CITY OF CONCORD
CONCORD, NORTH CAROLINA

FOR

BID# 2255
ONE (1) 40' HYDRAULIC TELESCOPIC AERIAL DEVICE
&
ONE (1) 45' SHEAVE HEIGHT HYDRAULIC DIGGER DERRICK

FOR

ELECTRIC SYSTEMS DEPARTMENT

ANNOUNCED DATE: FRIDAY, JANUARY 30, 2015

DUE DATE: THURSDAY, FEBRUARY 19, 2015

TIME: 2:00 PM
IN CONFERENCE ROOM C
ALFRED M. BROWN OPERATIONS CENTER
850 WARREN C. COLEMAN BOULEVARD
CONCORD, NORTH CAROLINA 28025

REQUEST FOR BID

The City of Concord will receive sealed bids on Thursday, February 19, 2015 at 2:00 PM, in Conference Room C, Alfred M. Brown Operations Center, 850 Warren C. Coleman Boulevard, Concord, North Carolina 28025. Said proposals will be publicly opened and read for:

BID# 2255
ONE (1) 40' HYDRAULIC TELESCOPIC AERIAL DEVICE
&
ONE (1) 45' SHEAVE HEIGHT HYDRAULIC DIGGER DERRICK

Copies of the specifications if not included in the bid can be obtained by contacting the Purchasing Department, Alfred M. Brown Operations Center, 850 Warren C. Coleman Blvd., P.O. Box 308, Concord, N.C. 28025. Telephone # 704-920-5441, Fax # 704-785-8856.

NC General Statutes, including G.S. §143-129, and the city of Concord, NC General Specifications and Instructions to bidders will govern the RFB and award of the contract.

The City of Concord reserves the right to reject any or all bids.

Sid Talbert
Purchasing Manager
City of Concord, N.C.

In accordance with state law (G.S. 143.129), the award shall be made to the lowest responsible, responsive bidder, taking into consideration quality, performance, the time specified in the bid. Prices should be quoted for each line as well as a price for the total award.

Each bid must be submitted in a sealed envelope, so marked as to indicate its contents when being opened. **All bids should be marked BID #2254 ONE (1) 40' HYDRAULIC TELESCOPIC AERIAL DEVICE & ONE (1) 45' SHEAVE HEIGHT HYDRAULIC DIGGER DERRICK**

An authorized official of the firm must sign the bid.

The vendor will be required to submit a written request for payment. Payment will depend on projected delivery date stated in the bid for items and certified acceptable by Daniel Nuckolls – Fleet Services Director, for City of Concord, P.O. Box 308, Concord, North Carolina 28025. Telephone# 704-920-5431. Questions concerning bid requirements or specifications should be directed to the Purchasing Manager, Alfred M. Brown Operations Center, 850 Warren C. Coleman Boulevard, P.O. Box 308, Concord, NC 28025. Any changes in specifications will be in writing in form of an addendum and furnished to all bidders. Verbal information obtained otherwise will not be considered in the awarding of bids. No changes to specifications will be permitted within (5) days to the bid opening.

Instructions for preparation and submission of a bid/proposal are contained in the attached packet. Please note that specific forms for submission may be required. Any changes to the conditions and specifications must be in the form of a written addendum to be valid; therefore, the Purchasing Department will issue a written addendum to document on all approved changes. Any bid submitted which does not acknowledge the receipt of an issued addendum will not be considered. Bidders should have no contact with elected officials or appointed officials except the Purchasing Manager during the bidding process. Any such contact will subject bidders to immediate disqualification. Questions regarding specifications should be directed to the Purchasing Manager. A bid proposal from your firm will be appreciated.

Bid Proposal

City of Concord
P.0. Box 308
Concord, North Carolina

Gentlemen/Ladies:

The undersigned, as bidder, hereby declares the proposal is made without connection with any other person, company, or parties making a similar bid or proposal, and that it is in all respects fair and in good faith without collusion or fraud. The Bidder has carefully examined the annexed form of the specifications and instructions to the bidder and hereby declares that he will furnish the material called for in a manner prescribed in the specifications and instructions to bidders for the following prices listed.

PRICE _____

DELIVERY DATE_____

COMPANY NAME _____

AUTHORIZED SIGNATURE _____

TYPE NAME AND TITLE _____

FEDERAL ID # _____

NC CONTRACTORS LICENSE # _____

TELEPHONE # _____

Note:
This signature page must be signed for your bid to be valid.

GENERAL SPECIFICATIONS & INSTRUCTIONS TO BIDDERS

Scope

It is the intent of this bid invitation to obtain proposals for supplying the materials, supplies and/or equipment listed on the Proposal Sheet. You are requested to submit your bid on the enclosed Proposal Sheet and return the entire sealed package to Sid Talbert, Purchasing Manager, City of Concord (hereinafter "City"), PO Box 308, Concord, NC 28026-0308 no later than the time specified in the bid advertisement. Bidders will be required to comply with all applicable statutes, regulations, and local ordinances, ect. And those attached to and made a part of the proposal.

Marking of Bid Envelopes

Bids must be contained in a sealed envelope, plainly marked, showing the bid name, bid number, date, time for opening bids and the bidder's name.

Late Bids Not Considered

Bids received after the stipulated bid opening date and time will not be considered.

Compliance With Specifications

Your bid must be in strict compliance with the specifications and offer the same or equal equipment. Exceptions are to be listed separately in a letter that will become a part of your proposal; otherwise, it is fully understood that the equipment offered is exactly as specified. The City reserves the right to allow or disallow minor deviations from the specifications in order to purchase what is best for the City from a standpoint of quality, price and service to be rendered.

Standard Equipment

To protect the interest of the City, the bidder guarantees that the equipment bid is standard equipment with parts regularly used for equipment offered. There must be no parts or attachments substituted or applied contrary to the manufacturer's recommendations and standards unless expressly called for in the specifications.

Warranty

In submitting a bid, the bidder warrants that all goods furnished shall be free from all defects and shall conform in all respects to the Technical Specifications established herein. Unless otherwise specified, all items shall be guaranteed for a minimum of one (1) year against defects in material and workmanship. At any time during that period, if a defect should occur in any item, that item shall be repaired or replaced by the seller at no cost to the buyer except where it can be shown that the defect was caused by misuse. The bidder expressly warrants that all items bid are fit and sufficient for their intended purpose. If the specifications contain a statement of the particular

purpose for which the goods will be used, the goods offered by bidder shall be fit for this purpose.

Shipping

All prices are to be quoted f.o.b. Concord N.C. delivered unless otherwise specified. Risk of loss and/or damage shall be upon the seller until such time as the goods have been physically delivered and accepted by the buyer.

Unit Prices to Prevail

Prices shall be submitted on per unit basis by line item. In the event of a disparity between the unit price and the extended price, the unit price shall prevail.

Bid Price Corrections

All prices and notations shall be written in ink or typed. Changes or corrections made on the bid form must be initialed by the individual signing the bid. No corrections will be permitted once bids have been opened.

Withdrawal of Bids

Bids may be withdrawn at any time prior to the time specified for the bid opening upon written or personal request of the bidder. No bid may be withdrawn for a period of sixty (60) days after the scheduled bid opening time and date. Negligence on the part of the bidder shall not constitute a right to withdraw the bid subsequent to such bid opening.

Use of Brand Names and References

Unless otherwise stated, the use of manufacturer's names and product numbers are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish; otherwise it is fully understood that they shall furnish all items as stated.

Alternate Bids

Bid submitted as alternate which do not meet or exceed the minimum specifications shall be rejected except that minor deviations may be acceptable. The City shall be the sole judge of what is considered a minor deviation.

Time For Delivery

The time for delivery must be stated in calendar days on the Proposal Sheet and may be a factor in making awards, price notwithstanding.

Rejection of Bids

The City reserves the right to reject any and all bids.

Bonds

A 5% bid bond is waived for the purchases of apparatus, supplies, materials or equipment as stated in the cover section. A 100% performance bond is also waived.

Award

Award shall be made to the lowest responsible, responsive bidder, taking into consideration quality, performance, time specified in the bids for the performance of the contract.

Brochures and Literature

The proposal must be accompanied by descriptive literature marked, indicating the exact item(s) bid upon. The term "as specified" will not be acceptable.

