

Attachment E

Traffic Signal Equipment and Parts  
Quotation Page

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION AGENCY CONTRACT  
TRAFFIC SIGNAL PARTS AND EQUIPMENT  
FOR THE PERIOD OF COMMISSION APPROVAL THROUGH MAY 31, 2020.**

**ATTACHED SPECIFICATIONS ARE FOR REFERENCE ONLY. ONLY USE APPLICABLE LANGUAGE ASSOCIATED WITH TRAFFIC SIGNAL PARTS. ANY REFERENCE TO CONTRACTOR, CONSTRUCTION, TESTING, PERFORMANCE PERIOD, TRAINING, BASIS OF PAYMENT, METHOD OF MEASUREMENTS, PAY ITEMS, ETC. SHALL NOT BE UTILIZED WHEN REFERENCING.**

**ACTUATED CONTROLLERS, TERMINAL FACILITIES AND CABINETS (VENDORS BIDDING ON THIS SECTION MUST BID ON ALL ITEMS IN THIS SECTION. VENDOR WITH LOWEST CUMULATIVE PRICE FOR THIS ENTIRE SECTION WILL BE AWARDED CONTRACT FOR THIS ENTIRE SECTION) (see SECTION 632 of the attached specification.) (Note: Cabinets shall include Type 1 actuated controller (must be compatible with MDOT's existing Traffic Signal Management Software and able to communicate via FSK, Radio, Fiber and Ethernet), MMU2, four (4) loop detector amplifiers. Adequate number of flash transfer relays, PS175 power supplies, NEMA load switches, load switch arrestors, and loop detector arrestors shall also be included)**

	<b>EACH</b>
Type I Pole Mounted Cabinet	_____
Type I Base Mounted Cabinet	_____
Type II Pole Mounted Cabinet	_____
Type II Base Mounted Cabinet	_____
Type III Base Mounted Cabinet	_____
Type IV Base Mounted Cabinet	_____
Type V Base Mounted Cabinet	_____

Add on options (Items listed below must be compatible with the above assembly):

	<b>EACH</b>
Single Mode Fiber Panel	_____
Multi-Mode Fiber Panel	_____

**Total Bid Amount** \_\_\_\_\_

**ACTUATED CONTROLLERS (VENDORS BIDDING ON THIS SECTION MUST BID ON ALL ITEMS IN THIS SECTION. VENDOR WITH LOWEST CUMULATIVE PRICE FOR THIS ENTIRE SECTION WILL BE AWARDED CONTRACT FOR THIS ENTIRE SECTION) (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES (SEE SECTION 632 of the attached specification) (Must be compatible with MDOT's existing Traffic Signal Management Software and able to communicate via FSK, Radio, Fiber and Ethernet)**

	<b><u>EACH</u></b>
Type 1 Traffic Actuated Controller	_____
Type 1 Master Traffic Actuated Controller	_____
Type 2 Traffic Actuated Controller	_____
Type 2 Master Traffic Actuated Controller	_____
Type 3 Traffic Actuated Controller	_____
Type 3 Master Traffic Actuated Controller	_____

**Total Bid Amount** \_\_\_\_\_

**NEMA CONFLICT/VOLTAGE MONITORS (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES) (See SECTION 632 of the attached specification).**

MMU2 with SDLC cable	EACH
	_____

**BATTERY BACKUP SYSTEM AND POWER CONDITIONER (See SECTION 633 of the attached specification)**

Battery Backup System and Power Conditioner (UPS)	EACH
	_____

Above System with Cabinet	EACH
With Pole Mounted Cabinet	_____
With Piggyback Cabinet	_____
With Base Mounted Cabinet	_____

Accessories:	EACH
Battery	_____
Battery Wiring Kit	_____
Battery Balancer	_____
Battery Balancer with Monitoring Capabilities	_____

**LOOP DETECTOR AMPLIFIERS (STAND ALONE) (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES) (Must meet the specifications outlined in SECTIONS 632, 640 of the attached specification minus the card rack mounting requirements. Also see SECTION LOOP DETECTOR AMPLIFIERS (STAND ALONE) at the end of the attached specifications)**

