



1. Solicitation #: 3450035051 / 25-MTL-0016

2. Solicitation Issue Date: 01/24/2025

3. Brief Description of Requirement:

**SOLICITATION DESCRIPTION: Benchtop Sequential Wavelength Dispersive Xray Fluorescence Spectrometer (WDXRF)**

**Vendors may submit questions to [mlgroom@odot.org](mailto:mlgroom@odot.org) until Tuesday, February 4, 2025 at 1:00 pm CST with ODOT's responses made available no later than Tuesday, February 11, 2025 at 1:00 pm CST.**

**CLOSING DATE: Wednesday, February 19th, 2025 at 10:00AM CST**

**Submitted to: [odotbids@odot.ok.gov](mailto:odotbids@odot.ok.gov)**

**See attached specifications for details.**

**\*Delivery will may be a factor in award. \***

4. Response Due Date<sup>1</sup>: 02/19/2025

Time: 10:00 AM CST/CDT

5. Issued By and **RETURN SEALED BID TO**<sup>2</sup>:

Electronic Submission Address: ODOTBIDS@ODOT.OK.GOV

6. Solicitation Type (type "X" at one below):

- Invitation to Bid
- Request for Proposal
- Request for Quote

7. Contracting Officer:

Name: Melissa Groom

Phone: 405-227-5473

Email: [mlgroom@odot.org](mailto:mlgroom@odot.org)

<sup>1</sup> Amendments to solicitation may change the Response Due Date (read GENERAL PROVISIONS, section 3, "Solicitation Amendments").

<sup>2</sup> If "U.S. Postal Delivery" differs from "Carrier Delivery," use "Carrier Delivery" for courier or personal deliveries.

*"Certification for Competitive Bid and Contract" **MUST** be submitted along with the response to the Solicitation.*

1. **RE: Solicitation #** 3450035051 / 25-MTL-0016

2. **Bidder General Information:**

FEI / SSN : \_\_\_\_\_ Supplier ID: \_\_\_\_\_  
Company Name: \_\_\_\_\_

3. **Bidder Contact Information:**

Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Contact Name: \_\_\_\_\_  
Contact Title: \_\_\_\_\_  
Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_  
Email: \_\_\_\_\_ Website: \_\_\_\_\_

4. **Oklahoma Sales Tax Permit<sup>3</sup>:**

- YES – Permit #: \_\_\_\_\_  
 NO – Exempt pursuant to Oklahoma Laws or Rules – Attach an explanation of exemption

5. **Registration with the Oklahoma Secretary of State:**

- YES - Filing Number: \_\_\_\_\_  
 NO - Prior to the contract award, the successful bidder will be required to register with the Secretary of State or must attach a signed statement that provides specific details supporting the exemption the supplier is claiming ([www.sos.ok.gov](http://www.sos.ok.gov) or 405-521-3911).

6. **Workers' Compensation Insurance Coverage:**

Bidder is required to provide with the bid a certificate of insurance showing proof of compliance with the Oklahoma Workers' Compensation Act.

- YES – Include with the bid a certificate of insurance.  
 NO – Exempt from the Workers' Compensation Act pursuant to 85A O.S. § 2(18)(b)(1-11) – Attach a written, signed, and dated statement on letterhead stating the reason for the exempt status.<sup>4</sup>

<sup>3</sup> For frequently asked questions concerning Oklahoma Sales Tax Permit, see <https://www.ok.gov/tax/Businesses/index.html>

<sup>4</sup> For frequently asked questions concerning workers' compensation insurance, see <https://www.ok.gov/wcc/Insurance/index.html>

**7. Disabled Veteran Business Enterprise Act**

- YES – I am a service-disabled veteran business as defined in 74 O.S. §85.44E. Include with the bid response 1) certification of service-disabled veteran status as verified by the appropriate federal agency, and 2) verification of not less than 51% ownership by one or more service-disabled veterans, and 3) verification of the control of the management and daily business operations by one or more service-disabled veterans.
- NO – Do not meet the criteria as a service-disabled veteran business.

_____	_____
Authorized Signature	Date
_____	_____
Printed Name	Title



**NOTE:** A certification shall be included with any competitive bid and/or contract exceeding \$5,000.00 submitted to the State for goods or services.

