PROJECT DESCRIPTION

I. GENERAL:

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 7 AND ROSEDALE AVENUE / HAMILTON AVENUE IN BALTIMORE COUNTY. A NEMA CONTROLLER IN A SIZE '6' BASE MOUNTED CABINET SHALL BE INSTALLED AT THE INTERSTECTION.

MD 7 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION

II. INTERSECTION OPERATION:

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-ACTUATED MODE. MD 7 WILL OPERATE CONCURRENTLY WITH EXCLUSIVE/PERMISSIVE LEFT TURNS FOR BOTH DIRECTIONS. ROSEDALE AVENUE AND HAMILTON AVENUE SHALL OPERATE IN A SPLIT PHASE.

A SIZE 6 FULL-ACTUATED CONTROLLER WITH ALL NECESSARY EQUIPMENT SHALL BE HOUSED IN A BASE=MOUNTED CABINET SHALL BE INSTALLED AT THE INTERSECTION.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

QUANTITY	DESCRIPTION
1 EA	NEMA EIGHT PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH VIDEO DETECTION UNIT, 1- FOUR CHANNEL RACK MOUNTED AMPLIFIER, AND ALL NECESSARY EQUIPMENT.
75 SF	FLAT SHEET ALUMINUM SIGNS CONSISTING OF:
2 EA	R3-5 (30"X36") MAST ARM MOUNT
2 EA	D-3(2) (16" X VAR.) MAST ARM MOUNT
2 EA	R10-6A (24"X30) GROUND POST MOUNT

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: 410-321-2781-2885

MR. DAVID CREIGHTON
ASSISTANT DISTRICT ENGINEER-CONSTRUCTION
410-321-2821

MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
410-321-2761

MR. MIKE PAQUARILLO
DISTRICT UTILITY ENGINEER
410-321-2841

THE CONTACT PERSONS FOR
OFFICE OF TRAFFIC AND SAFETY:

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATION SECTION
PHONE: 410-787-7652

MR. ROBERT SNYDER
ASST. CHIEF, TRAFFIC OPERATION DIVISION
410-787-7631

MR. JAY THAKER
PROJECT MANAGER, TRAFFIC
ENGINEERING DESIGN DIVISION
410-582-5682

EQUIPMENT LIST "B"

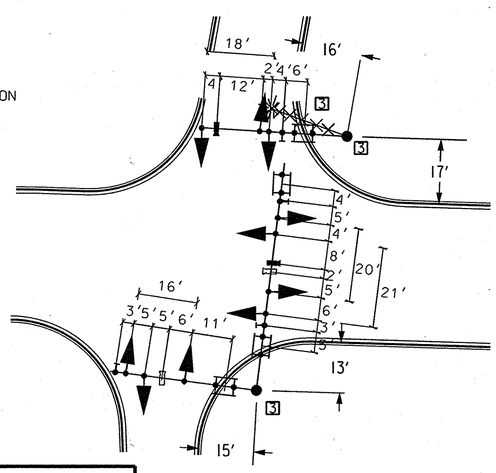
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

	CAT. CODE	QTY	UNITS	DESCRIPTION
	203030	2	CY	TEST PIT EXCAVATION
[3]	~~800000~~	~~4~~	~~EA~~	~~AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON~~
[3]	~~800000~~	~~1~~	~~EA~~	~~NAVIGATOR CENTRAL CONTROL UNIT~~
	800000	2	EA	DISCONNECT & RELOCATE EXISTING VIDEO DETECTOR CAMERA (REWIRE)
	801004	12	CY	CONCRETE FOR SIGNAL FOUNDATION
	805125	20	LF	2" SCHEDULE 80 PVC CONDUIT-TRENCHED
	805135	430	LF	3" SCHEDULE 80 PVC CONDUIT-TRENCHED
	805140	60	LF	4" SCHEDULE 80 PVC CONDUIT-TRENCHED
	805150	110	LF	3" SCHEDULE 80 PVC CONDUIT-SLOTTED
[3]	~~805155~~	~~50~~	~~LF~~	~~4" SCHEDULE 80 PVC CONDUIT SLOTTED~~
	807202	1	EA	METERED SERVICE PEDESTAL
	810010	30	LF	ELEC CABLE - 1 CONDUCTOR NO. 4 AWG-THHN/THWN
	810601	2	EA	NON-INVASIVE PROBE WITH 500' LEAD-IN CABLE
[3]	811001	6 ~~X~~	EA	FURNISH & INSTALL ELECTRICAL HANDHOLE
	813015	75	SF	INSTALL SHEET ALUMINUM SIGN- OVERHEAD
	816001	2	EA	VIDEO DETECTOR CAMERA
	816005	2	EA	CONTROL CABLE, 250', VIDEO DETECTOR CAMERA TO CONTROLLER
	818036	1	EA	STEEL POLE WITH SINGLE 50' MAST ARM
	818050	1	EA	STEEL POLE WITH TWIN 50' AND 60' MAST ARMS
[3]	~~831010~~	~~1~~	~~EA~~	~~250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE~~
	832020	240	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
	837001	5	EA	GROUND ROD (3/4 " DIA X 10' LENGTH)
	860270	6	EA	8" LED SIGNAL HEAD SECTION
	860272	32	EA	12" LED SIGNAL HEAD SECTION
[3]	860292	4 ~~3~~	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
	861107	100	LF	ELECTRICAL CABLE 5 - CONDUCTOR NO. 14 AWG
	861108	750	LF	ELECTRICAL CABLE 7 - CONDUCTOR NO. 14 AWG
[3]	~~861116~~	~~100~~	~~LF~~	~~ELECTRICAL CABLE 2 - CONDUCTOR NO. 12 AWG TRAY CABLE~~
[3]	~~866104~~	~~1~~	~~EA~~	~~20' LIGHTING ARM ON SIGNAL STRUCTURE~~
	871202	1	EA	INSTALL CONTROLLER AND CABINET-BASE MOUNT

