

TOWN OF PLYMOUTH
PROCUREMENT DIVISION
11 LINCOLN STREET
PLYMOUTH, MASSACHUSETTS 02360

BID 21510, PURCHASE OF COMBINATION SEWER AND CATCH BASIN CLEANER TRUCK

Issued: February 12, 2015
Due: February 26, 2015, at 11:00 a.m.

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BID FORMS

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TOWN OF PLYMOUTH
11 Lincoln Street
Plymouth, Massachusetts 02360

February 12, 2015

INVITATION FOR BID 21510

A. INVITATION

Sealed bids are requested by the Town of Plymouth for the purchase of one (1) new and unused combination sewer and catch basin cleaner truck.

Specifications and bid forms are available online at http://www.plymouth-ma.gov/public_documents/PlymouthMA_currentbids/ and in the Procurement Office, 11 Lincoln St, Plymouth, MA, 02360. The office hours are M-F 7:30 a.m.-4:00 p.m. Call first for availability at 508-747-1620 x210.

Bids are to be submitted by 11:00 a.m., Thursday, February 26, 2015, at which time they will be publicly opened and read. Postmarks will not be considered. All bids must be sealed and made upon forms furnished by the Procurement Division. Bids submitted on any other form will not be accepted as valid bids. Envelopes should be clearly marked "Bid 21510, Truck."

All bids are subject to the provisions of M.G.L. Chapter 30B.

Contract Period:

This agreement shall be for the period from the date of award through equipment acceptance.

Rule for Award:

The contract will be awarded to the responsive, responsible and eligible bidder offering the lowest total bid price, including the alternate, selected by the Town.

Bid Surety:

Bid deposit is required in the amount of five percent (5%) of the approximate total value of the bid. Such bid deposit shall be in the form of a Cashier's, Certified, or Bank Treasurer's check payable to the Town of Plymouth or a bid bond from a licensed surety company doing business in the Commonwealth of Massachusetts. Bid deposit of successful bidder will be returned upon delivery and acceptance of the product. All others will be returned upon contract award.

Pre-Bid Conference: N/A

MA Highway: N/A

DCAMM Certification: N/A

Prevailing Wage Rates: N/A

Labor and Materials Bond: N/A

Performance Bond: N/A

Specifications:
See Attachment 1

GENERAL INFORMATION

A. GENERAL CONDITIONS

1. All bids shall be based on the quantities set forth in the Invitation for Bid. These quantities shall be used as a basis for comparison of the bid proposals. The quantities are based on the Town's best estimates of the work to be performed during the term of this Contract, the Town does not expressly or by implication agree that the actual amount of work will correspond herewith and the Town reserves the right to increase or decrease the amount of any class or portion of the work as it may deem necessary, without change of price per unit. Charges for delays due to changes required in the field are expected to be reasonable and will be determined by the Town Engineer and Contractor.
2. The Town of Plymouth reserves the right to reject all proposals, to waive technicalities, to advertise for new proposals and to split awards as may be deemed to be in the best interests of the Town. The contract or contracts will be awarded by the Town within thirty (30) business days after opening bids. The Town reserves the right to require samples of materials for inspection and testing.
3. All words, signatures and figures submitted on the bid shall be in ink. Proposals which are conditional, obscure or which contain additions not called for, erasures, alterations or irregularities, or any prices which contain abnormally high or low prices for any item, may be rejected as informal. More than one proposal from the same bidder will not be considered.
4. If the Invitation for Bid requires payment of prevailing wage rates or a performance bond or a payment bond, then this bid is subject to Section 39M of Chapter 30 and Sections 26 to 27G and Section 29 of Chapter 149 of the Massachusetts General Laws as amended, including but not limited to the following:

a. Prevailing Wage Rates

Prevailing wage rates as determined by the Commissioner of Labor and Industries must be paid on this contract. A copy of said rates is contained herein. Each Contractor and/or subcontractor shall preserve its payroll records for a period of three (3) years from this date of completion of the contract, and shall furnish to the Commissioner within fifteen (15) days a statement of compliance, a copy of which is enclosed herein. In addition, each contractor and/or subcontract must submit a copy of their weekly payroll records to the Town Manager's Office on a weekly basis. A copy of the Weekly Payroll Report Form that is to be used in also included herein.

In addition, all bids must be accompanied by the bidder's certification regarding payment of prevailing wages in the form set forth in the bid form section of this document.

b. Performance Bond

The successful bidder must furnish a Construction Payment Bond,

payable to the Town of Plymouth, issued by a responsible surety company doing business in the Commonwealth of Massachusetts.

c. Payment Bond

The successful bidder must furnish a bond for payment by the Contractor and/or SubContractors for labor performed or furnished and material used or employed therein, payable to the Town of Plymouth, issued by a responsible surety company doing business in the Commonwealth of Massachusetts, the premiums of which are to be paid by the Contractor and included in the bid price.

5. If the Invitation for Bid requires bid surety, this surety shall be in the form of a cashier's check, certified check, or bank treasurer's check payable to the Town of Plymouth or a bid bond from a licensed surety company doing business in Massachusetts. Failure to include this surety will result in the rejection of the bid. Such deposits will be returned to all except the three lowest responsible and responsive bidders within seven (7) days of bid award. The remaining checks will be returned after the Town and the successful bidder have executed the Contract. In case of default, the bid surety shall be forfeited to the Town.
6. The successful bidder shall comply with all applicable federal, state, and local laws and regulations.
7. The Town's policy on awarding bids to offerors with identical prices states: "When bids for goods and services are requested and received by the Town, the award is made to the lowest responsive and responsible bidder. If two or more bid prices are identical and all tied bidders are responsive and responsible, an award will be made according to the first of these three conditions to apply:
 - Past service to the Town; if one of the tied bidders has provided this or similar service in a satisfactory manner in the past, it will be awarded to that bidder;
 - A bidder based in Plymouth
 - Random selection - flip of a coin or drawing of more than two are tied."
8. Purchases made by the Town are exempt from taxes and bid prices must exclude any taxes. Tax exemption certificates will be furnished upon request.
9. Verbal orders are not binding on the Town and deliveries made or work done without formal Purchase Order or Contract are at the risk of the Seller or Contractor and may result in an unenforceable claim.
10. "Equality" - An item equal to that named or described in the specifications of the contract may be furnished by the Contractor and the naming of any commercial name, trademark, item or manufacturer not mentioned by name or as limiting competition, but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if (1) it is at least equal in quality, durability, appearance, strength and design, (2) it will perform at least equally the function imposed by the general design for the work being contracted for or the material being purchased, and (3) it conforms substantially, even with deviations, to the detailed requirements for the item in the

specifications. The name and identification of all materials other than the one specifically named shall be submitted to the Town for approval, prior to purchase, use or fabrication of such items. Subject to the provisions of Section 39J of Chapter 30 of the Massachusetts General Laws, approval shall be at the sole discretion of the Town, shall be in writing to be effective, and the decision of the Town shall be final. The Town may require tests of all materials so submitted to establish quality standards at the Contractor's expense. All directions, specifications and recommendations by manufacturers for the installation, handling, storing, adjustment and operation of their equipment shall be complied with; responsibility for proper performance shall continue to rest with the Contractor.

For the use of material other than the one specified, the Contractor shall assume the cost of and responsibility for satisfactorily accomplishing all changes in the work as shown. If no manufacturer is named, the Contractor shall submit the product for intended use for approval of the Town.

