

CITY OF TORRINGTON REQUEST FOR BID

BID # WTP-041-042806 TRAILER MOUNTED TRASH PUMP

Date of bid opening: April 28, 2006 Time: 10:00 am Location: Room 109A, City Hall

Bid Bond or Certified Check required with bid: 5%

Performance Bond required if awarded bid: see "Instructions to Bidders"

Submit an original bid and a duplicate copy.

The City of Torrington reserves the right to accept or reject any or all bids or any portion thereof, to waive technicalities, and to award the contract as will best serve the public interest.

Omit State and Federal Taxes.

All prices must be F.O.B.: Destination (Torrington) unless otherwise requested.

Dated in Torrington: April 10, 2006

Purchasing Agent _

Charlene R. Antonelli, CPPB

Item	PRICE
TRAILER MOUNTED TRASH PUMP PER SPECIFICATIONS	\$
OPTION #1	\$
OPTION #2	\$
OPTION #3	\$

			Bid Submitted By:
Signature			Name of Company Address
Title			
	Date	Fax	Phone
	Web Page		E-mail address
Title	Date Web Page		Phone Delivery Date E-mail address

INSTRUCTIONS TO BIDDERS

Sealed bids will be received by the Purchasing Agent, Room 109A, 140 Main St., Torrington, CT until the time and date specified on the cover sheet and opened thereafter in the Purchasing Department, Room 109A. Bids received later than the time specified will not be accepted. Amendments to or withdrawal of any section of the submitted bid received later than the time & date set for the bid opening will not be considered. Bid proposals must remain in effect for a minimum of 30 days unless otherwise noted elsewhere in the bid specifications.

BID DOCUMENTS: are available over the Internet on the City's web page, under "open bids", www.torrington-CT.org. Businesses without internet access may contact the Purchasing Department at 860-489-2224 for the bid documents. Any alleged oral agreement made by a bidder or contractor with any agency or employee of the City of Torrington will be disregarded.

FREIGHT: Prices quoted shall be net delivery **F.O.B. Torrington, CT.** All bid prices must include prepaid delivery, assembly, and/or installation (ready for operation and/or use) of all equipment and/ or materials to the individual locations(s) as designated by the Purchasing Agent. All bid prices are to be submitted on the sheets provided on this bid. Quantities and pricing are to be listed in accordance with these sheets.

EXPARTE COMMUNICATION: Please note that to insure the proper and fair evaluation of a bid, the City of Torrington prohibits exparte communication (i.e., unsolicited) initiated by the Bidder to a City Official or Employee evaluating or considering the bids prior to the time a bid decision has been made. Communication between Bidder and the City will be directed in writing to the Purchasing Agent only. The Purchasing Agent will obtain the information or clarification needed. Exparte communication may be grounds for disqualifying the offending Bidder from consideration or award of the bid and repeat offenders may be disqualified from future bids.

QUESTIONS: Request for interpretation of any portion of the bid shall be made to the Purchasing Agent at (860) 489-2225. All replies will be given verbally and a copy of any such inquiry and advice (if deemed vital to the bid by the Purchasing Agent) will be made available to each prospective bidder. Bidders should check the web site for addendums/updates 48 hours prior to the bid opening.

In the event of receipt of identical bids as to offerings, delivery, service, content, price, etc., the bid will be awarded in accordance with the information contained in the bid document, based on first received as to date and time of receipt of the bid.

NON-COLLUSION STATEMENTS: In order for bids to be considered, a non-collusive statement must be submitted with the bid. A sample non-collusive bid statement is attached. Bidders may elect to submit their own notarized non-collusion statement.

CONDITIONAL, QUALIFIED OR NON-RESPONSIVE BIDS/PROPOSALS: All bids/proposals shall be submitted in the form and manner as indicated by the bid documents and bid forms. Any proposal which is not submitted in the form and manner indicated by the bid documents or which contains information, statements, conditions, or qualifications which place conditions or qualifications on the proposal submittal for purposes of making an award, or which alter any proposal terms, conditions, specifications, or forms, which has not been previously approved by written addendum from the Purchasing Agent, or which does not meet legal requirements, shall be declared as a qualified, conditional, or non-responsive proposal and shall be rejected without further consideration. Any proposal forms, may be declared "non-responsive" and recommended for rejection. The City of Torrington shall not be responsible for any errors or omissions of the Offeror.

