# PROJECT DESCRIPTION

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THIS PROJECT INVOLVES THE REMOVAL AND REPLACEMENT OF PEDESTRIAN SIGNALS AND PUSHBUTTONS WITH NEW COUNTDOWN SIGNALS AND NEW AUDIBLE TACTILE PUSHBUTTON SYSTEMS. MD 450 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE EXISTING PHASING AT THE INTERSECTION WILL REMAIN.

CONTROLLER REQUIREMENTS

N/A

# PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

CONTACTS FOR DISTRICT 5:

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER, TRAFFIC
410-841-1003

MR. JOHN S. MAYS
ASSISTANT DISTRICT ENGINEER, MAINTENANCE
410-841-1013

MR. JOE HORTY
UTILITIES ENGINEER
410-841-1039

CONTACTS FOR 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 |
|---|---|---|

# SPECIAL NOTES:

APS FOR MD 450 (DEFENSE HIGHWAY) WILL FUNCTION AS FOLLOWS:

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSH BUTTON FOR AN EXTENDED TIME. THE PUSH BUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS DEFENSE HIGHWAY AT PRIEST BRIDGE".
B. WHEN WALK PHASE BEGINS. THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

FOR PRIEST BRIDGE ROAD

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSH BUTTON FOR AN EXTENDED TIME. THE PUSH BUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS PRIEST BRIDGE AT DEFENSE HIGHWAY".
B. WHEN WALK PHASE BEGINS. THE MESSAGE WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION. 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.

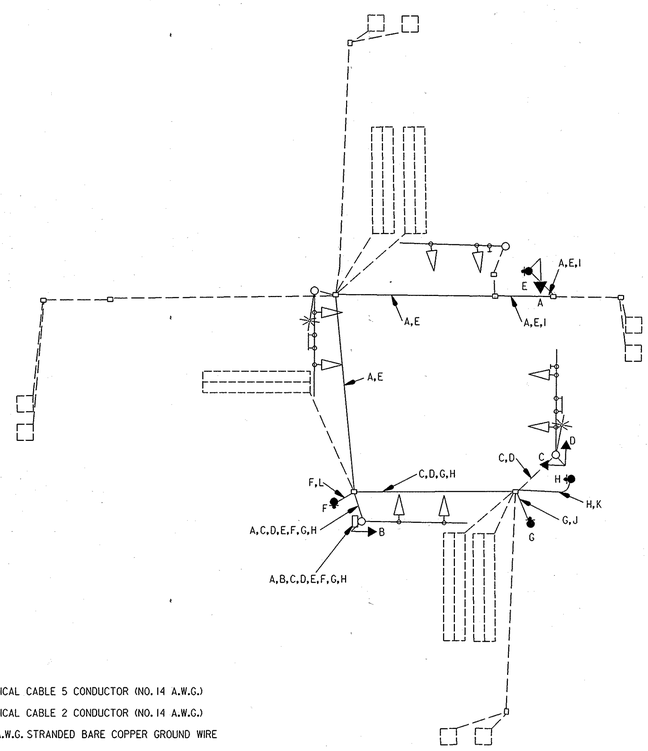
| CATEGORY CODE NO. | QUANTITY | DESCRIPTION |
|---|---|---|

