

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING FLAG IN THE AIR TO A PEDESTRIAN ACTUATED SIGNAL AT THE INTERSECTION OF MD 547 (STRATHMORE AVENUE) AND KENILWORTH AVENUE IN MONTGOMERY COUNTY, MARYLAND. MD 547 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

1. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A FLASHING MODE.

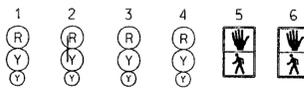
2. SPECIAL OPERATION

THE INTERSECTION WILL OPERATE AS INDICATED ABOVE, UNLESS A PUSHBUTTON IS ACTIVATED BY A PEDESTRIAN WHICH WILL STOP THE MD 547 APPROACHES.

CONTROLLER REQUIREMENTS

INSTALL FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.

PHASE CHART



NORMAL OPERATION	8° FL/Y	8° FL/Y	8° FL/Y	8° FL/Y	DW	DW	←
PEDESTRIAN ACTUATED OPERATION	QUICK 8° FL/Y	QUICK 8° FL/Y	QUICK 8° FL/Y	QUICK 8° FL/Y	DW	DW	→
	12° Y	12° Y	12° Y	12° Y	DW	DW	
PED. CLEARANCE	R	R	R	R	WK	WK	→
PED ACT. CHANGE	R	R	R	R	FL/DW	FL/DW	→

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9044	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET
9571	18 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 2 EACH S1-1 SIGN FYG (36 IN. x 36 IN.) - MAST ARM MOUNT

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.02-09 (FLAGGING OPERATION)

STANDARD NO. MD-104.02-01 (SHOULDER WORK)

STANDARD NO. MD-104.02-03 (LANE SHIFT)

STANDARD NO. MD-104.02-13 (INTERSECTION FLAGGING OPERATION)

EQUIPMENT LIST "B"

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

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2002	3 C.Y.	TEST PIT EXCAVATION
8001	5 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
8002	4 EACH	12 IN. PEDESTRIAN SIGNAL HEAD SECTION
8014	1 EACH	MAST ARM POLE (15 FT. T) AND 50 FT. MAST ARM
8018	2 EACH	PEDESTRIAN POLE (ANY SIZE)
8019	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT AS PER ASSIGNMENT
8024	35 L.F.	DISCONNECT, PULL-BACK AND REROUTE CABLES
8030	160 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8038	50 L.F.	2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8040	10 L.F.	4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8046	1 EACH	ELECTRICAL UTILITY SERVICE EQUIPMENT (120/240 V, 1 PHASE 3 WIRE SYSTEM)
8047	45 L.F.	ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G - THHN/THWN
8056	18 S.F.	INSTALL OVERHEAD SIGN
8074	3 EACH	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
8075	4 EACH	8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8076	8 EACH	12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
8079	1 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8080	3 EACH	PAINT INSTALLED TRAFFIC SIGNAL STRUCTURE
8082	190 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
8084	220 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8085	85 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8089	2 EACH	PUSHBUTTON AND SIGN
8094	1 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. LEE STARKLOFF, MONTGOMERY
PHONE: (301) 513-7368
ASSISTANT DISTRICT ENGINEER - TRAFFIC

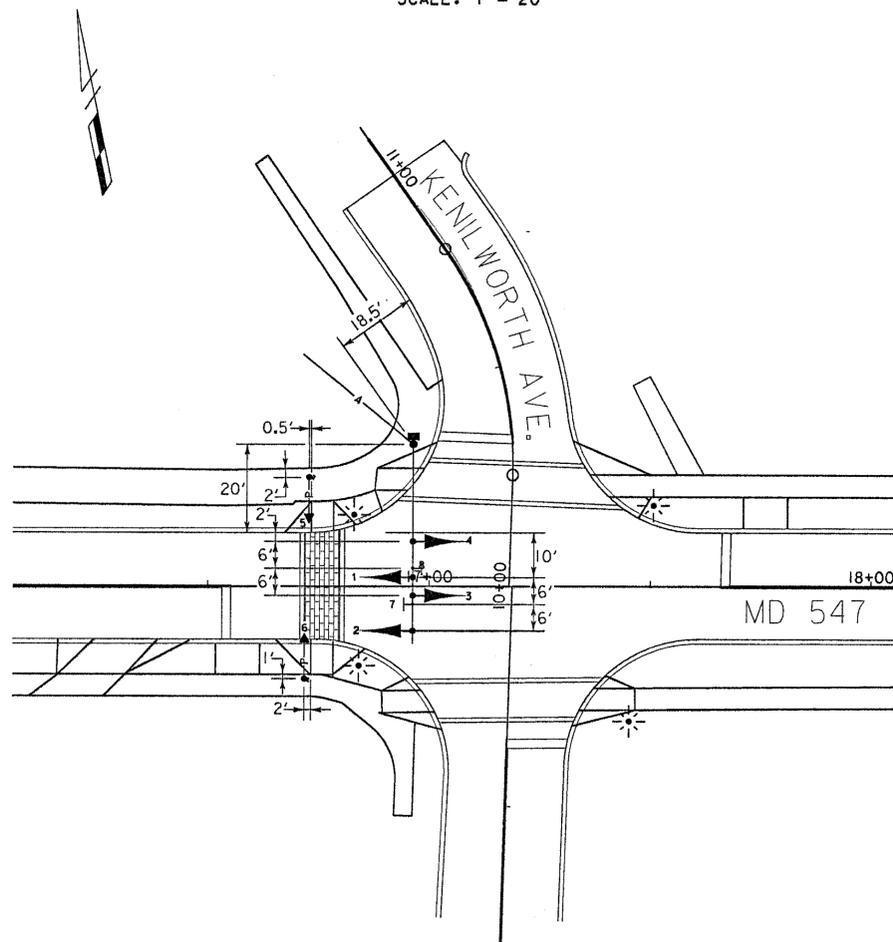
MR. AUGIE REBISH
DISTRICT UTILITY ENGINEER
PHONE: (301) 513-7350

MR. RALEIGH MEDLEY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

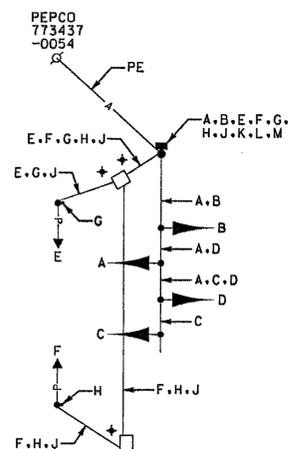
MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

DIMENSION DIAGRAM

SCALE: 1" = 20'



WIRING DIAGRAM



WIRING KEY

- A } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- B }
- C } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D }
- E }
- F }
- G } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- H }
- J } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- K } 1-CONDUCTOR ELECTRICAL CABLE (NO. 4 A.W.G.)
- L }
- M }

PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE
+ - 3/4 IN. X 10 FT. GROUND ROD

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

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

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

GENERAL INFORMATION SHEET

MD 547 (STRATHMORE AVE.) & KENILWORTH AVE.

WR&A
Whitman, Reardon
and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

DRAWN BY: S. BLOSS	F.A.P. NO.	TS NO.
CHECKED BY: N. LEARY	S.H.A. NO. AT3565185	TS-3723B
SCALE: NONE	COUNTY: MONTGOMERY	T.I.M.S. NO.
DATE: 7/27/2004	LOG MILE: 15054700.67	6117
		SHEET NO. 2 OF 2