UNBALANCED BIDS AND/OR EXCESSIVE LINE ITEM PRICES: The City reserves the right to reject any bids in which unit prices, in the sole opinion of he City, are unbalanced. In addition, where the City has decided to make an award, it further reserves the right to non-utilize a particular line item that in the sole opinion of the City is excessively priced, and reserves the right to obtain that item from another source.

CONTRACT: A response to an Invitation To Bid is an offer to contract with the City of Torrington based upon the terms, conditions, and specifications contained in the City's ITB. Bids do not become contracts unless and until executed by the City, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the contract are contained in the ITB, unless any of the terms and conditions are modified by an ITB Amendment, a Contract Amendment, or by mutually agreed terms and conditions in the contract documents.

TAXES: Omit all State and Federal taxes from the bid. The City of Torrington is exempt from the payment of taxes imposed by Federal government and/or the State of Connecticut.

OWNERSHIP OF DOCUMENTS: All documents, including drawings, plans, specifications, videotapes, or other documents or maps prepared by a contractor pursuant to any agreement arising from this bid shall become the property of the City of Torrington upon completion of the project or any termination of the project prior to the completion of the project.

LEGALITY: All bid offers for commodities, work, materials, or equipment hereunder shall comply in every respect with the laws, specifications and requirements of the State of Connecticut and the Federal government. Contractor will comply with the provisions of the Connecticut Fair Employment Practices Law.

LANGUAGE DISPUTES: Any disputes over the interpretation and/or meaning of any individual terms, conditions, and/or language within this Request for Bid/Proposal document shall be resolved by and at the sole discretion of the City Purchasing Agent in a manner that is in the best interest of, and best advantage to, the City of Torrington, provided any such interpretation shall be reasonable. In the event that an individual term, condition, and/or language/wording is determined at any time, including after award, by the City Purchasing Agent to be "not applicable at all" tot his contract, then the term, condition, and or language/wording may be disregarded, even though an addendum is not issued. However, if the Purchasing Agent determines that the term, condition, and/or language/wording "is applicable in part", then the term, condition, and/or language/wording is not issued.

RESPONSIBILITY: The Contractor shall save the City of Torrington, its agents or employees, harmless from liability of any kind for all claims of labor payments and materials furnished for this work, and for use of any copyrighted or uncopyrighted composition, secret

process patented or unpatented invention, article or application furnished or used in the performance of the contract of which the Contractor is not the patentee, assignee, or licensee. The successful bidder agrees to indemnify and hold harmless the City of Torrington, its agents and employees from any and all liability arising out of the successful bidders' operations, functions and/or supplied items.

The successful bidder, vendor, and/or contractor must protect all property of the City of Torrington (i.e. all floors, furniture, grass, land, etc.) from injury or other damage. Any damage so caused must be repaired by contractor/vendor at his/her own expense. At the completion of work, the vendor and/or contractor must remove from the premises all surplus materials and all debris created by same. The premises must be left in a broom-clean and finished condition acceptable to the owner or its agents. Successful bidder will furnish adequate protection from damage for all work and to repair damage of any kind; for which he or his workers are responsible, to the premises or equipment to his own work or to the work of other contractors.

DEFAULT: It shall be understood that a bidder supplying equipment and/or supplies will be considered to be in default if/when they have not delivered the item(s) within the time constraints listed in this document or subsequent purchase orders and/or contract. Bidders providing a service and/or construction will be considered to be in default if/when they have failed to meet the completion date set forth in this document or its subsequent contract and/ or purchase orders and/ or they have ceased work on the project for a period of fifteen (15) working days, cumulative or consecutive.

SUSPENSION AND DEBARMENT: The Purchasing Agent may suspend or debar the right of a vendor to be included on the vendor list and has the authority to reject any bid or response from any suspended or debarred vendors.

