

LEGAL NOTICE OF REQUEST FOR BIDS
City of Carlsbad, New Mexico

Rapid Extraction Module Vehicle
BID 2018-23

The City of Carlsbad is soliciting formal competitive sealed bids for a Rapid Extraction Module Vehicle for use by the Carlsbad Fire Department.

Bids must be received by the City of Carlsbad, Purchasing Manager, Room 115, Carlsbad Municipal Building, 101 N. Halagueno, Carlsbad, NM 88220 by **Wednesday, November 28, 2018 no later than 2:00 p.m. local time.**

Bids will be publically opened and read aloud at 2:00 p.m. on November 28, 2018, in Room 204 at the Carlsbad Municipal Building located at 101 N. Halagueno, Carlsbad, New Mexico 88220. Bids submitted after the due date/time will not be accepted.

Bid documents, and all related information is available on the City of Carlsbad website at the following address:

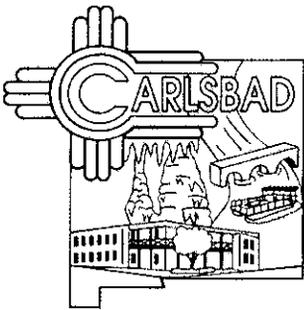
<http://www.cityofcarlsbadnm.com/purchasing.cfm>

Copies of the bid can also be obtained by contacting the Purchasing Manager – Matt Fletcher, at PO Box 1569, Carlsbad, NM 88221-1569, (575) 234-7905 or by email request to msfletcher@cityofcarlsbadnm.com.

A pre-bid conference will not be held.



/s/ Matt Fletcher, CPO
City of Carlsbad



RETURN INVITATION TO BID:

GSD/PD (Rev. 03/14)

City of Carlsbad

(Hand Deliver, FedEx and UPS Only)

101 N. Halagueno, Room 114

Carlsbad, NM 88220

(Standard Mail Only)

PO Box 1569

Carlsbad, NM 88221-1569

Invitation to Bid Price Agreement

Title:

Bid number: 2018- 23

Agency requested delivery: As Requested

Commodity code(s): 99894

Commodity Name: Rapid Extraction Module Vehicle

Bid Type : Formal Sealed Bid Opening

Place: 101 N. Halagueno, Carlsbad, NM 88220

Bid opening date: **November 28, 2018**

Time: 2:00 p.m.

Ship To:
(Various Locations)

Invoice:

City of Carlsbad
c/o Accounts Payable
PO Box 1569
Carlsbad, NM 88221-1569

If you have questions regarding this Bid, please contact:

Procurement Manager: Matt Fletcher, CPO

Email - msfletcher@cityofcarlsbadnm.com

Telephone No.: 575-234-7905

Bidder MUST complete and sign the following in order for Bid to be valid:

Company name: _____

Address: _____

Telephone no. : _____

Federal tax ID#: _____

Signature: _____

Print or type name: _____

Additional Bidder Information

Applications for in-state preference will no longer be processed through the State Purchasing Division. All resident businesses, veterans, and contractors will have to obtain preference number(s) with the NM Department of Taxation & Revenue. In order for the appropriate preference to be applied to any solicitation, there must be no federal funds involved, and vendor must submit a copy of their preference certificate with each solicitation. Applications are available for download at:

<http://www.tax.newmexico.gov/Businesses/in-state-veteran-preference-certification.aspx>

Veterans Only: The Resident Veterans Preference Certification enclosed herein **must** be completed and returned with bid in order to receive the preference.

E-mail: _____

Payment terms: Net 30 days

FOR MAILED-IN BIDS: Important- bids must be submitted in a sealed envelope with the bid number and opening date clearly indicated on the bottom left hand side of the front of the envelope. (Note: "No Bid" does not require a return of this document.) Sealed bids will be received at the above address until the above specified date and local time, and then publicly opened at the location specified above.

This Bid is subject to the "Terms and Conditions," shown on the reverse side of this page, and "Additional Bidding Instructions," if any.

If applicable, Bidder acknowledges receipt of the following amendments(s):

Amendment No. _____ Dated _____ Amendment No. _____ Dated _____

City of Carlsbad
Purchasing Department
Standard Terms and Conditions
(Unless otherwise specified)

