PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF AN EMERGENCY VEHICLE PRE-EMPTION TRAFFIC SIGNAL AT THE INTERSECTION OF 5 AND MECHANICSVILLE ROAD IN ST. MARY'S COUNTY.

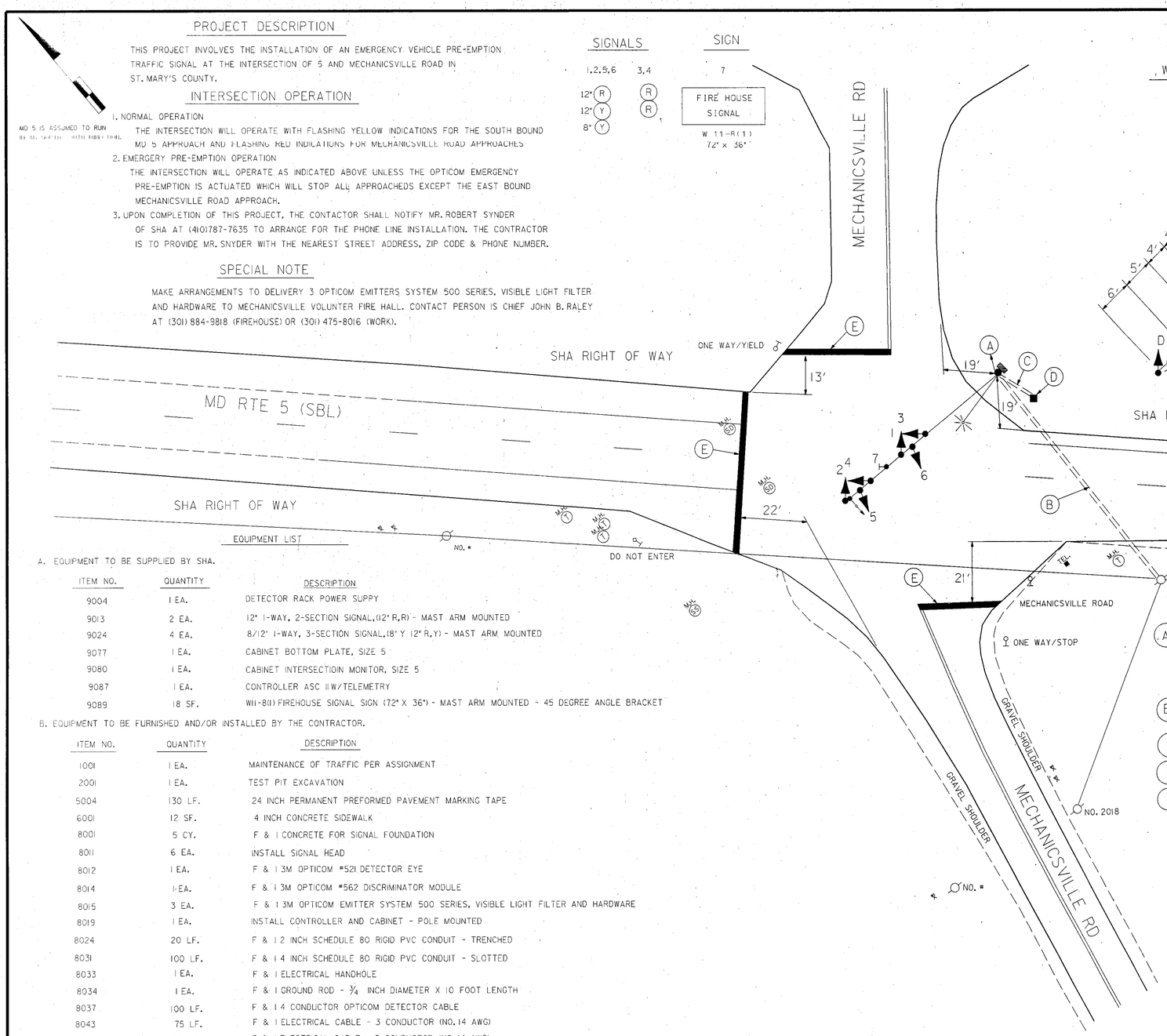
INTERSECTION OPERATION

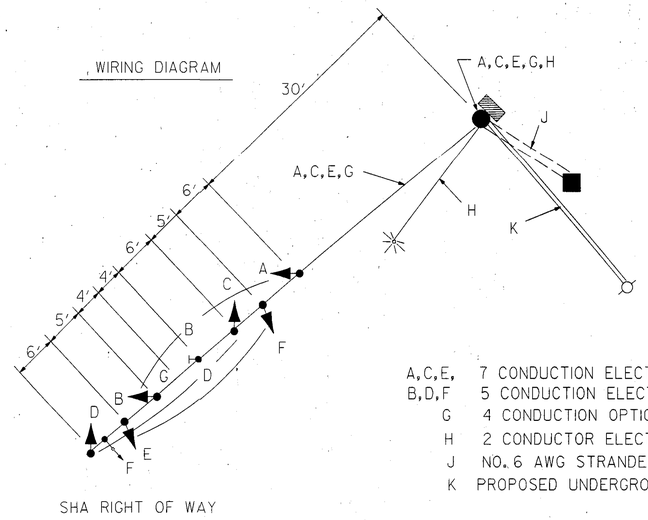
MD 5 IS ASSUMED TO RUN IN AN N-S DIRECTION WITH THIS TRAFFIC

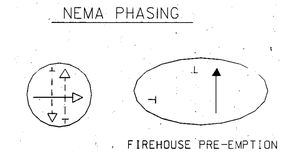
1. NORMAL OPERATION
   THE INTERSECTION WILL OPERATE WITH FLASHING YELLOW INDICATIONS FOR THE SOUTH BOUND MD 5 APPROACH AND FLASHING RED INDICATIONS FOR MECHANICSVILLE ROAD APPROACHES
2. EMERGERY PRE-EMPTION OPERATION
   THE INTERSECTION WILL OPERATE AS INDICATED ABOVE UNLESS THE OPTICOM EMERGENCY PRE-EMPTION IS ACTUATED WHICH WILL STOP ALL APPROACHEDS EXCEPT THE EAST BOUND MECHANICSVILLE ROAD APPROACH.
3. UPON COMPLETION OF THIS PROJECT, THE CONTACTOR SHALL NOTIFY MR. ROBERT SYNDER OF SHA AT (410)787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE & PHONE NUMBER.

SPECIAL NOTE

