

PROJECT DESCRIPTION

GENERAL
 THIS PORTION OF THE PROJECT INVOLVES RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNALS AT U.S. 1 N.B. AND MD 198 E.B. (GORMAN AVE.) AND U.S. 1 S.B. AND MD 198 E.B. (GORMAN AVE.) AND ~~MD 198 E.B. (GORMAN AVE.)~~ ~~THE EXISTING TRAFFIC CONTROL SIGNAL AT U.S. 1 N.B. AND MD 198 W.B. (TALBOTT AVE.)~~ IN PRINCE GEORGE'S COUNTY. U.S. 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION
 1. U.S. 1 S.B. AND MD 198 E.B. (GORMAN AVE.)
 THE INTERSECTION WILL OPERATE IN A NEMA TWO PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH THE U.S. 1 S.B. APPROACH OPERATING ALONE AND THE MD 198 E.B. APPROACH OPERATING ALONE. AN ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE NORTH LEG OF U.S. 1 AND PEDESTRIAN INDICATIONS ARE PROVIDED ACROSS THE WEST LEG OF MD 198.
 2. U.S. 1 N.B. AND MD 198 E.B. (GORMAN AVE.)
 1. NORMAL OPERATION
 THE INTERSECTION WILL OPERATE IN A NEMA TWO-PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH THE U.S. 1 N.B. APPROACH OPERATING ALONE AND THE MD 198 E.B. APPROACH OPERATING ALONE.
 2. EMERGENCY PRE-EMPTION
 THE INTERSECTION WILL OPERATE AS INDICATED ABOVE, UNLESS AN EMERGENCY VEHICLE PRE-EMPTS THE TRAFFIC SIGNAL AND STOPS THE MD 198 E.B. APPROACH FOR THE U.S. 1 N.B. APPROACH.
 3. U.S. 1 N.B. AND MD 198 W.B. (TALBOTT AVE.)
 1. NORMAL OPERATION
 THE INTERSECTION WILL OPERATE IN A NEMA TWO-PHASE, SEMI-TRAFFIC-ACTUATED MODE WITH THE U.S. 1 N.B. APPROACH OPERATING ALONE AND THE MD 198 W.B. APPROACH OPERATING ALONE.
 2. EMERGENCY PRE-EMPTION
 THE INTERSECTION WILL OPERATE AS INDICATED ABOVE, UNLESS AN EMERGENCY VEHICLE PRE-EMPTS THE TRAFFIC SIGNAL AND STOPS THE MD 198 W.B. APPROACH FOR THE U.S. 1 N.B. APPROACH.

CONTROLLER REQUIREMENTS
 1. U.S. 1 S.B. AND MD 198 E.B. (GORMAN AVE)
 INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE AND FOUR (4) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER AND ASSOCIATED HARNESSSES HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.
 2. U.S. 1 N.B. AND MD 198 E.B. (GORMAN AVE.)
 INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH SYSTEM PACKAGE AND TWO (2) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIER AND ASSOCIATED HARNESSSES HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET.
 3. U.S. 1 N.B. AND MD 198 W.B. (TALBOTT AVE.)
~~THE EXISTING POLE MOUNTED CABINET AND CONTROLLER WILL BE USED.~~
 INSTALL A FULL TRAFFIC ACTUATED EIGHT PHASE CONTROLLER WITH SYSTEM PACKAGE AND TWO (2) FOUR CHANNEL TIME DELAY OUTPUT LOOP DETECTOR AMPLIFIER AND ASSOCIATED HARDWARE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

MAINTENANCE OF TRAFFIC

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

STANDARD NO. MD-104.00 - 104.00-30
 STANDARD NO. MD-104.37-01 (LEFT-LANE CLOSURE)
 STANDARD NO. MD-104.38-01 (RIGHT-LANE CLOSURE)
 STANDARD NO. MD-104.40-01 (INTERSECTION FAR-LEFT LANE CLOSURE)
 STANDARD NO. MD-104.41-01 (INTERSECTION FAR-RIGHT LANE CLOSURE)
 STANDARD NO. MD-104.43-01 (SHOULDER WORK)
 STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)
 STANDARD NO. MD-104.32-02 (INTERSECTION FLAGGING OPERATION)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. CHARLES WATKINS
 DISTRICT ENGINEER
 PHONE: (301) 513-7311

MR. MAJIB SHAKIB
 ASSISTANT DISTRICT ENGINEER - TRAFFIC
 PHONE: (301) 513-7358

MR. RANDY BROWN
 ASSISTANT DISTRICT ENGINEER - MAINTENANCE
 PHONE: (301) 513-7304

MR. JOE GECKLE
 DISTRICT UTILITIES ENGINEER
 PHONE: (301) 513-7350

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

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
960000	8 X EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
971016	2 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "5" POLE MOUNTED CABINET
973023	122 X S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF: - 3 X EACH R3-2 SIGN (30" IN X 30" IN) - MAST ARM MOUNT - 3 X EACH R3-1 SIGN (30" IN X 30" IN) - MAST ARM MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "NORTH, U.S. 1, LEFT ARROW" (36" IN X 75" IN) - POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY "SOUTH, U.S. 1, RIGHT ARROW" (24" IN X 51" IN) - GROUND MOUNT - 1 EACH R3-5L SIGN (30" IN X 36" IN) - MAST ARM MOUNT - 4 X EACH D-3(1) SIGN (VARIABLE X 16" IN) - MAST ARM MOUNT
971017	1 EACH	EIGHT PHASE, FULL TRAFFIC ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET

EQUIPMENT LIST "B" (CONTINUED)

