

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS TO MINIMIZE HAZARD, DELAY, AND INCONVENIENCE TO MOTORISTS. IN ADDITION TO THE PROVISIONS OF ITEM 614, MAINTAINING TRAFFIC, THE FOLLOWING SPECIFIC PROVISIONS ARE MANDATORY.

## SEQUENCE OF OPERATIONS

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN THE ORDER OF THE FOLLOWING PHASES. THE PROPOSED CONSTRUCTION AND TRAFFIC MAINTENANCE IN EACH PHASE ARE SUMMARIZED HEREIN.

## PHASE I

MAINTAIN TRAFFIC ON EXISTING PAVEMENT.  
PLACE THE SOUTHERN MOST SECTION OF PROPOSED PRECAST BOX CULVERT AT STATION 146+38, AND POUR THE CAST-IN-PLACE BOX AND WING WALL.  
TWO WAY TRAFFIC IS REQUIRED AT ALL TIMES DURING THIS PHASE.

## PHASE II

DETOUR TRAFFIC AROUND PROJECT SITE.  
INSTALL TEMPORARY CONCRETE BARRIER AS SHOWN. MAINTAIN EMERGENCY VEHICLE TRAFFIC ONLY ON NORTH PORTION OF EXISTING BRIDGE.  
DEMOLISH SOUTH PORTION OF EXISTING BRIDGE.  
PLACE PRECAST BOX CULVERT SECTIONS, DRIVE SHEET PILING, CAST RETAINING WALL AND PLACE FILL.

## PHASE III

CONTINUE DETOUR AROUND PROJECT SITE.  
CONSTRUCT EMERGENCY ACCESS LANE FOR EMERGENCY VEHICLE TRAFFIC & INSTALL TEMPORARY CONCRETE BARRIER.  
DEMOLISH NORTH PORTION OF EXISTING BRIDGE.  
PLACE REMAINING BOX CULVERT SECTIONS, MANHOLES, STORM SEWERS, CAST-IN-PLACE CURVED BOX AND RETAINING WALLS.  
PLACE FILL, CONSTRUCT PAVEMENT AT NEW BOX CULVERT AND REMOVE TEMPORARY DRUMS AND RAILING.  
CONSTRUCT STORM SEWERS AND DITCHES ALONG THE EAST SIDE OF ERIE RD. FROM STA. 4+00 TO STA. 15+50.

## PHASE IV

CONSTRUCT TEMPORARY PAVEMENT ALONG EAST SIDE OF ERIE RD. FROM STA. 4+00 TO STA. 15+50.  
MAINTAIN TWO WAY TRAFFIC ON EXISTING PAVEMENT.  
INSTALL TEMPORARY DRUMS ALONG WESTBOUND LANE OF LAKE SHORE BLVD. AND ALONG SOUTHBOUND LANE OF ERIE RD.  
INSTALL NEW PAVEMENT (BASE COURSE), STORM SEWERS, UNDERDRAINS, CURBS AND GUARDRAIL ALONG WESTBOUND LANE OF LAKE SHORE BLVD. AND SOUTHBOUND LANE OF ERIE RD.

## PHASE V

PLACE PAVEMENT LEVELING COURSES AS NECESSARY FOR MAINTAINING TRAFFIC ON NORTHERN TWO LANES OF LAKE SHORE BLVD. AND THE WESTERN TWO LANES OF ERIE RD.  
INSTALL TEMPORARY BARRICADES AND DRUMS.  
INSTALL NEW PAVEMENT BASE, UNDERDRAINS, CURBS AND GUARDRAIL ALONG THE EASTBOUND LANE OF LAKE SHORE BLVD. AND ALONG THE NORTHBOUND LANE OF ERIE RD.  
PLACE FINAL PAVEMENT SURFACE AND BERM THROUGHOUT ENTIRE PROJECT LIMITS. REMOVE TEMPORARY BARRICADES AND DRUMS AS REQUIRED FOR TRAFFIC MAINTENANCE.

