ATTACHMENT B

MISSOURI DEPARTMENT OF TRANSPORTATION
NEMA TS1 TRAFFIC CONTROLLER ASSEMBLIES

The equipment shall conform to the latest revision of Section 1092 of the Missouri Standard Specifications for Highway Construction and the following:

1. Controller operation shall comply with color sequence and phasing shown on attached intersection layout(s) and phasing and timing sheet(s) *or* controller order form.

2. Time-delay-to-call shall be integral with detectors so indicated. Calling detectors shall be supplied where indicated.

3. Cabinets indicated for side of pole mounting shall be furnished with the bottom undrilled or with a plate of the same cabinet material, covering 85 percent of the bottom area, attached to the bottom with four, 1/4 inch diameter bolts.

4. Furnish three complete operation manuals for all equipment, including but not limited to controllers, conflict monitors, detectors and auxiliary equipment. Furnish four complete cabinet wiring diagrams with each controller. The cabinet wiring diagrams shall include labeling for all field terminal connections and shall provide an orientation of the terminal layout that conforms with the intersection information supplied.

5. Closed Loop Controller Requirements:

If the controller is specified for a closed loop system, then it shall be fully communications and features compatible with the specified system and shall conform to the latest revision of Section 1092 of the Missouri Standard Specifications for Highway Construction and the following. All necessary hardware shall be supplied to provide communications. The MoDOT D Plug is not required for the closed loop controllers.

A. Interconnect Panel:

If this item is specified, the cost shall be included in the price bid for the controller.

B. Dial-Up Modem:

If this item is specified, the cost shall be included in the price bid for the controller.

C. Cabinet Accessories:

1. Telephone Interface Panel

The cost of this item shall be included in the price bid for the system master.

2. Extra Service Outlet

The cost of this item shall be included in the price bid for the system master.

6. These controllers shall be equipped with internal time base coordination using daily midnight reference or a selectable daily reference of which midnight can be selected. Each cabinet shall be furnished with twelve load switch jacks, unless otherwise indicated. Load switch jacks shall be completely wired to field terminal facilities as indicated on the controller order form. Conflict monitor shall be a twelve channel unit. All necessary components such as load switches, conflict monitors, flash transfer relays, and detector amplifiers shall be furnished. Cabinet type, interconnect information and delivery locations are attached.

7. All boxes of equipment delivered for a specific intersection should be clearly marked with both the controller number and the intersection, as shown on the Delivery Schedule.

8. All controllers shall be stamped or tagged with a manufacturer's serial number.