



**MISSOURI DEPARTMENT OF TRANSPORTATION  
SE – SIKESTON DISTRICT  
INFORMAL QUOTE GUIDELINES AND DOCUMENTATION  
FOR PURCHASES FROM \$3,000 To \$24,999.00**

**REQUEST FOR QUOTATION**

(THIS IS NOT AN ORDER)

It is the vendor's responsibility to read and comply with all conditions, specifications, and instructions outlined in this document. This document and any subsequent attachments shall supersede all confirmation forms, receipts, or any other paperwork needed to secure materials, equipment, or services.

TODAY'S DATE: FEBRUARY 1, 2012	<b>RESPONSES DUE NO LATER THAN:</b> TUESDAY, FEBRUARY 14, 2012 @ 1:00 PM CENTRAL TIME	F.O.B. REQUIREMENTS: DESTINATION
TO BE DELIVERED BY: <b>FRIDAY, MARCH 30, 2012</b>	<b>QUOTATION #:</b> <u>SE12-Q407-RJ</u>  THIS QUOTATION # SHOULD BE REFERENCED ON ALL MAILING LABELS, ENVELOPES, AND ANY OTHER CORRESPONDENCE. <b>RESPONSES ACCEPTED BY FAX or Email</b>	BUYER: TAMMY BAKER PHONE NUMBER: 573-472-5369 FAX NUMBER: 573-472-5890 EMAIL: TAMMY.BAKER@MODOT.MO.GOV
<b>District Mailing Address:</b> Missouri Department of Transportation SE – Sikeston District Procurement 2675 N. Main, P.O. Box 160 Sikeston, MO 63801		<b>Delivery Location:</b> MoDOT Signal Shop 1111 Edwards Street Sikeston, MO 63801

ALL QUOTATIONS SHOULD BE EXTENDED & TOTALED. DELIVERY TIME SHOULD BE LISTED.

<b>This work shall consist of furnishing RF Radio Modems, Antennas, and Cable as show on attached figures.</b>				
Quantity	U/M	DESCRIPTION (including size and/or part #'s)	UNIT PRICE	UNIT PRICE EXTENSION
8	Each	Wireless Radio Modem		
8	Each	Lightning Arrestor		
8	Each	Yagi Antenna		
2	Each	Omni Antenna		
500	Feet	LMR 400 Cable		
		<b>F.O.B.</b> Price all materials as F.O.B. Destination. Delivery cost must be included in the unit price(s) & not listed separately.		
<b>TOTAL ORDER EXTENSION:</b>			<b>\$</b>	
Delivery Time (A.R.O. = After Receipt of Order):				A.R.O.

<b>VENDOR NAME:</b> (Please enter your company name in this block)
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**Tax Exempt Status**

The Missouri Highways and Transportation Commission (MHTC) is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the Contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Project Tax Exemption Certificate will be furnished to the successful Bidder upon request, if applicable.

**Right of Acceptance/Rejection**

MoDOT reserves the right to reject any or all bids/quotes/proposals, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the solicitation response, unit prices will govern.

**Award**

Award of this solicitation will be made on an "All Or Nothing" basis. Contractors selection shall be at the Traffic Engineer's, or designated representative's, discretion and may be based, but not limited to the following reasons: price, location of project, availability of material, ability of vendor to supply quantities needed in a timely manner, or other factors related to project areas. Notification of award will be at the time the tabulation is posted to the Internet. It is the sole responsibility for all vendors to check the website for tabulation/award results.

**Increase or Decrease Quantities**

The quantities listed are MoDOT's best estimate of needs at the time of the solicitation posting. MoDOT reserves the right to increase or decrease quantities based upon budget constraints or changes in project requirements. The final quantity ordered by MoDOT shall be furnished at the same unit price with the option to order under this contract for a period of 120 days from the acceptance date of this proposal, providing terms are still acceptable to both parties.

**VENDOR NOTES**

VENDORS MAY ATTACH OTHER PERTINENT/SUPPORTING DATA WITH THEIR RESPONSE TO THIS SOLICITATION.

MoDOT purchase orders must be issued to the invoicing company ("Remit To") address. If the invoicing company/address will be different from that listed in the vendor information section (below), the vendor should specify the "remit to" company/address in the vendor notes section (above).

All responses to this solicitation should be submitted on this form and returned to the buyer listed above at the district address shown. Responses may be faxed, mailed, or hand-delivered.

