EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

SPEC. SECTION	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
806	960022	6 EACH	12 IN., 1-WAY, 3-SECTION (R,Y,G) SIGNAL HEAD MAST ARM MOUNT
816	971017	1 EACH	EIGHT PHASE, FULLY-ACTUATED TRAFFIC SIGNAL CONTROLLER IN A NEMA SIZE '6' POLE MOUNTED SYSTEM READY CABINET.
816	963007	4 EACH	FOUR CHANNEL LOOP DETECTOR AMPLIFIERS (DELAY OUTPUT)
813	973023	70 S.F.	SHEET ALUMINUM SIGNS

- 1 EACH R3-4 SIGN (30 IN. x 30 IN.) - 'LANE USE CONTROL - NO U TURN' MAST ARM MOUNT
- 1 EACH R3-3 (2) SIGN (30 IN. x 30 IN.) - 'LANE USE CONTROL - NO LEFT OR U TURN' MAST ARM MOUNT
- 1 EACH R3-1 SIGN (30 IN. x 30 IN.) - 'LANE USE CONTROL - NO RIGHT TURN' MAST ARM MOUNT
- 1 EACH D3-2 SIGN (VARIABLE x 16 IN.) - (ADVANCE STREET NAME PANEL) MAST ARM MOUNT
- 1 EACH ONE PIECE SHIELD ASSEMBLY ON A BLACK BACKGROUND - (30 IN. x 51 IN.) POLE MOUNT:
  - M3-1 SIGN (24 IN. x 12 IN.) 'NORTH' (FOR INDEPENDENT USE)
  - M1-5 SIGN (30 IN. x 24 IN.) 'MARYLAND 197' (FOR INDEPENDENT USE)
  - M6-1 SIGN (21 IN. x 15 IN.) 'DIRECTIONAL ARROW-HORIZONTAL'
- 1 EACH ONE PIECE SHIELD ASSEMBLY ON A BLACK BACKGROUND - (48 IN. x 75 IN.) POLE MOUNT:
  - M3-3 SIGN (30 IN. x 15 IN.) 'SOUTH' (FOR INDEPENDENT USE)
  - M1-5 SIGN (30 IN. x 24 IN.) 'MARYLAND 197' (FOR INDEPENDENT USE)
  - M6-1 SIGN (30 IN. x 24 IN.) 'DIRECTIONAL ARROW-HORIZONTAL'
- 1 EACH R3-1 SIGN (30 IN. X 30 IN.) 'TURN PROHIBITION - NO RIGHT TURN' MAST ARM MOUNT

EQUIPMENT LIST "B"

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

SPEC. SECTION	CATEGORY CODE NO.	QUANTITY	DESCRIPTION
104	120500	L.S.	MAINTENANCE OF TRAFFIC
205	203030	1 C.Y.	TEST PIT EXCAVATION
801	801004	7 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
804	837001	2 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER x 10 FT. LENGTH
805	805160	25 L.F.	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
806	831010	2 EACH	FURNISH AND INSTALL 250 WATT H.P.S. LAMP AND LUMINAIRE
807	807205	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
810	802501	370 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
810	861104	2265 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
810	861107	90 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
810	861116	470 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
810	862101	1265 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
811	811001	9 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813	800000	63 S.F.	INSTALL OVERHEAD SIGN
815	862102	360 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
816	871201	1 EACH	INSTALL EIGHT-PHASE (FULLY ACTUATED) CONTROLLER AND CABINET - BASE MOUNTED
——	800000	L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
——	873001	L.S.	REMOVE EXISTING SIGNAL EQUIPMENT TO BE SALVAGED
810	861108	845 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
815	800000	1 EACH	FURNISH AND INSTALL 27' STEEL POLE WITH TWIN 50 AND 60 FT. MAST ARMS.
818	800000	2 EACH	FURNISH AND INSTALL20' FOOT LONG LIGHTING ARM ON SIGNAL STRUCTURE
805	800000	240 L.F.	FURNISH AND INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
805	800000	240 L.F.	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
805	805150	267 L.F.	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED.
805	800000	20 L.F.	FURNISH AND INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
——	500000	175 L.F.	FURNISH AND INSTALL 24" WHITE HEAT APPLIED PREFORMED PAVEMENT MARKINGS (STOP LINE).
——	800000	L.S.	DELIVERY OF SALVAGED MATERIALS

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7941 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.

