

		Date Bids Due: May 20, 2015	Time of Bid Opening: 1:00 P.M.	Bid Opening Location: 800 Lincoln Way, Ames, IA	
Proposal Number: 14202	Description: 62-Foot Reach Under-Bridge Inspection Unit with 3-Person Platform				
Contract to Begin: N/A	Date of Completion: N/A	Proposal Guaranty Amount: N/A	Performance Bond (Y/N) N/A	Liquidated Damages: N/A	
Purchasing Agent: Zach Gillen		E-mail Address: zachary.gillen@dot.iowa.gov	Phone: 515-239-1347	Fax: 515-239-1538	
Company Name:				Federal Tax ID:	
Street Address:		City:	State:	Zip Code:	
Supplier Contact (type or print)	E-mail Address:		Phone:	Fax:	
Supplier agrees to sell items/services at the same prices, terms and conditions to any other state agency. Regent or Political Subdivision upon request. Please check Yes or No. <input type="checkbox"/> Yes <input type="checkbox"/> No			Are you an Iowa Targeted Small Business? <input type="checkbox"/> Yes <input type="checkbox"/> No		

GENERAL INFORMATION

This bid proposal includes the Bid Response cover page, Schedule of Prices, Standard Terms and Conditions, Supplemental terms (if any), specifications, mailing label and all other information needed to prepare a bid response. Information in the "Bid Response" above must be typed or completed in ink, signed, and returned in a flat style envelope along with any other information required in the bid proposal prior to the bid opening date and time. Please use the furnished mailing label, or label the bid response as "Iowa Department of Transportation, proposal number & letting date" on the outside of the return envelope. Bidders may personally deliver, mail, or select a carrier that ensures timely delivery. **Faxed or e-mail bids will not be accepted.**

If required, each bid response must be accompanied by a proposal guaranty in an accepted form, in the sum indicated above. Refer to the Standard Terms and Conditions for the accepted forms in which the proposal guaranty requirement may be fulfilled. **Bids lacking a required proposal guaranty will not be considered for award.** If the intended awarded bidder fails to enter into a formal contract within fifteen (15) days after award is made for any reason on their part, the proposal guaranty may be retained by the State.

PROPOSAL STATEMENT

The entire contents of this Proposal, Addendums to the Proposal, Specifications, Supplemental Terms and Conditions, Standard Terms and Conditions, and Schedule of Prices shall become part of the contract.

We promise to furnish all materials, equipment and/or services specified, in the manner and the time prescribed, at prices hereinafter set out.

We certify that we have not, either directly or indirectly, entered into any agreement or participated in any collusion or otherwise taken any action in restraint of free competition; that no attempt has been made to induce any other person or firm to submit or not to submit a bid; that this bid has been independently arrived at without collusion with any other bidder, competitor, or potential competitor; and that this bid has not been knowingly disclosed prior to the opening of bids to any other bidder or competitor.

We certify that all materials, equipment and/or services proposed meet or exceed the specifications and will be supplied in accordance with the entire contents of this proposal.

We promise to complete the contract within the contract period, or pay any liquidated damages, if stipulated, for each calendar day as set forth in the bid documents.

Signed _____ Date _____



Schedule Of Prices

Number	14202
Date Required	05/20/2015 1:00 PM

Title 62-Foot Reach Under-Bridge Inspection Unit
with 3-Person Platform

Vendor

Delivery Location AMES, IA 50010

PA Name Zachary Gillen

Shipping Terms FOB Destination/Freight Prepaid

Phone 515-239-1347

E-Mail zachary.gillen@dot.iowa.gov

Description

Product Availability Days: _____

Item	Qty	Unit	Description	Part #	Unit Price	Total Price
1	1	EACH	Truck, Underbridge Inspection As per attached specifications: Spec. No. 1-A25B-B057-0315 Delivery Location: AMES, IA 50010			
Comments:						
2	1	EACH	Boom, Underbridge Inspection As per attached specifications: Spec. No. 1-A25B-B057-0315 Delivery Location: AMES, IA 50010			
Comments:						

I HEREBY CERTIFY THAT THIS PROPOSAL MEETS OR EXCEEDS THE MINIMUM REQUIREMENT INCLUDING SPECIFICATIONS AND ADDENDUMS.

Signature: _____ Date: _____



**Iowa Department of Transportation
Standard Terms and Conditions For
Bid Proposals/Contracts
-FORMAL-**

Formal is the procurement process required by Iowa law when the estimated, aggregate amount of the purchase equals or exceeds \$50,000.

The entire contents of this bid proposal shall become a part of a contract or purchase order. In case of a discrepancy between the contents of the bid documents, the following items listed by descending order shall prevail:

- Addendums to the bid proposal
- Bid Proposal-
- Schedule of Prices
- Specifications
- Plans and Drawings
- Supplemental Terms and Conditions
- Standard Terms and Conditions

(Example - if a statement in the specifications contradicts a statement in the Standard Terms and Conditions, the statement in the specifications shall apply)

Preparation of Bid Response: All bid responses must address all aspects of the proposal including clearly answering all questions within the proposal. Bid responses must be typed or completed in ink and submitted on the forms supplied by the Iowa DOT.

Bid responses must be signed and received prior to the bid opening date and time as indicated on the Bid Response cover page or bid opportunity. The signed, submitted quotation or bidder's proposal shall become the official bid response to be considered for award.

No email, fax or web link bid responses will be accepted. Bid Responses must be signed, sealed and delivered in person or by a mail courier that ensures timely delivery.

A. Bid Proposal

1. **Bid Opening:** Bid openings are made public and conducted at the Iowa DOT, Ames complex unless otherwise specified. Bid responses received after the time of the bid opening will be returned unopened and considered non-compliant.
2. **Communications:** Questions concerning this proposal should be directed to the purchasing agent listed on the bid proposal. Inquiries can be written, phoned, or faxed. In all cases, written communication will take precedence over verbal communication
3. **Proposal Guarantee:** If required, the bid response page will indicate the amount required to be included in the bid response. A Proposal Guarantee can be supplied in one of the following ways: **(1)** Certified check or credit union certified share draft, cashier's check, or bank draft, drawn on a solvent bank or credit union. Certified checks and certified share drafts shall be drawn and endorsed in the amount indicated. Checks or drafts shall be made payable either to the Iowa Department of Transportation (Iowa DOT) or to the bidder. If payable to the bidder, the check or draft shall be endorsed without qualifications to the Iowa DOT by the bidder or an authorized agent. **(2)** An insurance or surety company may be retained to provide a bond in fulfillment of the proposal guarantee requirement. A properly completed and signed copy of the Proposal Guarantee (*Form 131084*) must accompany the bid. **The Iowa DOT's Proposal Guarantee form must be used; no other forms or formats will be accepted.**
4. **Pricing and Discount:** Unit prices shown on the bid/response shall be quoted as the price per unit (e.g., gal., case, each, etc.) as stated in the bid proposal. If there is a discrepancy between the unit bid prices, extension, or total amount of bid, the unit prices shall prevail. Unless otherwise indicated, prices shall be firm for the duration of the contract or purchase. Discounts for early payment are allowed, but not considered in award of the contract.

