

MISSOURI DEPARTMENT OF TRANSPORTATION
GENERAL SERVICES - PROCUREMENT
830 MoDOT Drive, Jefferson City, MO
65109

REQUEST NO.	3-120223RJ
DATE	February 6, 2012
PAGE NO.	1

SEALED BIDS, SUBJECT TO THE ATTACHED CONDITIONS WILL BE RECEIVED AT THIS OFFICE UNTIL

2:00 pm., Local Time, February 23, 2012

AND THEN PUBLICLY OPENED AND READ FOR FURNISHING THE FOLLOWING SUPPLIES OR SERVICES.

BIDS TO BE BASED F.O.B. MISSOURI DEPARTMENT OF TRANSPORTATION

Submit net bid as cash discount stipulations will not be considered
Various End User Delivery Locations

DEFINITE DELIVERY DATE SHOULD BE SHOWN. THE BIDDER MUST SIGN AND RETURN BEFORE DATE AND TIME SET FOR OPENING.

BUYER: Reva Jones

BUYER TELEPHONE: 573-526-2744

BUYER EMAIL: reva.jones@modot.mo.gov

EQUIPMENT

Street Sweepers

To establish a contract to furnish "street sweepers" in accordance with the following pages.

Components of Agreement: The Agreement between MHTC and the successful Bidder shall consist of: the RFB and any written amendments thereto, the "Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions" that are attached to this RFB, the bid submitted by the Bidder in response to the RFB and the post-award contract agreement signed between the parties. However, MHTC reserves the right to clarify any relationship in writing and such written clarification shall govern in case of conflict with the applicable requirements stated in the RFB or the Bidder's bid. The Bidder is cautioned that its bid shall be subject to acceptance by MHTC without further clarification.

Return sealed bid to the address shown at the top of this page.

(SEE ATTACHED FOR TERMS, CONDITIONS, AND INSTRUCTIONS)

In compliance with the above Request For Bid, and subject to all conditions thereof, the undersigned bidder agrees to furnish and deliver any or all the items on which prices were bid within the timeframe specified herein, after receipt of formal purchase order.

Date: _____
Telephone No.: _____
Fax No.: _____
Federal I.D. No. _____
Email Address: _____

Firm Name: _____
Address: _____
By (Signature): _____
Type/Print Name _____

Is your firm MBE certified? Yes No

Title: _____
Is your firm WBE certified? Yes No

1. INTRODUCTION AND GENERAL INFORMATION

1.1 Introduction:

- 1.1.1 This Request for Bid (RFB) seeks bids from qualified organizations to provide **street sweepers** for the locations in the State of Missouri (listed on page 2 of this document), to the Missouri Highways and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT). Each bid must be in a sealed envelope, be mailed or delivered by courier to the RFB Coordinator at the below listed address, on or before the date and time listed herein for receipt of bids/proposals. All questions regarding the RFB shall be submitted to the RFB Coordinator. **Bids must be returned to the office of the RFB Coordinator no later than 2:00 p.m., CDT, February 23, 2012.**

RFB COORDINATOR:

Reva Jones, Senior General Services Specialist
Missouri Department of Transportation, General Services
830 MoDOT Drive
Jefferson City, MO 65109

PHONE: 573-526-2744

FAX: 573-526-1218

1.2 General Information:

- 1.2.1 This document constitutes an invitation for competitive, sealed bids for the procurement of street sweepers as set forth herein.
- 1.2.2 Organization: This RFB is divided into the following parts:
- 1) Introduction and General Information
 - 2) Scope of Work
 - 3) Bid Submission
 - 4) Pricing Page(s)
 - 5) Vendor Information and Preference Certification Form
 - 6) Anti-Collusion Statement
 - 7) Specifications
 - 8) Terms and Conditions

2. SCOPE OF WORK

2.1 General Requirements:

- 2.1.1 The contractor shall provide street sweepers on an as needed, if needed basis for the MHTC and MoDOT, in accordance with the provisions and requirements stated herein.
- 2.1.2 The contractor shall provide all deliverables/services to the sole satisfaction of MoDOT.
- 2.1.3 MoDOT does not guarantee how many units will be ordered.
- 2.1.4 Unless otherwise specified herein, the contractor shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.
- 2.1.5 MoDOT reserves the right to reject any or all bids, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid, unit prices will govern.

2.2 Specific Requirements:

- 2.2.1 The contractor shall provide MoDOT with street sweepers, in accordance with the attached specifications.

2.3 Required Specifications:

- a. All materials, equipment, and/or services bid upon must comply with the attached MoDOT Specification and any other provisions outlined in the solicitation documents.

2.4 Delivery Requirements:

- 2.4.1 The following delivery requirements shall apply:

- a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Material arriving after 3:00 p.m. will not be unloaded until the following workday. No material will be received on Saturday, Sunday or state holidays.
- b. If the prices bid herein include the delivery cost of the material, the Contractor agrees to pay all transportation charges on the material as FOB - Destination. Freight costs must be included in the unit price bid and not listed as a separate line item.
- c. Any demurrage is to be paid by the Contractor direct to the railroad or carrier.

- 2.4.2 The contractor shall deliver the products specified herein to the following MoDOT locations:

- a. St. Joseph, Missouri 64502
- b. Macón, Missouri 63552
- c. Hannibal, Missouri 63401
- d. Lee's Summit, Missouri 64064-8002
- e. Jefferson City, Missouri 65102
- f. Chesterfield, Missouri 63017-5712
- g. Joplin, Missouri 64802
- h. Springfield, Missouri 65801
- i. Willow Springs, Missouri 65793
- j. Sikeston, Missouri 63801

2.5 Contract/Purchase Order:

2.5.1 The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Contractor and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification.

2.6 Invoicing and Payment Requirements:

2.6.1 The contractor shall submit an itemized invoice to the applicable requesting address for the completion of deliverables, as specified herein.

Missouri Department of Transportation
830 MoDOT Drive
P.O. Box 270
Attn: Stephanie Green
Jefferson City, MO 65102

2.6.2 Each invoice should be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.

2.6.3 The contractor shall understand and agree MoDOT reserves the right to make contract payments to the contractor through electronic funds transfer (EFT). Therefore, prior to any payments becoming due under the contract, the contractor must return a completed state Vendor Input ACH/EFT Application, which is downloadable from the Vendor Services Portal at: <https://www.vendorservices.mo.gov/vendorservices/Portal/Default.aspx>. Each contractor invoice must be on the contractor's original descriptive business invoice form and must contain a unique invoice number. The invoice number will be listed on the state's Vendor Payment Website to enable the contractor to properly apply state payments to invoices. The contractor must comply with all other invoicing requirements stated in the RFB.

2.6.4 The contractor shall be paid in accordance with the firm, fixed prices stated on the pricing page of this document after completion of deliverables specified herein and acceptance by MoDOT.

2.6.5 Other than the payment specified above, no other payments or reimbursements shall be made to the contractor for any reason whatsoever.

2.6.6 Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The MHTC shall not make any advance deposits.

2.6.7 The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the contractor's expense.

2.7 Other Contractual Requirements:

2.7.1 Contract Period - The contract shall commence from the date of award until February 28, 2013 with up to three (3) one-year renewal option periods, or any portion therein.

- 2.7.2 Renewal Periods - If the option for renewal is exercised by MoDOT, the contractor shall agree to all terms and conditions of the RFB and all subsequent amendments. Renewal options are at the sole discretion of MoDOT.
- 2.7.3 Escalation Clause - In the event the contractor requests a price increase during the contract period, either the original contract period or any contract renewal period, the contractor must provide a written request and documentation justifying the need for a price increase, and the amount of such price increase. MoDOT will review the contractor's written request and documentation, and decide if a price increase is to be granted at that particular time. The contractor shall understand and agree that MoDOT's decision shall be final and without recourse.
- a. No price increase shall be granted during the original contract period.
 - b. In the event a price increase is granted due to an approved escalation, the renewal percentage shall be based upon the current contract value.
- 2.7.4 Inspection and Acceptance: MoDOT reserves the right to inspect the equipment at the point of manufacture, intermediate storage point, or at a destination which shall be at the discretion of MoDOT.
- a. No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
 - b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Contractor upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
 - c. The MHTC reserves the right to return any such rejected shipment at the Contractor's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
 - d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.
- 2.8 Additional Notifications:**
- 2.8.1 Bidders are encouraged to obtain minority business enterprise (MBE) and women business enterprise (WBE) participation in this work through the use of subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful participation for M/WBEs. Bidders are encouraged to obtain 10% MBE and 5% WBE participation.
- 2.8.2 Equipment Trade-In Allowance:
- a. If equipment trade-ins are offered as an option, the trade-in(s) must be negotiated between the District, Division and vendor.
 - b. The vendor must be currently under contract with MoDOT.
 - c. It will be the responsibility of the vendor to examine the condition of the equipment offered for trade. The vendor must not impose any mandatory requirements or restrictions on equipment disposal.
 - d. If the value offered is less than the Division's pre-established minimum price, the Division and District must both approve the trade in value.

