# MAINTENANCE OF TRAFFIC

ACCESS TO ABUTTING PROPERTIES DURING DRIVEWAY PAVING OPERATIONS

ACCESS SHALL BE MAINTAINED TO ALL ABUTTING PROPERTIES AT ALL TIMES BY USE OF TEMPORARY DRIVEWAYS AND PROPOSED PERMANENT DRIVEWAYS DURING DRIVEWAY PAVING OPERATIONS. PERMANENT DRIVEWAY PAVING OPERATIONS SHALL NOT BEGIN UNTIL THE FULL WIDTH PERMANENT CONCRETE PAVEMENT OF A PARTICULAR CONSTRUCTION SECTION IS COMPLETE. ACCESS SHALL BE MAINTAINED AS PER THE PHASE CONSTRUCTION DETAILS SHOWN ON SHEET NO. 44 . ACCESS SHALL BE INCORPORATED INTO THE WORK OPERATIONS BY THE CONTRACTOR. TEMPORARY ACCESS SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE CLOSING OF ANY EXISTING ACCESS POINT.

# EXISTING TRAFFIC SIGNALS

THE EXISTING TRAFFIC SIGNALS AT ERIE ROAD/ESSEX DR., OHIO STREET, BELLFLOWER ROAD AND LAKESHORE BOULE VARD WILL REMAIN IN SERVICE DURING CONSTRUCTION OF THE PROJECT. ADJUSTMENTS FOR THE EXISTING SIGNALS AT THESE FOUR (4) LOCATIONS ARE SHOWN IN THE PLANS. SEE DETAILS ON SHEET NOS. 40 THROUGH 41. THE COST ASSOCIATED WITH TEMPORARY POLES, MOVING OF SPAN WIRE AND RELOCATING SIGNAL HEADS AND TEMPORARY PRESENCE DETECTORS SHALL BE INCLUDED IN ITEM 614-MAINTAINING TRAFFIC. SIGNAL SHUTDOWN AND/OR LANE BLOCKAGE SHALL NOT OCCUR DURING THE HOURS OF 7:00 A.M. TO 8:30 A.M. AND 4:00 P.M. TO 6:00 P.M. EXCEPT WITH THE PERMISSION OF THE ENGINEER. IF IT IS NECESSARY TO STOP ALL TRAFFIC FOR THE ERECTION OF SIGNAL SUPPORTS. THE WORK SHALL BE ARRANGED SO THAT THE STOPPAGE IS LESS THAN FIVE (5) MINUTES IN ANY ONE (1) THIRTY (30) MINUTE PERIOD. NO STOPPAGE OF TRAFFIC SHALL OCCUR FOR THE ERECTION OF OVERHEAD SUPPORTS WITHOUT A POLICE OFFICER BEING AT THE SITE FOR ASSISTANCE IN CONTROLLING TRAFFIC AND INFORMING MOTORISTS AS TO THE NATURE OF THE DELAY. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO PROVIDE THE SERVICES AND SCHEDULING OF THE QUALIFIED POLICE OFFICER TO DIRECT TRAFFIC DURING THE PERIOD OF THE SIGNAL SHUTDOWN.

THE CONTRACTOR SHALL INSTALL A POLE MOUNTED "MICROWAVE SENSORS, MODEL NO.TC-30" PRESENCE DETECTOR, OR APPROVED EQUAL, TO ASSURE SEMI-ACQUATED OPERATION AT ALL TRAFFIC SIGNAL LOCATIONS WHEN THE EXISTING PRESENCE LOOPS BECOME DAMAGED DUE TO CONSTRUCTION OPERATIONS. THE LOCATION & INSTALLATION OF THE TEMPORARY PRESENCE DETECTOR SHALL BE AS PER THE MANUFACTURER'S SPECIFICATIONS AND SHALL BE AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL HAVE THE OPTION OF TURNING OFF THE TRAFFIC SIGNAL FOR A PERIOD NOT TO EXCEED SIX (6) HOURS WHEN SWITCHING FROM THE EXISTING SIGNAL INSTALLATION TO THE PROPOSED SIGNAL INSTALLATION. THE APPROVED TIME PERIOD OF THE SIGNAL SHUTDOWN SHALL BE AS DIRECTED BY THE ENGINEER. DURING THE PERIOD OF SIGNAL SHUTDOWN, THE CONTRACTOR SHALL SUPPLY AND MAINTAIN TEMPORARY STOP SIGNS ON ALL MINOR APPROACHES TO THE INTERSECTION. THE ENGINEER SHALL APPROVE THE DESIGN AND PLACEMENT OF ALL TEMPORARY STOP SIGNS. THE CONTRACTOR SHALL IMMEDIATELY COVER OR REMOVE THE EXISTING SIGNAL HEAD WHEN THE PROPOSED SIGNAL INSTALLATION IS TURNED ON. SHOULD THE CONTRACTOR ELECT TO COVER THE EXISTING HEAD. THE COVERING SHALL CONFORM TO ITEM 632.24. PAYMENT FOR COVERING THE EXISTING SIGNAL HEADS DURING THE SIGNAL SWITCH OVER SHALL BE INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC.