Single Channel Detector with Timing	EACH
Two Channel Detector with Timing	_____
Four Channel Detector with Timing	_____

**LOOP DETECTOR AMPLIFIERS (CARD RACK) (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES) (See SECTIONS 632 and 640 of the attached specifications)**

Power Supply, 175 watt	EACH
Loop Detector Amplifier, Two Channel Detector	_____
Loop Detector Amplifier, Four Channel Detector	_____
Five Space Card Rack (wired)	_____

**TRAFFIC SIGNAL HEADS AND LENSES (VENDORS BIDDING ON THIS SECTION MUST BID ON ALL ITEMS IN THIS SECTION. VENDOR WITH LOWEST CUMULATIVE PRICE FOR THIS ENTIRE SECTION WILL BE AWARDED CONTRACT FOR THIS ENTIRE SECTION) (See SECTION 635 of the attached specification. Also See Head Type Diagram in the attached specifications.)**

LED Lenses	EACH
12" Red Arrow "LED" Lens	_____
12" Yellow Arrow "LED" Lens	_____
12" Green Arrow "LED" Lens	_____
12" Circular Red "LED" Lens	_____

	<b>EACH</b>
12" Circular Yellow "LED" Lens	_____
12" Circular Green "LED" Lens	_____
8" Circular Red "LED" Lens	_____
8" Circular Yellow "LED" Lens	_____
8" Circular Green "LED" Lens	_____

Traffic Signal Heads **with backplates**, Polycarbonate, Black or Yellow, LED Lenses, **with visors**

	<b>EACH</b>
8" Three Section (Type 1) Traffic Signal Head	_____
8" Three Section (Type 1) Traffic Signal Head (quantity 50-99)	_____
8" Three Section (Type 1) Traffic Signal Head (quantity 100+)	_____
12" Three Section (Type 1) Traffic Signal Head	_____
12" Three Section (Type 1) Traffic Signal Head (quantity 50-99)	_____
12" Three Section (Type 1) Traffic Signal Head (quantity 100+)	_____
12" Three Section (Type 2) Traffic Signal Head w/Arrows	_____
12" Four Section (Type 2A FYA) Traffic Signal Head w/Arrows	_____
12" Three Section (Type 2B FYA) Traffic Signal Head w/Arrows	_____
12" Four Section (Type 3) Traffic Signal Head with Green Arrow	_____
12" Three Section (Type 4) Traffic Signal Head w/Green, Yellow Arrow	_____
12" Three Section (Type H) Hawk Signal	_____

Traffic Signal Heads, Aluminum, Black or Yellow, LED Lenses, **with attached visors**

	<b>EACH</b>
12" Three Section (Type 1) Traffic Signal Head	_____
12" Three Section (Type 1) Traffic Signal Head (quantity 50-99)	_____
12" Three Section (Type 1) Traffic Signal Head (quantity 100+)	_____
12" Three Section (Type 2) Traffic Signal Head w/Arrows	_____
12" Four Section (Type 2A FYA) Traffic Signal Head w/Arrows	_____
12" Three Section (Type 2B FYA) Traffic Signal Head w/Arrows	_____
12" Four Section (Type 3) Traffic Signal Head with Green Arrow	_____
12" Three Section (Type 4) Traffic Signal Head w/Green, Yellow Arrow	_____

Backplates for Traffic Signals Heads ( <i>Reference Attached Head Type Detail</i> )	<b>EACH</b>
Three Section Traffic Signal	_____
Four Section Traffic Signal, Type 3	_____
Four Section Traffic Signal, Type 2A FYA	_____
Five Section Traffic Signal, Type 7	_____

Visors for Traffic Signal Heads	<b>EACH</b>
12" Aluminum Visor	_____
12" Polycarbonate Visor	_____