5. **Acceptance/Rejection:** The Iowa DOT reserves the right to accept or reject any or all bids and to waive irregularities or technicalities, provided such waiver does not substantially change the offer or provide a competitive advantage to any supplier(s). The Iowa DOT also reserves the right to accept that bid which is deemed to be in the best interests of the state. Any unauthorized changes, additions, or conditional bids including any ties to another bid or proposal or any reservations about accepting an award or entering into a contract, may result in rejection of the bid. Bids must remain available for award for thirty (30) days from date of bid opening.
6. **Bid Results & Disclosure:** Bid tabulations will be posted on the DOT website at www.iowadot.gov/purchasing under the *Bid Award* link referencing the proposal number with an award recommendation indicated. At the conclusion of the selection process, the contents of all received bid responses will be placed in the public domain and be open to inspection by interested parties, according to state law. Trade secrets or proprietary information that are recognized as such and are protected by law may be withheld if clearly identified as such in the proposal.
7. **Quality:** All material shall be new and of first quality. Items which are used, demonstrators, refurbished, obsolete, seconds, or which have been discontinued are unacceptable without prior written approval by the Iowa DOT.
8. **Recycled Content:** The Iowa Code encourages purchase of products and materials with recycled content, including but not limited to paper products, oils, plastic products, compost materials, aggregate, solvents, and rubber products. Recycled items or alternatives must be noted in the bid response, if known.
9. **Shipping Terms:** Deliveries shall be F.O.B. Destination unless otherwise specified. All deliveries shall be accompanied by a packing slip indicating the Supplier, quantities shipped, and the purchase order number(s). All delivery charges shall be included in the bid price and paid by the Supplier. No collect C.O.D. deliveries shall be accepted. When entering into a contract, the Supplier shall notify the freight company that all freight and delivery charges are to be prepaid by the Supplier. Goods delivered to the Iowa DOT Distribution Center at 800 Lincoln Way, Ames, IA shall be received between the hours of 7:30 a.m. and 3:30 p.m. on any day except Saturday, Sunday, or a holiday. For deliveries to other Iowa DOT locations, the Supplier may contact the destination location for available times to deliver as not all Iowa DOT locations have the same business hours. The Iowa DOT will not be liable for any freight claims or unpaid freight bills arising from contract or purchase order issues.

B. Award

The binding agreement (award) may be issued in the form a purchase order or contract or both depending on the requirements and complexity of the agreement.

1. **Method of Award:** Award shall be made to the lowest responsible, responsive bidder whose bid meets the requirements of the solicitation and is the most advantageous to the Iowa DOT unless otherwise specified. An Iowa bidder will be given preference over an out-of-state bidder when bid responses are equal in all aspects and are tied in price. By virtue of statutory authority preference will be given to products and provisions grown and coal produced within the State of Iowa.
2. **Award Protests:** Protests of award recommendations are to be addressed to the Director of Purchasing, and shall be made in accordance with paragraph 761--20.4(6)"e" of the Iowa Administrative Code.
3. **Contracts:** Successful contractor(s) may be sent either a formal Contract, Notification of Award or purchase order as confirmation of acceptance and award. Any of these binding agreements shall be for the term stated in the bid proposal or on a purchase order and may be renewed for additional period(s) under the same terms and conditions upon mutual agreement as defined. The successful bidder may not assign a contract to another party without written authorization from the Iowa DOT Purchasing Section. A service contract, including all optional renewals, shall not exceed a term of six years unless a state agency obtains a waiver of this provision pursuant to rule 11-11B.16 (8A).
4. **Payment Terms:** The Iowa DOT typically pays properly submitted vendor invoices within thirty (30) days of receipt, providing goods and/or services have been successfully delivered, installed or inspected (if required), and accepted. Invoices presented for payment must be only for quantities received by the Iowa DOT and must reference the purchase order number to be submitted for processing.

5. **Default:** Failure of the Supplier to adhere to specified delivery schedules or to promptly replace rejected materials shall render the Supplier liable for all costs in excess of the bid price when alternate procurement is necessary. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the binding agreement.
6. **Default:** Failure of a Contractor other than a Supplier to meet any specified project completion deadline shall render the Contractor liable for all costs incurred by DOT that were: a) necessary to meet said deadline; or b) necessary to complete said project after said deadline. This shall not be the exclusive remedy and the Iowa DOT reserves the right to pursue other remedies available to it by law or under the terms of the agreement.

C. General

1. **Administrative Rules:** For Additional details on the rules governing the actions of the Iowa DOT Purchasing Section, refer to 761 IAC, Chapter 20, Iowa Administrative Code, entitled "Procurement of Equipment, Materials, Supplies and Services".
2. **Affirmative Action:** The Contractor (and also subcontractor, vendor or supplier) is prohibited from engaging in discriminatory employment practices forbidden by federal and state law, executive orders and rules of the Iowa Department of Management, pertaining to equal employment opportunity and affirmative action. Contractor may be required to have on file a copy of their affirmative action program, containing goal and time specifications. Contractors doing business with Iowa in excess of \$5,000 annually and employing 50 or more full time employees may be required to file with the Iowa Department of Management a copy of their affirmative action plan. Failure to fulfill these non-discrimination requirements may cause the contract to be canceled and the contractor declared ineligible for future state contracts or subject to other sanctions as provided by law or rule.
3. **Applicable Law:** The contract shall be governed under the laws of the State of Iowa. The contractor shall at all times comply with and observe all federal and state laws, local laws, ordinances, and regulations which are in effect during the period of a contract and which in any manner affect the work or its conduct. Any legal action relating to a contract shall only be commenced in the Story County, Iowa, District Court or the United States District Court for the Southern District of Iowa.
4. **Conflict of Interest:** No state or county official or employee, elective or appointive shall be directly or indirectly interested in any contract issued by the Iowa DOT, see Code of Iowa 314.2.
5. **Debarment and Vendor Suspension:** By submitting a proposal, the contractor is certifying that it and its principals and/or subcontractors are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by the State of Iowa or any Federal department or agency.
6. **Equal Opportunity:** Firms submitting bids must be an "Equal Opportunity Employer" as defined in the Civil Rights Act of 1964 and in Iowa Executive Order Number Thirty-four.
7. **Infringement:** Goods shall be delivered free of the rightful claim of any third party by way of infringement. Contractor shall indemnify and save harmless the State of Iowa and the Iowa DOT against all claims for infringement of, and/or royalties claimed under, patents or copyrights on materials and equipment furnished under this bid.
8. **Records Audit:** The contractor agrees that the Auditor of the State of Iowa or any authorized representative of the state, and where federal funds are involved, the Comptroller General of the U.S. Government, shall have access to and the right to examine, audit, excerpt, and transcribe any directly pertinent books, documents, papers, and records of the contractor relating to orders, invoices, or payments of a contract or purchase order.
9. **Targeted Small Businesses:** The Iowa DOT seeks to provide opportunities for women and/or minority small business enterprises. To apply for certification as an Iowa Targeted Small Business, contact the Iowa Department of Inspection and Appeals (515-281-5796). Contractors shall take documented steps to encourage participation from Targeted Small Businesses for the purpose of subcontracting and supplying of good or services or both.
10. **Taxes:** Prices quoted shall not include state or federal taxes from which the state is exempt. Exemption certificates will be furnished upon request.
11. **Termination:**
 - **Termination Due to Lack of Funds or Change in Law**
The Iowa DOT shall have the right to terminate this Contract without penalty by giving thirty (30) days written notice to the vendor as a result of any of the following:
 - Adequate funds are not appropriated or granted to allow the Iowa DOT to operate as required and to fulfill its obligations under contract.
 - Funds are de-appropriated or not allocated or if funds needed by the Iowa DOT, at the

