PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD157 (MERRITT BLVD) AND HOLABIRD AVE/WISE AVENUE IN BALTIMORE COUNTY. THE EXISTING STRAIN POLES AND SPAN WIRE SHALL BE REPLACED WITH NEW MAST ARM POLES, LED SIGNAL HEADS, VIDEO DETECTION CAMERAS AND A NEW SIZE "6" BASE MOUNTED SIGNAL CABINET. MD 157 IS ASSUMED TO RUN IN THE NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

1. THE INTERSECTION OPERATES IN A NEMA EIGHT-PHASE FULLY ACTUATED MODE WITH EXCLUSIVE LEFT TURN PHASES FOR BOTH NORTHBOUND AND SOUTHBOUND MOVEMENTS OF MERRITT BLVD AND BOTH THE EASTBOUND AND WESTBOUND MOVEMENTS OF HOLABIRD AVE AND WISE AVE. THE NORTHBOUND AND SOUTHBOUND MOVEMENTS OF MERRITT BLVD OPERATE CONCURRENTLY AND THE EASTBOUND AND WESTBOUND MOVEMENTS OF HOLABIRD AVE AND WISE AVE OPERATE CONCURRENTLY.

2. A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT, TELEMETRY CABLE AND ALL NECESSARY EQUIPMENT HOUSED IN A NEMA SIZE "6" BASE-MOUNTED CABINET SHALL BE INSTALLED AT THIS INTERSECTION.

III. INTERCONNECT NOTES

SEE SHEET SP-16 OF 33 FOR INTERCONNECT DETAILS AND QUANTITIES

CONTACTS

DISTRICT

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER
TRAFFIC
410-321-2781

MR. DONALD SCHAEFER
ASSISTANT DISTRICT ENGINEER
CONSTRUCTION
410-321-2821

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER
MAINTENANCE
410-321-2761

MR. MICHAEL PASQUARIELLO
ASSISTANT DISTRICT ENGINEER
UTILITIES
410-321-2841

MR. DAVID CASTLE
BALTIMORE GAS & ELECTRIC
ELECTRICAL SERVICE
1-800-233-1854

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.
CHIEF, TRAFFIC OPERATIONS
410-787-7630

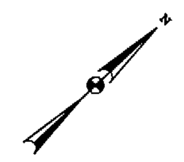
MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
410-787-7630

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
410-787-7650

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
410-787-7670

MS. DARLENE EIDE
SUPPLY OFFICER IV
(SIGNAL SHOP WAREHOUSE)
410-787-7668

PHASE CHART



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	R Y G	R Y G	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	R Y G	R Y G	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	R Y G	R Y G	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	◄R- ◄Y- ◄G-	R Y G	R Y G
PHASE 1 + 5	◄G-	◄G-	◄G-	R	R	◄G-	◄G-	◄G-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASES 1 + 6 OR 2 + 5 OR 2 + 6																			
PHASE 1 + 6	◄G-	◄G-	◄G-	G	G	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R
1 CHANGE	◄Y-	◄Y-	◄Y-	G	G	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R
PHASE 2 + 5	◄R-	◄R-	◄R-	R	R	◄G-	◄G-	◄G-	G	G	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R
5 CHANGE	◄R-	◄R-	◄R-	R	R	◄Y-	◄Y-	◄Y-	G	G	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R
PHASE 2 + 6	◄R-	◄R-	◄R-	G	G	◄R-	◄R-	◄R-	G	G	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R
2 + 6 CHANGE	◄R-	◄R-	◄R-	Y	Y	◄R-	◄R-	◄R-	Y	Y	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R
PHASE 3 + 7	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄G-	◄G-	◄G-	R	R	◄G-	◄G-	◄G-	R	R
3 + 7 CHANGE	PHASE 3 + 7 MAY CHANGE TO PHASES 3 + 8 OR 7 + 4 OR 4 + 8																			
PHASE 3 + 8	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄G-	◄G-	◄G-	G	G
3 + 8 CHANGE	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄Y-	◄Y-	◄Y-	G	G
PHASE 4 + 7	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄G-	◄G-	◄G-	G	G	◄R-	◄R-	◄R-	R	R
7 CHANGE	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄Y-	◄Y-	◄Y-	G	G	◄R-	◄R-	◄R-	R	R
PHASE 4 + 8	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	G	G	◄R-	◄R-	◄R-	G	G
4 + 8 CHANGE	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	R	R	◄R-	◄R-	◄R-	Y	Y	◄R-	◄R-	◄R-	Y	Y
FLASHING OPERATION	FL/ ◄R-	FL/ ◄R-	FL/ ◄R-	FL/Y	FL/Y	FL/ ◄R-	FL/ ◄R-	FL/ ◄R-	FL/Y	FL/Y	FL/ ◄R-	FL/ ◄R-	FL/ ◄R-	FL/R	FL/R	FL/ ◄R-	FL/ ◄R-	FL/ ◄R-	FL/R	FL/R

