

**MISSISSIPPI
DEPARTMENT
OF
TRANSPORTATION**

AGENCY CONTRACT

TRAFFIC SIGNAL PARTS & EQUIPMENT

1/1/15 APPROVAL THROUGH 12/31/16

Vendor No.	Supplier Name	Supplier No.	Contract No.	Smart No.	Contact Name	Address	Phone No.
1	Temple, Inc.	3100016514	8200017535	1130-15-C-SWCT-00624	Blair Temple	P.O. Box 2066 Decatur, AL 35602	800-633-3221
2	Quality Traffic Systems	3100001107	8200017536	1130-15-C-SWCT-00625	Greg Sheehan	862 Visco Drive Nashville, TN 37210	615-369-4148
4	Electrotechnics Corp.	3100024268	8200012278	1130-15-C-SWCT-00126-V001	William M. Marshall	1310 Commerce Street Marshall, TX 75672	903-938-1901
5	Traffic Signal Cable	3100000217	8200012279	1130-15-C-SWCT-00127-V001	Stuart Zieff	333 Jericho, NY 11753	516-921-6725
6	Trastar, Inc.	3100033435	8200012291	1130-15-C-SWCT-00129-V001	Elaine Davis	860 N. Dorothy Drive STE 600 Richardson, TX 75081	972-480-0888
7	K&K Systems	3100034789	8200012290	1130-15-C-SWCT-00128-V001	Chip Phillips	687 Palmetto Road Tupelo, MS 38801	662-566-2025
8	Traffic Parts, Inc.	3100024163	8200012235	1130-15-C-SWCT-00115-V001	Joni Fexer	P.O. Box 837 Spring, TX 77383	800-345-6329
9	Twincrest, Inc. dba Twincrest Technologies	3100030697	8200012292	1130-15-C-SWCT-00130-V001	Jackie Jameson	P.O. Box 757 Mansfield, TX 76063	817-539-2200

VENDORS 1, 2, 4, 5, 6, 7, 9: MDOT, GOVERNING AUTHORITIES & OTHER STATE AGENCIES

VENDOR 8: MDOT & OTHER GOVERNING AUTHORITIES

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION AGENCY CONTRACT
TRAFFIC SIGNAL PARTS AND EQUIPMENT
FOR THE PERIOD OF JANUARY 1, 2015 THROUGH DECEMBER 31, 2015**

ACTUATED CONTROLLERS, TERMINAL FACILITIES AND CABINETS

Four phase cabinet assembly pole mounted to include:

- Eight phase solid state controller, Ethernet ready, must be compatible with MDOT's existing Traffic Signal Management Software.
 - Eight position terminal facility
 - Detector panel
 - Laptop Tray
 - Dual LED lighting panels
 - 50x30x17 pole mounted cabinet assembly
 - Twelve channel conflict monitor with LCD display
 - 4) Flash transfer relays
 - 4) NEMA load switches compatible with low wattage LED signals
 - 4) Load switch arresters
 - NEMA flasher
 - 1) Five position detector rack with PS175 power supply
 - 2) Four channel EDI Series loop detector amplifier
 - 8) Loop detector arresters
- | | VENDOR | EACH |
|--|---------------|-------------|
| | __1__ | _\$7,091.00 |

Above assembly complete with closed loop communication added for the following (Items listed below must be compatible with the above assembly):

FSK	__1__	_\$7,249.00
Radio	__1__	_\$7,338.00
Single Mode Fiber	__1__	_\$8,598.00
Multi Mode Fiber	__1__	_\$7,598.00
Ethernet	__1__	_\$7,385.00

Eight phase cabinet assembly pole mounted to include:

- Eight phase solid state controller, Ethernet ready, must be compatible with MDOT's existing Traffic Signal Management Software.
 - Twelve position terminal facility
 - Detector panel
 - Laptop Tray
 - Dual LED lighting panels
 - 50x36x17 pole mounted cabinet assembly
 - Twelve channel conflict monitor with LCD display
 - 4) Flash transfer relays
 - 8) NEMA load switches compatible with low wattage LED signals
 - 8) Load switch arresters
 - NEMA flasher
 - 1) Seven position detector rack with PS175 power supply
 - 4) Four channel EDI Series loop detector amplifier
 - 16) Loop detector arresters
- | | | EACH |
|--|-------|-------------|
| | __1__ | _\$8,571.00 |

Above assembly complete with closed loop communication added for the following
(Items listed below must be compatible with the above assembly):

		EACH
FSK	___1___	_\$8,729.00
Radio	___1___	_\$8,818.00
Single Mode Fiber	___1___	\$10,078.00
Multi Mode Fiber	___1___	_\$9,078.00
Ethernet	___1___	_\$8,865.00

Eight phase cabinet assembly 56x44x25 base mounted with rear access door to include:

Eight phase solid state controller, Ethernet ready, must be compatible with MDOT's existing Traffic Signal Management Software.