# REPLACEMENT SIGNS

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENT OF THE PLANS AND SPECIFICATIONS WHICH BECOME DAMAGED BY TRAFFIC FOR REASON BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE PRICE BID PER SQUARE FOOT FOR ITEM SPECIAL - REPLACEMENT SIGNS AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED SIGNS. HARDWARE SUPPORTS. ETC. REPLACEMENT SIGNS SHALL BE NEW BUT OTHER MATERIALS MAY BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.

AN ESTIMATED QUANTITY OF ITEM SPECIAL - REPLACEMENT SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM SPECIAL

REPLACEMENT SIGNS

500 S.F.

# REPLACEMENT DRUMS

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENT OF THE PLANS AND SPECIFICATION WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER AND PAID FOR UNDER ITEM SPECIAL - REPLACEMENT DRUMS. PAYMENT FOR EACH DRUM SHALL INCLUDE 1) THE COST OF REMOVING AND DISPOSING THE DAMAGED DRUM. AND 2) PROVIDING, MAINTAINING AND REMOVING NEW DRUMS IN ACCORDANCE WITH

THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM. (REPLACEMENT LIGHTS SHALL NOT BE PAID FOR SEPARATELY BUT CONSIDERED INCIDENTAL TO THIS ITEM OR ITEM 614 - MAINTAINING TRAFFIC.) AN ESTIMATED QUANTITY OF ITEM SPECIAL - REPLACEMENT DRUMS HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM SPECIAL

REPLACEMENT DRUMS

500 EACH

#### LAW ENFORCEMENT OFFICER WITH PATROL CAR

THE CONTRACTOR SHALL PROVIDE AND PAY ALL COST FOR THE SERVICES OF LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR THE EXCLUSIVE PURPOSE OF CONTROLLING TRAFFIC WHENEVER A CHANGE IN THE TRAFFIC PATTERN TAKES PLACE. THE NUMBER OF OFFICERS AND CARS REQUIRED FOR THIS PURPOSE SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE OFFICERS SHALL MOVE THEIR PATROL CARS AS NECESSARY TO INSURE THEIR CONSTANT PRESENCE AT THE POINT(S) OF SLOW DOWN, STOPPAGE OR BACK-UP. PAYMENT FOR THE ABOVE WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL - LAW ENFORCEMENT OFFICER WITH PATROL

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ARRANGEMENTS WITH THE CITY OF MENTOR POLICE DEPT. REGARDING SCHEDULING AND PAYMENT OF LAW ENFORCEMENT OFFICER WITH PATROL CAR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM SPECIAL - LAW ENFORCEMENT OFFICER WITH PATROL CAR 250 HOURS

#### TEMPORARY PRECAST CONCRETE BARRIER

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING, AND SUBSEQUENTLY REMOVING TEMPORARY PRECAST CONCRETE BARRIER SECTIONS FOR THE CULVERT CONSTRUCTION WORK AT STA. 127+28.

THE TEMPORARY PRECAST CONCRETE BARRIER SECTIONS (10 FEET LONG) NECESSARY TO PERFORM THIS ITEM OF WORK SHALL BE SUPPLIED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOADING, UNLOADING AND TRANSPORTATION OF THE BARRIER SECTIONS.

PAYMENT FOR PRECAST BARRIER INSTALLED AS PER THE MAINTENANCE OF TRAFFIC PLANS SHALL BE MADE AT THE CONTRACT PRICE FOR ITEM 622, LINEAR FOOT, TEMPORARY CONCRETE BARRIER.

# BARRIER REFLECTORS

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING, INSTALLING AND MAINTAINING BARRIER REFLECTORS ON TEMPORARY CONCRETE BARRIER SECTIONS USED IN WORK ZONES. THE LOCATION, COLOR, SPACING AND TYPE SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 802.

PAYMENT FOR EACH BARRIER REFLECTOR INSTALLED SHALL BE MADE AT THE CONTRACT PRICE FOR ITEM 614, EACH, BARRIER REFLECTOR.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR BARRIER REFLECTORS.

ITEM 614 - BARRIER REFLECTOR, TYPE B

4 EACH

# TEMPORARY TRAFFIC MARKINGS

THE ROADWAY SHALL NOT BE OPENED TO TRAFFIC UNTIL EITHER THE PERMANENT OR TEMPORARY PAVEMENT MARKINGS ARE IN PLACE. THE FOLLOWING TEMPORARY PAVEMENT MARKINGS SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER:

ITEM 614	TEMPORARY LANE LINES, CLASS II	4.58	MILE
ITEM 614	TEMPORARY CENTER LINES, CLASS II	2.99	MILE
ITEM 614	TEMPORARY CHANNELIZING LINES, CLASS I	1352	LIN.FT.
ITEM 614	TEMPORARY STOP LINES, CLASS I	887	LIN.FT.
ITEM 614	TEMPORARY SCHOOL SYMBOL MARKINGS, 72", CLASS I	2	<b>EACH</b>

THESE QUANTITIES ARE AS CALCULATED FOR THE PERMANENT ITEM 621 MARKINGS AND TABULATED ON SHEET 350-351 OF THE TRAFFIC CONTROL PORTION OF THE PLAN. THESE QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

