

ADVERTISEMENT FOR BIDS

Sealed proposals will be received in the Office of the Buyer II, Greenville Utilities Commission, 401 S. Greene Street, Greenville, North Carolina 27834 until 2:00 PM (EDST) on June 23, 2015 and immediately thereafter publicly opened and read for the furnishing of One (1) Multi Conductor Hi Cube Truck Mounted Body With TV Inspection System.

Instructions for submitting bids and complete specifications will be available in the Office of the Buyer II, Greenville Utilities Commission, 401 S. Greene Street, Greenville, North Carolina during regular office hours, which are 8:30AM – 5:00PM Monday through Friday.

Greenville Utilities Commission reserves the right to reject any or all bids.

SECTION I
GENERAL INSTRUCTIONS FOR FORMAL BIDS
RELATED TO THE PURCHASE OF APPARATUS, SUPPLIES,
MATERIALS, AND EQUIPMENT

1.0 NOTICE TO BIDDERS

Sealed bids, subject to the conditions made a part hereof, will be received in the Office of the Buyer II, Greenville Utilities Commission, 401 S. Greene Street, Greenville, North Carolina 27834 until **2:00 PM** (EDST) on **June 23, 2015**, the day of opening. Bids submitted in a fax or e-mail in response to this Invitation for Bids **will not be acceptable. Late Bids will not be considered.**

1.1 PRE-BID MEETING – A Pre-Bid meeting will be held at: Greenville Utilities Commission, 401 S. Greene Street, Greenville, North Carolina 27834 on **Wednesday, June 17, 2015** at 10:00 am (EDST).

1.1.1 The intent of the Pre-Bid Meeting is to allow the bidders an opportunity to ask questions and make clarifications prior to submitting a bid.

1.1.2 Only portions of the bid/contract will be discussed. Lack of discussion or clarifications of any portion of the bid/contract does not relieve the Bidder from conforming to the provisions of the same.

2.0 STANDARD FORMS REQUIRED

Each bidder must submit a proposal on the enclosed bid forms. **The bid must be signed by an authorized official of the firm. Return only the attached Proposal Form. Do not return the Advertisement for Bids, Instructions to Bidders or Specifications.**

3.0 PREPARATION OF BID

Bids must be in sealed envelopes clearly marked on the outside with the name of the bid and the bid opening date and time. Bid shall be addressed to BUYER II, GREENVILLE UTILITIES COMMISSION, P. O. BOX 1847, 401 S. GREENE STREET, GREENVILLE, NORTH CAROLINA 27835-1847.

4.0 TIME FOR OPENING BIDS

Bids will be opened promptly and read at the hour and on the date set forth in the advertisement in the Office of the Buyer II, Greenville Utilities Main Office, 401 S. Greene Street, Greenville, North Carolina. Bidders or their authorized agents are invited to be present.

5.0 DEPOSIT

A deposit is **NOT** required for this bid.

6.0 NC SALES TAX

Do **not** include NC sales taxes in bid figure; however, Greenville Utilities Commission (GUC) does pay sales tax. Sales tax should be added to the invoice as a separate item.

7.0 FEDERAL EXCISE TAX

GUC is exempt from Federal Excise Tax and will issue a Federal Exemption Certificate upon request to the successful bidder.

8.0 EXCEPTIONS TO BE CLEARLY STATED

If bid is not in strict accordance with Section II, "Specifications," bidder must list or note all exceptions **on the Request for Proposal Form**, otherwise, it is fully understood that the successful bidder will furnish equipment and/or materials exactly as specified. GUC reserves the right to accept or reject bids with noted minor deviations from specifications and to determine the lowest responsible, responsive bid from the standpoint of quality, performance, and price.

Any and all changes and/or options that are made after the bid award must be pre-approved on a change order indicating all cost and/or credits.

9.0 EVALUATION AND AWARD OF BIDS

GUC reserves the right to reject any and all bids, to waive any and all informalities, and to disregard all nonconforming or conditional bids or counter proposals. In evaluating bids, GUC shall consider whether the bids comply with the prescribed requirements, plus all alternates or options requested. GUC reserves the right to include or exclude any option or alternative in GUC's opinion is in GUC's best interests. If a bid is to be awarded, it will be awarded to the lowest responsible, responsive bidder whose evaluation by GUC indicates that the award will be in GUC's best interests. Only firm prices will be considered for award of this bid.

10.0 PROMPT PAYMENT DISCOUNTS

Bidders are urged to compute all discounts into the price offered. If a prompt payment discount is offered, it may be considered in the award of the contract.

11.0 NUMERICAL ERRORS

In the case of a discrepancy between a unit price and the extension (the unit price multiplied by the number of units), the unit price governs. In the case where numerical bids are stated both in numbers and in words, the words govern.

12.0 BID WITHDRAWAL

A bidder must notify GUC in writing of its request to withdraw a bid within seventy-two (72) hours after the bid opening, not including Saturdays, Sundays, or holidays. In order to justify withdrawal, the bidder must demonstrate that a substantial error exists and that the bid was submitted in good faith.

13.0 MINORITY BUSINESS PARTICIPATION PROGRAM

GUC has adopted an Affirmative Action and Minority and Women Business Enterprise Plan (M/WBE) Program. Firms submitting a proposal are attesting that they also have taken affirmative action to ensure equality of opportunity in all aspects of employment, and to utilize M/WBE suppliers of materials and/or labor.

14.0 DELIVERY TIME

Delivery time is to be stated and will be considered in the evaluation of bids.

15.0 MANUFACTURER

Bidder is to specify the manufacturer of items being quoted.

16.0 CONTACT INFORMATION

Questions regarding this bid request should be directed to Bill Darty, Fleet Manager at (252) 551-1515, dartywe@guc.com, Cleve Haddock, Buyer II at (252) 551-1533, haddocgc@guc.com.

17.0 TERMS AND CONDITIONS

The attached Terms and Conditions apply to all purchases made by Greenville Utilities Commission (GUC) and must be considered as part of the bid proposal.

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SECTION II

GREENVILLE UTILITIES COMMISSION

SPECIFICATIONS FOR ONE (1) MULTI CONDUCTOR HI CUBE TRUCK

MOUNTED WITH TV INSPECTION SYSTEM

JUNE 23, 2015

It is the intent of these specifications to describe a multi conductor hi cube truck mounted TV inspection system. The system will be able to inspect multiple pipe sizes with varying pipe conditions. The camera and cables will both be able to operate in submerged conditions with no damage to each resulting from such work. Information gathered will be digitally captured and stored and have the ability to download and store captured information (video and inspection data) to the Greenville Utilities network/server.

The bid will be awarded on the basis of price, quality of equipment, conformity with this set of specifications and the date of delivery. Greenville Utilities reserves the right to reject any or all bids and to waive all informalities.

The unit must be a model that has been regularly manufactured for at least two (2) years. **Prototype units are not acceptable.** A user list of the exact model offered shall be provided. The unit shall be installed on a current year model cab and chassis as described in these specifications.

All exceptions and variations must be clearly noted on the attached Exception/Variation Form. A copy of this form must be signed and returned with the bid package. **Failure** to clearly identify all exceptions or variations, as determined by and at the discretion of Greenville Utilities, may be cause for rejection of the bid.

Any and all changes and/or options that are made after the bid award must be pre-approved on a change order indicating all cost and/or credits.

Distributors may not quote on any brand of equipment that they have not been representing for a minimum of five (5) years.

Component List:

- 1 **Current Model Year TV High Cube Truck mounted body, 19,000 GVWR, 158" Wheelbase (or upfitter recommendation), minimum 6.6 liter Turbo Diesel Engine w/Automatic Transmission and 14' (Minimum) Aluminum Freight Body without pass thru.**
- 1 **TV High Cube Body Equipment to include:**
 - 2 Amber Electronic Strobe Warning Beacons, Roof Mount
 - 2 Adjustable Halogen Floodlights Rear of Vehicle Area Illumination
 - 1 Back-Up Alarm – Automatic Adjustable

1 TV Hi Cube Body Power Package to include:

- 1 7500 Watt, 120 Volt, 60 Hz Commercial Grade Generator, Diesel Powered with Electric Start
- 1 Generator Remote Start/Stop Cable Assembly
- 1 Generator Storage Compartment with a Lockable External Access Door
- 1 Generator Slide Out Rail Assembly for External Servicing
- 1 Commercial Power Supply Receptacle, 25' Cord and Plug
- 1 Electric Supply Center with Circuit Breaker Box, Commercial Power and Generator Power Connectors
- 1 Automatic Power Transfer Switch

1 TV Hi Cube Body Control Room Interior to Include:

- 1 13,500 Air Conditioner Roof Mount with 5600 BTU Heat Strip
- 1 Armstrong Safeguard Hydro Industrial Vinyl Floor Covering
- 1 Laminated Surface Wall Covering
- 1 Kemlite Ceiling Covering
- 1 Bulkhead Wall with Plexiglas Viewing Window in Wall and Hinged Passage Door with 14" X 48" Plexiglas Window from Control Room to Equipment Room
- 1 Built in Laminated Contoured Control Console w/Rack Mounts for Electronic Equipment and Desk Top
- 1 110 Volt Fluorescent Light Fixture
- 1 Electrical Outlet Dual Receptacle, GFI
- 1 Fire Extinguisher 10 BC Rating w/Bracket
- 1 Operators Chair
- 1 Metal Closet/Cabinet 16" W x 14" D x 71" H
- 1 Padded Bench Seat with Underneath Storage
- 1 Side Entry Door with Retractable Drop Down Steps

1 TV Hi Cube Body Equipment Room Interior to include:

- 1 1/8" Thick Aluminum Tread Plate for floor covering
- 1 Kemlite Covered Walls & Ceiling
- 1 Electrical Outlet Dual Receptacle, GFI
- 1 12 Volt Cargo Dome Light
- 1 Downhole Pole Mounting Bracket Assembly
- 1 110 Volt Fluorescent Light Fixture Mounted Above Electronic Access Door
- 1 First Aid Kit
- 1 30 Gallon Water Supply Tank
- 1 15 Gallon Waste Tank
- 1 Sink
- 1 Steps at Rear of Equipment Room for Exit/Entry

1 System Engineering Panel, Power Distribution System Rack Mount to include:

- 1 Voltage Readout, Power Supply
- 1 Hertz Readout, Power Supply for 60Hz
- 1 Generator Hour Readout
- 1 Remote Generator Start/Stop Control Switch