Twelve position terminal facility

Detector panel

Laptop Tray

Dual LED lighting panels

56x44x25 base mounted cabinet assembly with backdoor and

Twelve channel conflict monitor with LCD display

4) Flash transfer relays

8) NEMA load switches compatible with low wattage LED signals

8) Load switch arresters

NEMA flasher

1) Seven position detector rack with PS175 power supply

4) Four channel EDI Series loop detector amplifier

16) Loop detector arresters ___1___ **EACH** _\$8,757.00

Above assembly complete with closed loop communication added for the following
(Items listed below must be compatible with the above assembly):

FSK	___1___	_\$8,915.00
Radio	___1___	_\$8,999.00
Single Mode Fiber	___1___	\$10,263.00
Multi Mode Fiber	___1___	_\$9,263.00
Ethernet	___1___	_\$9,049.00

Eight phase cabinet assembly 77x38x26 base mounted to include:

Eight phase solid state controller, Ethernet ready, must be compatible with MDOT's existing Traffic Signal Management Software.

Integrated Battery Backup System with Line Conditioning and External Generator Plug

Twelve position terminal facility

Detector panel

Laptop Tray

Dual LED lighting panels

77x38x26 base mounted cabinet assembly with external generator plug

Twelve channel conflict monitor with LCD display

4) Flash transfer relays

8) NEMA load switches compatible with low wattage LED signals

8) Load switch arresters

NEMA flasher

1) Seven position detector rack with PS175 power supply		
4) Four channel EDI Series loop detector amplifier		EACH
16) Loop detector arresters	___1___	_\$9,339.00

Above assembly complete with closed loop communication added for the following
(Items listed below must be compatible with the above assembly):

		EACH
FSK	___1___	_\$9,497.00
Radio	___1___	_\$9,586.00
Single Mode Fiber	___1___	\$10,846.00
Multi Mode Fiber	___1___	_\$9,846.00
Ethernet	___1___	_\$9,633.00

Twelve phase cabinet assembly 56"x44"x27.5" base mounted with to include:

Eight phase solid state controller, Ethernet ready, must be compatible with MDOT's existing Traffic Signal Management Software.

Sixteen position terminal facility

Detector panel

Laptop Tray

Dual LED lighting panels

56"x44"x27.5" base mounted cabinet assembly with backdoor

Sixteen channel conflict monitor with LCD display

6) Flash transfer relays

12) NEMA load switches compatible with low wattage LED signals

12) Load switch arresters

NEMA flasher

1) Seven position detector rack with PS175 power supply		
6) Four channel EDI Series loop detector amplifier		EACH
16) Loop detector arresters	___1___	\$10,795.00

Above assembly complete with closed loop communication added for the following
(Items listed below must be compatible with the above assembly):

		EACH
FSK	___1___	\$10,953.00
Radio	___1___	\$11,041.00
Single Mode Fiber	___1___	\$12,299.00
Multi Mode Fiber	___1___	\$11,299.00
Ethernet	___1___	\$11,088.00

Twelve phase cabinet assembly with integrated UPS system 57.875"x56.75"x 29.125" base mounted with to include:

Eight phase solid state controller, Ethernet ready, must be compatible with MDOT's existing Traffic Signal Management Software.

Integrated Battery Backup System with Line Conditioning and External Generator Plug

Sixteen position terminal facility

Detector panel

Laptop Tray

Dual LED lighting panels

NEMA CONFLICT/VOLTAGE MONITORS (MUST BE COMPATIBLE WITH PAGES 1, 2, 3 and 4 CABINET ASSEMBLIES)

		EACH
NSM-12 12 Channel Monitor	___1___	___\$419.00
SSM-12LE 12 Channel Monitor Enhanced	___1___	___\$557.00
SSM-12LEC 12 Channel Monitor Enhanced with Comm. Port	___1___	___\$650.00
MMU-16 LEip Conflict Monitor	___1___	___\$739.00

LOOP DETECTOR AMPLIFIERS (STAND ALONE) (MUST BE COMPATIBLE WITH PAGES 1, 2, 3 and 4 CABINET ASSEMBLIES)

		EACH
Single Channel with Timing	___2___	___\$88.25
Two Channel Detector with Timing	___2___	___\$99.90
Four Channel Detector with Timing	___2___	___\$229.50