Agency Name: Oklahoma Department of Transportation Agency Number: 34500

Solicitation or Purchase Order #: 3450035051 / 25-MTL-0016

Supplier Legal Name: \_\_\_\_\_

**SECTION I [74 O.S. § 85.22]:**

A. For purposes of competitive bid,

1. I am the duly authorized agent of the above named bidder submitting the competitive bid herewith, for the purpose of certifying the facts pertaining to the existence of collusion among bidders and between bidders and state officials or employees, as well as facts pertaining to the giving or offering of things of value to government personnel in return for special consideration in the letting of any contract pursuant to said bid;
2. I am fully aware of the facts and circumstances surrounding the making of the bid to which this statement is attached and have been personally and directly involved in the proceedings leading to the submission of such bid; and
3. Neither the bidder nor anyone subject to the bidder's direction or control has been a party:
  - a. to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding,
  - b. to any collusion with any state official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract, nor
  - c. in any discussions between bidders and any state official concerning exchange of money or other thing of value for special consideration in the letting of a contract, nor
  - d. to any collusion with any state agency or political subdivision official or employee as to create a sole-source acquisition in contradiction to Section 85.45j.1. of this title.

B. I certify, if awarded the contract, whether competitively bid or not, neither the contractor nor anyone subject to the contractor's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of the State of Oklahoma any money or other thing of value, either directly or indirectly, in procuring this contract herein.

**SECTION II [74 O.S. § 85.42]:**

For the purpose of a contract for services, the supplier also certifies that no person who has been involved in any manner in the development of this contract while employed by the State of Oklahoma shall be employed by the supplier to fulfill any of the services provided for under said contract.

The undersigned, duly authorized agent for the above named supplier, by signing below acknowledges this certification statement is executed for the purposes of:

the competitive bid attached herewith and contract, if awarded to said supplier;

**OR**

the contract attached herewith, which was not competitively bid and awarded by the agency pursuant to applicable Oklahoma statutes.

\_\_\_\_\_  
Supplier Authorized Signature

\_\_\_\_\_  
Certified This Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Email

\_\_\_\_\_  
Fax Number

## **A. GENERAL PROVISIONS**

### **A.1. Definitions**

As used herein, the following terms shall have the following meaning unless the context clearly indicates otherwise:

- A.1.1. "Acquisition" means items, products, materials, supplies, services, and equipment a state agency acquires by purchase, lease purchase, lease with option to purchase, or rental pursuant to the Oklahoma Central Purchasing Act;
- A.1.2. "Addendum" means a written restatement of or modification to a Contract Document executed by the Supplier and State.
- A.1.3. "Bid" means an offer in the form of a bid, proposal, or quote a bidder submits in response to a solicitation;
- A.1.4. "Bidder" means an individual or business entity that submits a bid in response to a solicitation;
- A.1.5. "Solicitation" means a request or invitation by the State Purchasing Director or a state agency for a supplier to submit a priced offer to sell acquisitions to the state. A solicitation may be an invitation to bid, request for proposal, or a request for quotation; and
- A.1.6. "Supplier" or "vendor" means an individual or business entity that sells or desires to sell acquisitions to state agencies.

### **A.2. Bid Submission**

- A.2.1. Submitted bids shall be in strict conformity with the instructions to bidders and shall be submitted with a completed Responding Bidder Information, OMES-FORM-CP-076, and any other forms required by the solicitation.
- A.2.2. Bids shall be submitted to the procuring agency in a single envelope, package, or container and shall be sealed, unless otherwise detailed in the solicitation. The name and address of the bidder shall be inserted in the upper left corner of the single envelope, package, or container. SOLICITATION NUMBER AND SOLICITATION RESPONSE DUE DATE AND TIME MUST APPEAR ON THE FACE OF THE SINGLE ENVELOPE, PACKAGE, OR CONTAINER.
- A.2.3. The required certification statement, "Certification for Competitive Bid and/or Contract (Non-Collusion Certification)", OMES-FORM-CP-004, must be made out in the name of the bidder and must be properly executed by an authorized person, with full knowledge and acceptance of all its provisions.
- A.2.4. All bids shall be legible and completed in ink or with electronic printer or other similar office equipment. Any corrections to bids shall be identified and initialed in ink by the bidder. Penciled bids and penciled corrections shall NOT be accepted and will be rejected as non-responsive. In addition to a hard copy submittal, the bidder will also be required to submit an electronic copy. Electronic responses must be submitted in the identical format contained in the solicitation (for example Microsoft Word, Microsoft Excel, but not Adobe PDF). In the event the hard copy of the price worksheets and electronic copy of the price worksheets do not agree, the electronic copy will prevail.
- A.2.5. All bids submitted shall be subject to the Oklahoma Central Purchasing Act, Central Purchasing Rules, and other statutory regulations as applicable, these General Provisions, any Special Provisions, solicitation specifications, required certification statement, and all other terms and conditions listed or attached herein—all of which are made part of this solicitation.

