



CITY OF TORRINGTON INVITATION TO BID

BID # SJT-030-011508 TRUCK MOUNTED COMBINATION SEWER JETTER WITH CLOSED CIRCUIT TELEVISION INSPECTION SYSTEM

Date of bid opening: **January 15, 2008** Time: **10:00AM** 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: 12/20/2007 Purchasing Agent _____
Pennie Zucco

Item	PRICE
SUPPLY TRUCK MOUNTED COMBINATION SEWER JETTER WITH CLOSED CIRCUIT TELEVISION INSPECTION SYSTEM PER SPECIFICATIONS	\$ _____

The Purchasing Agent is authorized to offer City based bidders that exceed the lowest bid by up to 6%, the opportunity to match the lowest bid. A City based bidder within the 6% differential who agrees to accept the amount of the lowest bid will be awarded the bid. When multiple City based bidders agree to accept the amount of the low bid then the City based bidders will be invited to submit a new bid, not to exceed the low bid. The bid will then be awarded to the lowest responsive, responsible bidder.

Bid Submitted By: _____

Name of Company _____
Address _____

Signature

Title

Phone _____ Fax _____

Date _____

Delivery Date: _____ days ARO

E-mail address _____

Web Page _____

Comments: _____

Comments: _____

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 response that does not fully respond to and comply with all detailed specifications or requests for information including execution of 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 the 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" to 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 will apply to the degree applicable, even though an addendum 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:

- 1) 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 or 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:

- 1) 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 both 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 & officers as the **additional insured** 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, 1965, (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 measures 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 non-discrimination 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. I am _____ of _____, the bidder that has submitted the attached request for proposal for _____;
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 its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signed _____

Title _____

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

Notary Public

My commission expires _____

NOTE: Documents must be signed before and sealed by a Notary Public. Only documents bearing a notary seal will be accepted.

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

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

Authorized Representative's Signature

My commission expires _____

Title

BID SPECIFICATIONS:

TRUCK MOUNTED COMBINATION SEWER JETTER WITH CLOSED CIRCUIT TELEVISION INSPECTION SYSTEM

1) GENERAL

- A)** The City of Torrington Water Pollution Control Authority is seeking sealed bids for one (1) Combination Sewer Jetter with Closed Circuit Television Inspection System. For procedural questions please contact the Purchasing Agent: Pennie Zucco (860) 489-2225. For technical questions please contact WPCA Administrator: Ray Drew (860) 485-9166.
- B)** It is the intent of these specifications to describe the minimum requirements for a new High Pressure Water Jet designed for the removal of sand, dirt, grease, detergents, and other materials commonly found in storm drain and sanitary sewer pipes. The machine described shall be designed to deliver high performance capabilities and provide maximum operator safety and convenience. The machine described must also be equipped with a high quality color video inspection/recording system to allow the operator to inspect the mains. All parts not specifically mentioned which are required for a complete unit shall conform in design, strength, quality of material, and workmanship to the highest standards of engineering practice. Unit to also have a water jet propelled camera system.
- C)** The Vehicle, Accessory Equipment and Documentation shall be delivered in whole to the City of Torrington Water Pollution Control Authority on or before March 1, 2008.
- D)** Combination Sewer Jetter with Closed Circuit Television Inspection System offered shall be the manufacturer's standard production model. The manufacturer shall have a minimum of five (5) years experience in the manufacturing and or assembly of Combination Sewer Jetter with Closed Circuit Television Inspection System and shall have units 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 model in service.

