PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF JOPPA ROAD AND MD 41 (PERRING PKWY) IN BALTIMORE COUNTY.

JOPPA ROAD IS ASSUMED TO TRAVEL IN AN EAST-WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION SHALL OPERATE IN AN EIGHT-PHASE,FULL TRAFFIC ACTUATED MODE. EXCLUSIVE LEFT TURNS SHALL BE PROVIDED FOR THE EAST AND WESTBOUND MOVEMENTS OF JOPPA ROAD WITH THE THROUGH MOVEMENTS OPERATING CONCURRENTLY. EXCLUSIVE-PERMISSIVE LEFT TURNS SHALL BE PROVIDED FOR THE NORTH AND SOUTHBOUND MD 41 WITH THE THROUGH MOVEMENTS OPERATING CONCURRENTLY. VIDEO CAMERA'S SHALL BE PROVIDED FOR THE PRESENCE DETECTION. STREET LIGHTING WILL BE PROVIDED. EXISTING OVERHEAD INTERCONNECT SHALL BE RE-ROUTED.

III. SPECIAL NOTES:

THE CONTRACTOR SHALL CONTACT MR. JEFF RICE, BALTIMORE COUNTY AT 410-788-3554: 72 HOURS PRIOR TO THE COMPLETION OF THE RECONSTRUCTION TO COORDINATE THE EXISTING INTERCONNECT TO ADJOINING SIGNAL INTERSECTIONS.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9014	1 EA	27' STEEL POLE WITH 38' MAST ARM (FOUR- 1 1/2" x 60" ANCHOR BOLTS)
9021	1 EA	21' STEEL POLE WITH 50' MAST ARM (CONTRACTOR TO SUPPLY ANCHOR BOLTS)
9022	1 EA	27' STEEL POLE WITH 50" MAST ARM (CONTRACTOR TO SUPPLY ANCHOR BOLTS)
9571	44 SF	SHEET ALUMINUM FOR MAST ARM MOUNTING
		2 EA R10-12 "LEFT TURN YIELD ON GREEN" (36" x 42") 2 EA D3-2 "Perring PKWY" (VARIABLE x 16") DUAL FACED 2 EA D3-2 "Joppa RD" (VARIABLE x 16") DUAL FACED 1 EA M1-4 "I- 695"/ "A-1L" ON SHEET PANEL (36" x 54") 1 EA M1-6 "MD 41"/ "A-1L" ON SHEET PANEL (30" x 54") (SEE PLAN SHEET FOR SIGN PANEL LAYOUT)
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT

PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 4 ARE AS FOLLOWS:

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER
TRAFFIC - 410-321-2781

MR. DANIEL WITT
ASSISTANT DISTRICT ENGINEER
CONSTRUCTION - 410-321-3600

MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER
MAINTENANCE - 410-321-2761

MS. SUENETTE POPE
ASSISTANT DISTRICT ENGINEER
UTILITIES - 410-321-2841

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 DIVISION
410-787-7631

MR. ED RODENHIZER
TEAM LEADER - SIGNAL OPERATIONS
410-787-7652

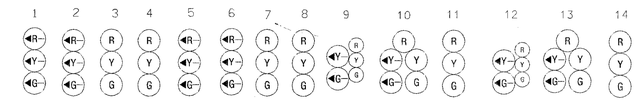
MR. BRIGIDIA VAN DOORNICK
PROJECT MANAGER - TTRAFFIC
ENGINEERING DESIGN DIVISION
410-787-4037

EQUIPMENT LIST "B"

