITEM CODE	QTY	UNITS	DESCRIPTION
9571	6	SF	SHEET ALUMINIUM MAST ARM/POLE MOUNTED SIGNS
			4 EA R10-3 COUNTDOWN PEDESTRIAN PUSHBUTTON SIGN "TO CROSS WASHINGTON AVE" (9"x 15")
			2 EA R10-3 COUNTDOWN PEDESTRIAN PUSHBUTTON SIGN "TO CROSS SPRING AVE" (9"x 15")

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

ITEM CODE	QTY	UNITS	DESCRIPTION
1001	1	LS	MAINTENANCE OF TRAFFIC
2002	3	CY	TEST PIT EXCAVATION
5003	100	LF	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
6001	48	LF	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH DEPTH
6002	127	SF	5 INCH CONCRETE SIDEWALK
8001	28	EA	12 INCH LED SIGNAL HEAD SECTION
8002	1	EA	2-WIRE CENTRAL CONTROL UNIT
8004	6	EA	8 INCH LED SIGNAL HEAD SECTION
8006	1	EA	ADJUST HANDHOLE TO GRADE
8007	6	EA	AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8008	5	EA	BREAKAWAY PEDESTAL POLE (ANY SIZE), POWER COATED BROWN II 5950
8011	6	EA	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL
8014	1	EA	REMOVE AND DISPOSE OF EQUIPMENT PER ASSIGNMENT
8016	20	LF	3 INCH ELECTRICAL CONDUIT SCHEDULE 80
8018	135	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC - SLOTTED
8019	70	LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC - TRENCHED
8021	56	SF	DETECTABLE WARNING SURFACES
8022	29	SF	RELOCATE EXISTING SIGN
8027	1	EA	WEATHERHEAD, 3 INCH
8030	2	EA	FURNISH & INSTALL ELECTRICAL HANDHOLE
8032	7	SF	INSTALL OVERHEAD SIGN
8033	1	EA	VIDEO DETECTION CAMERA AND CABLE UP TO 500 FT
8037	600	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8039	635	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

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

SPECIAL NOTES

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

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. FRANK ANUSZEWSKI
PROJECT MANAGER
PHONE: (410) 787-4047

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

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

MR. WM NORRIS EMBERT
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 810-3270

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

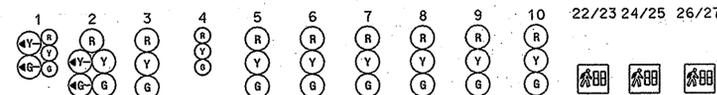
MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. ED RODENHIZER
SIGNAL SHOP (410) 787-7652

MM CENTURY
ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031

T3 design
T3 DESIGN, P.C.
3827 OLD LEE HWY
SUITE 101-C
FAIRFAX, VA 22030
PHONE: 703-959-5861
www.t3design.us