2) SEWER JETTER AND CAMERA SYSTEM

A) WATER TANK

- i) Tank capacity shall be 1500 gallons of water.
- ii) Tank shall be welded/repairable construction of 0.500", U.V. stabilized Duraprolene.
- iii) The baffles in the tank will be constructed of 0.375" Duraprolene. These baffles will be designed to reduce sloshing and distortion and will form no less than sixteen interconnected compartments.
- iv) Tank bottom will be flat bottom type; pump intake will be located such that sediment will settle at tank bottom and shall not enter pump intake.
- v) Tank will be equipped with a strainer at tank top for elimination of foreign objects into tank.
- vi) Entire tank top shall be completely removable for safe access of personnel entry during maintenance.
- vii) Duraprolene to be ultraviolet stabilized to prevent material breakdown.
- viii) Tanks constructed of steel will not be acceptable due to the potential of water pump damage by rust and corrosion particles.
- ix) Tanks constructed of polypropylene will not be acceptable due to inadequate UV protection and lack of repairability.

B) FILL SYSTEM

- i) Tank filling shall be possible from both curbside and street side.
- ii) Tank filling system and fill hose will be located between the cab and water tank of the unit with a fill point on both sides of the truck.
- iii) Tank fill system shall utilize a quick disconnect cam lock fitting for 2-1/2" fill hose.
- iv) A water level indicator will be located at operator's station.
- v) A water level sight gauge will be located on street side and on curbside.
- vi) A four (4) inch air gap will be utilized between fill pipe and tank fill opening to eliminate siphoning potential.
- vii) There will be a shut-off valve between tank and 20-mesh "Y" strainer.
- viii) 2" drain valves will be located at both curbside and street side.
- ix) Air gap shall have an integral float valve assembly to eliminate water discharge due to movement of the vehicle.

C) CAMERA CONTROL SYSTEM

- i) The camera monitor shall be a 7" minimum LCD screen mounted on the left side of the hose reel assembly.
- ii) The camera monitor shall be enclosed in a lockable sealed enclosure that allows for optimum security. Said enclosure shall be of aluminum construction with a removable front panel.

- iii) The above camera monitor enclosure shall also include the necessary controls for operating the camera functions. These controls shall be mounted in a NEMA 4 enclosure. The camera controls shall be located in a weather tight enclosure, sock mounted for optimum durability. Said enclosure shall be of aluminum construction.
- iv) Camera controls shall consist of a DVR (multi-format), CAMERA CONTROL CENTER and storage tray. These controls shall be of a slide in rack mount design for ease of maintenance and durability.
- v) The DVR shall operate on 12 VDC power and be rated for mobile operation. Recording shall be able to be controlled through a remote control infrared sensor.
- vi) The camera control shall operate off 12 VDC power and rated for mobile operation. This control center shall incorporate all camera controls. Said controls shall consist of camera head light intensity, camera power control, microphone jack, footage counter display reset and individual circuit breakers for various accessories. In addition, this control center shall have the ability to change control locations from the control center to the remote controller at the hose reel.

D) CAMERA

- i) The camera shall be self righting /self leveling and of a high resolution (400 lines minimum) color camera. The camera shall also have high sensitivity, 0.2-LUX minimum.
- ii) The camera shall have an Electronic Iris to compensate for light intensity.
- iii) The camera shall have a Shatterproof Sapphire Window, Stainless Steel Housing and be Internally Potted for Shock Protection and Water Resistance.
- iv) The camera shall have an LED Light head consisting of 48 Lower Power, Long Life LEDs. The LED light head shall be designed for illumination for up to 24" diameter pipes.
- v) Camera skid shall be propelled through the sewer via a water jet skid complete with replaceable inserts. Said inserts shall be available in hardened steel or ceramic materials of construction.

E) 360° ROTATING CAMERA

- i) The camera system shall include an additional rotating head camera assembly. Said assembly shall have the ability to rotate through a 360-degree arc allowing the operator to inspect lateral pipe connections and the like.
- ii) The camera shall be of a high-resolution (400 lines minimum) color camera. The camera shall have high sensitivity, 0.2-LUX minimum.
- iii) The camera shall have an Electronic Iris to compensate for light intensity.