EQUIPMENT LIST "C"

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILLIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

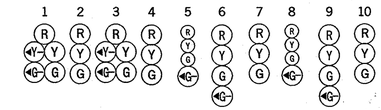
DIMENSION DETAIL



WIRING KEY

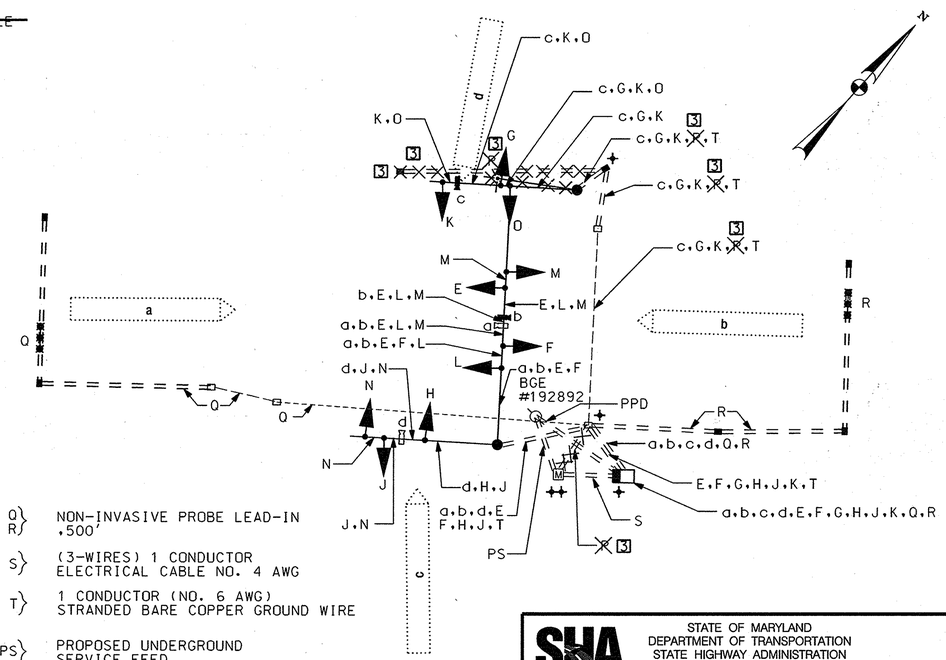
a b c d	VIDEO DETECTION CABLE
E F G H J K	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
L M N O	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
[3] ~~X~~	~~2 CONDUCTOR #12 TRAY CABLE~~
Q R	NON-INVASIVE PROBE LEAD-IN ,500'
S	(3-WIRES) 1 CONDUCTOR ELECTRICAL CABLE NO. 4 AWG
T	1 CONDUCTOR (NO. 6 AWG) STRANDED BARE COPPER GROUND WIRE
PS	PROPOSED UNDERGROUND SERVICE FEED
PPD	PROPOSED UNDERGROUND PHONE DROP
+	3/4" DIA. X 10' LENGTH GROUND ROD
M	METERED SERVICE PEDESTAL

PHASE CHART



	1	2	3	4	5	6	7	8	9	10
PHASE 1 AND 5	←G/R	R	←G/R	R	R	R	R	R	R	R
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6										
PHASE 1 AND 6	←G/G	G	R	R	R	R	R	R	R	R
1 CHANGE	←Y/G	R	R	R	R	R	R	R	R	R
PHASE 2 AND 5	R	R	←G/G	G	R	R	R	R	R	R
2 CHANGE	R	R	←Y/G	G	R	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	R	R	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	R
PHASE 3	R	R	R	R	G ←G–	G ←G–	G	R	R	R
3 CHANGE	R	R	R	R	Y	Y	Y	R	R	R
PHASE 4	R	R	R	R	R	R	R	G ←G–	G ←G–	G
4 CHANGE	R	R	R	R	R	R	R	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



BY: $USERNAME$

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

T3 design
T3 DESIGN, P.C.
3927 OLD LEE HWY
SUITE 101-C
FAIRFAX, VA 22030
PHONE: 703-359-5861
www.t3design.us

[3] GREEN LINE NO. 3, TRAFFIC
REPLACE SHEET NO. 163
DATE: OCTOBER 6, 2008

PLOTTED: $DATETIME$
FILE: $FILE$

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

MD 7 (PHILADELPHIA RD) AND ROSEDALE AVE /HAMILTON AVE

REVISIONS

GENERAL INFORMATION SHEET

SCALE 1" = 20' DATE 10/1/06 CONTRACT NO. BA6885185

DESIGNED BY AJM
DRAWN BY SJW
CHECKED BY PAT
F.A.P. NO.
COUNTY BALTIMORE
LOGMILE 03000700.66
T.I.M.S. NO. F189
TOD NO.

DRAWING NO. TS-1653D SG-2 OF 9 SHEET NO. 163 OF