Iowa DOT's sole discretion, are insufficient for any reason.

- The Iowa DOT's authorization to operate is withdrawn or there is a material alteration in the programs administered by the Iowa DOT.
- The Iowa DOT's duties are substantially modified.

Following a 30 day written notice, the Iowa DOT may terminate a binding agreement in whole or in part without the payment of any penalty or incurring any further obligation to the Supplier. Following termination upon notice, the Supplier shall be entitled to compensation upon submission of invoices and proper proof of claim for goods and services under contract up to and including the date of termination.

Iowa Department of Transportation
SUPPLEMENTAL TERMS & CONDITIONS
For
62-Foot Reach Under-Bridge Inspection Unit with 3-Person Platform
Proposal No.: 14202
Letting Date: May 20, 2015

Award

It is the intent of the Iowa DOT to award the contract to the responsible bidder whose submitted quotation is the most advantageous to the Iowa DOT, cost and other factors considered. Other factors include, but are not limited to: meeting or exceeding mandatory requirements, proposed staffing, and meeting required time schedule.

Purchase Order

One Purchase Order will be sent for entire quantities stated in Bid Request.

Alternatives or Exceptions

Any equipment being offered as an alternative to the specified make/model must be submitted on the enclosed form "Bidder's Request for Alternatives or Exceptions." The form must specifically state the requested alternative and be accompanied by adequate supporting information to evaluate the request.

The "Bidder's Request for Alternatives or Exceptions" form must be received in sufficient time *prior* to the bid opening to evaluate and respond with the appropriate action. It is suggested that any requests for alternatives be submitted either by e-mail or fax immediately upon receipt of the proposal in order to receive full consideration. Fair treatment to all vendors shall be the primary concern in evaluation of requests for proposed alternates, particularly those submitted just prior to the bid opening. **Do not submit "Bidder's Request for Alternative or Exceptions" with your bid response.**

Vendor Responsibilities

It shall be the responsibility of the bidding vendor to make sure their bid meets all specification and performance requirements. Bidders shall provide detailed information of the unit being bid including dimensions and clearances.

Pre-Delivery Inspection

Vendor shall do a thorough pre-delivery inspection, to include the chassis and all installed equipment. A copy of this inspection, signed by the technician who does it, shall be placed in truck cab.

Inspections

- A. The Department may, at its discretion, exercise rights of inspection. This may include none, any, or all of the following.
- B. Inspection at chassis manufacturer's facility. Vendor shall notify Equipment Services upon completion of the chassis. Vendor may be required, at the Department's discretion, to make arrangements for an inspection of the chassis at the point of manufacture.
- C. Inspection of bridge manufacturer's facility. The Department reserves the right to inspect the bridge unit manufacturer's facility. Vendor shall notify Equipment Services when the chassis is delivered and before outfitting begins.
- D. Inspection at 80% completion. Vendor shall notify Equipment Services when the outfitting is at the 80% completion stage. The Department reserves the right to inspect the under-bridge unit at this stage.

- E. Completion inspection. Vendor shall notify Equipment Services when the outfitting is complete and before scheduling delivery. The Department reserves the right to inspect the under-bridge unit at this stage.
- F. A written document of all inspections findings will be provided to the vendor and/or his outfitter. Discrepancies and/or findings of non-compliance will be listed and must be corrected and/or addressed to the satisfaction of the Department before delivery.
- G. Delivery inspection. Upon delivery to the Department, the complete unit will be thoroughly inspected. Discrepancies and/or findings of non-compliance will be listed and must be corrected and/or addressed to the satisfaction of the Department before payment will be rendered.

Manuals and Service Publications

- A. Three (3) complete sets of manuals shall be provided. Vehicle payment may be withheld until complete manual sets are received for each specific vehicle when it is delivered.
- B. Chassis set shall be all inclusive, containing all available chassis publications, to include at a minimum an operator's manual, service/repair instruction set (must detail all components), a complete fully illustrated parts manual (must include all components) and wiring diagrams.
- C. Under bridge equipment set shall be all inclusive, containing accurate and detailed publications on all components. They shall include at a minimum operator's manuals, service and repair instructions, complete wiring diagrams, and complete fully illustrated parts lists.
- D. Publications must be bound into manuals or installed in binders when delivered to the Department; boxed, shrink-wrapped or otherwise unbound loose pages are not acceptable.

Warranty

Truck Chassis

- A. The chassis manufacturer shall guarantee to furnish all warranty services gratis at franchised dealers within the State of Iowa.
- B. From the date the Department assigns this chassis to its requesting location, the manufacturer and/or its representative shall provide a no deductible all-inclusive warranty (less normal maintenance) for a minimum 1 year/12,000 miles, whichever occurs first.
- C. Engine and drive train shall be covered by an all-inclusive (less normal maintenance) no deductible warranty for a minimum 2 years/ 24,000 miles, whichever occurs first.
- D. A warranty certificate or card shall be supplied with chassis.

Under bridge Inspection Unit

From the date the Department assigns this equipment to its requesting location, the manufacturer and/or its representative shall provide a no deductible all-inclusive warranty (less normal maintenance) for a minimum 1 year/12,000 chassis miles, whichever occurs first.