- iv) The camera shall have a Shatterproof Sapphire Window, Stainless Steel Housing and be Internally Potted for Shock Protection and Water Resistance.
- v) The camera shall have an LED Light head consisting of 48 Lower Power, Long Life LEDs. The LED light head shall be designed for illumination for up to 24" diameter pipes.
- vi) The camera control center shall control the transfer of control between cameras as well as the rotating camera lens location.

F) ROTATING SAFETY DUAL REEL

- i) Unit shall be equipped with two (2) hose reels. The hose reels shall be constructed of 1/4" steel, designed to withstand maximum working pressure without distortion.
- ii) The narrow designed reels shall be self-leveling type for operator safety.
- iii) The left side reel of the unit has a minimum capacity of 500' of Umbilical Hose/Cable to propel the high definition camera through the sewer line.
- iv) The right side jetting hose reel shall have a capacity of 800' of 1" sewer hose.
- v) Reel flanges shall be a minimum of 1-1/2" wide and designed to prevent hose damage.
- vi) The hose reel sides will be reinforced with heavy-duty side supports to eliminate damage.
- vii) The sewer hose will be attached to the reel on the inside to facilitate replacement of hose.
- viii) The dual hose reel assembly shall be mounted in the rear/center of the rear compartment.
- ix) The hose reels shall have the ability to extend out from the rear compartment via a hydraulically powered cylinder.
- x) The cylinder shall extend the hose reels 48" from the fully retracted position in the heated rear compartment after the rear roll-up door has been completely opened.
- xi) To provide direct alignment to manholes, the hose reel shall rotate 190-degrees when fully extended in the operating position. Direct alignment minimizes hose wear and damage.
- xii) The hose reel mount assembly shall be supported by ball bearings allowing for smooth trouble free operation. Said assembly shall be capable of being extended or retracted by hand in the event of the loss of hydraulic power. Mount assemblies utilizing sliding contacts shall not be acceptable.
- xiii) The hose reels shall rotate on a heavy-duty vertical thrust bearing. Hose reels relying on sliding contact or other wear surface are not acceptable.
- xiv) The hose reels will lock into position using a spring-loaded safety pin at 2" intervals.

- xv) The Sewer Hose reel (right reel only) shall be equipped with an automatic level wind, which allows for “hands-free” winding of sewer hose onto the hose reel without operator touching sewer hose.
- xvi) The automatic level wind system (sewer hose reel/right reel only) will incorporate a drive system, which scrolls a pivoting “V” roller head back and forth across hose reel for proper winding of sewer hose onto reel.
- xvii) The automatic level wind system is equipped with a hydraulic controlled elevation system, which incorporates dual cylinders and pivot arms to raise and lower the level wind guide depending on location of manhole. Level wind raises/lowers minimum 45 degrees.
- xviii) The “V” roller head will open to allow use of hose guide, fin extension, and nozzle without need to thread hose into guide.
- xix) A pendant control with 25’ cord will be supplied for ease of operator use with the automatic level wind.
- xx) The pendant control will include controls for hose reel “Forward/Neutral/Reverse”, engine throttle “up/down” and a kill switch.
- xxi) The reel design shall be such that either a rotating or fixed position reel will be interchangeable with regards to the method of attaching to the truck.
- xxii) Digital Footage Counter to be included with the capability of footage accuracy of plus or minus one percent that is displayed on a digital screen with 2” red LED number display. The Digital Footage Counter measures the rotation of the hose reel and takes into account the diameter of the hose, the length of the hose, and the diameter of the hose reel drum. Based on that information the Digital Footage Counter delivers footage accuracy of plus or minus one percent. The Digital Footage Counter to be run off 12 volts. User can store up to 10 distance counts for review at later time. The Digital Footage Counter includes an A/B switch so user can view footage of either hose reels on unit from the single display. Footage of the B reel can also be viewed on the monitor of the TV system. This footage can be recorded through the DVD in the TV system.