1. **General:** When the City of Carlsbad Chief Procurement Officer or his/her designee issues a purchase document in response to the Vendor's bid, a binding contract is created.
2. **Variation in Quantity:** No variation in the quantity of any item called for by this order will be accepted unless such variation has been caused by conditions of loading, shipping, packing or allowances in manufacturing process and then only to the extent, if any, specified in this order.
3. **Assignment:**
 - a. Neither the order, nor any interest therein, nor any claim thereunder, shall be assigned or transferred by the Vendor, except as set forth in Subparagraph 3b or as expressly authorized in writing by the Procurement Officer or his/her designee. No such assignment or transfer shall relieve the Vendor from the obligations and liabilities under this order.
 - b. Vendor agrees that any and all claims for overcharge resulting from antitrust violations which are borne by the City as to goods, services, and materials purchased in connection with this bid are hereby assigned to the City.
4. **City Furnished Property:** City furnished property shall be returned to the City upon request in the same condition as received except for ordinary wear, tear and modifications ordered hereunder.
5. **Discounts:** Prompt payment discounts will not be considered in computing the low bid. Discounts for payment within thirty (30) days will be considered after the award of the contract. Discounted time will be computed from the date of receipt of the merchandise invoice, whichever is later.
6. **Inspection:** Final inspection and acceptance will be made at the destination. Supplies rejected at the destination for Non-conformance with specifications shall be removed at the Vendor's risk and expense, promptly after notice of rejection.
7. **Inspection of Plant:** The City of Carlsbad Procurement Officer or his/her designee may inspect, at any reasonable time, the part of the Contractor's, or any subcontractor's plant or place of business, which is related to the performance of this contract.
8. **Commercial Warranty:** The Vendor agrees that the supplies or services furnished under this order shall be covered by the most favorable commercial warranties the Vendor gives for such to any customer for such supplies or services. The rights and remedies provided herein shall extend to the City and are in addition to and do not limit any rights afforded to the City by any other clause of this order. Vendor agrees not to disclaim warranties of fitness for a particular purpose of merchantability.
9. **Taxes:** The unit price shall exclude all state taxes.
10. **Packing, Shipping, and Invoicing:**
 - a. The City purchase order number and the Vendor's name, user's name and location shall be shown on each packing and delivery ticket, package, bill of lading and other correspondence in connection with the shipments. The user's count will be accepted by the Vendor as final and conclusive on all shipments not accompanied by a packing ticket.
 - b. The Vendor's invoice shall be submitted duly certified and shall contain the following information: purchase order number, description of supplies or services, quantities, unit price and extended totals. Separate invoices shall be rendered for each and every complete shipment.
 - c. Invoices must be submitted to the City of Carlsbad Accounts Payable Department and NOT the City Procurement Officer. .
11. **Default:** The City reserves the right to cancel all or any part of this order without cost to the City, if the Vendor fails to meet the provisions of this order and, except as otherwise provided herein, to hold the Vendor liable for any excess cost occasioned by the City due to the Vendor's default. The Vendor shall not be liable for any excess costs if failure to perform the order arises out of causes beyond the control and without the fault or negligence of the Vendor, such

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causes include but are not restricted to, acts of God or the public enemy, acts of the State or Federal Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather and defaults of subcontractors due to any of the above, unless the City shall determine that the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Vendor to meet the required delivery scheduled. The rights of the City provided in this paragraph shall not be exclusive and are in addition to any other rights now being provided by law or under this order.

12. **Non-Collusion:** In signing this bid the Vendor certifies he/she has not, either directly or indirectly, entered into action in restraint of free competitive bidding in connection with this offer submitted to the City Procurement Officer or his/her designee.

13. **Nondiscrimination:** Vendor doing business with the City of Carlsbad must be in compliance with the Federal Civil Rights Act of 1964 and Title VII of the Act (Rev. 1979) and the Americans with Disabilities Act of 1990 (Public Law 101-336).

14. **The Procurement Code:** Sections 13-1-28 through 13-1-199 NMSA 1978, imposes civil and criminal penalties for its violation. In addition the New Mexico criminal statutes impose felony penalties for bribes, gratuities and kickbacks.

15. All bid items are to be NEW and of most current production, unless otherwise specified.

16. **Payment for Purchases:** Except as otherwise agreed to: late payment charges may be assessed against the City of Carlsbad in the amount and under the conditions set forth in Section 13-1-158 NMSA 1978.

17. **Workers' Compensation:** The Contractor agrees to comply with state laws and rules pertaining to Workers' Compensation benefits for its employees. If the Contractor fails to comply with Workers' Compensation Act and applicable rules when required to do so, this Agreement may be terminated by the City.

18. Bids must be submitted in a sealed envelope with the bid number and opening date clearly indicated on the bottom left hand side of the front of the envelope and returned to the City of Carlsbad Procurement Officer. Failure to label bid envelope will necessitate the premature opening of the bid in order to identify the bid number.

19. **Contractor Personnel:** Personnel proposed in the Contractor's written proposal to the Procuring Agency are considered material to any work performed under this Price Agreement. Once a Purchase Order or contract has been executed, no changes of personnel will be made by the Contractor without prior written consent of the City. Replacement of any Contractor personnel, if approved, shall be with personnel of equal ability, experience, and qualifications. The Contractor will be responsible for any expenses incurred in familiarizing the replacement personnel to insure their being productive to the project immediately upon receiving assignments. Approval of replacement personnel shall not be unreasonably withheld. The City shall retain the right to request the removal of any of the Contractor's personnel at any time.

20. **Subcontracting:** The Contractor shall not subcontract any portion of the Price Agreement without the prior written approval of the City. No such subcontracting shall relieve the Contractor from its obligations and liabilities under this Price Agreement, nor shall any subcontracting obligate payment from the Agency.