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

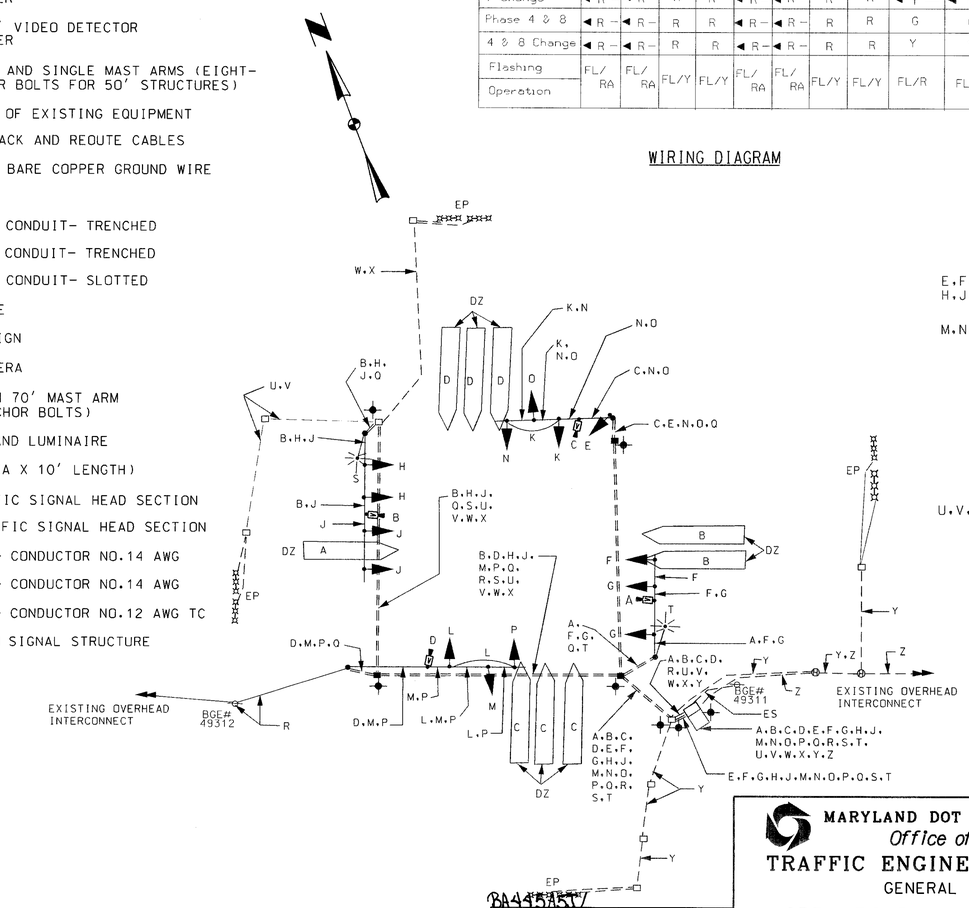
ITEM NO.	QUANTITY	DESCRIPTION
1001	3 EA	MAINTENANCE OF TRAFFIC
2001	5 CY	CLASS 2 EXCAVATION
2002	2 CY	TEST PIT EXCAVATION
5001	185 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS (ANY WIDTH)
5006	35 LF	24" WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKINGS
5009	285	5" WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKINGS
6004	388 SF	4" CONCRETE SIDEWALK
8001	13 CY	CONCRETE FOUNDATION
8006	1 EA	CONDUIT BEND IN EXISTING FOUNDATION-ANY SIZE
8008	2 EA	CONTROL CABLE, 200' VIDEO DETECTOR CAMERA TO CONTROLLER
8009	2 EA	CONTROL CABLE, 300' VIDEO DETECTOR CAMERA TO CONTROLLER
8013	3 EA	INSTALL STEEL POLE AND SINGLE MAST ARMS (EIGHT- 1 3/4" x 90" ANCHOR BOLTS FOR 50' STRUCTURES)
8019	1 EA	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8024	2362 LF	DISCONNECT, PULL BACK AND REQUTE CABLES
8029	505 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8033	1 EA	3" WEATHERHEAD
8038	50 LF	3" SCHEDULE 80 PVC CONDUIT- TRENCHED
8039	15 LF	4" SCHEDULE 80 PVC CONDUIT- TRENCHED
8042	325 LF	4" SCHEDULE 80 PVC CONDUIT- SLOTTED
8052	3 EA	ELECTRICAL HANDHOLE
8055	44 SF	INSTALL OVERHEAD SIGN
8056	4 EA	VIDEO DETECTOR CAMERA
8066	1 EA	27' STEEL POLE WITH 70' MAST ARM (FOUR- 2" x 90" ANCHOR BOLTS)
8069	2 EA	250 WATT HPS LAMP AND LUMINAIRE
8073	7 EA	GROUND ROD (3/4" DIA X 10' LENGTH)
8074	6 EA	8" VECHICULAR TRAFFIC SIGNAL HEAD SECTION
8075	44 EA	12" VECHICULAR TRAFFIC SIGNAL HEAD SECTION
8083	1225 LF	ELECTRICAL CABLE 5- CONDUCTOR NO.14 AWG
8084	925 LF	ELECTRICAL CABLE 7- CONDUCTOR NO.14 AWG
8085	390 LF	ELECTRICAL CABLE 2- CONDUCTOR NO.12 AWG TC
8089	2 EA	15' LIGHTING ARM ON SIGNAL STRUCTURE

