

SCHEDULE OF ITEMS

Contractor _____

Signature Date

(Print Bidder's Name and Title)

- Paper bids must be signed in pen and ink. Signatures shall be original. Stamped and copied signatures will not be accepted.

Item	Unit	Price
1) TRAFFIC CONTROL		
Traffic Control for 3-way intersection (Including signs, drums, cones)	Lump Sum	
Traffic Control for 4-way intersection (Including signs, drums, cones)	Lump Sum	
Traffic Control for 5-way intersection (Including signs, drums, cones)	Lump Sum	
Flagger	Hour	
2) LABOR		
Hourly Labor (for trouble shooting)	Hour	
Hourly Labor (for installing items not listed in sections 4-7)	Hour	
3) TRAVEL TIME		
Travel Time to Region 1 (time to travel to and from any site in the region, includes time for an electrician to travel both ways and the cost of bucket truck, including fuel)	Lump Sum	
Travel Time to Region 2 (time to travel to and from any site in the region, includes time for an electrician to travel both ways and the cost of bucket truck, including fuel)	Lump Sum	
Travel Time to Region 3 (time to travel to and from any site in the region, includes time for an electrician to travel both ways and the cost of bucket truck, including fuel) Lump Sum	Lump Sum	

Item	Unit	Price
Travel Time to Region 4 (time to travel to and from any site in the region, includes time for an electrician to travel both ways and the cost of bucket truck, including fuel)	Lump Sum	
Travel Time to Region 5 (time to travel to and from any site in the region, includes time for an electrician to travel both ways and the cost of bucket truck, including fuel)	Lump Sum	
Mobilization for Directional Boring in Region 1 (Boring is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Directional Boring in Region 2 (Boring is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Directional Boring in Region 3 (Boring is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Directional Boring in Region 4 (Boring is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Directional Boring in Region 5 (Boring is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Trenching in Region 1 (Trenching is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Trenching in Region 2 (Trenching is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Trenching in Region 3 (Trenching is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Trenching in Region 4 (Trenching is charged by linear foot in Lighting and Wiring below)	Lump Sum	
Mobilization for Trenching in Region 5 (Trenching is charged by linear foot in Lighting and Wiring below)	Lump Sum	
4) SIGNAL INDICATIONS (<i>furnish, deliver, and install parts</i>)		
12-inch Bi-model Yellow/Green Arrow LED	Each	
12-inch Red Arrow LED	Each	
12-inch Yellow Arrow LED	Each	

Item	Unit	Price
12-inch Green Arrow LED	Each	
12-inch Red Ball LED	Each	
12-inch Yellow Ball LED	Each	
12-inch Green Ball LED	Each	
4-inch Red Bicycle LED	Each	
4-inch Yellow Bicycle LED	Each	
4-inch Green Bicycle LED	Each	
8-inch Red Bicycle LED	Each	
8-inch Yellow Bicycle LED	Each	
8-inch Green Bicycle LED	Each	
12-inch Red Bicycle LED	Each	
12-inch Yellow Bicycle LED	Each	
12-inch Green Bicycle LED	Each	
Pedestrian Heads (18-inch LED)	Each	
Pedestrian Heads (18-inch LED countdown)	Each	
5) SIGNAL AND BEACON COMPONENTS (<i>furnish, deliver, and install parts</i>)		
TS-2 Type 1 Controller	Each	
TS-2 Type 2 Controller	Each	
ATC Traffic Controller	Each	
6 foot by 40 foot quadrapole inductance loop (with IMSA Spec 51-5 loop wire with tube jacket)	Each	
6 foot by 6 foot inductance loop (with IMSA Spec 51-5 loop wire with tube jacket)	Each	
Traffic cam 8mm with interface	Each	
4TI Traffic cam processor	Each	
Signal Housing for 12" signal head	Each	
Microwave detector presence Type	Each	
Self-supporting aerial cable (12 AWG) 5 conductor	Linear Foot	
Self-supporting aerial cable (12 AWG) 7 conductor	Linear Foot	
Self-supporting aerial cable (12 AWG) 12 conductor	Linear Foot	

Statewide
Traffic Signal Maintenance Work
July 26, 2024

Item	Unit	Price
Communication cable (19AWG 12 pair) IMSA Spec 59-2 and 60-2	Linear Foot	
Advanced Dilemma zone detection with secondary presence detection	Lump Sum	
Battery cabinet type P216	Each	
Atc Controller Cabinet 2 door pole mount	Each	
Atc Controller Cabinet 4 door ground mount	Each	
Controller Cabinet Type M	Each	
Controller Cabinet Type P	Each	
Controller Cabinet Type F	Each	
Controller Cabinet Type M (with back panel)	Each	
Controller Cabinet Type P (with back panel)	Each	
Controller Cabinet Type F (with back panel)	Each	
Atc switch packs for signal indications	Each	
Atc Malfunction management unit	Each	
Malfunction Management Unit	Each	
NEMA Conflict Monitor 12 Channel	Each	
Dual Indicator Load switches	Each	
Loop amplifiers (2 channel) rack mounted	Each	
Loop amplifiers (Single channel) shelf mounted	Each	
Span wire (5/16 inch)	Linear Foot	
Span wire signal mount bracket	Each	
Tether wire (1/4 inch)	Linear Foot	
Tether Clamp Assembly	Each	
Strand vise (5/16 inch)	Each	
Strand Vice (1/4 inch)	Each	
Goosenecks for signals	Each	
Reinforcing bar for span wire mounted signals	Each	
Retroreflective Back plates for 3-section heads	Each	
Retroreflective Back plates for 4-section heads	Each	