- Suspension: A vendor may be suspended based on the following:
- A vendor defaults or fails to fully comply with the conditions, specifications, or terms of a Bid, Quotation, Proposal or Contract with the City of Torrington.
- 2) A vendor commits any fraud or misrepresentation in connection with a Bid, Quotation, Proposal, or Contract with the City of Torrington.
- 3) A vendor is charged by a court with the commission of a criminal offense as incident to obtaining or attempting to obtain a public or private contract or sub-contract, or in the performance of such contract or sub-contract
- 4) A vendor is charged by a court with the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty which currently, seriously, and directly affects responsibility as a City contractor. If charges are dismissed or the vendor is found not guilty, the suspension shall be lifted automatically upon written notification and proof of final court disposition provided by the vendor to the City of Torrington.
- 5) A vendor becomes insolvent, has proceedings in bankruptcy instituted against it or, compounds its debts or assigns over its estate or effects for payment thereof, or has a receiver to trustee appointed over its property.
- 6) A vendor's commission of any act or omission to perform act is grounds for debarment.
- 7) A vendor violates the ethical standards set forth in local, state, or federal law.
- 8) Any other cause the Purchasing Agent determines to be so serious and compelling as to materially and adversely affect responsibility of a vendor as a City contractor, including but not limited to suspension by another government entity **Debarment:** A vendor may be permanently debarred for the following:
- Default or failure to fully comply with the conditions, specifications, drawings, or terms of a bid, proposal, or contract with the City of Torrington twice in any three-year period.
- 2) Conviction of or judgment obtained in a court for commission of those offenses in connection with the vendor's commercial enterprise stated sections 3) or 4) of suspension section listed above. If the conviction is reversed through the appellate process, the debarment shall be removed upon written notification and proof of final Court disposition from the vendor to the City of Torrington.

TRADE NAME REFERENCES: Any and all references to trade names, types, styles, model numbers, stock numbers or catalogs are intended to be descriptive only and not restrictive. The intention is to indicate to bidders the type and quality of the articles and or materials that will be satisfactory. When reviewing the information, it is the responsibility of the prospective bidder to inform the City of Torrington of any discrepancy that is found (i.e. number listed does not fit item description) Bids received on other makes or models with reference to other catalogs will be considered. The bidder is to clearly state in his bid exactly what he intends to furnish and to furnish with his bid a cut or illustration or other descriptive matter that will clearly indicate and give specification as to the product he/she proposes to furnish. Where a bid is offered on an item other than the trade standard used in the specification the item should be identified on the bid form by entering the MAKE, TRADE NAME AND MODEL NUMBER. It is understood that any substitute and/or alternate that might be offered are guaranteed by the bidder to be of equal or better quality than is referenced in the bid. The item(s) must be equivalent as to function, basic design, type and quality of material, method of construction and any required dimensions. It shall be further understood that during original as well as subsequent shipments spot checks will be performed to insure that the items received are in fact the items offered in the bid. When received, should items/materials prove to be different from what was bid in any way, the bidder agrees to the return of the items and agrees to supply correct items (per bid specifications) at the bidders expense. In the event this return action is required, it is understood the bidder may be subject to removal from the city's approved bidder's list. Bidders are cautioned that surplus, seconds, factory rejects, floor samples, close outs or distressed items are not acceptable and shipments of substitutions, defective or shop-worn equipment will be returned for a full refund at the vendor's expense.

QUANTITY: The quantities and/or materials listed in the specifications/bid sheets may be increased or decreased by the City of Torrington or its designated representative based on actual need at the time the purchase orders are placed.

QUALITY: The City of Torrington reserves the right to reject any proposal in whole or in part offering equipment and/or materials and/or services that in its or its agents opinion does not meet the quality standards desired. Such decision is final and not subject to further recourse by the bidder.

SAMPLES: forwarded by the bidder will be returned to the bidder at his request and expense. Requests for return of samples must be submitted in writing at the time the sample is given to the City of Torrington or its representative. Samples not returned to the bidder will be disposed of at the discretion of the City of Torrington or its designated representative. Large pieces of equipment submitted for evaluation and inspection are to be picked up by the bidder within 30 days of the bid opening date. Items remaining with the City of Torrington after 30 days will be discarded.

AWARD: It is the intent to award this bid in its entirety to one bidder, however, the City reserves the right to award the bid line item by line item if it is deemed in its best interest to do so. In addition, bidders are advised that should budgetary constraints dictate, part, and/or all the items in this bid may be rejected. This decision shall be considered final and not subject to recourse by the bidder.