Addendums

The City shall not be responsible for any oral instructions made by its employees or officers of the City with regard to bidding instructions, drawings, specifications or contract documents. Any changes to the specifications will be in the form of an Addendum, which will be mailed to all bidders who are listed with the Purchasing Department as having received the invitation or any other bidder who requests an Addendum.

Responsibility of Compliance With Legal Requirements

The bidder's products, service and facilities shall be in full compliance with any and all applicable state, federal, local, environmental and safety laws, regulations, ordinances and standards, or any standard adopted by nationally recognized testing facilities regardless of whether or not they are referred to in the invitation.

Taxes

The City of Concord is subject to 7% N.C. Sales & Use tax. Tax will not be shown on the proposal; however, invoices will indicate all applicable sales tax. The city is exempt from Federal Excise Tax and will provide a Federal Exemption number.

Terms and Conditions

Payment will be made by the City in full for all equipment delivered as soon after complete delivery and receipt of a correct invoice as can be processed in accordance with these specifications.

Any company submitting a "No Bid" response to a bid invitation should clearly mark the outside of the envelope.

Terms and Conditions attached to the bid by the bidder and made a condition of purchase may render the bid non-responsive and may be rejected by the City.

Terms and Conditions included herein are an integral part of the bid document and shall prevail, unless changes or attachments are agreed to and initialed by the City prior to the bid opening.

Introduction in Use of Goods: Demonstration

A demonstration may be required of the goods bid upon. The demonstration shall be at no cost to the City. If the bidder cannot make a demonstration within twenty days of the request, his or her bid may be rejected. Performance of the equipment at the demonstration must be made with the exact equipment offered in the bid and may be completed at the same time as competitive demonstrations.

Trade-ins

Goods listed for trade-in, if any, may be examined after contacting the Purchasing Department. Goods listed for trade-in are represented "as is" and "where is". Such goods will be released to the successful bidder after receipt of the new equipment and in the same condition as when examined, excepting normal wear and tear.

The City reserves the right to retain goods listed as trade-in if it is deemed to be in the best interest to do so.

Training/Safety

When requested or required, a factory-trained representative shall be present at the time of delivery to train City personnel in the use of and/or safety aspect of the equipment or chemical. The factory representative shall effectively train the City personnel in all aspects, including assembly, disassembly, operating procedures, safety and any other training necessary for its safe and effective use. Items received without sufficient training when requested will be set aside and payment withheld until sufficient training can be completed.

Training shall include OSHA related training in the handling of hazardous materials.

MSDS sheets must be sent with each order. Failure to provide MSDS sheets prior to or at the time of delivery will result in withholding payment until such sheets are received.

Service

All vehicles furnished under a bid shall receive without additional cost whatsoever the usual check-up, guarantees and adjustment identical to that which is normally furnished on vehicles sold to the general public.

Manuals

One parts, one service, and one operators manual shall be furnished with each type vehicle delivered if applicable to this bid.

Bankruptcy

Successful bidders shall execute a contract that contains the following language:

If any bankruptcy or insolvency proceedings are commenced against the contractor And are not dismissed within thirty (30) days after service of such proceeding on the Contractor, or if the contractor shall file petition in bankruptcy or for reorganization or To effect a plan or other arrangement with creditors, or be adjudicated bankrupt or make an assignment for the benefit of creditors, or be dissolved or liquidated, or shall Admit in writing its inability to pay its debts generally as they become due, or a receiver, trustee or liquidator of the contractor or of all or substantially all of the property of the contractor is appointed in any proceeding brought by the contractor, or if any such receiver, trustee, or liquidator is appointed in any proceeding against the contractor, and any such receiver, trustee or liquidator is not discharged within (30) days after service of such appointment on the contractor, this agreement shall be null and void.

W-9 Form

Prior to the first payment by the City under any contract awarded to the successful bidder, the successful bidder shall submit a complete and accurate W-9 form to the Purchasing Manager.

Dissolution of Corporate Status

Successful bidders shall execute a contract that contains the following language:

Failure to register the agent of the corporation or other business entity, if any, with the N.C. Secretary of State or voluntary, judicial or administrative dissolution of the corporation or other business entity shall automatically terminate this contract or agreement unless the bidder or contractor notifies the City of Concord in writing within 72 hours of the dissolution or failure to register the agent and makes satisfactory arrangements and/or guarantees with the City Purchasing Officer and City Attorney to fulfill the contractors obligations under the contract or agreement.

Concord NC Licenses and Taxes

ALL BIDDERS SHOULD BE IN COMPLIANCE WITH THE CITY OF CONCORD PRIVILEGE LICENSE TAX ORDINANCE AND AWARD OF BID WILL BE CONTINGENT UPON RECEIPT OF COPY OF LICENSE.

CITY OF CONCORD
850 Warren C. Coleman Blvd.
Concord, NC 28026

SPECIFICATIONS FOR A 45 FOOT HYDRAULIC TELESCOPIC AERIAL DEVICE

This specification is to set forth the specific requirements for a 40 foot to bottom of platform, hydraulic operated, telescopic aerial device equipped with single platform and with an aluminum line service body mounted on an appropriate chassis/cab. These insulated aerial device requirements shall also include an insulated lower arm insert, insulated telescopic upper boom and a dielectrically tested insulated control handle, with upper control isolation system at the boom tip, offering an additional layer of secondary dielectric protection for the operator.

This aerial device shall be to the manufacturer's standard. It shall be equipped with the manufacturer's equipment and accessories which are included as standard in the advertised and published literature for the unit. No such item of equipment or accessories shall be removed or omitted for the reason that it was not specified in the bid.

If it is necessary to bid alternate equipment or to take exceptions to the specifications as set forth, this must be so stated in your bid. For each item, please place an X in the appropriate space (Yes__ No__) to signify whether or not you are in complete compliance with the specification. Failure to follow the format or answer the specification may cause your bid to be disqualified. If you need extra space to describe your product, please attach extra sheets. When doing this, be sure your description references the appropriate question number.

GENERAL SPECIFICATIONS

		COMPLY YES	COMPLY NO
1.	40 Foot telescopic articulating aerial device with an insulating lower arm, insulating telescopic upper boom and a dielectrically tested insulating control handle, with upper control isolation system at the boom tip, for installation behind chassis cab, built in accordance to these standard specifications and to include the following features:	_____	_____
	A. Ground to Bottom of Platform Height: 40.6 feet at 10.9 feet from centerline of rotation (12.4 m at 3.3 m)	_____	_____
	B. Working Height – 45.6 feet (13.9 m)	_____	_____
	C. Maximum Reach to Edge of Platform: 30.1 feet at 15.2 foot platform height (9.2 m at 4.6 m)	_____	_____
	D. Pedestal: Post type pedestal design with large service	_____	_____

openings. Pedestal consists of fixture welded steel tubing 10.75 inch (273 mm) diameter. The 1.13 inch (28.6 mm) top plate of the pedestal is machined after welding to provide a rigid, flat mounting surface for the rotation bearing.

E. Rotation: Continuous rotation is provided by a hydraulic motor, close coupled to a worm-and-spur gear drive, equipped with extended shaft for manual rotation. For ease of service, the gearbox is conveniently mounted in the turntable and is accessible without removal of covers. The fully adjustable rotation drive assembly includes an external eccentric ring adjustment of the gearbox pinion gear to the main rotation bearing, permitting the **ability to easily adjust backlash**, reduce boom side play and ensure proper tooth contact over the life of the unit. This reduces life cycle cost. _____ _____

F. ANSI Category C, 46 kV and below dielectric rating _____ _____

G. Platform: Rated at **400 pounds** (181.4 kg) _____ _____

H. Platform can be placed on the ground when the telescopic/articulating booms are extended and articulated _____ _____

I. Turntable: Steel fixture-welded structure with a 1.0 inch (25.4 mm) steel bottom plate. The bottom plate of the turntable is machined after welding to ensure a flat mounting surface for the rotation bearing. A steel ring is welded to the bottom plate to stiffen the plate and to protect the rotation bearing. For ease of maintenance, the main control valve is located on the side of the turntable for convenience and ease of access and is covered for protection. _____ _____

J. Articulating Arm and Compensating Link: Articulation is from -5 to +79 degrees. The articulating arm is composed of four major components: arm, link, riser and articulating arm lift cylinder. The arm is composed of two steel sections separated by an insulting fiberglass section. The insulating fiberglass section provides 12 inches (305 mm) minimum clear isolation gap. _____ _____

K. Compensating System: By raising or lowering the _____ _____

articulating arm only, the upper (or telescopic) boom maintains its relative angle in relation to the ground. The work position is achieved through a single function operation allowing the operator to position more quickly and easily into the work area.

