

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A TEMPORARY TRAFFIC SIGNAL FOR STAGES 1-4 OF THE TRAFFIC CONTROL PLANS AND ULTIMATE SIGNAL AT THE INTERSECTION OF MD 193 (UNIVERSITY BOULEVARD) AND I-495 (CAPITAL BELTWAY) IN MONTGOMERY COUNTY, MARYLAND. MD 193 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

TEMPORARY SIGNAL

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH MD 193 APPROACHES OPERATING CONCURRENTLY AND THE I-495 APPROACH OPERATING ALONE.

ULTIMATE SIGNAL

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH MD 193 APPROACHES OPERATING CONCURRENTLY AND THE I-495 APPROACH OPERATING ALONE.

PEDESTRIAN INDICATIONS WILL BE PROVIDED ACROSS THE I-495 OFF RAMP.

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS - ULTIMATE SIGNAL

MD 193 (UNIVERSITY BOULEVARD) AND I-495 OFF RAMP - NORTH LEG

STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS I-495 RAMP AT UNIVERSITY, WAIT."

WALK: RAPID TICK

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH TWO (2) FOUR-CHANNEL, SYSTEM PACKAGE, VIDEO INTERFACE EQUIPMENT (1-8 CAMERAS), UNINTERRUPTIBLE POWER SUPPLY, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "S" BASE MOUNTED CABINET.

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. VENU NEMANI, MONTGOMERY
PHONE: (301) 513-7404
ASSISTANT DISTRICT ENGINEER - TRAFFIC

MR. KAMAL HAMUD
MONTGOMERY COUNTY TMC
PHONE: (240) 777-8761

MR. VERNON STINNETT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 513-7304

MR. VICTOR GRAFTON
DISTRICT UTILITY ENGINEER
PHONE: (301) 513-7350

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CATEGORY CODES	QUANTITY	DESCRIPTION
900000	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED ASC III CONTROLLER WITH VIDEO INTERFACE EQUIPMENT: 1-8 CAMERAS
900000	1 EACH	NEMA SIZE "S" BASE MOUNTED CABINET WITH INTERSECTION MONITOR
900000	1 EACH	UPS BATTERY BACKUP SYSTEM
900000	1 EACH	LAU PANEL
973023	69 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF (POLE MOUNT) :
	- 1 EACH	D-3(1) SIGN (VARIABLE x 16 IN.) - MAST ARM MOUNT
	- 2 EACH	R3-3 SIGN (24 IN. x 24 IN.) - MAST ARM MOUNT
	- 2 EACH	R3-3 SIGN (24 IN. x 24 IN.) - SPAN MOUNT
	- 2 EACH	R3-5(L) SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT
	- 1 EACH	R200-2 SIGN (30 IN. x 54 IN.) - MAST ARM MOUNT
	- 1 EACH	R200-3 MOD. SIGN (30 IN. x 54 IN.) - MAST ARM MOUNT
	- 2 EACH	R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS I-495 RAMP"

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

- EXISTING VIDEO DETECTION CAMERAS AND INTERFACE EQUIPMENT SHALL BE RETURNED TO SHA.
- ALL OTHER REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST "B"

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

CATEGORY CODES	QUANTITY	DESCRIPTION
203030	6 C.Y.	TEST PIT EXCAVATION
585621	595 L.F.	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	450 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
1 801004	19 33 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
801106	38 L.F.	WOOD SIGN SUPPORTS 4"x6"
1 802501	555 485 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
1 805018	60 L.F.	3 INCH ELECTRICAL CONDUIT - GALVANIZED RISER
1 805050	2 EACH	WEATHER HEAD, 3 INCH
805118	175 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
805125	50 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805135	30 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805140	100 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
811001	5 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	24 S.F.	INSTALL GROUND MOUNTED SIGN
813015	85 S.F.	INSTALL OVERHEAD SIGN
818004	2 EACH	10 FOOT BREAKAWAY PEDESTAL POLE
1 818009	3 EACH	14" x 32" STRAIN POLE
818021	1 EACH	STEEL POLE WITH TWIN 50 FOOT MAST ARM
818050	1 EACH	STEEL POLE WITH TWIN 50 FOOT AND 60 FOOT MAST ARMS
837001	6 EACH	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860265	12 EACH	RELOCATE EXISTING SIGNAL HEAD
860284	45 EACH	12 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860292	1 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	210 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	860 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	1855 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	490 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
866103	2 EACH	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
869102	375 L.F.	STEEL SPAN WIRE - 3/8 INCH DIAMETER
871202	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
800000	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
800000	2 EACH	16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	2 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION
800000	1 EACH	2-WIRE CENTRAL CONTROL UNIT
800000	5 EACH	VIDEO DETECTION CAMERA AND CABLE
800000	2 EACH	280 LED LAMP AND LUMINAIRE
1 800000	3 EACH	40 FOOT CLASS II WOOD POLE



1 REDLINE REVISION NO.1 AUGUST 2013
TEBD APPROVAL SHA NO. PG5935176

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 193 (UNIVERSITY BOULEVARD) AND I-495 (CAPITAL BELTWAY)
SILVER SPRING, MARYLAND

GENERAL INFORMATION SHEET

SCALE NONE DATE OCTOBER 2012 CONTRACT NO. MO5825180

DESIGNED BY S. BLOSS COUNTY MONTGOMERY
DRAWN BY S. BLOSS LOGMILE 15019304.84
CHECKED BY N. LEARY TMS NO. H314
F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 4521B DRAWING TSP-07 OF 07 SHEET NO. 97 OF 184