LOOP DETECTOR AMPLIFIERS (CARD RACK) (MUST BE COMPATIBLE WITH PAGES 1, 2, 3 and 4 CABINET ASSEMBLIES)

		EACH
Power Supply, 175 watt	___1___	___\$152.00
Two Channel Detector with Timing	___2___	___\$76.50
Four Channel Detector with Timing	___2___	___\$141.25
Four Channel Detector with LCD	___1___	___\$233.00
Enhanced Loop Detector with Timing (see attached specs)	___1___	___\$599.00
Three Space Card Rack (wired)	___1___	___\$239.00
Four Space Card Rack (wired)	___1___	___\$259.00
Five Space Card Rack (wired)	___1___	___\$289.00
Six Space Card Rack (wired)	___1___	___\$305.00
Seven Space Card Rack (wired)	___1___	___\$316.00

LOOP DETECTOR ACCESSORIES (MUST BE COMPATIBLE WITH PAGES 1, 2, 3 and 4 CABINET ASSEMBLIES)

		EACH
Wireless Magnetometer Vehicle Detection System (see attached specs)		
Access Point/ Contact Closure		
Ethernet Communication	___1___	___\$2,566.00
Serial Port Protocol Digital Radios	___1___	___\$645.00
Repeater	___1___	___\$1,291.00
Replacement Battery for Repeater	___1___	___\$75.00
Vehicle Sensor Node	___1___	___\$395.00
Vehicle Sensor Node (with Data)	___1___	___\$475.00
Dual Component Epoxy Applicator	___1___	___\$147.00
Epoxy Tube	___1___	___\$59.00
Isolator Module	___1___	___\$335.00
4-Channel Extension Interface Card	___1___	___\$357.00
Data System Manager Server	___1___	___\$7,350.00
Input/Output Module	___1___	___\$129.00
Micro Loop Probe	___1___	___\$179.00
Micro Loop Probe Lead-in Cable	___1___/LF	___\$0.39

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)

		EACH
LED Lenses (see attached specifications)		
12" Red Arrow "LED" Lens	___1___	___\$28.10
12" Yellow Arrow "LED" Lens	___1___	___\$29.25
12" Green Arrow "LED" Lens	___1___	___\$29.90
12" Circular Red "LED" Lens	___1___	___\$26.85
12" Circular Yellow "LED" Lens	___1___	___\$29.60
12" Circular Green "LED" Lens	___1___	___\$28.99
8" Circular Red "LED" Lens	___1___	___\$29.90
8" Circular Yellow "LED" Lens	___1___	___\$27.25
8" Circular Green "LED" Lens	___1___	___\$25.99

Traffic Signal Heads ***with backplates*** (see attached specifications), Polycarbonate, Black or Yellow, LED Lenses (see attached specifications), ***with attached visors***

8" Three Section Traffic Signal Head (1-49)	___1___	___\$251.00
8" Three Section Traffic Signal Head (50-99)	___1___	___\$243.00
8" Three Section Traffic Signal Head (100+)	___1___	___\$236.00
12" Three Section Traffic Signal Head (1-49)	___1___	___\$252.00
12" Three Section Traffic Signal Head (50-99)	___1___	___\$244.00
12" Three Section Traffic Signal Head (100+)	___1___	___\$237.00
12" Three Section Traffic Signal Head with Three Arrows (1-49)	___1___	___\$240.00

Traffic Signal Heads, Aluminum, Black or Yellow, LED Lenses (see attached specifications), ***with attached visors***

12" Three Section Traffic Signal Head (1-49)	___1___	___\$335.00
12" Three Section Traffic Signal Head (50-99)	___1___	___\$325.00
12" Three Section Traffic Signal Head (100+)	___1___	___\$307.00
12" Three Section Traffic Signal Head with Three Arrows (1-49)	___1___	___\$318.00

Backplates for Traffic Signals Heads(see attached spec.)

		EACH
Three Section Traffic Signal	___1___	___\$42.00
Four Section Traffic Signal, Type 3	___1___	___\$99.00
Four Section Traffic Signal, Stacked	___1___	___\$54.00
Five Section Traffic Signal, Type 7	___1___	___\$101.00

PEDESTRIAN SIGNALS (see attached LED specification) 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

		EACH
16" X 18" Ped Housing with LED insert, Aluminum, yellow or black, Countdown type, side of pole mount	___6___	___\$203.19
16" X 18" Ped Housing with LED insert, Aluminum, yellow or black, Countdown type, drilled for clamshell mount	___6___	___\$203.19