G) HOSE REEL DRIVE SYSTEM

- i) The hose reels shall be chain driven by hydraulic power in both directions, either with or without the water pump in operation. The hydraulic drive shall have sufficient power to retract the hose and umbilical cable when fully extended into the sewer with the cleaning nozzles in operation.
- ii) A hydraulic pump rated at 0-8 GPM at 2,000 PSI will power the hose reel drive. A hydraulic motor with chain drive and sprocket capable of operating in both directions will be furnished. The hydraulic motor and chain must be adjustable.
- iii) The hydraulic drive for the reels will be furnished with an overload relief valve.

- iv) The hydraulic drive for the reels shall select left or right reel control through use of a single diverter valve mounted on the hose reel assembly.

H) UMBILICAL HOSE/CABLE

- i) The camera propulsion left side mounted reel on this unit shall be equipped with an Umbilical Hose/Cable which encases 500' of 5/8" high-pressure polyurethane sewer hose of specially formulated thermoplastic construction expressly designed for sewer cleaning use and an 11-conductor .410" diameter video cable. The Umbilical Hose/Cable shall have an abrasion, and scuff resistant cover.
- ii) The Umbilical Hose/Cable is of "single construction". Two (2) piece systems that call for "synchronization" of hose and cable during use are not acceptable.

I) SEWER HOSE

- i) The unit will be supplied with an abrasion resistant plastic (Armor Belt) sewer cleaner hose capable of cleaning sanitary service lines, storm lines, culverts, drainage tiles another open conducts.
- ii) Hose will be 1" ID by 600' with an operating pressure of 3,000 PSI and a minimum burst pressure of 7,500 PSI.
- iii) Hose outer cover will contain an integral belting of high tensile polymer reinforcement for cut and abrasion resistance.

J) WATER SYSTEM PIPING

- i) All piping systems subjected to high pressure shall use zinc chromate plated steel fittings with minimum burst pressure of 4 times the system pressure. Hoses working pressure ratings shall exceed the maximum system pressure.
- ii) A strainer with a minimum of 40-mesh screen shall be installed in the suction line at a location accessible for cleaning.
- iii) All piping shall be installed to drain by gravity through suitable openings equipped with plugs, drain cocks, or ball valves.
- iv) Pressure to the cleaning nozzle, shall be regulated by an overload relief valve.
- v) To control water flow from water pump, a single lever control shall regulate direction of water either to hose reel or back to tank utilizing a high-pressure valve assembly. This single lever control shall control a 3-way valve.
- vi) The recirculation ability of this system allows for use of unit in sub-freezing temperatures.
- vii) Water delivery to hose reel shall pass through a single 90-degree swivel rotary coupling.

K) WATER PUMP

- i) Triplex positive displacement pump rated at and powered to produce 75 GPM at 2,500 PSI.
- ii) Water pump will be located in the rear compartment, which is shrouded and heated to protect the pump from the dangers of any damage caused by freezing.
- iii) Pump to be fitted with drain cocks for complete draining of pump.
- iv) Pump shall be fitted with a factory set overload relief valve.
- v) The water pump shall be direct coupled to a hydraulic motor. Drive systems incorporating any type of flexible coupling or belt drive system are not deemed acceptable due to maintenance related issues.

L) HYDROSTATIC DRIVE SYSTEM

- i) The water pump will be driven by a hydrostatic system, which is powered by the truck engine via a PTO mounted to the transmission. The PTO drives a shaft, which powers a hydrostatic transmission pump. This hydrostatic transmission pump is responsible for driving a rear mounted hydraulic motor, which drives the water pump. Also mounted to the hydrostatic pump is a hydraulic pump, which is responsible for relaying power to a rear mounted hydraulic motor that drives the hose reel.
- ii) The hydraulic oil reserve capacity will be at least 24 US gallons with oil temperature indicator. This unit will also be equipped with low hydraulic oil indicator lights located in cab as well as at operator's station to signal loss of hydraulic oil. A hydraulic oil cooler will be provided with hydraulic oil filter. Hydraulic filter shall be cartridge style and integral to the reservoir.
- iii) The hydraulic oil reservoir, water pump, and rear hydraulic motor are to be mounted above the chassis frame rails in the enclosed, heated pump compartment located at the rear of the water tank.

