PROJECT DESCRIPTION

I. PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REPLACEMENT OF EXISITNG PEDESTRIAN SIGNALS WITH AUDIBLE PUSHBUTTON SYSTEMS AND COUNTDOWN PEDESTRIAN SIGNALS ON THE WEST LEG OF EASTERN AVENUE. EXISTING PRESENCE LOOP DETECTORS WILL BE REPLACED WITH VIDEO DETECTION CAMERAS ON ALL APPROACHES, AND REPLACEMENT OF ALL SIGNAL HEADS TO BLACK FACED LED TRAFFIC SIGNAL HEADS.

II. INTERSECTION OPERATION

THE EXISTING PHASING AT THE INTERSECTION WILL REMAIN.

III. CONTROLLER REQUIREMENTS

N/A

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

DISTRICT 4:

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER,
TRAFFIC
410-321-2781/2785

MR. MICHAEL PASQUARIELLO
ASSISTANT DISTRICT ENGINEER,
UTILITIES
410-321-2841

MR. ANDRE FURTELL
ASSISTANT DISTRICT ENGINEER,
MAINTENANCE
410-321-2761

OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
410-787-7676

MR. MIKE STOCKER
SIGNAL SHOP WAREHOUSE
410-787-7696

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

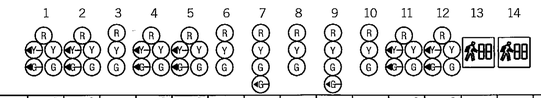
CATEGORY CODE NO.	QUANTITY	DESCRIPTION
900000	1 EA	VIDEO INTERFACE EQUIPMENT (FOR 4 CAMERAS)
973023	32 SF	FURNISH OVERHEAD SIGNS - R3-5L (30"X36") - R3-6R (30"X36") - R3-6 MOD. (36"X36")

EQUIPMENT LIST "B"

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

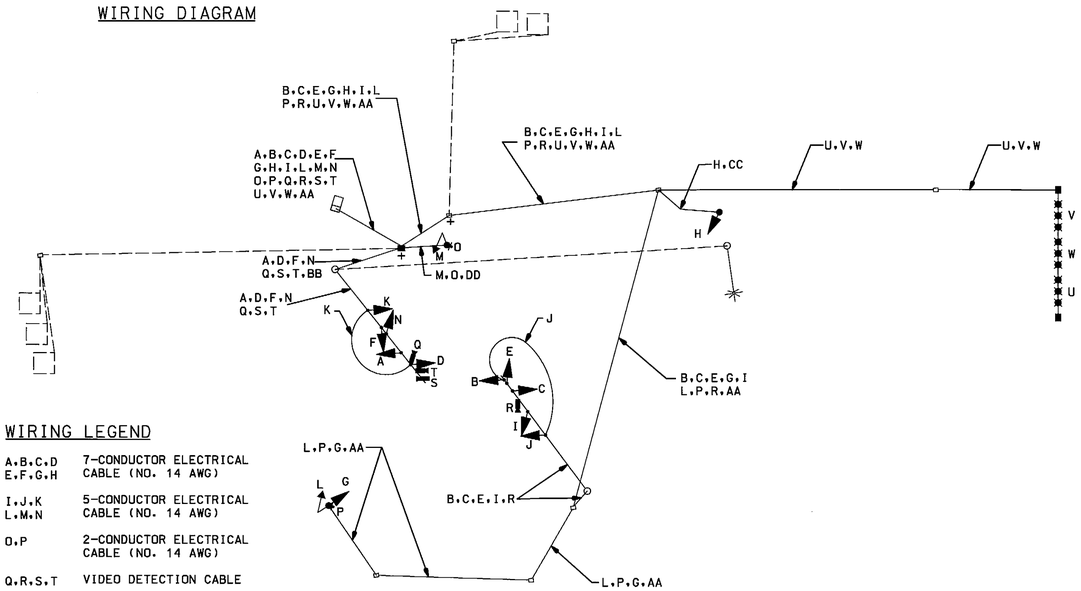
ITEM NO.	CATEGORY CODE NO.	SPECIFICATION NUMBER	QUANTITY	DESCRIPTION
5009	585412	549.556	400 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
5010	585424	549.556	140 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	800000	814	2 EA	16 INCH LED PEDESTRIAN COUNTDOWN SIGNAL HEAD
8002	800000	817	2 EA	AUDIBLE TACTILE PEDESTRIAN PUSH BUTTON & SIGN ASSEMBLY
8003	800000	800	1 LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8004	800000	816	1 EA	2 WIRE CENTRAL CONTROL UNIT (FOR APS BUTTON)
8005	801004	801	2 CY	CONCRETE FOR SIGNAL FOUNDATION
8010	802145	811	3 EA	ADJUST EXISTING HANDHOLE
8011	802501	804	430 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8012	805115	805	60 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8013	805135	805	150 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8015	805140	805	10 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8012	805155	805	140 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8016	810601	810	3 EA	NON INVASIVE DETECTOR, 500 FOOT LEAD IN CABLE
8017	811001	811	1 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8018	813015	813	30 SF	INSTALL OVERHEAD SIGN
8019	816001	800	4 EA	VIDEO DETECTION CAMERA
8020	816005	800	3 EA	CONTROL CABLE, 250 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
8021	816010	800	1 EA	CONTROL CABLE, 500 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
8022	818004	818.821	1 EA	10 FOOT BREAKAWAY PEDESTAL POLE
8023	818010	818.821	2 EA	14 FOOT BREAKAWAY PEDESTAL POLE
8024	837001	804	2 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8025	860284	814	50 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8026	861105	810	410 LF	ELECTRICAL CABLE- 2 CONDUCTOR (NO. 14 AWG)
8027	861107	810	850 LF	ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 AWG)
8028	861108	810	1750 LF	ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 AWG)