16" X 18" Ped Housing with LED insert, Polycarbonate, yellow or black, Countdown type, side of pole mount	__6__	__\$162.49
16" X 18" Ped Housing with LED insert, Polycarbonate, yellow or black, Countdown type, drilled for clamshell mount	__6__	__\$168.87
Mounting Hardware – side of pole	__6__	__\$60.94
Mounting Hardware – clamshell	__6__	__\$51.70

SOLAR 24 HOUR FLASHING BEACONS

EACH

Self-Contained Unit (see attached specifications)

Solar Powered Stop Sign Beacon (Red) with 1-8" LED with 3-year replacement warranty on all components.	__1__	__\$1,999.00
Solar Powered Stop Sign Beacon (Red) with 1-12" LED with 3-year replacement warranty on all components.	__1__	__\$1,999.00
Solar Powered Stop Sign Beacon (Red) with 2-8" LED's with 3-year replacement warranty on all components.	__1__	__\$2,999.00
Solar Powered Stop Sign Beacon (Red) with 2-12" LED's with 3-year replacement warranty on all components.	__1__	__\$2,999.00
Solar Powered Warning Sign Beacon (Amber) with 1-8" LED with 3-year replacement warranty on all components.	__1__	__\$1,999.00
Solar Powered Warning Sign Beacon (Amber) with 1-12" LED with 3-year replacement warranty on all components.	__1__	__\$1,999.00
Solar Powered Warning Sign Beacon (Amber) with 2-8" LED's with 3-year replacement warranty on all components.	__1__	__\$2,999.00
Solar Powered Warning Sign Beacon (Amber) with 2-12" LED's with 3-year replacement warranty on all components.	__1__	__\$2,999.00

Non Self-Contained Unit (see attached specifications)

Solar Powered Stop Sign Beacon (Red) with 1-8" LED with 3-year replacement warranty on all components.	__7__	__\$1,502.00
Solar Powered Stop Sign Beacon (Red) with 1-12" LED with 3-year replacement warranty on all components.	__4__	__\$1,515.98
Solar Powered Stop Sign Beacon (Red) with 2-8" LED's with 3-year replacement warranty on all components.	__4__	__\$1,981.63
Solar Powered Stop Sign Beacon (Red) with 2-12" LED's with 3-year replacement warranty on all components.	__4__	__\$2,014.49
Solar Powered Warning Sign Beacon (Amber) with 1-8" LED with 3-year replacement warranty on all components.	__7__	__\$1,502.00
Solar Powered Warning Sign Beacon (Amber) with 1-12" LED with 3-year replacement warranty on all components.	__4__	__\$1,515.98
Solar Powered Warning Sign Beacon (Amber) with 2-8" LED's with 3-year replacement warranty on all components.	__4__	__\$1,981.63
Solar Powered Warning Sign Beacon (Amber) with 2-12" LED's with 3-year replacement warranty on all components.	__4__	__\$2,014.49

SOLAR SCHOOL ZONE FLASHING BEACONS (see attached specification)

EACH

Solar Powered School Zone Warning Sign Beacon (Amber) with 1-8" LED with 3-year replacement warranty on all components.	___1___	__\$2,549.00
Solar Powered School Zone Warning Sign Beacon (Amber) with 1-12" LED with 3-year replacement warranty on all components.	___1___	__\$2,549.00
Solar Powered School Zone Warning Sign Beacon (Amber) with 2-12" LED's with 3-year replacement warranty on all components.	___1___	__\$3,225.00
Solar Powered School Zone Warning Sign Beacon (Amber) with 2-8" LED's with 3-year replacement warranty on all components.	___1___	__\$3,225.00

RADIO INTER-CONNECT SYSTEMS & EQUIPMENT (MUST BE COMPATIBLE WITH PAGES 1, 2, 3 and 4 CABINET ASSEMBLIES AND EXISTING MDOT RADIO SYSTEMS)

EACH

Radio Serial (900 MHZ) Interconnect System		
Radio Interconnect Assembly (Spread Spectrum)	___1___	__\$1,699.00
Radio with power supply	___1___	__\$1,202.00
Yaggi Antenna	___1___	__\$155.00
Omni Antenna	___1___	__\$241.00
Lo Pro NP 9000, 850-950 MHz Antenna	___1___	__\$149.00
Radio Ethernet Interconnect System (see attached specs)	___1___	__\$1,502.00

RADAR DETECTION SYSTEMS & EQUIPMENT (MUST BE COMPATIBLE WITH PAGE 1, 2, 3 and 4 CABINET ASSEMBLIES)