21. **Records and Audit:** The Contractor shall maintain detailed time and expenditure records that indicate the date, time, nature, and cost of services rendered during this Price Agreement's term and effect, and retain them for a period of three (3) years from the date of final payment under this Price Agreement. The records shall be subject to inspection by the City of Carlsbad upon request. The City shall have the right to audit billings, both before and after payment. Payment for services under this Price Agreement shall not foreclose the right of the Agency to recover excessive or illegal payments.

22. The foregoing requirements for Contractor Personnel, Subcontracting, and Audit shall be inserted into all subcontracts from the prime contractor to the subcontractor.

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Awards

Determination of Lowest Bidder-Following determination of product acceptability, if any is required, bids will be evaluated to determine which Bidder offers the lowest cost to the City in accordance with the specifications and terms & conditions set forth in the Invitation to Bid. The City of Carlsbad reserves the right to award this Invitation to Bid in total; by groups of items; on the basis of individual items; any combination of these which could result in a multiple award; or as otherwise specified in bid specifications; whichever, in his/her judgment, best serves the interest of the City of Carlsbad.

The City Procurement Officer or his/her designee reserves the right to accept and/or reject any and all bids, to waive technical irregularities, and to award to the Bidder whose bid is deemed to be in the best interest of the City of Carlsbad.

Special Notice-To preclude any possible errors and/or misinterpretations, bid prices must be affixed legibly in ink or typewritten. Corrections or changes must be signed or initialed by Bidder prior to the scheduled bid opening; failure to do so will be just cause for rejection of bid.

Bids may be withdrawn upon receipt of written request, prior to scheduled bid opening for the purpose of making any corrections and/or changes; such corrections must be properly identified and signed or initialed by Bidder. Resubmittal must be prior to scheduled bid opening for consideration.

After bid opening, no modifications on bid prices or other provisions of bid shall be permitted. A low Bidder alleging a material mistake of fact after bids have been opened may be permitted to withdraw the bid upon written request prior to award at the discretion of the City Procurement Officer or his/her designee.

F.O.B. Destination-Means goods are to be delivered to the destination designated by the user which is the point at which the user accepts ownership or title of the goods. Laws of New Mexico specifically prohibit acceptance of ownership of goods in transit. Any exception to F.O.B. Destination may cause bid to be declared nonresponsive.

If you are an individual with a disability and you require accommodations such as a hearing interpreter to attend our bid openings, please contact Matt Fletcher, CPO (575-234-7905) of this office at least five (5) working days prior to the scheduled bid opening.

New Mexico Employees Health Coverage

A. If Contractor has, or grows to, six (6) or more employees who work, or who are expected to work, an average of at least 20 hours per week over a six (6) month period during the term of the contract, Contractor certifies, by signing this agreement, to have in place, and agrees to maintain for the term of the contract, health insurance for its New Mexico Employees and offer that health insurance to its New Mexico Employees if the expected annual value in the aggregate of any and all contracts between Contractor and the City exceeds \$250,000 dollars.

B. Contractor agrees to maintain a record of the number of its New Mexico Employees who have (a) accepted health insurance; (b) declined health insurance due to other health insurance coverage already in place; or (c) declined health insurance for other reasons. These records are subject to review and audit by a representative of the state.

C. Contractor agrees to advise all of its New Mexico Employees of the availability of State publicly financed health care coverage programs by providing each of its New Mexico Employees with, as a minimum, the following web site link to additional information: <http://insurenemexico.state.nm.us/>.

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D. For purposes of this Paragraph, the following terms have the following meanings:

- (1) "New Mexico Employee" means any resident of the State of New Mexico employed by Contractor who performs the majority of the employee's work for Contractor within the State of New Mexico, regardless of the location of Contractor's office or offices; and
- (2) "offer" means to make available, without unreasonable restriction, enrollment in one or more health coverage plans and to actively seek and encourage participation in order to achieve the goals of Executive Order 2007-049. This could include State publicly financed public health coverage programs such as *Insure New Mexico!*

New Mexico Pay Equity Initiative

Contractor agrees, if it has ten (10) or more New Mexico employees OR eight (8) or more employees in the same job classification, at any time during the term of this contract, to complete and submit the PE 0-249 form on the annual anniversary of the initial report submittal for contracts up to one (1) year in duration. If contractor has (250) or more employees, contractor must complete and submit the PE250 form on the annual anniversary of the initial report submittal for contracts that are up to one (1) year in duration. For contracts that extend beyond one (1) calendar year, or are extended beyond one (1) calendar year, contractor also agrees to complete and submit the PE 0-249 or PE250 form, whichever is applicable, within thirty (30) days of the annual contract anniversary date of the initial submittal date or, if more than 180 days has elapsed since submittal of the last report, at the completion of the contract, whichever comes first. Should contractor not meet the size requirement for reporting at contract award but subsequently grows such that they meet or exceed the size requirement for reporting, contractor agrees to provide the required report within ninety (90) days of meeting or exceeding the size requirement. That submittal date shall serve as the basis for submittals required thereafter.

