# MAINTAINING TRAFFIC - (CONT.)

## LIQUIDATED DAMAGES/INTERIM COMPLETION REQUIREMENTS

THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS AND INCREASE HIS WORK FORCE AS NECESSARY SO AS TO COMPLETE ALL WORK ITEMS REQUIRING PERMANENT LANE CLOSURES FOR THE FOLLOWING WORK ZONES. WITHIN THE LIMITS ALLOCATED.

	LOCATION	DIRECTION	PHASE	TIME LIMIT
	1-90 STA. 124+34 TO STA. 322+71	E.B.	IA	75 DAYS
	I-90 STA. 92+40.11 TO STA. 124+34	E.B.	IB	45 DAYS
	I-90 STA. 10+00 TO STA. 18+13.64	W.B.		
å	I-271 STA. 0+00.20 TO STA. 92+40.11	N.B.		
	RAMP C STA. 8+13.64 TO STA. 42+28.41	DIR		
4	I-90 STA. 92+40.11 TO STA. 322+71	E.B.	2	45 DAYS
	1-90 STA. 10+00 TO STA. 18+13.64	W.B.		
	I-271 STA. 0+00.21 TO STA. 92+40.11	N.B.		
	RAMP C STA. 8+13.64 TO STA. 42+28.41	DIR	·	
	RAMPS G & H ALL	RAMP		
ю.	SAME AS PHASE IA & B		3A	20 DAYS
٥	1-90 STA. 132+50 TO STA. 322+71	W.B.	3B	75 DAYS
	1-90 STA. 90+60.78 TO STA. 132+50	W.B.	3C	30 DAYS
	I-271 STA. 0+00.20 TO STA. 90+63.78	S.B.		
	RAMP D STA. 18+13.64 TO STA. 38+78.80	DIR		
	I-90 STA. 90+63.78 TO STA. 322+71	W.B.	4	40 DAYS
g,	1-271 STA. 0+00.20 TO STA. 90+63.78	S.B		
	RAMP D STA. 18+13.64 TO STA. 38+78.80	DIR		
	RAMPS E & F ALL	RAMP		
	SAME AS PHASES 3B & C		5A	15 DAYS
	1-90 STA. 10+00 TO STA. 35+79.29	E.B.	5B	20 DAYS
	RAMP A STA. 6+25.28 TO STA. 25+46.12	DIR	·	
	RAMP B STA. 5+79.29 TO STA. 26+85.12	DIR		
-As	1-90 STA. 10+00 TO STA. 35+79.29	E.B.	6	20 DAYS
	RAMP A STA. 6+25.28 TO STA. 25+46.12	DIR		
	RAMP B STA. 5+79.29 TO STA. 26+85.12	DIR		
Ī	SAME AS PHASE 5B		7	10 DAYS
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# GENERAL NOTES

NON-RUSH HOUR CLOSURES AS PERMITTED BY THE "SCHEDULE OF THRU LANES TO BE MAINTAINED TABLE ON SHEET 34 ARE NOT CONSIDERED WITHIN THE TIME LIMITS ABOVE. (THOSE CLOSURES ARE DISCUSSED IN THE "LIQUIDATED DAMAGES/SHORT TERM LANE CLOSURES" NOTE)

THE COMPLETION OF A PHASE REQUIRES THAT ALL LANES BE RE-OPENED TO TRAFFIC OR THE SUBSEQUENT TRAFFIC CONTROL PHASE BE IMPLEMENTED.

THE TIME LIMIT AS SHOWN SHALL BEGIN ON THE FIRST DAY THAT PERMANENT CLOSURES (CLOSURES EXTENDING THROUGH RUSH HOURS) ARE IMPLEMENTED AND SHALL CONTINUE COUNTING BASED UPON CALENDAR DAYS UNTIL COMPLETION AS DEFINED ABOVE.

LIQUIDATED DAMAGES AS DETERMINED FROM THE TABLE IN SECTION 108.07 OF THE SPECIFICATIONS SHALL BE ASSESSED FOR EACH DAY (OR PORTION THEREOF) FOR WHICH THESE TIME LIMITS ARE NOT MET. IF MORE THAN ONE PHASE OF THIS WORK IS IN VIOLATION OF THE STATED TIME LIMITS THEN LIQUIDATED DAMAGES IN THE AMOUNT NOTED ABOVE SHALL BE ASSESSED FOR EACH PHASE AND WILL BE CUMULATIVE.