**Total Bid Amount** \_\_\_\_\_

**PEDESTRIAN SIGNALS (VENDORS BIDDING ON THIS SECTION MUST BID ON ALL ITEMS IN THIS SECTION. VENDOR WITH LOWEST CUMULATIVE PRICE FOR THIS ENTIRE SECTION WILL BE AWARDED CONTRACT FOR THIS ENTIRE SECTION) (See SECTION 635 of the attached specification)**

	<b>EACH</b>
16" X 18" Ped Housing with LED insert, Aluminum, yellow or black, Countdown type, top of pole mount	_____
16" X 18" Ped Housing with LED insert, Aluminum, yellow or black, Countdown type, drilled for clamshell mount	_____
16" X 18" Ped Housing with LED insert, Polycarbonate, yellow or black, Countdown type, top of pole mount	_____
16" X 18" Ped Housing with LED insert, Polycarbonate, yellow or black, Countdown type, drilled for clamshell mount	_____
Mounting Hardware – top of pole	_____
Mounting Hardware – clamshell	_____
Mounting Hardware – 1-way Post (4") Top	_____

**Total Bid Amount** \_\_\_\_\_

**FLASHING BEACONS (VENDORS BIDDING ON THIS SECTION MUST BID ON ALL ITEMS IN THIS SECTION. VENDOR WITH LOWEST CUMULATIVE PRICE FOR THIS ENTIRE SECTION WILL BE AWARDED CONTRACT FOR THIS ENTIRE SECTION) (See SECTION 638 of the attached specification)**

Solar 24 Hour Flashing Beacons	<b>EACH</b>
Solar Powered Stop Sign Beacon (Red) with 1-8" LED	_____
Solar Powered Stop Sign Beacon (Red) with 1-12" LED	_____
Solar Powered Stop Sign Beacon (Red) with 2-8" LED's	_____
Solar Powered Stop Sign Beacon (Red) with 2-12" LED's	_____
Solar Powered Warning Sign Beacon (Amber) with 1-8" LED	_____
Solar Powered Warning Sign Beacon (Amber) with 1-12" LED	_____
Solar Powered Warning Sign Beacon (Amber) with 2-8" LED's	_____
Solar Powered Warning Sign Beacon (Amber) with 2-12" LED's	_____

**Solar School Zone Flashing Beacons**

	<b>EACH</b>
Solar Powered School Zone Warning Sign Beacon (Amber) with 1-8" LED	_____
Solar Powered School Zone Warning Sign Beacon (Amber) with 1-12" LED	_____
Solar Powered School Zone Warning Sign Beacon (Amber) with 2-12" LED's	_____
Solar Powered School Zone Warning Sign Beacon (Amber) with 2-8" LED's	_____

	<b>EACH</b>
Hardwired Flasher Assembly with Cabinet, NEMA Type	_____
Hardwired Flasher Assembly with Cabinet, NEMA Type with Solid State Time Clock	_____
Traffic Solar Power Assembly	_____

**Total Bid Amount** \_\_\_\_\_

**EMERGENCY VEHICLE PREEMPTION SYSTEMS & EQUIPMENT (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES AND EXISTING MDOT PREEMPTION SYSTEMS) (VENDORS BIDDING ON THIS SECTION MUST BID ON ALL ITEMS IN THIS SECTION. VENDOR WITH LOWEST CUMULATIVE PRICE FOR THIS ENTIRE SECTION WILL BE AWARDED CONTRACT FOR THIS ENTIRE SECTION) (See SECTION 639 of the attached specification)**

	<b>EACH</b>
Type 1 Optical Detector, One Eye, One Channel	_____
Type 1 Optical Detector, Two Eye, One Channel	_____
Type 1 Optical Detector, Two Eye, Two Channel	_____
Type 1 Optical Vehicle Control Emitter	_____
Multimode Phase Selector	_____
Multimode Phase Selector Card Rack	_____
Type 2 Vehicle Control Unit	_____
Type 2 Radio/GPS Module	_____
Type 2 Radio/GPS Cable	<b>per LF</b> _____
Type 1 Optical Detector Cable	<b>per LF</b> _____