Contractor also agrees to levy this requirement on any subcontractor(s) performing more than 10% of the dollar value of this contract if said subcontractor(s) meets, or grows to meet, the stated employee size thresholds during the term of the contract. Contractor further agrees that, should one or more subcontractor not meet the size requirement for reporting at contract award but subsequently grows such that they meet or exceed the size requirement for reporting, contractor will submit the required report, for each such subcontractor, within ninety (90) days of that subcontractor meeting or exceeding the size requirement. Subsequent repayment submittals, on behalf of each such subcontractor, shall be due on the annual anniversary of the initial report submittal. Contractor shall submit the required form(s) to the City of Carlsbad Purchasing Department, and other departments as may be determined, on behalf of the applicable subcontractor(s) in accordance with the schedule contained in this paragraph. Contractor acknowledges that this subcontractor requirement applies even though contractor itself may not meet the size requirement for reporting and be required to report it self.

Two (2) copies of the Pay Equity Worksheet shall be submitted prior to Award by the prospective Awarded Vendor.

The PEJ0-249 and PE250 worksheet is available at the following website:
<http://www.generalservices.state.nm.us/statepurchasing/GuidesProcedures.aspx>

Carlsbad Fire Department

Rapid Extraction Module Vehicle Specifications Bid # 2018-23

Pre-Work Conference

A pre-work conference shall be held prior to construction to review contract specification, materials requirements, delivery schedule, and payment procedures. The conference, which may be accomplished by conference call, shall include the agency representative(s) and apparatus manufacturer representative(s), including the primary engineer working on this project. The date and time of the meeting, or conference call, will be scheduled by the agency representative(s) in consultation with any/all other needed parties.

Delivery Time

Delivery of the finished apparatus shall occur 270 days from the receipt of order.

Delivery Location

The customer shall complete the final inspection and accept the completed apparatus at manufacturing plant.

Training

An intensive training session shall be conducted by a manufacturing company employee with knowledgeable in the operations of all systems on the apparatus, shall provide a thorough orientation and hands on operation of the systems installed on the apparatus, and answer any questions that may arise regarding the operation of the chassis or apparatus. The training session shall be conducted at the manufacturing facility.

Superintendent Vehicle Configuration

The apparatus shall be a light brush type apparatus, without pump and tank, on a light duty chassis. The body shall be designed to withstand the rigors of off-road use and Wildland fire fighting. Specific details of the apparatus shall be as described below.

Chassis

The completed apparatus shall be mounted on a new Ford Super Duty F-550 XL series 4x4 chassis with four (4) full doors.

Gross Vehicle Weight Rating

The chassis shall be equipped with a Payload Plus Upgrade Package (68M) that include

- Increases GVWR from 18,000 pounds to 19,500 pounds
- Increases max rear GAWR to 14,706 pounds
- Low Deflection/High Capacity Rear Springs
- Upgraded frame
- Upgraded rear-axle

Carlsbad Fire Department

Rapid Extraction Module Vehicle

Specifications

Bid # 2018-23

Dual Rear Wheels on Chassis

The chassis shall be equipped with dual rear wheels. Mud flaps shall be installed on the apparatus body aft of the rear wheels.

Wheelbase

The wheelbase shall be no greater than approximately 179.00-inches.

Cab-to-Axle

The cab-to-axle measurement shall be approximately 60.00-inches.

Motor

The chassis shall be equipped with an electronically controlled turbo diesel engine. It shall be EPA compliant. The engine shall be rated at a minimum of 300 horsepower and 660 ft.-lbs. of torque.

Motor Air Intake and Filtration

The chassis shall be equipped with a heavy-duty air cleaner.

Options on the Motor

The following items shall be equipped by the Original Equipment Manufacturer, after market alternatives will not be accepted.

- Motor shall be equipped with dual alternators totaling 357 amps
- Motor shall be equipped with an OEM engine block heater

Battery

Two (2), 78 Amp, 12-volt maintenance free batteries totaling 750 cold cranking amps.

High Idle, Engine Speed Control

An NFPA 1906 compliant Engine Speed Control Device shall be installed to allow an increase in engine speed while the vehicle is parked.

Transmission

The chassis shall be equipped with a heavy duty Torq Shift 6-speed Select Shift automatic transmission with Tow/Haul mode.

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Transfer Case

An OEM all-wheel drive transfer case shall be an electronic shift-on-the-fly two (2) speed transfer case with auto locking hubs and manual override.

Suspension

The front suspension shall be coil springs with heavy duty gas shock absorbers. The front suspension shall have a minimum rating of 7,000 pounds. The rear suspension shall have a minimum 14,706 pounds rear leaf suspension with shocks.

Axles

The front drive axle shall have a minimum ground rating capacity of 7,000 pounds. The rear drive axle shall have a minimum ground rating capacity of 14,706 pounds. A manually controlled rear differential lock shall be installed if available from the OEM chassis manufacturer.

The axles shall each have a 4.88 axle gear ratio. Chassis shall be equipped with Low Deflection Spacer (86S) that includes 2.00-inch spacer blocks.

Wheels and Tires

The chassis shall be equipped with factory **gray steel** 19.5-inch wheels and 225/70R19.5 Michelin XDS tires. A full size matched spare tire with rim, 6-ton hydraulic jack, and lug wrench shall be supplied with the completed apparatus.