MAKE ARRANGEMENTS TO DELIVERY 3 OPTICOM EMITTERS SYSTEM 500 SERIES, VISIBLE LIGHT FILTER AND HARDWARE TO MECHANICSVILLE VOLUNTER FIRE HALL. CONTACT PERSON IS CHIEF JOHN B. RALEY AT (301) 884-9818 (FIREHOUSE) OR (301) 475-8016 (WORK).







A,C,E,	7 CONDUCTION ELECTRICAL CABLE (NO. 14 AWG)
B,D,F	5 CONDUCTION ELECTRICAL CABLE (NO. 14 AWG)
G	4 CONDUCTION OPTICOM DETECTOR CABLE (3M #138)
H	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG)
J	NO. 6 AWG STRANDED BARE COPPER WIRE
K	PROPOSED UNDERGROUND SERVICE BY S.M.E.C.O.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9004	1 EA.	DETECTOR RACK POWER SUPPY
9013	2 EA.	12" 1-WAY, 2-SECTION SIGNAL,(12" R,R) - MAST ARM MOUNTED
9024	4 EA.	8/12" 1-WAY, 3-SECTION SIGNAL,(8" Y 12" R,Y) - MAST ARM MOUNTED
9077	1 EA.	CABINET BOTTOM PLATE, SIZE 5
9080	1 EA.	CABINET INTERSECTIOIN MONITOR, SIZE 5
9087	1 EA.	CONTROLLER ASC III W/TELEMETRY
9089	18 SF.	W11-8(1) FIREHOUSE SIGNAL SIGN (72" X 36") - MAST ARM MOUNTED - 45 DEGREE ANGLE BRACKET