## MAINTAINING TRAFFIC NOTES

## TRAFFIC CONTROL SYSTEMS

## A. WHEN REQUIRED

WHEN ANY PART OF THE TRAVELED SURFACE IS BEING WORKED UPON OR IS NOT SUITABLE FOR SAFE AND CONVENIENT USED BY MOTORISTS, TRAFFIC CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED. THE DEVICES SHALL BE SUFFICIENT TO PROTECT AREAS OF WORK AND ASSURE SAFE AND CONVENIENT PASSAGE BY MOTORISTS. THE DEVICES AND THE MANNER OF THEIR USE SHALL BE CONSISTENT WITH THE PLANS AND THE CURRENT EDITION OF THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", HEREINAFTER REFERRED TO AS THE OHIO MANUAL. THE TRAFFIC CONTROL SYSTEM HEREIN INDICATED SHALL CONSTITUTE THE MINIMUM PROVISIONS FOR TRAFFIC CONTROL.

## B. PLACEMENT OF ASPHALT CONCRETE

TWO-WAY TRAFFIC SHALL BE MAINTAINED ON A MINIMUM OF TWO 12-FOOT LANES DURING PHASES I, IV & V EXCEPT DURING ACTUAL CONSTRUCTION OF TRANSITION PAVEMENT BETWEEN THE EXISTING AND TEMPORARY PAVEMENTS. ALTERNATING ONE-WAY TRAFFIC ON ONE 12-FOOT LANE WILL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES.

## C. TRENCH FOR WIDENING

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES. PLACEMENT OF PROPOSED SUBBASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATIONS. THE LENGTH OF WIDENING TRENCH WHICH IS OPEN AT ANY ONE TIME SHALL BE HELD TO A MINIMUM AND SHALL AT ALL TIMES BE SUBJECT TO APPROVAL OF THE ENGINEER.

## D. OVERNIGHT TRENCH CLOSING

THE BASE WIDENING ON THIS PROJECT WILL BE COMPLETED TO A DEPTH 3 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF THE WORK DAY. NO TRENCH WILL BE LEFT OPEN OVERNIGHT, EXCEPT FOR A SHORT LENGTH OF A WORK SECTION (25 FEET OR LESS) AT THE END OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING WILL BE BACKFILLED AT THE DIRECTION OF THE ENGINEER.

## E. ADDITIONAL QUANTITIES

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

ITEM 404 BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	50 CU. YD.
ITEM 410 TRAFFIC COMPACTED SURFACE TYPE A OR B	50 CU. YD.
ITEM 410 TRAFFIC COMPACTED SURFACE TYPE C	50 CU. YD.
ITEM 616 CALCIUM CHLORIDE	10 TONS
ITEM 616 WATER	50 M-GALS.

## F. DETOUR SIGNING

ALL DETOUR SIGNS (EXCEPT ROUTE SHIELDS) SHALL BE FURNISHED, ERRECTED, MAINTAINED AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. ROUTE SHIELDS SHALL BE FURNISHED BY THE STATE.

ALL COSTS FOR DETOUR SIGNING SHALL BE INCLUDED UNDER ITEM 614 - MAINTAINING TRAFFIC.

## G. TEMPORARY ROADS AND PAVEMENTS

ON THIS PROJECT THE TEMPORARY CLASS B PAVEMENT SHALL BE CONSTRUCTED ALONG THE EAST PAVEMENT EDGE OF ERIE RD. FROM STATION 4+00 TO STATION 15+50. THE MINIMUM ROADWAY WIDTH OF THE EXISTING AND TEMPORARY PAVEMENT SHALL BE 22 FEET.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED IN-CONSTRUCTING THE TEMPORARY CLASS B PAVEMENT.

ITEM 615 TEMPORARY PAVEMENT CLASS B. 1000 SQ. YDS.