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Item	Unit	Price
Retroreflective Back plates for 5-section heads	Each	
Astro-brac for 3-section head, 120" cable	Each	
Astro-brac for 4-section head, 120" cable	Each	
Astro-brac for 5-section head, 120" cable	Each	
Flash transfer relay (35 amps)	Each	
Line filters (30 amps)	Each	
Solar panel (45 watt) with mounting brackets	Each	
Solid State Replacement for mercury signal buss relay	Each	
Flash transfer relays	Each	
Loop amp rack mount	Each	
Loop amp shelf mount	Each	
Microwave detectors	Each	
Currux Vision Processor	Each	
AI FMU	Each	
Thrugreen FMU	Each	
Gridsmart GS2 Camera Detection System	Each	
Gridsmart GS3 Camera Detection System	Each	
Gridsmart Bell Camera (just camera)	Each	
Gridsmart Processor	Each	
Miovision Camera Detection System	Each	
Miovision Smartview360 camera (just camera)	Each	
Miovision AC3 Single Point Camera	Each	
Miovision Processor	Each	
Wavetronix SmartSensor Advance	Each	
Wavetronix XP21	Each	
Wavetronix Click 650	Each	
Wavetronix ARC6	Each	
36" Bimodal blankout sign (Any messages)	Each	
36" blankout sign (Any message)	Each	

Item	Unit	Price
30" Bimodal blankout sign (Any messages)	Each	
30" blankout sign (Any message)	Each	
Pedestrian Push Button	Each	
RTB No Touch Push Button	Each	
Audible ped button only	Each	
Audible ped system – includes power supply, ped button, bracket and speaker	Each	
Audible ped chirper	Each	
Bimodal Ped indication	Each	
Bimodal countdown ped indication	Each	
120 volt 8 pin octal base relays	Each	
1-½ inch rigid steel conduit	Linear Foot	
2-inch rigid steel conduit	Linear Foot	
1-½ steel 90° Elbow	Each	
2-inch steel 90° Elbow	Each	
3-inch PVC conduit	Linear Foot	
100-amp meter trim with bypass handle	Each	
5 pin flasher	Each	
Pedestal Pole (10 foot)	Each	
Pedestal Pole (7 foot)	Each	
Pedestal Pole Base	Each	
Replacement for Mercury Relay for Signal Buss	Each	
Econolite ZincBlue2 Battery	Each	

6) POLES AND FOUNDATIONS (<i>furnish, deliver, and install parts</i>)		
Wood poles 40 foot with guys	Each	
Wood poles 45 foot with guys	Each	
18" x5' Concrete Foundation	Each	
20" x 5'6" Concrete Foundation	Each	
24" x 7' Concrete Foundation	Each	

Item	Unit	Price
30" Concrete Foundation	Linear Foot	
36" Concrete Foundation	Linear Foot	
Manitoba Safety T-base or approved equal	Each	
Remove and replace traffic signal pole (steel or alum)	Lump Sum	
Remove and replace traffic signal mast arm 10 feet to less than 20 feet	Lump Sum	
Remove and replace traffic signal mast arm 20 feet to less than 30 feet	Lump Sum	
Remove and replace traffic signal mast arm 30 feet to less than 40 feet	Lump Sum	
Remove and replace traffic signal mast arm 40 feet to less than 50 feet	Lump Sum	
Remove and replace traffic signal mast arm 50 feet and above	Lump Sum	
Traffic signal foundation patching / repair	Lump Sum	
Traffic signal pole /mast arm repair	Lump Sum	
Frangible Coupling Breakaway Transformer Base	Each	

7) LIGHTING AND WIRING (<i>furnish, deliver, and install parts</i>)		
# 8 copper stranded Thwn various colors per foot	Linear Foot	
# 6 copper stranded Thwn various colors per foot	Linear Foot	
# 4 copper stranded Thwn various colors per foot	Linear Foot	
# 2 copper stranded Thwn various colors per foot	Linear Foot	
# 1ot copper stranded Thwn various colors per foot	Linear Foot	
PVC Schedule 40 1 ½ inch	Linear Foot	
PVC Schedule 80 1 ½ inch	Linear Foot	
PVC Schedule 40 2 inch	Linear Foot	
PVC Schedule 80 2 inch	Linear Foot	
Directional Boring	Linear Foot	
Junction Box (23,000 lb load rating, see MDOT Standard Details)	Linear Foot	
Bracket arms for light poles	Linear Foot	
Trenching 3 feet deep	Linear Foot	

8) Other		
Parts Markup on Unlisted Items	%	