In determining the lowest or highest responsible bidder, the City reserves the right to consider, in addition to price, the compatibility, quality, cost of maintenance and availability of parts, experience and/or past performance of the bidder, sufficiency of the financial resources of the bidder as relates to the offerings as well as the ability of the bidder to provide future maintenance and service.

Documents previously submitted to the city of Torrington will not be considered as satisfying submission requirements for this bid.

No bidder can claim any contract rights by virtue of bidding alone. Awarding of the contract means actual written notice by letter and a properly executed purchase order to the bidder or bidders to whom the bid has been awarded.

OPTION TO RENEW: This contract may be extended for four (4) additional one (1) year periods, provided all terms and conditions remain in full force and effect except for the contract period being extended. This option, if exercised, is to be executed in the form of a letter of agreement, to be issued no later than 60 days prior to the expiration of the then current contract period. This option to renew requires the mutual agreement of <u>both</u> parties. Refusal by either party to exercise this option to extend, will cause this contract to expire on the original or mutually agreed upon date. The total period of this contract, including all extensions as a result of exercising this option, will not exceed a maximum combined period of five (5) years.

BONDS:

Performance Bond: The Contractor, when awarded the Bid, must submit within 10 days of the bid award, and before beginning the work or signing a contract, a Performance Bond amounting to one hundred percent (100%) of the total amount of the bid. Said performance bond must be in favor of the City of Torrington and executed by a surety company authorized to do business in the State of Connecticut. The City of Torrington reserves the right to retain the Bid Bond or Certified Check on bids below \$25,000.00 as a Performance Bond. On bids of \$25,000.00 or more the Performance Bond may be furnished in the following manner: Performance Bond, Surety Bond, Certified Check, Bank Check, Savings Account in both the City & Vendor's name or Letter of Credit

Maintenance Bond: The contractor, upon signing a contract and before beginning the work, must submit to the Purchasing Agent a Maintenance Bond to guarantee that if defects in either labor or materials becomes evident within one year after completion and acceptance of work will be fixed at no cost to the City of Torrington. The maintenance bond may be included as a portion of the Performance bond or as a separate bond. If it is issued as a separate bond said maintenance bond must be in favor of the City of Torrington and issued by a surety company licensed and authorized to do business in the State of Connecticut.

Labor and Material Bonds: Per Section 49-41 of the Conn General Statutes, on Public Works project where the estimate is in excess of \$25,000.00, a labor (payment) and material bond must be furnished to the City. Said bonds must be filed with the Purchasing Agent prior to the commencement of work.

Consent for Release of Final Payment: AIA Document G707 & G706, or equivalent, must be signed and returned by the Surety Company before final payment will be released to the contractor.

INSURANCE:

Certificate of Insurance: All insurers must have an AM Best rating of A-V11 or better and admitted to do business in the State of Connecticut. All insurance policies must include a Waiver of Subrogation whereby the insured waives its right to subrogate against the City, its subsidiaries, employees, volunteers, directors and officers. Proof of proper insurance coverage, Workers Compensation Insurance, Liability and Property damage, and Vehicle Insurance shall be filed with the City of Torrington Purchasing Agent within 10 days after the award of the bid. The Certificate of Insurance must name the City of Torrington, 140 Main St., Torrington, CT, its subsidiaries, employees, volunteers, directors as the <u>additional insured</u> and filed with the Purchasing Agent ten (10) prior to commencement of work. Renewal Certificates of Insurance must be mailed to the Purchasing Agent 10 days prior to the expiration of the required coverage.

Workman's Compensation Insurance: The Contractor shall take out and maintain during the life of the contract adequate Workman's compensation Insurance for all the employees employed on said work. In case any class of employees or subcontractors is engaged in hazardous work under the contract at the site of the work is not protected under the Workman's Compensation statute, the contractor shall provide Workman's Compensation Insurance for the protection of employees not otherwise protected.

Liability Insurance: The Contractor shall take out and maintain for the life of the contract, adequate public liability insurance insuring against liability to persons not employed by him in an amount of not less than \$1,000,000.00 for injuries, wrongful death to any one person and subject to the limit for each person in an amount of not less than \$2,000,000.00 on account of one accident and property damage insurance in an amount of not less than \$1,000,000.00.