# VENDOR INFORMATION & PREFERENCE CERTIFICATION FORM

## Vendor Information

All bidders must furnish **ALL** applicable information requested below

<b>Vendor Name/Mailing Address:</b>  Email Address:	<b>Vendor Contact Information (including area codes):</b> Phone #: Cellular #: Fax #:
<b>Printed Name of Responsible Officer or Employee:</b>	<b>Signature:</b>
<b>For Corporations</b> - State in which incorporated:	<b>For Others</b> - State of domicile:

If the address listed in the Vendor Name/Mailing Address block above is not located in the State of Missouri, list the address of Missouri offices or places of business:

*If additional space is required, please attach an additional sheet and identify it as **Addresses of Missouri Offices or Places of Business.***

**M/WBE INFORMATION:** List all certified Minority or Women Business Enterprises (**M/WBE**) utilized in the fulfillment of this bid. Include percentages for subcontractors and identify the M/WBE certifying agency:

<u>M/WBE Name</u>	<u>Percentage of Contract</u>	<u>M/WBE Certifying Agency</u>

*If additional space is required, please attach an additional sheet and identify it as **M/WBE Information***

## Preference Certification

All bidders must furnish **ALL** applicable information requested below

**GOODS/PRODUCTS MANUFACTURED OR PRODUCED IN USA:** If any or all of the goods or products offered in the attached bid which the bidder proposes to supply to the MHTC are **not** manufactured or produced in the "United States", or imported in accordance with a qualifying treaty, law, agreement, or regulation, list below, by item or item number, the country other than the United States where each good or product is manufactured or produced.

Item (or item number)	Location Where Item is Manufactured or Produced

*If additional space is required, please attach an additional sheet and identify it as **Location Products are Manufactured or Produced.***

**MISSOURI SERVICE-DISABLED VETERAN BUSINESS:** Please complete the following if applicable. Additional information may be requested if preference is applicable. See below definitions for qualification criteria:

**Service-Disabled Veteran** is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs.

**Service-Disabled Veteran Business** is defined as a business concern:

- a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and
- b. The management and daily business operations of which are controlled by one or more service-disabled veterans.

<u>Veteran Information</u>	<u>Business Information</u>
Service-Disabled Veteran's Name (Please Print)	Service-Disabled Veteran Business Name
Service-Disabled Veteran's Signature	Missouri Address of Service Disabled Veteran Business

**WIRELESS RADIO EQUIPMENT SPECIFICATIONS**

**A WIRELESS RADIO MODEM**

**1.0 Description:** The wireless radio modem (RF modem) shall be used to transmit data in a point-to-point configuration. All radios shall be Frequency Hopping Spread Spectrum (FHSS) Technology.

The Radio modem shall be fully compatible and capable of operating within the existing wireless network of Intuicom Communicator II 900 Mhz Spread Spectrum Wireless Data Transceivers.

The Radio modem shall be an Intuicom Communicator II 900 Mhz Spread Spectrum Wireless Data Transceiver or approved equal that meets the following minimum specifications:

**A. Radio**

Technology:	FHSS
Frequency Range:	902 – 928 MHz
Output Power:	1mW, 10mW, 100mW or 1 Watt
Software Programmable:	Yes
Available Hop Patterns:	44
Number of RF Channels:	110
Error Checking:	16 Bit-CRC
Error Correction:	Forward Error Correction
Receiver Sensitivity / BER:	-108 dBm @ 10 <sup>-6</sup> BER
System Gain:	140 dBm
Antenna Port:	RP TNC-F or N-F
Certification:	FCC, Industry Canada
Operating Modes:	Master, Slave, Slave/Repeater, Repeater
Input Power:	6 – 30VDC
Power Consumption:	Typical < 100mA (standby)
Operating Temperature:	-40°C to +75°C
Humidity:	95% Non-Condensing
Dimensions:	8.0" W x 8.0" H x 8.0" D
Enclosure:	Aluminum

**B. Software**

Radio Configuration:	Yes
Spectrum Analyzer:	Yes
Remote Diagnostics:	Yes
Configuration:	Local and Remote
Windows Based:	Yes

**C. Interface:**

Programming Port:	DB9-F or DE9-F
Data Interface:	Standard RS232 Asynchronous
Controller Baud Rates Supported:	1200, 2400, 4800, 9600, 19200
Data Throughput:	1200bps – 115Kbps

**D. Indicators:**

TX Data, RX Data, PWR:	Yes
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**E. Additional Requirements:**

- **A Power Supply** unit and cable shall be provided to supply power to the RF Modem.
- **A Data Cable** to connect the communication port of the RF Modem to the RS232 port of an EPAC M40 Controller shall be provided with each RF Modem Unit.
- **A RF Jumper Cable** to connect the RF Modem to the Lightning Arrestor inside the cabinet. This cable shall be constructed out of RG-58 or LMR 400 cable, be a minimum of 3 feet in length, and have appropriate connectors affixed to connect to the Lightning Arrestor and the RF Modem.

