PROJECT DESCRIPTION

THIS PROJECT INVOLVES TRAFFIC SIGNAL AND SIDEWALK RAMP RECONSTRUCTION.
MD 528 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION WILL OPERATE IN A NEMA FIVE-PHASE FULL-TRAFFIC-ACTUATED MODE WITH AN ALTERNATE PEDESTRIAN PHASE FOR THE NORTH AND SOUTH LEGS OF THE INTERSECTION. THE MD 528 LEFT TURNS OPERATE IN EXCLUSIVE-PERMISSIVE PHASING.

CONTROLLER REQUIREMENTS

A NEW FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL INSTALLED. AN APS CENTRAL CONTROL UNIT SHALL BE FURNISHED BY THE CONTRACTOR AND INSTALLED BY SHA.

GENERAL NOTES

1. ALL EXISTING FOUNDATION TOPS WITHIN EXISTING SIDEWALK SHALL BE REMOVED 2" BELOW SIDEWALK GRADE.
2. ALL PROPOSED FOUNDATION TOPS SHALL BE INSTALLED FLUSH WITH SIDEWALK GRADE.
3. ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7652 TO COORDINATE.
4. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SECTION 4E.09 AND FIGURE 4E.2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
5. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18" FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
6. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
7. PUSHBUTTON ARROWS AND SIGNS ARE TO BE ORIENTED PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
8. ALL HARDWARE NECESSARY FOR THE INSTALLATION OF RELOCATED TRAFFIC SIGNAL EQUIPMENT SHALL BE INCIDENTAL TO THE PERTINANT RELOCATE PAY ITEM.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
10. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
11. IF EXISTING INTERCONNECT CABLE CANNOT BE REROUTED AS SPECIFIED IN PLANS, OVERHEAD INTERCONNECT CABLE SHALL BE REPLACED BETWEEN 123RD STREET AND 130TH STREET. OVERHEAD INTERCONNECT QUANTITY HAS BEEN INCLUDED BUT SHALL ONLY BE USED IF RELOCATION IS NOT POSSIBLE.
12. 60 INCHES SHALL BE MAINTAINED BETWEEN BACK OF CURB AND FACE OF PROPOSED POLE BASE PLATE FOR ALL PROPOSED POLES.

CONTACT PERSONS FOR DISTRICT #1 ARE AS FOLLOWS:

MR. GENE COFIELL
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (410) 677-4040

MR. RAVINDRA GANVIR
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 677-4020

MR. JAMES WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 677-4010

CONTACT PERSONS FOR OOTS ARE AS FOLLOWS:

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

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF
TRAFFIC OPERATIONS
PHONE: (410)787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
PHONE: (410)787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
PHONE: (410)787-7676

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9042	CONTROLLER ASC II WITH TELEMETRY	EA	1
9044	CONTROLLER CABINET, SIZE 6	EA	1
9086	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS	EA	1
9571	SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN 4 - D-3(1) (96"X16")	SF	43

EQUIPMENT LIST "B"