1 Color TV Power Control Unit-Multi Conductor Rack Mount, NTSC Color Standard to include:

- 1 TV Camera Remote Optical Focus Control
- 1 TV Camera Automatic Iris Remote Control
- 1 TV Camera Light head Intensity Control w/Meter
- 1 Camera Test Cable Assembly

1 P&T Zoom M/C Color Camera:

- 2 Solid State Color Sewer TV Camera
- 1 Pan & Rotate Camera Head, 40:1 Zoom Ratio, 10x Optical Zoom, 4x Digital Zoom
- 1 NTSC Color Standard with 4x Light Integration
- 1 4 X 5W Cluster LED's for 6" through 48" lines
- 1 Camera Transportation and Storage Case

1 Brass Comp Steerable Cam Trans, Wheeled

- 1. Steerable Unit Designed to Turn 360 Degrees Within its Own Radius
- 1 Two (2) Speed Transmission to Maximize Torque in Large Diameter Pipe with:
 - 1. Manual Shifter on Camera Carrier
- 1 Unit Shall Have Forward, Free Wheel, and Power Reserve
- 1 Set of Driven Rubber Wheels to Inspect 6" Pipe
- 1 All Six (6) Wheel Drive Transporter Assembly to Include:
 - 1. Motor & Enclosed Drive Train
- 1 Tip Up Rear 12-Pin Connector

1 8" Rubber Wheel Kit for Compact Transporter

1 10-15" Rubber Wheel Kit for Compact Transporter

1 Kit, Tire, Pneumatic, 12" – 15" Pipe, Compact Transporter

1 8" Steel 10/12 GR Wheel Kit for Compact Transporter

1 Data Display System, Rack Mount, to include:

- 1 Alpha Numeric Data Information Display, with Multi Paging and Defect Coding (55 preprogrammed and 70 User definable defect codes minimum, PACP compliant)
- 1 Remote "QWERTY" Keyboard for Data Entry

1 Video Recording System, CD or DVD Style Rack mount

2 22" Color Industrial LED HD TV Monitor, 450 (min.) Line Resolution, NTSC Color Standard

1 Combination TV Transmission & Tow Cable Assembly to include:

- 1 1000'-Multi Conductor Kevlar Fiber Armored Cable, 1/2" Diameter, 2000 lb. rating
- 1 Kevlar Armored Cable Terminal Connector
- 1 Set, Dummy Protector Plugs
- 1 Adjustable Cable Strain Relief

1 Electric Motor Drive Television Cable Reel to include:

- 1 Power Level Wind & Multi-Ratio Manual Transmission
- 1 Footage Meter with Local Mechanical Readout and Remote Electronic Counter
- 1 Transmission Control at Viewing Station
- 1 Local Reel Mount Electrical & Mechanical Control
- 1 Sealed Continuous Contact Collector Assembly
- 1 Controller Cable Reel/Power Winch Motor
- 1 Stainless Steel Drip Pan w/Drain
- 1 Auto Payout

1 Compact Self-Propelled Camera Transporter to include:

- 1 Transmission Coupling and Weighted Extension Plate Set for 6" (relined) – 48" Pipe Sizes With Power Forward, Power Reverse, and Freewheel Reverse
- 1 Spare Parts Kit to include additional wheels and parts necessary for repair or replacement
- 1 Transporter Controller w/Automatic Safety Off Switch
- 1 Transporter with camera mounted shall not exceed 20 inches

1 Cable Manhole Guide System to include:

- 2 TV Invert Pulley Assemblies
- 6 Quick Coupling Extension Poles
- 2 Manhole Adapter Hooks
- 1 Manhole Top Roller Assembly
- 1 Telescoping Equipment Retrieval Tool
- 1 Tiger Tail

1 TV Inspection Accessories Package to include:

- 1 TV Maintenance Tool Kit in Metal Tool Box w/ Ball Bearing Drawers
- 3 Manual Operation, Instruction and Maintenance
- 1 Manual, Spare Parts
- 1 Digital Video Training CD/DVD for TV Systems Operating Procedures
- 1 Digital Video Training CD/DVD for System Trouble Shooting Procedures
- 1 Digital Training CD/DVD for TV Cable Repair Procedures

Days On-Site Training: Operator training is to be conducted by a factory

representative, or a factory trained representative, for a minimum of three (3) days at the time of delivery with follow-up training of up to two (2) additional days, to be included.

Delivery: Successful bidder shall be required to furnish Greenville Utilities with a written guaranteed delivery date upon receipt of order. Completed unit shall be delivered and placed in-service at the Greenville Utilities Operation Center, 801 Mumford Rd., Greenville, North Carolina.

OPTIONAL EQUIPMENT:

- 1 Aluminum Storage Box Mounted Under Truck
- 1 Arrow Board Mounted on Rear of Truck
- 3 Slide Out Storage Compartments at Rear of Equipment Storage Room in bumper

DETAILED SPECIFICATIONS:

CAB AND CHASSIS:

Engine	6.6 Liter Turbo Diesel, Minimum
Exhaust System	Stainless Steel if available
Emission Control Systems	Meets Government Standards
Cooling System	Heavy Duty
Wheelbase	158" Minimum or as specified by upfitter
GVWR	OEM 19,000 lb. Minimum
Suspension	Heavy Duty Springs Heavy Duty Shock Absorbers
Brakes	Power Disc – Front and Rear
Electrical	12 Volt System
Alternator	200 AMP Minimum
Battery Freedom Type	750 CCA
Fuel Tank Capacity	37 Gallons Minimum
Steering	Power Steering
Transmission	Automatic, 5 Speed, HD Electronic w/Overdrive, minimum
Tires and Wheels	6 each (Dual Rear Wheels)

Miscellaneous: OEM Intermittent Windshield Wipers and Washers
Dual OEM Tow style Rear-View Mirrors, externally mounted
Back-Up Alarm
Paint – White, body to match OEM cab.
AM/FM Radio
OEM cab Air Conditioning
OEM tow package with OEM electric brake controller, Class V
OEM power windows and door locks
Bucket Seats
All standard equipment not listed shall be included
OEM Cab Step Rails

Warranty: Three (3) year 36,000 mile minimum warranty (Cab and Chassis) with a Dealership no future than seventy five (75) miles from Greenville Utilities, 801 Mumford Road, Greenville, North Carolina.

HI CUBE BODY:

Construction	Aluminum
Rear Doors	Full Opening
Rear Bumper	Full Width Steel Treadplate
Lighting	Standard Lights including Stop/Turn, License Plate, Back Up and ICC Running Lights

TV HI CUBE BODY DIMENSIONS AND EQUIPMENT:

Interior Height	82 Inches Minimum
Interior Width	90 Inches Minimum
Interior Loadspace	14 Foot Minimum

INTERIOR

The body interior shall be divided into three areas: The cab, an Operators Control Room, and an Equipment/Storage Room. A wall to wall washable Industrial Formica laminate covered exterior plywood bulkhead with an operator pass through door from Operators Control Room to Equipment Storage Room. The vehicle body shall include front and rear amber warning beacons, and dual adjustable halogen rear work floodlights.

BODY CONTROL ROOM

The Control Room shall be located at the front of the cube body. A roof mounted 13,500 BTU air conditioner with built in heat strip shall be supplied. All free standing cabinets and doors shall be of metal construction and will be mounted 3 inches above the floor surface

on runners to minimize any potential water damage from of free standing water during wash down. All exposed surfaces of the bulkhead doors, door cut outs, cabinets, and cabinet doors shall be constructed with a minimum 1" industrial aluminum liner to provide maximum protection from potential impact. The base of all free standing cabinets will be lined with a 3" aluminum kick plate to provide maximum protection from damage caused by impact or moisture. Cabinets of non-metal construction shall be deemed not acceptable. All cabinet doors will be installed with metal Sure Lock flush mounted latches, eliminating the unwanted opening of doors during transit. Plastic door latches shall be deemed not acceptable.

Cabinets installed directly on the floor surface shall be deemed non acceptable due to lack of protection from potential long term water damage. Cabinets installed with no protective aluminum liner for exposed surfaces or no 3 inch aluminum kick plate on the base shall be deemed not acceptable, due to lack of protection from potential long term impact damage.

The Control Room floor shall be constructed of a 3/4" AC exterior rated plywood substrate with built in water relief channels to prevent moisture gathering under the floor, thus minimizing potential long term water damage. The plywood substrate shall be covered with an industrial rated Armstrong Crosswalk floor. The Control Room walls and ceiling will be covered with a gray laminate surface.

A built in ergonomic control console with a smooth 45 degree contour shall be constructed to bring all controls within a comfortable reach of the operator. The console shall be positioned so the operator can see the Equipment Room area through a clear Plexiglas panel in the bulkhead. The console shall be equipped with 19 inch rack mounts for the electronic components and an angular panel for remote equipment controllers. Locations in the angular panel shall be provided for the Pan and Tilt Camera Controller, TV Reel Motor/Power Winch Controller, and the Self Propelled Camera Transporter Controller. The exact controllers furnished will be indicated on the component list. The contoured control console shall include a counter top covered with Industrial grade Formica. The top of the contoured control console shall be open to accommodate additional storage.

There will be a side entry door with drop steps installed on the passenger side wall. A padded bench/storage seat with seating for 2 persons and a removable top to facilitate storage shall be installed, along with a 16" W X 14" D X 71" H closet cabinet. There shall be a full height opening with a swing out door with a 14" X 48" Plexiglas viewing window will be installed between the viewing room and the Equipment Room.

A 24", 110 VAC florescent light and single duplex grounded interior duplex electrical outlet shall be supplied in the Control Room.

EQUIPMENT/STORAGE ROOM

The Equipment/Storage Room will be located in the rear of the Cube unit. The floor shall be constructed of 2 X 6 pine planks, water sealed and covered with a 1/8" thick aluminum tread plate. The floor shall be flat without protruding wheel wells. Side walls shall be constructed of 3/8" exterior plywood covered with Kemlite laminate. The rear doors will be lined with 3/8" plywood with a protective washable Kemlite liner.

The ceiling shall be ¼" exterior plywood covered with a Kemlite laminate. The electrical system shall be designed to fully meet the environmental safety, and electrical requirements of the vehicle as specified.

A 12 VDC cargo bay light will be installed in the Equipment Room. All Equipment Room electrical boxes, outlets, and wiring conduit will be UL approved for exterior use in a wet environment. No exposed wiring will be acceptable. All electrical wiring shall be in accordance with applicable codes including NEC. An automatic transfer switch for Shore/Generator Power shall be installed and will be activated upon receipt of power with a minimum 40 second delay to protect all electronic components/assemblies. A 110 VAC, 24' fluorescent light fixture mounted above the Rear Electronics Bay Service Access Door.

