



REQUEST FOR BID

Department of Administration
Purchasing Division

BID NUMBER

106138

RFB TITLE

Vacuum Sweeper Truck

PURPOSE

The purpose of this RFB is to solicit bids from responsive and responsible bidders to supply and deliver one new Vacuum Sweeper Truck. Complete description and technical specifications are included.

**DEADLINE FOR
BID SUBMISSIONS**

**2:00 P.M. Central Time
November 21, 2006**

Late bids, faxed bid, electronic mail bids or unsigned bid will be rejected

**SUBMIT BID TO
THIS ADDRESS**

DANE COUNTY PURCHASING DIVISION
ROOM 425 CITY COUNTY BUILDING
210 MARTIN LUTHER KING JR BLVD
MADISON, WI 53703-3345

**SPECIAL
INSTRUCTIONS**

Bidders must submit and original and **one (1) copy**

**PLEASE DIRECT
ALL INQUIRES TO**

NAME

Francisco Silva

TITLE

Purchasing Agent

PHONE #

608/267-3523

FAX #

608/266-4425

EMAIL

silva@co.dane.wi.us

WEB SITE

www.danepurchasing.com

THIS RFB IS COMPRISED OF:

Part 1- General Guidelines & Information

Part 2 - Bid Forms

Part 3- Detailed Specifications

RESPONSE CHECKLIST:

- Signed Affidavit – Completed Bid Forms
- Submit and original and one (1) Copy
- Label the lower corner of your bid with the bid number

DATE BID ISSUED: November 2, 2006

Part 1- General Guidelines and Information

1. Introduction

Dane County invites and will accept bids for item(s) outlined on Part 3 Detail Specifications. The County as represented by Purchasing Division, intends to use the results of this process to purchase item(s).

2. Note to Bidders:

Bidders are reminded to carefully examine the bid and specifications upon receipt. Any questions concerning this Bid must be submitted in writing by mail, fax or email at least **FIVE WORKING DAYS** prior to bid opening. Requests submitted after that time **WILL NOT** be considered. (**See cover page for contact person**)

In the event that it becomes necessary to provide additional clarifying data or information, or to revise any part of this RFB, revisions/amendments and/or supplements will be posted on the Dane County Purchasing web site. The Purchasing Division has the sole authority to make modifications of this specifications and or bid.

3. Vendor Registration Program:

All bidders wishing to submit a bid/proposal must be a paid registered vendor with Dane County. Prior to the bid opening, you can complete a registration form online by visiting our web site at www.danepurchasing.com or you can obtain a Vendor Registration Form by calling 608.266.4131. Your completed Vendor Registration Form and Registration Fee must be received for your bid to be considered for an award.

4. Acceptance:

Bid shall remain fixed and valid for acceptance for sixty (60) calendar days starting on the due date of the bid.

Dane County reserves the right to accept any part of this bid deemed to be in the best interest of the County. The County also retains the right to accept or reject any or all bids.

5. Payment Terms And Invoicing:

Unless otherwise agreed, Dane County will pay properly submitted vendor invoices within thirty (30) days of receipt of goods or services, or combination of both. Payment will not be made until goods or services are delivered, installed (if required), and accepted as specified. Invoices presented for payment must be submitted in accordance with instructions contained on the purchase order.

State Sale Tax/Federal Excise Tax: Bids should not include Federal Excise and Wisconsin Sales Taxes, as Dane County is exempt from payment of such taxes. See State Statute No. 77.54(9a). Wis. Stats. The Dane County's CES number is ES 41279.

6. Delivery

Quote price FOB destination. Price must include shipping. If there is a freight or transportation increase prior to delivery of the unit, the additional increase must be at the dealer/manufacturer's expense.

7. Award:

The County will award the bid to the responsive and responsible bidder whose bid is most advantageous to the County. In determining the most advantageous bid, the County will consider criteria such as, but not limited to, cost, bidder's past performance and/or service reputation, and service capability, quality of the bidder's staff or services, customer satisfaction, references, the extent to which the bidder's staff or services meet the County's needs, bidder's past relationship with the County, total long term cost to the County, fleet continuity and any other relevant criteria listed elsewhere in this solicitation. The County may opt to establish alternate selection criteria to protect its best interest or meet performance or operational standards.

8. Ordering/Acceptance:

Written notice of award to a vendor in the form of a purchase order or other document, mailed or delivered to the address shown on the bid will be considered sufficient notice of acceptance of bid.

9. Government Standards

All materials, equipment, and supplies provided to the County must fully comply with all safety requirements as set forth by the Wisconsin Department of Commerce and all applicable OSHA Standards. Bidders shall comply with all local, state and federal regulations, directives and laws.

10. Warranty

The length, time, and conditions of warranty must be attached to or stated in the bid document. In such cases where the location of the successful bidder makes it impractical to perform subsequent warranty and check-up service, it shall be the successful bidder's responsibility to make arrangements with an authorized dealer acceptable to Dane County. Generally a dealer over 50 miles from the delivery site will need to make other warranty arrangement.

The seller and/or manufacturer warrants that the goods sold hereunder will be merchantable quality, will conform to applicable specifications, and will be free from defects in material and workmanship and will be fit for the particular purpose intended.

Warranty does not commence until after the complete unit has been accepted and placed into service by the user agency.

STANDARD TERMS AND CONDITIONS
(Request For Bids/Proposals/Contracts)

1.0 **APPLICABILITY:** The terms and conditions set forth in this document apply to Requests for Proposals (RFP), Bids and all other transactions whereby the County of Dane acquires goods or services, or both.

1.1 **ENTIRE AGREEMENT:** These Standard Terms and Conditions shall apply to any contract, including any purchase order, awarded as a result of this request. Special requirements of a resulting contract may also apply. Said written contract with referenced parts and attachments shall constitute the entire agreement, and no other terms and conditions in any document, acceptance, or acknowledgment shall be effective or binding unless expressly agreed to in writing by the County.

1.2 **DEFINITIONS:** As used herein, "vendor" includes a provider of goods or services, or both, who is responding to an RFP or a bid, and "bid" includes a response to either an RFP or a bid.

2.0 **SPECIFICATIONS:** The specifications in this request are the minimum acceptable. When specific manufacturer and model numbers are used, they are to establish a design, type of construction, quality, functional capability or performance level, or any combination thereof, desired. When alternates are proposed, they must be identified by manufacturer, stock number, and such other information necessary to establish equivalency. Dane County shall be the sole judge of equivalency. Vendors are cautioned to avoid proposing alternates to the specifications which may result in rejection of their bid.

3.0 **DEVIATIONS AND EXCEPTIONS:** Deviations and exceptions from terms, conditions, or specifications shall be described fully, on the vendor's letterhead, signed, and attached to the bid. In the absence of such statement, the bid shall be accepted as in strict compliance with all terms, conditions, and specifications and vendor shall be held liable for injury resulting from any deviation.

4.0 **QUALITY:** Unless otherwise indicated in the request, all material shall be first quality. No pre-owned, obsolete, discontinued or defective materials may be used.

5.0 **QUANTITIES:** The quantities shown on this request are based on estimated needs. The County reserves the right to increase or decrease quantities to meet actual needs.

6.0 **DELIVERY:** Deliveries shall be FOB destination freight prepaid and included unless otherwise specified. County will reject shipments sent C.O.D. or freight collect.