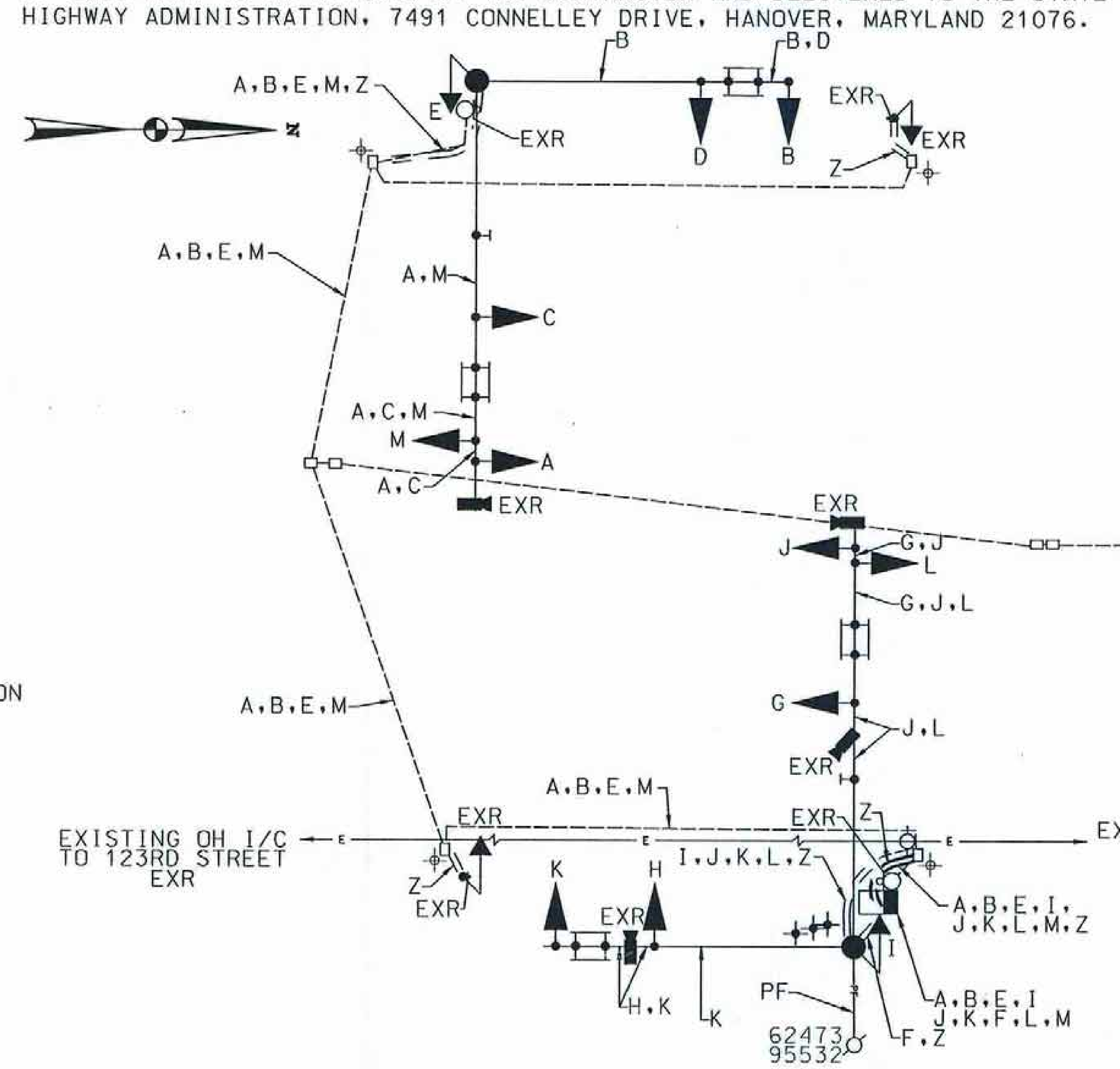
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1003	MAINTENANCE OF TRAFFIC (PAID FOR ON 118TH GI)	EA	0
2002	TEST PIT EXCAVATION	CY	5
5005	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS ANY WIDTH	LF	1200
5006	F & I 12" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES	LF	1200
6001	F & I STANDARD TYPE A COMBINATION CURB AND GUTTER 12" GUTTER PAN 8" DEPTH	LF	170
6002	F & I 5" CONCRETE SIDEWALK	SF	910
6003	F & I DETECTABLE WARNING SURFACE FOR CURB RAMPS	SF	[1] ~~125~~ 80
8001	F & I 2 WIRE CENTRAL CONTROL UNIT	EA	1
8003	F & I 8" LED SIGNAL HEAD SECTION	EA	6
8004	ADJUST EXISTING HANDHOLE TO GRADE INCLUDING COLLAR	EA	[1] ~~3~~ 0
8008	F & I BREAKAWAY PEDESTAL POLE (ANY SIZE)	EA	2
8021	REMOVE & DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT (PAID FOR ON 118TH GI)	EA	0
8024	F & I TWIN MAST ARM POLE & 50'/70' MAST ARMS ANY 'T' DIMENSION	EA	2
8030	DISCONNECT, PULL-BACK & REROUTE CABLES	LF	595
8034	F & I SCHEDULE 80 RIGID PVC CONDUIT UP TO 4" - TRENCHED	LF	145
8036	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)	SF	43
8038	F & I NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	150
8040	F & I WEATHER HEAD, 3"	EA	1
8042	F & I ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS	EA	1
8043	F & I ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 AWG - THHN/THWN	LF	115
8045	F & I ELECTRICAL HANDHOLE	EA	[1] 3
8050	F & I 12" LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	4
8056	F & I ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	505
8057	F & I ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	1650
8065	INSTALL CONTROLLER AND CABINET - BASE MOUNT	EA	1
8066-A	12-PAIR COMMUNICATION CABLE, SELF-SUPPORTING (OVERHEAD)	LF	2900*
8067-A	RELOCATE EXISTING TRAFFIC SIGNAL (ENTIRE CLUSTER)	EA	8
8068-A	RELOCATE EXISTING PED SIGNAL	EA	4
8069-A	RELOCATE EXISTING VIDEO CAMERA	EA	4
8071-A	RELOCATE EXISTING SIGNS	EA	2
8000 NEG	RELOCATE AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGNS	EA	2
8000 NEG	F & I 6"X6" LANDSCAPE TIMBER	LF	[1] 20