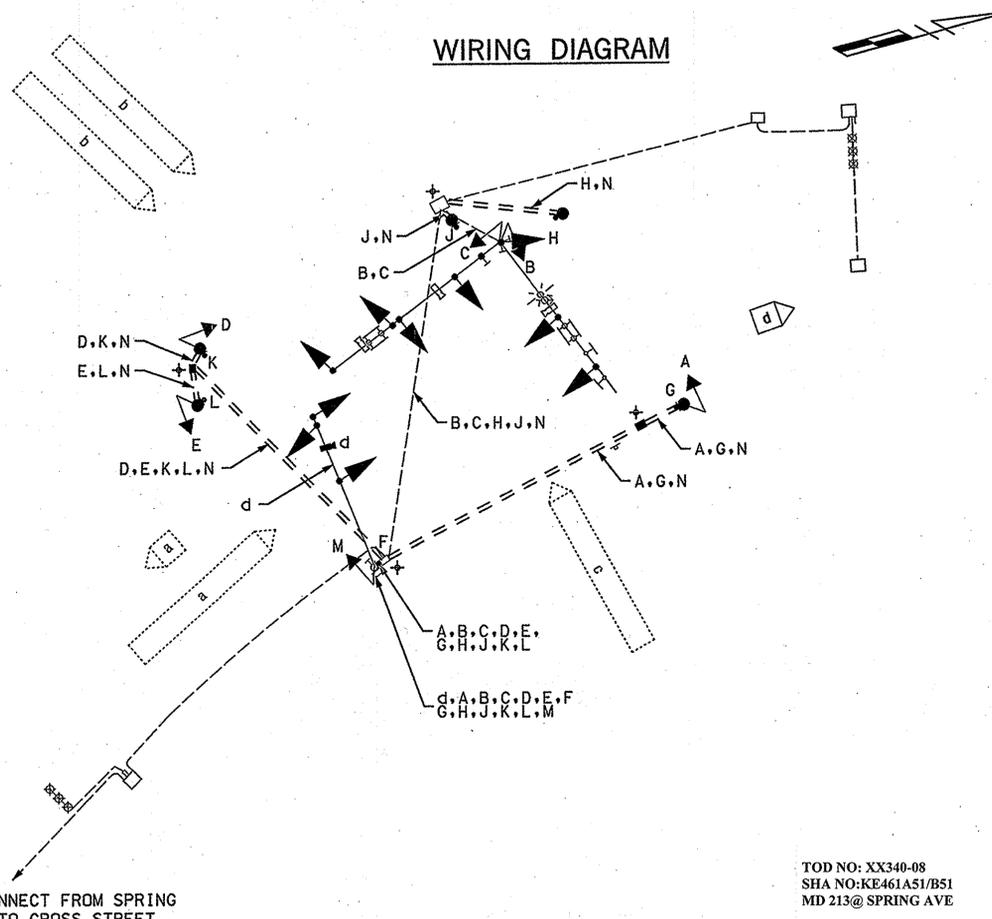
PHASE CHART



PHASE	1	2	3	4	5	6	7	8	9	10	22/23	24/25	26/27
PHASE 1 + 6	4G/G	4G/G	G	R	R	R	R	R	R	R	DW	DW	DW
CHANGE	4Y/G	4Y/G	G	R	R	R	R	R	R	R	DW	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	WK	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	FL/DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW
PHASE 4 + 8 ALT	R	R	R	R	R	R	G	G	G	G	DW	WK	WK
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	DW	FL/DW	FL/DW
4 + 8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW
EMERGENCY	G	G	G	G	G	G	R	R	R	R	DW	DW	DW
PRE-EMPTION 1 & 2	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK

NOTE: PRE-EMPTION NO. 1 IS HARDWIRED WITH INTERCONNECT, AND PRE-EMPTION NO. 2 IS OPTICOM, BOTH ACTIVATE PHASES 2 + 6

WIRING DIAGRAM



WIRING KEY

- d) VIDEO DETECTION CABLE WITH 250' LEAD IN
- A B C D E F } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- G H J K L M } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- N) NO. 6 AWG STRANDED COPPER GROUND WIRE
- + 3/4" DIA. X 10' LENGTH GROUND ROD

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

**MD 213 (WASHINGTON AVE)
AT SPRING AVENUE**
CHESTERTOWN, MARYLAND

GENERAL INFORMATION PLAN

SCALE: N.T.S. DATE: 8/7/08 CONTRACT NO.: XX3405185

DESIGNED BY: S. WILKENING COUNTY: KENT
DRAWN BY: R. QUELLETTE LOGMILE: 1402300(87)
CHECKED BY: A. MORRIS T.I.M.S. NO.: H864
F.A.P. NO.: TOD NO.: TS1680E

DRAWING NO.: TS 1680E - G1 SHEET NO.: 2 OF 2

TOD NO: XX340-08
SHA NO: KE461A51/B51
MD 213@ SPRING AVE

PLOTTED: @DATETIME@
FILE: #FILE#

INTERCONNECT FROM SPRING STREET TO CROSS STREET

DRILL HOLES

DRILL HOLES

DRILL HOLES

BY: 4/18/08/MS