Fuel Tank

The chassis shall be equipped a single fuel tank with a capacity of 40-gallons.

Cab

The cab shall be configured with a four (4) full sized door crew cab.

Interior

All interior upholstery/hardware including seating, dashboard, floor coverings, steering wheel, dash components, sun visors and all trim and door panels shall be Ford OEM supplied vinyl and color coordinated.

- Six (6) upfitter switches located on the overhead console

Carlsbad Fire Department

Rapid Extraction Module Vehicle

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Exterior

The following Ford OEM supplied exterior hardware shall be included:

- Front fender vents
- Black or chrome plated grille
- Halogen headlights
- 3-blink lane change signal
- Roof clearance lights
- Solar tinted glass
- Fixed rear window
- Black or chrome plated door handles
- Under hood service light

Mirrors / Cab Door Locks and Windows

The mirrors shall be the OEM manual telescoping trailer tow mirrors remotely adjustable, heated glass, heated convex spotter mirrors, integrated clearance lights and turn signals.

Cab Door Locks and Windows

Chassis shall be equipped with power windows and door locks. The chassis windows on the driver and passenger sides and rear will be tinted. The front window tint will not be changed.

Seating

All seating positions shall have OEM certified seat belts.

- **Front** - OEM supplied 40/20/40 vinyl split bench with center portion removed for console
- **Rear** - OEM supplied 60/40 vinyl bench seat

Steering Wheel

The chassis shall have a tilt steering for maximum comfort and ease of operation by multiple drivers.

Cruise Control

The chassis shall have cruise control.

Air Conditioning and Heating

The chassis shall be equipped with OEM air conditioning and heating.

Carlsbad Fire Department

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Stereo

The chassis shall have an OEM factory installed electronic AM/FM radio with auxiliary input port. Radio shall include a minimum of four (4) speakers.

Regeneration Control

The Ford chassis shall be equipped with the Fire / Rescue Prep package. This package shall include the following features:

- Operator Command Regeneration (98R)
- Dual Heavy-Duty Alternators (67A)
- 7,000 pounds Front Axle Rating

This prep package will allow the end user to place the chassis into "forced" regeneration at a minimum of 30 percent. The prep package will also allow the end user to operate that chassis on an empty diesel exhaust fluid (DEF) tank for an extended period.

Summarized directions for regeneration operations shall be on a sticker that is affixed to the visor on the driver's side so that it is visible/readable when the visor is folded down.

Tow Package

Chassis shall be equipped with an OEM trailer tow package that includes an aftermarket trailer wiring kit. An OEM trailer brake controller shall be optioned on the chassis as well.

Center Console

The cab shall be equipped with an angled front, form-fitted control console located between the front driver's and officer's seats. This console shall be sized to accommodate the installation of a switch panel for the control of the emergency and general illumination lighting, siren controller, and customer-mounted radios. The switch panel shall consist of a sixteen (16) switch multiplex module with lighted switches. The switch module shall have back lighted identification plates on a non-glare panel surface. The switch panel shall be illuminated whenever the master switch is in the "ON" position. Panel light brightness shall dim automatically via the multiplexing system when the chassis headlights are turned "ON". The cab console shall be fabricated from steel, and powder coated with a black finish.

The following controls and switches shall be positioned from forward to aft on the center console as follows:

- One (1) LED blue/white flexible map light
- One (1) faceplate for customer specified radio
- An Innovative Products, Inc. Magnetic Mic base for the agency's radio
- One (1) microphone hanger for the electronic siren microphone
- One (1) switch panel with sixteen (16) switches
- One (1) electronic siren controller
- Two (2) cup holders

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- Two (2) 12-volt aftermarket power outlets
- Four (4) 12-volt USB outlets
- One (1) 6.00-inch storage compartment
- Two (2) adjustable arm rests

The specific console layout shall be discussed/determined during the pre-work conference and a drawing of the layout shall be provided to the end user for approval.

12-Volt Power Sources

The cab shall have four (4) additional 12-volt power sources provide on the center console for recharging cell phones, or other similar battery-operated devices. Two (2) of the power sources shall be dual 2.1A USB style ports and two (2) shall be plunger style, flush mounted in the center console and shall have rubber caps. The power sources shall be wired so they will be "active" when the BODY MASTER switch is in the ON position.

Wiring for Radio Installation

The chassis cab interior shall be wired with one (1) wiring bundle for connecting department mobile radio.

The bundle shall terminate in Deutsch brand connectors. The antenna wire(s) shall remain separate from the connector. A pigtail shall be included for the bundle for connecting the department radio into the wiring harness. The bundle including antenna wires shall be labeled RADIO 1 or RADIO 2. In addition, the individual wires in each pigtail shall be labeled (Battery Power, Ground, PA Input, etc.). The pigtail and antenna wire shall be a minimum of 3-feet or as long as required for installation of the radios.

All connections shall be made to the battery. Blade style fuse holders, using the same size fuses as the chassis, shall be installed in the pigtails for the constant power, but no fuses shall be installed.