L. Lower Boom/Telescopic Upper Boom Articulation: Is from -25 degrees to +75 degrees. This is important because it allows the platform to be placed below grade when the boom is extended. This allows the operator to access the platform from the ground very close to the side of the body or access the platform from the ground even on uneven terrain such as off the side of a roadbed. _____ _____

M. Lower Boom/Telescopic Upper Boom Fiberglass Section: The lower boom is fabricated from a minimum 50,000 psi (345 MPa) yield, fixture welded, steel box structure. The telescopic boom pivot pin is high strength chrome plated steel with self lubricating, replaceable, non-metallic bushings. The upper boom fiberglass section has rectangular filament wound fiberglass, providing a minimum of 8.9 in (226 mm) of isolation when retracted and 41.7 inches (1059 mm) when extended. The inner surface of the fiberglass boom has acrylic polyurethane applied to provide a dry, smooth inner surface which will cause moisture to bead. The outer surface has a smooth gel coat finish. _____ _____

N. Platform Leveling System: The platform is leveled by hydraulic leveling means, contained within the telescopic boom and designed to **maintain the dielectric integrity of the aerial device.** Controls for leveling and tilting the platform are located at the platform and lower control station. Leveling for the platform includes two double acting cylinders incorporating counterbalance load holding valves to lock the platform in the event of hydraulic line failure. Cylinders are located at the platform and at the riser structure between the articulating arm and telescopic boom. The master-slave action of the cylinders maintains a level platform throughout the full range of boom articulation. _____ _____

P. ISO-Grip System: The patented ISO-Grip System includes components with high electrical resistance that _____ _____

GENERAL SPECIFICATIONS

can provide an additional layer of secondary electrical contract protection. This is not a primary protection system. The insulating single handle controls system is dielectrically tested to 40kV with no more than 400 microamperes of leakage. The upper control system includes the following components.

1. Control Handle: The control handle is green in color to differentiate it from other non-tested control systems. The handle also includes an interlock guard that reduces the potential for inadvertent boom operation.
2. Dashboards: The dashboards used for the upper control system are fabricated from composite materials.
3. Platform Mounting Bracket: The platform is mounted to a bracket fabricated from a composite material.
4. Auxiliary Hydraulic Control Covers: Non-tested blue silicon covers for auxiliary hydraulic actuators.
5. Auxiliary Electrical Control Switches: Non-tested electrical switches identified with blue indicators utilized for the auxiliary functions. The operator interface portion of the switches is non-metallic.

Covers: Non-tested non-metallic covers at the boom-tip, platform and upper control assemblies. These covers are not dielectrically tested, but provide some protection against electrical hazard.

Q. Controls: The upper control system utilizes an isolated electrical system at the platform that is powered by one of two 9 DVC batteries located at the platform. The fiber optic transmitter is part of the upper control system. The fiber optic transmitter creates a fiber optic signal which is sent through the fiber optic cables in the platform, boom, articulating arm, and turntable assemblies to the electrical system at the turntable. The fiber optic receiver and valve driver located at the turntable convert the fiber optic signal into electrical signals that in turn are utilized to power the solenoids on the main control valve. _____ _____

1. The upper control consists of a four function control handle and a group of switches. The four-function control activates: Articulating Arm **Raise and Lower**, Lower Boom **Raise and Lower**, Rotation **Clockwise/Counterclockwise,** and Upper Boom **Extend and Retract.**

	COMPLY YES	COMPLY NO

GENERAL SPECIFICATIONS

2. The single handle control contains an interlock safety switch that must be engaged and held before any of the four main boom functions can be actuated. The interlock switch must also be engaged before platform leveling and platform rotation functions can be activated.
3. The switches at the upper control station activate: Platform Leveling **Stow and Un-stow**, Platform Rotation **Clockwise/Counter-clockwise,** Hydraulic Tools **On/Off**, Backup Battery **On/Off** (Switches power source to backup 9-VDC battery), Emergency Stop of upper controls.
4. A lower control station is located above rotation on the curb side of the turntable. A selector switch is provided to positively override the upper controls. The individual lower control levers activate the Lower Boom, Rotation, Upper Boom, Articulating Arm and Platform Leveling.

R. Manual Lowering Valve: A valve located at the upper control station, easily accessible by the operator without having to remove any covers allows the lower boom to be lowered in the case of engine or hydraulic system failure. _____ _____

S. Hydraulic System: Open-center hydraulic system operates at a system pressure of 2,400 psi (16.5 MPa) and a free flow rate of 5.0 GPM (18.9 LPM). The system consists of a pump, hydraulic oil reservoir, and a main control valve. _____ _____

T. Hydraulic Tool Circuit: Control easily accessible to the operator activates the tool circuit which provides 5.0 GPM (18.9 LPM) at 2,000 psi (13.8 MPa). One set of HTMA quick disconnect couplings is located in a protected location at the upper control station. _____ _____

U. Diagnostic Pressure Test Quick Disconnect Couplings: are located at the turntable to allow a mobile service technician to quickly and easily attach a test gauge to verify system and tool circuit pressure. This reduces life cycle cost. _____ _____

V. Paint: Painted white with a **Powder Coat Paint** Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the ***inside*** as well as outside of fabricated parts then high temperature cured _____ _____

GENERAL SPECIFICATIONS

prior to assembly ensuring maximum coverage and protection

W. **Lifetime Structural Warranty** all of the following applicable major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, sub-bases and turntables. _____ _____

X. Manuals: Two (2) Operator's and two (2) Maintenance/ Parts manuals containing instructional markings indicating hazards inherent in the operation of an aerial device. _____ _____

Y. ISO 9001: This aerial device is designed in a facility that is certified to meet ISO 9001 requirements. _____ _____

Z. ANSI Category C, 46 kV and below dielectric rating _____ _____

Y. Manuals: Two (2) Operator's and two (2) Maintenance/ Parts manuals containing instructional markings indicating hazards inherent in the operation of an aerial device. _____ _____

_____ _____

2. ISO-Boom bolted and glued to the end of a shortened lower boom. Provides minimum isolation gap of 36.9 inches (937 mm) with a retracted upper boom and a clear maximum isolating gap of 41.7 inches (1059 mm) with an extended boom. _____ _____

3. Reservoir, 7 gallon (26.5 L) capacity, located at the right front of the cargo area _____ _____

4. Single one man end-mounted platform with rotator. Platform is 24 x 30 x 42 inches high (610 x 762 x 1067 mm), rated at 400 pounds (181.4 kg) capacity, and rotates hydraulically 180° about the boom tip. Includes Polyethylene platform liner for one man platform, 24 x 30 inches (610 x 762 mm), 50 kV rating (minimum) _____ _____

5. Engine start/stop with secondary stowage system, 12 VDC electric powered. Includes pump and motor, operates from chassis battery. Control is captive air operated from the platform and toggle switch operated from the lower controls. This option allows the operator to completely stow the booms _____ _____

GENERAL SPECIFICATIONS

and platform in a situation wherein the primary hydraulic source fails.

6. Throttle Control Interface for electronic engines, automatically increases engine speed when needed for proper hydraulic system operation _____ _____

7. Vane or gear type hydraulic pump installed in conjunction with power takeoff _____ _____

5. Power Distribution Module installed behind driver's seat _____ _____

   Power Distribution Module is a compact self-contained electronic system that provides a standardized interface with the chassis electrical system. The Power Distribution Module (PDM) is composed of a main board, approximately 12.0 x 13.0 inches (305 x 330 mm), designed to be mounted behind the driver's seat, inside the cab. Additional modules plug in to accommodate various options such as engine start/stop, variable throttle control, power take off, interface with Allison World transmission, and engine speed control module for specific engines and chassis. In addition to the above potential options, the PDM also provides up to 16 accessory circuits to be used for controlling other customer specified electrical components. The PDM includes built in test capabilities and diagnostic input, output and status LED's to quickly assess the PDM's performance. All components are circuit board mounted to facilitate replacement and reduce repair time should it be required.

