PROJECT DESCRIPTION

THIS PROJECT INVOLVES INSTALLATION OF THE UTIMATE TRAFFIC SIGNAL AT MD 210 (INDIAN HEAD HIGHWAY)/ SB I-95/I-495 OFF-RAMP (RAMP C). THIS INTERSECTION WILL BE INTERCONNECTED WITH MD 210/LIVINGSTON ROAD VIA COMMUNICATION CABLE. INTERSECTION LIGHTING WILL ALSO BE PROVIDED AT THIS LOCATION. IT IS ASSUMED THAT MD 210 (INDIAN HEAD HIGHWAY) RUNS IN A NORTH-SOUTH DIRECTION. THE POSTED SPEED LIMIT IS 40 MPH.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA THREE-PHASE OPERATION, FULLY-ACTUATED MODE. MD 210 (INDIAN HEAD HIGHWAY) AND SB I-95/I-495 OFF RAMP (RAMP C) WILL OPERATE IN SEPARATE PHASES.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, SOLID STATE EIGHT-PHASE CONTROLLER WITH TELEMETRY MODULE, LOOP DETECTOR AMPLIFIER AND VIDEO TRAFFIC DETECTION SYSTEM HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET.

SPECIAL NOTE:

INSTALL NON-FUSED DISCONNECT SWITCH AT PROPOSED BASE MOUNTED CONTROLLER CABINET. REMOVE LUMINAIRE AND LIGHTING ARM FROM TRAFFIC SIGNAL POLE LOCATED OVER SOUTHBOUND MD 210 WHEN PROPOSED STREETLIGHTING ALONG THIS SECTION IS OPERATIONAL. COORDINATE WITH LIGHTING CONTRACTOR.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT 3 ARE:
MR. MAJIB SHAKIB
ASSISTANT DISTRICT ENGINEER - TRAFFIC
301-513-7358

MR. AUGUSTINE REBISH
ASSISTANT DISTRICT ENGINEER - UTILITIES
301-513-7350

MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
301-513-7304

THE CONTACT PERSONS FOR THE OFFICE OF TRAFFIC AND SAFETY ARE:
MR. RICHARD DAFF
DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7630

MR. ROBERT SYNDER
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS
410-787-7631

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
410-787-7652

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7676

THE POWER COMPANY REPRESENTATIVES ARE:
MR. RICHARD CHILCOAT
POTOMAC ELECTRIC POWER COMPANY - ELECTRIC SERVICE
301-967-5805

MR. JOE NICE
POTOMAC ELECTRIC POWER COMPANY - RELOCATIONS
202-388-2581

MD 210 INDIAN HEAD HIGHWAY IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE MDSHA.

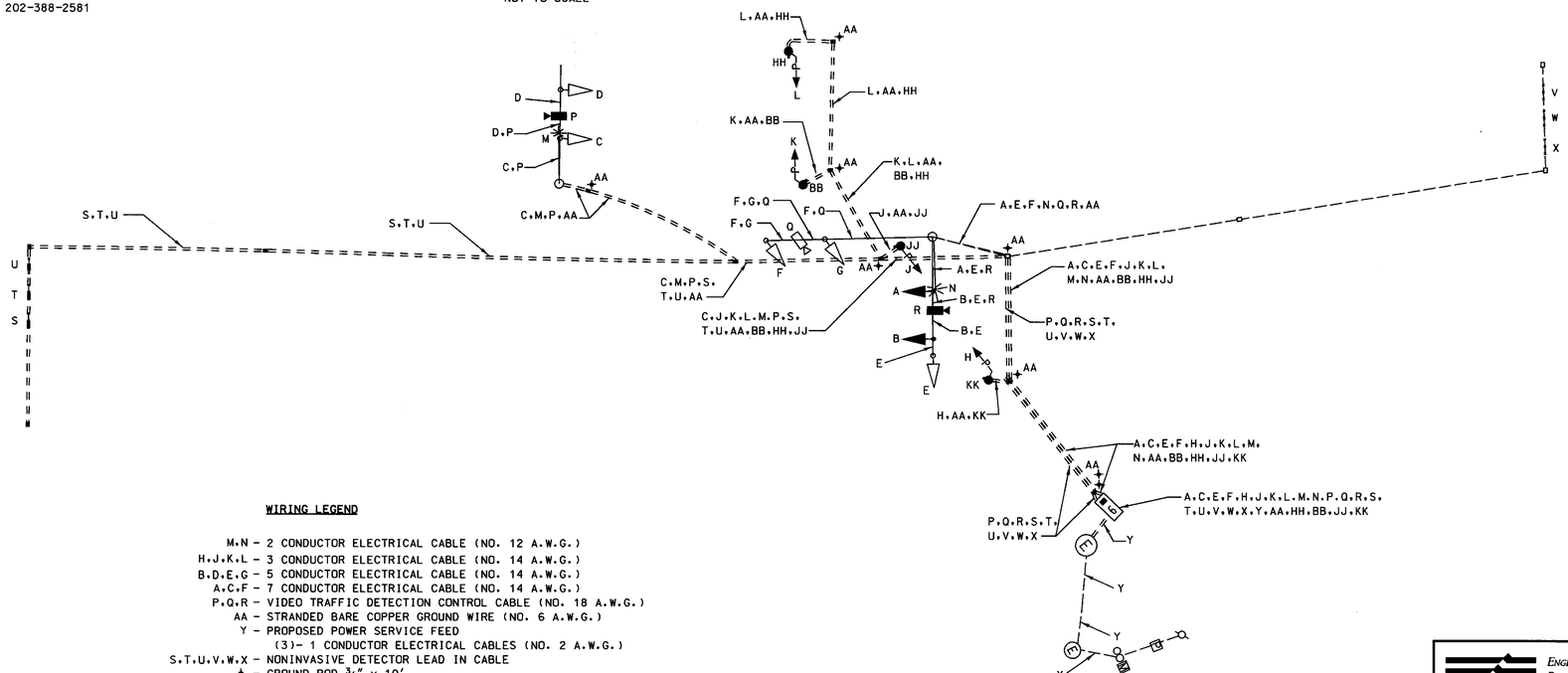
CAT. CODE	QUANTITY	DESCRIPTION
900000	1 EA	VIDEO INTERFACE EQUIPMENT FOR 1 TO 4 CAMERAS
963010	2 EA	FOUR CHANNEL LOOP DETECTOR AMPLIFIER, ROCK MOUNT
971017	1 EA	EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET-BASE MOUNT