If any standard retail warranty exceeds these minimum terms, the standard warranty shall apply.

Training

- A. Successful vendor shall provide the following training at no cost to the Department.
- B. Upon delivery and at the convenience of the Department, vendor shall arrange complete instructions on the safe operation, use, and maintenance of this unit and a demonstration of operation by a factory technician. Technician shall be thoroughly trained in operation, use, maintenance, and service of this unit. Instruction shall be a formal training session of not less than three (3) 8-hour days. Instruction shall include a balanced mixture of class room and hands-on operation, culminating in an actual inspection exercise at a bridge location of the Department's choosing.

- C. The Department reserves the right to require an additional one (1) day supplemental training session at any date up to one (1) year after delivery of the unit. Date shall be mutually agreed upon by the vendor and the Department, but must be on or within a 15-day window of the date requested by the Department.

Removed Components

All components removed from Department truck chassis and not re-installed or directly re-used shall be shipped to the Department Central Repair Shop in Ames, IA. This includes fuel tanks, brackets and any or all other components.

IOWA DEPARTMENT OF TRANSPORTATION
OFFICE OF PROCUREMENT & DISTRIBUTION

EQUIPMENT SERVICES

FY'2015

SPECIFICATIONS

for

62-Foot Reach Under-Bridge Inspection Unit with 3-Person Platform
mounted on
80,000-pound (minimum) GVWR Tandem Truck Chassis

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for
62-FOOT BRIDGE INSPECTION UNIT

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STANDARD SPECIFICATIONS

The following specifications shall apply to common requirements for all components included in the purchase package of this under-bridge inspection unit. All specified equipment is to be OEM installed, either as standard equipment, a line installed option or factory authorized DSO/SE installation unless otherwise stated.

Included are requirements for the following:

1. ELECTRONIC SHIELDING – RFI PROTECTION
2. PAINT
3. THREADED FASTENERS
4. PRE-DELIVERY INSPECTION
5. WARRANTY
6. INSPECTIONS
7. REMOVED COMPONENTS

1. ELECTRONIC SHIELDING – RFI PROTECTION

- A. Truck will have 2-way land mobile radio transceivers installed by the Department. These transceivers will operate in high band (150 to 174 MHz). Antennas will be mounted on the roof or highest plane surface of the vehicle. All vehicle electronic circuits including but not limited to ignition, AM/FM radio receivers, computers, emission controls, alternative fuel electronic controls, regulators and/or boom equipment controls shall be designed to suppress, bypass or otherwise prevent interference from affecting the Department transceivers. Also, the vehicle electronic equipment shall be unaffected by the radio frequency energy generated by the (up to 125 Watt output) transmitter portion of installed transceivers.
- B. Vehicle electrical system shall be designed so that the vehicle shall not degrade the 2-way radio receiver performance. The entire electrical system shall be designed so that effective sensitivity of the VHF FM receiver shall not require more than 0.5 microvolt (-111 dBm) to produce 12 dB or greater SINAD. The effective sensitivity shall not exceed 0.5 microvolt for all modes of operation, which shall include but not be limited to, engine off, engine on, (from idle to full throttle), and all vehicle systems or combinations thereof.
- C. Vehicle may be tested by the Department upon delivery. Delivered vehicle will not be accepted until it complies with these RFI requirements.
- D. The Department currently utilizes multiple frequencies from 150 - 163 Mhz and will test RFI in this bandwidth.

2. PAINT, RUST PROOFING, UNDERCOATING

- A. All equipment shall be thoroughly cleaned and completely painted with a high quality polyurethane finish, consisting of approximately 2-mils dry film build corrosion resistant primer top coated with 2-3 mils dry film build paint. Finish shall be smooth, shiny and free of runs, overspray and/or other defects.
- B. All manufactured ferrous equipment attached to the Department chassis shall be sand or media blasted to remove all mill scale, oils, dirt, rust, shipping primer and/or other contaminants from the steel surfaces.
- C. Equipment shall be completely primed according to the manufacturer's specifications with a light gray high solids low VOC polyurethane primer.
- D. Primer shall be completely coated as per the manufacturer's specifications with multiple coats of high solids low VOC polyurethane enamel paint.
- E. Minimum finished application thickness, 4-mils dry film build.
- F. Paints and primers used shall be 100% lead and chromate free. MSDS on products used shall be made immediately available to the Department upon request.
- G. Manufacturer's standard paint color/scheme is acceptable for this equipment. If there is no standard color/scheme, the Department's first preference will be bright white. Second preference will be Omaha orange. Whatever color, bridge inspection unit shall be color matched to the OEM chassis cab color. Frame and undercarriage shall be black.
- H. Rust Proofing/Undercoating: With the exception of drive shafts, drain holes, lube points, engine crank-case, heavy castings and suspension components, full undercoating shall be applied in a continuous and uniform manner under the inspection unit deck assembly and along chassis mainframe after inspection unit installation. Chassis requested with factory applied rust proofing or undercoating.

3. THREADED FASTENERS

- A. All threaded fastener components (bolts, washers, nuts) with a diameter designation greater than or equal to SAE 1/2-inch shall be of minimum grade-8 composition. Nuts shall be all metal self-locking, lock washers are not acceptable. A minimum of two (2) bolt threads must extend through a nut. All components shall have grade identifier marks and a registered manufacturer's logo.
- B. All threaded fastener components (bolts, washers, nuts) with a diameter designation greater than or equal to SAE 1/4-inch up too less than SAE 1/2-inch shall be minimum grade-8 composition or stainless steel. Nuts shall be self-locking, either poly-lock or all metal, lock washers are not acceptable. A minimum of two (2) bolt threads must extend through a nut. All components shall have grade identifier marks and a registered manufacturer's logo.
- C. All threaded fastener components (screws/bolts, washers/lock washers, nuts) with a diameter designation less than SAE 1/4-inch shall be minimum grade-2 composition.

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SPECIFICATIONS
FOR
TANDEM AXLE TRUCK CHASSIS
80,000-POUND (minimum) GVWR

1. GENERAL INFORMATION AND DIMENSIONS

- A. Conventional set-back (44 to 48-inches) front axle design, high-height cab suitable to provide adequate headroom, seat travel with the specified air-ride seats, and operator comfort with all additional in-cab equipment.
- B. Nominal 80-inch wide aluminum cab with over 56-inches floor-to-headliner height, minimum 18-inches operator's seat-to-floor height, and minimum 70-inches shoulder room dimension.
- C. One-piece tilting front-end engine access.
- D. Bumper-to-Back-of-Cab (BBC), 120 to 124-inches.
- E. Wheelbase (WB), 285-inches (approximate).
- F. Cab-to-Trunnion (CT), 214-inches (approximate).
- G. After-Frame (AF), 58-inches.
- H. Factory applied standard chassis rust proofing or undercoating.

