DRILL HOLES

DRILL HOLES

DRILL HOLES

PROJECT DESCRIPTION

I. GENERAL

THIS PROJECT INVOLVES A TRAFFIC SIGNAL MODIFICATION IN CONJUNCTION WITH GEOMETRIC IMPROVEMENTS ALONG MD 85 TO PROVIDE AN ADDITIONAL SOUTHBOUND THROUGH LANE. THIS MODIFICATION INVOLVES THE REMOVAL OF EXISTING HANDBOXES AND THE ADDITION OF NEW HANDBOXES AND MICRO-LOOP PROBE SETS IN ORDER TO ACCOMMODATE THE PROPOSED GEOMETRICS. MD 85 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL TRAFFIC ACTUATED MODE. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH THE NORTH AND SOUTHBOUND MOVEMENTS OF MD 85. THE MD 85 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE WESTVIEW ENTERTAINMENT COMPLEX AND MD-SHA ENTRANCES WILL OPERATE IN A SIDE STREET SPLIT PHASE MODE.

III. CONTROLLER REQUIREMENTS

THE CONTROLLER ASSEMBLY WILL BE AN EIGHT PHASE FULLY ACTUATED NEMA CONTROLLER COMPLETE WITH THE SYSTEM PACKAGE, VIDEO INTERFACE EQUIPMENT, AND MISCELLANEOUS AUXILIARY EQUIPMENT AS REQUIRED. A NEMA SIZE "6" BASE MOUNTED CABINET IS TO BE USED.

IV. SPECIAL NOTES

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 104.00-30, 104.31-01 (FLAGGING OPERATION), 104.33-01 (SHOULDER WORK), 104.35 (LANE SHIFT), 104.32-01 (INTERSECTION FLAGGING OPERATION).
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PULLING ALL CABLE TO THE CABINET AND SHALL PROPERLY LABEL EACH CABLE.
3. ALL UNDERGROUND AND OVERHEAD 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.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1 + 5	←G/R	←G/R	R	←G/R	←G/R	R	R	R	R	R	R	R	DW	DW
1 + 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 1 + 6, 2 + 5, OR 2 + 6													
PHASE 1 + 6	←G/G	←G/G	G	R	R	R	R	R	R	R	R	R	DW	DW
1 + 6 CHANGE	←Y/Y	←Y/Y	Y	R	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 + 5	R	R	R	←G/G	←G/G	G	R	R	R	R	R	R	DW	DW
2 + 5 CHANGE	R	R	R	←Y/Y	←Y/Y	Y	R	R	R	R	R	R	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	R	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 3	R	R	R	R	R	R	←G/G	←G/G	G	R	R	R	DW	DW
PHASE 3 CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW
ALT PHASE 3	R	R	R	R	R	R	←G/G	←G/G	G	R	R	R	W	W
ALT 3 PED CLEAR	R	R	R	R	R	R	←G/G	←G/G	G	R	R	R	FLDW	FLDW
ALT 3 CHANGE	R	R	R	R	R	R	Y	Y	Y	R	R	R	DW	DW
PHASE 4	R	R	R	R	R	R	R	R	R	←G/G	←G/G	G	DW	DW
PHASE 4 CHANGE	R	R	R	R	R	R	R	R	R	Y	Y	Y	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY SHA

None

EQUIPMENT LIST "B"

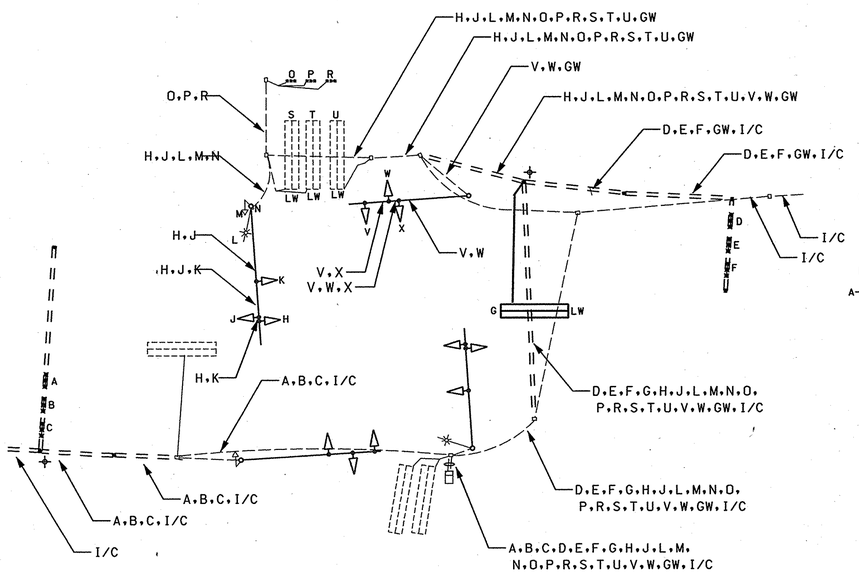
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