### **A.3. Solicitation Amendments**

- A.3.1. If an "Amendment of Solicitation", OMES-FORM-CP-011, is issued, the bidder shall acknowledge receipt of any/all amendment(s) to solicitations by signing and returning the solicitation amendment(s). Amendment acknowledgement(s) may be submitted with the bid or may be forwarded separately. If forwarded separately, amendment acknowledgement(s) must contain the solicitation number and response due date and time on the front of the envelope. The procuring agency must receive the amendment acknowledgement(s) by the response due date and time specified for receipt of bids for the bid to be deemed responsive. Failure to acknowledge solicitation amendments may be grounds for rejection.
- A.3.2. No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in the solicitation. All amendments to the solicitation shall be made in writing by the procuring agency.
- A.3.3. It is the bidder's responsibility to check frequently for any possible amendments that may be issued. The procuring agency is not responsible for a bidder's failure to download any amendment documents required to complete a solicitation.

#### **A.4. Bid Change**

If the bidder needs to change a bid prior to the solicitation response due date, a new bid shall be submitted to the procuring agency with the following statement "This bid supersedes the bid previously submitted" in a single envelope, package, or container and shall be sealed, unless otherwise detailed in the solicitation. The name and address of the bidder shall be inserted in the upper left corner of the single envelope, package, or container. SOLICITATION NUMBER AND SOLICITATION RESPONSE DUE DATE AND TIME MUST APPEAR ON THE FACE OF THE SINGLE ENVELOPE, PACKAGE, OR CONTAINER.

#### **A.5. Certification Regarding Debarment, Suspension, and Other Responsibility Matters**

By submitting a response to this solicitation:

- A.5.1. The prospective primary participant and any subcontractor certifies to the best of their knowledge and belief, that they and their principals or participants:
  - A.5.1.1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal, State or local department or agency;
  - A.5.1.2. Have not within a three-year period preceding this proposal been convicted of or pled guilty or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) contract; or for violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - A.5.1.3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph A.5.1.2. of this certification; and
  - A.5.1.4. Have not within a three-year period preceding this application/proposal had one or more public (Federal, State, or local) contracts terminated for cause or default.
- A.5.2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to its solicitation response.

#### **A.6. Bid Opening**

Sealed bids shall be opened by the Oklahoma Dept of Transportation located at See Page 1  
\_\_\_\_\_ at the time and date specified in the solicitation as the Response Due Date and Time.

#### **A.7. Open Bid / Open Record**

Pursuant to the Oklahoma Public Open Records Act, a public bid opening does not make the bid(s) immediately accessible to the public. The procurement or contracting agency shall keep the bid(s) confidential, and provide prompt and reasonable access to the records only after a contract is awarded or the solicitation is cancelled. This practice protects the integrity of the competitive bid process and prevents excessive disruption to the procurement process. The interest of achieving the best value for the State of Oklahoma outweighs the interest of vendors immediately knowing the contents of competitor's bids. [51 O.S. § 24A.5(5)]

Additionally, financial or proprietary information submitted by a bidder may be designated by the Purchasing Director as confidential and the procurement entity may reject all requests to disclose information designated as confidential pursuant to 62 O.S. (2012) § 34.11.1(H)(2) and 74 O.S. (2011) § 85.10. Bidders claiming any portion of their bid as proprietary or confidential must specifically identify what documents or portions of documents they consider confidential and identify applicable law supporting their claim of confidentiality. The State Purchasing Director shall make the final decision as to whether the documentation or information is confidential pursuant to 74 O.S. § 85.10. Otherwise, documents and information a bidder submits as part of or in connection with a bid are public records and subject to disclosure after contract award or the solicitation is cancelled.

#### **A.8. Late Bids**

Bids received by the procuring agency after the response due date and time shall be deemed non-responsive and shall NOT be considered for any resultant award.

#### **A.9. Legal Contract**

- A.9.1. Submitted bids are rendered as a legal offer and any bid, when accepted by the procuring agency, shall constitute a contract.

A.9.2. The Contract resulting from this solicitation may consist of the following documents in the following order of precedence:

A.9.2.1. Any Addendum to the Contract;

A.9.2.2. Purchase order, as amended by Change Order (if applicable);

A.9.2.3. Solicitation, as amended (if applicable); and

A.9.2.4. Successful bid (including required certifications), to the extent the bid does not conflict with the requirements of the solicitation or applicable law.