Except as otherwise provided for by the provisions of Section 39J of Chapter 30 of the Massachusetts General Laws, the Contractor shall not have any right of appeal from the decision of the Town condemning any materials furnished if the Contractor fails to obtain the approval for substitution under this clause. If any substitution is more costly, the Contractor shall pay for such costs.

11. No charges will be allowed for packing, crating, freight, express, transportation, shipping or cartage. Delivery location shall be as specified in the Contract or on the Purchase Order.
12. The Contractor shall not discriminate against any person on the grounds of race, color, marital status, physical disability, age, sex, sexual orientation, religion, ancestry, or national origin in any manner prohibited by the laws of the United States, the Commonwealth, or the Town of Plymouth.

B. EVALUATION CRITERIA

Award of this bid will be made to the bidder who offers the best price(s) and who is deemed to be both responsive and responsible. Determination of responsiveness and responsibility shall be based solely on the following criteria:

1. Bidders will be deemed responsive if they included the required submittals, if applicable, and completed all required forms as included in the attached bid form package to the satisfaction of the Town.
2. Bidders will be deemed responsible if they meet the following criteria:
 - a. The Bidder must have been in operation of sales and services of the specified equipment for a minimum of 15 years and sold and serviced a minimum of 30 units from the same manufacturer. No exception to this requirement will be allowed. A statement

of financial condition and/or Dun and Bradstreet rating may be required by the Town of Plymouth prior to award of contract. Provide name and contact information for the last 10 municipal sales.

b. To insure the Town a source of service and parts over the 20 year anticipated life of the equipment, the Bidder shall have established its permanency in the industry and include with its proposal a list of company owned or affiliated agency or service agencies. Bids from those manufacturers that do not have parts and service centers within a distance considered reasonable to the Town will not be considered.

c. The Bidder shall maintain a factory authorized service center within a sixty (60) mile radius of the Town of Plymouth. The Bidder must state the location of the service center and the availability of 24 hour a day/7 days a week emergency service.

d. The Bidder meets the specifications and the has not performed poorly for the Town in the past.

C. INSURANCE REQUIRMENTS

1. The Contractor shall carry and continuously maintain until completion of the Contract, insurance as specified below and in such form as shall protect him performing work covered by this Contract, or the Town of Plymouth and its employees, agents and officials, from all claims an liability for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this Contract. The Contractor covenants and agrees to hold the Town and its employees, agents and officials harmless from loss or damage due to claims for personal injury and/or property damage arising from, or in connection with operations under this Contract.

2. Except as otherwise stated, the amounts of such insurance shall be for each policy, not less than:

1) **General Liability** of at least \$1,000,000 Bodily Injury and Property Damage Liability, Combined Single Limit with a \$3,000,000 Annual Aggregate Limit. **The Town shall be named as an "Additional Insured".** Products and Completed Operations should be maintained for up to 3 years after the completion of the project.

2) **Automobile Liability** of at least \$1,000,000 Bodily Injury and Property Damage per accident. **The Town shall be named as an "Additional Insured".**

3) **Workers' Compensation Insurance** as required by law.

4) **Property Coverage** for materials and supplies being transported by the contractor.

5) **Umbrella Liability** of at least \$2,000,000/
occurrence, \$2,000,000/aggregate. **The Town shall be
named as an Additional Insured.**

3. All policies shall be so written that the Owner will be notified of cancellation or restrictive amendment at least fifteen (15) days prior to the effective date of such cancellation or amendment. A certificate from the Contractor's Insurance Carrier showing at least the coverage and limits of liability specified above and expiration date shall be filed with the Owner before operations are begun.

4. Such certificates shall not merely name the types of policy provided, but shall specifically refer to this Contract and shall state that such insurance is required by this Contract. The Contractor shall make no claims against the Town of Plymouth or its officers for any injury to any of his officers or employees or for damage to its trucks or equipment arising out of work contemplated by this Contract.

5. The Contractor shall, to the maximum extent permitted by law, indemnify and save harmless the Town of Plymouth, its officers, agents and employees from and against any and all damages, liabilities, actions, suits, proceedings, claims demands, losses, costs and expenses (including reasonable attorney's fees) that may arise out of or in connection with the work being performed or to be performed by the Contractor, his employees, agents, sub-contractors or materialmen. The existence of insurance shall in no way limit the scope of this indemnification. The Contractor further agrees to reimburse the Town of Plymouth for damage to its property caused by the Contractor, his employees, agents, sub-contractors or materialmen, including damages caused by his, its or their use of faulty, defective or unsuitable material or equipment, unless the damage is caused by the Town of Plymouth's gross negligence or willful misconduct.

D. WITHDRAWAL OF BIDS

Except as hereinafter expressed provided, once a proposal is submitted and received by the town, the proposer agrees that he may not and will not withdraw it within thirty (30) calendar days after the actual date of the opening of proposals.

Upon proper written request and identification, proposals may be withdrawn only as follows:

- a. at any time prior to the designated time for the opening of proposals;
- b. provided the proposal has not been accepted by the town, at any time subsequent to thirty days following the actual date of proposal opening.

Unless a proposal is withdrawn as provided above, the proposer agrees that it shall be deemed open for acceptance until a contract has been executed by both sides or until the town notifies the proposer in writing that his proposal is rejected or that the town does not intend to accept it, or returns his bid surety. Notice of acceptance of a proposal shall not constitute rejection of any other proposal.

E. BID STATUS INFORMATION

Addenda: If you received bid documents from the Town and provided the Town with an address for delivery of addenda, the Town intends to deliver a copy of each addendum to you at such address, but the Town shall not be responsible for any failure of a bidder to receive any addenda. Notwithstanding the foregoing, bidders are solely responsible to check for and confirm their receipt of any addenda in advance of the bid deadline.

Bid results will be available over the Internet at http://www.plymouth-ma.gov/public_documents/PlymouthMA_currentbids/
Bid results will not be provided over the phone.

Notification of award of contract will be mailed to all bidders.

F. BID QUESTIONS

Please contact Pamela D. Hagler, Procurement Officer, at 508-747-1620 ext. 107, if you have any questions on the bid process. Questions regarding the project or the specifications must be submitted in writing and faxed to 508-830-4133 or emailed to phagler@townhall.plymouth.ma.us. At the discretion of the Town, questions will be answered by written addenda. Bidders may not rely upon oral responses to questions, and may rely solely upon written addenda, if any.

ATTACHMENT 1

TECHNICAL SPECIFICATIONS

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TECHNICAL SPECIFICATIONS

The following specifications are to be used as a general guide. The brand names and/or models mentioned herein are to designate the minimum quality and capability of the equipment, it is not the intention to limit any make or model that is equal to or exceeds these specifications. The unit offered shall be new, unused, and a standard production model of the latest design in current production. The manufacturer shall have a distributor organization with suitable service and repair parts facilities to enable fast and expedient repairs for a component part or assembly of the machine.

In cases where the bidder cannot fully comply with the following specifications, any and all exceptions, as well as any deviations in the listed specifications, are to be noted on a separate sheet. Designs differing from the requested bid specifications may not be cause for rejection if they are deemed to be equivalent to, or to exceed the specifications set forth by the Town of Plymouth.

Bidders must provide detailed descriptions and brochures of the items bid. Bidders bidding on items other than specified below are required to submit a complete technical description of items for which they are bidding.