PHASE CHART



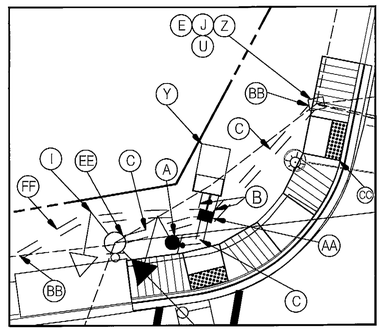
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 AND 5	←G R	←G R	R	←G R	←G R	R	R	R	R	R	←G R	←G R	DW	DW
1 AND 5 CHANGE	CONTROLLER MAY SKIP TO PHASE 1+6, 2+5 OR 2+6													
PHASE 1 AND 6	←G G	←G G	G	R	R	R	R	R	R	R	←G G	R	DW	DW
1 CHANGE	←Y G	←Y G	G	R	R	R	R	R	R	R	←Y G	R	DW	DW
PHASE 2 AND 5	R	R	R	←G G	←G G	G	R	R	R	R	R	←G G	DW	DW
5 CHANGE	R	R	R	←Y G	←Y G	G	R	R	R	R	R	←Y G	DW	DW
PHASE 2 AND 6	G	G	G	G	G	G	R	R	R	R	G	G	DW	DW
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	Y	Y	DW	DW
PHASE 3	R	R	R	R	R	R	←G G	G	R	R	R	R	DW	DW
3 CHANGE	R	R	R	R	R	R	Y	Y	R	R	R	R	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	←G G	G	R	R	DW	DW
4 CHANGE	R	R	R	R	R	R	R	R	Y	Y	R	R	DW	DW
PHASE 4 ALT	R	R	R	R	R	R	R	R	←G G	G	R	R	WK	WK
PED CLEARANCE	R	R	R	R	R	R	R	R	←G G	G	R	R	FL/DW	FL/DW
4 ALT CHANGE	R	R	R	R	R	R	R	R	Y	Y	R	R	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/Y	FL/Y	DARK	DARK

WIRING DIAGRAM



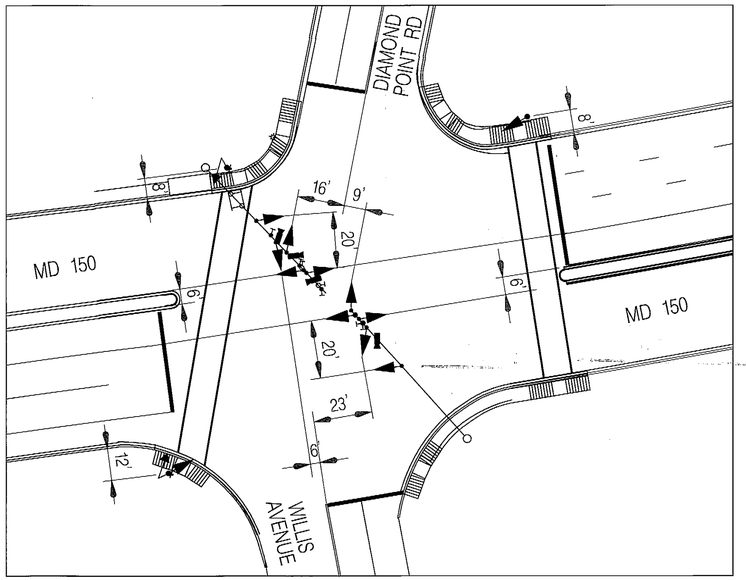
WIRING LEGEND

A,B,C,D E,F,G,H	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
I,J,K L,M,N	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
O,P	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
Q,R,S,T	VIDEO DETECTION CABLE
U,V,W	MICROLOOP TRIPLE PROBESET
AA,BB CC,DD	BARE COPPER GROUND WIRE (NO. 6 AWG)
+	GROUND ROD



DETAILED INSET

SCALE: 1"=10'



DIMENSIONS

SCALE: 1"=20'

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 150 (EASTERN AVENUE) AND DIAMOND POINT ROAD/WILLIS AVENUE

ESSEX, MD

REVISION F CONSULTANT

WALLACE, MONTGOMERY & ASSOCIATES, LLP
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110 West Road, Suite 300
Towson, Maryland 21204
(410) 494-9093, (410) 825-5714 Fax
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GENERAL INFORMATION

SCALE AS SHOWN DATE JANUARY 2009 CONTRACT NO. BA6645176

DESIGNED BY GNC/MJB
DRAWN BY GNC
CHECKED BY JLB/MJA
F.A.P. NO. SEE TITLE SHEET

COUNTY BALTIMORE
LOGMILE 03015002.21
T.I.M.S. NO. J439
TOD NO.

DRAWING NO. TS-1053F SG-02 OF 02

SHEET NO. 20 OF 23

PLOTTED: Friday, February 06, 2009 AT 11:09 AM
FILE: M:\PROJ\203005.20\Cadd\pSG-N001_MD150.dgn