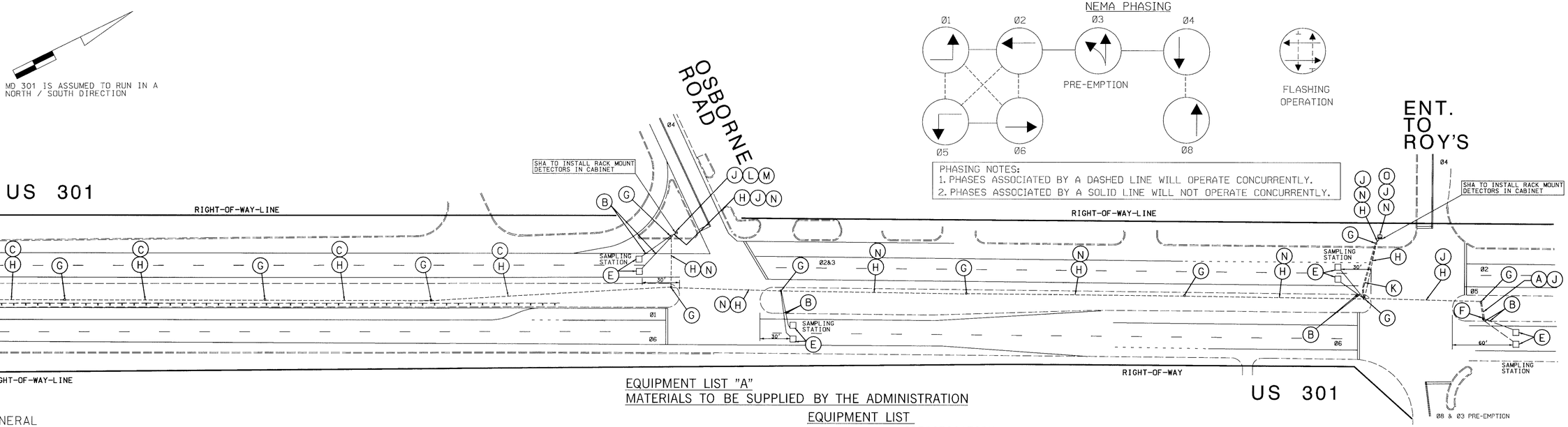

GENERAL

PROJECT DESCRIPTION:

THIS PROJECT INVOLVES THE INSTALLATION OF HARDWIRE INTERCONNECT FROM US 301 AT HEATHERMORE BLVD., OSBORNE ROAD AND MD 382 / CROOM ROAD INTERSECTIONS.

INTERSECTION OPERATIONS:

- THE INTERSECTION CABINET OF US 301 AT MD 382 SHALL OPERATE AS A MASTER / LOCAL CONTROLLER CABINET FOR THE NEW INTERCONNECT SYSTEM.
- THE INTERSECTON CABINET AT US 301 AND MD 382 WILL BE REWIRED TO OPERATE THE INTERSECTIONS OF US 301 AND OSBORNE ROAD ON ONE CONTROLLER.
- THE EXISTING POLE MOUNTED CABINET AT US 301 AND OSBORNE ROAD SHALL OPERATE AS A TERMINAL CABINET TO HOUSE THE DETECTOR AMPLIFIERS, WIRING TERMINALS AND SPECIAL RELAY PACKAGE.

SPECIAL NOTES:

1. THE LOCAL CONTROLLER EQUIPMENT AT OSBORNE ROAD SHALL BE REMOVED AND RETURNED TO THE WAREHOUSE BY THE SHA.
2. THE CONTRACTOR SHALL TERMINATE AND LABEL ALL WIRING LEADS IN THE CABINETS.