ITEM 615 TEMPORARY ROADS LUMP SUM

## H. ITEM 614 MAINTAINING TRAFFIC

PAYMENT FOR ITEM 614, MAINTAINING TRAFFIC, WILL BE MADE AT THE CONTRACT LUMP SUM PRICE INCLUDING ALL DRUMS AND SIGNS, BUT EXCLUDING PAVEMENT MARKINGS. THIS ITEM SHALL ALSO INCLUDE THE INSTALLATION AND REMOVAL OF ALL DETOUR SIGNS.

ITEM 614 MAINTAINING TRAFFIC LUMP SUM

## TEMPORARY MAINTENANCE OF EXISTING SIGNALS

INCIDENTAL TO THE REQUIREMENTS FOR MAINTAINING TRAFFIC IN ACCORDANCE WITH 614.03, THE EXISTING TRAFFIC SIGNAL SHALL BE TEMPORARILY MAINTAINED UNTIL THE NEW TRAFFIC SIGNAL INSTALLATION IS READY TO BE PLACED IN OPERATION.

WHEN NOT IN OPERATION, SIGNAL HEADS SHALL BE BAGGED. WHEN NO SIGNAL IS IN OPERATION AT THE INTERSECTION, TRAFFIC SHALL BE MAINTAINED BY A UNIFORMED POLICE OFFICER. THE OFF-DUTY OFFICER SHALL BE OBTAINED AND COMPENSATED BY THE CONTRACTOR.

SIGNAL CONTROL OF THE INTERSECTION SHALL NOT BE INTERRUPTED DURING THE HOURS OF 6:00 TO 9:00 A.M., OR 3:00 TO 6:00 P.M. WEEKDAYS. SIGNALS SHALL BE INOPERATIVE NO LONGER THAN 6 HOURS.

ANY COSTS FOR THE TEMPORARY MAINTENANCE OF EXISTING SIGNALS SHALL BE INCLUDED IN THE LUMP SUM FOR 614, MAINTAINING TRAFFIC.

## MAINTENANCE OF NEW TRAFFIC SIGNAL INSTALLATIONS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE NEW TRAFFIC SIGNAL HE HAS IN PART OR FULLY CONSTRUCTED UNTIL SUCH TIME AS THE TESTING REQUIREMENTS ARE SATISFIED, AND THE SIGNAL INSTALLATION IS COMPLETE AND ACCEPTED BY THE ENGINEER.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE CITY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES ARE LOCATED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO TROUBLE CALLS. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAULTS, EQUIPMENT MALFUNCTIONS, AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 4 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT EXCEPT POLES AND CONTROL EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK IN SERVICE WITHIN 8 HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

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	OHIO	LAK 283-4.13

NONE OF THE ABOVE SHALL BE CONSIDERED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION, THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICULAR ACCIDENT, THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO OR CANNOT RESPOND TO AN OUTAGE OF SIGNAL EQUIPMENT AT THOSE LOCATIONS WITHIN HIS RESPONSIBILITY, WITHIN PERIODS AS SPECIFIED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS TO THE STATE FROM THE CITY FOR POLICE SERVICES AND MAINTENANCE BY CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE MAINTENANCE SERVICE IN ONE OR MORE OF THE FOLLOWING MANNERS:

1. THE CONTRACTOR CAN HIRE A SIGNAL CONTRACTOR TO PROVIDE THESE SERVICES.
2. TWENTY-FOUR HOUR SERVICE BY THE CONTRACTOR.

TWO WEEKS BEFORE THE 10 DAY PERFORMANCE TEST, THE CONTRACTOR SHALL SEND A WRITTEN NOTICE TO THE CITY AND ENGINEER TO INDICATE THE MANNER IN WHICH HE PROPOSES TO PROVIDE THE ABOVE SERVICE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING TRAFFIC SIGNALS, SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES, AND REVISIONS TO THE SIGNAL SYSTEM.

THIS ITEM SHALL BE CONSIDERED A SUBSIDIARY WORK ITEM AND THE COST SHALL BE INCLUDED IN THE LUMP SUM FOR 614, MAINTAINING TRAFFIC.

*The work shall be so scheduled that the pavement shall be open to two-way traffic through the winter of 1986-1987.*