## LIQUIDATED DAMAGES/SHORT TERM LANE CLOSURES

SHORT TERM LANE CLOSURES ARE THOSE WHICH ARE PERMITTED BY THE PLANS FOR NON RUSH HOUR CLOSURES. THE WORK PERFORMED DURING THESE CLOSURES IS TYPICALLY THE SET UP AND TAKE DOWN OF TRAFFIC CONTROL ZONES AND RESURFACING OPERA-TIONS. THE TIME INTERVALS ALLOWED FOR THESE CLOSURES ARE AS SHOWN ON THE 'SCHEDULE OF THRU LANES TO BE MAINTAINED' TABLE ON SHEET 34 .

THESE TIME LIMITATIONS SHALL NOT BE REVISED WITHOUT PRIOR WRITTEN APPROVAL FROM BOTH THE PROJECT ENGINEER AND THE DISTRICT PLANNING AND DESIGN EN-GINEER.

ANY DELAY IN EFFECTING THESE CLOSURES SHALL NOT BE SUFFICIENT CAUSE FOR EXTENDING THE RE-OPENING TIME.

LIQUIDATED DAMAGES AS DETERMINED FROM THE TABLE IN SECTION 108.07 OF THE SPECIFICATIONS SHALL BE ASSESSED FOR ANY VIOLATION OF THE PERMITTED LANE CLOSURES.

THESE DAMAGES SHALL BE ASSESSED INDIVIDUALLY AND WILL BE CUMULATIVE FOR EACH LOCATION WHICH DOES NOT RE-OPEN TO TRAFFIC ON TIME. (THIS COULD RESULT IN SEVERAL ASSESSMENTS FOR EACH VIOLATION).

## TRAFFIC CONTROL FOR ASPHALT CONCRETE OPERATIONS (ITEM 301 AND ITEM 446 COURSES)

ALL ASPHALT CONCRETE OPERATIONS SHALL BE CONDUCTED IN A MANNER THAT WILL ASSURE MINIMUM DANGER AND INCONVENIENCE TO THE HIGHWAY USERS. SEE 'SCHEDULE OF THRU LANES TO BE MAINTAINED' ON SHEET 34 FOR ALLOWABLE WORK TIMES. THE PROCEDURE FOR INSTALLATION OF ANY ASPHALT LAYER SHALL BE SUCH THAT NO DISCONTINUITY IN THE ELEVATION OF THE TRAVELED SURFACE SHALL EXIST AT ANY TIME OTHER THAN DURING THE PERMITTED WORKING HOURS AND THEN ONLY WHEN SUCH PROPER TRAFFIC CONTROL DEVICES ARE IN PLACE AS WILL PREVENT SUCH A DISCON-TINUITY FROM BEING A DANGER TO HIGHWAY USERS. WHEN THE ASPHALT IS PLACED AND A DISCONTINUITY DOES EXIST IN THE TRAVELED LANES, THE CONTRACTOR SHALL ERECT OW-171-48 AND OW-P-171-24 SIGNS (DIAGRAMMATIC UNEVEN LANES AND DE-SCRIPTION BELOW) EVERY 1000'. WHEN THE DISCONTINUITY DOES NOT EXIST. THE SIGNS MUST BE REMOVED OR COMPLETELY COVERED. THE COST FOR THESE SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

TRAFFIC MUST BE MAINTAINED AT ALL TIMES IN BOTH DIRECTIONS IN ACCORDANCE WITH THE GENERAL CONSTRUCTION SEQUENCE NOTE ON SHEET NO  $\frac{19}{1000}$ .

A MINIMUM OF ONE (I) TWELVE (I2) FOOT LANE IN EACH DIRECTION MUST BE MAIN-TAINED AT ALL TIMES DURING NIGHTTIME RESURFACING OPERATIONS.

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED. THE MOTORIST SHALL BE WARNED AND DIVERTED BY THE CONTRACTOR THROUGH THE USE OF A FLASHING ARROW. IN ADDITION TO THOSE PROVISIONS SET FORTH IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVISED FOR STREETS AND HIGHWAYS.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS ANY PART-WIDTH RESURFACING JOINT EXCEPT AS NECESSARY DURING THE ACTUAL RESURFACING OPERATION. ANY PART -WIDTH RESURFACING JOINTS WHICH MUST BE EXPOSED TO TRAFFIC SHALL BE RAMPED USING ITEM 404 - BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC. AT A RATE NOT TO EXCEED ONE INCH IN ONE FOOT (LONGITUDINAL JOINTS).