QUANTITY	UNITS	SPECIFICATION SECTION	DESRCRIPTION
1	LS	104	Maintenance of Traffic.
1	LS	108	Mobilization.
1	EA	804	Ground rod -3/4 in. diameter X 10 ft.
970	LF	804	Stranded bare copper ground wire (#6 AWG)
720	LF	805	3 in. schedule 80 rigid PVC conduit (trenched).
190	LF	805	3 in. schedule 80 rigid PVC conduit (bored).
130	LF	805	4 in. schedule 80 rigid PVC conduit (bored).
20	LF	549	Furnish and Install 24in. white heat applied thermoplastic pavement marking tape.
410	LF	810	2 conductor electrical cable (NO.14 A.W.G.)
440	LF	810	2 conductor electrical tray cable (NO.12 A.W.G.) (for luminaires)
800	LF	810	5 conductor electrical cable (No.14 AWG).
1520	LF	810	7 conductor electrical cable (No.14 AWG).
6	EA	810	Noninvasive microloop probe set 500' lead-in.
7	EA	811	Electrical handhole.
160	LF	815	Sawcut for signal loop detector.
10	LF	805	1in liquid tight flexible non metallic conduit for loop detector sleeve
720	LF	814	Loop detector wire (No 14 AWG) encased in flexible tubing.

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

All material removed in accordance with these plans shall become the property of the contractor.



WIRING LEGEND

L	2 CONDUCTOR ELECTRICAL TRAY CABLE (#12 AWG) (LUMINAIRE)
G,S,T,U	2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHEILDED) (LOOP DETECTOR)
N	2 CONDUCTOR ELECTRICAL CABLE (#14 AWG) (PUSH BUTTON)
K,M,X	5 CONDUCTOR ELECTRICAL CABLE (#14 AWG)
H,J,V,W	7 CONDUCTOR ELECTRICAL CABLE (#14 AWG)
A-F,O,P,R	MICROLOOP LEAD-IN CABLE
LW	LOOP DETECTOR WIRE (NO. 14 AWG) IN FLEXIBLE TUBING
GW	STRANDED BARE COPPER GROUND WIRE (#6 AWG)
⊕	GROUND ROD (IN HANDHOLE)
I/C	INTERCONNECT

PROJECT CONTACTS

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (301) 624-8140

MR. RAY JOHNSON
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (301) 624-8106

THE POWER COMPANY REPRESENTITIVE IS:
ALLEGHENY POWER
FREDERICK SERVICE CENTER
421 EAST PATRICK STREET
FREDERICK, MD 21701
PHONE: (301) 694-4480

MS. ANDREA ABEND
DISTRICT UTILITIES ENGINEER
PHONE: (301) 624-8116

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

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

SHA

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

Traffic Signal Modification Plan
MD Route 85 (Buckeystown Pike)
at MD-SHA Entr./Westview Complex Entr.

WELLS & ASSOCIATES, LLC
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
1420 Spring Hill Road
McLean, VA 22102
Phone: (703) 917-6620 Fax: (703)917-0739
5 Wirt Street
Leesburg, VA 20175
Phone: (703) 443-1442 Fax: (703)443-1225

SCALE 1"=20' DATE 6/27/01 CONTRACT NO.

DESIGNED BY DPN
DRAWN BY DPN/LV
CHECKED BY DPN
F.A.P. NO. N/A

COUNTY Frederick
LOGMILE 10008508.58
TIMS # H318
TOD NO.

TS #4120B-GI

SHEET NO. 2 OF 2

PLOTTED: $DATETIME$
FILE: $FILE$