The location for the radio installation and radio wiring bundles shall be determined in conjunction with the NFEP, overhead shall not be acceptable.

Wiring bundle for RADIO 1 shall consist of:

Harness side connector: DT06-08SA

Pigtail side connector: DT04-08PA

- One (1) Red 10-gauge constant power to the battery. This shall split into two (2) 14-gauge wires going into the cavities 1 and 2 on the connector.
- One (1) Red with Black Stripe 12-gauge connected to the chassis ignition, supplying power when either the vehicle ignition is in the "Auxiliary" or "Run" position. This shall split into two (2) 14-gauge wires going into the cavities 3 and 4 on the connector.
- One (1) Black 10-gauge ground wired direct to the battery. This shall split into two (2) 14-gauge wires going into the cavities 7 and 8 on the connector.

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- One (1) set of 18-gauge wires connected to the radio audio input for the PA system consisting of two (2) Light Blue wires going into the cavities 5 and 6 on the connector. If polarity is needed with the audio input for PA System, the positive shall be solid (cavity 5) and the negative shall have a White Stripe (cavity 6)
- One (1) antenna lead which shall be labeled coiled and secured near the RADIO 1 connector

Radio Model: Bendix King – KNG-P150

Antenna Lead and Base

One (1) antenna mount with coaxial cable shall be supplied and installed a minimum of 18.00-inches apart and centered on the chassis cab roof. The components shall consist of a brass ¾-inch New Motorola (NMO) style Antenna Mount and Double Shielded Coaxial Cable soldered to the base. The coaxial cable shall terminate in the cab console and have a minimum of four (4) feet of additional cable. The cable shall be routed from the chassis/cab headliner to the console in a concealed manner. All cables shall be labeled as to where they are installed on the roof. A protective rain cap shall be installed on the NMO antenna mount. The cap shall be labeled as to the respective pre-wired set by placing a "#1" on the rain cap itself.

Map Light

A LED flexible map light with switch shall be installed on the officer's side, passenger side, of the cab center console. The map light shall be selectable between blue and white light.

Backup Alarm

One (1) Federal Signal Evacuator series solid state back up alarm shall be provided at the rear of the apparatus, protected from impact and debris. The back-up alarm shall be wired to the reverse circuit of the transmission and shall provide an audible alarm to the rear of the apparatus when reverse gear is selected. The alarm shall have a volume of **107** decibels while in operation.

Skid Plates/Impact Protection

The chassis shall be equipped with impact protection/skid plates in the following locations:

- Lower radiator skid plate
- Engine skid plate
- Transfer case skid plate
- DEF tank
- Chassis exhaust system

The design shall allow for regular maintenance and checks of common items (oil drain, oil filter, differential fluids, grease fitting, fuel water separator, etc.) without major disassembly. These guards and shields shall be designed to prevent trapping common grasses and other small debris which may ignite. Reasonable component protection shall be provided as manufacturer deems necessary for operations in extreme environments and conditions for easily damaged electrical components, drive line, cooling system, and/or suspension components. Intent of the shielding is to assist in the protection

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of the undercarriage components from impact during road less operations and to assist in the survivability of the apparatus. Skid plates and impact protection shall be capable of supporting the weight of the apparatus without complete failure, a degree of distortion is allowed. All exterior surfaces of the skid plates/impact protection shall be coated with a minimum 1-2 mm black powder coated finish.

Ember Separator Screens

The chassis engine air intakes shall be equipped with two (2) ember separator screens fabricated from stainless-steel screen, one (1) for the main fresh air intake and one (1) for the foam pre-heater. The screens shall be fabricated in a manner that allows them to be easily removable without the use of tools for cleaning/inspection and provide complete protection from embers from entering the filter area of the air filter box.

The chassis cab air intake shall be equipped with an ember separator fabricated from stainless-steel screen.

The auxiliary pump engine air intake shall be equipped with an ember separator fabricated from stainless-steel screen.

Front Bumper and Brush Guard

The chassis shall be equipped with a custom heavy-duty plate style front bumper/grill guard. The front bumper/grill guard shall meet the requirements of NFPA 1906 current edition. The front bumper/grill guard shall be designed so that it does not affect the chassis manufactures warranty. The front bumper/grill guard shall be designed so that it does not negatively affect the chassis approach angle. The front bumper/grill guard shall be equipped with provisions for winch mounting. The front bumper/grill guard shall be equipped with two (2) pre-cut holes/grates to accommodate off-road driving light in a protected location. The front bumper/grill guard shall be equipped with two (2) integrated external tow eyes with a rated capacity enough to extricate the apparatus if necessary. Each tow eye shall be equipped with bolt-on D-Shackles with a rated capacity enough to extricate the apparatus if necessary. The weight of the front bumper/grill guard shall not exceed 175 lbs. All exterior surfaces of the entire grill guard assembly shall be coated with a minimum 1-2 mm flat black powder coated finish. The front bumper shall contain a license plate mounting position with holes or a bracket for mounting.