- e. Allowance for trade-in(s) will be deducted from the full purchase price in computing the net purchase price. Trade-in(s) will not be available until the receipt and acceptance of the new equipment unless agreed upon by the District.

Trade-In Worksheet Example:

Make/Model of New Equipment:
Full Purchase Price: \$
Make/Model of Trade-In:
Less Trade-In (Deduct): \$
Net Purchase Price: \$

2.8.3 Equipment Refurbishments:

- a. If equipment refurbishments are available, the refurbishment(s) must be negotiated between the district and vendor. The vendor must be currently under contract with MoDOT. It will be the responsibility of the vendor to examine the condition of the equipment offered for refurbishment. The districts must keep accurate records verifying the process.

2.8.4 In accordance with RSMo 414.365, MoDOT must use fuel with at least the biodiesel content of B-20. (<http://www.moga.mo.gov/statutes/C400-499/4140000365.htm>) By submitting a response to this bid, you agree to comply with all the terms of your company's standard equipment warranties, except to the extent the equipment problems are determined to be attributed to MoDOT's use of B-20 fuel.

2.8.5 Please submit a complete parts and options list with detailed pricing information for each make/model of street sweepers your company would be willing to provide. Please indicate below the percent (%) discount off Manufacturers' Suggested Retail Prices (MSRP) for all air compressor equipment options available in your data book or pricing guides.

% discount off MSRP for all Data Book or Pricing Guide Options: - % Discount - _____

3. BID SUBMISSION

3.1 Bid Submission Information:

3.1.1 All bids must be received in a sealed envelope/package clearly marked "Street Sweepers".

3.1.2 All bids must be received at the office of the RFB Coordinator as outlined in Section 1. "INTRODUCTION AND GENERAL INFORMATION".

3.1.3 The bidder may withdraw, modify or correct his/her bid after it has been deposited with MoDOT provided such request is submitted in writing and received at the location designated for the bid opening prior to the date and time specified for opening bids. Such a request received as specified will be attached to the bid and the bid will be considered to have been modified accordingly. No bid may be modified after the date and time specified for the opening of bids.

3.1.4 Open Competition / Request For Bid Document:

- a. It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise MoDOT if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source. Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the buyer from MoDOT, unless the RFB specifically refers the bidder to another contact. Such communication should be received at least three (3) working days prior to the official bid opening date.
- b. Every attempt shall be made to ensure that the bidder receives an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all bidders will be advised, via the issuance of an amendment to the RFB, of any relevant or pertinent information related to the procurement. Therefore, bidders are advised that unless specified elsewhere in the RFB, any questions received less than three (3) working days prior to the RFB opening date may not be answered.
- c. Bidders are cautioned that the only official position of the MoDOT is that which is issued by MoDOT in the RFB or an amendment thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
- d. MoDOT monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among bidders, price-fixing by bidders, or any other anticompetitive conduct by bidders which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action.

3.1.5 Contract Award:

- a. This is a Multiple Award bid and there will be no 'one' bidder awarded each item within this bid. Each individual delivery destination will have sole responsibility for the discretion of all purchasing decisions. Criteria used to determine the "lowest and best" bid are based on price, location of servicing dealers, past performance of servicing dealers, and past performance of different makes and models of street sweepers. This bid will not be awarded solely based on low price per delivery destination. Units must be delivered to the listed delivery destinations but they will have to be serviced at other locations within the district.

4. PRICING PAGES

4.1 The bidder shall provide a firm, fixed price below for the original contract period for providing the deliverables/services in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables/services shall be included in the prices stated below.

ITEM # 1: Outright purchase of one (1) new Four Wheel (Vacuum) or Regenerative Air Street Sweeper meeting the attached MoDOT specification.

I am bidding (MAKE) _____ (MODEL) _____

Price: \$ _____

Cab/Chassis

Make _____ Model _____

Engine _____

Electrical System

Amps _____ Volts _____

Sweeper (Regenerative or Vacuum) _____

Auxiliary Engine

Engine _____

Cylinders _____

HP/RPM _____

Size of fuel tank _____

Water System: gpm _____ psi _____

Tank size _____

Brooms(Hydraulic or Mech.) _____

Under Body Transfer Broom

Dimensions _____ Operation _____

Gutter Broom

Qty _____ Dimensions _____

Hopper Size (Material) _____ cub. yds (_____)

Hopper Dump Height _____

Please indicate and list any additional options and its pricing you want to offer:

<u>Option:</u>	<u>Price:</u>	<u>Option:</u>	<u>Price:</u>
1. Cab Raise Assist Jack	\$ _____	5. _____	\$ _____
2. _____	\$ _____	6. _____	\$ _____
3. _____	\$ _____	7. _____	\$ _____
4. _____	\$ _____	8. _____	\$ _____

Delivery will be made approximately _____ days after receipt of order.

ITEM # 2: Outright purchase of one (1) new Mechanical Broom, with Vacuum-Assist Filtration Street Sweeper meeting the attached MoDOT specification.

I am bidding (MAKE) _____ (MODEL) _____

Price: \$ _____

Cab/Chassis
 Make _____ Model _____
 Engine _____
Electrical System
 Amps _____ Volts _____
 Sweeper (Regenerative or Vacuum) _____
Auxiliary Engine
 Engine _____
 Cylinders _____
 HP/RPM _____
 Size of fuel tank _____
Water System: gpm _____ psi _____
 Tank size _____
Brooms(Hydraulic or Mech.) _____
Under Body Transfer Broom
 Dimensions _____ Operation _____
Gutter Broom
 Qty _____ Dimensions _____
Hopper Size (Material) _____ cub. yds (_____)
Hopper Dump Height _____

Please indicate and list any additional options and its pricing you want to offer:

<u>Option:</u>	<u>Price:</u>	<u>Option:</u>	<u>Price</u>
1. Cab Raise Assist Jack	\$ _____	5. _____	\$ _____
2. _____	\$ _____	6. _____	\$ _____
3. _____	\$ _____	7. _____	\$ _____
4. _____	\$ _____	8. _____	\$ _____

Delivery will be made approximately _____ days after receipt of order.

ITEM #3: Outright purchase of one (1) new Mechanical Street Sweepers, minimum 3.5 cubic yards to 4 cubic yards meeting the attached MoDOT specification.

I am bidding (MAKE) _____ (MODEL) _____

Price: \$ _____

Cab/Chassis

Make _____ Model _____

Engine _____

Electrical System

Amps _____ Volts _____

Water System: gpm _____ psi _____

Tank size _____

Brooms(Hydraulic or Mech.) _____

Under Body Transfer Broom

Dimensions _____ Operation _____

Gutter Broom

Qty _____ Dimensions _____

Hopper Size (Material) _____ cub. yds (_____)

Hopper Dump Height _____

Please indicate and list any additional options and its pricing you want to offer:

<u>Option:</u>	<u>Price:</u>	<u>Option:</u>	<u>Price</u>
1. Cab Raise Assist Jack	\$ _____	5. _____	\$ _____
2. Dual operating controls-RH/LH	\$ _____	6. _____	\$ _____
3. _____	\$ _____	7. _____	\$ _____
4. _____	\$ _____	8. _____	\$ _____

Delivery will be made approximately _____ days after receipt of order.

ITEM # 4: Outright purchase of one (1) new Four Wheel Mechanical Street Sweepers meeting the attached MoDOT specification.