A hand/parts wash sink shall include a 30 gallon supply tank and 15 gallon waste tank.

Brackets shall be mounted on the passenger side rear barn door to hold all down hole brackets, invert rollers and manhole adapter hooks. A reel mounted bracket shall be supplied for storage of the top hole roller.

Steps at rear of truck to gain entry to Equipment Storage Room.

QUITE DIESEL POWERED ELECTRICAL 7.5 KW GENERATOR

The power source for the system will be a 7,500-watt commercial grade alternating current quiet diesel powered generator consisting of the following (minimum):
Generator

1. Shall provide optimum power by utilizing a pure sine wave specially designed for use with electronic equipment.
2. Shall be the product of a firm regularly engaged in the manufacture of diesel powered generators.
3. Shall be designed for commercial mobile applications capable of handling the load of intermittent heavy-duty use for sewer line television inspection units.
4. Shall be capable of continuously producing 7500 watts of power (62.5 amps) at 120 volts AC while rotating at 3600 RPM without undue heating, wear, or vibration.
5. Shall be enclosed in a sound-attenuated housing and furnished with a 3-point vibration isolation to ensure quiet operation.
6. Shall have an intake silencer and heavy-duty industrial muffler for reduced noise and ease of installation.
7. Shall include self-diagnostic capabilities to simplify troubleshooting.
8. Shall include digital voltage regulation to ensure voltage stability as loads change. Adjustments will not be required.

9. Shall include overvoltage, low oil pressure, overtemp, overspeed/underspeed, and overload protections.
10. Weight: 420lb
11. Shall be a 4-cycle diesel engine.
12. Shall be designed to operate the generator at 60 cycles and shall be governor controlled to maintain these cycles under varying load conditions.
13. Starting system: remote, 12v controlled from operators station.
14. Shall be designed with top-mounted switches, oil and cool and level check/fill for convenience.
15. Fuel consumption: up to 0.55 gal/hr diesel.
16. Fuel supply shall be plumbed to truck fuel tank. Generator shall be designed to shut down when the fuel tank reaches ¼ tank full.
17. Generator shall be mounted on a slide for easy access for generator maintenance or removal.

GENERATOR COMPARTMENT

1. Enclosed cabinet with a fire retardant liner, exterior locking vented door with a recessed stainless steel lock, and spark free exhaust system, and shall be mounted on equipment room floor with workbench top.
2. A 30-amp external shore power receptacle shall be provided.
3. Shore power to generator switchover shall be accomplished through a UL approved automatic changeover switch with suitable time delay to avoid damaging power surges.
4. 1 - 25 foot, 30 A shore power extension cable shall be supplied.

SYSTEM ENGINEERING PANEL

The engineering panel shall provide monitoring of the power supply to the system. The panel circuitry shall be assembled in a rack mounted chassis for installation in a built in control console. The face plate shall be heavy gauge aluminum finished with an industrial grade surface and shall have permanent labels designating the function of the various switches and controls.

Provisions shall be made on the panel for the following items:

AC Volt Readout
AC Frequency Readout (58-62 Hertz)
Generator Remote Start/Stop

Generator Run Time Readout
Flood Light Switch

CAMERA POWER CONTROL UNIT – MULTI CONDUCTOR

The power control unit shall provide all necessary power and controls to operate and monitor the television inspection system. All circuits shall be of solid state design, assembled in a rack mounted chassis for installation in a built in control console. The faceplate shall be heavy gauge aluminum finished with an industrial grade finish and shall have permanent labels designating the function of purpose of the various switches, readouts and controls. The PCU shall have a back plate for all cable connectors each separately indexed and locking and labeled as to purpose. Each camera system shall be equipped with a test cable to allow for the direct by-pass of slip rings, TV cable and any applicable connectors for testing purposes.

POWER CONTROL UNIT MINIMUM TECHNICAL REQUIREMENTS

The power control unit shall operate off of 120 volts AC current. The PCU shall contain a solid state lighthouse power source whose input shall be through an isolation, variable voltage transformer and whose output shall be from 0 volts to 120 volts DC. A light intensity adjustment control and DC volt readout shall be provided on the front panel. Input and output of both the camera and lighthouse power shall be protected by circuit breakers with indicators to identify open circuits. Circuits shall be isolated to provide operator protection from electrical shock hazards.

POWER CONTROL UNIT REMOTE CAMERA ADJUSTMENT

The power control unit will be equipped with the following remote camera adjustments:

Focus Control

A two pole switch spring loaded to off, permits the operator to adjust the camera focus for changes in pipe diameter or different views of defect conditions. In the neutral position, the camera focus will be electronically locked.

Automatic Iris Control

This control allows the operator to override the camera's automatic light compensating circuitry operating range in the event an excess of light or lack of light produces a poor picture response. With the proper adjustment, the operator can change the iris opening to compensate for the light level available thereby improving the picture response.

SYSTEMS REQUIRING MANUAL EXTERNAL CAMERA SETTINGS OR THE REMOVAL OF THE CAMERA FROM THE SEALED HOUSING IN THE FIELD TO MAKE THESE ADJUSTMENTS SHALL BE DEEMED NOT ACCEPTABLE.

PAN & TILT SOLID STATE MULTI CONDUCTOR COLOR CAMERA

The unit shall be labeled and listed as a minimum by a Nationally Recognized Testing Laboratory (NRTL) to the applicable Standard for Safety for Closed Circuit Television Equipment, UL 2044, 2nd edition, 11/09/01. A listing report must be supplied that certifies the aforementioned equipment is acceptable as defined by 29 CFR 1910.399 and required

by 29 CFR 1910.303(a). Self-certification or certification by a laboratory that is not an NRTL will be deemed unacceptable. NRTL labeled and listed equipment shall be supplied as required by the FEDOSHA memorandum, dated September 25, 2002, page 3, Section of Compliance.

The Pan & Tilt Camera will be specifically designed to provide a close up view of the sewer pipe walls, lateral openings and discharges through the panning and rotation of the camera head. The camera will be designed so that the pan motion begins on a side to side basis, rather than up and down, before rotating. This will speed inspection of lateral connections since most are side entry type. Chassis construction shall include 100% solid state circuitry designed to withstand shocks and vibration normally sustained while being pulled through a pipe. The image pickup device shall be solid state CCD type incorporating the latest technology. Operating temperature ranges of the camera shall be 0 degrees C to 65 degrees C. CAMERS INCORPORATING BUILT IN LIGHTING SYSTEMS THAT GENERATE HEAT EXCEEDING THE OPERATING TEMPERATURE PARAMETERS LISTED BY THE BASE STOCK CAMERA MANUFACTURER WILL NOT BE ACCEPTABLE.

PAN & TILT SOLID STATE MULTI CONDUCTOR COLOR CAMERA REQUIREMENTS

The camera shall be capable of providing 470 lines of horizontal resolution and 400 lines of vertical resolution. The image pick-up device will contain in excess of 379,000 picture elements (pixels). The high resolution image sensor will not burn even when pointed at direct sunlight. Scanning shall be 525 lines, 60 fields, 30 frames, interlaces 2:1- NTSC color standard. The composite video signal derived from the video camera shall be 1.0V (140 IRE Units) at the monitor after transmission through 2000' of twelve conductor cable. Then lens shall be an automatic iris type with a manual override (controlled from the control console) to control the illumination range for an acceptable picture between 3 and 100,000 lux. Built into the camera shall be a circuit that, when used with the *optional* enhancer, shall be capable of increasing the light sensitivity to 0.19 Lux. This results in an increased light sensitivity of 16 times that of a 3 Lux camera. There shall be no geometrical distortion of the image.

PAN & TILT SOLID STATE MULTI CONDUCTOR COLOR CAMERA TECHNICAL SPECIFICATIONS

Features:

1. Remote controlled focus and Iris
2. Automatic white balance
3. Image pickup device (CCD) that has a lower random noise feature in comparison with other devices (i.e. MOS or CID)
4. Rotation 360°
5. Mechanical Pan (Tilt) 275°
6. Optical Pan (Tilt) 330°
7. Auto Centering

Electrical Specifications:

Internal Lights	12 Self Contained Long Life LED's
Image pick-up device	Interline transfer 1/2 inch CCd color
Picture elements (pixels)	768 (H)x494 (V)=379,392 elements
Sensing area	6.35mm

System standard	NTSC color 525 lines, 60 fields/second
Supplied lens	8mm (F1.3) with auto iris
Resolution Lines	470 Horizontal/400 Vertical
S/N ratio	45db
Minimum illumination	3 Lux(F1.2) [0.19 when used with optional
enhancer]	
Illumination Range	3 – 10,000 Lux 1-1,000 Ft Candles
Color temperature	Auto: 2100 degrees K – 10,000 degrees K
Video output	1.0 volt p-p 75 OHMS
Vibration	7G
Shock	70G
Geometric distortion	None

PAN & TILT SOLID STATE MULTI CONDUCTOR COLOR CAMERA CONTROLLER

The panning and rotational camera head shall be remotely controlled from the control console. The controller shall be designed for mounting in a stand-alone angular panel. The controller shall be equipped with a joystick to pan the head and rotate the lens to allow viewing around the barrel of the pipe. The controller shall be equipped with an automatic iris override that allows the operator to override the camera's automatic light compensating circuitry operating range to compensate for various light reflective conditions within the pipe. An automatic centering switch shall be provided to allow auto repositioning of the camera field of vision to the 0 degree X-Y axis position. **Cameras not capable of remote automatic centering shall not be deemed acceptable.**

PAN & TILT SOLID STATE MULTI CONDUCTOR COLOR CAMERA PROTECTIVE HOUSING

The camera shall be housed in a high strength, damage resistant stainless tube. The rear portion of the camera shall not exceed 3 inches in diameter. The forward portion of the camera shall not exceed 4 inches in diameter and will include the camera head mounting fork, camera head and lighting. The housing shall be 1/8" minimum wall thickness. THINNER WALLED STAINLESS STEEL HOUSINGS THAT EASILY DENT ON IMPACT SHALL NOT BE ACCEPTABLE. The front of the camera head housing shall have a view port of distortion free, heat resistant glass. The rear of the housing shall have a recessed bell to protect the 5 pin indexed cable connector. A "Y" Eliminator cable will be provided to connect a light head for large pipe lighting if required.