A.9.3. Any contract(s) awarded pursuant to the solicitation shall be legibly written or typed.

#### **A.10. Pricing**

A.10.1. Bids shall remain firm for a minimum of sixty (60) days from the solicitation closing date.

A.10.2. Bidders guarantee unit prices to be correct.

A.10.3. In accordance with 74 O.S. §85.40, ALL travel expenses to be incurred by the supplier in performance of the Contract shall be included in the total bid price/contract amount.

#### **A.11. Manufacturers' Name and Approved Equivalents**

Unless otherwise specified in the solicitation, manufacturers' names, brand names, information and/or catalog numbers listed in a specification are for information and not intended to limit competition. Bidder may offer any brand for which they are an authorized representative, and which meets or exceeds the specification for any item(s). However, if bids are based on equivalent products, indicate on the bid form the manufacturer's name and number. Bidder shall submit sketches, descriptive literature, and/or complete specifications with their bid. Reference to literature submitted with a previous bid will not satisfy this provision. The bidder shall also explain in detail the reason(s) why the proposed equivalent will meet the specifications and not be considered an exception thereto. Bids that do not comply with these requirements are subject to rejection.

#### **A.12. Clarification of Solicitation**

A.12.1. Clarification pertaining to the contents of this solicitation shall be directed in writing to the Contracting Officer specified in the solicitation, and must be prior to the closing date of the solicitation.

A.12.2. If a bidder fails to notify the State of an error, ambiguity, conflict, discrepancy, omission or other error in the SOLICITATION, known to the bidder, or that reasonably should have been known by the bidder, the bidder shall submit a bid at its own risk; and if awarded the contract, the bidder shall not be entitled to additional compensation, relief, or time, by reason of the error or its later correction. If a bidder takes exception to any requirement or specification contained in the SOLICITATION, these exceptions must be clearly and prominently stated in their response.

A.12.3. Bidders who believe proposal requirements or specifications are unnecessarily restrictive or limit competition may submit a written request for administrative review to the contracting officer listed on the solicitation. This request must be made prior to the closing date of the solicitation.

#### **A.13 Negotiations**

A.13.1. In accordance with Title 74 §85.5, the State of Oklahoma reserves the right to negotiate with one, selected, all or none of the vendors responding to this solicitation to obtain the best value for the State. Negotiations could entail discussions on products, services, pricing, contract terminology or any other issue that may mitigate the State's risks. The State shall consider all issues negotiable and not artificially constrained by internal corporate policies. Negotiation may be with one or more vendors, for any and all items in the vendor's offer.

A.13.2. Firms that contend that they lack flexibility because of their corporate policy on a particular negotiation item shall face a significant disadvantage and may not be considered. If such negotiations are conducted, the following conditions shall apply:

A.13.3. Negotiations may be conducted in person, in writing, or by telephone.

A.13.4. Negotiations shall only be conducted with potentially acceptable offers. The State reserves the right to limit negotiations to those offers that received the highest rankings during the initial evaluation phase.

A.13.5. Terms, conditions, prices, methodology, or other features of the bidders offer may be subject to negotiations and subsequent revision. As part of the negotiations, the bidder may be required to submit supporting

financial, pricing, and other data in order to allow a detailed evaluation of the feasibility, reasonableness, and acceptability of the offer.

- A.13.6. The requirements of the Request for Proposal shall not be negotiable and shall remain unchanged unless the State determines that a change in such requirements is in the best interest of the State Of Oklahoma.

#### **A.14. Rejection of Bid**

The State reserves the right to reject any bids that do not comply with the requirements and specifications of the solicitation. A bid may be rejected when the bidder imposes terms or conditions that would modify requirements of the solicitation or limit the bidder's liability to the State. Other possible reasons for rejection of bids are listed in OAC 260:115-7-32.

#### **A.15. Award of Contract**

- A.15.1. The State Purchasing Director may award the Contract to more than one bidder by awarding the Contract(s) by item or groups of items, or may award the Contract on an ALL OR NONE basis, whichever is deemed by the State Purchasing Director to be in the best interest of the State of Oklahoma.
- A.15.2. Contract awards will be made to the lowest and best bidder(s) unless the solicitation specifies that best value criteria is being used.
- A.15.3. In order to receive an award or payments from the State of Oklahoma, suppliers must be registered. The vendor registration process can be completed electronically through the OMES website at the following link: <https://www.ok.gov/dcs/vendors/index.php>.