7.0 **PRICING:** Unit prices shown on the bid shall be the price per unit of sale, e.g., gal., cs., doz., ea., etc., as stated on the request or contract. For any given item, the quantity multiplied by the unit price shall establish the extended price, the unit price shall govern in the bid evaluation and contract administration.

7.1 Prices established in continuing agreements and term contracts may be lowered due to market conditions, but prices shall not be subject to increase for the term specified in the award. Vendor shall submit proposed increases to the contracting department thirty (30) calendar days before the proposed effective date of the price increase. Proposed increases shall be limited to fully documented cost increases to the vendor that are demonstrated to be industry wide. Price increases may not be granted unless they are expressed in bid documents and contracts or agreements.

7.2 Submission of a bid constitutes bidder's certification that no financial or personal relationship exists between the bidder and any county official or employee except as specially set forth in writing attached to and made a part of the bid. The successful bidder shall disclose any such relationship which develops during the term of the contract.

8.0 **ACCEPTANCE-REJECTION:** Dane County reserves the right to accept or reject any or all bids, to waive any technicality in any bid submitted and to accept any part of a bid as deemed to be in the best interests of the County. Submission of a proposal or a bid constitutes the making of an offer to contract and gives the County an option valid for 60 days after the date of submission to the County.

8.1 Bids **MUST** be dated and time stamped by the Dane County Purchasing Division Office on or before the date and time that the bid is due. Bids deposited or time stamped in another office will be rejected. Actual receipt in the office of the purchasing division is necessary; timely deposit in the mail system is not sufficient. **THERE WILL BE NO EXCEPTIONS TO THIS POLICY.**

9.0 **METHOD OF AWARD:** Award shall be made to the lowest responsible, responsive vendor conforming to specifications, terms, and conditions, or to the most advantageous bid submitted to the County on a quality versus price basis. Among other things, quantities, time of delivery, purpose for which required, competency of vendor, the ability to render satisfactory service and past performance will be considered in determining responsibility.

10.0 **ORDERING/ACCEPTANCE:** Written notice of award to a vendor in the form of a purchase order or other document, mailed or delivered to the address shown on the bid will be considered sufficient notice of acceptance of bid. A formal contract containing all provisions of the contract signed by both parties shall be used when required by the Dane County Purchasing Division.

11.0 PAYMENT TERMS AND INVOICING: Unless otherwise agreed, Dane County will pay properly submitted vendor invoices within thirty (30) days of receipt of goods or services, or combination of both. Payment will not be made until goods or services are delivered, installed (if required), and accepted as specified. Invoices presented for payment must be submitted in accordance with instructions contained on the purchase order.

11.1 NO WAIVER OF DEFAULT: In no event shall the making of any payment or acceptance of any service or product required by this Agreement constitute or be construed as a waiver by County of any breach of the covenants of the Agreement or a waiver of any default of the successful vendor, and the making of any such payment or acceptance of any such service or product by County while any such default or breach shall exist shall in no way impair or prejudice the right of County with respect to recovery of damages or other remedy as a result of such breach or default.

12.0 TAXES: The County and its departments are exempt from payment of all federal tax and Wisconsin state and local taxes on its purchases except Wisconsin excise taxes as described below. The State of Wisconsin Department of Revenue has issued tax exempt number ES41279 to Dane County.

12.1 The County is required to pay the Wisconsin excise or occupation tax on its purchase of beer, liquor, wine, cigarettes, tobacco products, motor vehicle fuel and general aviation fuel. The County is exempt from Wisconsin sales or use tax on these purchases. The County may be subject to other states' taxes on its purchases in that state depending on the laws of that state. Vendors performing construction activities are required to pay state use tax on the cost of materials.

13.0 GUARANTEED DELIVERY: Failure of the vendor to adhere to delivery schedules as specified or to promptly replace rejected materials shall render the vendor liable for all costs in excess of the contract price when alternate procurement is necessary. Excess costs shall include administrative costs.

14.0 APPLICABLE LAW AND VENUE: This contract shall be governed under the laws of the State of Wisconsin, and venue for any legal action between the parties shall be in Dane County Circuit Court. The vendor 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 this contract and which in any manner affect the work or its conduct.

15.0 ASSIGNMENT: No right or duty in whole or in part of the vendor under this contract may be assigned or delegated without the prior written consent of Dane County.

16.0 NONDISCRIMINATION/AFFIRMATIVE ACTION: During the term of this Agreement the vendor agrees, in accordance with sec. 111.321, Wis. Stats., and Chapter 19 of the Dane County Code of Ordinances, not to discriminate against any person, whether an applicant or recipient of services, an employee or applicant for employment, on the basis of age, race, ethnicity, religion, color, gender, disability, marital status, sexual orientation,

national origin, cultural differences, ancestry, physical appearance, arrest record or conviction record, military participation or membership in the national guard, state defense force or any other reserve component of the military forces of the United States, or political beliefs. The vendor shall provide a harassment-free work environment. These provisions shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruitment, advertising, layoff, termination, training, including apprenticeships, rates of pay or other forms of compensation.

16.1 Vendors who have twenty (20) or more employees and a contract of twenty thousand dollars (\$20,000) or more must submit a written affirmative action plan to the County's Contract Compliance Officer within fifteen (15) working days of the effective date of the contract. The County may elect to accept a copy of the current affirmative action plan filed with and approved by a federal, state or local government unit.

16.2 The vendor agrees to post in conspicuous places, available for employees and applicants for employment, notices setting forth the provisions of this Agreement as they relate to affirmative action and nondiscrimination.

16.3 Failure to comply with these Terms and Conditions may result in the vendor being debarred, termination of the contract and/or withholding of payment.

16.4 The vendor agrees to furnish all information and reports required by Dane County's Contract Compliance Officer as the same relate to affirmative action and nondiscrimination, which may include any books, records, or accounts deemed appropriate to determine compliance with Chapter 19, D.C. Ords., and the provisions of this Agreement.

16.5 *Americans with Disabilities Act:* The vendor agrees to the requirements of the ADA, providing for physical and programmatic access to service delivery and treatment in all programs and activities.

17.0 PATENT, COPYRIGHT AND TRADEMARK INFRINGEMENT: The vendor guarantees goods sold to the County were manufactured or produced in accordance with applicable federal labor laws, and that the sale or use of the articles described herein do not infringe any patent, copyright or trademark. The vendor covenants that it will, at its own expense, defend every suit which shall be brought against the County (provided that such vendor is promptly notified of such suit, and all papers therein are delivered to it) for any alleged infringement of any patent, copyright or trademark by reason of the sale or use of such articles, and agrees that it will pay all costs, damages, and profits recoverable in any such suit.

18.0 SAFETY REQUIREMENTS: All materials, equipment, and supplies provided to the County must fully comply with all safety requirements as set forth by the Wisconsin Department of Commerce and all applicable OSHA Standards.

18.1 MATERIAL SAFETY DATA SHEET: If any item(s) on an order(s) resulting from this award(s) is a hazardous chemical, as defined under 29 CFR 1910.1200, provide one (1) copy of the Material Safety Data Sheet for each item with the shipped container(s) and one (1) copy with the invoice(s).

19.0 WARRANTY: Unless specifically expressed otherwise in writing, goods and equipment purchased as a result of this request shall be warranted against defects by the vendor for one (1) year from date of receipt. An equipment manufacturer's standard warranty shall apply as a minimum and must be honored by the vendor. The time limitation in this paragraph does not apply to the warranty provided in paragraph 27.0.