M) REAR BODY, TOOLBOXES, AND SKIRTING

- i) Rear body will be constructed of aluminum for corrosion resistance and to protect all components located at the rear of the tank. Rear body shall be designed for total enclosure of major components including the water pump, hydrostatic motor, hose reel and associated plumbing and sewer hose.
- ii) Rear housing must be of a one-piece construction including sides and top to allow for easy removal and eliminate any corrosion as the result of bolt together joints and seams.
- iii) Floor decking of rear body will be constructed of 11-gauge steel. Said flooring shall also be treated with a non-skid coating for maximum protection from slipping.

- iv) Rear compartment shall utilize three (3) “upward acting” compartment doors which incorporate a header/counter balance design. Made of anodized aluminum panels, which maximize maneuverability, minimize vehicle width and eliminate safety hazard of open-hinged doors. Panels will have no rollers or cables, will resist rust and will be virtually maintenance free. Doors will include stainless steel, lockable and keyed alike heavy duty handles. Top and side seals will prevent dust, dirt and moisture from entry compartment. Hinged doors that protrude into work area, invite accident or personal injury, and could result in severe structural damage if vehicle is moved with hinged doors open, cannot be accepted.
- v) The rear compartment will utilize two deluxe roll-up doors on either side. These doors will measure 48” wide x 52” high. These doors allow for complete access to rear compartment.
- vi) The rear compartment will utilize a deluxe roll-up door on the rear of unit that will measure 91” wide x 70” high. This door will protect components when closed and allow telescoping extension of hose reel when opened.
- vii) The rear roll-up door will be equipped with an automatic safety switch, which will not allow hydraulic extension of hose reel unless roll-up door is opened completely.
- viii) Unit will include 5 aluminum underbody toolboxes; 2 toolboxes 18” x 18” x 30”, 2 toolboxes 18” x 18” x 36”, and 1 toolbox 10” x 19” x 54”.
- ix) Toolbox will be protected from the effects of water and road dust by a thick, automotive “bulb type” neoprene door seal.
- x) A heavy-duty handle (locking style) will be provided on toolboxes.
- xi) Skirting will be made of 11-gauge steel extending full height of toolboxes with cutouts for rear wheels.
- xii) Stop, running, and directional lights will comply with ICC regulations.

N) ALL-WEATHER SAFETY SYSTEM

- i) The rear compartment shall be totally enclosed and heated to prevent accidents and mechanical damage caused by ice build-up in hose (which can lead to hose bursts) and freezing of the high-pressure piping and/or water pump.
- ii) The rear compartment shall be equipped with an 80,000 BTU heater to protect components from freezing and to enhance overall ease of operations.
- iii) The rear compartment shall utilize three (3) deluxe roll-up doors which, when closed, completely enclose and protect the rear compartment.
- iv) When not in the extended position, the hose reels shall be housed within the heated rear compartment.
- v) A recirculation fitting will be installed to allow for recirculation of water. Recirculation will be possible at all times, including instances when truck is in motion.

- vi) An air purge system will be installed which allows high-pressure air to force water from system.

O) HIGH PRESSURE HAND GUN SYSTEM

- i) The high-pressure handgun piping shall be provided as standard with quick-disconnect fitting located at the control panel and 50' of ½" HP hose with fittings.
- ii) High-pressure handgun circuit shall utilize an adjustable relief valve capable of 500-PSI capacity.
- iii) The high-pressure handgun will be adjustable and repairable.
- iv) Rewind hose reel.