**2.0 Basis of Payment:** The payment for this item will be made for the accepted number of quantities at the contract price.

<u>Item Description</u>	<u>Unit of Measure</u>
Wireless Radio Modem	Each

**B LIGHTNING ARRESTOR**

**1.0 Description:** A lightning arrestor shall be used for protection of the radio equipment. The lightning arrestor shall meet the following minimum requirements.

Frequency Range:	125 MHz to 1000 MHz
VSWR:	≤ 1.3:1 over frequency range
Insertion Loss:	≤ 0.1 dB over frequency range
Max Power:	375 W at 125 MHz, 50 W at 1 Ghz
Turn on:	600 VDC ± 20% 2.5 ns for 2 kV / ns
Surge:	50 kA IEC 1000-4-5 8/20 μs Waveform 500 J
Vibration:	1G up to 100 Hz
Protected Side Connector:	N female 50 Ω
Surge Side Connector:	N female 50 Ω
Throughput Energy:	≤ 200 μJ
Throughput Voltage:	≤ 3 Vpk
Unit Impedance:	50 Ω
Operating Temperature:	-40°C to +75°C

**2.0 Basis of Payment:** The payment for this item will be made for the accepted number of quantities at the contract price.

<u>Item Description</u>	<u>Unit of Measure</u>
Lightning Arrestors	Each

**C YAGI ANTENNA**

**1.0 Description:** The Yagi Antenna shall be a medium or high gain directional antenna. The antenna shall be connected to the wireless radio modem for short haul data transmission in a point-to-point configuration. The Yagi antenna shall meet the following minimum specifications.

Frequency:	902 – 928 MHz
Gain	8.5 dBi
Polarization:	Horizontal or Vertical
Horizontal Beam Width:	50°
Vertical Beam Width:	45°
Front to Back Ratio:	14 dB
Impedance:	50 Ohm
Power Rating:	200 Watts
VSWR:	2:1 Max
Connector Type:	N-Female
Construction:	Welded Stainless Steel or Aluminum
Wind Loading:	100 mph
Operating Temperature:	-40°C to +75°C
RoHS Compliant:	Yes

All necessary mounting hardware shall be included with antenna for mounting to 2 in. diameter, vertical post.

**2.0 Basis of Payment:** The payment for this item will be made for the accepted number of quantities at the contract price.

<u>Item Description</u>	<u>Unit of Measure</u>
Yagi Antenna	Each

**D OMNI ANTENNA**

**1.0 Description:** The Omni Antenna shall be a medium or high gain directional antenna. The antenna shall be connected to the wireless radio modem for short haul data transmission in a point-to-point configuration. The Omni antenna shall meet the following minimum specifications.

Frequency:	902 – 928 MHz
Gain	5 dB
Polarization:	Vertical
Vertical Plane:	22°
Radome Material:	0.65 in. pultruded white fiberglass
Connector Type:	Recessed Type N Female or N-Male with 16" jumper cable
Wind Survival:	100 mph
Operating Temperature:	-40°C to +75°C
Power Rating:	150 Watts
VSWR:	2:1 Max

All necessary mounting hardware shall be included with antenna for mounting to 2 in. diameter, vertical post.

**2.0 Basis of Payment:** The payment for this item will be made for the accepted number of quantities at the contract price.

<u>Item Description</u>	<u>Unit of Measure</u>
Omni Antenna	Each

**E LMR 400 COAXIAL CABLE**

**1.0 Description:** LMR 400 Coaxial Cable shall be used to provide a link between the antenna and the lightning arrester. The cable shall meet the following minimum requirements.

Attenuation:	3.9 dB / 100 ft. at 900 MHz
Power Rating:	0.58 kW at 900 MHz
Center Conductor:	0.109 in. Copper Clad Aluminum
Dielectric:	0.285 in. Cellular PE
Shield:	0.291 in. Aluminum Tape
	0.320 in. Tinned Copper Braid
Jacket	Black UV protected polyethylene
Bend Radius:	1 in with less than 1 $\Omega$ impedance change at bend
Impedance:	50 $\Omega$
Capacitance:	23.9 pf/ft

**2.0 Basis of Payment:** The payment for this item will be made for the accepted number of quantities at the contract price.

