PROJECT DESCRIPTION

1. GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF LED SIGNALS, A SIZE 6 BASE MOUNTED CABINET, MASTER/LOCAL NEMA CONTROLLER, TELEMETRY PANELS, QUICK CONNECT BLOCKS, AND VIDEO DETECTION AT THE INTERSECTION OF US 222 (PERRYVILLE ROAD) AND MD 824A (BAINBRIDGE RD) IN CECIL COUNTY.

US 222 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

2. OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX PHASE FULL TRAFFIC ACTUATED MODE

PROJECT CONTACTS

MR. RICHARD K. LINDSAY
DISTRICT ENGINEER
PHONE: 410-810-3210

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

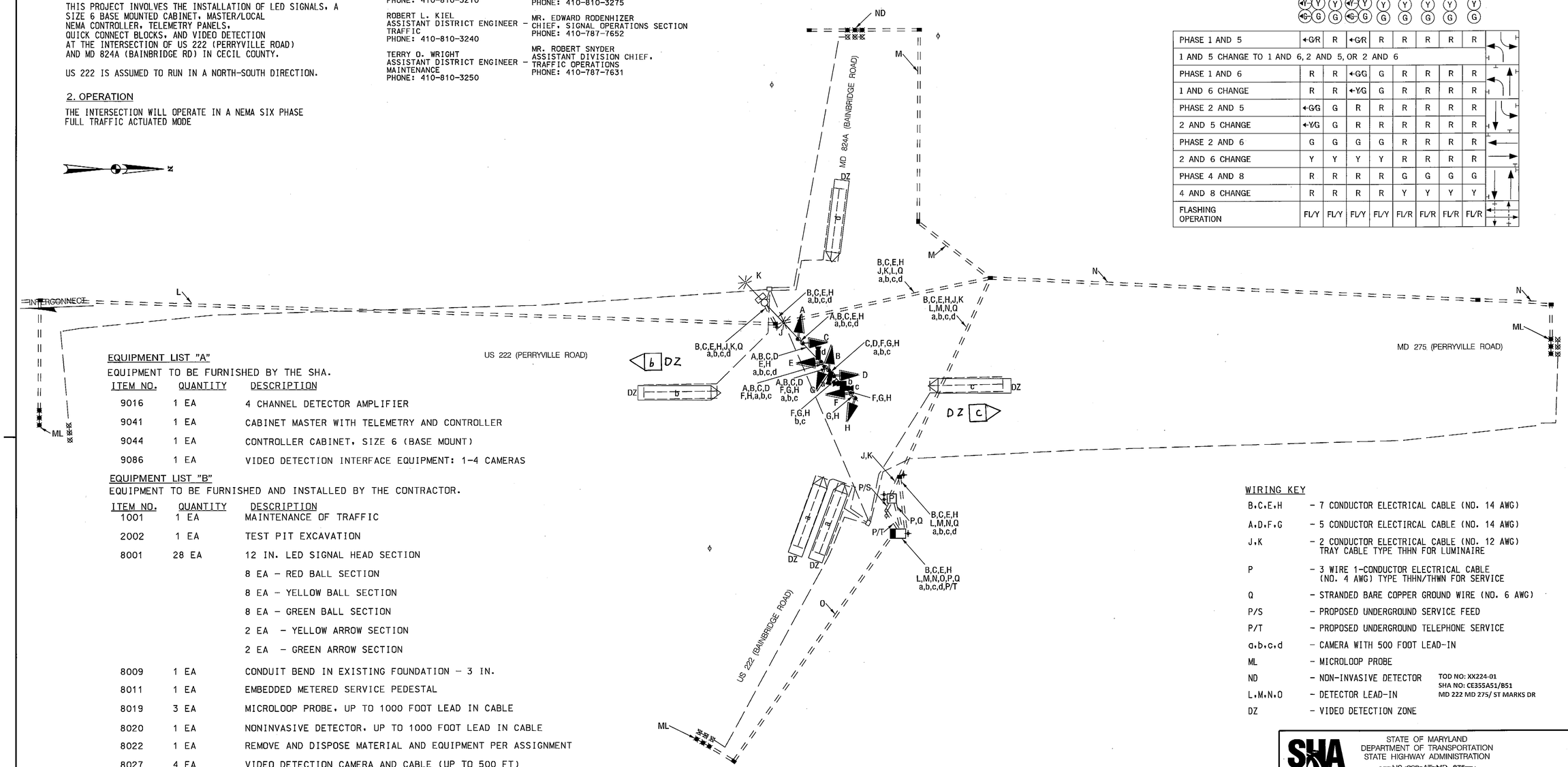
TERRY O. WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: 410-810-3250