P) CONTROL PANEL

- i) The jetter control panel will be located at rear of truck on the curbside of the hose reel. All controls shall be mounted in a weather tight NEMA 4 control panel.
- ii) Control panel will include
 - (a) Throttle
 - (b) Low oil warning light (in cab as well)
 - (c) Variable reel speed control
 - (d) Forward/reverse hose reel control
 - (e) Control panel light
 - (f) Water level indicator (4 light)
 - (g) Tachometer
 - (h) Hour meter
 - (i) Other controls contained in the rear compartment of the unit
 - (a) Water pressure gauge (glycerin filled)
 - (b) Pump power control

Q) MOUNTING

- i) Unit will be mounted on a base frame consisting of 2" x 6" tubing.
- ii) Deck assembly will be bolted solid at rear and spring mounted under the tank to allow the jetter deck to fully support the tanks while allowing the truck chassis rails to flex.

R) PAINT

- i) Before painting, all metal shall be cleaned and etched with a phosphoric material to insure permanent bond of primer and paint. The entire unit will be painted per customer specification.
- ii) All components of the unit whether purchased or manufactured shall be BOTH primed and painted prior to assembly in order to assure maximum resistance to corrosion. Painting after the assembly process is NOT acceptable.

- iii) The unit shall have the frame painted black and the hose reel and shroud assemblies to be painted white.

S) ACCESSORIES

- i) 25' FILL HOSE
- ii) Nozzle extension
- iii) Tri-Point (chisel) Nozzle with replaceable inserts
- iv) HW-70 (high-flow) Nozzle with replaceable inserts
- v) Hose guide with rope
- vi) Upstream pulley guide
- vii) Wash down gun with 50' x ½" hose with quick disconnect
- viii) Heavy-duty rear bumper with hitch
- ix) Floodlight at operator's station
- x) Spotlight with 25' cord
- xi) Rotating beacon mounted on top of rear compartment
- xii) Mud flaps
- xiii) Arrow board, rear mounted
- xiv) Rear pump compartment light
- xv) Three (3) Sets of Operation, Repair, and Parts manuals, one (1) set of which shall be in electronic format (i.e. PDF)
- xvi) One (1) quart of each color touch up paint

3) TRUCK CHASSIS MODEL PROFILE

- A) The truck and chassis shall be used for the mounting a Sewer Jetter and CCTV system as described in Section Two (2) above.
- B) The following specifications are generally based on an International 4300 SBA 4X2 (MA025) Model Year 2008.

C) GENERAL SPECIFICATIONS

- i) GVWR: 35,000
- ii) WB 162"
- iii) CA 96.0"
- iv) Truck must meet the CONN-OSHA noise requirements.
- v) Truck to be equipped with a Beka-Max lube system this system can be supplied and installed by Lubrication Technologies, Inc. 168 Windsor Street West Springfield, MA 01089-3530. Both the truck supplier and the body and equipment supplier will work with Lubrication Technologies to assure the lubrication needs and number grease points for there equipment are met.

D) FRAME

- i) Rails, Heat treated low alloy steel (120,000 PSI yield).
- ii) 10.1250" x 3.580" x 0.312".

E) AXLES

i) FRONT

- (a) Non-driving, I-beam type, 12,000 lb capacity.
- (b) Springs parabolic, taper leaf; 12,000 lb capacity w/shock absorbers.
- (c) Auxiliary front springs shall be rubber.
- (d) Power steering with a Sheppard M-100 steering gear.
- (e) 18" 2- spoke steering wheel.

ii) REAR

- (a) Single reduction Dana Spicer S23-170.
- (b) Capacity 23,000 lbs w/ "R" wheel ends.
- (c) Gear ratio 6.14. Subject:
- (d) Magnetic drain plug.
- (e) Suspension Vari-Rate springs 31,000 lb capacity with 4,500 lb rubber auxiliary spring.
- (f) Axle will be equipped with a Driver Controlled Locking Differential
- (g) Synthetic oil.