PAN & TILT SOLID STATE MULTI CONDUCTOR COLOR LED CAMERA LIGHTING

The camera head shall include 4x5W LED field replaceable light modules, capable of producing 480 lumens with a color temp of 4000°K to 4500°K or greater. The LED light sources must be individually field replaceable and shall be hermetically sealed from the cavity housing the camera module to prevent any moisture entry if field replacement occurs. Light modules will provide required light to allow inspection of 6" – 48" pipe. Pan and Tilt Zoom cameras that do not provide an extended life field replaceable LED light module with field replaceable individual light sources will be deemed not acceptable.

PROFESSIONAL VIDEO FOOTAGE & DATA GENERATOR

A video data generator with parallel printer output shall be supplied. It shall generate the alpha numeric information, as shown below, for display on a system monitor and digital recording. The generator shall have the capability to print a hard copy inspection report containing contract data, footage and defects, using a standard ink jet data printer. The inspection report shall include the following minimum information: CD number; date of inspection; pipe size, material, total length; upstream access location; downstream access location; direction of inspection (N-S-E-W and upstream/downstream); name of line; corresponding CD number, defect codes (70 user definable); lateral location and footage; observations and comments (6 lines). The rack mount control panel shall contain a 1" LED footage display for off line confirmation of footage.

The data generator shall have provisions for a minimum of 55 preprogrammed defect codes and 70 user defined codes (NASSCO PACP compliant). A standard "QWERTY" keyboard shall be supplied for the entry of alpha numeric data. Character intensity shall be adjustable from black to white and be able to be positioned anywhere within the visible viewing area.

An optional bar code wand shall be available for the single push button entering of defect information without the need for keyboard entry.

INPUTS	1V p-p Video Signal Footage count IBM Keyboard "QWERTY" Bar Code Wand
OUTPUTS	1V p-p to monitor & VCR Parallel printer output port
CONTROLS	Power ON/OFF
DISPLAY LINES	Footage (7 character) Alpha Numeric (12 lines, 40 characters each) Arrow (adjustable position)
DISPLAY MODE	White Text/Black Text
FOOTAGE	+/- 0 TO 9999.9
Software features	Bar Code Sub Menus – 20 groups – 20 items per group (user defined)
HARD COPY DATA	Parallel Printer Output (Ink Jet driver)
POWER	IIO V, 60 cps.
BATTERY BACKUP	Memory

Recording System

CD or DVD Style

TWO (2) 22" COLOR FLATSCREEN LED MONITORS; 1 IN REAR, 1 IN CONTROL CAB

1. Shall be a high quality, ultra-thin, industrial grade color unit providing a minimum of 1440 x 900pixels of resolution.
2. Shall include 16:10 aspect ratio displays HD content with no stretching or blurring.
3. Shall be a desk-mounted 22" LED computer display.
4. Shall include a user friendly, on-screen menu for easy parameter adjustments.
5. Shall be compatible with the NTSC signal. [PAL version available].
6. Shall have the ability to automatically monitor/adjust the video input and optimize the display settings without manual adjustments.

TV CABLE REEL ASSEMBLY

A TV cable reel assembly will be supplied with a minimum storage capacity for 1000' of 1/2" or 5/8" maximum diameter video transmission cable. The reel shall be chain driven and properly reinforced to withstand 200% of the maximum motor torque to insure trouble-free operation. The reel shall be powered by a variable speed electric motor and driven through a multi-gear ratio transmission. The transmission will have multiple speeds to limit the motor load during varying towing conditions. The reel shall be equipped with an automatic level wind assembly to evenly pay out or rewind the cable to prevent pile-ups, entanglements and burying. The reel shall be built into a rugged frame designed for fixed mounting into a unit. The reel drum and level wind shall be open to view to allow for inspection during operation. TV REEL SYSTEMS THAT ARE NOT CONTROLLED REMOTELY OR DO NOT HAVE A MULTI RATIO TRANSMISSION WILL NOT BE ACCEPTABLE. The slip ring assembly shall be fully enclosed in a dust and weatherproof high strength aluminum housing. Systems equipped with the high maintenance copper slip ring assemblies shall not be considered acceptable. Mercury Slip Rings shall not be considered acceptable. Reel assembly should include Auto Pay Out.

CABLE FOOTAGE METER, LOCAL/REMOTE ELECTONIC READOUT

The unit shall be equipped with a distance counting meter designed to accurately measure cable travel in feet and tenths of feet. The metering head shall be constructed of machined cast aluminum parts and shall include the necessary sheaves, wheels and guides. The meter shall be equipped with a meter for use at the rear of the unit and an electronic counter which is connected to the Data Display System at the operator's station.

CONTROLLER TV CABLE REEL MOTOR/POWER WINCH MOTOR

A single combined controller will be furnished to operate either the TV Cable Reel Motor or Power Winch Motor if supplied. It will be designed for mounting at the control console in an angular panel. The controller shall be equipped with an ON/OFF switch, and ON indicator light, clutch control (forward/reverse switch) and speed control with built in automatic off

positioning for safety when the operator releases the speed control. CONTROLLERS THAT DO NOT INCLUDE A SAFETY OFF SWITCH WILL NOT BE ACCEPTABLE.

TV CABLE REEL CONTROL REMOTE AND LOCAL

A gear shift selector and linkage shall be provided at the control console to operate the reel mounted transmission. The combination of the reel motor controller and transmission gear shift selector will maximize the efficiency of the television inspection operation and minimize the load on the reel and motor. A speed controller, gear shift selector and on/off switch shall be provided at the reel for local control during set up.

COMBINATION VIDEO TRANSMISSION/TOW CABLE KEVLAR FIBER ARMORED – MULTI-CONDUCTOR

A combined video and towing cable shall be furnished in a continuous length of not less than 1000 feet. The cable shall consist of a shielded coaxial center core wrapped with a mylar insulation. A grouping of not less than 11 separately insulated and color coded standard copper conductors shall form a perfectly round lay pattern around the core. A wrap of Kevlar fibers shall encircle the complete conductor grouping to provide the cable with the required towing tensile strength. The exterior of the cable shall consist of a minimum 1/16" thick abrasion resistant high density polyethylene outer jacket. The cable shall have minimum break strength of 5000 lbs., shall be not more than ½ inches in diameter and withstand external pressures of up to 400 psi. The cable weight shall not exceed 140 lbs. per 1000 feet.

CABLE TERMINAL CONNECTION KEVLAR FIBER ARMORED – MULTI-CONDUCTOR

The end of the multi-conductor cable shall be equipped with a scotchcast splice chamber to allow for the direct wiring of the female connector(s) and to transfer the cable towing strength to the camera skid runners. The terminal connection shall consist of the necessary connectors and dummy plugs as itemized on the component list.

SELF-PROPELLED WHEELED COMPACT CAMERA TRANSPORTER – WITH PROPORTIONAL STEERING

The unit shall be labeled and listed as a minimum by a Nationally Recognized Testing Laboratory (NRTL) to the applicable Standard for Safety for Closed Circuit Television Equipment, UL 2044, 2nd edition, 11/9/01. A listing report must be supplied that certifies the aforementioned equipment is acceptable as defined by 29 CFR 1910.399 and required by 29 CFR 1910.303(a). Self-certification or certification by a laboratory that is not an NRTL will be deemed unacceptable. NRTL labeled and listed equipment shall be supplied as required by the FEDOSHA memorandum, dated September 25, 2002, page 3, Section on Compliance, prepared by John L Henshaw, Assistant Secretary of Occupational Safety and Health.

A self-propelled camera transporter shall be provided for inspecting relined pipe and storm drains/wastewater pipelines measuring 6" and up in diameter. The transporter assembly shall be designed to operate optimally with 1200' multi-conductor cable and Transporter

- Shall include the following (minimum) equipment: (6) Driven Wheels, available in various sizes.
- Shall operate through a minimum of (1200) feet of multi conductor video cable in suitable pipe conditions.
- Shall utilize a rear tip-up bulkhead connector to minimize stress and strain on the cable connection. The cable-tp-transporter connection shall be secured via a twist-locking feature.
- The corresponding pan and tilt or pan and tilt zoom camera shall plug directly into the transporter with no external exposed cables.
- Shall include a two-speed transmission to optimize traction by doubling the torque in difficult pipe conditions or in a larger diameter pipe.
- There will be a protected manual shifter assembly on the transporter to facilitate quick gear ration changes.
- CAMERA TRANSPORTERS WITH A ONE SPEED/GEAR RATIO TRANSMISSION SHALL NOT BE ACCEPTABLE DUE TO THE SUBSTANTIAL REDUCTION OF TORQUE/TRACTION PRODUCED WHEN LARGER DIAMETER WHEELS ARE USED.
- Shall have sufficient power and traction to inspect a minimum of (1200) feet from the manhole entry point in suitable pipe conditions.
- Shall include (2) heavy-duty drive motors specifically designed to meet the power requirements of the system, regardless of size of pipe being inspected.
- The motors shall incorporate over-current protection circuitry.
- Shall be equipped with self-propelled power forward, power reverse, and free wheel capabilities. Shall be construced of brass, stainless steel, and aluminum alloy.
- Shall have speed and direction controlled from the control console.
- Shall be retrievable in the free wheel mode by the video cable reel to reduce the normal wear on the drive motor by 50%.
- Shall have full, variable speed in power forward or power reverse modes.
- The maximum speed for camera/transporter assemblies shall be minimum 30 fpm in high gear for pipe configurations up to 15" and minimum 45 fpm in low gear for pipe configurations up to 30".

CAMERA/TRANSPORTER ASSEMBLIES INCAPABLE OF OPERATING AT THE SPECIFIED SPEEDS WILL BE DEEMED UNACCEPTABLE.

- The transporter connector shall integrate directly to the camera, securing with a cam-locking action for positive sealing and retention.
- The transporter shall have a forward-locking feature to secure the camera, increasing the strength of the camera-to-transporter interface.
- The self-propelled camera carrier shall weigh a minimum of 27lbs.
- The length of the transporter shall not exceed 14.5".
- **TRANSPORTERS EXCEEDING 14.5 SHALL BE DEEMED UNACCEPTABLE.**
- Shall include full proportional steering with the ability to conduct a complete 360 degree turn within its own radius.

Camera Compatibility:

Shall be designed to be compatible with the pan and tilt /optical zoom pan and tilt cameras.