2. ENGINE AND RELATED COMPONENTS

- A. Diesel: Premium turbocharged domestic, 4-stroke liquid cooled, inline 6-cylinder only, fully electronic controlled, cast-iron skirt block with replaceable (wet) cylinder inserts.
- B. 12-Liter (minimum) engine displacement.
- C. Certified power rating minimums: 430-horsepower; 1,550 lb/ft torque.
- D. Engine shall be setup with a 2-speed throttle and remote PTO throttle control capability for bridge inspection unit.
- E. Magnetic oil drain plug.
- F. Air intake filtration: Heavy-duty, dry element meeting engine manufacturer's optimum filtration requirements.
- G. Radiator: Largest capacity available for provided engine. If an optional increased cooling capacity option (additional row(s) of tubes/fins) is available, it must be provided.
- H. Antifreeze: Extended Life testing to a minimum -35 degrees Fahrenheit.
- I. If "Extended Life" antifreeze is not an option, a spin-on, throw-away type engine coolant filter with time released conditioner recharge shall be provided. Filter is not required if "Extended Life" antifreeze is supplied.
- J. Fan: Positive on-off temperature controlled air-operated clutch type. Emergency mechanical failure lockup (on) provision.
- K. Fan override switch, driver control, allowing driver to lock fan on.
- L. Hose clamps: Constant torque or Perma-Shrink, all coolant hoses.
- M. Heater coolant shut-off valves on engine.
- N. Throttle/Cruise control: Dash mounted electronic adjustable.

- O. Engine warning/shut down system: Audible buzzer and lamp warning for high engine temperature and/or low engine oil pressure with automatic engine shut down feature. System must have an emergency override.
- P. Engine governor control wiring harness, type suitable to allow low cost Department installation of remote mounted engine speed control device(s). Necessary to power PTO driven accessories and/or hydraulic pump.
- Q. Electronic engine parameters: Maximum vehicle speed top gear, 72-MPH; Maximum cruise control speed, 70-MPH; idle shut-down override, yes. Any additional requirements will be determined at time of bid award.
- R. Engine "Regen" prohibit switch for use when inspection unit is deployed.

3. TRANSMISSION AND PTO

- A. Allison Automatic, model 4500RDS with temperature gauge and PTO provision.
- B. Synthetic transmission oil.
- C. Power take-off (PTO) shall be a transmission mounted power shift type and controlled from the cab. PTO ratio shall provide optimum performance of the hydraulic pump operating all bridge inspection system components described in the specifications. In cab PTO "engaged" light shall be supplied.

4. FRONT AXLE AND SUSPENSION

- A. Manufacture 20,000-pound (minimum) rated capacity, set-back, wide-track front axle for maximum maneuverability.
- B. Minimum "Wheel Cut" of approximately 40 to 45-degrees. Documentation required.
- C. Set-back (44 to 48-inches) axle only.
- D. Wet front oil seals, Stemco or equal.
- E. Synthetic oil.
- F. Multi-leaf spring suspension rated 20,000-pounds with highest deflection rate available.

5. REAR AXLES AND SUSPENSION

- A. Manufacture 46,000-pound (minimum) rated capacity tandem drive axles.
- B. Power divider & lockout.
- C. Synthetic differential oil.
- D. Magnetic drain plugs.
- E. Driver controlled differential lock in one of the two differentials. Dash mounted switch and indicator lamp.
- F. Axle Ratio adequate to provided sustained 65-68 MPH highway cruise at GVWR. Final determination to be at time of bid award. Estimate 4.33.
- G. Hendrickson RT-463 walking beam rear suspension, 46,000-pound capacity, 54-inch spacing with shock absorbers, bronze center bushings, fore and aft transverse control rods.
- H. A 20,000-pound, air operated "pusher" axle shall be installed approximately 74-inches in front of the front tandem axle. Exact location to be determined by the Bridge Inspection Unit manufacturer.

6. WHEELS AND TIRES – Goodyear Tires Preferred

- A. Premium 425/65R22.5 load range “L” super single front tires mounted on heavy duty steel hub piloted 10-bolt wheels rated at or exceeding the tire rating. Tire shall not speed restrict vehicle to less than 65-mph.
- B. Rear Tires: 11R22.5 load range “H” mounted on increased capacity (.472-inch) heavy-duty 8.25-inch steel hub piloted 10-bolt rear wheels.
- C. All wheels to be powder coated white.

7. FRAME

- A. Double channel straight rails (full outer “C” reinforcement).
- B. Minimum 110,000-PSI High Tensile Steel.
- C. Resistance to Bending Moment (RBM): Minimum 4,740,000 in/lb.
- D. Section Modulus (SM): Minimum 40.45 cu/in.
- E. Minimum ground clearance: There shall be a minimum 12-inches ground clearance under any frame mounted components, such as the fuel tank and/or its mounting brackets, steps, air tanks, battery box, etc.
- F. Bustin style, aluminum open grate cab steps: All steps shall be a minimum of 10-inches long. Steps required on both sides.

8. BRAKES

- A. Brakes: Dual full air anti-lock system rated at or to exceed axle GVWR requirements.
- B. Cab mounted low air pressure warning buzzer and gauge.
- C. Automatic traction control with dash indicator and on/off switch.
- D. Dry reservoir tanks.
- E. All brakes must be cam with non-asbestos linings.
- F. Minimum 13.2-CFM compressor.
- G. Heated air dryer, Bendix AD-IP only.
- H. Installation of the air tanks and/or dryer shall not inhibit the installation of the bridge inspection equipment anywhere underneath the truck or behind the cab (clear frame).
- I. Parking brake: Spring set rear wheel brake chambers, all four (4) positions. Premium quality corrosion resistant epoxy coated and sealed, Gold Seal Anchorlok or MGM TR-TS.
- J. Automatic slack adjusters: All wheel positions, premium Haldex brand.

9. EXHAUST SYSTEM

- A. Exhaust system: DPF/SCR switchback system mounted under the right side of cab with a vertical tailpipe. Exhaust system design and/or components shall not hinder the installation of the bridge inspection equipment anywhere underneath the truck or behind the cab (clear frame).
- B. Engine compression brake with selector and on/off switch. (Already in spec).
- C. Engine “Regen” prohibit switch for use when inspection unit is deployed (also referenced in 2.R).