Vehicle Insurance: The Contractor shall take out and maintain for the life of the contract, adequate automotive/truck or other vehicle insurance with minimum coverage of \$1,000,000.00 each for both liability and under insured and uninsured motorist as well as any other coverage required by the State of Connecticut or requested by an official of the City of Torrington as relates to the contract.

Additional Security: The City of Torrington reserves the right to require successful bidders to enter into and such security arrangements as are deemed necessary to protect the City of Torrington, its property and goods.

PERMITS: The successful bidder agrees to obtain all work/building permits as might be required. The cost of obtaining such permits is the responsibility of the bidder. The City of Torrington reserves the right to waive local permit fees. In addition, it shall be understood that where property lines are to be considered, bidders are to verify said lines and measurements with proper City Officials prior to commencement of work.

It is to be understood that any/all specifications and/or plans or drawings contained in or developed as a result of the bid process are and shall be presented subject to the approval of the City of Torrington planning, zoning and building officials and that awards made prior to said approval are subject to cancellation.

PREVAILING WAGE: When the State of Connecticut Prevailing Wage Rate is applicable to the bid, the successful bidder must submit a Certified Payroll Record prior to any request and/or invoice for payment.

CITIZENSHIP: Each employee of the Contractor shall be a citizen of the United States or an alien who has been lawfully admitted for permanent residence as evidenced by an Alien Registration Receipt Card. The Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1065, (18 USC 4082)(c)(2).

SAFETY:

Machine and/or Equipment Hazard Assessment and Safety Training: Upon delivery of machines and/or equipment, suppliers are required to provide to the end-user employees, at no additional charge, a training session that will emphasize hazard awareness and assessment and the safe use of such machinery/equipment.

Occupational Safety and Health Act of 1970: Seller shall warrant that the machinery, equipment or other materials covered hereby shall upon delivery to the City of Torrington, be in compliance with the standards required by said Act and any updates as pertain to or reference said Act as well as the standards required by comparable State and local laws, if any, for such machinery, equipment or other materials in effect at the time of delivery.

Machines and/or Equipment Lockout/Tagout: In an effort to comply with OSHA's final rule on the control of hazardous energy sources, vendors must warrant that any and all machines and/or equipment as is covered under this bid will be supplied and/or installed equipped with lockout/tagout devices as prescribed by OSHA.

Toxic Substance Control Act (PL94-469): Seller warrants that each and every chemical substance constituting or contained in the products sold or otherwise transferred to the City of Torrington under this bid and subsequent purchase orders is not on the list of prohibited chemical substances compiled and published by the Administrator of the Environmental Protection Agency pursuant to Act PL94-469 and are otherwise in compliance with said Act.

Hazardous Materials: Any materials required by this bid and subsequent purchase orders that are hazardous under federal, state, or local statute, ordinance, regulation, or agency order will be packaged, labeled, marked and shipped by the seller to comply with all federal, state and local regulations then in effect including but limited to the provisions of the Hazardous Materials Transportation Act and Regulations promulgated thereunder and will further comply with any special requirements and any policies and procedures of the City of Torrington relating to the purchase of hazardous materials as might be noted on subsequent purchase orders or otherwise communicated to seller in writing.

Material Safety Data Sheets: Shall be provided by the Seller upon delivery to the City of Torrington of any goods having constituents listed in the following references - OSHA 1910, ACHIG Current Threshold Values, DOT HazMat Table 49, IARC Carcinogen List, National Toxicology Program Carcinogen List, and/or Radioactive Materials. These Material Safety Data Sheets must be consistent with and include information required by the OSHA Hazard Communication Standard published as 29 CFR 1910.1200, as the same may be amended or supplemented from time to time.

Asbestos: Bidders are advised that asbestos-containing material may be located in the boiler rooms, pipe tunnels, storage areas and various portions of City buildings. Before proceeding on any contractual work on City buildings or their interiors, it is mandatory that bidders familiarize themselves with the asbestos-containing material and that said material be considered as a health hazard and all precautionary measurers according to the Ahera Rules & Regulations be observed. It is the bidder's responsibility to notify all employees and/or subcontractors of this notification.

SUBCONTRACTORS: The successful bidder shall not employ any subcontractor to fulfill any of the duties herein specified without express, prior written approval of the City of Torrington or its designated agent.