6. Fall Protection System to include one body harness and decelerating type lanyard. Harness has adjustable slide buckle on shoulder straps, Velcro chest strap, and interlocking buckles on leg straps and nylon web loop fall arrest attachment on back. Lanyard has built in shock absorber that allows 28 inches (711 mm) of automatic adjustability. _____ _____

7. Soft platform cover for platform. _____ _____

8. Post Mount for installation of aerial device on a **Freightliner M2-106** 4x2 Chassis. _____ _____

9. Primary, vertical outrigger installed at front, behind chassis cab with 85.5 inches (2172 mm) of spread at maximum penetration _____ _____

		COMPLY YES	COMPLY NO
	GENERAL SPECIFICATIONS		
	and includes the following: A. Outriggers controlled by a solenoid operated valve with controls on each side of chassis rear in order to view outriggers when in motion. B. Outrigger/Unit Selector Control. Reduces the potential for inadvertent outrigger movement during machine operation if outrigger controls are bumped. C. Outrigger motion alarms D. Outrigger Interlocks will not allow the unit to be operated until the outriggers have been at least partially deployed. **NOTE**: Unit capable of being operated on a slope of up to 5 degrees.		
	UNIT AND HYDRAULIC ACCESSORIES		
10.	Hydraulic oil and lubricants	_____	_____
11.	Power take-off to be installed in conjunction with transmission	_____	_____
12.	Braden PD18 Hydraulic Front Winch And Bumper Package. 20,000 LB Planetary, Single-Speed Winch With Tool Box And RH Extended Shaft Winch/Capstan Control, Air, Single Axis Control Lever (Semi-Meterable), 200ft of ½" cable, quick hook. Controls located in cab LH side of driver seat over switch panel and front winch with guard.	_____	_____
13.	Spring Loaded Hose Reel Hydraulic hose outlets at ground plumbed to retractable hydraulic hose reel Hydraulic Hose Kit Two (2) 45' lengths of 1/2" hydraulic hose with hose stops.	_____	_____
	ALUMINUM BODY		
14.	148 Inch Aerial Service Line Body, suitable for installing on any chassis with an approximate usable CA dimension of 108 inches, built in accordance with the following specifications:	_____	_____
	Body Fabricated From 3003 Grade Mill finish Aluminum Type 304 stainless steel door latch and hardware Rotary latch, stainless steel Structural channel crossmembers Two (2) wheel chock holders each side	_____	_____

		COMPLY YES	COMPLY NO
	GENERAL SPECIFICATIONS		
	A. Body Dimensions:	_____	_____
	148 inch overall body length 93 inch outside width 46 inch body height 18 inch compartment depth 57 inch floor width		
	B. Compartmentation – Curb Side:	_____	_____
	First Vertical – Four (4) adjustable shelves with removable dividers. Inverter storage in top of compartment. Inverter shelf without lip to allow for mounting as high as possible. Second Vertical – Seven (7) material swivel locking material hooks (2-3-2) Third Vertical – Seven (7) material swivel locking material hooks (2-3-2) Horizontal – Two (2) fixed shelves with removable dividers on 8 inch centers Rear Vertical – Three (3) adjustable shelves with removable dividers on 4 inch centers		
	C. Compartmentation – Street Side:	_____	_____
	First Vertical – Three (3) adjustable shelves with removable dividers on 4 inch centers. Second Vertical – Three (3) adjustable shelves with removable dividers on 4 inch centers Third Vertical – Seven (7) material swivel locking material hooks (2-3-2) Horizontal – One (1) fixed shelf with removable dividers on 8 inch centers Rear Vertical – Six (6) material hooks, (2-2-2) Through Shelf – full length with hotstick brackets and rear access door		
14.	24 Inch Steel tailshelf installed at rear of body. Storage compartment with drop down door on each side under tailshelf including cross storage shelf. Storage to be adequate for shovels and post-hole diggers.	_____	_____
15.	Grab handle, installed one curbside at rear of tailshelf	_____	_____

		COMPLY YES	COMPLY NO
	GENERAL SPECIFICATIONS		
16.	Cable steps, installed one each side at rear of tailshelf	_____	_____
17.	Three point grab handle access on streetside of tailshelf for bucket access.	_____	_____
18.	Security door lock system with provisions for locking all compartments with central locking points, one each side at the front of the body to allow use of padlock	_____	_____
19.	Large diameter reel holder, (36" and 48" Diameter) Reel holder uprights to be removable and provide two size capacity. Spindle bar to come equipped with locking collar to secure different size reels. Holder uprights to be inserted into recessed sockets at end of tailshelf area. Sockets may be installed at rear of tailshelf to keep flush with cargo floor. When rack is removed the floor must be flat.	_____	_____
20.	Compartment top access step at rear of streetside body.	_____	_____
21.	Sloped ladder rack, raised ladder rack located on CS compartment top. Rack to be raised approx 12" to allow for pipe storage and clearance over generator.	_____	_____
22.	4" material lip around perimeter of CS compartment tops. Creates storage under ladder rack.	_____	_____
23.	Six (6) Fixed Locking Material Hooks, located on ladder rack.	_____	_____
	BODY ACCESSORIES		
27.	Heavy-duty boom support installed	_____	_____
28.	Mud Flaps, installed	_____	_____
29.	Triangular reflector kit	_____	_____
30.	Five pound fire extinguisher with mounting bracket, shipped loose	_____	_____
31.	Rubber wheel chocks, (pair) 10 inches long x 8 inches wide x 5-1/2 inches high (254 x 203 x 140 mm)	_____	_____
32.	Cone holder, two (2) ring style holders mounted off front winch bumper.	_____	_____

		COMPLY YES	COMPLY NO
	GENERAL SPECIFICATIONS		
33.	T225 Pintle hook (**50,000lb**) with frame reinforcement and two safety chain rings installed at 28 inches (+/- 1 inch) from ground to center of eye	_____	_____
34.	Glad hands for trailer air supply. Chassis supplied tractor package.	_____	_____
35.	Dock bumper kit		
36.	Possum belly storage area, punched metal enclosure under tailshelf behind pintle hook.		
	ELECTRICAL		
37.	LED Lights and reflectors in accordance with FMVSS lighting package, installed	_____	_____
38.	Four point LED strobe system, Wired battery hot	_____	_____
24.	LED Compartment strip lighting installed in each compartment. Wiring installed in loom with switch located in cab. Wired ignition hot with master switch on dash.	_____	_____
39.	Trailer receptacle (7-Way Pin), installed at rear	_____	_____
40.	Amber strobe light installed on post at left front of cargo area with switch on dash. Wired battery hot.	_____	_____
41.	Post mount LED spotlight installed one (1) each side of chassis	_____	_____
42.	Outrigger Motion Alarm: Provides audible alarm when any of the outriggers are in motion.	_____	_____
43.	Backup alarm, installed at rear	_____	_____
44.	Hour meter installed to record PTO operating hours	_____	_____
45.	One (1) 1800 watt inverter (12v DC to 120v AC) installed in first vertical compartment on curb side. Install recessed weatherproof 120V outlet at curbside rear of body.	_____	_____

		COMPLY YES	COMPLY NO
	GENERAL SPECIFICATIONS		
46.	Generator - Honda EU3000is, Locate on top of 1st Vertical curbside. One (1) 1800 watt inverter (12v DC to 120v AC) installed in first vertical compartment on curb side. Install recessed weatherproof 120V outlet at curbside rear of body.	_____	_____
47.	Two (2) telescopic post-mount LED flood lights. (Tele-Lite or approved equal) Flood to be Rectangular Flood Light (Hella #90600B or approved equal). One installed each side of unit on outrigger frame. Low stow position to clear rotation of lower boom.	_____	_____
48.	Install Rearview Systems back up camera kit, auto-on when in reverse, day/night mode, 5.6" LCD color monitor, 130 degree diagonal view angle and display mounted high up center of windshield.	_____	_____
49.	Switch panel for PTO and electrical accessories to be mounted on LH side of driver seat. Switches to be accessed from ground.	_____	_____
50.	Two (2) Betts LED flood lights. Location TBD.	_____	_____
	INSTALLATION		
51.	Mounting aerial device	_____	_____
52.	Painted white with a Powder Coat Paint Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the ***inside*** as well as outside of fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection	_____	_____
53.	Mounting body and accessories	_____	_____
54.	Painting body and accessories white with urethane enamel	_____	_____
55.	Non-Skid applied, all walking surfaces	_____	_____
56.	Safety and Instructional signs, installed	_____	_____
57.	Vehicle placard is to be placed in view of driver	_____	_____