EACH

Microwave Based Traffic Sensor Assembly (see attached spec)	___1___	__\$4,800.00
Individual items listed below must be compatible with above Assembly		
Microwave Sensor	___1___	__\$4,215.00
Mounting Bracket	___1___	__\$143.00
Two Output Single Input Interface Board	___1___	__\$443.00
Four Output Single Input Interface Board	___1___	__\$443.00
Four Output Double Input Interface Board	___1___	__\$443.00
Radar Presence Detector (see attached spec)	___9___	__\$4,245.00
Continuous Tracking Advance Detector (see attached spec)	___9___	__\$4,105.00
Continuous Tracking Extended Range Advance Detector (see Attached spec)	___9___	__\$4,665.00
Individual items listed below must be compatible with above Assemblies		
Mounting Bracket	___9___	__\$175.00
6 Conductor Cable	___9___	__\$1.65/LF
Cable Junction Box	___9___	__\$150.00
Preassembled Backplate	___9___	__\$1,860.00

Multi Sensor Vehicle Detection System (see attached spec)	___1___	_\$7,647.00
---	---------	-------------

Individual items listed below must be compatible with above Assembly

Video Imaging Camera Sensor	___1___	_\$3,882.00
Radar Sensor	___1___	_\$1,250.00
Multi-Sensor Assembly	___1___	_\$1,875.00
Sensor Data Combiner	___1___	_\$1,875.00
Detection Processor	___1___	_\$3,765.00

VIDEO DETECTION SYSTEMS & EQUIPMENT (MUST BE COMPATIBLE WITH PAGES 1, 2, 3 and 4 CABINET ASSEMBLIES) (see attached specification)

(Vendors must bid on entire section and lowest cumulative bid wins entire section)

Video Detection System Items	EACH
Integrated sensor/processor Assembly (Camera, lens, & housing)	_____
Processor	_____
Mounting hardware	_____
Surge Interface Panel	_____
Video Detection Cable	_____
Video Power Cable	_____
9" Color Video Display	_____

MISCELLANEOUS PRODUCTS (MUST BE COMPATIBLE IF USED WITH PAGES 1, 2, 3 and 4 ASSEMBLIES)

	EACH
NEMA Controller Tester	___1___ \$2,750.00
NEMA Monitor Tester (Automatic)	___1___ \$10,179.00
NEMA Load Switch compatible with low wattage LED signals	___1___ \$17.10
NEMA Flasher	___1___ \$17.15
Flash Transfer Relay	___1___ \$23.60
Flasher Cabinet Assembly, NEMA Type	___1___ \$260.00
Flasher Cabinet Assembly, NEMA Type with Solid State Time Clock	_1_ \$495.00
Traffic Solar Power Assembly to supply 80 watts for 14 hrs/day	___4___ \$6,573.23
Pedestrian Pushbutton (see attached specification)	___8___ \$30.50
GPS Synchronization Clock (see attached specification)	___4___ \$275.00
LED Internally Illuminated Regulatory Sign (see attached specification)	_1_sq FT \$108.00
LED Internally Illuminated Street Name Sign (see attached specification)	_1_sq FT \$150.00
Two Conductor Shielded cable, 14 Gauge IMSA 50-2	___5___ per LF \$0.288
Four Conductor Shielded cable, 14 Gauge IMSA 50-2	___5___ per LF \$0.667
Four Conductor Stranded cable, 14 Gauge, IMSA 20-1	___5___ per LF \$0.393
Five Conductor Stranded cable, 14 Gauge, IMSA 20-1	___5___ per LF \$0.482
Seven Conductor Stranded cable, 14 Gauge, IMSA 20-1	___5___ per LF \$0.665
#14 Stranded Loop Wire, IMSA 51-3 Type XHHW	___5___ per LF \$0.108

**THE FOLLOWING ITEMS MUST BE COMPATIBLE WITH EXISTING MDOT
PREMPTION SYSTEM: (See Attached Specifications)**

		EACH
Multimode Four Channel Phase Selector	___1___	__\$2,751.00
Multimode Phase Selector Card Rack	___1___	__\$168.00
Optical Detector, One Eye, One Channel	___1___	__\$426.00
Optical Detector, Two Eye, One Channel	___1___	__\$484.00
Optical Detector, Two Eye, Two Channel	___1___	__\$675.00
Optical Vehicle Control Emitter – “High Range” w/Switch	___1___	__\$1,135.00
Optical Vehicle Control Emitter - “Low Range” w/Switch	___1___	__\$1,135.00
Optical Vehicle Control Emitter w/Range Control	___1___	__\$1,325.00
Multimode Emitter	___1___	__\$3,500.00
GPS Emitter	___1___	__\$3,000.00
Radio/GPS Cable	___1___ per LF	__\$0.60
Optical Detector, Cable	___5___ per LF	__\$0.26
GPS Detector	___1___	__\$200.00