I am bidding (MAKE) _____ (MODEL) _____

Price: \$ _____

Cab/Chassis

Make _____ Model _____

Engine _____

Electrical System

Amps _____ Volts _____

Auxiliary Engine

Engine _____

Cylinders _____

HP/RPM _____

Size of fuel tank _____

Water System: gpm _____ psi _____

Tank size _____

Brooms(Hydraulic or Mech.) _____

Under Body Transfer Broom

Dimensions _____ Operation _____

Gutter Broom

Qty _____ Dimensions _____

Hopper Size (Material) _____ cub. yds (_____)

Hopper Dump Height _____

Please indicate and list any additional options and its pricing you want to offer:

<u>Option:</u>	<u>Price:</u>	<u>Option:</u>	<u>Price</u>
1. Cab Raise Assist Jack	\$ _____	5. _____	\$ _____
2. RH operating controls and seat (same as LH)	\$ _____	6. _____	\$ _____
3. _____	\$ _____	7. _____	\$ _____
4. _____	\$ _____	8. _____	\$ _____

Delivery will be made approximately _____ days after receipt of order.

VENDOR INFORMATION & PREFERENCE CERTIFICATION FORM

Vendor Information

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

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

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

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

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

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

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

Preference Certification

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

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

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

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

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

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

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

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

Veteran Information

Business Information

Service-Disabled Veteran's Name (Please Print)	Service-Disabled Veteran Business Name
Service-Disabled Veteran's Signature	Missouri Address of Service Disabled Veteran Business

NOTICE OF COOPERATIVE PURCHASING

MODOT IS INTERESTED IN ASSISTING MISSOURI GOVERNMENTAL ENTITIES, ETC. IN PURCHASING EQUIPMENT, VARIOUS MATERIALS, AND SUPPLIES THAT MEET THE MISSOURI DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

Each bidder is asked to indicate below whether they would be willing to offer **Street Sweepers** listed in the attached "Request for Bid" for sale to these local political entities at the same bid price offered to MoDOT.

It is understood MoDOT will not issue purchase orders, accept delivery nor make payment for these items ordered by any of these agencies. It is further understood the price is based on the **Street Sweepers** meeting MoDOT specifications. Any added options, deletions, or extra freight costs would be negotiated between the local agency and the successful vendor.

Indicate below whether your company is willing to offer such cooperative purchasing for Missouri counties, cities or other political entities.

YES _____ NO _____

If the price varies throughout the state on MoDOT bids because of different delivery destinations, please indicate the price F.O.B. your location that would be offered as described.

F.O.B. Location _____

Indicate the deadline date that orders will be accepted. _____

COMPANY NAME _____

ADDRESS _____

E-MAIL _____

PHONE NUMBER _____

SIGNATURE _____

TITLE _____

DATE _____

ANTI-COLLUSION STATEMENT

STATE OF _____)
COUNTY OF _____)

SS.

_____ being first

duly sworn, deposes and says that he is _____
Title of Person Signing

of _____
Name of Bidder

that all statements made and facts set out in the bid for the above project are true and correct; and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affiant further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By _____

By _____

By _____

Sworn to before me this _____ day of _____, 20_____.

Notary Public

My Commission Expires _____

**Missouri Highways and Transportation Commission
Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions**

STANDARD SOLICITATION PROVISIONS

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

GENERAL TERMS AND CONDITIONS

Definitions

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

Nondiscrimination

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

Contract/Purchase Order

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

Applicable Laws and Regulations

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

Executive Order:

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

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

Preferences

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

Missouri Highways and Transportation Commission
Standard Bid Provisions, General Terms and Conditions and Special Terms and Conditions

Cancellation of Contract

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

Bankruptcy or Insolvency

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

Warranty

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

Status of Independent Contractor

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

Non-Walver

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

Indemnification

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

**Missouri Highways and Transportation Commission
Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions**

SPECIAL TERMS AND CONDITIONS

Tax Exempt Status:

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

Insurance

The Contractor shall maintain or cause to be maintained at Contractor's own expense commercial general liability, automobile liability, worker's compensation insurance against negligent acts, errors or omissions of the Contractor, or its subcontractors and anyone directly or indirectly employed by any of them. Any insurance policy required as specified in this Section shall be written by a company that is licensed and authorized to issue such insurance in the state of Missouri and shall provide insurance coverage for not less than the following limits of liability:

- 1) General Liability: Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence;
- 2) Automobile Liability: Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence;
- 3) Missouri State Workmen's Compensation policy or equivalent in accordance with state law.

Upon request from the Commission, the Contractor shall provide the Commission with certificates of insurance evidencing the required coverage and that such insurance is in effect.

Four Wheel (Vacuum) or Regenerative Air Street Sweeper – Item #1

General

- The intent of this specification is to secure the latest model and design “Vacuum or Regenerative air street sweeper” with extension broom capable of removing litter, debris, etc. from street surfaces. All items appearing in Manufacturer’s published literature and specifications as standard are assumed to be included in bidder’s proposal.

Cab/Chassis

- Must be diesel engine with shatterproof safety glass, tinted windshield and windows; Dual two-speed windshield wipers and washers with intermittent feature; factory installed AC/Heater and defroster; high back air suspension bucket seats or mid-back in air ride seats for both operator positions.
- Dual operating controls, RH and LH Operator positions with all O.E.M. components, AM/FM radio, LH and RH grab handles, seatbelts, LH and RH electric remote West Coast type outside mirrors, with 8” spot convex mirrors.
- RH gauge package shall be identical to original LH gauge package on dash
- Controls for all drive and sweeping functions shall be in-cab mounted.
- Engine protection system utilizing coolant temperature, oil pressure, etc.
- Minimum H.P. on chassis engine to be 200
- Chassis must have a minimum 32,000 pound GVWR and meet all current emission and motor vehicle standards

Electrical System, 12 Volt

- Sealed multiple beam headlights with dimmer switch, combination stop, tail, backup and directional signals, hazard warning flashers, clearance lights, front side marker lights, inside cab dome light and instrument lights.
- (Preferred) Wiring harnesses are to be color coded with a preference for hot stamping and labeling a min. of every 12”.
- Battery box/holder(s) shall be mounted to frame rail easily accessible.

Brakes

- Full air, service complete, cam type
- Parking brake to be spring set with air release

Steering

- Full power hydraulic

Sweeping/Cleaning Equipment

- Hopper, door and internal components shall be constructed of rust proof grade 304 Stainless Steel. All wear areas such as fan housing & pickup head shall be constructed of abrasion resistant steel with epoxy coating, replaceable liners, or other proven means to reduce wear.

Blower Fan & Exhaust

- Fan compartment shall be acoustically lined/sound suppressed and include replaceable wear liner. Fan speed independent of vehicle speed.
- Fan, fan compartment and all drive mechanism shall be housed in an enclosed compartment for safety and additional sound suppression.
- Fan housing shall incorporate an inspection/clean out door.

Side or Gutter Brooms

- Located each side, center of sweeper; hydraulically driven and hydraulic or pneumatic raised, lowered, suspended, adjusted, and tilted with inside cab controls.
- Power tilt gutter brooms on both sides controlled from inside cab.
- Broom contact pattern must remain constant with regards to vertical broom movement due to changes in pavement conditions.

Vacuum Nozzles/(Vacuum Sweepers Only)

- Minimum 11" inside diameter suction hoses; smooth inside bore hoses. Nozzles to be abrasion resistant (AR 400) steel; quick disconnect at pickup head for easy clean out.
- For safety nozzles must automatically raise when truck is placed in reverse.

Pick-Up Sweeping Head/ (Regenerative Air Sweepers Only)

- Minimum of 87" wide with abrasion resistant steel shoes/runners, heavy duty 3/8" thick wall rubber hoses attaching to hopper, quick disconnect on suction hose only, suspended from a minimum of 4 adjustable springs one (1) on each corner of pick-up head.
- For safety head must automatically raise when truck is placed in reverse.
- For performance, regenerative pick-up head must include a broom inside of the head.
- A quick disconnect shall be located near pickup head for easy clean out.