**Total Bid Amount** \_\_\_\_\_

**RADAR DETECTION & EQUIPMENT (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES (See SECTION 641 of the attached specification)**

Type 1 Radar Equipment. *(Vendors bidding on Type 1 equipment must bid on all items in this section. Vendor with lowest cumulative price for Type 1 equipment will be awarded contract. If Power and Communications are provided thru a single cable, only quote price for either Power Cable or Communications Cable, not Both)*

	<b>EACH</b>
Stop Bar Detector Unit	_____
Advanced Detector Unit	_____
Mounting Bracket	_____
Two Output Single Input Interface Board	_____
Four Output Single Input Interface Board	_____
Four Output Double Input Interface Board	_____
Radar Detection Communications Cable	<b>per LF</b> _____
Power Cable (If required and separate from Detection Cable)	<b>per LF</b> _____

**Total Bid Amount** \_\_\_\_\_

Type 2 Radar Equipment. *(Vendors bidding on Type 2 equipment must bid on all items in this section. Vendor with lowest cumulative price for Type 2 equipment will be awarded contract. If Power and Communications are provided thru a single cable, only quote price for either Power Cable or Communications Cable, not Both)*

	<b>EACH</b>
Stop Bar Detector Unit	_____
Extended Range Advanced Detector Unit	_____
Mounting Bracket	_____
Cable Junction Box	_____
Two Channel Contact Closure Rack Card	_____
Four Channel Contact Closure Rack Card	_____
Four Channel Contact Closure DIN Rail Card	_____

Serial to Ethernet Converter	_____
Four Sensor Cabinet Interface Device w/Ethernet and SDLC	_____
Six Sensor Cabinet Interface Device w/Ethernet and SDLC	_____
	<b>EACH</b>
6' SDLC Cable	_____
Sensor Cable	<b>per LF</b> _____
Home Run Cable	<b>per LF</b> _____

**Total Bid Amount** \_\_\_\_\_

**VIDEO DETECTION & EQUIPMENT (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES)**  
**(See SECTION 643 of the attached specification)**

Type 1A Video Detection Equipment. *(Vendors bidding on Type 1A equipment must bid on all items in this section. Vendor with lowest cumulative price for Type 1A equipment will be awarded contract. If Video and Power are provided thru a single cable, only quote price for either Video Cable or Power Cable, not Both)*

Video Detection Camera Sensor	<b>EACH</b>
Mounting hardware	_____
Video Detection Processor Rack Mounted	_____
Surge Interface Panel	_____
Communications Cable	<b>per LF</b> _____
Power Cable	<b>per LF</b> _____

**Total Bid Amount** \_\_\_\_\_

Type 1B Video Detection Equipment. *(Vendors bidding on Type 1B equipment must bid on all items in this section. Vendor with lowest cumulative price for Type 1B equipment will be awarded contract. If Video and Power are provided thru a single cable, only quote price for either Video Cable or Power Cable, not Both)*

Video Detection Processor with integrated Camera	<b>EACH</b>
Mounting hardware	_____
Cabinet Interface Rack Mounted	_____
	<b>EACH</b>
Cabinet Interface Shelf Mounted	_____
Surge Interface Panel	_____
Communications Cable	<b>per LF</b> _____
Power Cable	<b>per LF</b> _____

**Total Bid Amount** \_\_\_\_\_

Type 2 Span Wire Mounted Video Detection Equipment. *(Vendors bidding on Type 2 Span Wire Mounted equipment must bid on all items in this section. Vendor with lowest cumulative price for Type 2 Span Wire Mounted equipment will be awarded contract. If Video and Power are provided thru a single cable, only quote price for either Video Cable or Power Cable, not Both)*

	<b>EACH</b>
Sensor Unit	_____
Interface Board/Processor	_____
Mounting hardware	_____
Surge Interface Panel	_____
Communications Cable	<b>per LF</b> _____
Power Cable	<b>per LF</b> _____