- The transporter, when used with an optical zoom pan and tilt camera, shall fit into a 6" diameter relined pipe and will have the ability to operate in an 8" diameter pipe with offsets.
- **ALL TRANSPORTER/OPTICAL ZOOM CAMERA COMBINATIONS THAT ARE UNABLE TO OPERATE IN 6" DIAMETER PIPE WILL BE DEEMED UNACCEPTABLE.**
- **ALL TRANSPORTER/PAN & TILT COMBINATIONS THAT ARE UNABLE TO OPERATE IN 6" RELINED PIPE SHALL BE DEEMED UNACCEPTABLE.**
- The combined length of the transporter/pan & tilt camera assembly shall not exceed 20.0" with the camera in the home position.
- This will allow the inspection and traversal of 6" diameter pipe with off sets or meandering conditions and facilitate entry into short inverts.
- **CAMER/TRANSPORTER ASSEMBLIES EXCEEDING 20.0" IN LENGTH WILL BE DEEMED UNACCEPTABLE.**

Tires

- The transporter shall include (6) wheels, available in various sizes, designed to maximize traction in each pipe size.
- 3.5" diameter tires for 6" pipe and 6" relined pipe 4.375" diameter tires for 8" pipe.
- 5" diameter tires for 10"-15" pipe

- 7.9 diameter tires for 18"-30" pipe
- The transporter shall be capable of inspecting pipes up to 30" diameter with the addition of larger diameter wheels.
- The (2) smaller diameter wheels, designed to help negotiate offsets in larger pipe configurations, shall remain affixed to the middle axle, regardless of pipe size to be inspected.

TRANSPORTERS DRIVEN BY BELTS WILL NOT BE ACCEPTABLE.
TRANSPORTERS WITH EXTERNAL DRIVE TRAIN COMPONENTS WILL BE UNACCEPTABLE.

- Kits shall contain complete sets of wheels.

COMPUTER

- 1 Intel i3 Processor, MS Windows 7 – 32bit, 4 gig of RAM, 250 gig hard drive (7200RON), Video capture device for video recording (MPEG 1-2-4, WMV) with 22" LED HD monitor and keyboard.

GENERIC CCTV SOFTWARE SPECIFICATIONS FOR ASSET MANAGEMENT & DECISION SUPPORT SOFTWARE

Functional Requirements of the Software

- Unit shall be supplied with pipeline inspection software that is PACP compliant. Data collector shall have the ability to be downloaded, stored, and retrieved for review to GUC's current Network system, which is a Microsoft virtual server environment.
- Inspection software shall have the ability to import and view the existing PipeTech video and stored metadata the customer currently saves.
- The inspection software shall fully support CMOM activities as defined by the US EPA
- The software shall be NASSCO PACP and MACP version 4.4 certified and will conform to its asset assessment procedures.
- The software shall offer the ability to quickly click on an asset and see all of the history performed against that asset.
- The software's data entry interface shall be intuitive, easy to use, and able to provide on-line help files within the software to assist remote users with questions they may have.
- It shall use familiar Microsoft layouts or "panes" that are customizable screens for each user's preferences and job responsibility.
- It shall offer tool bars, drop - down menus, "auto-complete" features to speed data entry, and display data with easy Microsoft tree structures.

- Users shall be able to "single click" to burn CD / DVD's or generate reports.
- The core software or "standard" inspection lite edition used in the field shall maintain a complete database of infrastructure assets (pipelines, manholes, lateral service connections, lift stations, etc.).
- The software shall enable users to immediately point to a defect within the video stream.
- The panes shall be synchronized, whereby interaction with the main navigation window will determine the display of data in other associated panes. Changes made to an observation, inspection, asset, project, or resulting from a specific filtering criteria, shall display the newly selected properties in all corresponding open panes.
- To allow the user to select his / her default preferences as to which panes to view on a regular basis, each of the panes selected shall be able to be "docked" and/or "floating". The user shall have the ability to "dock" the panes side by-side, place one pane over another, and access each pane through a tab. "Floating" panes shall be able to be positioned anywhere in the application window. The software provider shall provide a common "out-of-the-box" layout scheme for use while performing a field inspection as well as for use in the office to review the collected data.
- The user shall be able to change the field labels. The module to change labels shall be part of the system and shall not require third party software.
- A pipe graph shall be interactive and the pane viewable during the inspection. The pipe graph shall show service connections with a graphic indicating the location of the connection. The user shall have the ability to control the graphical representation of the observations made during the inspection by selecting any combination of the following features: Connections, Defects, Continuous, Laterals, Informational, and/or Status Bar.
- A zoom feature shall be available for the pipe graph that allows the user to select a portion of the pipe with a mouse and zoom to that specific portion. A grid system shall be provided to display the location of a "zoomed" observation within 10 feet.
- To start an inspection, the user shall be able to select structure, nodes, or manhole information already within the database. If the data is not available, the operator shall be able to enter the correct information and the information shall be retained in separate tables for future selection. A graph shall be provided for structures that allow for the direction of entry, exit, and flow direction of each main and lateral.
- The user shall be able to display live video, playback video, and captured pictures on the screen simultaneously.
- All drop-down look up values shall be customizable by the end user without the use of third party programs.
- The application shall allow for the addition of custom fields available in the user interface without the need of third party applications.

Technical Requirements of the Software

- The software shall be coupled with a firmware controller to receive multiple, simultaneous inputs from connected devices to, for example, allow mainline footage, lateral footage, and inclination data to be received into the software without the need for manual input from multiple keyboards.

Database Structure and Requirements

- The inspection database shall include an asset based architecture which allows multiple inspections to be performed and retained as a historical record for the same physical location (asset). The "project based" database architecture shall store and immediately show all inspection history for each asset.
- The software shall be able to import an entire asset database.
- The software shall have the ability to import and retain the entire lists of assets despite not ever having generated an inspection.
- The inspection database shall have the ability to support and synchronize with multiple data sources, such as Microsoft Access, Oracle 8, 9i & 10g, or SQL Server. All or part of the data shall be capable of being duplicated between inspection databases and exported into multiple formats, such as, Access, PACP, Azteca, Hansen, Maximo, GSA, RJN, and ASCII. All or part of the inspection and asset information shall be able to be synchronized between the field and office with built-in automatic validation and error checking.
- The software must be based on Microsoft Windows and be a 32 bit or 64 bit Windows application, compatible with Windows 7 (32 or 64).
- The software must be capable of connection to external systems via an ODBC or OLE DB connection.
- The collected CCTV survey data shall be stored in either a Microsoft Access, SOL or Oracle tables, and be available for use by the system owner.
- Databases shall be able to be created in the default directory or on any writeable drive available.
- The Database structure shall have the ability to use Microsoft SQL Server.
- The database structure shall retain information on the various structures found within a Sewer, Storm, or combined system. It is important that the structures, nodes, manholes and pipe identifiers and related attribute information be retained as separate tables from the inspection allowing import of existing data from multiple sources. The data structure allows different projects to reside within a single database. Information gathered in projects shall be available to view by project or by system. Data gathered during project inspection shall be available to view by the selected structure. Therefore, all inspections can be viewed on a structure even if gathered in different projects.

Digital Video Format Capabilities and Requirements

- Digital video files (Inspection Videos) shall be captured and / or recorded in the MPEG1, 2, or 4.
- The Video capture files shall be in MPEG format with linking to the database file(s) (Inspection Observations). The "link" of the video capture file to the database observation file is required and each Observation shall record the name of the video file and the frame number referencing the time in the video when the inspection was made. The inspection observation(s) shall link to the video record in real-time.
- A Main, Lateral, or Node Inspection may have one or many linked video files. Video recording can be paused and then restarted without generating a new file.
- On playback, single click selection of a Main, Lateral, or Node Observation shall start the video from the moment the observation was made, and subsequent selections of observations will "jump" the video playback to the corresponding spot. If no additional observation selection is made, the software will play sequentially all linked videos in the inspection.
- Video linking to pipe inspection observations is a patented and protected technique and only software that holds the appropriate licenses is deemed acceptable.

Image (Photos) Capture Format Capabilities and Requirements

- The Inspection image files (pictures) shall have the ability to be exported to Industry Standard Formats to include JPEG, BMP, and TIFF formats and will be transferable by disk, DVD, and / or External Hard Drive to an external personal computer utilizing standard viewers and printers.
- The video image capture module shall be capable of collecting multiple color video frames of the defects found during inspection and then linked to the inspection reports. There shall not be a limitation to the number of pictures allowed per observation.
- Images or video clips shall be easily launched for viewing during inspection report review.
- Images can be captured and linked to an observation directly from "live" video during the TV inspection, or from the video playback at the office.
- Footage count shall be attached to the corresponding video image and shall appear on the reports indicating the correct footage when the image was captured during the pipeline inspection.
- Shall be able to print any captured image on the ink jet color printer in the inspection truck. Picture files shall be stored and exported with inspection data.
- A "thumbnail" preview of all pictures at an observation shall be available. The pictures shall be able to be expanded from thumbnail to window to full screen by utilizing the mouse.

Export of the Database - Capabilities and Requirements

- The database, videos, and pictures shall have the ability to be "Exported". Export is the process of selecting all or portions of the original data, video, and pictures and creating a complete and independent copy of this information, which can be run independently or synchronized.
- The office program shall have the ability to select the Assets and Projects to transfer to a particular database.
- All or part of a database can be exported from the TV Inspection database with or without videos and pictures. This new file can be burned to a CD / DVD, or transferred to a USB hard drive and brought into the office from the truck or to the truck from the office. If the TV Inspection system is connected to the customer's computer network, it will be possible to export the data directly to the a master or central database.
- The NASSCO export process will validate the PACP and MACP data and reject any non - compliant inspections, notifying the user via log files so that a corrective action can be implemented.

Synchronization Capabilities and Requirements

- The application shall have the ability to synchronize with assets and inspections from exported databases.
- The synchronization process shall have built-in error checking for duplicates, conflicts, updates, and any modifications to the data being synchronized using a unique hash revision control mechanism for every data object.
- The software shall have an OPTIONAL Scheduler module that allows for a daily, weekly, or monthly scheduled transfer of information between two databases (i.e., central office to truck, truck to master database, etc.). Inspections for an asset shall be able to be sent to the truck from the office.
- Synchronization and Exporting activities can be independently scheduled.
- Log files must be created for review purposes.
- During the synchronization process, validation dialogs shall be used to allow the users to select which data takes precedence when a conflict is challenged.
- All filtering capabilities previously described must be available for all exporting and synchronization tasks.
- The application will allow for multiple sources of data to be effectively consolidated into a single unitary database for analysis and evaluation.