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

MR. EDWARD RODENHIZER
CHIEF, SIGNAL OPERATIONS SECTION
PHONE: 410-787-7652

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
PHONE: 410-787-7631

WIRING DIAGRAM



PHASING SEQUENCE CHART

	1	2	3	4	5	6	7	8
	R	R	R	R	R	R	R	R
	◄Y Y	Y	◄Y Y	Y	Y	Y	Y	Y
	◄G G	G	◄G G	G	G	G	G	G
PHASE 1 AND 5	◄~~G~~/R	R	◄~~G~~/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	R	R	◄~~G~~/G	G	R	R	R	R
1 AND 6 CHANGE	R	R	◄~~Y~~/G	G	R	R	R	R
PHASE 2 AND 5	◄~~G~~/G	G	R	R	R	R	R	R
2 AND 5 CHANGE	◄~~Y~~/G	G	R	R	R	R	R	R
PHASE 2 AND 6	G	G	G	G	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R
PHASE 4 AND 8	R	R	R	R	G	G	G	G
4 AND 8 CHANGE	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

EQUIPMENT LIST "A"

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9016	1 EA	4 CHANNEL DETECTOR AMPLIFIER
9041	1 EA	CABINET MASTER WITH TELEMETRY AND CONTROLLER
9044	1 EA	CONTROLLER CABINET, SIZE 6 (BASE MOUNT)
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS

EQUIPMENT LIST "B"

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	1 EA	TEST PIT EXCAVATION
8001	28 EA	12 IN. LED SIGNAL HEAD SECTION
		8 EA - RED BALL SECTION
		8 EA - YELLOW BALL SECTION
		8 EA - GREEN BALL SECTION
		2 EA - YELLOW ARROW SECTION
		2 EA - GREEN ARROW SECTION
8009	1 EA	CONDUIT BEND IN EXISTING FOUNDATION - 3 IN.
8011	1 EA	EMBEDDED METERED SERVICE PEDESTAL
8019	3 EA	MICROLOOP PROBE, UP TO 1000 FOOT LEAD IN CABLE
8020	1 EA	NONINVASIVE DETECTOR, UP TO 1000 FOOT LEAD IN CABLE
8022	1 EA	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8027	4 EA	VIDEO DETECTION CAMERA AND CABLE (UP TO 500 FT)
8028	50 LF	3 IN ELECTRICAL CONDUIT - PVC RISER
8032	825 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 IN - BORED
		180 FT. SCHEDULE 80 RIGID PVC CONDUIT 4 IN - BORED
		645 FT. SCHEDULE 80 RIGID PVC CONDUIT 3 IN - BORED
8034	175 LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 IN - TRENCHED
		125 FT. SCHEDULE 80 RIGID PVC CONDUIT 4 IN - TRENCHED
		25 FT. SCHEDULE 80 RIGID PVC CONDUIT 3 IN - TRENCHED
		25 FT. SCHEDULE 80 RIGID PVC CONDUIT 2 IN - TRENCHED

EQUIPMENT LIST "B"

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
8038	225 LF	NO 6 AWG. STRANDED BARE COPPER GROUND WIRE
8043	60 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
8044	10 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8058	80 LF	ELECTRICAL CABLE - 5 CONDUCTOR NO. 14 AWG.
8059	1150 LF	ELECTRICAL CABLE - 7 CONDUCTOR NO. 14 AWG.
8060	450 LF	ELECTRICAL CABLE (1-CONDUCTOR NO. 12 AWG) TRAY CABLE
8067	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

WIRING KEY

B,C,E,H	- 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
A,D,F,G	- 5 CONDUCTOR ELECTIRCAL CABLE (NO. 14 AWG)
J,K	- 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE TYPE THHN FOR LUMINAIRE
P	- 3 WIRE 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 AWG) TYPE THHN/THWN FOR SERVICE
Q	- STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
P/S	- PROPOSED UNDERGROUND SERVICE FEED
P/T	- PROPOSED UNDERGROUND TELEPHONE SERVICE
a,b,c,d	- CAMERA WITH 500 FOOT LEAD-IN
ML	- MICROLOOP PROBE
ND	- NON-INVASIVE DETECTOR
L,M,N,O	- DETECTOR LEAD-IN
DZ	- VIDEO DETECTION ZONE

TOD NO: XX224-01
SHA NO: CE355A51/B51
MD 222 MD 275/ ST MARKS DR

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF ~~US 222 AT MD 275~~ SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 222 AT MD 275

TRAFFIC SIGNAL PLAN

GENERAL INFORMATION

SCALE 1" = 20' ADVERTISED DATE DECEMBER 2008 CONTRACT NO. AT9135185

DESIGNED BY A. POWELL
DRAWN BY J. CRIDER
CHECKED BY H. DONG
F.A.P. NO.
COUNTY CECIL
LOGMILE 07022202.18
TIMS NO.
TOD NO.

TS NO. 302E | DRAWING TS-1 OF 2 | SHEET NO. 13 OF 15

Edwards AND Kelcey
100 SOUTH CHARLES STREET
TOWER 2, SUITE 1000
BALTIMORE, MD 21201

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BY: fanuszewski