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADIMISTRATION

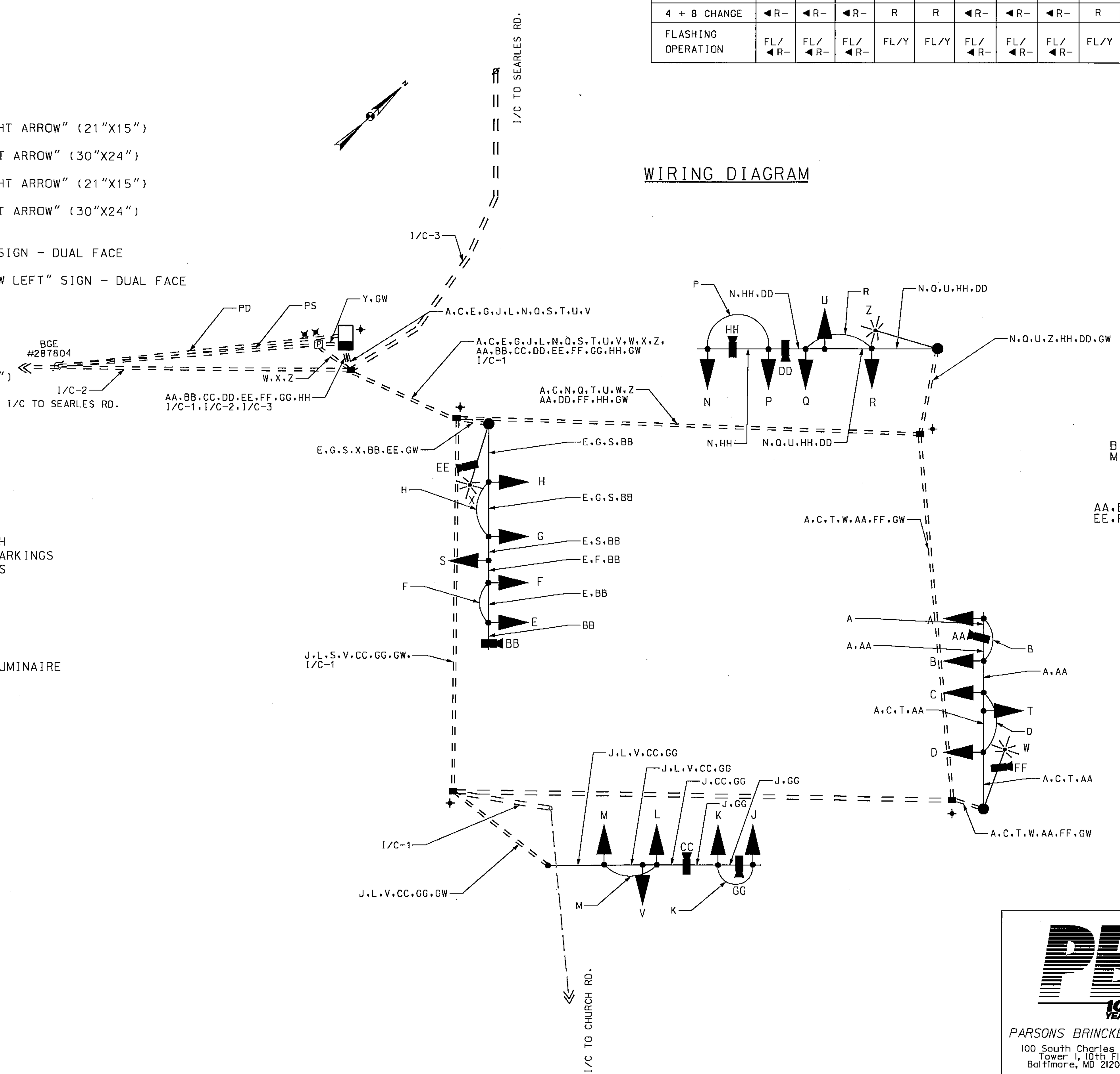
ITEM NO./ CAT CODE	QUANTITY		DESCRIPTION
900000	1	EA	[UPDATED] CONTROLLER, MASTER ASC 10,000 WITH TELEMETRY
900000	1	EA	[UPDATED] CONTROLLER CABINET, SIZE 6
900000	1	EA	[UPDATED] VIDEO DETECTION INTERFACE EQUIPMENT: 5-8 CAMERAS
900000	174	SF	[UPDATED] SHEET ALUMINUM MAST ARM / POLE MOUNTED SIGN
			1 EA SHIELD ASSEMBLY SIGN (30"X51") POLE MOUNTED M3-1 "NORTH" (24"X12"), M1-5 "MD157" (30"X24"), M6-1 "RIGHT ARROW" (21"X15")
			1 EA SHIELD ASSEMBLY SIGN (48"X75") POLE MOUNTED M3-3 "SOUTH" (30"X15"), M1-5 "MD157" (48"X36"), M6-1 "LEFT ARROW" (30"X24")
			1 EA SHIELD ASSEMBLY SIGN (30"X51") POLE MOUNTED M3-3 "SOUTH" (24"X12"), M1-5 "MD157" (30"X24"), M6-1 "RIGHT ARROW" (21"X15")
			1 EA SHIELD ASSEMBLY SIGN (48"X75") POLE MOUNTED M3-1 "NORTH" (30"X15"), M1-5 "MD157" (48"X36"), M6-1 "LEFT ARROW" (30"X24")
			2 EA D-3(1) "MERRITT BLVD" SIGN - DUAL FACE (VAR. X 16") MAST ARM MOUNTED
			1 EA D-3(1) "WISE AVE ARROW RIGHT" SIGN AND "WISE AVE ARROW LEFT" SIGN - DUAL FACE (VAR. X 16") MAST ARM MOUNTED
			1 EA D-3(1) "HOLABIRD AVE ARROW RIGHT" SIGN AND "HOLABIRD AVE ARROW LEFT" SIGN - DUAL FACE (VAR. X 16") MAST ARM MOUNTED
			8 EA R3-5(L) "LEFT ONLY" SIGN (30"X36") MAST ARM MOUNTED
900000	63	SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
			4 EA W11-1 "ADVANCED PEDESTRIAN CROSSING" SIGN (30"X30") AND W16-7p "DIAGONAL ARROW LEFT" SIGN (24"X12")
			2 EA D3-2 "WISE AVE/HOLABIRD AVE NEXT SIGNAL AHEAD" SIGN (VAR X 36")