Televising Survey Collection / Reporting Capabilities and Requirements

- The software's basic module shall be capable of providing complete survey reports.
- The software shall be capable of customization with the ability to modify / add to the pipeline condition descriptions / codes and to group them for ease of use.
- The software shall allow footage reading from the existing mainline and lateral camera equipment to be automatically entered into the current survey record and directly correspond to the noted defect location throughout either the main or lateral pipe graph and tabular reports generated. A context - sensitive, complete on-screen help file should be available.
- Drop - down boxes shall be available to quickly reference common information such as defects, pipe materials, survey purpose, locations, pipe usage, etc.
- Multiple windows shall be allowed so as to display live video compared to recorded video and / or recorded snapshots.
- The software's basic module database shall have the means to sort in ascending and descending order according to date, pipe ID, street name, structure ID, observed footage, pipe materials, pipe diameters, work order numbers, etc.
- Summary reports compiling data from multiple inspections shall be available. Reporting order shall be user defined.
- Individual inspection summary reports shall also be available and tabulate pipe survey results.
- Quarter section (or map or project areas) summary reports are to be made available so that all surveys within a quarter section are listed showing purpose of inspection, dates, work order numbers, structure ID's, street names, and total lengths.
- A report showing defects by inspection shall be available and programmable to list specific defects observed with corresponding footage, starting, and ending manhole numbers, structural pipe defects (i.e. cracks, offsets, defective laterals, collapsed pipe, etc ...) and service oriented defects (i.e. roots, grease, obstructions, infiltration, etc.).
- A report showing grading scores shall be available and summarize the structure I D's, pipe material and pipe diameter, and the grade scores for each survey with totals.
- Reports showing service and structural aspect scoring shall also be available and shall list the pipe ID, total observed length, number of defects and total score with reference to the condition of the total pipe, average of the pipe, total defects and average of defects.
- The software shall allow users to create additional reports as needed.
- The data structure shall allow different projects to reside within a single Database. Information gathered in projects shall be available to view by project or by unique system ID number or asset ID. Data gathered during the project inspection shall be available to

view by the selected structure. Therefore, all inspections can be viewed on a structure even if gathered in different projects.

- The data structure shall allow for the entire asset data inventory to be created or imported even if no inspections have been performed on the assets.

Televising Viewer Capabilities and Requirements

A viewer module shall be available for viewing all collected data and shall allow users to:

- View or print all available pictures.
- View all available video files.
- Review or print individually all available reports.
- View all data in the same format as the main software application.
- Use GIS map within the viewer to select assets, review inspections, and run reports.
- Use predefined and custom filters to search and sort the information and reports.

GIS and GPS Requirements

- The inspection software will integrate with GIS, GPS, and selected CMMS systems.
- The Database and Software program shall be able to import and export asset data, Inspection Observations, and pipeline inspection scores from an ArcGIS 9.3 shape file, personal geodatabase file, or ArcSDE files utilizing the network features to associate Sewer, Storm, or combined Mains with corresponding Node and Lateral Assets.
- Both an "import" and "export" profile shall be provided in the software to strictly control the attributes exchanged between the systems.
- The software shall provide the ability to browse to the profile location to select different profiles.
- The "import" and "export" profiles shall allow for data type conversions when the source and destination field types are not the same (i.e., allow for data type conversion of a float to an integer).
- Imported asset data from GIS, as well as exported asset data to GIS shall be filterable to bring in all asset data (full asset inventory) or selected assets / pipelines.
- The inspection software shall allow linear references to be created in GIS with corresponding hyperlinks to spawn video, still images, and other data from the inspection software or an ESRI GIS application.
- An interactive and integrated GIS map shall be viewable from within the application and allow for the initiation of inspection, creation of multiple inspections in a project format,

viewing, exporting, burning, and reporting of inspections for selected assets, map layer management, and customizable filtering capabilities for selection of map features.

- The software shall provide an ArcGIS- style identify tool on the integrated map view pane.
- The software shall provide an ArcGIS- style measure tool on the integrated map view pane.
- The software shall provide an ArcGIS- style find tool on the integrated view pane.
- The software shall collect real-time sub-meter accurate GPS coordinates wirelessly from the field for located structures.
- The software shall allow collection / storage of GPS coordinates imported from an existing GIS database.
- The inspection software shall provide a "zoom to GPS location" capability when a GPS device is connected to show the location of the inspection vehicle or a particular known structure's location.
- The software shall enable structures, observations, entry points, etc., to be estimated with GPS coordinates as a linear reference.
- The software shall provide the ability to select multiple inspections and provide an estimated GPS coordinate for all observations. The software shall provide the ability to estimate GPS coordinate for a node asset using the inspection observation's estimated coordinate.
- The software shall provide the ability to use the GIS map within the viewer to select assets, review inspections, and run reports.
- The software shall provide the ability to import GIS subtypes.
- The software shall provide the ability to check and / or correct the GIS source file name if that name and / or location changes between imports.
- The software shall provide the ability to estimate node asset coordinates by clicking on a map.
- The software shall provide the ability to zoom to a selection in the map view pane from a navigator context menu.

Televising Data Analysis/Reporting Capabilities and Requirements.

- Users shall have the ability to check for invalid data. To avoid corruption, data gathered from the field inspection shall be error checked. Inconsistent or erroneous data shall automatically be displayed and allow the user or supervisor to add or change data before being input into the database.
- Users shall have the ability to perform data entry and automatically control the video text overlay simultaneously to eliminate the need for dual entry.

- Users shall be able to directly access Oracle 8i, Oracle 9i, and Microsoft SQL Server 2000/2005 databases.
- Users shall have the ability to transfer data between the Data Acquisition System and the Software interface without the need for any user supplied programming, special scripts, or macros. The user shall be able to build a code system from active codes.
- The administrator shall be able to select asset and inspection fields that can updated without user verification, therefore allowing quick transfer.
- The application shall have the ability to filter all data using any data field in the application. Filter state should be savable for future use. Multiple filters can be saved. Filters can be defined graphically or by SQL query language. Users shall be able to filter the list of mainline inspections or assets to be exported. Users shall be able to select the mainline inspections by:
 - Data Acquisition System projects, filtering by: Project name.
 - Inspections, filtering by date (from/to), operator name, or work order number.
- In addition, the user shall be able to filter the mainline inspections by Sewer Main Assets:
 - The user shall be able to select a list of Main Assets and the inspections associated with the assets shall be displayed.
 - The user shall be allowed to select/de-select individual inspections. A scoring system incorporated in the software shall assist the user/management personnel in making proper pipe condition assessments. Scoring is to be based upon grades assigned to observation codes and calculated using either standard or customer specific algorithms. Grade can be programmed to be dependent to secondary properties like pipe size, type, weather, etc. Only administrators shall be allowed/able to make changes to grade and scoring algorithm values

CABLE GUIDE EQUIPMENT

Manhole cable guide rollers shall be provided to protect the TV cable, and/or winch cable from damage during the inspection. They shall be constructed of aluminum to minimize weight and be equipped with corrosion resistant pulleys. The minimum pulley bend radius shall be 6". A Tiger Tail for cable protection shall also be included.

Six (6) 5 foot quick coupling spring loaded extension poles will be supplied to connect the down hole cable guides. The quick coupling extension poles shall be constructed of 1" galvanized steel pipe. Manhole adapter hooks will be supplied to provide top sided cable protection.. The top roller shall consist of a welded Aluminum frame with the necessary pulleys. Rear door mounted pole and guide holding brackets with appropriate safety warnings shall be provided. **Downhole equipment requiring manhole entry to install shall not be deemed acceptable.**

RETRIEVAL TOOL FOR CAMERA, SKIDS AND TRANSPORTER

A Retrieval Tool will be supplied for skids and/or transporter. This device will allow placement or retrieval of camera, skids and/or transporter without the need to enter the manhole. Tool will feature 6' to 10' extending fiberglass safety handle with extension locks.

TV MAINTENANCE TOOL KIT

A kit containing sets of tools as listed herein shall be furnished in a metal tool box with ball bearing drawers. The kit shall contain the necessary items to field test, adjust and repair a number of components on the television systems. This kit must include: volt OHM test meter (0-600 milliamps), Allen wrench set, and soldering kit.

OPERATING MANUALS

Operating manuals shall be furnished that contain the recommended operating instructions and maintenance procedures for all systems and components being furnished. The instructions shall provide step-by-step use methods and include adequate illustrations, diagrams and other aids. Special attention shall be given to safety consideration for personnel and the equipment.

SYSTEMS PARTS BOOK

A parts book supporting field repair and replacement of the various components of the delivered systems shall be furnished. This book shall include exploded or cutaway drawings of numerous components and assemblies with each drawing referencing a manufacturer's part number and description.

INSTRUCTIONAL VIDEO CD or DVD

The vendor shall provide CD or DVD format training videos covering the following minimum requirements:

Video 1

TV System instructional video covering the recommended operation, step by step set up procedures and safety precautions for personnel and equipment. Minimum run time, 12, minutes.

Video 2

Trouble shooting instructional covering step by step procedures on continuity, cable testing, troubleshooting steps and safety precautions for personnel and equipment. Minimum run time, 14 minutes.

Video 3

TV Cable End Replacement instructional video covering step by step procedures on replacing the TV cable end, soldering techniques, connection location and safety precautions for personnel and equipment. Minimum run time, 34 minutes.

All videos provided must be produced from BataCam SP studio cameras and edited on "1" master dubs allowing for the maximum reproduction quality of the BHS videos provided.

Video tapes produced for the purpose of sales or marketing shall be deemed not acceptable. Video training tapes produced from consumer grade camcorders shall be deemed not acceptable.

INSTRUCTION AND TESTING

The supplier shall fully instruct and test buyers in the operation of the equipment furnished after delivery. The instruction period shall be of sufficient duration (number of days shown on the component list) to fully familiarize the buyers operating personnel. The instruction and testing shall be conducted by the suppliers' field service technician and shall include component familiarization, theory of operation, equipment operation, field procedures, techniques of use, troubleshooting, maintenance recording and logging of sewer conditions and safety procedures. Training provided by sales or office personnel will not be acceptable.