New and Unused 15 Yard Combination Sewer & Catch Basin Cleaner

The intent of this specification is to provide for the purchase of one (1) new and unused dual engine combination sewer and catch basin cleaner used for removing all debris commonly found in storm basins and leads and/or sanitary sewer lines and manhole structures using a front mounted operating station. The unit shall consist of a centrifugal compressor vacuum system, a hydraulically driven high-pressure water pump, an enclosed sealed body for storage of collected debris and equipped with a self-contained water supply as the source for the water pump system. The unit shall have the capability of operating both vacuum and water system simultaneously at the full operating speeds continuously. The centrifugal compressor system shall be powered by the auxiliary engine and have capability to vacuum while in motion.

CHASSIS

Engine/Transmission/Clutch:

1. ENGINE, 13 LITER-425M 425 HP @1500-1900 RPM (PEAK) 1570 LB FT. MAX TORQUE @ 1100-1300 RPM
2. TRANSMISSION, 6 SPEED AUTOMATIC, ALLISON 4500-RDS-6 (4.70/0.67) RUGGED DUTY SERIES GEN 5 INCLUDES TRANSMISSION COOLER.
3. EXTERNAL OIL COOLER
4. INTERNAL FILTER
5. OIL LEVEL SENSOR

Exhaust/Emissions:

6. DPF, CLEARTECH HHF, DPF & SCR FRAME MTD, BOTH RH SIDE UNDER CAB EXHAUST AFTER-TREATMENT SYSTEM, EXHAUST AFTER-TREATMENT SYSTEM DIESEL

- PARTIC FILTER CERAMIC PASSIVE REGEN DPF SMART SWITCH, NO INHIBIT DPF REGENERATION SWITCH EXHAUST, EXHAUST - CLEAR BOC
7. SINGLE (R/S) VERT EXHAUST CAB MOUNTED, LOWER VENTURI DIFFUSER, TURNED END SINGLE, BRIGHT FINISH HEAT SHIELD
 8. STACK AND SCR COVER FURNISH STEEL PAINTED HEAT SHIELD FOR FRAME MTD CAP DPF
 9. AIR COMPRESSOR, MERITOR/WABCO 318 18.7 CFM AIR CLEANER, 11" x 30" (279 mm x 762 mm) UNDER HOOD SINGLE ELEMENT DRY TYPE W/AIR INTAKE FROM BOTH SIDES OF HOOD ALTERNATOR
 10. DELCO 12V 145A (24SI) BRUSH-TYPE BATTERIES, (3) 12V 1000/3000 CCA THREADED STUD BUG SCREEN, RADIATOR MOUNTED TO -34 DEGREES F (-37 DEGREES C) COOLANT CONDITIONER ENGINE BRAKE FOR 13 LITER ENGINE
 11. ENGINE BLOCK HEATER, 120V 1500 WATI ENGINE BLOCK HEATER FAN DRIVE, BORG WARNER COOL LOGIC FAN DRIVE (HOMS) ELECTRONICALLY CONTROLLED VARIABLE FUEL-WATER SEPARATOR, W/MANUAL DRAIN VALVE (INTEGRAL W/PRIMARY FUEL FILTER)
 12. HOSES· RADIATOR/HEATER, SILICONE HOSES, SPRING CLAMPS ON RADIATOR & HEATER, 1/4 TURN BALL VALVE HEATER HOSE
 13. OIL PAN, CORROSION RESISTANT OIL PAN STARTER, 12 VOLT DELCO 39MT-MXT

Transmission Equipment/Drivelines:

14. TRANSMISSION BELL HOUSING SHALL BE ALUMINUM
15. TRANSMISSION OIL COOLER, FURNISH FOR ALLISON TRANSMISSION W/DIRECT MOUNT COOLER WITH STAINLESS STEEL COOLANT LINES IN PLACE OF PLAIN STEEL
16. SYNTHETIC LUBRICANT - TRANSMISSION, TRANSYNO SYNTHETIC LUBE FOR ALLISON TRANS VOCATIONAL PACKAGE - ALLISON, GROUP 102, PACKAGE 172
17. DRIVELINE-MAIN, MERITOR 18 MXL "XTENOED LUBE" ORIVELINE - INTERAXLE, MERITOR 17 MXL "XTENDED LUBE"

Cab:

18. AIR CONDITIONING IN CAB
19. CAB MOUNTING, AIR SUSPENSION CERTIFIEDWEIGHT INSIDE DOOR
20. TWO (2) EXTRA DASH MOUNTED ILLUMINATED TOGGLE SWITCHES PARK BRAKE ANO ENGINE RUNNING ACTIVATED
21. (4) DOME LAMPS - DOOR AND SWITCH ACTIVATED
22. DOOR INTERIOR TRIM PANELS, PADDED VINYL WITH ARM REST PADS FENDER EXTENSIONS
23. 5LB (ABC RATED/AMEREX) MOUNTED BETWEEN LH SEAT BASE AND DOOR WITH VALVE AIMED REARWARD FLOOR COVERING, POLYURETHANE FLOOR MAT
24. GAUGE CLUSTER, EXHAUST PYROMETER AND TRANSMISSION OIL TEMPERATURE GAUGES, ENGLISH/METRIC DISPLAY
25. GEAR SHIFT, DASH MOUNTED SHIFTER
26. GLASS - CAB WINDOW, TINTED WINDSHIELD, TINTED SIDE WINDOW AND TINTED REAR WINDOW (IF EQUIPPED) STANDARD GRAB HANDLE OPTION RH & LH. BEHIND DOOR
27. GRILLE - HOOD AIR INTAKE, BRIGHT FINISH GRILLE W/O SURROUND RADIATOR MOUNTED
28. HEADLINER, VINYL COVERED FOAM PADDED HEADLINER
29. HOOD AND FENDERS, COMPOSITE MATERIAL - TILTABLE W/INSPECTION HATCH PAINTED HOOD LATCHES
30. HORN·AIR, (1) RECTANGULAR SINGLE TRUMPET
31. HORN· ELECTRIC. DUAL TONE (TWO HORNS)
32. IDENTIFICATION/CLEARANCE LIGHTS. (5) TRUCKLITE LED CHROME BULLET TYPE LAMPS
33. INSTRUMENT CLUSTER DISPLAY. CO-PILOT DRIVER DISPLAY, ENHANCED 4.5"