Water System

- Industrial grade polyethylene or stainless steel water tank to be standard of manufacturer with filler capacity, strainer and low level indicator. Minimum of four (4) spray nozzles on main broom, two (2) on each side broom, one (1) inside hopper to dampen debris being swept by suction nozzle, and a front spray bar, or additional nozzles for dusty areas being swept, all spray nozzles controlled separately on console inside cab.
- Inside cab 'low' water indicator required.
- Hydrant fill hose required, minimum 16 feet.
- A Stainless Steel mesh filter is required in the water system to prevent spray bars from clogging.

Automatic Lubrication System

- Complete with individually calibrated injector pumps and lines for each grease point. An electronic controller will allow for adjustment of lubrication cycles. A manual override button will provide for testing.

Engine, Sweeper

- Minimum 4-cylinder turbo charged Tier 3 diesel; engine should have air-cleaner with pre-cleaner, full flow oil filter, variable RPM control, temperature and oil and coolant level shut-off, and emergency shut-off. Must meet minimum of Tier 3 emissions.
- Engine compartment to be easily accessible from left and right for service.
- A shutdown shall be supplied which stops the engine when the hydraulic oil in the reservoir falls below the acceptable level required.
- A shutdown shall be supplied which stops the engine when the engine temperature and oil pressure falls below the acceptable level required.

Hopper

- Air Sweeper Hopper shall be a minimum of seven cubic yard capacity, constructed of grade 304 Stainless Steel including rear door, screens and dust separator.
- For safety, a hopper load indicator must be provided to warn Operator that chassis is loaded to capacity of chassis suspension.

- To reduce dust during transport and dumping, the hopper must be able to be unloaded without the fan engaged and moving air.

Instruments, Inside cab mounted

- Water temperature, oil pressure and diesel gauges for all engines, ammeter, speedometer/odometer, tachometer, electric hour meter for all engines, broom hour meter. All instruments are to be located in cab between seats, centrally located for good vision from operator position(s).

Control Panel

- Shall include all sweeping and auxiliary engine controls. The control panel shall be mounted forward in the truck cab to allow easy viewing and access to all controls from either operator's position.

Arrow Board

- Arrow board specifications are attached. **LED warning lights shall be utilized.** Please list any alternative method and specifications for less cumbersome arrow signaling that will maintain the 6' X 3' size and effectiveness of safety. Price shall not exceed that of standard specifications. All new provisions subject for review by Missouri Department of Transportation Operations Division. *If any questions, please call the District or General Services.*

Electrical

- All wiring shall be color coded and hot-stamped with function every few inches.
- Control console shall be backlit for nighttime sweeping operation.
- A floodlight shall be adjacent to each side and main broom for safety.

Accessories

- A LifeLiner Coating or equivalent epoxy coating complete with repair kit or bolt in replaceable wear liners shall be provided for additional protection of the entire interior surface in the hopper in lieu of grade 304 Stainless Steel.
- Pricing should include listing for a cab jack as an option on the Bid Sheet. Cab jack will assist in raising the cab to prevent bodily damage (e.g. Back strain). *Ease of operability and safety is heavily looked upon.*

Safety Systems

- Backup alarm when transmission is placed in reverse, all sweep functions shall stop rotating and raise-up.
- Two (2) top-mounted **LED warning** lights shall be supplied with light protector. One (1) **LED warning** light to be mounted rear of unit and one (1) **LED warning** light to be mounted rear of cab, but not on cab itself.
- Two (2) flush mounted **LED warning** lights shall be installed in tailgate/bumper, bottom right and left hand corner.
- A back-up camera shall be mounted to rear of hopper with a color monitor mounted in cab to the dash to show Operator performance behind sweeper and for safety when backing up.

Paint

- Color of cab and sweeper to be "Highway Yellow" #13432 or manufacturer's standard safety or industrial yellow over a prime coat. (IF YOU HAVE ANY QUESTIONS REGARDING COLOR PLEASE CONTACT THIS OFFICE.)

Mechanical Broom with Vacuum-Assist Filtration Street Sweeper – Item #2

General

- The intent of this specification is to secure the latest model and design “Mechanical Broom with Vacuum-Assist Filtration Street Sweeper”, high dump mechanical street sweeper capable of removing litter, debris, etc. from street surfaces, that shall effectively control dust with or without use of water or combination there of. All items appearing in Manufacturer’s published literature and specifications as standard are assumed to be included in bidder’s proposal.

Cab/Chassis

- Must be diesel engine; Shatterproof safety glass, tinted windshield and all windows; Dual two-speed windshield wipers with intermittent feature and washers; factory installed AC/Heater and defroster; high back air suspension bucket seats or mid-back in air ride seats for both operator positions.
- Dual operating controls, RH and LH Operator positions with all O.E.M.components , AM/FM radio, LH and RH grab handles, seatbelts, LH and RH electric remote West Coast type outside mirrors, with 8” convex spot mirrors.
- RH gauge package shall be identical to original LH gauge package on dash
- Controls for all drive and sweeping functions shall be in-cab mounted.
- Engine protection system utilizing coolant temperature, oil pressure, etc.
- Minimum H.P. on chassis engine to be 200
- Chassis must have a minimum 32,000 pound GVWR and meet all current emission and motor vehicle standards

Auxiliary Engine

- Turbocharged diesel; minimum 4 cylinder minimum Tier 4 emission, fuel injected; dry type air cleaner
- A shutdown shall be supplied which stops the engine when the hydraulic oil in the reservoir falls below the acceptable level required.
- A shutdown shall be supplied which stops the engine when the engine temperature and oil pressure falls below the acceptable level required.

Instruments, Inside cab mounted

- Water temperature, oil pressure and diesel gauges for all engines, ammeter, speedometer/odometer, tachometer, electric hour meter for all engines, broom hour meter. All instruments are to be located on dash of cab, centrally located for good vision from operator position(s).

Electrical System, 12 Volt

- Complete 12 volt electrical system with a min. of 100 amp alternator and min. dual 900 CCA batteries
- (Preferred) Wiring harnesses are to be color coded with a preference for hot stamping and labeling a min. of every 12”.
- Battery box/holder(s) shall be mounted to chassis easily accessible

Steering

- Full power hydraulic

Hopper

- Minimum capacity 4 cubic yards; controlled from inside the cab. Dash mounted full load indicator light shall be furnished. Hopper inspection door to be included on the street side of the unit. An auxiliary emergency hopper lift system shall be included if needed for access to engine components.
- Hopper must have the ability to ground dump or dump at infinite levels up to a minimum of 9 ft. 6 inch height for truck loading. Fixed dump height units will NOT be acceptable.

Hydraulic System

- Complete with all pumps and motors for driving elevator, pickup broom, gutter brooms and for operation of lift functions and steering.

Sweeping/Cleaning Equipment

- Hopper and all wear areas are to be stainless steel or equivalent sprayed on LifeLiner coating in entire hopper area.

Filtration System

- Dust filter bag to be made of synthetic material; minimum one vacuum fan required.
- Dust filter shaker required to clean filter when full; to be operated from inside the cab.
- To provide dust control without use of water in freezing temperature.
- Include water system complete with minimum 300 gallon reservoir, pump and lines to spray dust suppression nozzles that Operator can choose to use for certain applications.

Blower Fan & Exhaust

- Fan housing shall be protected from debris via the baghouse filtration; fan speed to be independent of vehicle speed

Pickup Broom

- Full floating with spring or air bag suspension, pneumatically or hydraulically raised and lowered.

Side or Gutter Brooms(LH and RH)

- Free floating spring suspension, pneumatic or hydraulic lift control, automatic retract. The segments shall be disposable and quick replaceable type. Travel width not to exceed 8'. Core and Brooms to be Manufactures standard. Side broom tilt with in-cab controls.
- Brooms to be enclosed in dust-proof shrouding to prevent fugitive dust escape.

Water System

- Industrial grade polyethylene or stainless steel water tank with filler hose pump, spray bars over each gutter broom and pickup broom; front spray bar; and tank level indicator
- Front mounted spray bar
- Stainless Steel mesh filter required in the water system to prevent spray bars from clogging.
- Hydrant fill hose required, minimum 16 feet.

Automatic Lubrication System

- Complete with individually calibrated injector pumps and lines for each grease point. An electronic controller will allow for adjustment of lubrication cycles. A manual override button will provide for testing.