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FEDERAL PROJECT

TEMPORARY TRANSVERSE RESURFACING JOINTS WHICH MUST BE EXPOSED TO TRAFFIC SHALL BE RAMPED USING ITEM 404 - BITUMINOUS CONCRETE FOR MAINTAINING TRAF-FIC, AT A RATE NOT TO EXCEED ONE INCH IN FOUR FEET.

PRIOR TO OPENING THE HIGHWAY TO NORMAL TRAFFIC DURING WINTER MONTHS. ALL ASPHALT WORK INCLUDING THE SURFACE COURSE, MUST BE COMPLETED AN EQUAL FULL WIDTH DISTANCE. NO INTERMEDIATE LEVELING COURSE IS TO BE TRAVELED ON DURING WINTER MONTHS NOR SHALL ANY PART WIDTH RESURFACING REMAIN DURING THE WIN-TER. THE CONTRACTOR IS CAUTIONED TO SCHEDULE HIS OPERATIONS TO MEET THIS REQUIREMENT. IF THE CONTRACTOR DOES NOT MEET THIS REQUIREMENT. THE CONTRAC-TOR SHALL INCREASE THE THICKNESS OF THE SURFACE COURSE BY 1/2" ENTIRELY AT HIS EXPENSE FOR LABOR. MATERIALS AND EQUIPMENT.

## TRAFFIC CONTROL MATERIALS

#### A. SIGNS

SIGN DIMENSIONS AND SPECIFICATIONS. INCLUDING LETTER SIZES. SHALL BE AS PROVIDED IN THE 'MANUAL' OR IN SIGN DESIGN DRAWINGS PROVIDED BY THE DEPARTMENT OF TRANSPORTATION. THE SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER PRIOR TO THE START OF THE PROJECT.

#### B. SIGN SUPPORTS

SUPPORTS SHALL BE ADEQUATE IN MASS AND STABILITY TO PREVENT THE SIGNS BEING BLOWN OVER BY WIND OR VEHICULAR GENERATED AIR TURBULENCE.

#### DRUMS

DRUMS SHALL BE IN ACCORDANCE WITH PERTINENT SECTIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL PERMA-NENT LANE CLOSURES SHALL BE DELINEATED WITH DRUMS SPACED AT 50 FEET CENTER TO CENTER. ALL COSTS FOR INSTALLING. MAIN-TAINING AND SUBSEQUENT REMOVAL OF SAID DRUMS SHALL BE IN-CLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

## D. SMALL BARRICADES

TYPE II BARRICADES MAY BE USED INSTEAD OF DRUMS TO CLOSE LANES WHERE REQUIRED FOR RESURFACING. THESE SHALL BE AT LEAST 36" HIGH AND 12" WIDE. NEAR THE TOP OF THE BARRICADE THERE SHALL BE A PANEL WITH ALTERNATE ORANGE AND REFLECTOR-IZED WHITE 6" WIDE STRIPS.THIS PANEL SHALL BE AT LEAST 12" WIDE AND 24" HIGH. THE BARRICADES SHALL BE OF SUFFICIENT STABILITY SO THAT WIND OR TRAFFIC AIR TURBULENCE WILL NOT UPSET THEM. BARRICADES SHALL BE IN ACCORDANCE WITH PERTINENT SECTIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

# E. LIGHTING DEVICES

FLASHERS SHALL BE 12 VOLT BATTERY-OPERATED WITH 7 INCH DIAMETER YELLOW LENSES ILLUMINATED BY RAPID INTERMITTENT FLASHES OF SHORT DURATION AND SHALL BE PLACED ON ALL SIGNS AT ALL TIMES.

# F. FLASHING ARROW BARRICADES

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED. THE MOTORIST SHALL BE WARNED AND DIVERTED BY THE CONTRACTOR THROUGH THE USE OF ONE FLASHING ARROW BARRICADE FOR EACH LANE CLOSED. THE CONTRACTOR SHALL REFER TO STANDARD DRAWING TC-35.10 AND THE PROVISIONS SET FORTH IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. FOR ALL INFORMATION REGARDING FURNISHING. MAINTAINING. AND USE OF FLASHING ARROW BARRICADES. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAIN-TAINING TRAFFIC.