- DIAGONAL LCD DISPLAY W/4-BUTTON STALK CONTROL
34. INSTRUMENT PANEL, CHARCOAL GRAY
 35. INTERIOR TRIM (PUREBRED - SANDSTONE) Vinyl headliner & seat covering, 2 netted storage compartments and center CB radio mounting provisions in overhead console. rear panel with storage pouch, polyurethane floor mat. 2 cup holders. slate gray instrument panel with black gauge bezel, Sandstone door panels & trim, RH door peep window, padded interior sun visors both sides, 2 spoke slate grey urethane cushion grip steering wheel with horn button. adjustable tilt/telescoping steering column, hand crank lh/rh windows, 2 general overhead lights, 1 driver overhead light & 1 map non-glare overhead light, 2 12V power sources, seat belts, lap and shoulder w/cab mtd shoulder belt, 2 coat hangers, 2 trash bag hooks, RH storage compartment, RH Door Peep Window
 36. CHASSIS KEYED AT RANDOM - 2 KEYS
 37. MIRRORS EXTERIOR, WEST COAST, RH & LH BRIGHT FINISH AND HEATED MIRRORS - CONVEX TYPE. BRIGHT FINISH, LH & RH a.a DIA HEATED; MOUNTED BELOW LOWER ARM OF WEST COAST MIRROR
 38. OVERHEAD CONSOLE, (3) COMPARTMENT W/NET AM/FM STEREO CD W/WEATHERBAND RADIO - ACC, W/O AUDIO COMMUNICATION CONNECTION RADIO ANTENNA, CAB MOUNTED BEHIND LH DOOR
 39. POWER LEADS (5-WAY BINDING POSTS FOR CB RADIO) IN HEADER CONSOLE RADIO ANTENNA - CB. DUAL CB ANTENNA WIRING & ANT. MTG BASE ONLY DASHBOARD MOUNTING STRAP
 40. REAR WINDOW (FIXED TYPE)
 41. EMERGENCY TRIANGLE KIT PARALLEL TO INSIDE SURFACE OF RIDERS SEAT BASE
 42. SEAT - DRIVER. BOSTROM TALLADEGA 915 (MID-BACK) AIR SUSPENSION
 43. SEAT - RIDER, (MID-BACK) W/INTEGRAL STORAGE COMPARTMENT SEAT ARM RESTS, INBOARD MOUNTED ARM REST, DRIVER'S & RIDER'S SEAT COVERING, ALL VINYL DRIVER & RIDER SEATS
 44. SEAT BELTS/RETRACTORS. LAP AND SHOULDER W/CAB MOUNTED SHOULDER BELT W/ADJUSTABLE 0-RING FOR DRIVER & RIDER SEATS W/O ROOF VENT VENTILATION
 45. STARTER SWITCH, KEY TYPE
 46. STEERING COLUMN, ADJUSTABLE TILT TELESCOPE
 47. STEERING WHEEL, TWO SPOKE URETHANE GRIP PAINTED SPOKES & HORN CAP
 48. STORAGE POUCH REAR
 49. SUN VISOR, EXTERIOR, FIBERGLASS (CAB COLOR) SUN VISOR INTERIOR, BOTH SIDES (PADDED VINYL)
 50. TURN SIGNAL SWITCH, SELF CANCELLING TURN SIGNALS
 51. WINDOW CONTROLS, POWER ELECTRIC RH WINDOW & POWER ELECTRIC RH DOOR LOCK WINDSHIELD, 2-PIECE WINDSHIELD
 52. WINDSHIELD WASHER RESERVOIR, W/O WINDSHIELD WASHER OPTION
 53. WINDSHIELD WIPERS, 2 SPEED ELECTRIC MOTOR W/INTERMITTENT FEATURE

Frame Equipment/Fuel Tanks:

54. BUMPER FRONT, EXT.-SWEPT BACK-STEEL CHANNEL
122.5"/3112 mm BBC
55. CROSSMEMBERS, BOC AND INTERMEDIATE CROSSMEMBERS, HD I-BEAM
56. CROSSMEMBER (BEHIND REAR AXLE), STEEL SINGLE CHANNEL
(1) W/AF of 70" to 129". FRONT FRAME EXTENSION, 20"
(CONT PARENT RAIL) W/TILT W/INSPECTI ON HATCH TYPE
HOOD W/SWEPT BACK STEEL BUMPER
57. TOWING DEVICE FRONT, HOOKS
58. FUEL TANK LH, 93 GALLON (352 L) ALUMINUM 26"
DIAMETER WITH INTRACAL DEF TANK STANDARD FINISH
STEPS AND BRIGHT FINISH STRAPS

59. FUEL TANK 8.7 GALLON (33 L) DEF TANK

Front Axle/Equipment/Tires:

- 60. FRONT AXLE, 20000# (9072kg) FXL20 WIDE PIVOT CENTER
- 61. TIRES BRAND/TYPE - FRONT, BRIDGESTONE TUBELESS RADIAL PLY, (2)
425/65R22.5 20 L M854 (ALL POSITION) (CHASSIS WIDTH EXCEEDS 96")
- 62. WHEELS - FRONT, ALUMINUM DISC (2) 22.5x12.25 ALCOA LVL ONE, 10-HOLE
HUB PILOTED (11 1/4"/286mm BC), 4.68" INSET, #82462 WHEELS - POLISHED
(FRONT), MACHINE CLEAN BUFFED-ALL WHEELS
- 63. BRAKES - FRONT, MERITOR "S" CAM TYPE 16.5" x 6" Q+
- 64. BRAKE DRUMS FRONT, CAST OUTBOARD MOUNTED DUST SHIELDS • FRONT BRAKE,
FURNISH
- 65. HUBS - FRONT, FERROUS
- 66. FAG SCHAEFFLER, FRONT GREASE SEAL SHOCK ABSORBERS
- 67. FRONT SLACK ADJUSTERS •FRONT, HALDEX - AUTOMATIC SPRINGS - FRONT
TAPERLEAF HD 20000# (9072kg) GROUND LOAD RATING STEERING, SHEPPARD
SD110 + HD94

Rear Axle/Equipment/Tires/Ratios:

- 68. REAR AXLE/SUSPENSION, 46000# (20866kg) CAST DUCTILE IRON HOUSING,
46,000# MULTILEAF SPRINGS
- 69. 4S/4M SYSTEM REAR WHEEL END SENSORS
- 70. TIRES BRAND/TYPE - REAR, BRIDGESTONE - TUBELESS RADIAL PLY, (8)
11R22.5 14 G M726EL (TRACTION) CARRIER/RATIO •REAR AXLE, CRDP150/151,
4.19 RATIO
- 71. WHEELS - REAR, ALUMINUM DISC (8) 22.5x8.25 (210 mm) ALCOA LVL ONE 10-
HOLE HUB PILOTED (11 1/4" 286mm BOLT CIRCLE) WHEELS - POLISHED
(REAR), MACHINE CLEAN BUFFED - ALL WHEELS
- 72. BRAKES - REAR, MERITOR ϕ •CAM 16.5"x7" Q+
- 73. BRAKE DRUMS - REAR, CAST OUTBOARD MOUNTED DUST SHIELDS •REAR BRAKE,
FURNISH
- 74. HUBS • REAR, FERROUS
- 75. OIL SEALS, CHICAGO RAWHIDE (SCOTSEAL)
- 76. POWER DIVIDER LOCKOUT W/WARNING LIGHT AND BUZZER (INCLUDES IN CAB
MANUAL AIR VALVE) SHOCK INSULATORS, HEAVY DUTY URETHANE
- 77. SLACK ADJUSTERS• REAR, HALDEX - AUTOMATIC
- 78. SUSPENSION• AXLE SPACING, 55" AXLE SPACING (BOGIE WHEELBASE) SPRINGS,
ANTI-SWAY
- 79. SPRING BRAKE CHAMBERS •QUANTITY, (4) DOUBLE DIAPHRAGM TYPE,
MECHANICAL SPRING RELEASE, (2) MOUNTED ON EACH AXLE
- 80. SPRING BRAKE CHAMBERS•VENDOR, MGM MODEL TR-T (TAMPER RESISTANT) REAR
SPRING BRAKE CHAMBERS 30/30 TYPE
- 81. SYNTHETIC LUBRICANT • REAR AXLE, FACTORY OPTION LUBE REAR AXLE
TRANSVERSE TORQUE ROD (REAR AXLE ONLY)
- 82. BRONZE TRUNNION BUSHING

Frame/Wheelbase/Platform:

- 83. WHEELBASE, 284" (7210 mm) WB 196" CA (4987 mm)
- 84. PLATFORM, 302" LP (7667 mm) 106" AF (2680 mm) USED WITH 284" WB
- 85. FRAME RAILS, 11.811" x 3.54" x .37" (300 x 90 x 9.5mm) STEEL
Section Modulus: 29.8 cu in/RBM 3,580,000 In lbs per rail For Full
IC reinforcement
- 86. FRAME REINFORCEMENT - INSIDE, 5MM STEEL CHANNEL USED W/274"-303" LP
FURNISH TECTYL RUST PREVENTITIVE BETWEEN FRAME RAILS