SEQUENCE OF OPERATIONS

CONSTRUCTION SHALL BE PERFORMED IN FOUR (4) SECTIONS AS FOLLOWS:

SECTION 1: STATION 25+00 TO OHIO STREET

SECTION 2: OHIO STREET TO BELLFLOWER ROAD

SECTION 3: FAYE ROAD/PORT ROYAL COURT TO LAKESHORE BOULEVARD

SECTION 4: BELLFLOWER ROAD TO FAYE ROAD/PORT ROYAL COURT

THE MAINTENANCE OF TRAFFIC SCHEME AND THE SEQUENCE OF OPERATIONS FOR EACH PHASE OF EACH CONSTRUCTION SECTION IS OUTLINED IN THE FOLLOWING PLAN NOTES AND DETAILED IN THE PLANS ON SHEET NOS. 25 THROUGH 38. THE SEQUENCE OF OPERATION NOTES FOR EACH PHASE OF EACH CONSTRUCTION SECTION ARE TO BE USED AS A GENERAL GUIDE TO THE BASIC WORK OPERATIONS INVOLVED IN A PARTICULAR SECTION AND PHASE. THE CONTRACTOR MAY WORK ON ANY ADJACENT CONSTRUCTION SECTIONS. BUT SHALL SCHEDULE HIS WORK OPERATIONS SO THAT TRAFFIC IS MAINTAINED ON THE SAME SIDE OF THE ROADWAY CENTERLINE AT ALL TIMES IN ANY TWO (2) ADJACENT CONSTRUCTION SECTIONS. CROSSING TRAFFIC OVER TO THE OPPOSITE SIDE OF THE ROADWAY CENTERLINE AT THE VICINITY OF THE BREAK POINT BETWEEN TWO (2) ADJACENT CONSTRUCTION SECTIONS SHALL NOT BE PERMITTED.

THE CONTRACTOR MAY BEGIN HIS WORK OPERATIONS IN ANY SECTION WITH THE FOLLOWING EXCEPTION: THE CULVERT AT STATION 127+28 TO BE CONSTRUCTED IN SECTION 3, MUST BE COMPLETED BEFORE WORK OPERATIONS FOR DRAINAGE CONSTRUCTION CAN BEGIN IN SECTION 4.

ACCESS TO SIDE STREETS AND ABUTTING PROPERTIES SHALL BE MAINTAINED AND PERMANENT ACCESS FACILITIES CONSTRUCTED AS DETAILED IN THE PLAN FOR THE APPROPRIATE CONSTRUCTION SECTION.

SECTION 1 - PHASE A (STATION 25+00 TO OHIO STREET)

- 1. CONSTRUCT 54" STORM SEWER ACROSS EXISTING PAVEMENT FROM STATION 61+35 RIGHT TO STATION 62+40 LEFT. MAINTAIN TRAFFIC ON EXISTING PAVEMENT USING FLAGMEN AS REQUIRED.
- 2. CONSTRUCT TEMPORARY PAVEMENT ALONG WEST SIDE OF EXISTING PAVEMENT AS DETAILED IN PLAN BETWEEN ADKINS ROAD AND OHIO STREET. CONSTRUCT TEMPORARY TRAFFIC SIGNAL AT ERIE ROAD AND ESSEX COURT INTERSECTION. MAINTAIN TWO WAY TRAFFIC IN TWO (2) ELEVEN FOOT (11') MINIMUM LANES ON THE EAST SIDE OF THE EXISTING PAVEMENT USING FLAGMEN AS REQUIRED.
- 3. MAINTAIN TWO WAY TRAFFIC ON TWO (2) ELEVEN FOOT (11') MINIMUM LANES ON THE WEST SIDE OF THE ROADWAY USING TEMPORARY PAVEMENT MARKINGS ON THE EXISTING PAVEMENT AND TEMPORARY PAVEMENT.
- 4. CONSTRUCT PROPOSED STORM SEWER ALONG THE EAST SIDE OF THE ROADWAY FROM STATION 24+75 TO STATION 61+35.
- 5. CONSTRUCT STORM CROSSOVERS AND UTILITY SERVICE CONNECTIONS TO THE WEST AS REQUIRED TO THE APPROXIMATE CENTERLINE OF CONSTRUCTION.
- 6. CONSTRUCT TWO (2) LANES OF PROPOSED CONCRETE PAVEMENT ON THE EAST SIDE OF THE ROADWAY INCLUDING TEMPORARY PAVEMENT FOR GRADE CHANGE TO MEET EXISTING AT STATION 64+60.. CLOSE AVON DRIVE INTERSECTION FOR PAVING OPERATIONS AND MAINTAIN ACCESS TO WESTERN RESERVE CONDOMINIUM COMPLEX BY UTILIZING ESSEX COURT EXISTING PAVEMENT. CLOSE ESSEX COURT INTERSECTION FOR PAVING OPERATIONS AND MAINTAIN ACCESS TO WESTERN RESERVE CONDOMINIUM COMPLEX BY UTILIZING AVON DRIVE'S PERMANENT PAVEMENT.