QUANTITY	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER AND CABINET.
1	27' STEEL POLE WITH 50' / 70' TWIN MAST ARMS.
1	27' STEEL POLE WITH 45' MAST ARM.

NOTES:
1. THE CONTRACTOR SHALL NOTIFY THE SHA AT 410-787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.
2. ALL EQUIPMENT TO BE REMOVED AND NOT LISTED ABOVE SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONSTRUCTION DETAILS

A. INSTALL 50' MAST ARM ON EXISTING 21' STEEL POLE, 20' LIGHTING ARM AND LUMINAIRE, TRAFFIC SIGNAL HEADS AND SIGNS
B. INSTALL 27' STEEL POLE WITH TWIN 50' AND 60' MAST ARMS, 20' LIGHTING ARM AND LUMINAIRE, TRAFFIC SIGNAL HEADS, AND SIGNS. (NOTE: 1-3" PVC 90 DEGREE ANGLE CONDUIT BEND.)
C. INSTALL HANDHOLE.
D. INSTALL NEMA SIZE 6' CABINET (NOTE: 2-4" AND 2-2" 90 DEGREE ANGLE CONDUIT BENDS.)
E. INSTALL 1" FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT(DETECTOR WIRE SLEEVE.)
F. INSTALL 6' x 6' LOOP DETECTOR, (4 TURNS) ENCASED IN 1/4" FLEXIBLE TUBING.
G. INSTALL 6' x 30' LOOP DETECTOR, (3,6,3, TURNS) ENCASED IN 1/4"FLEXIBLE TUBING QUADRUPOLE TYPE.
H. INSTALL 2" SCHEDULE 80 PVC ELECTRICAL CONDUIT - TRENCHED.
I. INSTALL 3" SCHEDULE 80 PVC ELECTRICAL CONDUIT - TRENCHED.
J. INSTALL 3" SCHEDULE 80 PVC ELECTRICAL CONDUIT - SLOTTED.
K. INSTALL 4" SCHEDULE 80 PVC ELECTRICAL CONDUIT - TRENCHED ELECTRICAL CONDUIT - TRENCHED.
L. REMOVE EXISTING MAST ARM SIGNAL HEADS AND SIGNS
M. USE EXISTING HANDHOLE.
N. PROPOSED OVERHEAD SERVICE.
O. FURNISH AND INSTALL 24" WHITE HEAT APPLIED PREFORMED PAVEMENT MARKING TAPE (STOP LINE)
P. REMOVE EXISTING SPAN
Q. REMOVE EXISTING CABINET.
R. REMOVE EXISTING HANDHOLE.
S. ABANDON MICRO LOOP DETECTOR

ADDENDUM

FINAL SIGNAL PLAN SS-35

RUMMEL, KLEPPER & KAHL, LLP
CONSULTING ENGINEERS
81 MOSHER STREET
BALTIMORE, MARYLAND 21217
TEL: (410) 728-2900 FAX: (410) 383-3270

REVISIONS:

© February, 1999 Reconstruct Due to New Geometrics. SHA No: N/A

APPROVALS:

CHIEF SIGNAL DESIGN SECTION

ASST. DISTRICT ENGINEER TRAFFIC

CHIEF TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR OFFICE OF TRAFFIC & SAFETY

ORIGINAL ON FILE

MDOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION LOG MILE # 16019712.28

DRAWN BY: SMH
DES. BY: SMH/DLA
CHK. BY: BJH

MD 197 AT B/W PARKWAY RAMP A
SIGNAL PLAN
COUNTY: PRINCE GEORGE'S

DATE: FEBRUARY, 1999 F.A.P. NO. SEE TITLE SHEET
SCALE: N/A S.H.A. NO. N/A

TS/STD. NO.: 1615E-GI2

SHEET NO. 128F OF 367

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