Air Brake:

87. AIR DRYER, BENDIX HEATED AIR DRYER, ADIP W/COALESCING OIL FILTER AIR RESERVOIRS, STEEL
88. ANTI-LOCK BRAKE SYSTEM, BENDIX WITH TRACTION CONTROL
89. AIR CONTROL VALVES -VENDOR, BENDIX SWITCHES AND VALVES WHERE POSSIBLE BRAKE CONTROL VALVE SYSTEM, SINGLE VALVE SYSTEM
90. DRAIN VALVES - AUTO DRAIN VALVE NON-HEATED ON SUPPLY TANK: MANUAL (PETCOCK) ON ALL OTHER TANKS
91. HAND CONTROL VALVE FOR REAR SERVICE BRAKES

Electrical:

92. BACK-UP ALARM, ECCO BACK-UP ALARM 575 CONSTANT SOUND LEVEL 107 db BATTERY BOX COVERS, MOLDED PLASTIC
93. BATTERY BOX MOUNTING, BATTERY BOX LEFT HAND RAIL BACK OF FUEL TANK FLAMING RIVER BIG SWITCH WIRED ON POSITIVE SIDE
94. BATTERY SHOCK PADS
95. CHASSIS & POWER HARNESS WITH HEAVY DUTY CASING "BODY LINK" Ill W/CAB PASS-THRU
96. REAR LIGHTING, LED TYPE TAIL LAMP MODULE

Paint:

97. PAINT - CAB EXTERIOR, SINGLE COLOR, GREEN [PPG: P9014)
98. PAINT - CAB, URETHANE CLEAR COAT
99. PAINT - CHASSIS RUNNING GEAR, BLACK (URETHANE)
100. PAINT - BUMPER, SAME AS CHASSIS RUNNING GEAR

PTO/Specialty/Additional Equipment:

101. PTO CONTROL, PTO SWITCH AND LIGHT WITH WIRING AND PIPING, FACTORY INSTALLED

Programmable Parameters:

102. CUSTOMER VEHICLE LIMITING SPEED (MPH) 68 mph
103. PEDAL ROAD SPEED LIMITER (MPH) 68 mph

SEWER & CATCH BASIN CLEANER BODY

Subframe

1. The equipment shall be modular design consisting of vacuum system, water tanks system, debris body and drive system;
2. A sub frame shall be fabricated to the exact dimensions of the truck chassis for mounting modular components;
3. All components of the module shall attach to the sub frame and not directly to the chassis;
4. The sub frame shall be designed to ASME standards for maximum applied loads; chassis frame movement and even distribution of weight to the chassis and suspension;
5. The sub frame shall be continuous and uninterrupted from back of cab to end of frame.

Debris Body

6. The body shall be cylindrical having a maximum usable liquid capacity of 15 cubic yards;
7. The body shall be capable of high dump height of sixty (60)

- inches. Dump height of sixty (60) inches must be achieved without the use of scissor lift mechanism;
8. The debris storage body shall be constructed with a minimum ¼-inch corrosion and abrasion resistant EX-Ten steel;
 9. The debris storage body shall have a minimum yield point of 50,000 PSI and a minimum tensile strength of 70,000 PSI;
 10. The body shall have a rear door that is hinged at the top and is equipped with a replaceable neoprene type seal. Adjustable for periodic compensation of door seal wear;
 11. Dual outward mounted rear door props shall be included as standard to prevent operator from entering door swing path when engaging rear door prop;
 12. For optimal particulate separation, vacuum shall be drawn from separate ports in the top of the debris body;
 13. The body shall be dumped by raising the body to a 50-degree angle utilizing a forward mounted, double acting, hydraulic dump cylinder;
 14. Dump controls, accessory controls, and e-stop control, shall be provided at a central curbside location directly behind the cab of the truck;
 15. Industrial style rear debris body door shall be flat and shall open and close hydraulically be cylinders mounted at the top of the body. Door shall open 50 degrees from the fully closed position. Door shall be unlocked, opened, closed, and locked, by failsafe hydraulically activated sequential positive locking system, cam operated by a single hydraulic cylinder, with all controls located behind truck cab, forward of the debris body, so operator is not subject to sewage when dumping;
 16. Debris body shall have a body flush-out system with a fan-type spray nozzle located in the front wall of the debris body to aid in the flushing of heavy debris. The nozzle shall also utilize two (2) spray nozzles to flush the front most area of the debris body. System must produce a flow of eighty (80) GPM. Control valve shall be on the curbside of the unit;
 17. The debris body shall be equipped with a rear door drain to drain off excess liquids while retaining solids and shall include a manually operated six (6) inch knife valve with cam-lock coupler and twenty-five (25) feet of lay flat hose having cam-lock quick connects;
 18. The debris body shall be equipped with a rear door drain at bottom dead center to drain off excess liquids with an internal screen to prevent large solids from passing. A manually operated six (6) inch knife valve with cam-lock coupler and twenty-five (25) feet of lay flat hose having cam-lock quick connects shall be included at this location;
 19. The debris body shall be equipped with a curbside forward mounted body drain to drain off excess liquids while retaining solids and shall include an air-activated six (6) inch knife valve and screen with cam-lock coupler and ten (10) feet of lay flat hose;
 20. Four (4) dual vertical (cyclone) centrifugal separators shall be installed in-line between the debris body and the air mover, two (2) per side for each debris body, discharge port. Each dual separator shall include large fallout chamber, cleanout door;
 21. For safety, a minimum of five (5) vacuum tubes shall be stored on curbside storage racks to minimize operator exposure to traffic side of unit. Shall include quick release retainer handles (no bungees or clamps);
 22. A curbside, folding, three-pipe rack shall be provided,

- constructed of steel tubing, spring assisted. Shall include quick release retainer handles (no bungees or clamps);
23. A street side, folding, three-pipe rack shall be provided constructed of steel tubing, spring assisted. Shall include quick release retainer handles (no bungees);
 24. Two (2) pipe storage racks curbside waist level and two (2) on rear door with quick releases;
 25. A splash shield shall be mounted around the lower 60% of door opening to direct liquid and debris away from the chassis. Shield shall be a minimum of ten (10) inches deep bolted assembly with no openings;
 26. A lubrication manifold system shall be provided to allow ground level greasing of boom lift and swing cylinders, float level indicator, top rear door hinges, and debris body hoist cylinder pins;
 27. A ten (10) inch valve with three (3) inch vent to atmosphere, electrically activated, air operated valve debris body vacuum relief system shall be located in the inlet of the vacuum system to allow the venting of the tank and relieve vacuum at the debris intake hose;
 28. A debris inlet deflector distributing load evenly in debris body shall be included.