EEO: The successful bidder shall provide any/all additionally required, affirmative action statements, fair employment plans and nondiscrimination programs and statement as might be required by the City of Torrington. In connection with the execution of this bid, subsequent purchase orders and/or contracts, the seller shall not discriminate against any employee or applicant for employment because of age, race, religion, color, sex or national origin. Bidders must comply with all rules & regulations of the Department of Labor with regard to Equal Employment Opportunities as pertains to municipalities.

TERMINATION OF CONTRACT: Any contract entered into by the City and the successful bidder shall provide that the City may terminate the contract upon thirty (30) days notice to the bidder.

The City of Torrington reserves the right to award or reject any or all bids, or any portion thereof, to waive technicalities, and to award the bid and/or contracts to one or more bidders submitting essentially identical proposals and, that in the city's judgment, will best serve the public interest.

The terms and conditions of these "Instructions To Bidders" are made a part this bid.

SAMPLE FORM

Bid #

NON-COLLUSION AFFIDAVIT

STATE OF	_ COUNTY OF _	
I,		, being first duly sworn, deposes and says that:
1. lam		
of attached request for proposal for		, the bidder that has submitted the

2. I am fully informed respecting the preparation and contents of the attached RFP and of all pertinent circumstances respecting such bid;

3. Such Bid is genuine and is not a collusive or sham Bid;

4. Neither the Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the work for which the attached Bid has been submitted nor has it in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the price of any Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Torrington or any person interested in the proposed Bid; and

5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of it agents, representatives, owners, employees, or parties in interest, including this affiant.

. . .

My commission expires _____

SAMPLE FORM

BID #

CONSENT OF SURETY COMPANY TO RELEASE FINAL PAYMENT

City Architect Contractor Surety Other

PROJECT/BID NUMBER :

TO: City of Torrington Attn: Purchasing Agent 140 Main Street Torrington, CT 06790

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CONTRACTOR:

In accordance with the provisions of the Contract between the City of Torrington and the Contractor as indicated above, the (insert name & address of Surety Co.)

SURETY COMPANY on bond of (insert name & address of Contractor)_____

, CONTRACTOR, hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety Company of any of its obligations to the CITY OF TORRINGTON as set forth in the Surety Company's bond.

Subscribed and sworn to before this _____ day of _____, 20___.

Surety Company

Notary Public

My commission expires _____

Title

Authorized Representative's Signature

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<u>SPECIFICATIONS FOR BID # WTP-041-042806</u> <u>6" x 6" TRAILER MOUNTED TRASH PUMP</u>

PART ONE – GENERAL

1.1 **PROJECT SCOPE**

- 4.1.1 The City of Torrington is seeking sealed bids for one (1) 6" x 6" Trailer Mounted Trash Pump. For procedural questions please contact the Purchasing Agent Charlene Antonelli (860) 489-2225 for technical questions please contact WPCA Administrator Ray Drew (860) 485-9166.
- 4.1.2 The pump offered shall be the manufacturer's standard production model. The manufacturer shall have a minimum of five (5) years experience in the manufacturing of portable trash pumps and shall have pumps in continuous use by municipal and industrial owners for a minimum of three (3) years. The manufacturer shall submit a list of five municipalities within New England including contact names and telephone numbers that have the proposed pump model in service.
- 1.1.2 The portable pump shall be delivered to the Water Pollution Control Authority within seven to ten days of written bid award notification.

1.2 SYSTEM DESCRIPTION

- 1.2.1 The portable trash pump specified in this section will be used to pump wastewater with solids. The pump shall be capable of operating at design in all forms of weather that is typically found in Connecticut, particularly in temperatures ranging from 0° F to 90° F.
- 1.2.2 The pump and accessories shall be supplied by the pump manufacturer.
- 1.2.3 The pump shall be fitted with a fully-automatic priming system incorporating an air compressor, air ejector assembly, and an air/water separation tank. The priming system shall be capable of priming the pump from a completely dry pump casing. The air ejector shall operate on the discharge side of the compressor, eliminating the possibility of water being drawn into the air source. The pump must be capable of running totally dry for periods up to twenty-four hours, then re-priming and returning to normal pumping volumes.
- 1.2.4 The priming system shall not use a vacuum or diaphragm pump, nor require the use of a "Foot"-type valve. It shall contain no moving parts or protective float gear. A demonstration of the pump's ability to repeatedly cycle from dry suction / pump / snore / repriming / pump shall be required. This will necessitate the draining of all residual water from the pump case to initiate a dry suction starting condition.