Rear Bumper Construction

The rear bumper shall be a minimum of 3.00-inches tall by 8.00-inches deep and extend across the entire width of the apparatus body. The bumper shall be fabricated from heavy-duty steel tubing and shall be powder coated black. The top of the bumper shall be a 4F stainless-steel CNC punched and perforated non-skid resistant surface. The bumper shall be designed to protect the apparatus body.

Rear Receiver Hitch

The chassis shall be equipped with a Class V rear receiver hitch with a 2.50-inch receiver opening and integrated OEM trailer brake controller. The rear bumper shall be designed so that it does not hinder the use of receiver in any way. A seven (7) pin RV style trailer plug shall be located on the vertical rear surface of the apparatus body adjacent to the rear receiver hitch. A 36.00-inch long seven (7) pin trailer plug extender/pigtail, with both male and female ends, shall be included with the completed apparatus.

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Tow Points

Two (2) rear tow eyes shall be attached to the chassis frame to allow towing of the apparatus without damage. The rear tow points shall extend through the rear panel just above the rear bumper and shall not interfere with the bumper during the normal twisting of the apparatus. All tow eyes shall be large enough to attach a threaded clevis but shall not be large enough to pass a tow strap through.

Apparatus Frame Construction

The apparatus body and compartments shall be supported with a frame of channel or tubular aluminum members. The frame shall extend under the wheel well areas at the front and rear and shall be attached to the compartments. The cross-members in the support system shall be spaced so that there is no more than ¼-inch of vertical deflection per 256 square inches when 250 pounds is evenly distributed over 40 square inches. All tubular aluminum shall have a minimum wall thickness of 3/16-inch and any channel shall be a minimum of ¼-inch thick. The frame shall be constructed to become an integral portion of the apparatus body.

The channel or tubular aluminum deck and compartment support frames shall be strong enough to support 5000 pounds in the bed area and 1000 pounds of equipment in each side compartment (the actual load capability of the completed apparatus may be limited by the GVWR).

Flexible Mounting

A spring-loaded body mounting system shall be used to mount the body to the chassis. This system shall be designed to allow independent movement between the body frame and the chassis frame protecting the module from the stresses and twisting rendered by the flexing of the chassis frame. As such, the body frame shall not rest on the chassis frame at any point. The mounts shall be pre-engineered for their intended use.

All the mounting hardware (nuts, bolts, washers) required for complete body installation shall be Grade 8 for sizes ½-inch and smaller, and Grade 5 for sizes larger than ½-inch. All nuts shall be self-locking style. All mounting brackets shall be powder coated black.

The body front shall be mounted utilizing fluorescent powder coated pre-engineering springs. The center mount shall consist of an 18-inch-long Delrin spacer mounted mid-length allowing the body frame to rest in a neutral position under full load. The rear body mounts shall be affixed via solid mounts to the chassis frame.

Apparatus Body Construction

The installation of hardware parts such as hinges, catches, handles, or knobs shall be accomplished to avoid damaging the hardware or the mounting surface. After fabrication, all parts shall be cleaned of the following: smudges; loose, spattered, or excess welding; metal chips or fillings; or any other foreign material which might detract from the intended operation, function, or appearance of the apparatus or its equipment. This would include any particles which could loosen or become dislodged during the normal expected life of the equipment. Whenever possible, this cleaning shall take place before the parts are assembled.

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Threaded parts or devices shall show no evidence of cross-threading, mutilation, or detrimental burrs. All screw type and rivet fasteners shall be tight to allow no relative movement between the attached parts. All bolts and screws shall not be tightened more than the SAE torque standard established for the grade, screw, and thread type.

The entire body shall be removable in its entirety without the disassembly of any compartments, flooring, or other structural components.

The body shall be designed to be approximately as wide as the outside wheel track on the rear axle. This will allow the apparatus to maneuver more easily in off-road environments. The body shall be approximately 98-inches-wide form side to side at the rear of the apparatus.

The top of the apparatus shall have a nonskid surface across the entire area. The non-skid shall be consistent along the tops of the body and be free of any dirt, grease, or foreign material. There surface directly under the independent body modules shall be a smooth gel coated finish to allow for a better seal between the bottom of the independent body modules and top of the body. Additionally, the top of the apparatus body shall support, without distortion, a walking person weighing up to 300 lbs.

The entire apparatus body shall be an independent structure fabricated from bonded and molded fiber reinforced composite panels and compartments. The resin shall be thermoset and shall not be subject to distortion or loss of structural integrity at temperatures at minimum of 350° Fahrenheit (176 Celsius). This shall provide a strong, lightweight, corrosion free structure that will withstand extremely high temperatures.

All fiberglass used in the construction of the body shall be grade "E" or "S," and the resin to glass ratio shall be a 30/70 ratio average or higher. The glass reinforced polyester shall not be less than 3/16-inch thick at any point on the body. Additionally, all coring materials shall have a minimum covering of 1/8-inch thick glass and resin on either side. All coring for bulkheads, partitions, floors, compartments, and doors shall be either PVC-based, rigid, closed cell structural foam, or composite material. Wood is not acceptable. The apparatus manufacturer shall determine the proper thickness and foam density for each application.

