

**PROJECT DESCRIPTION  
GENERAL**

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW "IN-ROAD" LIGHTING SYSTEM FOR THE PEDESTRIAN CROSSING ON MD 547 (STRATHMORE AVENUE) AT KESWICK STREET MONTGOMERY COUNTY.

**CROSSWALK OPERATION**

THE PEDESTRIAN CROSSWALK WILL OPERATE BY USING A BOLLARD ACTIVATION SYSTEM SENSORS AT EACH FAR END OF THE CROSSWALK. THE SYSTEM SHALL BE ACTIVATED WHEN A PEDESTRIAN CROSSES BETWEEN THE BOLLARDS. THIS WILL ACTIVATE THE IN-ROAD WARNING LIGHTS. THE LIGHTS SHALL REMAIN ON FOR A PRE-DETERMINED SET TIME.

**SPECIAL NOTES**

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

**PROJECT CONTACTS:**

MR. LEE STARKLOFF, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 513-7358  
MR. DENNIS MCMAHON, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (301) 513-7336  
MR. WAYNE MOWDY, ASSISTANT DISTRICT ENGINEER- MAINTENANCE  
PHONE: (301) 513-7304  
MR. AUGIE REBISH, UTILITY ENGINEER  
PHONE: (301) 513-7350  
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630  
MR. CURTIS FASICK, LIGHTGUARD SYSTEMS INC. SALES REPRESENTATIVE  
PHONE: (703) 304-5463 OR (703)-406 9013

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR FOLLOWING MSHA STANDARD PLATES FOR TRAFFIC CONTROL.

**EQUIPMENT LIST**

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
900000	BASE MOUNTED (SIZE-5) CABINET	EA	1

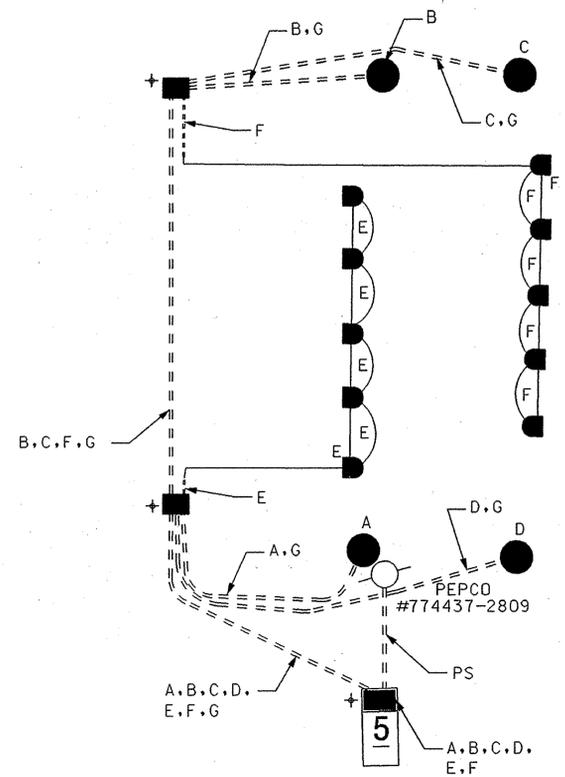
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
120500	MAINTENANCE OF TRAFFIC	LS	1
201032	CLASS 2 EXCAVATION	CY	1
203030	TEST PIT EXCAVATION	CY	1
800000	FURNISH AND INSTALL IN-ROAD WARNING SIGNALS	EA	12
800000	FURNISH AND INSTALL BALLARD ACTIVATION UNIT	EA	4
800000	FURNISH AND INSTALL POWER CONTROL UNIT	EA	1
800000	FURNISH AND INSTALL SPARE LED	EA	2
800000	SAW CUT FOR (IN-ROADS WARNING LIGHTS)	LF	95
801004	CONCRETE FOUNDATION	CY	3
802501	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	140
805118	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED	LF	35
805125	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	70
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED	LF	20
805160	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE	LF	10
807400	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS	EA	1
810022	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG-THHN/THWN	LF	130
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	2
837001	GROUND ROD - 3/4 INCH DIA. X 10 FT. LENGTH	EA	3
861108	ELECTRICAL CABLE - 7 CONDUCTOR NO. 14 AWG.	LF	315
862101	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)	LF	180
871202	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1

D. EQUIPMENT TO BE REMOVED BY CONTRACTOR.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
	"NONE"		

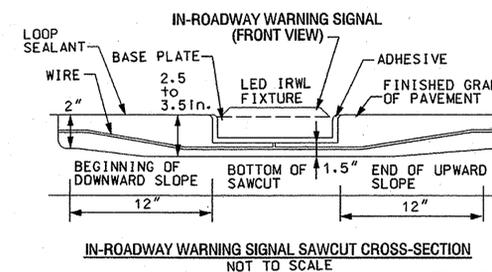
**WIRING DIAGRAM**



**KEY**

- A) 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
- B) (3) PIECES OF 1 CONDUCTOR (NO. 14 AWG) LOOP WIRE ENCASED IN SEPARATE 1/4 IN FLEXIBLE TUBING.
- C) 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
- D) PS POWER SERVICE UNDERGROUND 3 WIRE 1 - CONDUCTOR # 8 AWG
- E) + GROUND ROD

NOTE: CONTRACTOR SHALL REFER TO LIGHTGUARD INSTALLATION MANUAL FOR FURTHER INSTRUCTIONS FOR WIRING DIVIDED HIGHWAY IN-ROAD LIGHTING SYSTEM.



**IN-ROADWAY WARNING SIGNAL SAWCUT CROSS-SECTION**  
NOT TO SCALE

REDLINE REVISION NO. 3  
NEW SHEET

GP-02

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
GENERAL INFORMATION PLAN  
MD 547 (STRATHMORE AVE.)  
AT KESWICK STREET

**SABRA, WANG & ASSOCIATES, INC.**  
1504 JOH AVENUE  
SUITE 180  
BALTIMORE, MD 21227  
(410) 737-6564  
WWW.SABRA-WANG.COM

DRAWN BY: S. SMITH	F.A.P. NO.	TS NO. 4388-62
CHECKED BY: S. RENZI	S.H.A. NO. M07835185	SHEET NO.
SCALE: 1" = 20'	COUNTY: MONTGOMERY	T.I.M.S. NO. G 418
DATE: JULY 2004	LOG MILE: 15053700-93	OF

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