*QUANTITY TO BE USED AS REQUIRED

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.



PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 & 5	R ◄G	R ◄G	R	R ◄G	R ◄G	R	R	R	R	R	DW	DW	DW	DW
1 & 5 CHANGE	PHASE 1 & 5 MAY CHANGE TO PHASE 1 & 6, PHASE 2 & 5 OR PHASE 2 & 6													
PHASE 1 & 6	G ◄G	G ◄G	G	R	R	R	R	R	R	R	DW	DW	DW	DW
1 & 6 CHANGE	G ◄Y	G ◄Y	G	R	R	R	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 5	R	R	R	G ◄G	G ◄G	G	R	R	R	R	DW	DW	DW	DW
2 & 5 CHANGE	R	R	R	G ◄Y	G ◄Y	G	R	R	R	R	DW	DW	DW	DW
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW
PHASE 4 & 8	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW
4 & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 ALT & 8	R	R	R	R	R	R	G	G	G	G	WK	WK	DW	DW
PED CLEARANCE/ COUNTDOWN	R	R	R	R	R	R	G	G	G	G	FL/DW	FL/DW	DW	DW
4 ALT & 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 & 8 ALT	R	R	R	R	R	R	G	G	G	G	DW	DW	WK	WK
PED CLEARANCE/ COUNTDOWN	R	R	R	R	R	R	G	G	G	G	DW	DW	FL/DW	FL/DW
4 & 8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK

SPECIAL NOTES

APS WILL FUNCTION AS FOLLOWS:

TO CROSS COASTAL HIGHWAY:

A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT MESSAGE WILL BE "WAIT TO CROSS COASTAL HIGHWAY AT 127TH".

B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

GENERAL NOTES (CONT.)

[1] 13. THE CONTRACTOR SHALL COORDINATE WITH DISTRCT 1 TRAFFIC TO COORDINATE TRAFFIC SIGNAL TURN OFF AND TEMPORARY STOP CONTROL. CONTRACTOR SHALL VERIFY ANY EVENT OR DATE RESTRICTIONS PRIOR TO TRAFFIC SIGNAL TURN OFF.

WIRING KEY

A,B,J,K L,M	7-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
C,D,E,G H,I	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
F	1-CONDUCTOR ELECTRICAL CABLE (NO. 4 AWG) - 3 RUNS
EXR	EXISTING CABLE TO BE DISCONNECTED, PULLED BACK & REROUTED
PF	PROPOSED OVERHEAD POWER SERVICE BY DELMARVA
Z	STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
⌖	EXISTING GROUND ROD
✦	PROPOSED GROUND ROD

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REVISIONS

[1] REDLINE NO. 1
03/25/09
MODIFY DWS, INSTALL LANDSCAPE TIMBERS

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

MD 528 (COASTAL HWY.) AT 127TH ST.

OCEAN CITY, MARYLAND

GENERAL INFORMATION SHEET

SCALE 1"=20' DATE DECEMBER 2008 CONTRACT NO. XX4435185

DESIGNED BY	BJG	COUNTY	WORCESTER
DRAWN BY	BJG	LOGMILE	2305280I.33
CHECKED BY	DAE	TIMS NO.	J609
FAP NO.		TOD NO.	

TS NO. 2246D-GI | DRAWING SG - 5 OF 7 | SHEET NO. 5 OF 7

PLOTTED: Tuesday, March 24, 2009 AT 02:47 PM
FILE: M:\projects\2007\07056_shahdd\Task06_MD 528 ADA\CADD\127TH Street\pGI-P000_127TH.dgn

BY: BJG