PHASING CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Phase 1 & 5	G	G	R	R	G	G	R	R	R	R	R	R	R	R
1 & 5 Change	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6													
Phase 1 & 6	G	G	G	G	R	R	R	R	R	R	R	R	R	R
1 Change	Y	Y	G	G	R	R	R	R	R	R	R	R	R	R
Phase 2 & 5	R	R	R	R	G	G	G	G	R	R	R	R	R	R
5 Change	R	R	R	R	R	R	G	G	R	R	R	R	R	R
Phase 2 & 6	R	R	G	G	R	R	G	G	R	R	R	R	R	R
2 & 6 Change	R	R	Y	Y	R	R	Y	Y	R	R	R	R	R	R
Phase 3 & 7	R	R	R	R	R	R	R	R	G R	G R	R	G R	G R	R
3 & 7 Change	THE CONTROLLER MAY SKIP TO PHASES 3 & 8 OR 4 & 7 OR 4 & 8													
Phase 3 & 8	R	R	R	R	R	R	R	R	R	R	R	G G	G G	G
3 Change	R	R	R	R	R	R	R	R	R	R	R	Y G	Y G	G
Phase 4 & 7	R	R	R	R	R	R	R	R	G G	G G	G	R	R	R
7 Change	R	R	R	R	R	R	R	R	Y G	Y G	G	R	R	R
Phase 4 & 8	R	R	R	R	R	R	R	R	G	G	G	G	G	G
4 & 8 Change	R	R	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y
Flashing Operation	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM



WIRING KEY

B,C - CAMERA WITH 300' LEAD TO CONTROLLER

A,D - CAMERA WITH 200' LEAD TO CONTROLLER

E,F,G, H,J,K,L - 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

M,N,O,P - 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)

Q - NO.6 AWG STRANDED BARE COPPER GROUND WIRE

R - EXISTING OVERHEAD INTERCONNECT CABLE TO BE PULLED-BACK, STORED, RE-ROUTED UNDERGROUND TO EXISTING CABINET

S,T - 2-CONDUCTOR (NO. 12 AWG) TRAY CABLE

U,V,W,X - EXISTING PROBE LEAD-IN CABLES TO BE PULLED-BACK, STORED, RE-ROUTED UNDERGROUND TO EXISTING CABINET

Y - EXISTING PROBE SETS TO REMAIN

Z - EXISTING UNDERGROUND INTERCONNECT CABLE TO REMAIN

EP - EXISTING PROBE SETS

ES - EXISTING SERVICE FEED

DZ - CAMERA DETECTOR ZONE

3/4 IN. x 10 FT. GROUND ROD

AT357-50

BA4353357

CENTURY ENGINEERING, INC.
CONSULTING ENGINEERS - PLANNERS
32 WEST ROAD
TOWSON, MARYLAND 21204

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION SHEET
JOPPA ROAD AND MD 41 (PERRING PKWY)

DRAWN BY: EMM	F.A.P. NO.		TS NO. 4320B	SHEET NO. 2 OF 2
CHECKED BY: EMM. TH	S.H.A. NO.	AT3575185		
SCALE: NOT TO SCALE	COUNTY:	BALTIMORE	T.I.M.S. NO. G351	
DATE: 4/1/2005	LOG MILE:	03041002.50		

D:*TRANSDWG*25003*25003.09*task 42*g351 GI MD41AND JOPPA.dgn3/31/2005