10. ELECTRICAL

- A. In cab power port.
- B. Gauges; dash mounted, easy operator viewing, to include at a minimum: Oil Pressure, Coolant Temperature (with high temperature warning light), Air Pressure, Speedometer, Voltmeter, Fuel, Tachometer, Air Intake Restriction Indicator, Hourmeter, Transmission Temperature Gauge.
- C. Ignition switch: Automotive key with accessory position. Two (2) keys shall be provided.
- D. Turn signal switch: self-cancelling if available.
- E. Radio: AM/FM/Weatherband stereo.
- F. Clock: Electronic digital, visible day or night, may be an integral part of radio.
- G. Courtesy lamps: Dome lamp and door hinge pillar or under dash courtesy lamps to illuminate rocker panel and cab step areas.
- H. Air Horn(s). If top of cab mounted, must include cover(s).
- I. Windshield wiper system: Electric with intermittent operation feature. Electric washer pump.
- J. Electrical protection: Circuit breakers in lieu of fuses.
- K. Alternator: Pad mounted with a minimum output of 160-Amps.
- L. Three (3) batteries, maintenance free, minimum 2250-CCA @ 0-degrees Fahrenheit. Non-splice battery cables. Batteries mounted in an aluminum battery box.
- M. Back-up alarm, electronic with automatic 82-107 dB(A) volume adjustment.
- N. Electric, engine block heater, 110-volt, 1500-watt. Receptacle for attaching heater to outside power service shall be mounted on the driver's side of the chassis.

11. FUEL SYSTEM

- A. Minimum 9.5-gallon DEF tank and minimum 100-gallon fuel tank mounted on the left side under cab, with integral step(s). Both tanks shall be mounted as far forward as possible.
- B. In-tank circulating engine coolant type fuel heater with thermostat controlled by-pass.
- C. Fuel maintenance system: Fuel-water separator and filter functions. Components shall be factory installed ahead of fuel primer and other fuel filter(s).
- D. Primary fuel filter between fuel tank and engine.

12. CAB-INTERIOR

- A. Heavy-duty cab interior trim/insulation package: Hi-level, to include full surface coverage interior lining and trim panels. Color shall be medium brown or gray.
- B. Floor covering: Heavy duty rubber/vinyl floor mat with sound deadening backing covering entire floor, dark color.
- C. Glass: All tinted.
- D. Power windows: Both doors.
- E. Power door locks.
- F. Air conditioning, heater and defroster.
- G. Sun visors: Left and right.
- H. Grab handles: Cab entrance/exit assist, both sides.
- I. Arm rests: Both doors.

- J. Seats: Driver cloth covered premium quality high-back air suspension with 3-point seat belts, tethered to allow free suspension movement, with an adjustable lumbar support and minimum inboard armrest. Passenger OEM standard matching fixed.
- K. Power steering: Integral dual gears. Ram system not acceptable.
- L. Tilt and telescoping steering column. Smallest diameter steering wheel available from the factory for the front axle specified.
- M. Map pocket(s) in door(s) or other storage area suitable for manuals, hand tools and other incidentals.
- N. Overhead console: Suitable to allow Department installation of a 2-way radio in the center.

13. CAB/HOOD – EXTERIOR

- A. Cab air suspension system.
- B. Mirrors: West Coast Sr. heated, both left/right sides, set at 102-inches. Convex mirror head (minimum 48 in²) directly below each.
- C. Fender mirrors: Low profile with 8-inch round convex mirror head, installed to provide full-side-of-vehicle rear view, front-to-rear, without causing excessive blind spot.
- D. Front hood tilt-assist mechanism if available.
- E. Exterior cab entrance grab handles, left & right.
- F. OEM authorized engine radiator stone guard grille. Guard to be installed behind the tilt front grille or to the radiator supports (not directly on the radiator). Can be OEM line installed if that is a factory option.
- G. Front mud flaps wide enough to cover super single tire width. Mud flaps to be free of lettering and provide approximately 8-inches of ground clearance.

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SPECIFICATIONS
for
62-FOOT REACH UNDER-BRIDGE INSPECTION CRANE

The intent of this specification is to describe the requirements and performance criteria for a truck mounted under-bridge inspection unit designed to inspect under bridge structures. Apparatus shall have an approximate under bridge horizontal reach of 62-feet and be equipped with a 3-person, 600-pound capacity (approximate), rotating aluminum platform with fully proportional controls.

Bridge inspection assembly, as a complete unit, shall be stable throughout its entire working range. Should it be possible to place the booms in any position which would cause instability, a method shall be supplied, either hydraulically or mechanically actuated, which shall prevent the booms from attaining such a position. Fail safe limit switches shall be installed to shut off power/stop rotation when unit moves past safe limits. Complete unit shall conform to all current OSHA and ANSI 92.8 regulations.

Vendor will be responsible for installing their machine onto the truck chassis and providing the Department with a fully operational ready-to-use unit at the time of delivery.

1. TRUCK BODY

- A. Body to be of sufficient length to provide for storage of booms within the body confines during transport. Body to be fully supported by the truck frame rails. Maximum finished truck length, front bumper to rear bumper, of 42-feet.
- B. Overall body width to be 8-feet.
- C. Body cross sills to be spaced on 18 to 24-inch centers.
- D. Longitudinal sills to be 4-inch x 1-1/2 inch rectangular tubing.
- E. Body shall be constructed of plate steel. Deck shall be welded to the heavy-duty structural steel crossmembers and longitudinals with side and end rails. Body deck surface shall be finished with non-skid paint.
- F. Corner marker and rear identification lamps to be flush mounted LED type, mounted in the rub rail.
- G. Provisions shall be made in the body structure and fitment for safely supporting and locking the bridge inspector boom assemblies in a stowed position for transport.
- H. Access ladder steps are to be provided at the rear and on the left side. Distance from bottom of the first step to the ground is to be approximately 18-inches. Distance from the first step to the bottom of the second step is to be approximately 18-inches. All steps to be of adequate construction and properly braced so as not to deflect under personnel load.
- I. There are to be a minimum of two (2) stainless steel toolbox compartments installed under the body and attached to its structure. One (1) shall be located on each side, aft of the drive axle and be approximately 30-inches long x 24-inches high x 24-inches deep. All compartments to be constructed of minimum 14-gauge stainless steel throughout and must be water-tight. Doors must be embossed panels with lap seal and gutter drain, as well as full length stainless piano hinges. Already in spec.
- J. Two (2) additional driver's side stainless steel tool boxes shall be installed and deck mounted. Doors shall open upward and be supported with gas shocks. Box dimensions shall be approximately 60-inches long x 24-inches deep x 18-inches high.
- K. Door latches on all doors and panels are to be key locking, slam action, paddle type with all locks keyed alike.