F) BRAKES

- i) Front brakes 16.5.0" x 5.0" Air S-Cam w/MGM long stroke brake chambers.
- ii) Rear brakes 16.5" x 7.0" Air S-Cam w/MGM TR3030 long stroke brake chambers.
- iii) Air Compressor Bendix Tu-Flo 550 13.2 CFM.
- iv) Dust shields both front and rear.
- v) Brake system, Air dual system for straight truck applications.
- vi) Air pressure gauges located in instrument cluster air 1 and air 2 gauges.
- vii) Automatic slack adjusters both front and rear.
- viii) Parking brake, spring actuated rear brake chambers.
- ix) Bendix Antilock Brake System, Full vehicle wheel control system (4-channel).
- x) Air Dryer, Bendix AD-IP w/heater.
- xi) Drain valve manual w/ pull chain for air tank.
- xii) Brake lines color coded nylon.

G) ENGINE

- i) Diesel wet sleeve 260 HP, 800 lb-ft torque @ 1,400 RPM minimum.
- ii) Calculated geared speed 67.3 MPH.
- iii) Exhaust and compression braking electronically activated

- iv) Exhaust system, single, After treatment device frame mounted right side back of cab, includes a vertical tail pipe with guard.
- v) Radiator aluminum cross flow, over under system 717 sq in louvered, w/in tank transmission cooler.
- vi) Radiator hoses premium rubber.
- vii) Heater hoses silicone.
- viii) Air cleaner restriction gauge.
- ix) Fuel/water separator
- x) Engine shut down key operated
- xi) Engine drain plug magnetic
- xii) Fan drive Borg-Warner SA85 viscous screw on type w/nylon fan.
- xiii) Hand throttle engine speed control.

H) ELECTRICAL

- i) 12 Volt standard equipment.
- ii) Circuit breakers w/manual reset replaces all fuses except for 5-amp.
- iii) Single electric horn.
- iv) Electric windshield wiper w/2 speed and intermittent feature.
- v) Cigar lighter.
- vi) Alternator Leece-Neville 140 amp. Capacity.
- vii) Batteries (2) 12 volt maintenance free 1850 CCA total.
- viii) Body Builder wiring; includes sealed connectors for tail/amber turn/marker backup/accessory power/ground and sealed connector for stop/turn. Located back of standard cab at left frame.
- ix) Switch body circuits MID for bodybuilder, 6 switches in instrument panel; one power module with 6 channels; 20 amp max. Per channel and 80 amp max output; switches control the power module through multiplex wiring.
- x) All lights wherever possible will be LED. Lighting package for entire truck will be presented at time of bid opening.
- xi) Trailer connection socket mounted at rear of frame, wired for turn signals combined with stop, compatible with trailers that use combined stop, tail, and turn signals.
- xii) Toggle switch for work light, lighted on instrument panel wired to back of cab.
- xiii) Headlights halogen, composite aero design for two light; includes daytime running lights.
- xiv) Starting motor Leece-Neville M 130D; less thermal over-crank protection.
- xv) Radio AM/FM stereo w/weather band, clock, and multiple dual cone speakers.
- xvi) Engine control, remote mounted provision for; wiring for body builder installation of PTO controls; with ignition switch control for CEC II electronic engines.
- xvii) Toggle switch; auxiliary and wiring; for driving lights or fog lights, mounted by customer.

D) TRANSMISSION

- i) Allison automatic; Allison 3000_RDS_P close ratio, 6-speed w/overdrive.
- ii) Transmission includes oil level sensor and PTO provision.
- iii) Transmission oil pan magnet.
- iv) Transmission shift control Allison push button type.
- v) Allison spare input/output for rugged duty series (RDS).
- vi) PTO control dash mounted. Electric switch w/air solenoid, piping and wiring.
- vii) Synthetic oil.

J) FUEL TANK

- i) Fuel tank top draw; D style, non-polished aluminum, 50 U.S. gal. W/quick connect outlet, mounted right side under cab.
- ii) Fuel water separator w/thermostatic fuel temperature controlled electric heater, includes standard equipment water-in-fuel sensor.
- iii) Fuel lines nylon tubing w/O-Ring Snap-On quick connect fittings at both ends.