#### **A.16. Contract Modification**

- A.16.1. The Contract is issued under the authority of the State Purchasing Director who signs the Contract. The Contract may be modified only through a written Addendum, signed by the State Purchasing Director and the supplier .
- A.16.2. Any change to the Contract, including but not limited to the addition of work or materials, the revision of payment terms, or the substitution of work or materials, directed by a person who is not specifically authorized by the procuring agency in writing, or made unilaterally by the supplier, is a breach of the Contract. Unless otherwise specified by applicable law or rules, such changes, including unauthorized written Addendums, shall be void and without effect, and the supplier shall not be entitled to any claim under this Contract based on those changes. No oral statement of any person shall modify or otherwise affect the terms, conditions, or specifications stated in the resultant Contract.

#### **A.17. Delivery, Inspection and Acceptance**

- A.17.1. Unless otherwise specified in the solicitation or awarding documents, all deliveries shall be F.O.B. Destination. The supplier(s) awarded the Contract shall prepay all packaging, handling, shipping and delivery charges and firm prices quoted in the bid shall include all such charges. All products and/or services to be delivered pursuant to the Contract shall be subject to final inspection and acceptance by the State at destination. "Destination" shall mean delivered to the receiving dock or other point specified in the purchase order. The State assumes no responsibility for goods until accepted by the State at the receiving point in good condition. Title and risk of loss or damage to all items shall be the responsibility of the supplier until accepted by the receiving agency. The supplier(s) awarded the Contract shall be responsible for filing, processing, and collecting any and all damage claims accruing prior to acceptance.
- A.17.2. Supplier(s) awarded the Contract shall be required to deliver products and services as bid on or before the required date. Deviations, substitutions or changes in products and services shall not be made unless expressly authorized in writing by the procuring agency.

#### **A.18. Invoicing and Payment**

- A.18.1. Upon submission of an accurate and proper invoice, the invoice shall be paid in arrears after products have been delivered or services provided and in accordance with applicable law. Invoices shall contain the purchase order number, a description of the products delivered or services provided, and the dates of such delivery or provision of services. An invoice is considered proper if sent to the proper recipient and goods or services have been received.
- A.18.2. State Acquisitions are exempt from sales taxes and federal excise taxes.
- A.18.3.** Pursuant to 74 O.S. §85.44(B), invoices will be paid in arrears after products have been delivered or services provided.



A.18.4. Payment terms will be net 45. Interest on late payments made by the State of Oklahoma is governed by 62 O.S. § 34.72.

A.18.5. Additional terms which provide discounts for earlier payment may be evaluated when making an award. Any such additional terms shall be no less than ten (10) days increasing in five (5) day increments up to thirty (30) days. The date from which the discount time is calculated shall be the date of a proper invoice.

**A.19. Tax Exemption**

State agency acquisitions are exempt from sales taxes and federal excise taxes. Bidders shall not include these taxes in price quotes.

**A.20. Audit and Records Clause**

A.20.1. As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form. In accepting any Contract with the State, the successful bidder(s) agree any pertinent State or Federal agency will have the right to examine and audit all records relevant to execution and performance of the resultant Contract.

A.20.2. The successful supplier(s) awarded the Contract(s) is required to retain records relative to the Contract for the duration of the Contract and for a period of seven (7) years following completion and/or termination of the Contract. If an audit, litigation, or other action involving such records is started before the end of the seven (7) year period, the records are required to be maintained for two (2) years from the date that all issues arising out of the action are resolved, or until the end of the seven (7) year retention period, whichever is later.

**A.21. Non-Appropriation Clause**

The terms of any Contract resulting from the solicitation and any Purchase Order issued for multiple years under the Contract are contingent upon sufficient appropriations being made by the Legislature or other appropriate government entity. Notwithstanding any language to the contrary in the solicitation, purchase order, or any other Contract document, the procuring agency may terminate its obligations under the Contract if sufficient appropriations are not made by the Legislature or other appropriate governing entity to pay amounts due for multiple year agreements. The Requesting (procuring) Agency's decisions as to whether sufficient appropriations are available shall be accepted by the supplier and shall be final and binding.

**A.22. Choice of Law**

Any claims, disputes, or litigation relating to the solicitation, or the execution, interpretation, performance, or enforcement of the Contract shall be governed by the laws of the State of Oklahoma.