2. BRIDGE INSPECTION UNIT

- A. Assembly shall be hydraulic powered and consist of the following:
 - a. Pedestal and subframe.
 - b. Two (2) hydraulic rotation turrets.
 - c. Four (4) hydraulic articulating boom sections, two (2) with telescoping sections.
 - d. 3-Person rotating aluminum platform.
 - e. Auxiliary diesel engine and PTO power sources.
- B. Acceptable machine will have no counterweight or boom sections extending beyond the body perimeter.
- C. Unit must be able to deploy over a 10-foot high bridge rail/fence.

- D. Overall Dimensions:
- a. Stored Length – 42-feet (maximum)
 - b. Stored Height – 13-feet, 6-Inches (maximum)
 - c. Stored Width – 102-inches (maximum)
- E. Six (6) anti-sail mud flaps located behind pusher axle, front of tandems and rear of tandems shall be installed. Mud flaps to be free of lettering and provide approximately 8-inches of ground clearance.

3. PEDESTAL AND SUBFRAME

- A. Pedestal and subframe shall both be constructed of high strength steel and be able to withstand all torsional stress imposed by the boom assemblies with the maximum rated load in the work platform.
- B. Pedestal shall be mounted behind the truck cab. Pedestal shall be welded to a tubular or beam type subframe which shall extend the full length of the truck chassis frame.

4. ROTATION TURRETS

- A. Turret #1
Main turret shall be mounted on top of the pedestal and hinged to the main boom (#1). Turret shall rotate the booms off both sides of the truck.
- B. Turret #2
Second turret shall be mounted at the end of boom #1 and hinged to boom #2. Turret shall rotate a minimum of 180° when all booms are deployed. Turret shall be controlled automatically by a hydraulic cylinder so as to eliminate leveling arms. It shall also have the capability of being controlled manually to adjust for bridge slopes of up to 5°.
- C. Bearings
Both #1 and #2 turrets shall rotate on heavy-duty, shear ball type bearing protected against dirt and moisture. Bearing shall also be pressure lubricated.
- D. Motor and Gear Box
Rotation shall be powered by a reversible hydraulic orbital motor driving a gear box which shall prevent freewheeling in case of a hydraulic failure.
- E. Counterweight
A counterweight shall be attached to the pedestal assembly and rotate with the bridge inspection unit on the opposite side. Counterweight shall stay within the width of the body when booms are deployed.

5. BOOMS

Bridge inspection unit shall be equipped with four (4) articulating, hydraulically operated booms. All telescopic boom sections shall be equipped with high wear capacity nylon support rollers or pads. Hydraulic hose reels shall not be exposed.

- A. Boom #1
Main boom shall be a minimum of 16-feet, 11-inches long and shall be hinged to the mainframe pedestal turret. Sidewalk width clearance shall be a minimum of 12-feet, 6-inches.
- B. Boom #2
Second boom shall be attached to the end of boom #1 and provide a vertical clearance of 24-feet minimum. Boom #2 shall be capable of articulating to a horizontal position, perpendicular from the bridge so that the inspection bucket can access the bridge fascia.
- C. Boom #3
Third boom shall be telescopic and hinged to the end of boom #2. The third and fourth booms must be capable of reaching a minimum of 55-foot horizontally under a bridge when boom #2 is in a vertical (90°) position.
- D. Boom #4
Boom #4 shall be a pivoting end section with an articulating range of 90° above horizontal and 35° below horizontal. It shall be telescoping, providing a reach of 13-foot minimum, measured from the top of boom #3 to the top of the platform.
- E. Boom Cylinders
All booms shall have full hydraulic powered cylinders. Cylinders shall be pilot operated, double-acting with integral safety holding valve. Nitrate or chrome rods shall be provided on all lift cylinders.
- F. Cylinder Swivel Pins
High strength steel pins shall attach cylinders to booms. Pins may be secured with either keeper bolts in the head of the pin or locking nuts. All cylinders are to have replaceable bushings.
- G. Overhead Reach
Working platform (see requirements below) must be capable of being placed above the bridge deck approximately 50-feet.

6. 3-PERSON ALUMINUM PLATFORM with ACCESS GATE

- A. One (1) 3-person, aluminum platform with a minimum 600-pound capacity shall be hinged at the end of the fourth boom and shall automatically be kept level at all times by a hydraulic leveling system. Platform shall come equipped with an access gate for easy entry and also be capable of rotating 180-degrees hydraulically.
- B. Minimum platform dimensions: 40-inches high x 60-inches long x 42-inches deep.
- C. Platform shall have lanyard attachments installed. Three (3) safety harnesses and lanyards shall be supplied.
- D. Platform shall be equipped with two (2) 1500-watt, 5,000 Btu, 115-volt, 60 Hz heaters with blower fans for the convenience of the workers during cold weather operations.
- E. Two (2) swivel mounted 12-volt floodlights shall be installed on the platform.

7. AUXILIARY DIESEL ENGINE AND PTO POWER SOURCES

- A. Main power source for the operation of the bridge inspection unit hydraulic and electrical systems shall be provided by a PTO-driven, transmission mounted hydraulic pump.
- B. An auxiliary diesel engine will be supplied as an alternate source of power and shall include the following:
 - a. Keyed ignition, electric starter and alternator (12-volt system).
 - b. Fuel connection to chassis fuel tank(s).
 - c. Diesel engine filtration system.
 - d. Enclosed engine compartment with access cover to allow complete access to engine and hydraulic system components.

8. HYDRAULIC SYSTEM

- A. Hydraulic pressure shall control all movements of the bridge inspection unit. Hydraulic cylinders shall all be double acting with direct coupled safety check valves as protection in case of pump or hose failure.
- B. All boom lift cylinder shafts shall be nitride or chrome to resist corrosion and shall be able to with stand a 100-hour salt spray test.
- C. Hydraulic oil reservoir shall be of steel welded construction with a minimum capacity of 50-gallons. Reservoir shall be equipped with internal baffles and an exterior sight level gauge.
- D. Hydraulic oil shall be filter through a 10-micron return filter with a replaceable element. The suction side of the reservoir shall have a 100-mesh strainer installed. All filters shall be accessible for easy element replacement.
- E. Reservoir shall also have a shut-off valve installed for cleaning.
- F. Hydraulic hoses shall be flexible and wired braid reinforced with weather and abrasion resistant covering. Burst pressure rating shall be at least 200% of the system operating pressure.

9. CONTROLS AND OUTLETS

- A. Three (3) complete sets of controls shall be provided. First shall be hydraulic operation controls located on the pedestal and shall rotate as turret number one rotates. Second set shall be a set of radio wireless/wired controls located in the aluminum work platform. Third shall be a set of radio wireless/wired controls for remote operation from the side of the truck.
- B. Pedestal controls shall be capable of overriding the platform and remote control in case of emergency.
- C. In case of electrical failure, the hydraulic valve at the pedestal shall be capable of overriding the radio controls.
- D. All controls must be equipped with 2-way, return to neutral type levers. All booms articulation and turrets #1 and #2 shall have proportional flow control and precise metering capability to provide smooth operation in all working positions and to insure the safety of operating personnel at all times.
- E. Controls shall be arranged to allow for each individual movement separately or in any combination desired. Manual overrides shall be provided for all functions. Controls shall also be located for easy maintenance access.