20.0 INSURANCE RESPONSIBILITY: The successful vendor shall:

20.1 Maintain worker's compensation coverage as required by Wisconsin Statutes, for all employees engaged in the work. The successful vendor shall furnish evidence of adequate worker's compensation insurance.

20.2 Indemnify, hold harmless and defend County, its boards, commissions, agencies, officers, employees and representatives against any and all liability, loss (including, but not limited to, property damage, bodily injury and loss of life), damages, costs or expenses which County, its officers, employees, agencies, boards, commissions and representatives may sustain, incur or be required to pay by reason of the successful vendor furnishing the services or goods required to be provided under the contract with the County, provided, however, that the provisions of this paragraph shall not apply to liabilities, losses, charges, costs, or expenses caused by or resulting from the acts or omissions of County, its agencies, boards, commissions, officers, employees or representatives. The obligations of the successful vendor under this paragraph shall survive the expiration or termination of any contract resulting from the successful vendor's bid.

20.3 At all times during the term of this Agreement, keep in full force and effect comprehensive general liability and auto liability insurance policies (as well as professional malpractice or errors and omissions coverage, if the services being provided are professional services) issued by a company or companies authorized to do business in the State of Wisconsin and licensed by the Wisconsin Insurance Department, with liability coverage provided for therein in the amount of at least \$1,000,000 CSL (Combined Single Limits). Coverage afforded shall apply as primary. County shall be given ten (10) days advance notice of cancellation or non-renewal. Upon execution of this Agreement, the successful vendor shall furnish County with a certificate of insurance listing County as an additional insured and, upon request, certified copies of the required insurance policies. If the successful vendor's insurance is underwritten on a Claims-Made basis, the Retroactive Date shall be prior to or coincide with the date of this Agreement, the Certificate

of Insurance shall state that coverage is Claims-Made and indicate the Retroactive Date, the successful vendor shall maintain coverage for the duration of this Agreement and for two years following the completion of this Agreement. The successful vendor shall furnish County, annually on the policy renewal date, a Certificate of Insurance as evidence of coverage. It is further agreed that the successful vendor shall furnish the County with a 30-day notice of aggregate erosion, in advance of the Retroactive Date, cancellation, or renewal. It is also agreed that on Claims-Made policies, either the successful vendor or County may invoke the tail option on behalf of the other party and that the Extended Reporting Period premium shall be paid by the successful vendor. In the event any action, suit or other proceeding is brought against County upon any matter herein indemnified against, County shall give reasonable notice thereof to the successful vendor and shall cooperate with the successful vendor's attorneys in the defense of the action, suit or other proceeding.

20.4 The County reserves the right to require higher or lower insurance limits where County deems necessary.

20.5 In case of any sublet of work under this Agreement, the successful vendor shall furnish evidence that each and every subvendor has in force and effect insurance policies providing coverage identical to that required of the successful vendor.

21.0 CANCELLATION: County reserves the right to terminate any Agreement due to non-appropriation of funds or failure of performance by the vendor. This paragraph shall not relieve County of its responsibility to pay for services or goods provided or furnished to County prior to the effective date of termination.

22.0 PUBLIC RECORDS ACCESS: It is the intention of the County to maintain an open and public process in the solicitation, submission, review, and approval of procurement activities. Bid openings are public unless otherwise specified. Records are not available for public inspection prior to issuance of the notice of intent to award or the award of the contract. Bid results may be obtained by visiting the Dane County Purchasing Office Monday – Friday, between 8:00 a.m. and 4:00 p.m. Prior appointment is advisable.

22.1 PROPRIETARY INFORMATION: If the vendor asserts any of its books and records of its business practices and other matters collectively constitute a trade secret as that term is defined in s. 134.90(1)(c), Wis. Stats., County will not release such records to the public without first notifying the vendor of the request for the records and affording the vendor an opportunity to challenge in a court of competent jurisdiction the requester's right to access such records. The entire burden of maintaining and defending the trade secret designation shall be upon the vendor.

The vendor acknowledges and agrees that if the vendor shall fail, in a timely manner, to initiate legal action to defend the trade secret designation or be unsuccessful in its defense of that designation, County shall be obligated to and will release the records.

22.2 Data contained in a bid, all documentation provided therein, and innovations developed as a result of the contracted commodities or services cannot be copyrighted or patented. All data, documentation, and innovations shall be the property of the County.

22.3 Any material submitted by the vendor in response to this request that the vendor considers confidential and proprietary information and which vendor believes qualifies as a trade secret, as provided in section 19.36(5), Wis. Stats., must be identified on a designation of Confidential and Proprietary Information form. In any event, bid prices will not be held confidential after award of contract.

23.0 RECYCLED MATERIALS: Dane County is required to purchase products incorporating recycled materials whenever technically and economically feasible. Vendors are encouraged to bid products with recycled content which meet specifications.

24.0 PROMOTIONAL ADVERTISING: Reference to or use of Dane County, any of its departments or sub-units, or any county official or employee for commercial promotion is prohibited.

25.0 ANTITRUST ASSIGNMENT: The vendor and the County of Dane recognize that in actual economic practice, overcharges resulting from antitrust violation are in fact usually borne by the County of Dane (purchaser). Therefore, the successful vendor hereby assigns to the County of Dane any and all claims for such overcharges as to goods, materials or services purchased in connection with this contract.

26.0 RECORDKEEPING AND RECORD RETENTION-PUBLIC WORKS CONTRACTS: The successful bidder on a public works contract shall comply with the State of Wisconsin prevailing wage scale and shall establish and maintain adequate payroll records for all labor utilized as well as records for expenditures relating to all subcontracts, materialmen and suppliers. All records must be kept in accordance with generally accepted accounting procedures. The County shall have the right to audit, review, examine, copy, and transcribe any such records or documents. The vendor will retain all documents applicable to the contract for a period of not less than three (3) years after final payment is made.

26.1 RECORDKEEPING AND RECORD RETENTION-COST REIMBURSEMENT CONTRACTS: Where payment to the vendor is based on the vendor's costs, vendor shall establish and maintain adequate records of all expenditures incurred under the contract. All records must be kept in accordance with generally accepted accounting procedures. The County contracting agency shall have the right to audit, review, examine, copy, and transcribe any pertinent records or documents relating to any contract resulting from this bid/proposal held by the vendor. The vendor will retain all documents applicable to the contract for a period of not less than three (3) years after final payment is made.

27.0 YEAR 2000 COMPLIANT: Vendor warrants that: a) all goods, services and licenses sold otherwise provided pursuant to this procurement have been tested for and are fully year 2000 compliant, which means they are capable of correctly and consistently handling all date-based functions before, during and after the year 2000; b) the date change from 1999 to 2000, or any other date changes, will not prevent such goods, services or licenses from operating in a merchantable manner, for the purposes intended and in accordance with all applicable plans and specifications and without interruption before, during and after the year 2000; and c) vendor's internal systems, and those of vendor's vendors, are year 2000 compliant, such that vendor will be able to deliver such goods, services and licenses as required by this procurement.

28.0 LIVING WAGE REQUIREMENT: The vendor shall, where appropriate, comply with the County's Living Wage requirements as set forth in section 25.015, Dane County Ordinances.

28.01 In the event its payroll records contain any false, misleading or fraudulent information, or if the vendor fails to comply with the provisions of s. 25.015, D.C. Ords., the County may withhold payments on the contract, terminate, cancel or suspend the contract in whole or in part, or, after a due process hearing, deny the vendor the right to participate in bidding on future County contracts for a period of one (1) year after the first violation is found and for a period of three (3) years after a second violation is found.