**A.23. Choice of Venue**

Venue for any action, claim, dispute or litigation relating in any way to the Contract shall be in Oklahoma County, Oklahoma.

**A.24. Termination for Cause**

A.24.1. The supplier may terminate the Contract for default or other just cause with a 30-day written request and upon written approval from the procuring agency. The State may terminate the Contract for default or any other just cause upon a 30-day written notification to the supplier.

A.24.2. The State may terminate the Contract immediately, without a 30-day written notice to the supplier, when violations are found to be an impediment to the function of an agency and detrimental to its cause, when conditions preclude the 30-day notice, or when the State Purchasing Director determines that an administrative error occurred prior to Contract performance.

A.24.3. If the Contract is terminated, the State shall be liable only for payment for products and/or services delivered and accepted.

**A.25. Termination for Convenience**

A.25.1. The State may terminate the Contract, in whole or in part, for convenience if the State Purchasing Director determines that termination is in the State's best interest. The State Purchasing Director shall terminate the contract by delivering to the supplier a Notice of Termination for Convenience specifying the terms and

effective date of Contract termination. The Contract termination date shall be a minimum of 60 days from the date the Notice of Termination for Convenience is issued by the State Purchasing Director.

A.25.2. If the Contract is terminated, the State shall be liable only for products and/or services delivered and accepted, and for costs and expenses (exclusive of profit) reasonably incurred prior to the date upon which the Notice of Termination for Convenience was received by the supplier.

**A.26. Insurance**

The successful supplier(s) awarded the Contract shall obtain and retain insurance, including workers' compensation, automobile insurance, medical malpractice, and general liability, as applicable, or as required by State or Federal law, prior to commencement of any work in connection with the Contract. The supplier awarded the Contract shall timely renew the policies to be carried pursuant to this section throughout the term of the Contract and shall provide the procuring agency with evidence of such insurance and renewals.

**A.27. Employment Relationship**

The Contract does not create an employment relationship. Individuals performing services required by this Contract are not employees of the State of Oklahoma or the procuring agency. The supplier's employees shall not be considered employees of the State of Oklahoma nor of the procuring agency for any purpose, and accordingly shall not be eligible for rights or benefits accruing to state employees.

**A.28. Compliance with the Oklahoma Taxpayer and Citizen Protection Act of 2007**

By submitting a bid for services, the bidder certifies that they, and any proposed subcontractors, are in compliance with 25 O.S. §1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O.S. §1312 and includes but is not limited to the free Employment Verification Program (E-Verify) through the Department of Homeland Security and available at [www.dhs.gov/E-Verify](http://www.dhs.gov/E-Verify).

**A.29. Compliance with Applicable Laws**

The products and services supplied under the Contract shall comply with all applicable Federal, State, and local laws, and the supplier shall maintain all applicable licenses and permit requirements.

**A.30. Special Provisions**

Special Provisions set forth in SECTION B apply with the same force and effect as these General Provisions. However, conflicts or inconsistencies shall be resolved in favor of the Special Provisions.

1. Project Location

Oklahoma Department of Transportation  
Materials Division  
5201 NE 122<sup>nd</sup> Street  
Building 4011  
Edmond, OK 73013

2. Scope of Services

This project shall consist of the purchase and delivery of a Bench top Sequential Wavelength Dispersive X-ray Fluorescence Spectrometer (WDXRF) Bruker S6 Jaguar or equivalent configured for the analysis of fly-ash, cement related materials, glass beads, cement, and supplementary cementitious materials: on-site operation and safety training for 4 personnel for the WDXRF; shipping and disposal of a Panalytical Inc, Model AXIOS XRF; and shipping and disposal of a Panalytical, Inc. Model Cubix-Pro XRD. This purchase shall also include on-site set-up and calibration.

2.1 General Requirements. The Vendor, as an independent agent of the Oklahoma Department of Transportation (Department), shall supply necessary personnel, equipment, transportation, and all other items necessary for the shipment of the requested WDXRF, a table to place the WDXRF on and all other incidentals necessary for the subsequent deliver of the equipment. An internal cooling system is preferred. If an external cooling system is required, the price of said cooling system shall be included in the bid price for the WDXRF.

The Vendor shall be responsible for any other background work/research needed/required to confirm the Department's Permit for Radiation Producing Equipment has the capacity to receive the requested equipment. Any failure to do so shall not relieve the vendor from the responsibility and shall be without additional expense to the Department.

Review and discussion of the materials license can be scheduled by calling Ms. Stacy Welty at 405-766-0493. Review of the license shall be limited to Monday through Friday between 7:30 AM and 4:30 PM CST, excluding holidays.