<u>Item Description</u>	<u>Unit of Measure</u>
LMR 400 Cable	LF

**F TYPE N CONNECTORS**

**1.0 Description:** Type N Connectors shall be used to terminate the ends of the LMR 400 Coaxial Cable. The connectors shall meet the following minimum requirements.

Connector Type:	N Male Solder or Crimp Contact
Impedance:	50 $\Omega$
VSWR:	1.5:1 Max
Frequency:	902 – 928 MHz
Operating Temperature:	-40°C to +75°C
Power Rating:	0.58 kW at 900 MHz

**2.0 Basis of Payment:** The payment for this item will be made for the accepted number of quantities at the contract price.

<u>Item Description</u>	<u>Unit of Measure</u>
Type N Connector	Each

### **STANDARD SOLICITATION PROVISIONS**

- a. The solicitation for the procurement of the supplies referenced therein, to which these "Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions" are attached, is being issued under, and governed by, the provisions of Title 7 – Missouri Department of Transportation, Division 10 – Missouri Highways and Transportation Commission, Chapter 11 – Procurement of Supplies, of the Code of State Regulations. The Missouri Highways and Transportation Commission (MHTC), acting by and through its operating arm, the Missouri Department of Transportation (MoDOT), draws the Bidder's attention to said 7 CSR 10-11 for all the provisions governing solicitation and receipt of bids/quotes and the award of the contract pursuant to this solicitation.
- b. All bids/quotes must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.

### **GENERAL TERMS AND CONDITIONS**

#### **Definitions**

Capitalized terms as well as other terms used but not defined herein shall have the meaning assigned to them in section 7 CSR 10-11.010 Definition of Terms.

#### **Nondiscrimination**

- a. The Contractor shall comply with all state and federal statutes applicable to the Contractor relating to nondiscrimination, including, but not limited to, Chapter 213, RSMo; Title VI and Title VII of Civil Rights Act of 1964 as amended (42 U.S.C. Sections 2000d and 2000e, *et seq.*); and with any provision of the "Americans with Disabilities Act" (42 U.S.C. Section 12101, *et seq.*).
- b. **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MHTC shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
  - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
  - ii. cancellation, termination or suspension of the contract, in whole or in part.

#### **Contract/Purchase Order**

- a. By submitting a bid/quote, the Bidder agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's bid response, and (3) the MHTC's acceptance of the bid by post-award contract or purchase order.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized notice to proceed and/or purchase order.

#### **Applicable Laws and Regulations**

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri, Missouri Department of Revenue, and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MHTC a copy of their current Authority Certificate from the Secretary of State of the State of Missouri and/or a copy of their Certificate of No Tax Due from the Missouri Department of Revenue.
- c. Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MHTC a copy of their current Transient Employer Certificate from the Missouri Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.

#### **Executive Order**

The Contractor shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6<sup>th</sup>) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement.

- 1) "By signing this Agreement, the Contractor hereby certifies that any employee of the Contractor assigned to perform services under the contract is eligible and authorized to work in the United States in compliance with federal law."
- 2) In the event the Contractor fails to comply with the provisions of the Executive Order 07-13, or in the event the Commission has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Commission reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.
- 3) The Contractor shall include the provisions of this paragraph in every subcontract. The Contractor shall take such action with respect to any subcontract as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance.

#### **Preferences**

- a. In the evaluation of bids/quotes, preferences shall be applied in accordance with 7 CSR 10-11.020(7). Contractors should apply the same preferences in selecting subcontractors. The attached document entitled "**VENDOR INFORMATION AND PREFERENCE CERTIFICATION FORM**" must be completed and returned with the solicitation documents.
- b. Bidders are encouraged to obtain minority business enterprise (MBE) and women business enterprise (WBE) participation in this work through the use of subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful participation for M/WBEs. Bidders are encouraged to obtain 10% MBE and 5% WBE participation.

#### **Cancellation of Contract**

The MHTC may cancel the Contract at any time for a material breach of contractual obligations or for convenience by providing Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.

**Bankruptcy or Insolvency**

Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntarily, or upon the appointment of a receiver, trustee, or assignee, for the benefit of creditors, the Commission reserves the right and sole discretion to either cancel the Agreement or affirm the Agreement and hold the Contractor responsible for damages.

**Warranty**

The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by the MHTC, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.

**Status of Independent Contractor**

The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

**Non-Waiver**

If one of the parties agrees to waive its right to enforce any term of this Contract, that party does not waive its right to enforce such term at any other time or to enforce any or all other terms of this Contract.

**Indemnification**

The Contractor shall defend, indemnify and hold harmless MHTC, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Contractor's performance of its obligations under the contract awarded pursuant to this solicitation.