- F. Remote carrier and auxiliary engine kill switches shall be installed at the pedestal and platform control station. A color display shall be provided at the pedestal with control of front and rear suspension lockouts, counterweight and accessories. There shall also be a display at the pedestal for the status of the limit switch system.
- G. Platform shall be equipped with an intercom connection with speaker, two waterproof and grounded duplex outlets for 20 amps at 120 VAC, and a 3/4 inch compressed air outlet.
- H. A lockable storage facility shall be provided for storing the wireless controls.
- I. All power/control lines and controls to/on work platforms shall be enclosed or shielded to protect against damage.
- J. There shall be adequate protective coverings/actuator guards for all controls to guard against accidental/unintentional actuation by any means.
- K. Safety Devices:
 - a. Interlock to prevent operation of bridge inspection unit if suspension lockouts are not engaged.
 - b. Limit switches to prevent rotation or articulation of booms into unstable positions.
 - c. Relief valve and switches to prevent overloading hydraulic system with excessive pressures.
 - d. Emergency kill switch of truck and auxiliary engines at pedestal and basket.
 - e. Automatic check valves on hydraulic cylinders in case of pump or hose failure.
 - f. Automatic audible alarm to signal excessive slope conditions.

10. TRUCK STABILIZERS

- A. Frame shall be equipped with four (4) hydraulically operated suspension lockouts, two (2) at the front axle and two (2) at the rear axles, controlled from the pedestal station. Lockout system shall include indicator lights to alert the driver that the lockouts are engaged or disengaged. Lights shall be installed in the cab.
- B. An interlock shall be installed to prevent operation of the bridge inspection unit when suspension lockout system is disengaged. A manual override (to allow booms to be stowed in case of system malfunction) shall be installed at the pedestal.
- C. When lockouts are engaged, the truck shall be capable of withstanding all tipping forces generate by booms in all positions in both stationary and moving applications.
- D. Outriggers are NOT acceptable.

11. COMMUNICATION SYSTEM

- A. An intercommunication system between personnel in truck cab, pedestal control station, ground remote control station and work platform shall be provided and installed. System shall consist of the following:
 - a. Fully transistorized amplifier (powered by truck batteries) with an on/off switch, volume controls and an integral press-to-talk switch mounted in the truck cab, convenient to the driver and at the pedestal. Working platform speaker shall be activated in a hands free mode.

12. ACCESSORIES AND SPECIAL FEATURES

- A. Bridge inspection unit shall be equipped with a remote control system allowing stopping of the truck engine from the personnel platform or basket. System to be controlled by an illuminated master switch located in the truck cab.
- B. Inspection unit shall be equipped with a minimum 18 CFM @ 100-PSI hydraulically driven air compressor unit mounted on the truck body. A minimum 30-gallon, ASME stamped air receiver tank with safety valve, condensation drain, pressure gauge and globe valve shall be supplied and mounted under the truck body.
 - a. An airline, with a minimum 100-PSI working pressure rating, shall be provided to the work platform. Airline shall be routed along the booms in protected areas and shall terminate at the work platform with a quick disconnect coupling.
 - b. Additional air quick connector outlets shall be provided at the rear of the truck platform to allow convenient use of air tools behind or on the truck bed.
 - c. Four (4) 115-volt, three (3) contact, weatherproof grounding outlets shall be provided. Two (2) located at the work platform and two (2) at the truck platform. Outlets shall be ground fault interruption protected.
- C. Bridge inspection unit shall be equipped with a minimum single phase 60Hz, AC generator which will be driven by the auxiliary diesel engine. Generator shall be a minimum 5 kW for the operation of the work platform heaters and electrical outlets.
- D. Proper placards shall be supplied at each control station to identify control functions by directional arrows and to remind operators of safe operational methods. In addition, all decals as required by the manufacturers of aerial devices and digger/derricks council (MADDCS) shall be supplied.
- E. All welding done to critical components shall be inspected by magnetic particle method and certified to be sound and proper.
- F. Vendor shall install two amber rotating lights on the truck cab. Lights shall be an ECCO model 5280A RotoLED minibar. To locate nearest ECCO dealer, go to www.eccolink.com. Lights shall be installed on a stainless steel gutter mount lamp bar, mounted so as to be as far apart as possible; but not wider than 102 inches. An appropriate switch shall be installed in the truck cab.
- G. Inspector shall be outfitted with a rear facing amber strobe light system, installed in the rearmost face of the platform body. System shall be a Whelen IADOTSY1 amber LED2 lamp system wired so that the quad flash lamps work in an alternating manner. Lamps shall be 2" x 6" oval mounted in shock absorbing rubber grommet mount. Switch and controller shall be mounted in truck cab.
- H. Bridge inspection unit shall have a 3-camera, video system installed with the monitor mounted in the cab. Camera placement:
 - #1 Turret #2, facing down along the outside of the bridge.
 - #2 Boom #3, facing the platform.
 - #3 Rear of chassis, used as a backup camera.



Bidders Request for Alternatives or Exceptions (BRAE)

Letting Date: May 20, 2015

Proposal No.: 14202

BRAE form due on or before: May 6, 2015

Item: 62-Foot Reach Under-Bridge Inspection Unit with 3-Person Platform

Spec. No.: 2-A37A-5-A38-0315

Request: _____

Bidder Proposes to furnish in lieu of above: _____

NOTE: The determination of acceptance of this BRAE request is only valid for the bid for which it was submitted. BRAE approvals received for this bid do not determine or set a precedent for what is acceptable in any other bid posted by the State of Iowa.

Email/Fax to:

Iowa Department of Transportation
Purchasing Section
Attention: Zach Gillen
Email: zachary.gillen@dot.iowa.gov

Fax No.: 515-239-1538

Submitted By _____

Company _____

Address _____

City State Zip

Phone No. _____

Fax No. _____

=====

DOT USE ONLY

Approved _____

Disapproved _____

Reason _____

Signature: _____

Date: _____

Bidder _____

SEALED BID

LETTING DATE: May 20, 2015
PROPOSAL NO: 14202
PROPOSAL DESCRIPTION: 62-Foot Reach Under-Bridge Inspection Unit
with 3-Person Platform

**Iowa Department of Transportation
PURCHASING - SEALED BID PROPOSAL
800 Lincoln Way
Ames, IA 50010**