Water Tanks

29. The water tanks shall be manufactured from a non-corrosive material to prevent rust yet still provide for maximum strength;
30. The water tank material shall require no internal coating and shall be repairable if patching is required;
31. The water tanks shall be easily removed from the sub frame to provide complete access to the truck chassis for maintenance purposes;
32. The water tanks shall be adequately vented and connected, to provide complete filling;
33. The water tanks shall be totally separate from the debris tanks and provide no structural support;
34. The water tanks shall share no common walls with the debris tanks to prevent corrosion;
35. The water tanks shall come equipped with an anti-siphon device and twenty-five (25) feet of hydrant fill hose and fittings;
36. The water tanks shall carry a ten (10) year warranty against corrosion or cracking;
37. All water tanks shall be fully baffled to form a maximum compartment storage of one hundred fifty (150) gallons for each compartment as has been determined that for the stability of the vehicle when turning and stopping and for safety of personnel, that systems be baffled at one hundred fifty (150) maximum gallon compartments are preferred. Exceptions of requirement shall be explained in detail accompanied with detailed engineering drawings;
38. The water tank shall be located for the lowest possible center of gravity while providing 100% gravity flooded intakes to water pumps;
39. Fresh water shall enter the tanks through an in-line six (6) inch air gap, all aluminum covered anti-siphon device;
40. Water level sight tubes of non-yellowing plastic shall be installed on both tanks;
41. The sides of these water tanks shall not extend more than forty-

- eight (48) inches out from the centerline of the truck chassis;
42. A fresh water drain system shall be provided to completely drain the fresh water system from one location utilizing a three (3) drain port plug;
 43. A minimum six (6) inch connection between tanks shall be provided;
 44. For stability safety, the water tanks shall not elevate with debris body during the dumping cycle;
 45. A low water alarm with light at the operator station shall alert operator when water storage has one hundred fifty gallons remaining;
 46. An air purge system utilizing the chassis air system shall be provided to assist displacing of residual water out of the high-pressure water system. System shall utilize the truck chassis air compressor to fill a thirty (30) gallon auxiliary air storage chamber with pressure gauge and pressure protection valves to isolate the holding tank from the chassis compressor. System shall be equipped with ball valve and all necessary high pressure piping hoses, couplings, and controls;
 47. A three (3) in-line "Y" trap strainer shall be located at inlet of water tank fill air-gap;
 48. A three (3) in-line "Y" trap Monel stainless steel strainer shall be located between the water cells and water pump;
 49. A three (3) inch gate valve shall be provided at water pump;
 50. The water tanks must be a certified metered capacity of one thousand five hundred (1,500) gallons. Certification shall be necessary upon delivery;
 51. The water tanks shall be constructed of 1/8 inch aluminum with baffled compartments maximum one hundred fifty (150) gallons each;
 52. An additional water tank sight gauge shall be provided;
 53. A liquid float level indicator shall be provided.

VACUUM/VACUUM DRIVE SYSTEM

54. Vacuum shall be provided by compressing air within a two-stage, thirty-eight (38) inch diameter centrifugal compressor;
55. Compressor fans to be constructed of non-corrosive material;
56. Each centrifugal compressor fan shall be constructed of non-corrosive, hardened ¼ inch chrome blades;
57. Centrifugal compressor shall be warranted against corrosion for a minimum of five (5) years;
58. The outer housing shall be constructed of ¼ inch spun steel;
59. The compressor housing shall be equipped with a drain no exceeding two (2) inch diameter;
60. The complete compressor and housing assembly shall be warranted against materials and workmanship for a minimum of five (5) years;
61. The fan shall be powered by a six (6) cylinder turbo charged, minimum one hundred seventy-three (173) horse power @ 2400 rpm diesel engine (John Deere model 6068-TF-285 or equal) diesel engine;
62. Auxiliary engine gauge package including voltmeter, water temperature, oil pressure, tachometer, hour meter with ignition on/off and throttle controls at front operator station;
63. A fluid coupler drive system shall be provided including vacuum relief and controls at operator station;
64. Step-up transmission shall be gear type having a ration of 2.036 to 1;

65. For cleaning of drying beds, vacuuming leaves and debris along curbs, the unit shall have a full, constant vacuum and full-range of boom control. A water ring, installed in the boom inlet with variable capacity of 0-22 GPM to suppress carry-over while vacuuming dry materials, will also be included. All of the fore mentioned functions would operate while unit is in motion via the auxiliary engine. This also allows daily maintenance of the chassis engine without ignition of the chassis engine to extend the hose reel;
66. Hydraulic shut off valves shall be provided at the suction, return and filter lines to permit servicing of the hydraulic system.

VACUUM BOOM SYSTEM

67. Vacuum hose shall be designed for front operation with hose mounted and stored at front mounted work station. Front mounted location is required for ease of positioning vacuum hose as well as minimizing need for operator to swing hose into traffic;
68. All connections between debris body and vacuum system will be of the self adjusting pressure fitting type;
69. Vacuum hose will remain stationary and not rise with debris body;
70. Upper debris tube shall consist of an anchored steel tube and elbow;
71. A sub-frame mounted cab guard shall be mounted behind cab with boom rest cradle;
72. All vacuum pipes shall be connected to vacuum pick up tube and extension pipes by adjustable over-center quick clamps to join the aluminum flanges on pipes;
73. One (1) quick clamp for each pipe supplied shall be provided;
74. Boom pedestal shall be directly mounted to module sub-frame;
75. Boom support used for travel mode shall not interfere with access or require removal to tilt hood forward;
76. A control station shall be equipped with control switches for all directions as well as a safety emergency shut-down button, which shall automatically eliminate power to boom;
77. The vacuum boom shall have a heavy-duty flexible hose assembly joining the transition pipe to the debris body, and a 70-degree elbow and 5-1/2 heavy-duty hose at the suction end of the boom;
78. Boom shall rotate 180 degrees and shall be operated by an electric over hydraulic system. Lift and swing movements shall be actuated by hydraulic cylinders;
79. The horizontal inner steel vacuum tube and inner box beam boom section shall telescope (tube within tube, box beam within box beam) and retract a minimum of 8' without affecting the vertical position of the pick-up tubes, and shall be located at the front work station in its retracted position, providing 277" minimum reach off the longitudinal axis of unit;
80. Boom shall be fully controlled by a remote push button pendant control station with 25ft. cable. Controls to include up/down, left/right, in/out boom functions, vacuum relief, e-stop and main power switch;
81. A joystick for hydraulic control of the boom shall be installed on hose reel front panel;
82. A removable 4" diameter storage "Post" to stabilize the lower boom hose during transport. Storage device shall not interfere with raising hood;
83. A cordless remote boom control system equipped to activate boom

functions, throttle, water pump on/off, hose reel in/out, hose reel speed, vacuum relief on/off and emergency disengagement e-stop shall be provided;

84. A rotatable inlet hose for telescopic boom shall be provided;
85. A detailed engineering drawing must be supplied showing the relationship of the hose reel in relation with the vacuum boom range of motion. Drawing shall show module mounted on chasses, full arc of vacuum hose both retracted and extended, full rotation of arc for hose reel in the extended position and dimension all arc lengths of vacuum boom retracted and extended. Drawing shall highlight intersection areas whereby combination cleaning is possible (within full arc on telescoping boom system).