28.02 Bidders are exempt from the above requirements if:

- The maximum value of services to be provided is less than \$5,000;
- The bid involves only the sale of goods to the County;
- The bid is for professional services;
- The bid is for a public works contract where wages are regulated under s. 62.293, Wis. Stats.;
- The bidder is a school district, a municipality, or other unit of government;
- The service to be provided is residential services at an established per bed rate;
- The bidder's employees are persons with disabilities working in employment programs and the successful bidder holds a current sub-minimum wage certificate issued by the U.S. Department of Labor or where such a certificate could be issued but for the fact that the employer is paying a wage higher than the minimum wage;
- The bidder is an individual providing services to a family member; or
- The bidder's employees are student interns.

SIGNATURE AFFIDAVIT

In signing this proposal, we also 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 proposal; that this proposal has been independently arrived at without collusion with any other bidder, competitor or potential competitor; that this proposal has not been knowingly disclosed prior to the opening of bids to any other bidder or competitor; that the above statement is accurate under penalty of perjury.

The undersigned, submitting this proposal, hereby agrees with all the terms, conditions, and specifications required by the County in this Request for Proposal, and declares that the attached proposal and pricing are in conformity therewith.

Name (Type or Print)

Title

Signature

Firm

Address: (Street, City, State, Zip Code)

Telephone

Fax

E-Mail

Date

PRICE PROPOSAL

Company Name _____

For the price(s) listed below, our firm hereby offers to provide one new unsued Vacuum Sweeper in accordance with the specifications of this bid. Pricing must include delivery

Sweeper Year / Make / Model: _____

Chassis Year / Make / Model: _____

Warranty: _____

Nearest Service / Parts Location: _____

Delivery Time: _____
(Indicate delivery days after receipt of order)

TOTAL DELIVERED PRICE: \$ _____

OPTIONAL TRADE-IN

Provide trade-in allowance for one (1) 1992 Elgin Whirlwind Series L Vacuum Sweeper Truck, with 982 hours. Contact Greg Kerkenbush, Dane County Regional Airport, at (608) 246-3396 to inspect truck. Airport reserves the right to accept or reject trade-in offers.

OPTIONAL TRADE-IN ALLOWANCE: \$ _____

(continued on next page)

PRICING (CONT.)

Company Name: _____

PROVIDE ADDITIONAL LINE ITEM PRICING FOR THE FOLLOWING EQUIPMENT:

| | Optional Item | Price |
|-----|--|--------------|
| 1. | Precleaner installed on chassis engine intake system. | \$ _____ |
| 2. | Precleaner installed on auxiliary engine intake system. | \$ _____ |
| 3. | Litter Collection Hose consisting of: a. One (1) 5-inch diameter litter collection hose for remote cleaning of areas inaccessible to the sweeper pickup head. Hose will be usable from either left or right side of sweeper. b. 5 in. diameter x 4 ft. long aluminum collection nozzle with handgrip. c. On-board storage location for hose when not in use. d. Block off plate. e. Heavy-duty, wire reinforced construction. | \$ _____ |
| 4. | Additional 92-gallon water tank (sweeper total water capacity of 197 gallons). | \$ _____ |
| 5. | Automatic shutdown system to stop auxiliary engine when hydraulic oil in reservoir falls below the minimum required level. | \$ _____ |
| 6. | Electric hydraulic backup system that controls all hydraulic functions without running the auxiliary engine. | \$ _____ |
| 7. | Hopper vibrator. | \$ _____ |
| 8. | Hopper drain. | \$ _____ |
| 9. | Exterior hopper dump controls. | \$ _____ |
| 10. | Life Last hopper. | \$ _____ |
| 11. | Washdown system to clean hopper using on-board water supply. | \$ _____ |
| 12. | Resume sweep function to return brooms to preset configuration. | \$ _____ |
| 13. | Side broom tilt (right side). | \$ _____ |
| 14. | Air ride operator seats. | |
| 15. | Procurement and installation of one (1) Motorola CM200 mobile UHF radio, 32 channel, high power (40 watt). External speaker mounted in cab. Installation of external antenna shall be included. Airport will provide frequency programming information. | \$ _____ |
| 16. | Procurement and installation of one (1) ICOM IC-A110-05 VHF aircraft band mobile radio. External speaker mounted in cab. Installation of external antenna included. | \$ _____ |
| 17. | One (1) complete set of filters (oil, fuel, hydraulic, transmission, coolant) for both engines. | \$ _____ |

Sales Tax

Bids should not include Federal Excise and Wisconsin Sales Taxes, as Dane County is exempt from payment of such taxes. Sec.State Statute No. 77.54(9a). Wis. Stats. The Dane County's CES number is ES 41279.

Payment terms: Net 30

Quote/Bid price delivered FOB Destination To:

Dane County Regional Airport
2601 Darwin Road
Madison WI 53704

Technical Specifications

**VACUUM SWEEPER TRUCK
ELGIN CROSSWIND FURY OR EQUIVALENT
DANE COUNTY REGIONAL AIRPORT (“AIRPORT”)**

1.0 INTENT

It is the intent of this specification to provide for the purchase of one (1) new and unused street sweeper having a truck chassis, dual diesel engines, dual sweeper controls and switches; 4.4 cubic yard capacity hopper, automatic transmission, 105 gallon water tank, and left and right side brooms.

In comparing proposals, consideration will not be limited to price only. The successful bidder will be one whose product is judged to best serve the interests of the County when price, product, safety, quality and delivery are considered. The County reserves the right to reject any or all bids or any part thereof, and to waive any minor technicalities. A purchase order will be awarded to the bidder submitting the lowest responsible bid meeting the requirements of this specification.

2.0 EQUIVALENT PRODUCT

Bids will be accepted for consideration on any make or model that is equal or superior to the sweeper specified. Decisions of equivalency will be at the sole interpretation of the County. A blanket statement that equipment proposed will meet all requirements will not be sufficient to establish equivalence. Original manufacturer's brochures of the proposed unit are to be submitted with the proposal.

All modifications made to the standard production unit described in the manufacturer's brochures must be certified by the manufacturer and submitted with the bid. Bidder must be prepared to demonstrate a unit similar to the one proposed, if requested.

3.0 INTERPRETATIONS

In order to be fair to all bidders, no oral interpretations will be given to any bidder as to the meaning of the specification documents or any part thereof. Every request for such a consideration shall be made in writing to the Purchasing Division. Based upon such inquiry, the County may choose to issue an Addendum.

4.0 GENERAL

The specification herein states the minimum requirements for the vacuum sweeper. Bidders shall complete every space in the area provided with either a check mark to indicate the item being bid is exactly as specified (“Comply – Yes”), or deviates from the bid specification (“Comply – No”). If checking “Comply – No”, use a separate sheet to explain how the item being provided deviates from the bid specifications. Each exception should be labeled with the corresponding paragraph number from the specification. Any deletions, additions or variations from the following specifications must be noted. Any items appearing in the manufacturer’s regular published specifications furnished by the bidder are assumed to be included in the Bidder’s proposal.