		COMPLY YES	COMPLY NO
	GENERAL SPECIFICATIONS		
58.	Delivery of completed vehicle	_____	_____
	MISCELLANEOUS		
59.	This aerial device is designed in a facility that is certified to meet ISO 9001	_____	_____
60.	Three (3) year parts warranty	_____	_____
61.	Three (3) year labor warranty.	_____	_____
62.	One (1) year warranty for travel charges.	_____	_____
63.	Bidder is to supply a self-directed, computer based training (CBT) program. This program will provide basic instruction in the safe operation of this aerial device. This program will also include and explain ANSI and OSHA requirements related to the proper use and operation of this unit	_____	_____
64.	Warranty on structural integrity of the following major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbase and turntables	_____	_____
65.	Supply copy of manufacturer's warranty with bid	_____	_____
	CHASSIS		
66.	Freightliner M2-106 (Manufactured in NC) 4 x 2 Configuration with straight frame Usable Cab-To-Axle: 110 inches Gross Vehicle Weight Rating: 35,000 pounds Front Axle Weight Rating: 14,000 pounds* Rear Axle Weight Rating: 21,000 pounds Frame rails, 120,000 PSI yield Engine: Cummins Model, 300 horsepower, 860+ ft/lb torque Transmission, 5spd automatic, Allison Model 3500RDS Driver Controlled Locking Rear Differential Exhaust, single vertical on right side to allow clear access to power take off	_____	_____

COMPLY
YES NO

GENERAL SPECIFICATIONS

Fuel tank, single, 50 gallon capacity
Heavy duty cooling system
DEF tank filler to be same side as fuel fill.
Electrical Components:
- Batteries: 1400 CCA, Jump start terminal included
- Alternator: manufacturer, model, 130 amp
- Engine Block Heater 1,000 watt
- Dual electric horns
- Cigar lighter
- Body Builder wiring harness

Tires:
- Front: Michelin, 315/80R22.5 XZU-S
- Rear: Michelin, 11R22.5 XZY-3 Dual rear tires, Mud & Snow tread type

Cab:
- Tilting hood and fenders
- Tinted windshield and glass
- Air conditioning
- Winter cover for radiator
- Tractor Package
- Cruise control, electronic

Interior:
- Air Ride Driver Seat, passenger bench
- Tilt/Telescopic Steering Column
- Pinnacle Cab Interior
- Control panel switches for all electrical functions.
- Hourmeter
- Tachometer

Provide copy of chassis warranty at time of bid.

Bid as Option:
- Five (5) Year Transmission
- Seven (7) Year /150k Mile Engine Warranty

Completed unit is to be delivered to the following address, cleaned, with at least ¼ tank of fuel and ready to place in service:

CITY OF CONCORD
850 Warren C. Coleman Blvd.
Concord, NC 28026

COMPLY
YES NO

GENERAL SPECIFICATIONS

OPTION:

1. Dual Stability System: Torsion bar stabilizer installed on front and rear axle. Over the frame type torsion bars required for added ground clearance. Outrigger use available. Does not require override key activation.
Primary, vertical outrigger installed at front, behind chassis cab with 85.5 inches (2172 mm) of spread at maximum penetration and includes the following:

E. Outriggers controlled by a solenoid operated valve with controls on each side of chassis rear in order to view outriggers when in motion.
F. Outrigger/Unit Selector Control. Reduces the potential for inadvertent outrigger movement during machine operation if outrigger controls are bumped.
G. Outrigger motion alarms
H. Outrigger Interlocks will not allow the unit to be operated until the outriggers have been at least partially deployed.

NOTE: Unit capable of being operated on a slope of up to 5 degrees. **Builder to indicate if counterweight is needed to achieve full stability at time of quote.**

Counterweight (yes/no): _____ Weight: _____lbs.

USE OF OTHER NAMES AND REFERENCES:

Unless otherwise stated, the use of manufacturer's name and product numbers are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items stated.

BROCHURES AND LITERATURE:

Your proposal must be accompanied by descriptive literature (marked), indicating the exact items to be furnished. The term "as specified" will not be acceptable

City of Concord
850 Warren C. Coleman
Concord, NC 28025

SPECIFICATIONS FOR A 45 FOOT SHEAVE HEIGHT HYDRAULIC DIGGER DERRICK

This specification is to set forth the specific requirements for a 45 foot sheave height digger derrick, hydraulic operated, equipped with a steel line service body mounted on an appropriate chassis/cab.

This digger derrick shall be to the manufacturer's standard. It shall be equipped with the manufacturer's equipment and accessories which are included as standard in the advertised and published literature for the unit. No such item of equipment or accessories shall be removed or omitted for the reason that it was not specified in the bid.

If it is necessary to bid alternate equipment or to take exceptions to the specifications as set forth, this must be so stated in your bid. For each item, please place an **X** in the appropriate space (Yes__ No__) to signify whether or not you are in complete compliance with the specification. Failure to follow the format or answer the specification may cause your bid to be disqualified. If you need extra space to describe your product, please attach extra sheets. When doing this, be sure your description references the appropriate question number.

	GENERAL SPECIFICATIONS	COMPLY YES	NO
1.	45 Foot Hydraulic Derrick, **Rear mount**, designed for mounting over rear axle with a **Turntable winch**, built in accordance with standard specifications and to include the following features:	_____	_____
	Maximum Sheave Height 45 ft	_____	_____
	Maximum Horizontal Reach 35.0 ft	_____	_____
	Maximum Digging Radius 25.0 ft	_____	_____
	Elevation – From 80 degrees above horizontal to 20 degrees below horizontal	_____	_____
	Performance Ranges per the attached capacity chart.	_____	_____
	A. Unit meets or exceeds ANSI 10.31-2006	_____	_____
	B. Unit serial number placard clearly states compliance.		
	C. Unit is designed and manufactured in facilities that are certified to meet ISO 9001 requirements.	_____	_____
	D. Winch: 15,000 pound bare drum capacity turntable winch	_____	_____

GENERAL SPECIFICATIONS	COMPLY YES	NO
with 8.625" diameter drum to comply with ANSI 10.31 Section 4.10.4 for synthetic rope or 15,000 pound bare drum capacity boom tip winch. High torque hydraulic motor drives a self-locking worm gear winch. Counterbalance valves on motor provide reliable load holding		
E. Insulated, "46 kV and below"	_____	_____
F. Hydraulic Overload Protection System – activates when unit is exposed to overload condition. System prevents actuation of all functions that could add to the overload condition including: - Boom Lower - Intermediate Boom Extend - Third Stage Boom Extend - Winch Raise - Auger Dig System automatically resets when overload condition is relieved.	_____	_____
G. Hydraulic Side Load Protection relieves overload conditions by allowing rotation system to back drive.	_____	_____
H. System pressure gauges on all vehicle mounted main control stations.	_____	_____
I. Transferable Boom Flares include **adjustable alignment guides**.	_____	_____
J. Pole Guides – cylinder driven open/close and tilt **includes double pilot operated check valves** to support poles in both tilt directions. Also includes **tilt interlock** that prevents the upper boom from extending when the transferable flares are attached to the intermediate boom until the guides are articulated to the full up position.	_____	_____
K. Fiberglass Boom Tip with provisions for platform attachment.	_____	_____
L. Two-part load line attachment point on intermediate boom.	_____	_____
M. Full capacity fiberglass upper boom is round and is fabricated using a Centrifugally Cast process that provides a smooth surface finish inside and out that is easy to clean and is highly resistant to damage.	_____	_____

