GENERAL NOTES

FHWA REGION 35 OHIO

LAKE COUNTY

COMPUTED BY: N. A 3-84 LAK-44-7.11

TRAFFIC MAINTENANCE

For alternate methods note see short + 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.

ALL SIGNS SHALL HAVE A REFLECTORIZED BACKGROUND OF REFLECTIVE MATERIAL AS DESCRIBED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

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.

C. DRUMS

DRUMS SHALL BE IN ACCORDANCE WITH PERTINENT SECTIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL COSTS FOR INSTALLING, MAINTAINING AND SUBSEQUENT REMOVAL OF SAID DRUMS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

D. SMALL BARRICADES

TYPE II BARRICADES SHALL BE USED 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 OPANGE AND REFLECT-ORIZED WHITE 6" WIDE STRIPES. THIS PANEL SHALL BE AT LEAST 12" WIDE AND 24" HIGH. STEADY BURN WARNING LIGHTS MAY BE LOCATED AT THE TOP OF THE BARRICADE AT THE END NEAREST TO TRAFFIC DURING TWILIGHT OR DARKNESS HOURS ONLY. THE FLASH SHALL FACE ONCOMING TRAFFIC, THE BARRICADES SHALL BE OF SUFFICIENT STABILITY SO THAT WIND OR TRAFFIC AIR TURBULANCE 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 MODELS WITH 8 INCH DIAMETER YELLOW LENSES ILLUMINATED BY RAPID INTERMITTENT FLASHES OF SHORT DURATION AND SHALL BE PLACED ON ALL SIGNS AT ALL TIMES.

CONTINUOUS BURN LIGHTS SHALL BE 12 VOLT BATTERY-OPERATED MODELS WITH MINIMUM 8 INCH DIAMETER YELLOW LENSES. THEY SHALL BE PLACED ABOVE THE GROUND ON THE TOPS OF BARRELS OR BARRICADES AND SPACED AT 50 FT. INTERVALS.

CONTINUOUS BURN LIGHTS AS DESCRIBED ABOVE SHALL BE REQUIRED WHENEVER ANY PORTION OF THE TRAVELED SURFACE IS CLOSED DURING TWILIGHT OR NIGHTTIME HOURS.

F. FLASHING ARROW BARRICADE

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 35.10, AND THE PROVISION SET FORTH IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. CURRENT EDITION, LATEST REVISION, FOR ALL INFORMATION REGARDING FURNISHING. MAINTAINING. AND USE OF FLASHING ARROW BARRICADES. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE LLMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

ITEM 614 - TEMPORARY PAVEMENT MARKINGS (LANE SHIFTS)

TEMPORARY PAVEMENT MARKINGS SHALL BE REQUIRED AT ALL WORK AREAS AS DETAILED ON SHEET 35. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED FOR LANE SHIFTS.

PART I PART II LOCATIONS 1.45 <u>2.05</u> MI. ITEM 614 - TEMPORARY EDGE LINE, CLASS I, TYPE R TAPE

H. ITEM 614 - TEMPORARY PAVEMENT MARKINGS (RESURFACING OR LANE SHIFT REMOVAL)

TEMPORARY MARKINGS SHALL BE PLACED AT THE JOINTS AS SHOWN ON THE TYPICAL SECTIONS. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AFTER RESURFACING OR AFTER LANE SHIFT REMOVALS;

	PARTI	PARTIL	LOCATIONS
HTEM 614 - TEMPORARY STOP LINES, CLASS I	210	<u>250</u> FT.	(STA. 164+10, RAMPS B and C, OLIVE ST., BLACKBROOK RD., TEMPLE AVE.)
ITEM 614 - TEMPORARY LANE LINES, CLASS II	4.3	<u>6.1</u> MI.	VARIOUS
ITEM 614 - TEMPORARY EDGE LINES, CLASS I	9.42	<u>13.38</u> MI.	VARIOUS
ITEM 614 - TEMPORARY GORE MARKINGS, CLASS II	450	<u>450</u> FT.	(RAMPS B and C)

ITEM 622 - TEMPORARY CONCRETE BARRIER

THE BARRIER SECTIONS SHALL BE KEYED TOGETHER OR BOLTED TOGETHER WITH STEEL CONNECTORS AS PER STANDARD CONSTRUC-TION DRAWING MC-9A. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS SHOWN ON TRAFFIC SHEET FOR LAK-44-0784. IT SHOULD BE NOTED THAT 740 LIN.FT. OF BARRIER IS ALL THAT IS REQUIRED TO PERFORM THE WORK. THE EXTRA LENGTH IS TO COMPENSATE THE CONTRACTOR FOR MOVING BARRIERS FROM PHASE I TO PHASE II.