COMPLY

5.0 CHASSIS (ISUZU NQR 17,950 GVWR OR EQUAL)

COMPLY
Yes No

- | | | | |
|------|--|-------|-------|
| 5.1 | Chassis shall be cab-over engine design with a minimum 17,950 LB GVW rating. Bidder shall state chassis make, model and location of nearest service center: _____ | _____ | _____ |
| 5.2 | Wheelbase shall not exceed 109 inches. | _____ | _____ |
| 5.3 | Cab-to-axle shall not exceed 88 inches. | _____ | _____ |
| 5.4 | The overall length of the sweeper shall not exceed 215 inches. | _____ | _____ |
| 5.5 | The overall height of the sweeper shall not exceed 88 inches. | _____ | _____ |
| 5.6 | The turning radius of the sweeper shall not exceed 17 feet. | _____ | _____ |
| 5.7 | Sweeper shall be equipped with front and rear bumpers. Bumpers shall be mounted no greater than 20 inches from ground level to provide undercarriage protection. The rear of the unit shall incorporate a heavy-duty bumper with foot steps. | _____ | _____ |
| 5.8 | Rear bumper shall include heavy-duty bumper guards to permit backing into receptacles for dumping debris. | _____ | _____ |
| 5.9 | Rear bumper shall incorporate recessed lights protected by a steel housing. | _____ | _____ |
| 5.10 | Yield strength of the frame shall be 44,000 PSI minimum. | _____ | _____ |

- 5.11 One- (1) 30 gallon fuel tank shall be shared by both engines and shall be easily accessible without raising or shifting any components. A fuel gauge, in cab, shall be supplied. The fuel tank shall be mounted between the chassis frame rails in the back of the unit, behind the rear axle. The use of saddle-mounted fuel tank(s) on the side of the sweeper is not acceptable. _____

6.0 CHASSIS ENGINE

COMPLY
Yes No

- 6.1 Truck engine shall be four cylinder, direct injection diesel, rated at not less than 175 Hp @ 2700 RPM, 347 ft-lbs. @ 2000 RPM. _____
- 6.2 Truck engine shall be equipped with a single horizontal exhaust system. _____
- 6.3 Cooling system shall be protected to -30° F. _____
- 6.4 Engine shall be equipped with single stage, dry-type air cleaner; spin-on fuel filter, full flow oil filter, and fuel/water separator. _____

7.0 TRANSMISSION, AXLES, WHEELS & BRAKES

COMPLY
Yes No

- 7.1 A four speed automatic transmission with lockup torque converter and overdrive shall be provided. Transmission shall include a heavy-duty oil cooler. _____
- 7.2 The rear axle shall have a ratio of 5.875 : 1 for proper sweeping and transport speeds. _____
- 7.3 A minimum 6,830 lb. capacity front axle shall be provided and equipped with minimum 8,440 lb. semi-elliptical leaf spring suspension, shock absorbers, and a front stabilizer bar. _____
- 7.4 A minimum 14,550 lb. capacity rear axle shall be provided and equipped with minimum 9,880 lb. semi-elliptical leaf spring suspension. Rear axle to be equipped with shock absorbers and stabilizer bar. _____
- 7.5 Front and rear tires and rims shall all be interchangeable. _____
- 7.6 All tires shall be tubeless steel belted radial 12-ply 225/70R19.5F highway tread. The rear axle shall include dual tires for load capacity; singles will not be acceptable. _____
- 7.7 The rims shall be 19.5 inch X 6.0 inch 6 hole steel disc. _____
- 7.8 The brakes shall be hydraulic. Front brakes shall be disc; rear brakes shall be self-adjusting drum. _____
- 7.9 The parking brake shall be spring applied expanding drum and shoe. _____
- 7.10 All brakes shall have ABS through a four-channel full vehicle wheel control system. _____

8.0 CAB

COMPLY
Yes No

- 8.1 Maximum visibility, forward line of sight from the chassis front bumper to the point on the ground visible to the operator shall not exceed 17 feet for an SAE 98th percentile size operator. _____
- 8.2 Steering shall be full power with all operator controls. _____
- 8.3 The steering system shall have an adjustable steering column. _____
- 8.4 The driver seat shall be fully adjustable bucket, cloth covered and include 3-point seat belt. _____
- 8.5 The sweeper shall include two (2) fold-away outside west coast type mirrors with lower convex lens for easy viewing of the side broom during sweeping. _____
- 8.6 The cab interior environment shall be fully air-conditioned including a fresh air heater/ventilator/ defroster. Air conditioning shall be chassis OEM. _____
- 8.7 The cab shall have full flow through ventilation for optimal temperature control and operator comfort. _____
- 8.8 The windshield wipers shall be two speed with washer. _____
- 8.9 The wipers shall have mist-wipe feature. _____
- 8.10 The interior of the cab shall have ergonomic controls for ease of use and include automotive type trim, and center sweeper console. _____
- 8.11 All glass shall be tinted safety glass. _____
- 8.12 Both the driver and passenger positions shall have an adjustable sun visor. _____
- 8.13 Both doors shall be key locked. _____
- 8.14 Both door windows shall be roll-down type. _____
- 8.15 Side windows shall include a defogger. _____
- 8.16 The cab to be equipped with fresh air two-way roof vent. _____
- 8.17 Chassis shall have dual steering positions on the left hand and right hand side. Functions must be electronically separated between left and right driving positions to allow the functions to operate at only one driving position. The ignition switch must be centrally located to allow access from either driving position. _____

9.0 INSTRUMENTS

COMPLY
Yes No

- 9.1 The chassis operator instrument panel shall be chassis OEM, full vision illuminated with speedometer, odometer, trip odometer, fuel gauge, and water temperature gauge. _____
- 9.2 The chassis engine instruments shall include warning light for low oil pressure and high coolant temperature to warn the operator of a potential problem before _____

any damage to the engine occurs.

- 9.3 The truck instruments shall include warning light for battery and brake system. _____
- 9.4 In the dash, all console switches including transmission controls and all gauges shall be illuminated. _____

10.0 ELECTRICAL

COMPLY
Yes No

- 10.1 The batteries shall be placed in an enclosed, easily accessible location. _____
- 10.2 The chassis shall have two (2) maintenance free batteries rated at not less than 1500 CCA, 12 volt. _____
- 10.3 The chassis engine shall have a 110-amp alternator. _____
- 10.4 The chassis lighting shall include multi-beam halogen headlights, stoplights, taillights, backup lights, license plate lights, clearance lights, signal lights, illuminated gauges and instrument panel, and directional lights with hazard switch. Automatic daytime running lights shall provided. _____

11.0 OTHER CHASSIS ACCESSORIES

COMPLY
Yes No

- 11.1 Two – 8” diameter convex mirrors shall be included for increasing operator visibility of sweep operations. _____
- 11.2 One (1) Federal Signal HighLighter LED mini lightbar, amber color. Lightbar shall be mounted to roof of cab and controlled by a switch located in the cab. _____

12.0 SWEEPER ENGINE

COMPLY
Yes No

- 12.1 The sweeper engine shall be a 4 cylinder, direct injection diesel, dynamically balanced, turbo charged, EPA Tier 2 Certified (John Deere PowerTech 4024TF270 or equal). _____
- 12.2 Displacement of the engine shall not be less than 149 cubic inches. _____
- 12.3 Horsepower rating of the engine shall be not less than 60 HP @ 2800 RPM, torque 150 lb-ft @ 1680 RPM. _____
- 12.4 The engine shall be equipped with glow plugs and must have a glow plug switch on the sweeper control console to activate glow plugs. _____
- 12.5 The engine air cleaner shall be dry type, dual stage and easily accessible, with safety filter and service indicator. _____
- 12.6 The engine shall be filled with 50/50 mixture anti-freeze/water for cold weather _____

storage and or operation.