- 1.2.5 The diesel engine driven pump unit shall be mounted on a trailer suited for highway travel at 65 M.P.H. and wired for over the road usage per applicable D.O.T. Standards.
- 1.2.6 Pump and priming system shall be fully automatic, needing no form of adjustment or manual addition of water for the priming system. The pump shall be capable of static suction lifts to twenty-eight vertical feet, at sea level. It shall also be capable of operation using extended suction lines.
- 1.2.7 Equipment acceptance shall be contingent upon the pumps ability to run continuously at full speed in a completely dry condition for periods up to twenty-four hours. This may require the draining of all residual water in the pump casing to simulate a dry suction/case condition. A demonstration may be required by the the City of Torrington or its appointed designee.
- 1.2.8 The engine shall be completely enclosed with fourteen-gauge sheet metal panels with locking side doors painted black.

1.3 DESIGN REQUIREMENTS

1.3.1 **OPERATING SPEED (MAXIMUM)** 2200 RPM MAXIMUM SOLIDS HANDLING SIZE **3 INCHES** IMPELLER DIAMETER 10.8 INCHES SUCTION SIZE **6 INCHES** DISCHARGE SIZE **6 INCHES** MAXIMUM SUCTION LIFT 28 FEET 1200 GPM AT 125'TDH MAXIMUM DUTY POINT (INCLUDING A 15' SUCTION LIFT) SECOND DUTY POINT 1100 GPM AT 75'TDH

(INCLUDING A 25' SUCTION LIFT)

1.4 **REFERENCES**

1.4.1 ANSI B16.1 - Standard for Cast Iron Pipe Flanges and Flanged Fittings.

PART TWO - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

2.1.1 The pump shall be a Model CD150M, size 6" x 6" as manufactured by GODWIN PUMPS, Bridgeport, New Jersey or equal.

2.2 EQUIPMENT

2.2.1 CASING, SUCTION COVER, SEPARATION TANK: Pump castings shall be cast

iron. Pump design shall incorporate a direct suction flow path that is in axial alignment with the impeller eye. There shall be no turns, chambers, or valves between the suction flange and the impeller eye. Pumpend shall be manufactured to ISO 9002 specifications.

- 2.2.2 IMPELLERS: The pump impeller shall be an open, three-bladed, non-clog type with pump-out vanes on the back shroud and fabricated from hardened cast- chromium steel construction (minimum Brinell Hardness 340 HB).
- 2.2.3 WEARPLATES: Shall be fully adjustable and replaceable, fabricated of cast iron. Wear plate clearances shall have no relationship to the ability of the pump to achieve a prime.
- 2.2.4 BEARINGS AND SHAFTS: Pump shall be fitted with a bearing bracket to contain the shaft and bearings. Bearings shall be tapered roller bearings of adequate size to withstand imposed loads for sustained pumping at maximum duty points. Minimum ISO L_{10} bearing life to be 100,000 hours. Impeller shafts shall be fabricated of 1.5% chromium alloy.
- 2.2.5 SEALS: Seals shall be high pressure, mechanical self-adjusting type with silicon carbide faces capable of withstanding suction pressures to 100 psi. The mechanical seal shall be cooled and lubricated in an oil bath reservoir, requiring no maintenance or adjustment. Pump shall be capable of running dry, with no damage, for periods up to twenty-four hours. All metal parts shall be of stainless steel. Elastomers shall be Viton.
- 2.2.6 PUMP SUCTION AND DISCHARGE FLANGES: Shall be cast iron ANSI (B16.1) Class 150, raised faced with 6" Bauer fittings.
- 2.2.7 PUMP GASKETS: Shall be compressed fiber and/or Teflon.
- 2.2.8 PUMP O RINGS: Shall be Viton.
- 2.2.9 PRIMING SYSTEM: Pump shall be fitted with a fully automatic priming system incorporating a twin-cylinder compressor and air ejector assembly, no vacuum pump. The compressor shall be installed on the engine auxiliary drive and shall be belt driven, lubricated and cooled from the engine. The priming system shall require no fail-safe protection float gear or any adjusting at high or low suction lifts and positive pressure condition priming shut out valve shall be included.
- 2.2.10 CHECK VALVE: Pump shall be supplied with an integral ball-type check valve mounted on the discharge of the pump, allowing unrestricted flow from the impeller. The check valve shall prevent in-line return of flow when the pump is shut off. Non-return valve elastomers shall be Nitrile rubber and shall be field replaceable.
- 2.2.11 DRIVE UNIT: The drive unit shall be a diesel water-cooled engine. The engine shall drive the pump by use of direct-connected intermediate drive plate. Starter shall be twelve-volt electric. Safety shut down switches for low oil pressure and high temperature shall be provided. Battery shall have 180 amp hour rating. Unit shall