ITEM 622 - TEMPORARY CONCRETE BARRIER

PART I <u>1400</u> L.F.

K. REPLACEMENT DRUMS

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENT OF THE PLANS, SPECIFICATION AND PROPOSAL 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 PEPLACEMENT DRUMS. PAYMENT FOR EACH NEW DRUM SHALL INCLUDE (1) THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM AND (2) PROVIDING, MAINTAINING AND REMOVING NEW DRUMS IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUMS. (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

PART I PART II 120 EACH

L. 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 SLOWDOWN, STOPPAGE OR BACK-UP. PAYMENT FOR THE ABOVE WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL, LAW ENFORCEMENT OFFICER WITH PATROL CAR.

THE FOLLOWING PAY ITEM AND QUANTITY HAS BEEN CARRIED TO THE GENERAL SIMMARY;

ITEM SPECIAL - LAW ENFORCEMENT OFFICER WITH PATROL CAR PART I PART II 10_HOURS

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ARRANGEMENTS REGARDING SCHEDULING AND PAYMENT OF LAW ENFORCEMENT OFFICER WITH PATROL CAR.

TRAFFIC CONTROL TIMING AND SEQUENCE OF OPERATIONS FOR ASPHALT CONCRETE WORK (ITEM 848 COURSES)

ALL ASPHALT CONCRETE OPERATIONS SHALL BE CONDUCTED IN A MANNER THAT WILL ASSURE MINIMUM DANGER AND INCON-VENIENCE TO THE HIGHMAY USERS. THE RAMPS SHALL ONLY BE PAVED DURING DAYLIGHT HOURS AND THE PAVING SHALL BE TERMINATED AT THE NOSE TO ELIMINATE ANY LONGITUDINAL DISCONTINUTY IN ELEVATION BETWEEN THE SPEED CHANGE LANES AND THE MAIN LINE.

IN EITHER TRAVELED DIRECTION, ALL OF THE INTERMEDIATE LEVELING COURSE SHALL BE PLACED BEFORE WORK IS BEGIN ON THE SURFACE COURSE. THE PROCEDURE FOR INSTALLATION OF ANY ASPHALT LAYER SHALL BE SUCH THAT NO DISCON-TINUITY 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 DISCONTINUITY BEING A DANGER TO HIGHWAY USERS.

TRAFFIC MUST BE MAINTAINED AT ALL TIMES IN BOTH DIRECTIONS: HOWEVER, EITHER THE RIGHT OR LEFT LANE IN EITHER DIRECTION MAY BE CLOSED ONLY DURING THE PERMITTED WORK HOURS TO ALLOW THE LAYING OF ASPHALT CONCRETE. TRAFFIC CONTROL FOR SUCH LANE CLOSING SHALL BE IMPLEMENTED USING TYPE II BARRICADES WITH STEADY BURN WARNING LIGHTS (50' ON CENTERS), ANY LANE CLOSURES SHALL BE IMPLEMENTED AT A 55:1 MAXIMUM TAPER RATE, ADVANCE WARNING SIGNS SHALL BE AS SHOWN ON SHEET NO. 35

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED, THE MOTORISTS 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 DEVICES FOR STREETS AND HIGHWAYS.

AN ACCEPTABLE METHOD OF ACCOMPLISHING THE PLACEMENT OF ANY LAYER OF ASPHALT CONCRETE WOULD BE FOR THE CONTRACTOR TO CLOSE THE LEFT LANE IN EITHER DIRECTION AT THE BEGINNING OF THE PERMITTED DAILY WORK PERIOD AND TO PLACE ONE LAYER OF ASPHALT CONCRETE AN EQUAL DISTANCE IN EACH OF THE CLOSED LANES DURING THE FIRST HALF OF THE DAILY WORK PERIOD. THE RIGHT LANE WOULD THEN BE CLOSED AND, DURING THE SECOND HALF OF THE SAME SINGLE DAILY WORK PERIOD, THE CORRESPONDING LAYER OF ASPHALT CONCPETE THE RIGHT LANE FOR THE SAME DISTANCE AND ADJACENT TO THE APEA IN WOULD BE PLACED IN WHICH IT WAS PLACED IN THE LEFT LANE. ANY OTHER METHOD THE CONTRACTOR DESIRES TO USE MUST BE APPROVED BY THE ENGINEER BEFORE ANY WORK BEGINS.

THIS NOTE DOES NOT APPLY TO ITEM 301 WORK.