- | | | | |
|-------|---|-------|-------|
| 12.7 | The engine shall drive the blower fan by a heavy-duty three (3) "V" groove power belt. The power belt will provide ease of maintenance. The use of gearboxes to drive the fan is not acceptable. | _____ | _____ |
| 12.8 | The engine shall be equipped with an automatic shut down device that detects low oil pressure or high coolant temperatures, at which point the device will shut down the engine and turn on indicator light in cab. | _____ | _____ |
| 12.9 | The engine shall be completely accessible without tilting the hopper. Hoppers and or sound enclosures that cover the sweeper engine and that allow no access to the sweeper engine in a lowered position shall not be acceptable. | _____ | _____ |
| 12.10 | The engine shall include a remote oil drain system which does not require removing any of the engine or surrounding components. An oil change must be possible without raising the hopper or removal of the sound enclosure. | _____ | _____ |
| 12.11 | The engine exhaust shall be incorporated into the blower housing air exhaust system to further enhance noise reductions on the engine. | _____ | _____ |
| 12.12 | The engine shall have a dual spherical roller bearing stub shaft with a flex plate attached to the flywheel to run the fan drive belt. | _____ | _____ |

13.0 BLOWER

COMPLY
Yes No

- | | | | |
|------|---|-------|-------|
| 13.1 | A closed face radial pressure blower shall be provided to create suction and pressure for the sweeper. | _____ | _____ |
| 13.2 | The blower shall be driven by a three (3) "V" groove power belt for maximum performance and energy transfer. Power belt tensioning shall be achieved by an automatic tensioner. | _____ | _____ |
| 13.3 | The blower shall be a turbine type, with 10 curved vanes, minimum 30 in. diameter constructed of abrasion resistant steel and fully balanced for longevity of fan and bearing life. A die-cast aluminum alloy open face blower, either covered with rubber or not, will not be acceptable because of quick wear issues. | _____ | _____ |
| 13.4 | The blower housing shall be constructed of 10 gauge abrasion resistant steel and lined with rubber liner for maximum extended wear in abrasive environments. | _____ | _____ |
| 13.5 | The blower housing shall be equipped with a vacuum enhancer system to enable operator complete control of the amount of blast air entering/exiting the pick-up head. The control for the vacuum enhancer shall be located in the cab. | _____ | _____ |
| 13.6 | The blower housing shall not be an integral part of the hopper. Replacement of the blower housing must be possible without any cutting and/or welding of the housing and or hopper. | _____ | _____ |
| 13.7 | The blower shall be mounted and supported by a heavy duty fan shaft which is supported on both sides by heavy-duty self aligning anti friction bearings, capable of being greased from ground level through remotely located grease zerks that allow for quick maintenance. Greasing of the bearings must be possible without | _____ | _____ |

tilting the hopper.

- | | | | |
|-------|---|-------|-------|
| 13.8 | The blower housing shall be equipped with an additional diverter system to allow blower exhaust air (when in vacuum mode) to be directed vertically for sweeping open areas or for sweeping enclosed areas. The control for this feature shall be provided at the blower housing. | _____ | _____ |
| 13.9 | Access to the blower housing diverter system as well as the vacuum enhancer must be possible without raising the hopper. | _____ | _____ |
| 13.10 | The blower housing shall be equipped with an access door for inspection of the fan. | _____ | _____ |

14.0 PICKUP HEAD

COMPLY
Yes No

- | | | | |
|-------|---|-------|-------|
| 14.1 | A true regenerative air pick-up head, including pressure slot and upper and lower pressure chamber shall be provided. The pickup head shall be of spring-balanced and all steel construction with heavy duty, replaceable rubber curtains, two (2) front and one (1) rear. | _____ | _____ |
| 14.2 | The pickup head shall be a spring-balanced cross-flow style pick-up head, all steel construction with heavy-duty replaceable rubber curtains, two (2) front and one curved rear. | _____ | _____ |
| 14.3 | The pickup head shall be not less than 80 inches wide for a total area of 2,400 square inches. To avoid damage, the pick-up head shall not extend past the width of the rear wheels (no exception). | _____ | _____ |
| 14.4 | The pickup head shall have a minimum of 10 inch diameter pressure hose that connects the blower outlet with the pickup head. Urethane transition pieces between the pressure hose and the pickup head are not acceptable because of high wear reasons. | _____ | _____ |
| 14.5 | The pickup head shall have a minimum 10 inch diameter suction hose with a quick disconnect coupling at the lower area near the pickup head where obstructions may occur. The quick disconnect enables the operator to inspect the suction hose as well as the inlet area of the pickup head without lifting the pick-up head or the hopper. Urethane transition pieces between the suction hose and the pickup head are not acceptable because of high wear reasons. The quick disconnect system may not be at the hopper inlet area as it will necessitate raising the hopper when obstructions occur. | _____ | _____ |
| 14.6 | The pickup head shall be raised and lowered hydraulically from inside cab by a single switch. This control must be separate from the hopper raise and lower controls. The pick-up head and hopper controls cannot be combined for simplicity of the hydraulic system. | _____ | _____ |
| 14.7 | The pickup head shall be designed to lower at the rear first to allow the operator a greater frontal pick-up head opening when sweeping leaves or bulky materials. | _____ | _____ |
| 14.8 | Sweeping paths: Pickup head only = 80 inches minimum One side broom and pickup head = 105 inches minimum Two side brooms and pickup head = 130 inches minimum | _____ | _____ |
| 14.9 | The pickup head shall be equipped with side mounted adjustable steel runners with carbide inserts for maximum pickup performance and long life. | _____ | _____ |
| 14.10 | The carbide steel runners, or dirt shoes, shall be symmetrical for optimum life. | _____ | _____ |
| 14.11 | The pickup head shall be capable of sweeping in either forward or reverse directions without damage. The forward and reverse motion shall be possible without the use of a chain reverse system. | _____ | _____ |

14.12 The vacuum enhancer control shall be in cab operated by one switch

15.0 SIDE BROOMS

COMPLY
Yes No

15.1 The right and left side broom shall be a free floating trailing arm design with inward motion safety to prevent damage when sweeping and encountering a fixed obstacle. The trailing arm shall be of a parallelogram design for simple, non-binding action/motion and for constant bristle and wear pattern. Side broom assemblies that are of a non-parallelogram design are not acceptable, as they do not keep a constant wear pattern of the broom as the bristles wear.

15.2 The side brooms shall be minimum 36-inch diameter, with hydraulically driven rotation.

15.3 The side brooms shall be hydraulically raised, lowered, suspended and moved in and out in their sweep and transport position.

15.4 The side broom movements must be accomplished by **two** hydraulic cylinders. The use of just one hydraulic cylinder shall not be allowed because of increased broom wear and inconsistent broom angles.

15.5 The side broom hydraulic motors shall provide not less than 7400 in/lbs. of torque for superior digging power.

15.6 The side broom assemblies, including broom disc, shall be constructed of minimum $\frac{3}{8}$ inch plate steel.

15.7 The side broom wires shall utilize minimum 26 inch tempered wire.

15.8 Each side broom shall be controlled from in the cab by two rocker switches.

15.9 The side broom bristles shall be steel digger type four (4) segment bolt-on design (clevis pin retaining of segments not acceptable).

15.10 To prevent exposure to accidental laceration by the bristle tips, the side brooms shall retract with wire bristle tips unexposed. No exception will be allowed to this safety requirement.