K) CAB

- i) Conventional steel.
- ii) Five clearance lights LED if possible.
- iii) Floor covering black rubber with additional “catch-all” style floor mats on both drivers and passenger sides.
- iv) Tinted glass.
- v) Gauge cluster speedometer, odometer w/miles, engine hours, engine oil pressure, water temperature, fuel, tachometer, voltmeter, transmission oil temperature (Allison Transmission).
- vi) Warning system low fuel, low oil pressure, high engine coolant temperature, and low battery voltage.
- vii) Air cleaner restriction gauge mounted in instrument panel.
- viii) Both seats will be National 2000 air suspension, high back w/integral headrest, vinyl, isolated, w/2-position front cushion, and lumbar support.
- ix) Seat belt 3-point, lap and shoulder belt type.
- x) Mirrors Lang Mekra rectangular 7.44” x 14.84”, breakaway bracket type, and w/7.44 “sq. convex, on both sides, w/all heads heated and thermostatically controlled.
- xi) Mirror, convex hood mounted for right and left sides 7.44 sq in.
- xii) Chrome grab handle w/anti-slip rubber inserts on left side only.
- xiii) Heater with defroster and silicone hoses.
- xiv) Deluxe cab interior trim.
- xv) Air conditioning.
- xvi) Air horn Grover single trumpet.

- xvii) Hood front-end tilting, fiberglass, hood shall have two service hatches, and a stationary grille.
- xviii) Steering column shall be of the tilt type.
- xix) Front bumper will be steel full width.
- xx) Paint color will be White.

L) WHEELS

- i) 22.5" front disc, 10-stud hub piloted w/flanged nuts.
- ii) 22.5" dual rear wheels, 10-stud hub piloted w/flanged nuts.
- iii) Front wheels will be oil lubricated.

M) TIRES

- i) Front 11R22.5 Goodyear G149, load range F, 14 ply.
- ii) Rear 11R22.5 Goodyear G124 M+S, load range F, 14 ply.

N) MANUALS

- i) Three (3) Sets of Complete operators, parts and service manuals will be supplied with truck.

O) TOW PACKAGE

- i) The package will include 15 ton P Hook and Tow Plate with electrical. The package will also include a 12-volt brake controller.

4) ACCEPTABLE MANUFACTURERS

- A) The Combination Sewer Jetter with Closed Circuit Television Inspection System shall be a 800-HPRTV Series II as manufactured by Sewer Equipment Co. of America, 2111 Chestnut Ave, Glenview Illinois 60025, 1-847-729-3316 or equal.

5) SUBMITTALS-EXECUTION

A) MANUFACTURERS SERVICES

- i) The manufacturer shall furnish the services of a competent factory representative to do the following:
 - (a) 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.
 - (b) Instruct the owner's operating personnel in the proper operation and maintenance of the system for a period of not less than one day.

B) TOOLS, SPARE PARTS, AND DOCUMENTATION

- i) The manufacturer shall furnish the following with the Combination Sewer Jetter with Closed Circuit Television Inspection System:
 - (a) A recommended list of spare parts.
 - (b) Three Sets of Operations and Maintenance manuals complete with breakdown drawings.
 - (a) One set of Operation and Maintenance manuals and Equipment breakdown drawings shall be submitted in electronic format (i.e. PDF).
 - (c) One quart of matching touch-up paint for each color.
 - (d) One set of specialty required tools.
 - (e)

C) WARRANTY

- i) The manufacturer shall furnish the following to the owner:
 - (a) A copy of the truck manufacturer's parts and labor warranty.
 - (b) A one-year Parts and Labor Warranty issued by the manufacturer on the entire Combination Sewer Jetter with Closed Circuit Television Inspection System. This warranty must cover all items.

6) EXCEPTIONS TO SPECIFICATIONS

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