Engine, Sweeper

- Minimum 4-cylinder turbo charged diesel; engine should have air-cleaner wet pre-cleaner, full flow oil filter, variable RPM control, temperature and oil shut-off, and emergency shut-off
- Engine compartment to be easily accessible from left and right for service

Control Panel

- Shall include all sweeping and auxiliary engine controls. The control panel shall be mounted forward in the truck cab on a swivel base to allow easy viewing and access to all controls from either operator's position

Arrow Board

- Arrow board specifications are attached. **LED warning lights shall be utilized.** Please list any alternative method and specifications for less cumbersome arrow signaling that will maintain the 6' X 3' size and effectiveness of safety. Price shall not exceed that of standard specifications. All new provisions subject for review by Missouri Department of Transportations Operations Division. *If any questions, please call the District or General Services.*

Accessories

- A LifeLiner Coating or equivalent epoxy shall be provided to cover the entire interior surface in the hopper in lieu of grade 304 Stainless Steel.
- Pricing shall be listed for a cab jack as an option on the Bid Sheet. Cab jack will assist in raising the cab to prevent bodily damage (e.g. Back strain). Ease of operability will be heavily looked upon.

Safety Systems

- Backup alarm when transmission is placed in reverse, all sweep functions shall stop rotating and rise.
- Two (2) top-mounted **LED warning** lights shall be supplied with light protector. One (1) **LED warning** light to be mounted rear of unit and one (1) **LED warning** light to be mounted rear of cab, but not on cab itself.
- Two (2) flush mounted **LED warning** lights shall be installed in tailgate/bumper, bottom right and left hand corner.
- A back-up camera shall be mounted to rear of hopper with a color monitor mounted in cab to the dash to show Operator performance behind sweeper and for safety when backing up

Paint

- Color to be "Highway Yellow" #13432 or manufacturer's standard safety or industrial yellow over a prime coat. (IF YOU HAVE ANY QUESTIONS REGARDING COLOR PLEASE CONTACT THIS OFFICE.)

Three Wheel High Dump Street Sweeper Specifications – Item #3

General - The intent of this specification is to secure the latest model and design "Three Wheel" high maneuverable, high dump, front-loading mechanical street sweeper capable of removing litter, debris, etc. from street surface. All items appearing in Manufacturer's published literature and specifications as standard are assumed to be included in bidder's proposal.

Cab - All weather steel pressurized fully enclosed with full doors, windshield, (all glass to be shatter proof), two-speed dual electric intermittent windshield wipers, in-cab air conditioning (shall not protrude above, heater, ventilator and defroster with 6 adjustable vents; hydraulic suspension upholstered full foam padded adjustable seat(s) and backrest(s), remote and heated LH and RH West Coast outside rearview mirrors, and inside cab rearview mirror, tilt and telescoping steering wheel(s).

A limb guard shall protect both the left and right side of the cab.

Lights and Signals - Two sealed beam headlights with Hi-Lo Beam, one spotlight for each gutter broom, clearance lights, two stop and tail lights, self-canceling directional signals, 4-Way hazard warning flasher, instrument lights, cab dome light, and horn.

A Whelan strobe light shall be provided with wiring and mounting provisions for one strobe light above cab level mounted at rear edge of cab.

Instruments – Inside Cab Mounted - Speedometer, odometer, fuel gauge, ammeter, water temperature gauge, oil pressure gauge, key ignition switch and hand throttle. A electric hour meter will be installed. Main broom hour meter, right and left side broom inclination gauges to be included.

Controls - Drive and sweeping controls for all functions shall be in-cab mounted, easily accessible to operator. Sweeper shall have dual driving and center mounted sweeping controls to allow operator to be positioned for maximum visibility of sweeping components for safety.

Electrical System - Complete 12 volt electrical system with a minimum of 120 amps. alternator and 925 CCA battery.

Engine – Minimum Tier III EPA approved diesel with full flow oil filter and dry type air cleaner. For greater heat dissipation and lower cost of maintenance, engine shall have individually replaceable wet sleeve cylinder liners.

An engine shutdown shall be included which protects against damage when either low oil pressure or high coolant temperature conditions occur. A low hydraulic oil, high temperature automatic engine shutdown system shall also be provided to protect the hydraulic system from failure.

Brakes - Service, full power hydraulic and parking brake.

Axle, Drive – Hydrostatic front wheel drive

Rear Axle, Steer - Reinforced steel strut with spring wheel guide assembly.

Hydrostatic and Final Drives - Hydrostatic transmission and hydraulic motor on each drive wheel, single foot pedal providing forward/reverse control without clutch or shifting.

Steering - HD full power

Tires and Wheels, (2 Front and 2 Rear) - Wheels - Disc Front and Rear

Tires, Drive - Minimum 11R22.5 Steel Belted Radials, Tires, Rear Steer - Minimum 10R17.5 Steel Belted Radials, Front and Rear Spare Wheels.

To reduce chassis fatigue, sweeper shall be equipped with fully rear sprung guide wheel strut utilizing two large heavy duty springs concentrically mounted around two smaller springs.

Hopper - Minimum capacity 3.5 - cubic yards front loading hopper. Capable of dumping at any height up to 9'6". A hopper safety prop shall be included. Operator shall be able to fully see the hopper out the front of the sweeper for safe dumping into a dump truck or a container.

Hydraulic System - Complete with all pumps and motors for driving elevator, pickup broom, gutter brooms, and for operation of lift functions and steering.

Pickup Broom(Main Broom) - Full floating hydraulically raised and lowered, speeds variable. The core shall be quick-change steel. The filler shall be synthetic fiber. Main broom suspension shall be hydraulic, allowing the operator to regulate the positive down pressure exerted on the broom from the cab while moving. System shall include side broom position indicator located within the cab.

Gutter Brooms (LH and RH) - Free floating hydraulic suspension, hydraulic lift control, automatic retract and variable speeds. Tilting of both side brooms shall be variable from the cab. An electrically controlled linear actuator shall allow the operator to tilt the side broom inward and outward from the cab, while sweeping. The segments shall be disposable and quick replaceable type flat steel wire.

Water System- Complete with a minimum of 220 gallon capacity industrial grade polyethylene tank, filler hose, pump, spray bars over each gutter broom and pickup broom, flusher system and in-cab controls.

Automatic Lubrication System - Complete with individually calibrated injector pumps and lines for each grease point. An electronic controller will allow for adjustment of lubrication cycles. A manual override button will provide for testing.

Accessories

A conveyor lower roller cleanout shall be provided.

A light protector shall be provided for strobe light.

Dual deluxe mechanical suspension seats shall be provided for operator stations.

An AM/FM radio shall be provided.

A shutdown shall be supplied which stops the engine when the hydraulic oil in the reservoir falls below the acceptable level required or the temperature exceeds the maximum allowable.

Safety Systems - Backup alarm when transmission is placed in reverse, Sweep gear shall automatically raise in reverse and then redeploy to last position when operation is redirected to forward, must comply with FMVSS for school bus forward visibility, must have 360 degree visibility without the use of mirrors, cameras or visual aids. A color camera system with LCD screen in cab shall be installed to prevent damage to the unit when backing up.

Paint - Color to be "Highway Yellow" #13432 or manufacturer's standard safety or industrial yellow over a prime coat. (IF YOU HAVE ANY QUESTIONS REGARDING COLOR PLEASE CONTACT THIS OFFICE.)

Mechanical Broom Truck Mounted Street Sweeper – Item #4

General

- The intent of this specification is to secure the latest model and design “Mechanical Broom Street Sweeper”, high dump mechanical street sweeper capable of removing litter, debris, etc. from street surfaces that shall effectively control dust with use of water. All items appearing in Manufacturer’s published literature and specifications as standard are assumed to be included in bidder’s proposal.

Cab/Chassis

- Must be diesel engine; Shatterproof safety glass, tinted windshield and all windows; Dual two-speed windshield wipers with intermittent feature and washers; factory installed AC/Heater and defroster; high back air suspension bucket seats or mid-back in air ride seats for both operator positions.
- Dual operating controls, RH and LH Operator positions with all O.E.M.components , AM/FM radio, LH and RH grab handles, seatbelts, LH and RH electric remote West Coast type outside mirrors, with 8” convex spot mirrors.
- RH gauge package shall be identical to original LH gauge package on dash
- Controls for all drive and sweeping functions shall be in-cab mounted.
- Engine protection system utilizing coolant temperature, oil pressure, etc.
- Minimum H.P. on chassis engine to be 200
- Chassis must have a minimum 32,000 pound GVWR and meet all current emission and motor vehicle standards

Auxiliary Engine

- Turbocharged diesel; minimum 4 cylinder minimum Tier 4 emission, fuel injected; dry type air cleaner
- A shutdown shall be supplied which stops the engine when the hydraulic oil in the reservoir falls below the acceptable level required.
- A shutdown shall be supplied which stops the engine when the engine temperature and oil pressure falls below the acceptable level required.