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

ITEM NO.	QUANTITY		DESCRIPTION
203030	3	CY	TEST PIT EXCAVATION
585462	30	LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
585620	30	LF	12 INCH HEAT APPLIED WHITE PERM.-PREF. THERMOPLASTIC PAVEMENT MARKINGS
585627	124	SF	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LEGENDS & SYMBOLS
655105	90	SF	5 INCH CONCRETE SIDEWALK
800000	330	LF	DISCONNECT, PULL BACK & REROUTE CABLE
800000	515	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - BORED
800000	535	LF	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCH - TRENCHED
800000	237	SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN
800000	4	EA	MAST ARM POLE & 70 FT MAST ARM ANY "T" DIMENSION
800000	3	EA	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP & LUMINAIRE
800000	8	EA	VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
800000	4	EA	REMOVE SIGNAL POLE FOUNDATION 12" BELOW GRADE
801106	126	LF	WOOD SIGN SUPPORTS 4 INCH x 6 INCH
802501	495	LF	NO.6 AWG STRANDED BARE COPPER GROUND WIRE
807202	1	EA	METERED SERVICE PEDESTAL EMBEDDED
810010	60	LF	ELECTRICAL CABLE 1-CONDUCTOR, NO.4 AWG THHN/THWN
811001	5	EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
860284	60	EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860292	4	EA	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861107	165	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
861108	3215	LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
861116	735	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC
871202	1	EA	INSTALL CONTROLLER AND CABINET - BASE MOUNT

C. IF THE CABINET IS TO BE REMOVED 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.

WIRING DIAGRAM



WIRING KEY

A,C,E,G J,N,L,Q S,T,U,V	-	7 -CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
B,D,F,H,K M,P,R	-	5 -CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
W,X,Z	-	2 -CONDUCTOR TRAY CABLE (NO. 12 A.W.G.)
AA,BB,CC,DD EE,FF,GG,HH	-	VIDEO DETECTION LEAD IN CABLE
Y	-	3-1 CONDUCTOR (NO. 4 AWG THHN/THWN)
I/C-1	-	12 PAIR INTERCONNECT TO CHURCH RD.
I/C-2	-	12 PAIR INTERCONNECT TO SEARLES RD.
I/C-3	-	12 PAIR INTERCONNECT TO SEARLES RD.
GW	-	GROUND WIRE
PS	-	PROPOSED SERVICE
PD	-	PHONE DROP
✦	-	GROUND ROD

PARSONS BRINCKERHOFF
100 South Charles Street
Tower I, 10th Floor
Baltimore, MD 21201-2727
Phone: 410-727-5050
Fax: 410-727-4608

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 157 (MERRITT BLVD) AND HOLABIRD AVE/WISE AVE
DUNDALK, MARYLAND

GENERAL INFORMATION PLAN

SCALE 1" = 20' DATE 6/1/09 CONTRACT NO. BA1195168

DESIGNED BY K. PERMISOHN — COUNTY BALTIMORE
DRAWN BY R. ROBERTSON — LOGMILE 03015703.49
CHECKED BY D. MACLEAN — TIMS NO. J639
FAP NO. — TOD NO.

TS NO. 4686A GI | DRAWING SP-08 OF 39 | SHEET NO. 2 OF 2

PLOTTED: $DATETIME$
FILE: T:\173089a_District6Traffic\trf\Task 4_TEDD Stimulus\Plans\MD157_Wise-Holabird_GI.dgn