GENERAL SPECIFICATIONS	COMPLY YES	NO
N. Cylinders: Rods are chrome plated and ends are threaded and welded.	_____	_____
O. Bearings: Lift cylinder equipped with self-aligning bearings. All extending booms utilize **slide bearings**; there are **no roller bearings** on extending booms.	_____	_____
P. Proportional-Hydraulic Control System: The electrical control panel(s) and pilot hydraulic system provide easy to operate controls with superior metering. There are only **two hydraulic lines through rotation**. Hydraulic control valves for Rotation, Boom Elevation, Boom Extension, Digger and Winch are pilot operated and controlled by a proportional pilot system which provides full metering and feathering characteristics. There are **no hydraulic lines within operator control station**.	_____	_____
Q. Control system includes **single quick connect plug** for quick and easy installation of radio remote control system in the field upon request.	_____	_____
R. Standard/Low Speed Selector allows an operator to select standard or low functional speeds without respect to engine throttle. When in standard mode, each function operates at normal speeds. When in low mode, the maximum operational speed of each function is approximately half that of the standard speed, providing a more meterable feel. The function is separate from engine throttle control, giving the operator additional fine tuning speed control.	_____	_____
S. Hydraulic Dump Valve installed in pedestal: Provides extra protection by **diverting hydraulic flow away from the main control valve when unit is idle**. Dump valve solenoid is electronically activated when a function is operated.	_____	_____
T. Boom Storage Protection System – switch on main boom activates hydraulic overload protection system to prevent operator from inadvertently placing excessive down force on boom stow bracket.	_____	_____
U. Continuous rotation including worm drive rotation gearbox. With booms horizontal and fully extended, unit is able to rotate a 500 lbs load on winch line at boom tip up a 5 degree slope.	_____	_____

GENERAL SPECIFICATIONS	COMPLY YES	NO
V. Manual Override of Hydraulic Functions at main control valve.	_____	_____
W. Complete Hydraulic System including:		
1. Magnetic suction separator	_____	_____
2. Return line filter with cold oil indicator	_____	_____
3. Hydraulic pressure gauges	_____	_____
X. Outrigger/Boom Interlock System: Prevents boom from being unstowed until outriggers have been at least partially deployed.	_____	_____
Y. Outrigger/Unit Selector Control: Located near the outrigger controls, allows operator to divert hydraulic oil from machine circuit for outrigger operation. This reduces the potential for inadvertent outrigger movement during machine operation if outrigger controls are bumped.	_____	_____
Z. Outrigger Control Valves, located at tailshelf	_____	_____
AA. Outrigger Motion Alarm: Provides audible alarm when any of the outriggers are in motion.	_____	_____
BB. Back-up Alarm, installed	_____	_____
CC. Tool outlets at tailshelf – tool control valve is integral to the outrigger control valve on the vehicle curbside.	_____	_____
DD. Two (2) Operator's and Maintenance/Parts Manuals Containing instructional markings indicating hazards inherent in the operation of an aerial device.	_____	_____
EE. Painted white with a **Powder Coat Paint Process** which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-statically applied to the ***inside*** as well as outside of all fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection.	_____	_____
2. **Rear Mount pedestal** with **cylindrical steel tube** that transitions to a rectangular bridge substructure. Substructure **has storage space from front-to-back**, through pedestal. All other bed openings in pedestal are covered to prevent foreign objects from entering pedestal. All **outer race rotation bearing bolts are accessible from outside the pedestal** to facilitate torque	_____	_____

GENERAL SPECIFICATIONS	COMPLY YES	NO
inspection.		
3. Turntable Winch - Self-locking worm gearbox with locking counterbalance valves to provide reliable load holding. **Drum diameter is 8.63 inches** (219 mm); flange diameter is 15.75 inches (400 mm); drum width is 13.0 inches (330 mm)	_____	_____
4. Winch, normal speed (15,000 pounds). Full hydraulic line speed is 21.0 feet (6.4 m) per minute on first layer, and 39.0 feet (11.9 m) per minute on full drum.	_____	_____
5. Digger Derrick use only (no Personnel Handling)	_____	_____
6. Rear Mount – Front Entry Control Seat, installed on curb side of turntable, with single control station that includes:	_____	_____
a) Red emergency stop plunger.	_____	_____
b) Twin multi-function joystick controls with integral interlock switches and adjustable arm rests. Right hand joystick operates all boom functions. Left hand joystick operates digger and winch. Control panels may be reversed to accommodate left hand boom control.	_____	_____
c) Control joysticks include electrical interlocks that activate a hydraulic dump valve that provides hydraulic flow to main control valve.	_____	_____
d) Lighted controls for night use.		
e) Access door to close off entry opening. Hinge door on LH side of operator station. (door swing toward boom)		
7. Foot throttle – electronic control does not require any hydraulic plumbing.	_____	_____
8. Cover - for Front Entry Control Seat (covers seat and both control panels), vinyl	_____	_____
9. Radio Remote Controls, lower controls. *Note: Radio Remote Controls can be a stand alone system or can be used in conjunction with other control systems.* Radio Remote Control panel includes:	_____	_____
a) All derrick controls		
b) Unique transmitting address. Transmitter prevents identical frequency being utilized when many systems are working together.		
c) Battery charger.		
d) Alarm system with speaker mounted on turntable communicates initial activation of radio control system.		

GENERAL SPECIFICATIONS	COMPLY YES	NO
e) Red emergency stop plunger. **f) Glow in dark decals** g) Anti-Left storage cradle installed in cab. Includes flashing indicator light on dash when radio is out of storage cradle.		
10. Digger – right-hand storage - normal	_____	_____
11. Derrick Pole Guide Tong Protection	_____	_____
12. Digger, Two-Speed Mechanical Shift, 12,000 ft-lbs.	_____	_____
13. 1 Inch x 115 feet – installed, 15,000 pound rating, **for turntable winch**, "Samson" Spectron II rope with eye each end.	_____	_____
14. Swivel hook/downhaul weight, 8-1/2 ton capacity, 33 lbs.	_____	_____
15. Outriggers, A-frame, folding shoe, 153 inch maximum spread, for use as auxiliary or primary outriggers. Center structure is closed. **Permanent 18" x 18" Foot Pads installed.**	_____	_____
16. Outriggers, A-frame, folding shoe, 153 inch maximum spread, for use as auxiliary or primary outriggers. **Center structure is open allowing storage through outrigger frame. Permanent 18" x 18" Foot Pads installed.**	_____	_____
17. Power Distribution Module (PDM) installed. The PDM is a compact self-contained electronic system that provides a standardized interface with the chassis electrical system. It is composed of a main board, approximately 12.0 x 13.0 inches (305 x 330 mm), designed to be mounted behind the driver's seat, inside the cab. Additional modules plug in to accommodate various options such as engine start/stop, variable throttle control, power take off, interface with Allison World transmission, and engine speed control module for specific engines and chassis. In addition to the above potential options, the PDM also provides up to 16 accessory circuits to be used for controlling other customer specified electrical components. The PDM includes built in test capabilities and diagnostic input, output and status LED's to quickly assess the PDM's performance. All components are circuit board mounted to facilitate replacement and reduce repair time should it be required.	_____	_____
18. No Electronic Side Load Protection - unit will be equipped with standard hydraulic side load protection to help protect against	_____	_____

	GENERAL SPECIFICATIONS	COMPLY YES	NO
	rotation system damage resulting from excessive side loading of the boom by winching, digging, or the placement of screw anchors.		
19.	Floating Rotation System – Facilitates the setting of screw anchors by allowing the rotation system to float. Operator engages system by activating switch - located adjacent to the digger control - while simultaneously operating digger dig. Includes alarm and visual indicator. Boom rotation then follows the screw anchor as it continues into the ground.	_____	_____
20.	Reservoir Assembly – includes 60 gallon reservoir, filter, and magnetic suction separator. Includes 2-1/2" Gate Valve for shut off during maintenance. Locate reservoir in cargo area against bulkhead.	_____	_____
21.	Pump – Pressure Compensating, Piston Pump. Capable of 43gpm @ 2200psi.	_____	_____
	UNIT AND HYDRAULIC ACCESSORIES		
22.	Hydraulic oil and lubricants, installed	_____	_____
23.	Cab control, heavy duty SAE PTO to be air shifted on chassis with air brakes	_____	_____
24.	Subbase assembly for mounting of derrick pedestal and outriggers, to consist of 6 inch x 4 inch tubing (3/8 inch wall) each side of chassis frame with top and bottom plate. Storage area built in with stop at 10ft 6in. Single drop down door at rear. Door to have cut out for tamp hoses. Cut out protected with trim lock.	_____	_____
25.	Samson Nylite spool shield	_____	_____
26.	Nylon strap auger wind up sling	_____	_____
27.	Stanley TA-54 hydraulic tamp complete with three (3) feet of hose and quick disconnect couplings with three (3) foot handle	_____	_____
28.	(Set) of two 60 foot hydraulic hoses with two (2) quick disconnect couplings, dust caps, and fittings for hydraulic tool use installed on auto retracting reel. Locate reel behind outriggers and beside curbside cargo area wall.	_____	_____
29.	Braden PD18 Hydraulic Front Winch And Bumper Package.	_____	_____