include a tachometer and an hour meter. Drive unit shall be a John Deere 4045D or equal, rated at 68 H.P. (continuous) at 2200 R.P.M. A certified continuous-duty engine curve shall be supplied to the owner/engineer.

- 2.2.12 GOVERNOR: Governor shall be a mechanical type. Engine speed shall be adjustable to operate the pump between maximum and minimum design operation speeds.
- 2.2.13 FUEL SOURCE: Integral skid fuel tank capacity shall be sufficient to provide a minimum of twenty hours of operating time at full load. The engine shall be capable of operating satisfactorily on a commercial grade of distilled No. 2 fuel oil. Fuel tank capacity shall be a minimum of 60 gallons.
- 2.2.14 EXHAUST: Exhaust system shall include hospital grade muffler, cowl type.
- 2.2.15 BASE: The pump and engine shall be mounted with an integral fuel tank. The fuel tank shall be equipped with drain plugs.
- 4.1.1 TRAILER: The pump, engine and tank shall be trailer mounted with a pintle type trailer hitch. Tires and torsion bar suspension shall be adequately sized for the required load range ratings. Trailers shall be equipped with fenders, D.O.T. lights, front and rear support stand, lifting bar, safety chains and side and rear reflectors. Trailer design shall be in compliance with applicable D.O.T. regulations.
- 4.1.2 CONTROL PANEL: The control panel shall at a minimum be equipped with tachometer, a non-resettable hour meter, engine temperature gauge, oil pressure gauge, voltage output gauge and keyed start on/off switch.

2.3 FACTORY PAINTING

2.3.1 Pump, engine, base, and trailer shall be shop primed and finish painted at the place of manufacturer. Materials and dry film thickness for priming and finish paint shall be in accordance with manufacturer's standards.

PART THREE - EXECUTION

3.1 MANUFACTURERS SERVICES

- 3.1.1 The manufacturer shall furnish the services of a competent factory representative to do the following:
- 4.1.1.1 Inspect the system prior to delivery, supervise the start up and testing of the system, and certify the system has been properly furnished and is ready for operation.
- 3.1.1.2 Instruct the owner's operating personnel in the proper operation and maintenance of the system for a period of not less than one-half day.

3.2 TOOLS AND SPARE PARTS

- 3.2.1 The manufacturer shall furnish the following with the Portable Trash Pump System:
- **3.2.1.1** A recommended list of spare parts.
- **3.2.1.2** Three Sets of Operations and Maintenance manuals complete with breakdown drawings.
- **3.2.1.3** One set of Equipment breakdown drawings shall be submitted in electronic format (i.e. autocad).
- **3.2.1.4** One quart of matching touch-up paint.

3.3 WARRANTY

- 3.3.1 The manufacturer shall furnish the following to the owner:
- 3.3.1.1 A copy of the engine manufacturer's parts and labor warranty.
- 3.3.1.2 A one-year Parts and Labor Warranty issued by the manufacturer on the Portable Trash Pump System. This warranty must cover all pump parts, including the mechanical seal.

PART 4 - EXCEPTIONS TO SPECIFICATIONS:

4.1 If a bidder wishes to propose a product that does not exactly match the specifications above, on a separate page he shall provide a complete list of all deviations and an explanation of how the proposed product meets or exceeds each line of the above specifications.

PART 5 - OPTIONS:

- (1) One each: Block Heater, 115 Volt, Single Phase;
- (2) One each: 12 Volt Automatic Battery Charger, 115 Volt, Single Phase,

(3) One each: 30 Amp Inverter (Alternator shall be proper size to support the additional 30 amp load).