CONSTRUCTION DETAILS

A. INSTALL 2" SCHEDULE 80, POLYVINYL CHLORIDE CONDUIT-TRENCHED.
B. INSTALL 1" LIQUID-TIGHT, FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT FOR DETECTOR WIRE SLEEVE
C. INSTALL 12 PAIR COMMUNICATION CABLE.
D. INSTALL 12 PAIR COMMUNICATION CABLE IN BASE MOUNTED CABINET AND TERMINATE CABLE.
E. INSTALL 6'X 6' LOOP DETECTOR FOR SAMPLING STATION.
F. INSTALL HANDHOLE.
G. USE EXISTING HANDHOLE.
H. USE EXISTING CONDUIT.
J. INSTALL 2-CONDUCTOR (ALUMINUM SHIELDED CABLE NO. 14 AWG) ONE CABLE PER LOOP DETECTOR.
K. INSTALL 4" SCHEDULE 80 PVC AND 4" PVC BENDS, CONDUIT-BORED (TIE INTO EXISTING HANDHOLES)
L. USE EXISTING POLE MOUNTED CABINET, SHA WILL REMOVE CONTROLLER AND INSTALL RELAY PACKAGE AND TERMINAL STRIPS.
M. INSTALL TWO(2) PIECES OF 7-CONDUCTOR NO. 12 AWG CABLES AND TWO PIECES OF 12 PAIR COMMUNICATION CABLE IN POLE/BASE MOUNTED CABINETS.
N. INSTALL TWO(2) PIECES OF 7-CONDUCTOR NO. 14 AWG CABLES AND TWO PIECES OF 12 PAIR COMMUNICATION CABLE IN EXISTING CONDUIT.
O. INSTALL MASTER CONTROLLER IN EXISTING BASE MOUNTED CABINET.

EQUIPMENT LIST "A"
MATERIALS TO BE SUPPLIED BY THE ADMINISTRATION

EQUIPMENT LIST

ITEM NO.	DESCRIPTION	SPECIFICATION SECTION	UNIT	QUANTITY
* 9001	ASC MASTER CONTROLLER W/TELEMETRY	816	EA	1
* 9002	RACK MOUNT DETECTOR AMPLIFIER	816	EA	3
* 9003	SPECIAL RELAY PACKAGE 110V (FOR OSBORNE ROAD)	816	EA	1

* NOTE: ITEMS THE SHA SIGNAL SHOP WILL INSTALL IN THE FIELD.

EQUIPMENT LIST "B"
FURNISHED AND /OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	SPECIFICATION SECTION	UNIT	QUANTITY
1001	MAINTENANCE OF TRAFFIC	104	LS	1
8021	FURNISH AND INSTALL SAWCUT FOR SIGNAL LOOP DETECTOR	815	LF	530
8023	FURNISH AND INSTALL 1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT	805	LF	60
8024	FURNISH AND INSTALL 2" PVC SCHEDULE 80-TRENCHED	805	LF	1730
8032	FURNISH AND INSTALL 4" SCHEDULE 80 PVC CONDUIT- BORED	805	LF	50
8033	FURNISH AND INSTALL HANDHOLE	811	EA	8
8039	FURNISH AND INSTALL 12 PAIR COMMUNICATION CABLE, JELLY FILLED UNDERGROUND	SP/810	LF	5550
8040	FURNISH AND INSTALL LOOP DETECTOR WIRE, 1 CONDUCTOR (NO. 14 AWG)	810	LF	2500
8041	FURNISH AND INSTALL ELECTRICAL CABLE-2 CONDUCTOR NO. 14 AWG (ALUMINUM SHIELDED)	810	LF	700
8045	FURNISH AND INSTALL ELECTRICAL CABLE-7 CONDUCTOR NO. 14 AWG	810	LF	1780

EQUIPMENT LIST "C"
MATERIALS TO BE REMOVED AND DELIVERED TO SHA

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
ASC	LOCAL CONTROLLER	EA	1

GEOMETRIC LEGEND

EXISTING
PROPOSED

UTILITY LEGEND

SD SD STORM DRAIN
G G GAS MAIN
W W WATER MAIN
S S SEWER MAIN
E E ELECTRIC CABLES
A A AERIAL CABLES
T T TELEPHONE CABLES

SABRA, WANG & ASSOCIATES, INC.
9881 BROKEN LAND PARKWAY
SUITE 105
COLUMBIA, MD 21046

REVISIONS

A INTERCONNECT, EXTENDED TO HEATHERMORE BLVD. SHA NO.: AW-2775185 MAY. 1999

APPROVALS

ASST. TRAFFIC ENGINEERING DESIGN DIVISION — ORIGINAL ON FILE
ASST. DISTRICT ENGINEER, TRAFFIC
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION
DIRECTOR, TRAFFIC & SAFETY

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

INTERCONNECT PLAN
US 301 FROM HEATHERMORE BLVD. TO MD 382

DRAWN BY: WJ NIES (FOR STS)	F.A.P. NO.		TS NO. 2366X2-A
CHECKED BY: R R ZACHERAL	S.H.A. NO.	AW582(A59)B59	
SCALE: 1"=50'	COUNTY:	PRINCE GEORGE'S	T.I.M.S. NO. C-805
DATE: 3-14-88	LOG MILE:	1603011O.34	SHEET NO. 2 OF 2