

TRAFFIC CONTROL NOTES

CALC. BY: _____ DATE: _____	LAKE COUNTY LAK-91-4.56	OHIO	7 56
CHKD. BY: _____ DATE: _____		FHWA REGION 5	
		FEDERAL PROJECT	

THE BENCH MARK PROGRAM SHALL CONTAIN PARAMETERS FOR AT LEAST 15 LOCAL INTERSECTIONS, AT LEAST 10 SENSOR INPUTS WITH THE ABILITY TO SIMULATE FIELD VOLUME AND OCCUPANCY DETECTOR DATA, AND SHALL OPERATE WITH AT LEAST 3 ON-STREET MASTER CONTROLLERS.

- B. THE BENCH MARK TESTS SHALL EXERCISE ALL FEATURES OF THE HARDWARE, SOFTWARE, COMMUNICATIONS SYSTEMS AND LOCAL CONTROLLERS AND SHALL BE A MINIMUM OF 48 HOURS OF CONTINUOUS OPERATION.

THE TESTING SHALL BE ARRANGED AT A TIME MUTUALLY AGREEABLE TO THE CITY AND CONTRACTOR. THE COURSE SHALL COVER FAMILIARIZATION AND OPERATIONAL TRAINING IN THE USE OF THE SYSTEM. THE TRAINING SHALL BE BASED UPON (HANDS-ON) OPERATION OF THE MASTER PERIPHERALS, COMMUNICATIONS DEVICES AND LOCAL CONTROLLERS.

11. ITEM 632.27 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS IS MODIFIED AS FOLLOWS:

- A. PART 5, FUNCTIONAL TEST, SHALL HAVE THE FOLLOWING REQUIREMENTS ADDED:

1. ALL HARDWARE, SOFTWARE AND PERFORMANCE FUNCTIONS REQUIRED IN THE SPECIFICATIONS SHALL BE INDIVIDUALLY DEMONSTRATED TO THE ENGINEER BY THE CONTRACTOR TO ASSURE COMPLIANCE AND TO SHOW THAT THE SYSTEM IS COMPLETELY FUNCTIONAL AND READY FOR SERVICE.
2. TRAINING SHALL HAVE BEEN PROVIDED TO CITY REPRESENTATIVES IN THE MANNER REQUIRED AND SHALL BE COMPLETED.

- B. PART 6, PERFORMANCE TEST (10 DAY TEST) SHALL BE MODIFIED ONLY AS FOLLOWS:

1. THE LIST OF MAJOR MALFUNCTIONS IN 632.07-6 SHALL BE EXPANDED TO INCLUDE:
 - A. FAILURE OF LOCAL CONTROLLER TO CONTROL TRAFFIC SAFELY AND IN CONFORMANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 - B. FAILURE OF THE MASTER CONTROLLER (WITH SYSTEM MONITOR) TO CORRECTLY SUPERVISE AND CONTROL THE SYSTEM, OR TO ACCEPT AND PROCESS TRAFFIC DATA FROM THE FIELD OR TO PROPERLY REPORT SYSTEM STATUS AND MALFUNCTIONS.
 - C. FAILURE OF MORE THAN TWO INTERSECTIONS, IN ANY 24-HOUR PERIOD, TO FUNCTION COMPLETELY IN THE MANNER CALLED FOR IN THE SPECIFICATION WITHOUT LOSS OF COMMUNICATION OR REVERTING TO STANDBY OPERATION.
 - D. FAILURE OF ANY SINGLE INTERSECTION MORE THAN 3 TIMES DURING A 5 DAY PERIOD TO

FUNCTION COMPLETELY IN THE MANNER CALLED FOR IN THE SPECIFICATION WITHOUT LOSS OF COMMUNICATION OR REVERTING TO STANDBY OPERATION.

- E. A SOFTWARE ERROR WHICH CAUSES THE SYSTEM TO CEASE TO OPERATE THE TRAFFIC CONTROL SYSTEM OR CAUSES AN UNSAFE CONDITION ON THE STREET.

- F. THE APPEARANCE OF ANY PROBLEM WHICH, IN THE OPINION OF THE ENGINEER, HAS A SIGNIFICANT EFFECT UPON THE RELIABILITY, SAFETY OR OPERATION ON THE SYSTEM.

2. DURING THE 10-DAY PERFORMANCE TEST THE ENGINEER OR THE TRAINED REPRESENTATIVES OF THE CITY, SHALL EXERCISE THE SYSTEM AND DOCUMENT THE PERFORMANCE OF ALL SPECIFIED FEATURES, AND ANY OTHER EVENTS WHICH COULD BE EXPECTED TO OCCUR IN AN OPERATIONAL TRAFFIC CONTROL SYSTEM INCLUDING THE SIMULATION OF FAILURES.

PAYMENT FOR SPECIAL: CENTRAL OFFICE MONITOR WILL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH CENTRAL OFFICE MONITOR IN PLACE AND FULLY OPERATIONAL AS SHOWN IN THE PLANS.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR FOR THIS CONTRACT SHALL COORDINATE HIS WORK WITH OTHER CONTRACTORS WORKING IN THE IMMEDIATE AREA. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THIS CONTRACT TO COORDINATE HIS WORK SO AS NOT TO INTERFERE WITH EXISTING CONSTRUCTION PROJECTS AND MAKE SURE HIS TRAFFIC CONTROL IS COMPATIBLE WITH THE TRAFFIC CONTROL WITH THESE PROJECTS. THE ENGINEER SHALL APPROVE ANY PROPOSED SOLUTIONS TO THE CONFLICT BETWEEN VARIOUS TRAFFIC CONTROL SETUPS. THE FOLLOWING PROJECTS MAY BE WORKED ON DURING THIS PROJECT:

1. LAK-283-3.83

TRENCH, BY TYPE

IN ADDITION TO THE REQUIREMENTS OF 632 TRENCH SHALL BE USED AS FOLLOWS:

1. TRENCH SHALL BE USED IN ALL UNPAVED AREAS AND UNDER ALL WALK THAT IS TO BE REMOVED AND REPLACED
2. TRENCH IN PAVED AREAS, TYPE B SHALL BE USED UNDER ALL DRIVEWAYS

LANE CLOSURE RESTRICTIONS (SHORT TERM)/LIQUIDATED DAMAGES

THE CONTRACTOR SHALL HAVE ALL LANES OPEN TO TRAFFIC BETWEEN THE HOURS OF 7:00 A.M.-9:00 A.M. AND 3:00 P.M.-6:00 P.M. 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.

REMOVAL ITEM CHART

DESCRIPTION OF THE ITEMS TO BE REMOVED BY THE CONTRACTOR	ITEMS TO BE STORED FOR THE CITY OF EASTLAKE	ITEMS TO BE DISPOSED OF BY THE CONTRACTOR
ALL CONTROLLERS W/CABINETS AND ACCESSORIES		X
ALL SIGNAL HEADS		X
MESSENGER WIRE AND SIGNAL CABLE		X
EXISTING SIGNAL POLES (WOOD)		X
EXISTING PEDESTALS		X
SPAN WIRE MOUNTED SIGNS	X	
PEDESTRIAN SIGNAL HEADS AND PUSHBUTTONS		X