WATER PUMP AND DRIVE

86. For most efficient use of horsepower and reduced fuel consumption, high pressure rodder pump shall be hydraulically driven via (1) load sensing utility pump, (1) variable displacement pump and (1) fixed displacement pump;
87. Hydraulic powered rodder pump via twin variable displacement hydraulic pumps and (1) fixed displacement utilizing (2) 10-bolt PTO's;
88. High-pressure water pump shall be rated capable of continuous delivery of 100 GPM at 2500 PSI (submit manufacturer support documentation);
89. High-pressure water (rodder) pump system shall allow front-mounted controls for operation of three modes: (1) Low flow range 0-22 GPM; (2) medium-flow range, 22-60 GPM / 2500 psi; and (3) High-flow range: 60 up to 100 GPM / 2500 psi;
90. Digital flow meter shall be displayed in front LCD display. Flow meter shall be capable of displaying system flow in all pump-operating modes. In addition, a low water alarm shall be provided;
91. This hydraulic drive system shall allow variation of water pump speed independent of required vacuum drive speed within maximum drive engine speed of 1760 RPM;
92. Variable flow systems routing water back-to-tank are not considered equal due to additional wear, horsepower, and fuel consumption. Any deviation from this drive requirement should have full explanation of horsepower consumption;
93. Water (rodder) pump shall include smooth and pulsation operation mode feature;
94. When required to assist nozzle breaking through obstructions, water pump "pulsation mode" shall provide a forward-acting nozzle surge. Pulsation surge wave shall allow nozzle to punch forward 2" to 18" depending on flow dynamics and length of hose in sewer pipe;
95. Explanation of forward-acting pulsation method shall be submitted with bid or explained below;
96. Water pump location shall provide a flooded gravity suction inlet to eliminate potential cavitations damage;
97. An oil to water heat exchanger will be provided in the water system to cool all hydraulic fluids on the unit. State horsepower requirement to operate hydraulics at full speed;
98. The water pump shall provide precise 0-80 GPM controlled flow at variable pressure up to 2500 PSI;
99. A hydro-pneumatic nitrogen charged accumulator system shall be

- provided with all control valves, piping and hoses for either continuous flow or jackhammer rodding. Accumulator shall be a 2.5 gallon capacity and 1400 to 2500 PSI pressure rating;
100. Two (2) ½" high-pressure ball valves shall be provided for draining the water pump and flushing sediment from the bottom of the pump;
 101. A nozzle rack accommodating (3) nozzles shall be provided in curbside toolbox. The nozzles shall be labeled on storage rack for pipe size/flow and application;
 102. System shall be relieved to protect operator;
 103. Handgun shall be supplied that allows for changing of flow pattern from a fine mist to a steady stream;
 104. Handgun shall come equipped with quick connect couplers;
 105. An additional 1" water relief valve shall be provided;
 106. A mid-ship quick disconnect handgun couplers shall be provided;
 107. Front and rear quick disconnect handgun couplers shall be provided;
 108. Hydro-Excavation Package/Retractable Reel with 50' x 3/8" Hose, Hydro excavation Handgun and Plumbing. Water system shall allow precise variable flow control range of 0-22 GPM at 2500 PSI with digital flow meter in clear view of adjustment control;
 109. A water pump hour meter shall be provided.

HOSE REEL

110. Hose reel assembly shall be direct frame mounted;
111. Hose reel assembly shall be mounted on an independent frame that can be removed from brackets attached permanently to front of main truck frame members;
112. Reel will be manufactured out of ¼" spun steel for added structural strength and shall require no internal or external reinforcements that could damage rodder hose;
113. Hose reel shall be driven by adjustable gear reduction chain and sprocket assembly;
114. Hose reel shall operate at full rotational speed while chasses engine is at idle;
115. Hydraulic Telescoping Rotating Hose Reel - 800' capacity of 1" hose shall be provided;
116. The front mounted hose reel shall telescope 15" forward down centerline of truck;
117. Entire reel assembly shall rotate 270 degrees on a large diameter ball bearing;
118. Hose reel shall include a dual locking device to positively lock reel in any position across operating range;
119. The hose reel shall rotate about the reel assembly centerline so the reel shall never extend beyond the truck width. Reel coverage diagram shall be submitted with bid;
120. Controls shall accessible on both sides of the hose reel, allowing operator to work at either side of the unit for safety purposes;
121. 600'x1" Piranha Sewer Hose / 2500 Psi shall be provided;
122. An automatic hose level wind scroll device shall be supplied. An air-cylinder actuated pinch-roller shall exert downward pressure across full width of reel to retain hose on reel when encountering nozzle blockages;
123. An air-cylinder actuated pinch-roller shall exert downward pressure across full width of reel to retain hose on reel when

- encountering nozzle blockages;
124. A hose footage counter shall be supplied to indicate the amount of hose travel within pipe;
125. Digital footage counter displaying absolute and relative footage values shall be provided. System must be capable of resetting relative value to ensure operator safety., Accuracy To Within One Percent Of Actual Distance, Large Easy To Read LCD Screen, Large Keypad With Sealed Membrane Switches That Are Easily Activated, Nema-4 Moisture Sealed Enclosure, Solid State Circuitry, Dimensions: 5 5/8 x 3 3/8x 3/16, LCD Display Area: 3.0 x 2.2.

WASH-DOWN EQUIPMENT

126. A spring retractable storage reel for handgun hose shall be provided to allow the operator to deliver water to area served by pick up hose and to the inside of the debris body for clean out. Reel shall be mounted mid-ship on curbside, equipped with ½ x 50' 2000 psi hose. An additional 35' of ½" hose with quick disconnect couplers shall be supplied loose';
127. Hand sprayer with adjustable spray-pattern to be provided with trigger-style gun.

FRONT OPERATING STATION AND CONTROLS

128. Primary operator station will be located at front of truck on right curb side of hose reel;
129. All front operator controls shall be accessible while operating either front or rear use of reel assembly. All operations to either side of unit shall position operator in front of vehicle affording protection from on coming traffic;
130. Station shall include truck engine throttle, water pump (on/off), water pump mode, water pump flow meter, hose reel control valve (forward/reverse), adjustable hose reel speed control, and oil dampened water pressure gauge, boom controls, digital water pump flow meter, and low water warning light;
131. Tachometer and hour meter for chassis engine provided at control station shall be provided;
132. Tachometer and hour meter for auxiliary engine provided at control station shall be provided;
133. All Hydraulic Functions. - Color Coded, Sealed Electric/Hydraulic NEMA 4 switches shall be provided;
134. Fan Engagement/Vacuum Relief - Sealed Electric/Air NEMA 4 Switch shall be provided;
135. Water pump hour meter shall be provided;
136. PTO hour meter shall be provided.

ELECTRICAL AND SAFETY LIGHTING

137. The entire system shall be vapor sealed to eliminate moisture damage, "NEMA-4" or equal;
138. Vansco Electronic Package: Chassis Tachometer, Auxiliary Engine Tachometer, Operating Mode, PTO Mode, Hydraulic Oil Temperature shutdown, and E-Stop shall be included. E-Stop activation must turn off rodder pump, shutdown PTO A&B , set chassis throttle to idle, & open vacuum relief. E-stop must be located at each operator interface; including front/rear hose reel controls, pendant control, and dump control location. Basic

- machine functions and both chassis and module diagnostics shall be provided;
139. All electrical connections shall be void of exposed wires or terminals nor should they be painted. Paint process shall be completed prior to installation of wiring;
 140. All wiring shall be color-coded and encased in conduit to scaled terminal boxes with circuit breakers;
 141. All light bulbs shall be shock mounted to eliminate bulb failure;
 142. All other lights required by State and Federal Laws;
 143. Two-piece directional LED 10-storbe-light arrow board shall be mounted on rear door of debris body, with controls mounted in cab;
 144. A pistol grip hand light with bumper plug and 25' coiled cord shall be provided;
 145. Operator station work lights shall be provided. Hose reel manhole work lights shall be provided;
 146. (2) L.E.D. Boom work lights shall be provided;
 147. L.E.D. Work light at mid-ship curbside shall be provided;
 148. (2) L.E.D. Rear door work lights shall be provided;
 149. FS DOT 3-6 Light System-Federal Signal Mirror Mount Strobes, 2 Mid-Ship, 2 Rear Water Mounted Oval Led Quad Flash Strobes shall be provided;Vactor Four Flashing Light Assembly - Two Piece - (4) 7" Amber Lights shall be provided;
 150. L.E.D. Lights, Clearance, Back-Up, Stop, Tail & Turn shall be provided.