# EQUIPMENT LIST "B"

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

| AX3745133 ITEMS | CATEGORY CODE NO. | SPECIFICATION NUMBER | QUANTITY | DESCRIPTION |
|---|---|---|---|---|
| 5001 | 500000 | 549 | 570 LF | REMOVAL OF EXISTING PAVEMENT MARKINGS |
| 5006 | 525412 | 549 | 545 LF | 12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS |
| 5007 | 525625 | 549 | 65 LF | 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS |
| 8001 | 800000 | 801 | 2 CY | CONCRETE FOR SIGNAL STRUCTURE |
| 8002 | 800000 | 817 | 4 EA | AUDIBLE TACTILE PEDESTRIAN PUSH BUTTON |
| 8003 | 818004 | 818 | 4 EA | BREAKAWAY PEDESTRIAN POLE- ANY SIZE |
| 8004 | 800000 | 814 | 4 EA | 16 INCH LED PEDESTRIAN COUNTDOWN SIGNAL HEAD |
| 8005 | 800000 | 800 | 1 EA | REMOVE AND DISPOSE PER ASSIGNMENT |
| 8006 | 800000 | 817 | 4 SF | PEDESTRIAN EDUCATION SIGN |
| 8007 | 802501 | 804 | 85 LF | NO. 6 A.W.G. STRANDED BARE COPPER GROUNDWIRE |
| 8008 | 805135 | 805 | 40 LF | 3 ICH SCHEDULE 80 RIDGID PVC CONDUIT - TRENCHED |
| 8012 | 860292 | 825 | 3 EA | CUT, CLEAN, GALVINIZE AND CAP TRAFFIC SIGNAL STRUCTURE |
| 8013 | 861105 | 810 | 560 LF | ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.) |
| 8014 | 861107 | 810 | 400 LF | ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.) |
| 8016 | 800000 | 816 | 1 EA | APS CENTRAL CONTROL UNIT |

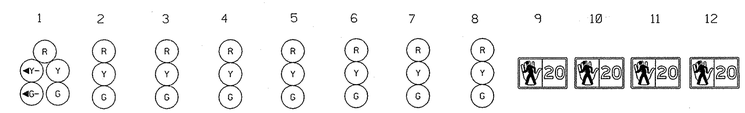
# WIRING DIAGRAM




WIREING KEY

| | |
|---|---|
| A,B,C,D | ELECTRICAL CABLE 5 CONDUCTOR (NO. 14 A.W.G.) |
| E,F,G,H | ELECTRICAL CABLE 2 CONDUCTOR (NO. 14 A.W.G.) |
| I,J,K,L | NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE |

# PHASING DIAGRAM




| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHASE 1 & 6 | G / G | G | R | R | R | R | R | R | DW | DW | DW | DW |
| 1 & 6 CHANGE | G / Y | G | R | R | R | R | R | R | DW | DW | DW | DW |
| PHASE 2 & 6 | G | G | G | G | R | R | R | R | WK | WK | DW | DW |
| PED CLEAR | G | G | G | G | R | R | R | R | FL/DW | FL/DW | DW | DW |
| 2 & 6 CHANGE | Y | Y | Y | Y | R | R | R | R | DW | DW | DW | DW |
| PHASE 4 & 8 | R | R | R | R | G | G | G | G | DW | DW | DW | DW |
| 4 & 8 CHANGE | R | R | R | R | Y | Y | Y | Y | DW | DW | DW | DW |
| PHASE 8 ALT | R | R | R | R | G | G | G | G | DW | DW | WK | WK |
| PED CLEAR | R | R | R | R | G | G | G | G | DW | DW | FL/DW | FL/DW |
| 8 ALT CHANGE | R | R | R | R | Y | Y | Y | Y | DW | DW | DW | DW |
| FLASHING OPERATION | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | DARK | DARK | DARK | DARK |

NOTE: NO CHANGE TO EXISTING OPERATION

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

**MD 450 (DEFENSE HIGHWAY) AT GOOD HOPE DR /PRIEST BRIDGE RD**
**CROFTON, MARYLAND**

REVISION & CONSULTANT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## GENERAL INFORMATION SHEET

SCALE _____ DATE 02/2008 CONTRACT NO. AA275A5F

DESIGNED BY G.N.C./F.A.E. COUNTY ANNE ARUNDEL
DRAWN BY G.N.C./F.A.E. LOGMILE 02045000.52
CHECKED BY J.L.R. T.I.M.S. NO. I806
F.A.P. NO. _____ TOD NO. 2448A

DRAWING NO. – OF SHEET NO. 2 OF 2

PLOTTED: Tuesday, Februey 12, 2008 AT 11:15 AM
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