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA.	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2001	1 EA.	TEST PIT EXCAVATION
5004	130 LF.	24 INCH PERMANENT PREFORMED PAVEMENT MARKING TAPE
6001	12 SF.	4 INCH CONCRETE SIDEWALK
8001	5 CY.	F & I CONCRETE FOR SIGNAL FOUNDATION
8011	6 EA.	INSTALL SIGNAL HEAD
8012	1 EA.	F & I 3M OPTICOM #521 DETECTOR EYE
8014	1 EA.	F & I 3M OPTICOM #562 DISCRIMINATOR MODULE
8015	3 EA.	F & I 3M OPTICOM EMITTER SYSTEM 500 SERIES, VISIBLE LIGHT FILTER AND HARDWARE
8019	1 EA.	INSTALL CONTROLLER AND CABINET - POLE MOUNTED
8024	20 LF.	F & I 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8031	100 LF.	F & I 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
8033	1 EA.	F & I ELECTRICAL HANDHOLE
8034	1 EA.	F & I GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
8037	100 LF.	F & I 4 CONDUCTOR OPTICOM DETECTOR CABLE
8043	75 LF.	F & I ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
8044	60 LF.	F & I ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8045	360 LF.	F & I ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8046	60 LF.	F & I ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
8049	15 LF.	F & I NO. 6 AWG STRANDED BARE COPPER WIRE
8054	18 SF.	INSTALL OVERHEAD SIGN
8056	1 EA.	F & I 250 WATT HPS LUMINAIRE WITH PHOTOCELL
8057	1 EA.	F & I LIGHTING BRACKET ARM FOR TRAFFIC SIGNAL STRUCTURE
8070	1 EA.	F & I CONTROL AND DISTRIBUTION EQUIPMENT
8073	1 EA.	F & I PHOTOCELL
8084	1 EA.	F & I MAST ARM POLE AND 70 FOOT MAST ARM

"CONSTRUCTION DETAILS"

(A) INSTALL 27 FT. STEEL POLE WITH 70 FT. MAST ARM, 20 FT. LIGHTING ARM WITH 250 WATTS LUMINAIRE, TRAFFIC SIGNAL HEADS, SIGN, OPTICOM DETCTOR EYE AND POLE MOUNTED CABINET (INSTALL 1 - 2 IN., 1 - 3 IN. AND 1 - 4 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE CONDUIT BENDS IN POLE BASE)

(B) INSTALL 4 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT - SLOTTED FOR PROPOSED POWER FEED BY S.M.E.C.O.

(C) INSTALL 2 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE ELECTRICAL CONDUIT -TRENCHED.

(D) INSTALL ELECTRICAL HANDHOLE.

(E) INSTALL 24 IN WHITE PERFORMED PAVEMENT MARKING TAPE.

PHASE CHART

	1	2	3	4	5	6
12" R		R	R	R	R	R
12" Y		Y	R	R	Y	Y
8" Y		Y			Y	Y
NORMAL OPERATION	FL/8"Y	FL/8"Y	FL/R	FL/R	FL/R	FL/R
PRE=EMPT WARNING	QFL/8"Y	QFL/8"Y	R/R	R/R	R	R
WARNING CHANGE	12" Y	12" Y	R	R	R	R
PRE-EMPT PHASE	R	R	R	R	FL/8"Y	FL/8"Y
PRE-EMPT CHANGE	R	R	R	R	Y	Y
FLASHING OPERATION	FL/12"Y	FL/12"Y	FL/R	FL/R	FL/R	FL/R

LOG MILE NO. 18005040.25

REVISIONS	APPROVALS
	3/20/98 ASST. DIVISION CHIEF, TEDD
	ASST. DISTRICT ENGINEER, TRAFFIC 3/23/98
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION 3/23
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

MD 5 @ MECHANICSVILLE ROAD

DATE 1/22/98

DRAWN BY:	F.A.P. NO. AC-STPG-000S(590)E	TRAFFIC SIGNAL NO.:	SHEET NO.
CHECK BY:	S.H.A. NO. AW279 A501/B513	TS-3760	1 OF 1
SCALE: 1"=20'	COUNTY ST MARY'S		

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