If a specification or description of the equipment, as outlined in this document, conflicts with a law or regulation, the regulation will supersede.

2.2 Notification. The Vendor shall notify the Department ten (10) business days prior to the delivery of the WDXRF.

3.0 Technical Standard. Provide a bench top WDXRF which complies with all relevant ASTM and AASHTO standards to ensure accuracy and reliability. The equipment shall be configured for the analysis of glass beads, fly-ash cement, and supplementary cementitious materials. Cement Quant calibration package and standardless software will be included as well as He gas flushing for liquids and loose powders analysis.

3.1 Footprint

- 3.1.1 Spectrometer enclosure with easy access to maintenance parts on casters. Footprint should not exceed 8.6 ft<sup>2</sup> (0.8 m<sup>2</sup>).
- 3.1.2 Included vacuum pump that can be positioned anywhere in the vicinity of the system
- 3.2 Tube and Generator:
  - 3.2.1 Tube below design
  - 3.2.2 Rh target end-window X-ray tube with thin 75um Be window to be used such that no external cooling water is needed.
  - 3.2.3 Settings for kV and mA should be individually selectable via the Software in increments of 1 in the range from 1 to 17 mA and from 20kV upwards.
  - 3.2.4 HV generator with preferably maximum power 400 W.
  - 3.2.5 The tube window and geometry should enable the illumination of a 32-34mm maximum spot size without exceeding temperatures of more than 50 deg C on the sample surface.
- 3.3 Maintenance
  - 3.3.1 Temperature controlled interior with stabilization better than 0.05 deg C. Sensors and warnings to clearly display temperature changes of more than 0.1 deg from standard setting.
  - 3.3.2 Easily accessible de-ionized internal water-cooling system to operate the tube to safeguard the investment in the x-ray tube.
  - 3.3.3 Quick soft-shutdown option
  - 3.3.4 One set of QA reference samples used for instrument check and drift correction.
- 3.4 Sample Loading
  - 3.4.1 Liquid / powder sample cup detection with automatic rejection of running liquids or powders in vacuum mode
  - 3.4.2 Auto-loader with 22 or more positions for unattended analysis
  - 3.4.3 Mixed batches of liquids and solids can be added to autoloader at any time
  - 3.4.4 Sample tray to allow transport of several samples to and from system
  - 3.4.5 Sample seal and dust reservoir to protect goniometer components
  - 3.4.6 Manual mode available
- 3.5 Beam Path

- 3.5.1 5-position filter changer with Al and Cu filters for better peak to background ratio
- 3.5.2 Collimator masks from 34 to 18 mm for different sample sizes  
Programmable sample rotation system
- 3.5.3 High-transmission vacuum seal separating sample and goniometer chamber

### 3.6 High Precision Goniometer

- 3.6.1 Goniometer should be digitally driven and controlled. Independent drives for theta and two theta.
- 3.6.2 Collimator for both: Enhanced spectral resolution and high sensitivity for better detection limits and analytical precision
- 3.6.3 Crystal changer with at least 3 crystals fitted to cover all elements (F-U): LiF200 (K-U), PET (Al-Cl) and a synthetic multilayer crystal (F-Mg). Preferably with additional position to add high resolution curved Ge crystal for better detection limits and resolution for P, S, Cl
- 3.6.4 Detector system with two detectors with linear range up to 2 Mcps
  - 3.6.4.1 Solid state detector for best heavy element detection.
  - 3.6.4.2 Flow counter for best sensitivity for light elements

### 3.7 X-ray Analytical Software

- 3.7.1 State of the art software for qualitative and quantitative applications
- 3.7.2 System should be capable of performing Standardless / Semiquantitative Analysis which are Scan and Peak Background based.
- 3.7.3 Analytical Assistant for the definition of analytical programs and calibrations
- 3.7.4 Multivariable Regression for calibration curves determination including a range of correction models:
  - 3.7.4.1 Empirical (Concentration and Intensity based corrections)
  - 3.7.4.2 Fixed Theoretical Alphas (based on full Sherman Equation)
  - 3.7.4.3 Variable Theoretical Alphas (based on full Sherman Equation) for most accurate and theoretically correct computation of inter element correction factors for wider concentration ranges.
- 3.7.5 Loader program
  - 3.7.5.1 Intuitive setup of samples