Instruments, Inside cab mounted

- Water temperature, oil pressure and diesel gauges for all engines, ammeter, speedometer/odometer, tachometer, electric hour meter for all engines, broom hour meter. All instruments are to be located on dash of cab, centrally located for good vision from operator position(s).

Electrical System, 12 Volt

- Complete 12 volt electrical system with a min. of 100 amp alternator and min. dual 900 CCA batteries
- (Preferred) Wiring harnesses are to be color coded with a preference for hot stamping and labeling a min. of every 12”.
- Battery box/holder(s) shall be mounted to chassis easily accessible

Steering

- Full power hydraulic

Hopper

- Minimum capacity 4 cubic yards; controlled from inside the cab. Dash mounted full load indicator light shall be furnished. Hopper inspection door to be included on the street side of the unit. An auxiliary emergency hopper lift system shall be included if needed for access to engine components.
- Hopper must have the ability to ground dump or dump at infinite levels up to a minimum of 9 ft. 6 inch height for truck loading. Fixed dump height units will NOT be acceptable.

Hydraulic System

- Complete with all pumps and motors for driving elevator, pickup broom, gutter brooms and for operation of lift functions and steering.

Sweeping/Cleaning Equipment

- Hopper and all wear areas are to be stainless steel or equivalent sprayed on LifeLiner coating in entire hopper area.

Pickup Broom

- Full floating with spring or air bag suspension, pneumatically or hydraulically raised and lowered.

Side or Gutter Brooms(LH and RH)

- Free floating spring suspension, pneumatic or hydraulic lift control, automatic retract. The segments shall be disposable and quick replaceable type. Travel width not to exceed 8'. Core and Brooms to be Manufactures standard. Side broom tilt with in-cab controls.

Water System

- Industrial grade polyethylene or stainless steel water tank with filler hose pump, spray bars over each gutter broom and pickup broom; front spray bar; and tank level indicator
- Front mounted spray bar
- Stainless Steel mesh filter required in the water system to prevent spray bars from clogging.
- Hydrant fill hose required, minimum 16 feet.

Automatic Lubrication System

- Complete with individually calibrated injector pumps and lines for each grease point. An electronic controller will allow for adjustment of lubrication cycles. A manual override button will provide for testing.

Engine, Sweeper

- Minimum 4-cylinder turbo charged diesel; engine should have air-cleaner wet pre-cleaner, full flow oil filter, variable RPM control, temperature and oil shut-off, and emergency shut-off
- Engine to be minimum Tier 4 emission standard
- Engine compartment to be easily accessible from left and right for service

Control Panel

- Shall include all sweeping and auxiliary engine controls. The control panel shall be mounted forward in the truck cab on a swivel base to allow easy viewing and access to all controls from either operator's position

Arrow Board

- Arrow board specifications are attached. **LED warning lights shall be utilized.** Please list any alternative method and specifications for less cumbersome arrow signaling that will maintain the 6' X 3' size and effectiveness of safety. Price shall not exceed that of standard specifications. All new provisions subject for review by Missouri Department of Transportations Operations Division. *If any questions, please call the District or General Services.*

Accessories

- A LifeLiner Coating or equivalent epoxy shall be provided to cover the entire interior surface in the hopper in lieu of grade 304 Stainless Steel.
- Pricing shall be listed for a cab jack as an option on the Bid Sheet. Cab jack will assist in raising the cab to prevent bodily damage (e.g. Back strain). Ease of operability will be heavily looked upon.

Safety Systems

- Backup alarm when transmission is placed in reverse, all sweep functions shall stop rotating and rise.
- Two (2) top-mounted **LED warning** lights shall be supplied with light protector. One (1) **LED warning** light to be mounted rear of unit and one (1) **LED warning** light to be mounted rear of cab, but not on cab itself.
- Two (2) flush mounted **LED warning** lights shall be installed in tailgate/bumper, bottom right and left hand corner.
- A back-up camera shall be mounted to rear of hopper with a color monitor mounted in cab to the dash to show Operator performance behind sweeper and for safety when backing up

Paint

- Color to be "Highway Yellow" #13432 or manufacturer's standard safety or industrial yellow over a prime coat. (IF YOU HAVE ANY QUESTIONS REGARDING COLOR PLEASE CONTACT THIS OFFICE.)

**MISSOURI DEPARTMENT OF TRANSPORTATION (MoDOT)
TRUCK MOUNTED FLASHING ARROW PANEL SPECIFICATIONS
(SOLAR POWERED, WITH LED LAMPS)**

Description

The truck mounted flashing arrow panel shall consist of an arrow panel, mounting frame and rotating mechanism, remote control switches and circuitry, a control cabinet housing electronic components mounted in a self-contained power supply. Each unit shall be fully assembled when delivered.

Panel and Mounting Assembly

The arrow panel shall be aluminum and contain a minimum of 15 LED (Light Emitting Diode) lamps. Lamps shall be energized from a control cabinet mounted inside the battery compartment and controlled by remote control switches located inside the truck cab.

A nominal 5 1/2-inch, 360° tunnel visor with full attachment flange shall be provided for each lamp. Visors shall be attached to the panel with stainless steel machine screws. Visors shall be removable without removing the screws. The panel or lamp holder shall be notched to match a projection on the lamp to ensure proper lamp alignment. All lamps shall be replaceable from the front of the panel.

A lamp of the same type used on the panel face shall be provided on the backside of the panel and be continuously energized or flashed when the arrow panel is operating. A visor is not required on this lamp. It shall be located in the uppermost corner of the panel on the driver's side.

Lamps shall be PAR-46, yellow, 5 1/2" dia., LED lamps, specifically designed for solar applications. Each lamp shall have an optical lense and contain enough light emitting diodes to meet the existing MoDOT specifications for visibility and legibility performance standards as stated later in these specifications.

Overall size of the arrow panel shall be a nominal 3 feet by 6 feet.

Panel mounting height shall be a nominal 4 1/2 feet from the bottom of the support frame to the lowest point on the panel.

The arrow panel shall consist of a nominal 3-inch by 1 inch by 1/8 inch welded aluminum channel with a 1/16 inch thick aluminum sheet attached to the front and back. The front and back surfaces of the panel shall be painted non-reflective flat black. All wiring inside the arrow panel shall be corrosion resistant wiring and shall be attached to the panel approximately every 8-inches. Company names or logos shall not be placed on the arrow panel.

The arrow panel shall be supported on a four vertical post framework consisting of a minimum of 2-inch by 2-inch by 1/8 inch thick welded steel tubing. All open ends of tubing shall be capped and welded shut. The panel shall be rotatable from a horizontal to a vertical position electrically, hydraulically, by winch and cable (minimum 1/4" diameter, galvanized aircraft cable) with automatic brake, with a screw type mechanism, or by a self-locking, manually operated square stainless steel tube. All manually operated winch mechanisms shall be mounted on the right, or passenger, side of the truck, as according to the drawing on Attachment 2.

The supporting frame shall have a locking device to secure the panel in the horizontal and vertical positions. When in the horizontal position, the panel shall rest on a rigid frame support, relieving the load from the rotating device. Angle and cross bracing of the vertical supports shall be provided at the top and bottom of the supports to ensure a rigid frame. (See the drawing on Attachment 2.)

The support frame shall be painted one coat of primer and one coat of Du pont Automotive Deluxe Enamel Code 93-75306 (yellow), or Chrome Enamel 13432 (yellow), of Federal Standard 595, or equal. A high-visibility, safety orange paint, such as Sherwin Williams Omaha Orange Paint, which is similar to Federal Standard 595B #12243, or equal, may be used in lieu of yellow paint.