**Total Bid Amount** \_\_\_\_\_

Multi Sensor Vehicle Detection Equipment. *(Vendors bidding on Multi Sensor equipment must bid on all items in this section. Vendor with lowest cumulative price for Multi Sensor equipment will be awarded contract. If Communications and Power are provided thru a single cable, only quote price for either Communications Cable or Power Cable, not Both)*

	<b>EACH</b>
Multi Sensor Unit	_____
Video Imaging Camera Sensor	_____
Radar Sensor	_____
Sensor Data Combiner	_____
Detection Processor	_____
Mounting Bracket	_____
Surge Interface Panel	_____
Communications Cable	_____
Power Cable	_____

**Total Bid Amount** \_\_\_\_\_

**RADIO INTER-CONNECT SYSTEMS & EQUIPMENT (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES AND EXISTING MDOT RADIO SYSTEMS (See SECTION 662 of the attached specification))**

900 MHz Interconnect equipment. *(Vendors bidding on this section must bid on all items in this section. Vendor with lowest cumulative price for this section will be awarded contract.)*

	<b>EACH</b>
900 MHz Radio Interconnect, Ethernet Style	_____
900 MHz Radio Repeater, Ethernet Style	_____
900 MHz Antenna, Ethernet Style	_____
Yaggi Antenna, Coax Style	_____
Omni Antenna, Coax Style	_____

**Total Bid Amount** \_\_\_\_\_



Broadband Equipment. *(Vendors bidding on this section must bid on all items in this section. Vendor with lowest cumulative price for this section will be awarded contract.)*

	EACH
Broadband Local Radio (Short Range)	_____
Broadband Local Radio (Long Range)	_____
Broadband Repeater	_____

**Total Bid Amount** \_\_\_\_\_

TVBR Equipment. *(Vendors bidding on this section must bid on all items in this section. Vendor with lowest cumulative price for this section will be awarded contract.)*

	EACH
TVBR Local Radio (Short Range)	_____
TVBR Local Radio (Long Range Range)	_____
TVBR Repeater	_____

**Total Bid Amount** \_\_\_\_\_

**TRAFFIC SIGNAL SYSTEM SOFTWARE (VENDORS BIDDING ON THIS SECTION MUST BID ON ALL ITEMS IN THIS SECTION. VENDOR WITH LOWEST CUMULATIVE PRICE FOR THIS ENTIRE SECTION WILL BE AWARDED CONTRACT FOR THIS ENTIRE SECTION) (Must be compatible with MDOT's Traffic Signal Controllers and existing Management Software) (SEE SECTION 632 of the attached specification)**

	EACH
Closed Loop Software (Single User)	_____
Workstation Software (Single User)	_____
Add-on User License (per 1 user)	_____
Add-on User License (per 5 users)	_____
Intersection License (per 10 intersections)	_____
Intersection License (per 25 intersections)	_____
Intersection License (per 50 intersections)	_____
Intersection License (per 100 intersections)	_____
Maintenance Plan (1 year)	_____