GENERAL SPECIFICATIONS	COMPLY YES	NO

- Powered shaft extension to curbside
- 4-way cable roller guide
- Clutch controls on winch
- Semi-Meterable control in cab
- Semi-Meterable controls on front winch bumper. Guard for control handle.
- E-Stop with ring guard
- Hydraulic system "tie-in" components
- Storage box on streetside
- Primed and painted black

30. 250' of ½' IWRC wire rope with eye, PD16A – ¾" quick hook and rubber strap winch line holder. _____ _____

31. Quick hook (wide-mouth type) _____ _____

32. Stanley Model CT-10065A compression tool with Burndy Y35 head, 12 ton crimping force, for use with closed-center systems with 2,000 PSI operating pressure. Note: Confirm correct attachments provided. _____ _____

33. Pole Puller - with 7 feet of 5/8 inch high-tensile chain and base _____ _____

34. Flow divider, variable for installation of tools at tailshelf. Used in conjunction with hydraulic hose reel. _____ _____

35. Three (3) wide mouth quick hooks. Note: Confirm intended use. _____ _____

36. Two (2) 4ft x 1/2" wire sling with small eye on each end to be used with quick hooks _____ _____

37. Two (2) Auger stowage brackets for 18" and 9" auger to be mounted on street side under pole rack and over compartment. To offset brackets for auger stems to store side by side. _____ _____

38. One (1) 9" auger (2-1/2 "hex), with carbide teeth and P-1650 point with carbide teeth. _____ _____

39. Auger assembly, 18 inch diameter, for 2 1/2 inch kelly bar, Pengo (or approved equal). Auger to have removable head. Provide carbide dirt and rock ripper bullet teeth auger head attachments. _____ _____

BODY

1. Aluminum Utility line body, suitable for installing on any single

rear axle chassis with 120 inch usable CA dimension. Body is built in accordance with our standard specifications, including:

A. Body: Fabricated from A40 grade 100% zinc alloy coated steel with the following minimum gauge thickness:

1/8" outside panels
1/8" top panels
1/8" end panels
1/16" inner door panels
1/16" outer door panels
18 gauge shelving, spangled steel
3/16" Treadbrite Aluminum Floor

B. Body Dimensions:

160 inch overall body length
94 inch outside width
46 inch body height
18 inch compartment depth
58 inch floor width

B. Compartmentation – Curbside:

1. First Vertical (26") – Six (6) adjustable locking swivel material hooks. Fixed shelf no lip in upper portion. Shelf to be as high as possible with enough room for 1800W Dimensions Inverter.
2. Second Vertical (26") – Access steps to cargo area (treadplate) with two (2) 45 degree bent grab handles. Include under step storage area with gas shock holder. Rain gutter channels either side for water and debris drainage. Note: Storage for extra chassis batteries needed for inverter
3. Third Vertical (26") – Six (6) adjustable locking swivel material hooks
4. Horizontal (58") – One (1) adjustable shelf with removable dividers on 8 inch centers
5. Rear Vertical (24") – Two (2) locking swivel material hooks. Outrigger housing inside compartment. Three (3) gallon water cask and bracket.
6. Through Shelf – Full length of streetside of body with indoor/outdoor carpet and rear door

C. Compartmentation – Streetside:

GENERAL SPECIFICATIONS	COMPLY YES	NO

1. First Vertical (26") – Six (6) adjustable locking swivel material hooks
2. Second Vertical (26") – Three (3) adjustable shelves with removable dividers on 4 inch centers
3. Third Vertical(26") – Three (3) adjustable shelves with removable dividers on 4 inch centers
4. Horizontal Horizontal (58") – One (1) adjustable shelf with removable dividers on 8 inch centers
5. Rear Vertical (24") – Five (5) locking swivel material hooks. Outrigger housing inside compartment.
6. Through Shelf – Full length of streetside of body with indoor/outdoor carpet and rear door

A. Standard Features: _____ _____

1. Fabricated From 3003 Grade Mill finish Aluminum
2. All doors are full, double paneled, self-sealed with built-in drainage for maximum weather-tightness. Electro-zinc plated, steel hinge rods extend full length of door. Door hinges are zinc alloy material attached with rivets.
3. Door handles are riveted to the outer doors panel. Back panel has opening for easy access.
4. All edges are either rolled or folded for strength and safety
5. Door header drip rail at top for maximum weather protection.
6. Aluminum formed fenders
7. Aluminum treated for extra good primer bond and rust resistance
8. Automotive underseal applied to body.
9. Prime painted
10. Automotive type non-porous door seals mechanically fastened to the door facing.
11. Structural channel crossmembers
12. Wheel chock holders installed two (2) each side of body in fender panel
13. Drop-in 2" x 6" pressure treated wooden tailboard
14. Master body security locking system
15. Gas cylinder door holders for all vertical doors
16. Type 304 Stainless Steel Rotary Paddle Latches on all doors
17. Chains on Horizontal doors

GENERAL SPECIFICATIONS	COMPLY YES	NO
18. Latch covers on all doors		
BODY ACCESSORIES		
101. An 18" tail shelf shall be installed. Storage compartments on each side including through shelf in floor channel. Side hinged doors with rotary paddle latch. (Note: Box to be approximately 12-14" deep. Must allow space between box and frame rail for outrigger control valve and plumbing.)	_____	_____
102. 4 "high flat bar retainer on top of tailshelf. Retainer extends from rear of body and 18" from each corner. Slots to hold 2 x 4 lumber across rear (furnish 2 x 4). Notch curbside portion of lip to accommodate vise receiver.	_____	_____
103. Side access step under curbside access, rigid, installed so that the step extends 2" beyond body. Step to be 22" wide to accommodate single outrigger pad holder on either side	_____	_____
104. Cargo floor access step for compartment top access.	_____	_____
105. Gripstrut catwalk on curbside compartment top. Raised for washout. Extend from curbside access area to operator access step.	_____	_____
106. Riding seat access step, gripstrut, installed on curbside compartment top.	_____	_____
107. Cable step located under each corner of tailshelf. Single gripstrut cable step to be mounted using channel and bolt.	_____	_____
108. Grab handle each side of tailshelf.	_____	_____
109. Gripstrut installed over dock bumper extension.	_____	_____
110. Pintle hook, T125 style or equivalent, with frame reinforcement and two safety chain rings installed at 28 inches (+/- 1 inch) from ground to center of eye. Pintle hook to have secondary latching.	_____	_____
111. Storage channel for hydraulic tamp. Locate in outrigger/unit through storage tunnel. Channel to have stop and notch for foot catch. Tamp to remain connected.	_____	_____

	GENERAL SPECIFICATIONS	COMPLY YES	NO
112.	One (1) Ten-pound B&C fire extinguisher with mounting bracket, installed in curbside rear vertical compartment.	_____	_____
113.	Rubber dock bumpers installed on curbside and streetside of frame at rear.	_____	_____
114.	Three-point grounding system tying unit, body, and chassis to a common ground with copper "U" bolts installed at curbside front and curbside rear of vehicle.	_____	_____
115.	Grounding cable assembly includes 50 ft. 2/0 stranded flexible cable with bracket permanently attached, and "C" type grounding clamps. Locate permanent location at drawing review.	_____	_____
116.	Install glad hand connectors at rear of vehicle. Tractor package to be supplied with chassis.	_____	_____
117.	Outrigger pads, 22" x 22" x 1" DICA.	_____	_____
118.	Outrigger pad holders to accept DICA pads. Holders under 1st and 3rd vertical compartments each side. Holders to be angled and have lip only. No chain or pendulum retainers.	_____	_____
119.	Pipe vise support installed on top of curbside rear of tailshelf, removable type, with Walton Vice 655.	_____	_____
120.	Wire reel storage support mounted in bed with 2 " spindle bar for 48 " reel. Provide pin retainers for spindle bar and locking spindle collar for smaller reels.	_____	_____
121.	Two (2) Cone holders, ring type. Installed on front winch bumper each side of four way roller.	_____	_____
122.	Provide D.O.T. triangle type road reflector kit mounted in cab.	_____	_____
123.	10-Unit medical kit with storage bracket - shipped loose, with door marking decal.	_____	_____
124.	Four (4) recessed tie down rings in cargo floor. Locate at drawing review.	_____	_____
125.	Install streetside pole racks with binder for carrying two (2) poles. Rear section of pole racks to be removable and stored upright on back of compartment in bed. Ratchet tie binders with 4" nylon straps installed on front side of each rack. J hook tie down attachment point to be accessible from ground level. Provision	_____	_____

