

PROJECT DESCRIPTION
GENERAL
 THIS PROJECT INVOLVES UPGRADING EXISTING ICB TO A FULL SIGNAL WITH HIB AT THE INTERSECTION OF US 15 AT MOUNTVILLE ROAD IN FREDERICK COUNTY. US 15 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION
 A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES WITH VIDEO DETECTION INTERFACE MODULES. SB/NB LEFT TURNS FROM US 15 WILL OPERATE AS EXCLUSIVE/PERMISSIVE. THE SHA SIGNAL SHOP WILL INSTALL THE VIDEO INTERFACE EQUIPMENT IN THE EXISTING CABINET.

SPECIAL NOTES
 I. THE FOLLOWING CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

PROJECT CONTACTS:
 MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC
 PHONE: (301) 624-8140
 MR. RAYMOND JOHNSON, ASSISTANT DISTRICT ENGINEER- MAINTENANCE
 PHONE: (301) 624-8105
 MS. ANDREA ABEND, ASSISTANT DISTRICT ENGINEER - UTILITY
 PHONE: (301) 624-8115
 MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION
 PHONE: (410) 787-1630
 MR. ED RODENHIZER, SIGNAL SHOP SUPERVISOR
 PHONE: (410) 787-1652

ALLEGHENY POWER - PO Box 1392, FAIRMONT, WV - 26554
 PHONE: (304) 367 -3370

2. MAINTENANCE OF TRAFFIC INCLUDING LANE CLOSURE HOURS SHALL BE HANDLED ACCORDING TO MOT PLAN SHEET AND SPECIFICATIONS (CATEGORY 100) OF THIS PROJECT.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
973023	SHEET ALUMINUM SIGNS	SF	241.0
	2 EA W3-3(2) (120"x60")	SF	100.0
	2 EA ASSEMBLIES (24"x51")	SF	17.0
	2 EA ASSEMBLIES (36"x75")	SF	38.0
	2 EA D3-2 DOUBLE FACED (96"x16")	SF	22.0
	4 EA D95-25 (24"x24")	SF	16.0
	4 EA W3-3 (36"x36")	SF	36.0
	2 EA D3-2 (72"x12")	SF	12.0
900000	VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS	EA	1.0

EQUIPMENT LIST "B"

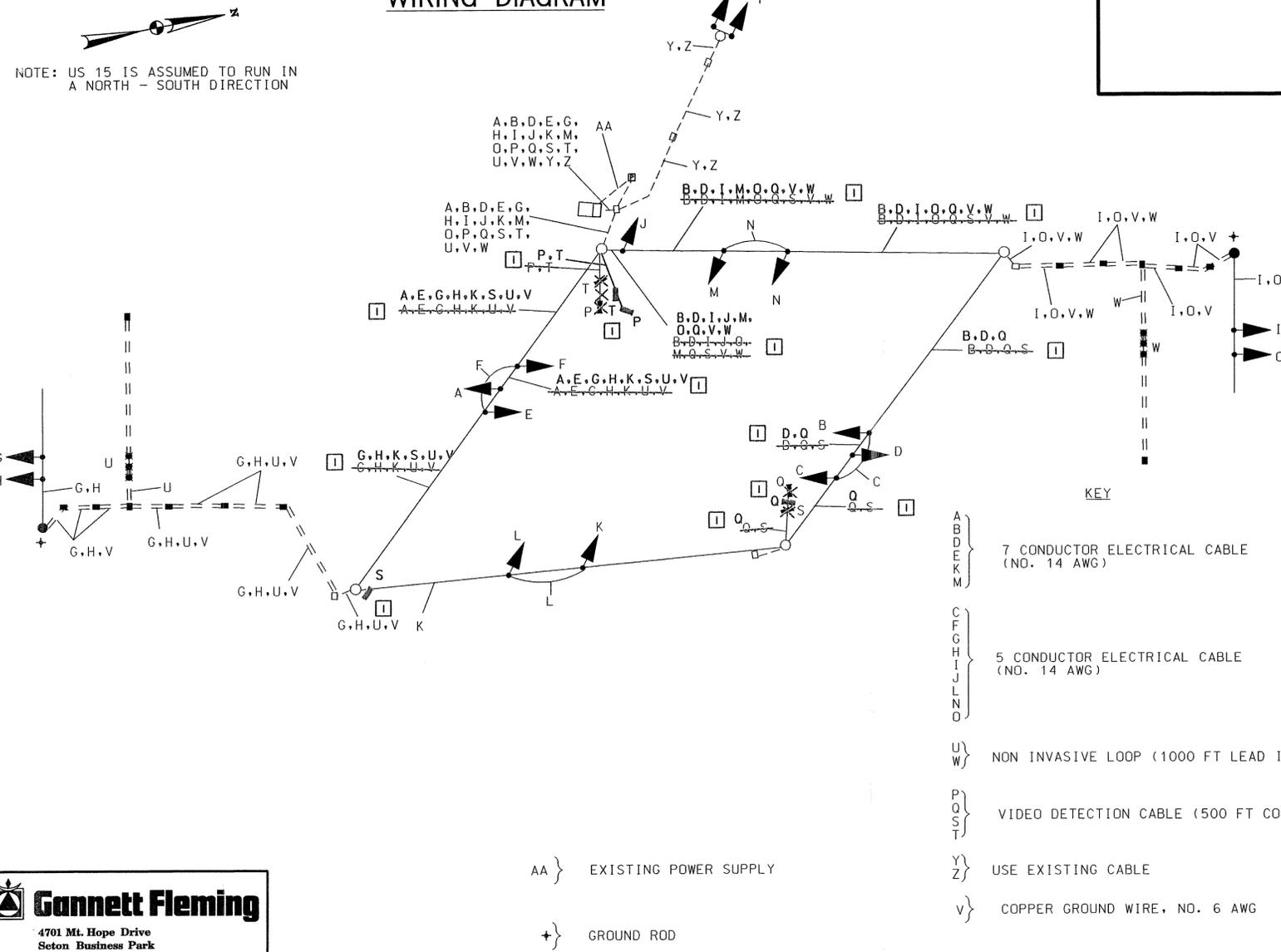
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.
 ALL 8 INCH AND 12 INCH VEHICULAR SIGNAL HEADS WILL BE BLACK FACED LED.