Control and Wiring

The remote cab control switches shall provide left and right flashing arrows, a double flashing arrow, and caution modes of operation. The caution mode shall consist of flashing 4 lamps using the upper and lower lamps of the left and right arrowheads and may be energized when the cab control power switch is placed in the "on" position. Left and right flashing arrows shall flash 10 lamps; 5 in the arrowhead and 5 in the horizontal shank, simultaneously. The double flashing arrow shall flash 13 lamps; 5 in each arrowhead and 3 in the horizontal shank, simultaneously.

The remote cab control shall include an on/off switch, a dim/bright selector switch, an operation mode selector switch, an LED power-on lamp, and be equipped for top of dash mounting. The control shall be provided with at least 30 feet of multi-conductor, salt-resistant, weatherproof cable and a NEMA 4 surface base with cover connector plug to connect to the NEMA 4 side entry hood connector mounted approximately 4 feet from the base of the frame and controller. (See the drawing on Attachment 2.) All electronic components shall be solid state and electrically protected by fuses or circuit breakers. The remote cab control shall be assembled in a manner to allow easy access to internal circuitry and switches for service and repair, such as with machine screws.

The flashing rate of the lamps shall not be less than 25 or greater than 40 flashes per minute. Lamp "on-time" shall be at least 50 percent.

Control circuitry shall provide dimming of all lamps to prevent blinding during night operation. Dimming shall be by manual and automatic control. The photoelectric cell shall automatically reduce the flashing arrow light intensity as ambient light reduces. The weatherproof photoelectric control shall be mounted on the side of the battery box.

A readily accessible cartridge fuse or circuit breaker shall be provided at the power supply end of the circuit between the power supply and controller mounted inside of the battery box. The fuse or breaker shall be rated to handle the maximum lamp load of 14 lamps. An additional fuse or breaker shall be located on the controller cabinet, protecting the circuit supplying the remote cab control.

Solar Panels: Solar panels shall be a minimum of 100-110 watt panels, with a remote battery charger backup. Solar panels shall be mounted above top of arrow panel with 4 degree pitch from the horizontal position to encourage shedding of dirt and rainwater.

Battery Charger: A built-in 50 amp, 120 volts AC input, 12 volts DC output, battery charger with charge indicator shall be included and shall be mounted at the base of the frame of the arrow panel support, inside a lockable, weatherproof, battery box.

Batteries: Batteries shall be the deep-cycle type; a minimum of 3 batteries, 12 VDC marine-type or equivalent, with a minimum of 1000 amp-hours of energy when fully charged, or a minimum of 6 batteries, 6 VDC marine-type or equivalent, with a minimum of 700 amp-hours of energy when fully charged, wired to provide a 12-volt DC power supply.

Battery Box: A lockable, weatherproof, battery box, mounted at the base of the frame of the arrow panel support, shall be made of minimum 14-gauge steel, with louvered side panels for cross-flow ventilation and with the bottom and sides coated with acid-resistant protector. The battery box shall be large enough to sufficiently house and service the controller, batteries and charger.

Voltage Regulator: The voltage regulator shall be solid-state, micro-processor-based, utilizing constant positive drive voltage and pulse with modulation to optimize battery charging, measuring battery voltage and adjusting current from the solar panels so the batteries are not overcharged and also prevent overcharging of batteries by the solar panels when the sign is turned off. An automatic disconnect device shall be included to protect the entire system in case of low voltage.

Controller: A solid-state, LED optimized, controller shall be utilized to minimize wattage consumption and maximize battery life. The control circuitry shall provide a negative ground to each lamp at all times. Frame-ground circuitry to the lamps will not be permitted. Individual ground circuits to each lamp shall be provided. Positive power shall be supplied to each lamp through individual circuits from solid-state load switches in the control cabinet. The controller cabinet shall be assembled in a manner to allow easy access to internal control circuitry, such as with machine screws, for service and repair purposes. The controller shall be provided with approximately a 4 foot long weather and salt-resistant, multi-conductor cable and side entry hood connector to provide a means of connection from the remote cab control. (See the drawing on Attachment 2.) Continuous, positive 12-volts to the lamps will not be permitted. The positive power to each lamp shall be reduced to zero voltage by the solid-state load switches. It shall have reverse-polarity and short-circuit protection. The voltage regulator and controller shall be in a lockable, weatherproof, aluminum enclosure mounted inside the lockable, weatherproof, battery box mounted at the base of the frame.

Disconnect and Enclosures: Disconnect plug and receptacle shall be determined by the current, voltage and number of contacts required for proper operation. Connectors shall have screw terminations and accommodate a wire size of up to # 12 AWG. The male connector shall be enclosed in a NEMA 4 rated surface base enclosure with cover. The female connector shall be enclosed in a NEMA 4 side-entry hood enclosure. Multi-conductor cable shall enter the bottom of the enclosures through a waterproof, flame-resistant and salt and corrosion resistant cable connector with a sealing nut and internal ratchet containing a neoprene cable gland. (See the drawing on Attachment 2.)

Locks: A lockable box shall be mounted on the frame of the arrow panel support to protect the batteries and battery charger from theft and damage from falling or flying objects.

General

All units shall meet or exceed the specifications for advance warning arrow panels as listed in Part 6F.53 of the Federal Highway Administration's Manual on Uniform Traffic Control Devices (MUTCD) Millennium Edition, December, 2000. Units shall be skid mounted to slip into the back of dump trucks.

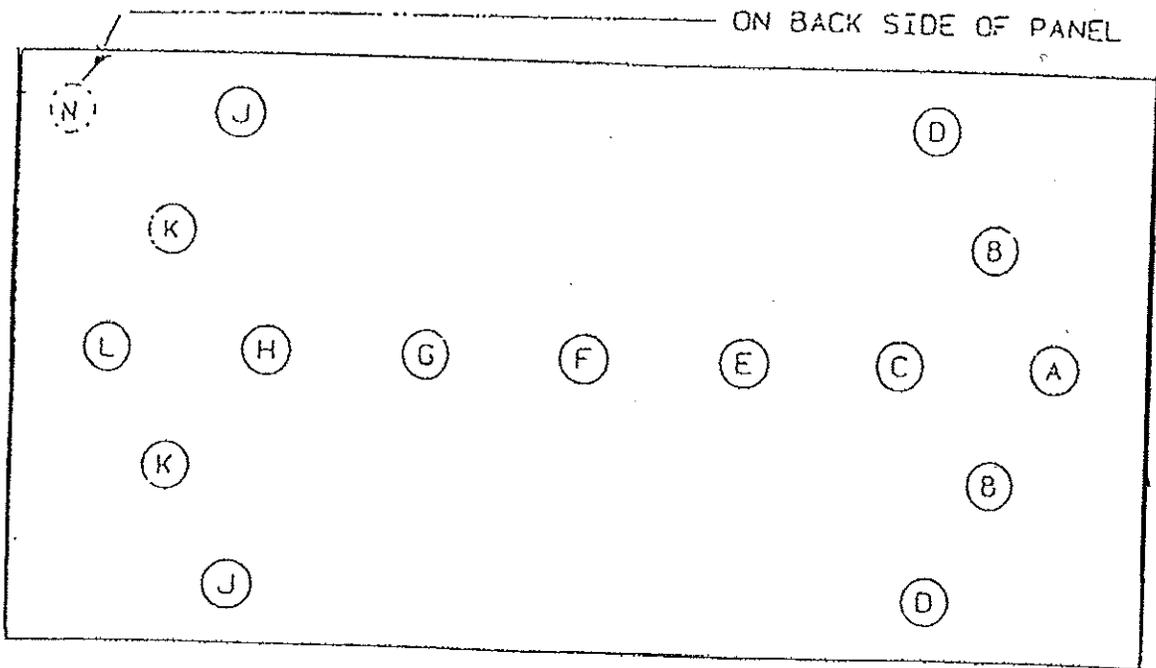
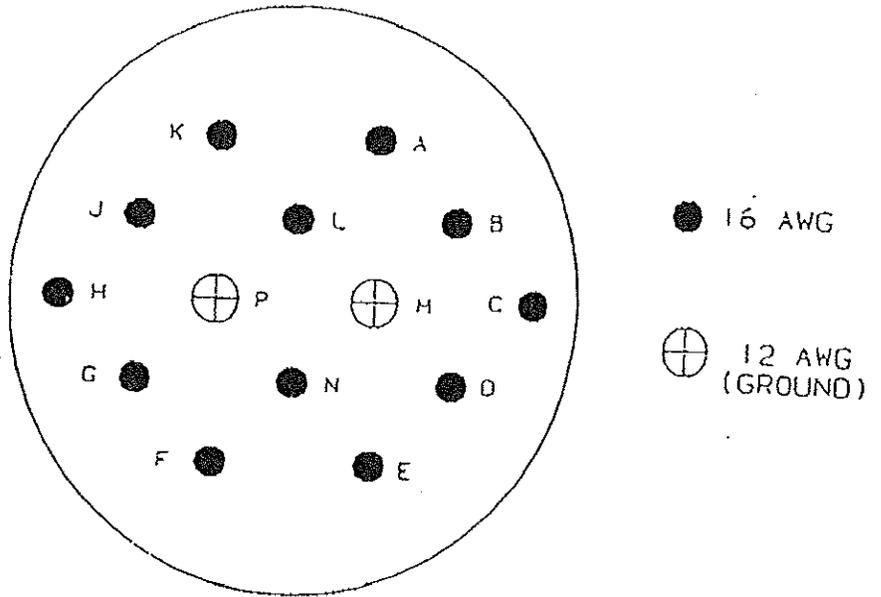
Performance: The flashing arrow must be visible on a sunny day for a distance of one mile. The flashing arrow must be able to operate for 20 continuous days in the single arrow mode during day/night light conditions with the solar panel disconnected or covered.. A device shall be provided to indicate the remaining charge in the batteries. The arrow panel support frame shall contain a device to align the arrow panel to oncoming traffic and to adjust the arrow panel so its bottom edge is relatively level when in use. The panel lamp must be visible during the "on-time" at an angle of 15° minimum to both the left and right of center and 4° minimum both up and down of center.