15.11 The side broom down pressure shall be automatically controlled by a rotary potentiometer inside on the operator's console. Pressure is controlled by an electric proportional hydraulic valve.

15.12 Each side broom shall have an inward motion protection structure built into the hydraulic in and out movement cylinder through the use of a high tension spring. This allows the brooms to move in 15 inches when an obstacle is encountered. This system shall prevent damage to the side broom structure.

15.13 Each side broom assembly has a simple mechanical transport catch system that fully supports the side broom assembly when the unit is transported. For simplicity the use of electric lock valve systems shall not be allowed.

15.14 Side brooms must be capable of sweeping in front of the pickup head.

15.15 Each side broom assembly comes with its own side broom light that can be controlled from the cab by an individual switch. A view of the side broom is also enhanced through the use of parabolic mirrors on each side of the sweeper.

16.0 HOPPER

COMPLY
Yes No

16.1 The volumetric capacity of the hopper shall be 4.4 cubic yards minimum, with a material volume of 3.3 cubic yards per SAE

16.2 The hopper shall be constructed of minimum 10 gauge steel for durable life. Hoppers that are constructed of 12 or 14 gauge steel are not acceptable because of poor wear characteristics. State the gauge size of the steel: _____

16.3 The hopper shall be of a high dump design capable of emptying into a minimum

- 67 inch high receptacle. Dumping shall be accomplished by tilting the hopper via two single stage hydraulic cylinders. The use of two piggybacked cylinders, for a total of 4 cylinders, in this dump hydraulic system shall not be allowed because of complexity of the system.
- 16.4 A replaceable rubber dump lip extension shall be provided at the rear of the hopper to provide a flexible debris guide that guides the material into the receptacle. Steel extension debris guides are not acceptable. _____
 - 16.5 The hopper shall include a top clean-out door that provides maximum access and cleaning capabilities of the hopper screen and the dust separator. This door allows for **top-down** cleaning off the screen and the dust separator. Units that require movement of the screen and or lowering of the screen for cleaning and that require the operator to clean the screen while standing underneath the dump door shall not be accepted due to potential safety hazards. Units that require the screen and dust separator to be cleaned in a **down-top** sequence shall not be acceptable. Units that make use of external hopper/screen mechanical levers for lowering the screen shall not be acceptable as they force the operator to stand underneath the dump door for cleaning action. _____
 - 16.6 A removable, abrasion resistant rubber deflector shall be located at the suction inlet of the hopper. This deflector is to direct material to the rear/center of the hopper for optimal loading conditions. This entire abrasion resistant intake system must be of a bolt-in design and can be completely serviced. Units that have a fixed abrasion resistant package are not acceptable. _____
 - 16.7 The steel hopper rear door shall be hinged at the top of the door and opened and closed hydraulically by one hydraulic cylinder. Dump doors that are opened and closed by two hydraulic cylinders shall not be acceptable because of complicated hydraulic systems. Plastic and or steel gravity dump doors and components are not acceptable due to high wear and poor opening characteristics. _____
 - 16.8 Dumping shall be controlled from inside the cab by one simple switch. _____
 - 16.9 The hopper rear door, top door and both inspection doors shall include replaceable seals for ensuring a tight fit and optimal sealing between the hopper and these doors. No exceptions. _____
 - 16.10 The hopper interior shall be smooth and crevice free to ensure material is easily removed when dumping. _____
 - 16.11 An expanded metal screen shall be provided inside the hopper to separate debris from entering the blower. This screen is of a bolt-in design for easy service and removal without any welding or cutting within the hopper area. _____
 - 16.12 The metal screen shall have a total area of 3500 square inches. _____
 - 16.13 With the hopper in a complete upright position the dump angle shall be 93 degrees minimum. _____
 - 16.14 The required overhead dump height clearance shall be no greater than 13 feet. _____
 - 16.15 The hopper shall be equipped with two inspection doors, one on each side of the hopper that are equipped with corrosion resistant hardware. _____
 - 16.16 The hopper shall have a safety prop that is positioned between the hopper and the hopper tilt frame. Units without safety props shall not be allowed _____
 - 16.17 Hopper pivot pins shall be 1" diameter minimum. _____

17.0 DUST SEPARATOR

- 17.1 Dust separation from the air stream shall be accomplished by means of an internal centrifugal dust separator that is installed at the air return outlet of the hopper. The separator shall be designed so that it will not plug with regular _____

COMPLY
Yes No

- | | | | |
|------|---|-------|-------|
| | debris. The use of external dust separators shall not be allowed. | | |
| 17.2 | The dust separator shall have a self-opening dump door on it that is activated automatically when the hopper is raised. This dump door allows material to be discharged and simplifies cleaning of the separator area. External separators that need separate cleaning outside the hopper shall not be allowed. | _____ | _____ |
| 17.3 | The size of the dust separator shall be not less than 5,000 cubic inches and shall have a clean out door that has a minimum size of 400 square inches. | _____ | _____ |
| 17.4 | The dust separator shall have a self cleaning centrifugal compartment to trap fine materials and prevent material from re-entering the air stream | _____ | _____ |

18.0 SPRAY WATER SYSTEM

COMPLY
Yes No

- | | | | |
|-------|---|-------|-------|
| 18.1 | The water tank shall be a removable, minimum 105-gallon total capacity, constructed of 100% rust proof polyethylene. | _____ | _____ |
| 18.2 | The water tank shall be frame mounted over the entire width of the chassis for optimal front axle loading. The water tank shall not be mounted on just one side of the chassis as it will create excessive chassis lean and tire wear when full. The water tank shall not share any common wall with the hopper and shall not raise during hopper dumping for better weight distribution. | _____ | _____ |
| 18.3 | An electric 12 volt diaphragm water pump, shall provide minimum 2.5 GPM @ 30 PSI to the pickup head, inside the hopper and the side brooms. Belt and/or hydraulic driven pumps are not acceptable. | _____ | _____ |
| 18.4 | All controls for water spray supplies shall be from inside the cab, and shall consist of individual switches. | _____ | _____ |
| 18.5 | The water tank shall be of an opaque in color so that the water level is easily gauged. Water tanks that are of a non see-through color such as black shall not be acceptable. | _____ | _____ |
| 18.6 | A filling port shall be provided on each side of the water tank making it possible to fill the water from either side of the sweeper. A spin-on cap shall be provided on each filling port of the water tank. The cap opening shall be a minimum 5 inches in diameter. | _____ | _____ |
| 18.7 | Access to the water fill(s) shall be accomplished without having to raise the debris hopper. | _____ | _____ |
| 18.8 | Two (2) water spray nozzles shall be located at each side broom for optimal dust control. Nozzles shall be solenoid controlled from inside the cab. | _____ | _____ |
| 18.9 | One (1) brass water spray nozzle shall be located inside the hopper for optimal dust control. Nozzle shall be solenoid controlled from inside the cab. | _____ | _____ |
| 18.10 | Two (2) brass water spray nozzles shall be located inside the suction nozzle of the pickup head for lubrication of the suction hose and to further enhance dust control. Solenoid controlled from inside the cab. Dust control nozzles that spray water outside the pick-up head shall not be acceptable, because of poor dust control and no lubrication properties inside the pick-up head. | _____ | _____ |
| 18.11 | All water lines shall be heavy duty plastic. All fittings shall be brass. | _____ | _____ |
| 18.12 | A wire 100 mesh filter and drain shall be provided at the lowest point of water system to aid in winterizing and to prevent freezing. | _____ | _____ |
| 18.13 | All water piping shall be external to the operator cab. For safety, no water lines capable of leaking or bursting shall be located within the cab. | _____ | _____ |
| 18.14 | All water fittings shall be Prestomatic Push-To-Lok or equivalent for easy service and inspection. | _____ | _____ |
| 18.15 | A ball valve must be provided at the filter inlet to allow cleaning of the filter without the loss of water from the water tank. | _____ | _____ |