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
800000	2 X EACH	FURNISH AND INSTALL OPTICOM DISCRIMINATION MODULE
800000	250 X L.F.	FURNISH AND INSTALL 4-CONDUCTOR OPTICOM DETECTOR CABLE
800000	LUMP SUM	REMOVAL AND DISPOSAL OF EXISTING MATERIAL AND EQUIPMENT
800000	LUMP SUM	REMOVAL OF EXISTING SIGNAL EQUIPMENT TO BE SALVAGED
800000	LUMP SUM	DELIVERY OF SALVAGED SIGNAL EQUIPMENT AND MATERIAL
800000	4 EACH	ADJUST HANDHOLE TO FINAL GRADE
800000	36 X EACH	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION: 12 X EACH 12 INCH, ONE-WAY, THREE-SECTION (R,Y,G) TRAFFIC SIGNAL HEAD - MAST ARM MOUNT
800000	8 EACH	FURNISH AND INSTALL 12 IN. PEDESTRIAN SIGNAL HEAD SECTION: 1 EACH 12 INCH, ONE-WAY, TWO-SECTION PEDESTRIAN SIGNAL HEAD - PEDESTAL MOUNT 1 EACH 12 INCH, TWO-WAY, TWO-SECTION PEDESTRIAN SIGNAL HEAD - PEDESTAL MOUNT 1 EACH 12 INCH, ONE-WAY, TWO-SECTION PEDESTRIAN SIGNAL HEAD - POLE MOUNT
800000	2 EACH	PEDESTRIAN PUSHBUTTON AND R10-4(1) SIGN (NOTE: SIGN TO READ, "PUSH BUTTON TO CROSS WASHINGTON BLVD.")
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH 60 FT. MAST ARM
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH 50 FT. MAST ARM
870166	110 L.F.	FURNISH AND INSTALL 4 INCH SCHEDULE 80 POLYVINYL CHLORIDE ELECTRICAL CONDUIT - TRENCHED
871202	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
800000	120 L.F.	PULLBACK AND RE-FEED EXISTING INTERCONNECT CABLE

EQUIPMENT LIST "B"

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

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
120500	LUMP SUM	MAINTENANCE OF TRAFFIC
120610	12 U.D.	ARROW PANEL
120620	300 S.F.	TEMPORARY TRAFFIC SIGNS
130850	LUMP SUM	MOBILIZATION
203030	4 C.Y.	TEST PIT EXCAVATION
500000	650 L.F.	12 INCH WHITE HEAT APPLIED PERMANENT PREFORMED PAVEMENT MARKINGS
500000	270 L.F.	24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED PAVEMENT MARKINGS
801004	22 X C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
801106	18 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 IN. X 6 IN.
802501	430 X L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE
805011	60 L.F.	FURNISH AND INSTALL 1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
805150	240 L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - SLOTTED
805155	450 X L.F.	FURNISH AND INSTALL 4 INCH SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - SLOTTED
805160	285 X L.F.	FURNISH AND INSTALL 1 INCH, LIQUID-TIGHT, FLEXIBLE NON-METALLIC CONDUIT DETECTOR SLEEVE
810010	135 X L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G. - THHN/THWN
811001	9 X EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	9 S.F.	INSTALL GROUND MOUNTED SIGN
813015	113 X S.F.	INSTALL OVERHEAD SIGN
822002	2300 L.F.	FURNISH AND INSTALL 12 PAIR COMMUNICATION CABLE, JELLY-FILLED (UNDERGROUND)
831010	2 EACH	FURNISH AND INSTALL 250 WATT HIGH PRESSURE SODIUM LUMINAIRE WITH PHOTOCELL
837001	9 X EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIA. - 10 FT
838003	3 X EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240V, 1 PHASE 3 WIRE SYST)
861104	4480 X L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)
861107	180 X L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
861108	715 X L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
861116	120 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
862101	7300 X L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING
862102	2850 X L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL
861105	400 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
861106	565 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 A.W.G.)
865201	2 EACH	INSTALL PUSHBUTTON AND SIGN
866104	2 EACH	FURNISH AND INSTALL 20 FOOT LIGHTING BRACKET FOR TRAFFIC SIGNAL STRUCTURE
871201	2 EACH	INSTALL CONTROLLER AND CABINET - POLE MOUNT
800000	230 L.F.	FURNISH AND INSTALL 2 INCH SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - TRENCHED
800000	920 X L.F.	FURNISH AND INSTALL 3 INCH SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - TRENCHED
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH 50 FT. MAST ARMS
800000	3 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 500 FT. LEAD-IN
800000	1 EACH	FURNISH AND INSTALL 2 IN. SCHEDULE 80, 90 DEGREE POLYVINYL CHLORIDE CONDUIT BEND IN EXISTING BASE
800000	2 EACH	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH 70 FT. MAST ARM
800000	2 X EACH	FURNISH AND INSTALL OPTICOM DETECTOR EYE

TSP-17

REVISIONS	APPROVALS
4 RED LINE REVISION NO. 4 REVISED QUANTITIES	
	TEAM LEADER, TRAFFIC ENG. DESIGN DIVISION
	ASST. CHIEF, TRAFFIC ENG. DESIGN DIVISION
	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY

WR&A
 Whitman, Reardon
 and Associates, LLP
 2315 Saint Paul Street
 Baltimore, Maryland 21218
 (410) 235-3450

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

U.S. 1 INTERSECTIONS

DRAWN BY: M. LARSON	F.A.P. NO. _____	TS NP. _____	SHEET NO.
CHECKED BY: N. LEARY	S.H.A. NO. PG2745184	TS-684C	
SCALE: NONE	COUNTY: PRINCE GEORGE'S	T.I.M.S. NO. _____	127 OF 142
DATE: 11/12/99	LOG MILE: 16009113.60		