FHWA REGION FED. AID PROJ NO STATE 9 F-RRS-1-006(005)066 N.D. 8 (1)Revised 1-18-91

770 LEGEND--LIGHTING: P08

● 100-watt sodium vapor luminaire 200-watt sodium vapor luminaire ● 250-watt sodium vapor luminaire

770 REMOVE WOOD POLE LIGHT STANDARDS: The contractor shall remove PO9 the existing light standards as shown on the plans. The contractor shall arrange to have power disconnected at the feed point. The light standard shall have the circuits disconnected and the luminaire and mast arm removed. The underground conductors are deemed not salvageable and may be abandoned. The removed light standard luminaires and mast arms shall become the property of the city and shall be delivered to the city maintenance yard. The cost of equipment, labor, and delivering the removed equipment shall be incidental to price bid for "Remove Wood Pole Light Standards."

770 MAIN STREET WOOD POLE LIGHTING SYSTEM: The contractor shall not P10 remove the wood pole light system along Main Street until the new lighting system is installed and operational.

770 TEMPORARY LIGHTING SYSTEM: The contractor shall install the P11 temporary lighting system from Third Street to Seventh Street prior to diversion of traffic to the east half of the roadway. The wood pole system shall be de-energized at the feed point and the conductors installed, the wood pole and luminaire relocated and the wire spliced to provide continuity. The lighting system shall be re-energized at the end of each days work and shall be entirely operational. The cost of materials, equipment, and labor shall be included in the price bid for "Temporary Lighting System."

770 The contractor shall install the permanent lighting on the west P12 side of the roadway prior to moving traffic to the west half of the roadway. This circuit of the lighting shall be energized.

772 SIGNAL TESTING AND INITIAL OPERATION: The signal head shall be 006 hooded with a material that will allow the signal heads, when lighted, to be seen dimly by personnel testing the signals. The hood shall remain in place until the signal is authorized to be operated.

772 PAINT: The traffic signal system components shall be painted in 100 accordance with the following:

Transformer base - green Mast arm - green Signal head mounting hardware - yellow Shaft - green

Signal housing - yellow Pedestrian pushbutton post - yellow Pedestrian pushbutton housing - yellow

772 CONTROLLER MONITORING UNIT AND/OR COMMUNICATION MODULE: The POS volume density controller shall be provided with a communication hookup which provides a duplex data link with a central control computer. The communications hookup shall be IBM PC compatible.

> A controller monitoring unit and/or communication module shall be installed in the controller. The monitor unit shall be installed and connected to the controller and conflict monitor so as to monitor conflict monitor flash, pre-emption status, cabinet door open, phase on and status bits required for central control intersection display, and detector diagnostics. The unit shall be capable of providing a traffic map and of uploading and down loading information into the controller from a PC, central control computer or a laptop in the field, or a telephone line.

> The controller monitoring unit and/or communications module shall be capable of initiating contact by dial-up telephone line, either directly from a PC, central control computer or a laptop, or through a system master controller with a PC central control computer to report failure conditions when they occur with computer in the monitor mode. Other events shall be logged and reported at preset intervals or on command from a central control computer or laptop computer.

> The controller monitoring unit and/or communications module shall be capable of operating at an isolated intersection with an interconnect cable or a telephone link to a central control computer or a laptop computer. In the future, the unit shall be able to be operated through a systems master controller by interconnect cable or telephone link from a central control computer.

> The cost of furnishing and installing the communications module and/or the controller monitoring unit shall not be bid separately, but shall be included in the price bid for the volume density controller.

772 COMMUNICATIONS INTERFACE: The volume density controllers shall PO6 be capable of communications with a central control computer by telephone line. All necessary modems, interface units, and etc. required, shall not be bid separately but shall be included in the price bid for the Volume Density Controller.