	GENERAL SPECIFICATIONS	COMPLY YES	NO
	for decorative pole cushion.		
126.	Two (2) wheel chock holders each side of body. Supply two wheel chocks.	_____	_____
127.	Copper Storage Rack, to hold three copper reels. Largest reel 15"W x 14"dia.	_____	_____
128.	Material hook rail installed on SS cargo wall. 6 Locking Swivel hooks mounted to reinforced channel. Hooks throat to be 30" from cargo floor.	_____	_____
	ELECTRICAL ACCESSORIES		
129.	Lights and reflectors in accordance with FMVSS lighting package, installed	_____	_____
130.	Four (4) Point LED Strobe System. Four (4) 4" grommet mounted strobes. Two in front winch bumper and two in rear light channel. Wired battery hot with master switch.	_____	_____
131.	Compartment lighting. LED directional strip lighting provided in all compartments. Fused between each compartment. Wired ignition hot with master switch on dash.	_____	_____
132.	Berg or equivalent seven (7) pole electrical trailer connection installed	_____	_____
133.	Provide EPCO 500-PS electronic solid state brake controller for air brake equipped chassis.	_____	_____
134.	Two (2) Amber strobe light installed on curbside of boom storage support with master switch and indicator light installed in cab. Strobe light is to be visible from the front and rear of the vehicle.	_____	_____
135.	Outrigger Motion Alarm: Provides audible alarm when any of the outriggers are in motion.	_____	_____
136.	Backup alarm, installed at rear. Backup alarm adjusts automatically to provide from 87 to 112 decibels alarm, depending on ambient noise conditions. Alarm is installed in 4.5 inch (114 mm) diameter hole with rubber grommet and is wired to chassis backup lights. Installation at rear provides a protected environment for alarm, free from damage from road spray and debris.	_____	_____

GENERAL SPECIFICATIONS	COMPLY YES	NO
137. Sealed automotive plug-in connectors are made with a thermoplastic housing and silicon seals to withstand conditions of extreme temperatures (-55 degrees to +125 degrees Celsius). The connectors utilize a double positive lock and keeper system to ensure a reliable contact retention system.	_____	_____
138. Install modular in-cab accessory switch panel with dual lit switches for function identification and function activation. Switch panel located on left hand base of driver seat. Switches to be accessed from the ground.	_____	_____
139. Quick disconnect wiring harness for PDM or equivalent. Electronic body builder harness to be used in conjunction with chassis supplied harness.	_____	_____
140. One (1) 1800 watt inverter (12v DC to 120v AC) installed in first vertical compartment on curb side. Install recessed weatherproof 120V outlet at curbside rear of body.	_____	_____
141. Generator - Honda EU3000is, Locate on top of 1st Vertical curbside.	_____	_____
142. Two (2) telescopic post-mount LED flood lights. (Tele-Lite or approved equal) Flood to be Rectangular Flood Light (Hella #90600B or approved equal). One installed each side of unit on outrigger frame. Master switch in cab and switch at base of each light.	_____	_____
143. Hindsight 20/20 back up proximity warning system.	_____	_____
144. Two (2) LED Betts cargo lights. One located under boom support one located on back of pedestal.	_____	_____
145. Post mount spotlight installed one (1) each side of chassis	_____	_____
INSTALLATION		
146. Installation of body and accessories	_____	_____
147. Paint body White with urethane enamel	_____	_____
148. Derrick painted white with the Powder Coat Paint Process which provides a finish-painted surface that is highly resistant to chipping, scratching, abrasion and corrosion. Paint is electro-	_____	_____

GENERAL SPECIFICATIONS		COMPLY YES	NO
	statically applied to the ***inside*** as well as outside of fabricated parts then high temperature cured prior to assembly ensuring maximum coverage and protection		
149.	Safety and instructional signs, installed	_____	_____
150.	Vehicle height placard is to be placed in view of driver	_____	_____
151.	DOT Certification of completed vehicle	_____	_____
152.	Delivery of completed vehicle	_____	_____
153.	Direct Ship/Customer Installed Unit, includes a dielectric test performed at manufacturing facility and one final assembly manual shipped loose, placards installed	_____	_____
	MISCELLANEOUS		
154.	This derrick is designed and manufactured in a facility that is certified to meet ISO 9001	_____	_____
155.	Three (3) year parts warranty	_____	_____
156.	Three (3) year labor warranty.	_____	_____
157.	One (1) year warranty for travel charges.	_____	_____
158.	Bidder is to supply a self-directed, computer based training (CBT) program. This program will provide basic instruction in the safe operation of this aerial device. This program will also include and explain ANSI and OSHA requirements related to the proper use and operation of this unit	_____	_____
159.	Warranty on structural integrity of the following major components is to be warranted for so long as the initial purchaser owns the product: Booms, boom articulation links, hydraulic cylinder structures, outrigger weldments, pedestals, subbases and turntables	_____	_____
160.	Supply copy of manufacturer's warranty with bid	_____	_____
161.	A pre-paint inspection is required, bidder is to provide the necessary Transportation, food and lodging accommodations for two.	_____	_____
	CHASSIS		

	GENERAL SPECIFICATIONS	COMPLY YES	NO
39.	Freightliner (Mt. Holly Mfg. Facility) 4 x 2 Configuration with straight frame Usable Cab-To-Axle: 120 inches Gross Vehicle Weight Rating: 37,000 pounds Front Axle Weight Rating: 14,000 pounds Rear Axle Weight Rating: 23,000 pounds Frame rails, 120,000 PSI yield Engine: Cummins ISL Model, 300 horsepower, 860+ ft/lb torque Transmission, Allison Model 3500RDS Driver Controlled Locking Rear Differential Exhaust, single vertical on right side to allow clear access to power take off Fuel tank, single, 50 gallon capacity Heavy duty cooling system DEF tank filler to be same side as fuel fill. Electrical Components: **Three (3) Batteries:** 1400 CCA, Jump start terminal included Alternator: manufacturer, model, 130 amp Engine Block Heater 1,000 watt Dual electric horns Cigar lighter AM/FM Weatherband Radio with aux input. **Body Builder wiring harness.** Tires: Front: Michelin, 315/80R22.5 XZU-S Rear: Michelin, 11R22.5 XZY-3 Dual rear tires, Mud & Snow tread type Cab: Tilting hood and fenders Tinted windshield and glass Air conditioning Tractor Package Cruise control, electronic Interior: Air Ride Driver and Bench Passenger Seat Tilt/Telescopic Steering Column Pinnacle Cab Interior Control panel switches for all electrical functions. Hourmeter Tachometer	_____	_____

GENERAL SPECIFICATIONS	COMPLY YES	NO
Provide copy of chassis warranty at time of bid.		
Completed unit is to be delivered to the following address, cleaned, with at least ¼ tank of fuel and ready to place in service:	_____	_____
CITY OF CONCORD 850 Warren C. Coleman Blvd. Concord, NC 28026	_____	_____

USE OF OTHER NAMES AND REFERENCES:

Unless otherwise stated, the use of manufacturer's name and product numbers are for descriptive purposes and establishing general quality levels only. They are not intended to be restrictive. Bidders are required to state exactly what they intend to furnish, otherwise, it is fully understood that they shall furnish all items stated.

BROCHURES AND LITERATURE:

Your proposal must be accompanied by descriptive literature (marked), indicating the exact items to be furnished. The term "as specified" will not be acceptable

OPTIONS:

1. Install Rearview Systems back up camera kit, auto-on when in reverse, with day/night mode, 5.6" LCD color monitor, 130 degree diagonal view angle and display mounted in place of rearview mirror. Installed ILO Hindsight 20/20 Backup alarm system $ _____
2. Five (5) Year Transmission $ _____
3. Seven (7) Year /150k Mile Electronics and Engine Warranty $ _____
4. Deduct for item 20. "Floatation Rotation System" $ _____
5. Five (5) Year Parts and Labor Unit Warranty ILO 3yr. $ _____