SAFETY EQUIPMENT

151. E-stop shall be located at each operator interface location. Standard locations to include: front hose reel, mid-ship curbside dump controls, and wireless controller (if equipped); E
152. Electrical system controls shall be configured to allow for single point operation only. Upon engagement of controls at specified locations, additional controls shall be disabled;
153. Electrical system controls shall be configured to allow for single point operation only. Upon engagement of controls at specified locations, additional controls shall be disabled;
154. Electrical system must enable self-check to ensure all switches are in home position prior to critical function enablement. System must "lock out" controls when switch is not in home position;
155. Rear work lights shall be activated upon engagement of reverse gear;
156. (1) Emergency Flare Kit;
157. (1) #5 Fire Extinguishers;
158. 7' dash monitor, 2-camera system shall be provided. A Front Hose Reel Camera with 130 deg Viewing Angle shall be provided to provide a front visual of the manhole cover to aid in equipment set-up. A rear back-up color camera with 130 deg viewing angle shall be provided. Camera to have automatic activation when the unit is switched to reverse.

SEWER TOOLS AND ACCESSORIES

159. (1) 30 Sand Nozzle;
160. (1) 30 deg. Sanitary Nozzle;
161. (1) 15 deg. Penetrator Nozzle;

162. (1) 1" Small finned nozzle pipe skid.

VACUUM TOOLS AND ACCESSORIES

163. The basic vacuum tube package shall include the following:
(1) 8" x 3' aluminum pipe
(2) 8" x 5' aluminum pipe
(1) 8" x 6'6" catch basin tube
(4) 8" quick clamps

CHASSIS EQUIPMENT AND STORAGE

164. Two (2) front tow hooks shall be provided;
165. Two (2) rear tow hooks shall be provided;
166. (1) 60"x20" x 12" Aluminum Toolbox Mounted street side shall be provided;
167. (1) Aluminum Toolbox with nozzle storage and dump controls mounted curbside shall be provided;
168. (2) 18" x 16" x 12" Aluminum Toolbox - Front Bumper shall be provided.

MODULE FINISH

169. Painting of the module shall be with a DuPont Imron Elite Polyurethane Enamel Top Coat. Application is to be a wet top coat applied to a wet un-sanded primer base.

CHASSIS SPECIFICATION

170. The unit shall be a new model. No discontinued models will be accepted.

ADDITIONAL PARTS

171. (2) 8"x3' Aluminum Vacuum Tube;
172. (2) 8"x5' Aluminum Vacuum Tube;
173. (1) 8"x78" Higbee C/B Nozzle Assembly;
174. (6) 8" Quick Clamp Assembly;
175. (1) 1"-80 GPM @ 2500 PSI-15 DEG Sand Nozzle;
176. (1) 1" -80 GPM @ 2500 PSI - 30 DEG Penetrator Nozzle;
177. (1) 1" -80GPM @ 2500 PSI - 3" General Purpose Nozzle.

Additional Requirements:

1. 2 YR/250,000 MILES ENGINE WARRANTY US10
2. ALL COMPONENTS SHALL CARRY A ONE-YEAR WARRANTY
3. MANUFACTURER'S STANDARD WARRANTY STATEMENT SHALL BE INCLUDED WITH BID
4. PREPARE FOR DELIVERY SUPPLY ICC KIT
5. FENDER MIRRORS SHALL BE INSTALLED
6. ONE COMPLETE SET OF OPERATING, SERVICE, AND PARTS MANUALS TO BE PROVIDED ON CD
7. SUPPLY SPARE TIRE AND RIM FOR FRONT AND REAR, IN COMPLIANCE WITH CHASSIS SPEC
8. DEALER SHALL PROVIDE FENDER MIRRORS

Delivery:

THE TOWN OF PLYMOUTH DESIRES THAT THE ENTIRE COMBINED UNIT AND OTHER SPECIFIED ITEMS BE DELIVERED AS SOON AS POSSIBLE AFTER RECEIPT OF PURCHASE ORDER TO PLYMOUTH DPW FACILITY, 159 CAMELOT DRIVE, PLYMOUTH, MA, 02360.

NAME OF BIDDER:

Bids must be submitted on this form and the following table. Bids submitted on any other form will not be considered valid. Please return this form and the attached forms to:

Town of Plymouth
ATTN: Procurement Div.
Town Office Building
11 Lincoln Street
Plymouth, MA 02360

Bids must be received by 11:00 a.m., Thursday, February 26, 2015.

Postmarks will not be considered. All bids will be publicly opened and read at the above address, date and time. Prices are to include any delivery charges unless otherwise specified. All offers are subject to Specifications 21510. This contract may be extended for up to thirty (30) calendar days at the request of the Town of Plymouth.

In compliance with the above, the undersigned offers and agrees, if this offer is accepted within thirty (30) business days from date of receipt of offers specified above, to perform the herein described work for the prices offered opposite each item and that said prices will be good for the period of one year.

The undersigned bidder hereby certifies:

Bidder has carefully read and examined all the documents herein referred to and knows and understands the terms and provisions therein.

No person in the employ of the Town of Plymouth has any pecuniary interest in this proposal or in the contract for the work, which is proposed.

THE UNDERSIGNED BIDDER HEREBY CERTIFIES UNDER THE PAINS AND PENALTIES OF PERJURY THE FOLLOWING:

This bid in all respects is bonafide, fair, and made without collusion or fraud with any other person. As used in this paragraph, the word PERSON shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity.

The Contracting Party has complied with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support in accordance with MGL Chapter 62C, Section 49A.

ONE (1) NEW AND UNUSED 15 YD COMBINATION SEWER & CATCH BASIC CLEANER:
PLEASE NOTE EXCEPTIONS TO THESE SPECIFICATION ON COMPANY LETTERHEAD

Manufacturer: _____

Year & Model: _____

Bid Price: \$ _____

Guaranteed Delivery _____ weeks from bid award date.

Location of closest service center to Plymouth:

Location of closest parts distributor to Plymouth:

Submittals with bid:

Evidence that Evaluation Criteria has been met
Manufacturer's brochures of proposed equipment
Manufacturer's Standard Warranty statement

THE UNDERSIGNED ACKNOWLEDGES RECEIPT OF ADDENDA # _____ *

*To be filled in by bidder if addenda are issued.

BIDDER _____

AUTHORIZED SIGNATURE

COUNTY _____

Printed Name and Title

STATE OF INCORPORATION _____

PHONE _____

Date Offered

FAX _____

E-MAIL _____

TAX I.D. # _____

DELEGATION OF AUTHORITY

At a meeting of the Board of Directors of the _____
(Name of Corporation)

_____ duly called and held on _____
(Date)

at which a quorum was present, and acting throughout, the following vote

was duly adopted: VOTED: That _____
(Name of Individual)

the _____ of the Corporation, hereby is authorized
(Title)

to affix the Corporate Seal, sign and deliver in the name and on behalf of the Corporation, bids, proposals, contracts, bills of sale, conditional sale agreements, chattel mortgages, leases, bonds, applications, affidavits, certificates, and any other similar documents required in connection with the sale of the Corporation's products to any purchaser, including assignments and satisfactions of any such documents.

Any and all applications, affidavits, statements, certificates, and similar documents required by law in connection with the licensing of the Corporation or its representatives for the sale, distribution, and servicing of its commercial products.

The authority is hereby delegated and shall be exercised by the aforesaid person in connection with the duties as

_____ of _____
(Title) (Name of Corporation)

and not otherwise.

ATTEST: _____ DATE: _____

NOTE: This form must be completed if the contractor is a corporation.