CATEGORY CODE NO.	DESCRIPTION	UNITS	QUANTITY
203030	TEST PIT EXCAVATION	CY	1.0
585625	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS	LF	77.0
801004	CONCRETE FOR SIGNAL FOUNDATION	CY	6.0
801106	WOOD SIGN SUPPORTS 4 INCH X 6 INCH	LF	70.0
801711	REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS	SF	12.5
805115	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-BORED	LF	130.0
805135	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	1650.0
810605	NON INVASIVE DETECTOR, 1000 FOOT LEAD-IN CABLE	EA	2.0
811001	FURNISH AND INSTALL ELECTRICAL HANDHOLE	EA	13.0
813010	BAND SIGN TO SIGN SUPPORT	EA	4.0
813014	INSTALL GROUND MOUNTED SIGN	SF	39.0
813015	INSTALL OVERHEAD SIGN	SF	202.0
816001	VIDEO DETECTION CAMERA	EA	4.0
816010	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER	EA	4.0
818030	STEEL POLE WITH A SINGLE 38 FOOT MAST ARM	EA	2.0
837001	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	2.0
832020	BARE COPPER GROUND WIRE, NO 6 AWG	LF	2040.0
860284	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	41.0
861107	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	4880.0
861108	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)	LF	1400.0
866103	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE	EA	2.0
800000	REMOVE & DISPOSE MATERIALS & EQUIPMENT	LS	1.0
800000	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	EA	6.0

EQUIPMENT LIST "C"

C. MATERIALS TO BE REMOVED BY THE CONTRACTOR.
 ALL MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	12"	12"	12"/8"	12"	12"	12"	12"/8"	12"	12"	12"/8"	12"	12"	12"	12"	12"	12"	12"
PHASE 1 AND 5	FL/Y	FL/Y	←G/R	←G/R	R	FL/Y	FL/Y	←G/R	←G/R	R	FL/Y	FL/Y	R	R	R	R	R
1 AND 5 CHANGE	FL/Y	FL/Y	←V/R	←V/R	R	FL/Y	FL/Y	←V/R	←V/R	R	FL/Y	FL/Y	R	R	R	R	R
PHASE 1 AND 6	Dark	Dark	←G/G	←G/G	G	FL/Y	FL/Y	R	R	R	FL/Y	FL/Y	R	R	R	R	R
1 AND 6 CHANGE	Dark	Dark	←V/G	←V/G	Y	FL/Y	FL/Y	R	R	R	FL/Y	FL/Y	R	R	R	R	R
PHASE 2 AND 5	FL/Y	FL/Y	R	R	R	Dark	Dark	←G/G	←G/G	G	FL/Y	FL/Y	R	R	R	R	R
2 AND 5 CHANGE	FL/Y	FL/Y	R	R	R	Dark	Dark	←V/G	←V/G	Y	FL/Y	FL/Y	R	R	R	R	R
PHASE 2 AND 6	Dark	Dark	G	G	G	Dark	Dark	G	G	G	FL/Y	FL/Y	R	R	R	R	R
2 AND 6 CHANGE	FL/Y	FL/Y	Y	Y	Y	FL/Y	FL/Y	Y	Y	Y	FL/Y	FL/Y	R	R	R	R	R
PHASE 4 AND 8	FL/Y	FL/Y	R	R	R	FL/Y	FL/Y	R	R	R	FL/Y	FL/Y	G	G	G	G	G
4 AND 8 CHANGE	Dark	Dark	R	R	R	Dark	Dark	R	R	R	FL/Y	FL/Y	Y	Y	Y	Y	Y
FLASHING	Dark	Dark	FL/Y	FL/Y	FL/Y	Dark	Dark	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R

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STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF TRAFFIC & SAFETY
 TRAFFIC ENGINEERING DESIGN DIVISION
 US 15 @ MOUNTVILLE ROAD

REVISIONS

REVISIONS	GENERAL INFORMATION PLAN
SCALE: NTS	DATE: 11/2006 CONTRACT NO. FR4155176
DESIGNED BY: DKS	COUNTY: FREDERICK
DRAWN BY: DKS	LOGMILE: 10001505.25
CHECKED BY: TCC	T.I.M.S. NO. H930
F.A.P. NO.	TOD NO.

DRAWING NO. TS# 4535A - GI OF SHEET NO. 19 OF 19