3.7.5.2 Automatable daily check routine for system and custom programs

3.7.5.3 Easy setup of sample scheduling

3.7.5.4 Easy access to measure check samples and drift corrections

3.7.6 Results display program

3.7.6.1 User specific formats for display and printing

3.7.6.2 Results storage and retrieval, statistics and export to Windows based Applications and/or Lims systems

3.7.6.3 Highlighting of specification limits for check samples and desired concentration ranges

3.7.6.4 Displaying and visualization of measurements, methods parameters and analysis trends

3.7.7 Monitoring

3.7.7.1 Software includes monitor dashboard of system health and options to for quick trouble-shooting

3.8 Connectivity

3.8.1 Network connectivity of Software, Results and Instrument Status must be retrievable via network.

3.8.2 Preferably Software can be operated from more than one PC and access a shared database for the results storage.

3.9 Measurement modes

3.9.1 Available modes: Vacuum, Helium (reduced and atmospheric), Air

3.9.2 Vacuum

3.9.2.1 Pressure-controlled sample introduction, including pump exhaust filters.

3.9.2.2 The pressure-controlled sample introduction should only open the vacuum slider once the vacuum in the sample chamber is identical to the spectrometer chamber to ensure best stability and a long lifetime of the detector foil.

3.9.2.3 The pressure-controlled sample introduction or working equivalent should ensuring reproducible vacuum for each sample introduction, which is especially important for light element analysis.

3.9.3 Helium

3.9.3.1 The system should be equipped with a Helium purge to handle liquid or loose powder samples.

3.9.3.2 It should have a safeguard against accidental introduction of liquids samples in vacuum. The changeover time between Vacuum and Helium should be short without compromising the short-term stability.

3.9.3.3 The Helium consumption should be minimal with a seal separating the goniometer from the sample chamber. It should be possible to measure also highly volatile liquids such as jet fuels or acetone. Preferably the system should be equipped with a

#### 3.9.4 Air

3.9.4.1 Air mode should be available allowing measurement of element Ca and up in liquids and powders without the need for Helium.

### 3.10 Touch Screen

3.10.1 Intuitive control via touch screen

3.10.2 Simplified touch screen mode available – can be used with minimal training

3.10.3 Island mode possible without connection to external PC needed

3.10.4 Touch screen with same capabilities as normal PC

3.10.5 Same software on touch screen as on optional external PC

### 3.11 Documentation

3.11.1 Instrument documentation on USB, user manual on paper, including electrical and block diagrams.

3.11.2 Recovery CD for entire system, On Site warranty for one year

3.11.3 User's manual on paper

3.11.4 Tutorial with easy-to-follow self-tutoring steps to set up calibration and overview poster for daily operation as pdf

### 3.12 Installation

3.12.1 Includes factory hardware and software installation, onsite commissioning with basic software and operation training

3.12.2 Demonstration and Introduction to system at Install

3.12.3 Fulfillment of Manufacturers acceptance test procedure on Site according to IQ and OQ. Bidder to Detail procedure and enclose documentation to quote.

3.12.4 On Site support for development of calibrations by experienced application scientists: 2 days (all expenses included) to train operators and set up 1 or more calibrations. Needed reference material and infrastructure is provided by the client.

3.13 Quote

3.13.1 System price should contain all mandatory items as detailed above and should include installation and commissioning as well as delivery to the Bidders facility free of charge.

3.13.2 The basic Warranty should at least be one year on ALL parts including hardware and software,

3.13.3 Enclose additional pricing for service contracts of different levels after the expiration of the warranty.

4. Disposal

Disposal shall include the cost for disposal of one (1) Panalytical, Inc Model AXIOS XFR and one (1) Panalytical, Inc. Model CUBIX-PRO XRD in compliance with state and federal regulations.

5. Trade-In

The purchase price for the new WDXRF shall include any trade-in value.

6. Shipping/Delivery

Shipping/transportation costs shall include all costs for delivery of the new equipment to the ODOT Materials Division and cost of delivery of the existing XRF and XRD to the Vendor for disposal.

7. Operation and Safety Training

The purchase price shall include on-site safety and operation training for up to 4 personnel.





## Pricing Sheet

**Solicitation #**

**Description:**

**Location:**

Item # 2	Quantity	Price
<input type="text" value="Benchtop WDXRF"/>	<input type="text" value="1"/>	<input type="text" value="\$"/>

Item #3	Quantity	Price
<input type="text" value="Freight and/or Delivery"/>	<input type="text" value="1"/>	<input type="text" value="\$"/>

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**Comments:**

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**Authorized Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_