Owner's Manual

The successful bidder shall furnish two Owner's Manuals for each arrow panel. Each manual shall include the manufacturer's instructions for maintenance and operation of the power supply, arrow panel and control. Each manual shall also include a detailed, schematic, wiring diagram showing all circuits and components from the power supply through the control to the arrow panel. The schematic diagram shall list all transistors, resistors, triacs, diodes and other components with the manufacturer's name and part number.

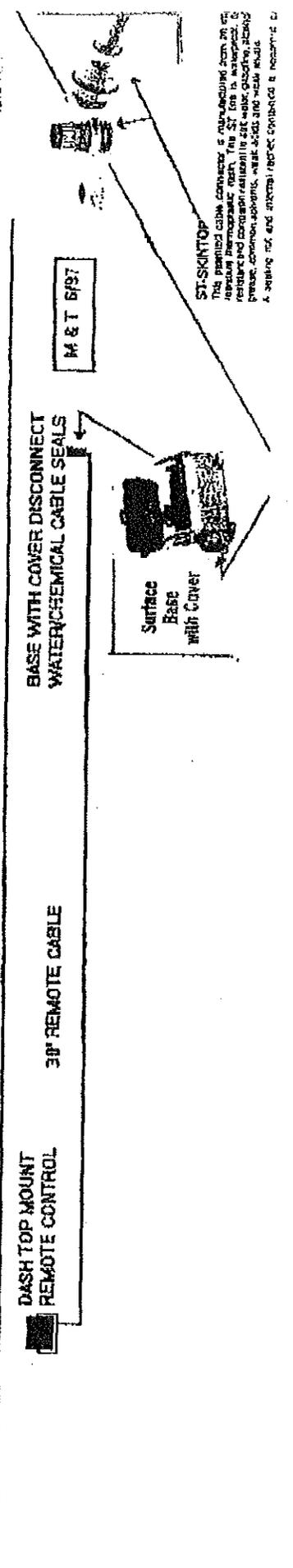
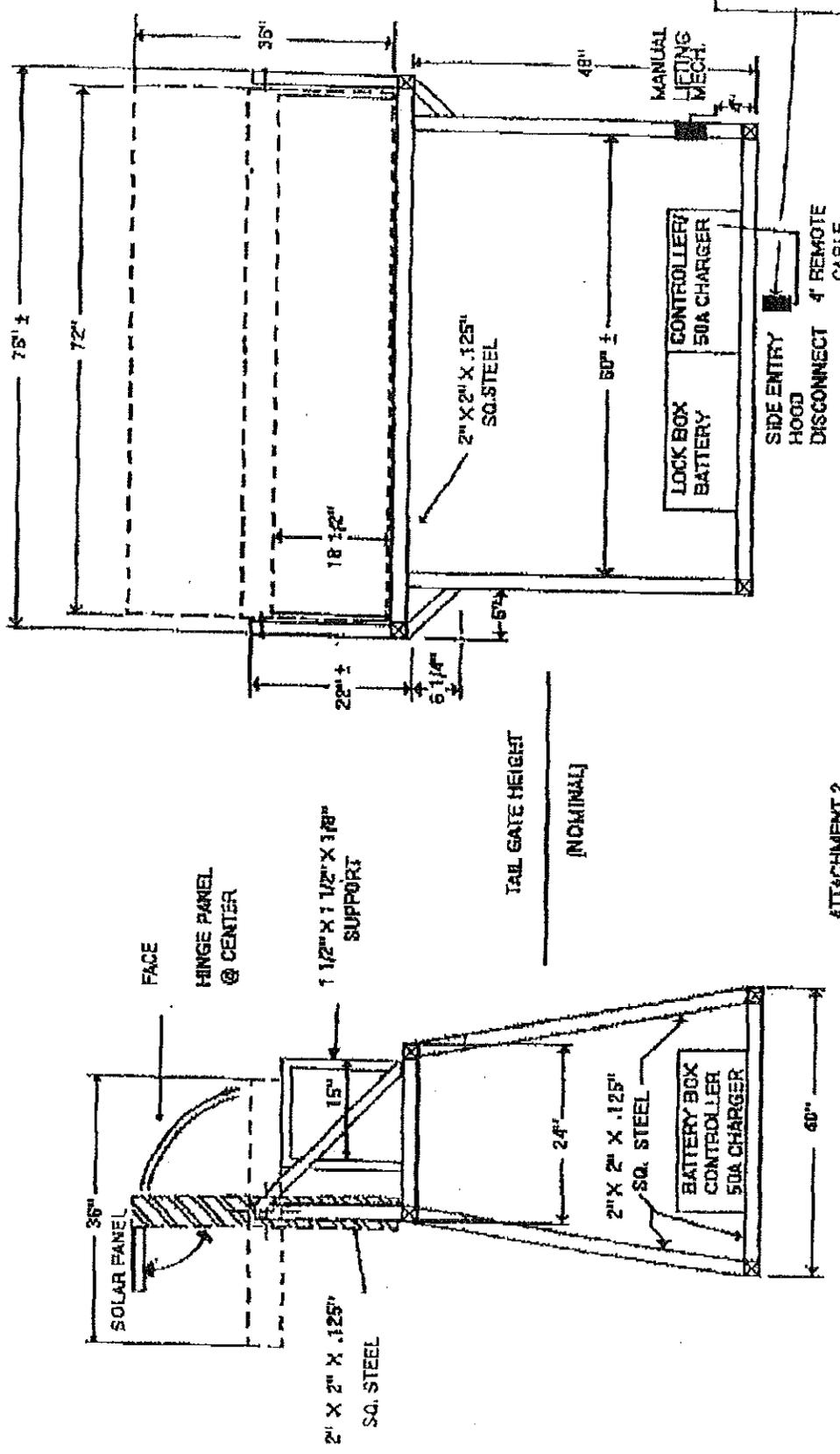
ATTACHMENT ONE

14 PIN
CONNECTOR



SUPPLIER TO DESIGNATE WIRING COLOR CODE.
PINS M AND P ARE NEGATIVE 12-VOLT GROUND.

SOLAR TRUCK MOUNTED ARROW PANEL



ST-SKINTOP
 The painted cable connectors are manufactured from an oil resistant polypropylene resin. The ST line is waterproof, oil resistant and chemically resistant to salt water, gasoline, alcohol, brake, common solvents, white acids and other acids. A warning tag and internal resistor contained a necessary 2.