ADDITIONAL INSTRUCTIONS FOR BIDDER

Greenville Utilities shall reserve the right to make an inspection of the unit at mid-point and at the final pre-delivery inspection. Supplier shall contact Troy Perkins, Water Resources Systems Superintendent, (252) 551-3301 and Bill Darty, Fleet Manager, (252) 551-1515 at least ten (10) working days prior to unit being scheduled for mid-point and final inspection. All cost for travel and lodging must be included in the bid for three (3) people.

SUBMIT BID ON ATTACHED PROPOSAL FORM(S)

[Balance of page left blank intentionally]

Vendor Name: _____

GREENVILLE UTILITIES COMMISSION

PROPOSAL FORM

The undersigned bidder hereby declares that it has carefully examined the enclosed detailed specifications for furnishing GUC with the below listed item(s). The undersigned bidder further agrees, if this proposal is accepted within thirty (30) days from the date of the opening, to furnish any or all of the item(s) upon the quoted price.

ITEM NO.	QUANTITY	DESCRIPTION	DELIVERY TIME DAYS	UNIT PRICE
I	1	<p><u>One (1) Multi Conductor Hi Cube Truck Mounted With TV Inspection System.</u></p> <p>Brand: _____</p> <p>Model: _____</p>	_____	\$ _____

Method of Award: Item(s) one, (1) will be awarded as a total bid.

Complete and Check All Math: It is the responsibility of the Bidder to extend bid prices and supply a total for all item(s).

It is certified that this proposal is made in good faith and without collusion or connection with any other person bidding on the same above listed items. It is also certified that this proposal is made in good faith and without collusion or connection with any GUC employee(s).
Certified check or cash for \$_____n/a_____or bid bond for \$_____n/a_____attached.

Firm Name _____ Phone (_____)_____

Address_____

City _____ State _____ Zip Code _____

Fax (____) _____ E-Mail _____

Authorized Official _____ Title _____
Typed Name

Signature Date _____

**Three (3) copies of your proposal should be received no later than
June 23, 2015 at 2:00 PM (EDST).**

NO BIDS CONSIDERED UNLESS SUBMITTED ON THIS FORM

(RETURN ONLY THIS FORM AND EXCEPTION FORM)

Vendor Name: _____

GREENVILLE UTILITIES COMMISSION
EXCEPTION/VARIATION FORM FOR
ONE (1) MULTI CONDUCTOR HI CUBE TRUCK MOUNTED WITH TV
INSPECTION SYSTEM

Provider’s Certification:

This is to certify that it is our intent to furnish equipment, material, services, etc. in absolute compliance with the bid specification except where expressly noted below.

Instructions: List all exceptions or variations to these bid specifications. Providers shall identify each exception or variation by specification page. The omission of exception or variation information shall be deemed by the Commission as the Provider’s intent to absolutely comply with the bid specification. If additional space is required, Provider may reproduce this form as necessary.

<u>Page #</u>	<u>Exception/Variation</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Authorized Signature of Certification: _____
Print Name: _____

Firm Represented: _____
Address: _____

E-VERIFY LETTER OF COMPLIANCE

1. I have submitted a proposal for contract or desire to enter into a contract with the Greenville Utilities Commission;
2. As part of my duties and responsibilities pursuant to said proposal and/or contract, I affirm that I am aware of and in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):
3. ____ After hiring an employee to work in the United States I verify the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or
4. ____ I employ less than twenty-five (25) employees in the State of North Carolina.
5. As part of my duties and responsibilities pursuant to said proposal and/or contract, I affirm that to the best of my knowledge and subcontractors employed as a part of this proposal and/or contract, are in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):
6. ____ After hiring an employee to work in the United States the subcontractor verifies the work authorization of said employee through E-Verify and retains the record of the verification of work authorization while the employee is employed and for one year thereafter; or
7. ____ Employ less than twenty-five (25) employees in the State of North Carolina.
Specify subcontractor: _____

_____ (Company Name)

By: _____ (Typed Name)

_____ (Authorized Signatory)

_____ (Title)

_____ (Date)

SECTION III

TERMS AND CONDITIONS FOR THE PURCHASE OF APPARATUS, SUPPLIES, MATERIALS, AND EQUIPMENT

These Terms and Conditions, made and entered into on this the ____ day of _____, by and between GREENVILLE UTILITIES COMMISSION OF THE CITY OF GREENVILLE, PITT COUNTY, NORTH CAROLINA, with one of its principal offices and places of business at 401 S. Greene Street, Post Office Box 1847, Greenville, Pitt County, North Carolina 27835-1847, hereinafter referred to as "GUC" and _____, a _____ organized and existing under and by virtue of the laws of the State of _____, with one of its principal offices and places of business at _____, hereinafter referred to as "PROVIDER";

1.0 TAXES

No taxes shall be included in any bid prices. GUC is exempt from Federal Excise Tax. GUC is not exempt from North Carolina state sales and use tax or, if applicable, Pitt County sales and use tax. Such taxes shall be shown as a separate item on the invoice.

2.0 INVOICES

It is understood and agreed that orders will be shipped at the established contract prices and quantities in effect on dates orders are placed. Invoicing at variance with this provision may subject the contract to cancellation. Applicable North Carolina sales tax shall be invoiced as a separate line item. All invoices must bear the GUC purchase order number. Mail all invoices to Greenville Utilities Commission, Finance Department, P. O. Box 1847, Greenville, NC 27835-1847.

3.0 PAYMENT TERMS

Payments for equipment, materials, or supplies will be made after the receipt and acceptance of the equipment, materials, or supplies and after submission of a proper invoice. GUC's normal payment policy is thirty (30) days. GUC will not be responsible for any goods delivered without a purchase order having been issued. Payment will be made in U. S. currency only.

4.0 QUANTITIES

Quantities specified are only estimates of GUC's requirements. GUC reserves the right to purchase more or less than the stated quantities at prices indicated in the submitted Proposal Form based on our actual needs.

5.0 AFFIRMATIVE ACTION

The Provider will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of the handicapped, and concerning the treatment of all employees, without discrimination by reason of race, color, religion, sex, national origin, or physical handicap.

6.0 CONDITION AND PACKAGING

Unless otherwise indicated in the bid, it is understood and agreed that any item offered or shipped shall be new and in first class condition, that all containers shall be new and suitable for storage or shipment, and that prices include standard commercial packaging.

7.0 SAMPLES

Samples of items, if required, must be furnished free of expense to GUC, and if not destroyed, will, upon request, be returned at the Provider's expense. Request for the return of samples must be made at the bid opening, otherwise, the samples will become GUC's property. Each individual sample must be labeled with Provider's name.

8.0 SPECIFICATIONS

Any deviation from specifications must be clearly pointed out, otherwise, it will be considered that items offered are in strict compliance with specifications, and the Provider will be held responsible. Deviations must be explained in detail. **The Provider shall not construe this paragraph as inviting deviation or implying that any deviation will be acceptable.**

9.0 INFORMATION AND DESCRIPTIVE LITERATURE

Providers are to furnish all information requested. Further, as may be specified elsewhere, each Provider must submit with its proposal: cuts, sketches, descriptive literature, and/or complete specifications covering the products offered. Reference to literature submitted with a previous bid does not satisfy this provision. Bids which do not comply with these requirements will be subject to rejection.

10.0 AWARD OF CONTRACT

As directed by statute, qualified bids will be evaluated and acceptance made of the lowest responsible, responsive bid most advantageous to GUC as determined upon consideration of such factors as prices offered, the quality of the article(s) offered, the general reputation and performance capabilities of the Provider, substantial conformity with the specifications and other conditions set forth in the bid, the suitability of the article(s) for the intended use, the related services needed, the date(s) of delivery and performance, and such other factors deemed by GUC to be pertinent or peculiar to the purchase in question.

Acceptance of the order includes acceptance of all terms, conditions, prices, delivery instructions, and specifications as shown on this set of Terms and Conditions and in this order or attached to and made a part of this order.

The conditions of this order cannot be modified except by written amendment in the form of "Amended Purchase Order," which has been approved by GUC's Buyer II.

In the event of a Provider's failure to deliver or perform as specified, GUC reserves the right to cancel the order or any part thereof, without prejudice to GUC's other rights. The Provider agrees that GUC may return part of or all of any shipment at Provider's expense. GUC may charge the Provider with all reasonable expenses resulting from such failure to deliver or perform.

11.0 MEDIATION/BINDING ARBITRATION

In the event of any dispute between the Parties, the Parties agree to submit any dispute to non-binding mediation before a mutually agreeable Mediator prior to initiating litigation. If the Parties are unable to agree upon a Mediator within thirty (30) days after demand therefore, either Party may petition a Court of competent jurisdiction for the designation of a qualified Mediator for these purposes. Each Party shall bear its own costs and expenses of participating in the mediation (including, without limitation, reasonable attorneys' fees), and each Party shall bear one-half (1/2) of the costs and expenses of the Mediator. Unless otherwise agreed, the Parties will hold the mediation in Greenville, North Carolina. The matters discussed or revealed in the mediation session shall not be disclosed in any subsequent litigation.

In the event the matter is not resolved in mediation, either Party may request arbitration. The parties shall jointly select an Arbitrator, and shall be bound by the decision of the Arbitrator with respect to any dispute between the parties with respect to this Agreement. If the parties are unable to mutually agree upon an Arbitrator, the Parties shall each select an Arbitrator, and the two Arbitrators so selected shall select a third Arbitrator, and the decision of the majority of the Arbitrators shall be conclusive and binding upon the Parties. The Parties at all times agree to equally split the costs of any Arbitrator(s) selected in an effort to resolve the dispute between the Parties. Any party desiring to resolve a dispute under the terms of this Agreement shall notify the other Party in writing, and the Parties shall seek to agree upon a mutually agreed-upon Arbitrator within a period of ten (10) days from the date of such written demand. If the Parties are unable to agree within such ten (10) day period, the Parties shall each select an Arbitrator, and the two (2) Arbitrators so selected shall select a third Arbitrator within fifteen (15) days from the date of the written demand for arbitration, and a decision shall be rendered by the Arbitrator(s) so selected within five (5) days after such Arbitrator(s) is selected.

12.0 GOVERNMENT RESTRICTIONS

In the event any Governmental restrictions may be imposed which would necessitate alteration of the material, quality, workmanship, or performance of the items offered on this bid prior to their delivery, it shall be the responsibility of the successful Provider to notify the GUC Buyer II, at once, indicating in its letter the specific regulation which required such alterations. GUC reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or, in the sole discretion of GUC, to cancel the contract.