18.16 A "no water" level indicator shall be installed on the operator's console for notification of an empty water tank. _____

19.0 HYDRAULIC SYSTEM

COMPLY
Yes No

- 19.1 The hydraulic system shall provide easy controls and energy to the side broom assemblies, the hopper and hopper rear door as well as the pick-up head. A tandem style hydraulic pump is direct gear driven by the sweeper engine with a 9 GPM capacity. For maintenance free operation a V-belt driven pump is not acceptable. _____
- 19.2 The hydraulic oil reservoir capacity shall be not less than 15 gallons and shall have an exterior sight and temperature gauge. The reservoir must be located in the enclosed auxiliary engine compartment for quick inspections without tilting the hopper. _____
- 19.3 A hydraulic oil service restriction indicator to indicate that service is needed on the filter shall be provided. _____
- 19.4 An 80 mesh suction strainer and a 10 micron spin-on hydraulic filter shall be provided. Exchange of the filter must be possible without tilting the hopper. _____
- 19.5 To further reduce the chance of hydraulic system contamination and joint leakage use of standard pipe threads requiring pipe dope shall not be acceptable. _____
- 19.6 All hydraulic connections shall be SAE o-ring face seal. _____
- 19.7 A hydraulic oil cooler shall be incorporated to keep oil cool and to prolong component life. _____
- 19.8 The hydraulic assembly shall be accessible without having to raise the debris hopper. _____

20.0 ELECTRICAL SYSTEM

COMPLY
Yes No

- 20.1 The sweeper electrical system shall be common with the electrical system of the chassis. _____
- 20.2 The sweeper engine shall share the dual (2) 750 CCA, 12 volt batteries of the chassis. _____
- 20.3 The sweeper engine shall have a minimum 70 amp alternator. _____
- 20.4 The sweeper shall have an electronic back-up alarm for additional warning and safety when the chassis is in reverse. _____
- 20.5 The sweeper lighting shall include rear identification lights, side broom, auxiliary engine compartment and rear clearance lights as well as a third brake light. _____
- 20.6 A center-mounted, high-level rear brake light shall be provided in addition to the bumper mounted brake lights. _____
- 20.7 The sweeper wiring harnesses shall be color-coded, hot stamped with function name. _____
- 20.8 For safety, resettable circuit breakers or fuses must protect all electrical circuits. _____

21.0 CONTROLS

COMPLY
Yes No

- 21.1 All sweeper controls shall be mounted on a central control terminal. The terminal shall be pedestal mounted for easy viewing and unobstructed operation. _____
- 21.2 The controls shall include all sweep, spray water, and lighting functions. _____
- 21.3 The controls for sweep, spray water, and lighting functions shall be conventional rocker switches. _____

- | | | | |
|------|--|-------|-------|
| 21.4 | The controls for the auxiliary engine ignition and throttle, fuses shall be located in the control console pedestal. | _____ | _____ |
| 21.5 | The control console shall have a full width piano style hinge that allows easy opening of the control console for when service is needed | _____ | _____ |
| 21.6 | The control console shall be equipped with a snake light that enhances nighttime operation. | _____ | _____ |

22.0 TOOLBOXES

COMPLY
Yes No

- | | | | |
|------|--|-------|-------|
| 22.1 | Sweeper shall include two (2) large rear toolboxes located one (1) on each side of the hopper. | _____ | _____ |
| 22.2 | The toolboxes shall be fabricated of steel plate and have a total capacity of not less than 10,300 cubic inches each | _____ | _____ |
| 22.3 | The toolboxes shall each have a large access door that allows for the storage of backpack blowers and must be capable of holding a full size spare tire, similar as what is original equipment on the chassis, on each side of the sweeper | _____ | _____ |
| 22.4 | The toolboxes shall be interconnected by two steel 2.5 inch diameter fully enclosed tubes that allow for the pass-through of handles of brooms, rakes or similar long equipment. | _____ | _____ |
| 22.5 | The rear of the toolboxes shall be protected by a full width heavy-duty steel bumper that protects the rear of the sweeper when backing into the dump receptacle. Half width bumpers shall not be acceptable. | _____ | _____ |
| 22.6 | The rear bumpers shall have replaceable heavy-duty bumper guards mounted for additional protection and the rear lights must recessed in steel housings to protect them as well. | _____ | _____ |
| 22.7 | The rear of the toolboxes shall be connected by a removable steel plate that allows access to the hydraulic dump cylinders if needed. This steel plate also incorporates the back up alarm. No exceptions. | _____ | _____ |
| 22.8 | Each side of the sweeper, including the toolboxes, shall be striped by reflective 3M warning tape chevrons. This reflective tape provides an additional safety feature, especially in nighttime operations. | _____ | _____ |
| 22.9 | The toolbox access doors must be on the side of the sweeper. Doors that are mounted at the rear of the sweeper are not acceptable. | _____ | _____ |

23.0 INSTRUMENTS

COMPLY
Yes No

- | | | | |
|------|---|-------|-------|
| 23.1 | The sweeper engine instruments shall include tachometer, hour meter, oil pressure, voltage, and coolant temperature for complete information for the operator on the condition of the auxiliary engine. | _____ | _____ |
| 23.2 | Sweeper engine shall include an electronic throttle control. Cable operated controls are not acceptable. | _____ | _____ |

24.0 PAINT

COMPLY
Yes No

- | | | | |
|------|---|-------|-------|
| 24.1 | All metallic surfaces shall be precision laser cut and powder coat painted. | _____ | _____ |
| 24.2 | To prevent hidden corrosion, all sweeper parts shall be iron phosphatized and powder painted before assembly. The use of just a black zinc primer that covers the undercarriage of the sweeper in a non-paint-before-assembly-way and that is not covered by any wet style paint shall be unacceptable. | _____ | _____ |
| 24.3 | The sweeper hopper and engine enclosure shall be powder coated white to match the cab. | _____ | _____ |

24.4 The sweeper frame, gutter brooms and tool storage compartments shall be powder coated gray. _____

25.0 MANUALS

COMPLY
Yes No

- 25.1 One set of Maintenance manual(s) shall be provided. _____
- 25.2 One set of Parts manual(s) shall be provided. _____
- 25.3 Four (4) sets of Operator manuals shall be provided. _____

26.0 WARRANTY

COMPLY
Yes No

- 26.1 Manufacturer's warranty shall be not less than one (1) year on entire sweeper, including all parts and labor. One-year warranty shall commence on first date of intended use by the Airport. Airport will provide written notification of the date sweeper is placed into service. _____
- 26.2 Chassis Manufacturer's warranty shall be stated in OEM warranty policy. _____
- 26.3 Manufacturer's warranty shall be not less than lifetime protection against rust-through of the water tank. _____

27.0 SERVICE AND TRAINING

COMPLY
Yes No

- 27.1 Vendors shall have a full parts and service facility within a reasonable distance from the Dane County Regional Airport. State location and distance in the space provided:

_____ _____
- 27.2 A qualified technician shall provide complete, on-site training to Airport's operators and maintenance personnel. Training shall include safety, operation, maintenance and service. _____