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

CAT. CODE	QUANTITY	DESCRIPTION
120500	1 LS	MAINTENANCE OF TRAFFIC
203030	5 CY	TEST PIT EXCAVATION
585620	500 LF	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585624	150 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
800000	1 LS	REMOVE AND DISPOSE OF EXISTING MATERIALS AND EQUIPMENT
800000	500 LF	PULL BACK AND REROUTE EXISTING ELECTRICAL CABLES
801004	4 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	550 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805118	400 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED
805135	600 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805140	150 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
800000	1100 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 2 AWG-THHN/THWN
810605	3 EA	NONINVASIVE DETECTOR, 1000-FOOT LEAD IN CABLE
811001	10 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
818004	4 EA	10 FOOT BREAKAWAY PEDESTAL POLE
837001	8 EA	GROUND ROD -3/4 INCH DIAMETER X 10 FOOT LENGTH
860272	6 EA	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860282	8 EA	12 INCH PEDESTRIAN SIGNAL HEAD SECTION PEDESTAL POLE MOUNT
861106	1000 LF	ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
861107	350 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	1000 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	700 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
871117	1 EA	INSTALL EIGHT PHASE (FULLY ACTUATED) CONTROLLER AND CABINET- BASE MOUNT
816001	2 EA	VIDEO TRAFFIC DETECTION CAMERA
800000	2 EA	VIDEO TRAFFIC DETECTION CONTROL CABLE 300 FEET
800000	1 EA	VIDEO TRAFFIC DETECTION CONTROL CABLE 500 FEET
800000	1 EA	FURNISH AND INSTALL NON-FUSED DISCONNECT SWITCH
861105	1000 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
865201	4 EA	INSTALL PUSHBUTTON AND R10-4(1) "PUSH BUTTON TO CROSS INDIAN HEAD HIGHWAY..." SIGN

C. MDSHA FORCES SHALL REMOVE THE CABINET-POLE MOUNT, CONTROLLER AND ALL AUXILIARY EQUIPMENT. ALL OTHER MATERIAL TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM
NOT TO SCALE



WIRING LEGEND

M,N - 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
H,J,K,L - 3 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B,D,E,G - 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
A,C,F - 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
P,Q,R - VIDEO TRAFFIC DETECTION CONTROL CABLE (NO. 18 A.W.G.)
AA - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
Y - PROPOSED POWER SERVICE FEED
(3)- 1 CONDUCTOR ELECTRICAL CABLES (NO. 2 A.W.G.)
S,T,U,V,W,X - NONINVASIVE DETECTOR LEAD IN CABLE
✦ - GROUND ROD 3/4" x 10'
BB,HH,JJ,KK - 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)

PHASE CHART

	1	2	3	4	5	6	7	8-11
PHASE 2 & 6	G	G	G	G	R	R	R	DW
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	DW
PHASE 4	R	R	R	R	G	G	G	DW
4 CHANGE	R	R	R	R	Y	Y	Y	DW
ALT. PHASE 4	R	R	R	R	G	G	G	W
PED CLEARANCE	R	R	R	R	G	G	G	FDW
ALT. 4 CHANGE	R	R	R	R	Y	Y	Y	DW
FLASHING	FL / Y	FL / Y	FL / Y	FL Y	FL / R	FL / R	FL / R	DARK

4 ADDENDUM NO. 4
MARCH 10, 2005
SHEET REPLACED

SP-6 OF SP-23

KCI TECHNOLOGIES
ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
10 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
21030-1888
(410) 316-7800

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

ULTIMATE GENERAL INFORMATION SHEET
MD 210 INDIAN HEAD HIGHWAY AT SB I-95/I-495 OFF RAMP (RAMP C)

DRAWN BY: M. PIERRE	F.A.P. NO. SEE TITLE SHEET	TS NO. 4373-G1	SHEET NO.
CHECKED BY: J. LAWRENCE	S.H.A. NO. PG5075173		
SCALE: NONE	COUNTY: PRINCE GEORGE'S	T.I.M.S. NO. E149	286 OF 402
DATE: 12-7-04	LOG MILE: 16021013.33		

PLOTTED: 10:06 AM on Monday, February 14, 2005
BY: McSendy Pierre Division: Transportation
FILE: m:\1998\03984S\200G3004.dgn