**Total Bid Amount** \_\_\_\_\_

## **MISCELLANEOUS PRODUCTS (MUST BE COMPATIBLE WITH CABINET ASSEMBLIES)**

	<b>EACH</b>
Power Service Pedestal with Exposed Meter Mount (See SECTION 632 of the attached specification)	_____
Composite Cabinet Foundation (See SECTION 632 of the attached specification)	_____
NEMA Load Switch (See SECTION 632 of the attached specification)	_____
NEMA Flasher (See SECTION 632 of the attached specification)	_____
Flash Transfer Relay (See SECTION 632 of the attached specification)	_____
Field Wire Signal Arrestor (See SECTION 632 of the attached specification)	_____
Cabinet Arrestor (See SECTION 632 of the attached specification)	_____
Loop Detector Arrestor (See SECTION 632 and 640 of the attached specification)	_____
Cabinet Fan with Thermostat (See SECTION 632 of the attached specification)	_____
GPS Synchronization Clock (See SECTION 632 of the attached specification)	_____
Two Conductor Shielded cable, 14 Gauge IMSA 50-2 (See SECTION 636 of the attached specification)	<b>per LF</b> _____
Four Conductor Shielded cable, 14 Gauge IMSA 50-2 (See SECTION 636 of the attached specification)	<b>per LF</b> _____
Four Conductor Stranded cable, 14 Gauge, IMSA 20-1 (See SECTION 636 of the attached specification)	<b>per LF</b> _____
Five Conductor Stranded cable, 14 Gauge, IMSA 20-1 (See SECTION 636 of the attached specification)	<b>per LF</b> _____
Eight Conductor Stranded cable, 14 Gauge, IMSA 20-1 (See SECTION 636 of the attached specification)	<b>per LF</b> _____
#14 Stranded Loop Wire, IMSA 51-3 Type XHHW (See SECTION 636 of the attached specification)	<b>per LF</b> _____
	<b>EACH</b>
Type 1 Pullbox (See SECTION 637 of attached specification)	_____
Type 2 Pullbox (See SECTION 637 of attached specification)	_____
Type 3 Pullbox (See SECTION 637 of attached specification)	_____
Type 4 Pullbox (See SECTION 637 of attached specification)	_____
Type 5 Pullbox (See SECTION 637 of attached specification)	_____
Pullbox Composite Collar (See SECTION 637 of attached specification)	_____
Loop Sealant (See SECTION 640 of the attached specification)	_____
Standard Pedestrian Pushbutton (See SECTION 645 of the attached specification)	_____
Accessible Pedestrian System (APS) Pushbutton (See SECTION 645 of the attached specification)	_____
LED Internally Illuminated Regulatory Sign (See SECTION 646 of the attached specification)	_____
LED Internally Illuminated Street Name Sign (See SECTION 646 of the attached specification)	_____
LED Blank-Out Sign (See SECTION 646 of the attached specification)	_____
Cellular Modem (See attached SECTION 663 of the attached specification)	_____
Traffic Signal (3 Section Head) Mast Arm Attachment Bracket (see SECTION 722 of the attached specification)	_____
Traffic Signal (4 SECTION Stacked Head) Mast Arm Attachment Bracket (see	_____

EACH

SECTION 722 of the attached specification)	_____
Traffic Signal (4 SECTION Inverted T) Mast Arm Attachment Bracket (see SECTION 722 of the attached specification)	_____
Traffic Signal (5 SECTION) Mast Arm Attachment Bracket (see SECTION 722 of the attached specification)	_____
Vehicle Preemption Confirmation Light	_____
Vehicle Preemption Blue Rotating Beacon	_____
Cabinet Monitoring Intersection Device (see SECTION TRAFFIC SIGNAL PREEMPTION/REMOTE CABINET MONITORING DEVICE of the Attached specification)	_____
Cabinet Monitoring Intersection Device with 5 year cell plan Device (see SECTION TRAFFIC SIGNAL PREEMPTION/REMOTE CABINET MONITORING DEVICE of the attached specification)	_____
Cabinet Monitoring Intersection Device with Preemption (see SECTION TRAFFIC SIGNAL PREEMPTION/REMOTE CABINET MONITORING DEVICE of the attached specification)	_____
Cabinet Monitoring Intersection Device with Preemption with 5 year cell plan Device (see SECTION TRAFFIC SIGNAL PREEMPTION/REMOTE CABINET MONITORING DEVICE of the attached specification)	_____
Cabinet Monitoring Vehicle Device with Preemption (see SECTION TRAFFIC SIGNAL PREEMPTION/REMOTE CABINET MONITORING DEVICE of the attached specification)	_____

\*This attachment must be submitted with SOQ. The quotations on Attachment E will **not be used to award the contract.** The quotations will be used to help determine the starting price for the reverse auction. **The results from the Reverse Auction will award the contract.** \*

COMPANY: \_\_\_\_\_ NAME: \_\_\_\_\_  
(Print or Type)

ADDRESS: \_\_\_\_\_ SIGNED BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

PHONE : \_\_\_\_\_ DATE : \_\_\_\_\_

FAX : \_\_\_\_\_

EMAIL : \_\_\_\_\_