13.0 INSURANCE

13.1 Coverage – During the term of the contract, the Provider at its sole cost and expense shall provide commercial insurance of such type and with the following coverage and limits:

13.1.1 Workers' Compensation – The Provider shall provide and maintain Workers' Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$1,000,000 each accident, covering all Provider's employees who are engaged in any work under the contract. If any work is sublet, the Provider shall require the subcontractor to provide the same coverage for any of its employees engaged in any work under the contract.

13.1.2 General Liability – Commercial Liability Coverage written on an “occurrence” basis in the minimum amount of \$1,000,000 per occurrence.

13.1.3 Automobile – Automobile Liability Insurance, to include coverage for all owned, hired, and non-owned vehicles used in connection with the contract with a minimum combined single limit of \$1,000,000 per accident.

13.2 Requirements - Providing and maintaining adequate insurance coverage is a material obligation of the Provider. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized to do business in North Carolina by the Commissioner of Insurance. The Provider shall at all times comply with the terms of such insurance policies and all requirements of the insurer under any of such insurance policies, except as they may conflict with existing North Carolina laws or this contract. The limits of coverage under each insurance policy maintained by the Provider shall not be interpreted as limiting the Provider’s liability and obligations under the contract. It is agreed that the coverage as stated shall not be canceled or changed until thirty (30) days after written notice of such termination or alteration has been sent by registered mail to GUC’s Buyer II.

14.0 PATENTS AND COPYRIGHTS

The Provider shall hold and save GUC, its officers, agents, and employees, harmless from liability of any kind, including costs and expenses, including reasonable attorney fees, on account of any copyrighted articles or any patented or unpatented invention, device or appliance manufactured or used in the performance of this contract.

15.0 PATENT AND COPYRIGHT INDEMNITY

The Provider will defend or settle, at its own expense, any action brought against GUC to the extent that it is based on a claim that the product(s) provided pursuant to this agreement infringe any U.S. copyright or patent; and will pay those costs, damages, and attorney fees finally awarded against GUC in any such action attributable to any such claim, but such defense, settlements, and payments are conditioned on the following: (1) that Provider shall be notified

promptly in writing by GUC of any such claim; (2) that Provider shall have sole control of the defense of any action on such claim and of all negotiations for its settlement or compromise; (3) that GUC shall cooperate with Provider in a reasonable way to facilitate the settlement of defense of such claim; (4) that such claim does not arise from GUC modifications not authorized by the Provider or from the use of combination of products provided by the Provider with products provided by GUC or by others; and (5) should such product(s) become, or in the Provider’s opinion likely to become, the subject of such claim of infringement, then GUC shall permit Provider, at Provider’s option and expense, either to procure for GUC the right to continue using the product(s), or replace or modify the same so that it becomes non-infringing and performs in a substantially similar manner to the original product.

16.0 EXCEPTIONS

All proposals are subject to the terms and conditions outlined herein. All responses will be controlled by such terms and conditions and the submission of other terms and conditions, price catalogs, and other documents as part of a Provider's response will be waived and have no effect on this Request for Proposal or any other contract that may be awarded resulting from this solicitation. The submission of any other terms and conditions by a Provider may be grounds for rejection of the Provider's proposal. The Provider specifically agrees to the terms and conditions set forth in this set of Terms and Conditions by affixing its name on the signatory page contained herein.

17.0 CONFIDENTIAL INFORMATION

Except as provided by statute and rule of law, GUC will keep trade secrets which the Provider does not wish disclosed confidential. Each page shall be identified in boldface at the top and bottom as "CONFIDENTIAL" by the Provider. Cost information shall not be deemed confidential. The determination of whether a matter is confidential will be determined by North Carolina law.

18.0 ASSIGNMENT

No assignment of the Provider's obligations or the Provider's right to receive payment hereunder shall be permitted without the express written consent of GUC, provided however, upon written request approved by the GUC Buyer II, solely as a convenience to the Provider, GUC may:

- Forward the Provider's payment check directly to any person or entity designated by the Provider, and
- Include any person or entity designated by Provider as a joint payee on the Provider's payment check.
- In no event shall such approval and action obligate GUC to anyone other than the Provider, and the Provider shall remain responsible for fulfillment of all contract obligations.

19.0 ACCESS TO PERSON AND RECORDS

GUC shall have reasonable access to persons and records of Provider as a result of all contracts entered into by GUC.

20.0 INSPECTION AT BIDDER'S SITE

GUC reserves the right to inspect, at a reasonable time, the item, plant, or other facilities of a prospective Provider prior to contract award and during the contract term as necessary for GUC's determination that such item, plant, or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the contract. Provider may limit GUC's access to restricted areas.

21.0 AVAILABILITY OF FUNDS

Any and all payments of compensation of this specific transaction and any continuation or any renewal or extension are dependent upon and subject to the allocation of GUC funds for the purpose set forth in this Agreement.

22.0 GOVERNING LAWS

All contracts, transactions, agreements, etc., are made under and shall be governed by and construed in accordance with the laws of the State of North Carolina.

23.0 ADMINISTRATIVE CODE

Bids, proposals, and awards are subject to applicable provisions of the North Carolina Administrative Code.

24.0 EXECUTION

In the discretion of GUC, failure of a duly authorized official of Provider to sign the Signatory Page may render the bid invalid.

25.0 CLARIFICATIONS/INTERPRETATIONS

Any and all questions regarding these Terms and Conditions must be addressed to the GUC Buyer II. Do not contact the user directly. **These Terms and Conditions are a complete statement of the parties' agreement and may only be modified in writing signed by Provider and the GUC Buyer II.**

26.0 SITUS

The place of all contracts, transactions, agreements, their situs and forum, shall be North Carolina, where all matters, whether in contract or tort, relating to the validity, construction, interpretation, and enforcement shall be determined.

27.0 TERMINATION OF AGREEMENT

GUC or Provider may terminate this Agreement for just cause at any time. Provider will be paid for all time and expenses incurred as of the termination date. Termination for just cause by either party shall be by certified letter and shall be effective thirty (30) days after signed and acknowledged receipt of said letter. Just cause shall be based on reasonable grounds, and there must be a fair and honest cause or reason for such action. The causes for termination, include, but are not limited to: (1) Provider's persistent failure to perform in accordance with the Terms and Conditions, (2) Provider's disregard of laws and regulations related to this transaction, and/or (3) Provider's substantial violation of the provisions of the Terms and Conditions.

28.0 DELIVERY

Shipments will be made only upon releases from a purchase order issued by GUC in accordance with GUC's current needs.

Time is of the essence with respect to all deliveries under this Agreement.

Delivery of all equipment, materials, or supplies shall be made Free on Board (FOB) GUC Warehouse, 801 Mumford Road, Greenville, North Carolina 27834, unless otherwise specified. The agreed price for such equipment, materials, or supplies shall include all costs of delivery and ownership, and risks of loss shall not be transferred from Provider to GUC until express written acceptance of delivery and inspection by GUC. Delivery hours are between 8:00 AM and 4:30 PM Monday-Friday only. **GUC's purchase order number is to be shown on the packing slip or any related documents.** GUC reserves the right to refuse or return any delivery with no purchase order number or which is damaged. GUC will not be charged a restocking fee for any delivery which is refused or returned.

29.0 INDEMNITY PROVISION

Provider agrees to indemnify and save GREENVILLE UTILITIES COMMISSION of the City of Greenville, Pitt County, North Carolina, and the City of Greenville, North Carolina, its co-owners, joint venturers, agents, employees, and insurance carriers harmless from any and all losses, claims, actions, costs, expenses including reasonable attorney fees, judgments, subrogations, or other damages resulting from injury to any person (including injury resulting in death), or damage (including loss or destruction) to property of whatsoever nature of any person arising out of or incident to the performance of the terms of this Contract by Provider, including, but not limited to, Provider's employees, agents, subcontractors, and others designated by Provider to perform work or services in, about, or attendant to, the work and services under the terms of this Contract. Provider shall not be held responsible for any losses, expenses, claims, subrogations, actions, costs, judgments, or other damages, directly, solely, and proximately caused by the negligence of Greenville Utilities Commission of the City of Greenville, Pitt County, North Carolina. Insurance covering this indemnity agreement by the Provider in favor of Greenville Utilities Commission of the City of Greenville, Pitt County, North Carolina, and the City of Greenville, North Carolina, shall be provided by Provider.

30.0 FORCE MAJEURE

Neither party shall be considered in default in the performance of its obligations hereunder to the extent that the performance of any such obligation is prevented or delayed by any cause, existing or future, which is beyond the reasonable control of such party. In any such event of force majeure, the parties shall advise each other of such event, and the parties shall negotiate an equitable adjustment to their respective obligations under this Agreement.

31.0 WARRANTY(IES)

The Provider hereby includes all warranties, whether expressed or implied, including, but not limited to, the Implied Warranty of Merchantability and the Implied Warranty of Fitness for a Particular Purpose.

32.0 INTEGRATED CONTRACT

These Terms and Conditions, Instructions to Bidders, Specifications, and the selected Provider's bid represents the entire contract between the Parties. No verbal or other written agreement(s) shall be held to vary the provisions of this Agreement.

33.0 CONTRACT PROVISIONS

Each of the provisions of these Terms and Conditions shall apply to the full extent permitted by law, and the invalidity in whole or in part of any provision shall not affect the remainder of such provision or any other provisions.

34.0 NOTICES

Notices to the Parties should be sent to the names and addresses specified below:

Cleve Haddock
Purchasing Department, Buyer II
Greenville Utilities Commission
P.O. Box 1847
Greenville, NC 27835-1847

Bill Darty
Fleet Manager
Greenville Utilities Commission
P.O. Box 1847
Greenville, NC 27835-1847

Vendor Specified on Page 1 of Section III when awarded.

GREENVILLE UTILITIES COMMISSION

By: _____
Anthony C. Cannon

Title: General Manager/CEO
(Authorized Signatory)

Date: _____

Attest: _____

Name (Print): Amy Carson Quinn

Title: Executive Secretary

Date: _____

(OFFICIAL SEAL)

COMPANY NAME:

By: _____

Name (Print): _____

Title: _____
(Authorized Signatory)

Date: _____

Attest: _____

Name (Print): _____

Title: Corporate Secretary

Date: _____

(CORP. SEAL)

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Control Act.

By: _____
Jeff W. McCauley

Title: Chief Financial Officer

Date: _____

APPROVED AS TO FORM AND LEGAL CONTENT:

By: _____
Phillip R. Dixon

Title: Commission Attorney

Date: _____