The fiber composite body shall allow for up to 30° flex off-center without causing body fatigue or component failure.

Wheel Well Area

The inside of each wheel well shall be lined with three (3) separate pieces of minimum 18-gauge stainless-steel sheet material to protect the underside of the entire body wheel well area. Each sheet shall be attached with stainless-steel screws or bolted with self-locking nuts. The use of rivets shall not be acceptable.

Compartment Door Construction

All compartment doors shall be integral in design and recessed into the apparatus body sides, sized to provide easy access to all interior areas of the compartment. All doors shall be consistent in fit and finish with the apparatus body. All doors shall be weatherproof and maintain contact with all points of the weather stripping. Weather stripping shall be bulb type, attached

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to the opening flange of the compartment opening. The interior surface of the compartment door shall be a white gel coat surface of a quality and uniformity equal to that of the exterior surface of the apparatus body. The compartment doors shall be cored with industrial grade closed cell PVC foam, or composite material, of the correct thickness.

Door Hinges and Retainers

Door Hinges

Doors shall be equipped with stainless steel hinges and hardware. Hinge pins shall be non-removable. All side compartment doors shall open to a 90-degree angle without hindering operations of other compartment doors. Doors shall not interfere or make contact with the body or any other open doors. Rubber bumpers and/or stainless-steel shields shall be in place to prevent damage wherever the potential exist for doors to come in contact with other apparatus components.

Retainers

All vertically-hinged, outward-opening compartment doors shall be provided with an over center door check to hold the door in the desired position. The door check shall be attached to the top of the door and fastened to a stainless-steel plate bolted into the body and door. The passenger side front compartment shall utilize a gas shock as the door opening device. This is used due to the full-length shelf pertaining to the hard-suction hose compartment. All vertically-hinged, outward opening compartment doors shall be capable of being closed with one hand, allowing a free hand to hold equipment or supplies.

Each horizontally hinged door shall be equipped with add-a-link style (removable) retainers and small rubber bumpers installed on the body fenders to allow full 180-degree opening for improved access into the compartment. A piece of black heat shrink shall be utilized over the crimp. **Any/all measures shall be taken to reinforce the mounting/fastening locations of the retainers to allow the end user to use the door as a "work bench".**

All horizontally-hinged, overhead lift-up, outward opening compartment doors shall be provided with two (2) extending, gas cylinder type hold open devices, one (1) mounted vertically on each side of the compartment door opening. The pressure rating of the gas cylinders shall be carefully matched to the size and weight of the compartment door and shall hold the compartment door securely open to a greater than 90° angle without additional support. The gas cylinder hold openers shall dampen the upward movement of the compartment door while opening and shall permit the closing of the compartment door without the need to release any type of manual locking devices. All horizontally-hinged, overhead lift-up compartment doors shall be capable of being closed with one hand, allowing a free hand to hold equipment or supplies.

Door Latches

Unless were noted, all compartment door latch assemblies shall be installed with threaded fasteners, shall not be welded, and shall be easily removable for servicing or replacement. All door latch assemblies shall be of a flush-mount, "D-Handle" design, with all external components fabricated from polished stainless steel. All latches shall be of a two-step slam-type design, with a single-point latching operation. Matching striker bolts shall be utilized with all latch assemblies. All striker bolts shall have slotted mounting holes and shall be attached with bolts to captive steel plates in the body structure for strength and ease of adjustment. The strikers shall be installed on a level axis and shall not be crooked. Welded striker bolts or plates shall not be acceptable.

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All hardware shall be corrosion resistant and suitable for its intended use. All nuts and bolts shall be stainless steel. Stainless steel nuts shall be the self-locking type. Each lock shall be configured so that in the vertical position it is "UNLOCKED" and in the horizontal position it is "LOCKED". A minimum of ten (10) keys shall be provided with the apparatus upon delivery.

Shelving Construction and Layout

Each shelf shall be one-piece pultruded fiberglass with nylon reinforced composite end caps and provision for dividers on 2.00-inch centers. Shelves shall be designed to maximize usable space within the compartment, prevent items from sliding off, and be adjustable. Shelves shall be capable of supporting a minimum 250 pounds unsecured load without being damaged or permanently distorted.

Street Side Front:

- Three (3) adjustable shelves

Street Side Center:

- One (1) adjustable shelf

Street Side Rear:

- Three (3) adjustable shelves

Curb Side Front:

- Three (3) adjustable shelves

Curb Side Center:

- One (1) adjustable shelf

Curb Side Rear:

- Open

Shelf Dividers and Retention Clips

One (1) package of shelf dividers and retention clips shall be provided for each shelf described elsewhere in this specification.

Composite Adjustable Shelf Channels

Vertically-mounted composite shelving tracks shall be provided and installed in all enclosed body compartments, except passenger's side lower rear compartment, for the current or future installation of infinitely-adjustable shelving, slide out trays or equipment brackets. The composite tracks shall allow for the shelves to be adjustable every two inches vertically utilizing nylon reinforced composite shelving standards with embedded stainless lock nuts.

Compartment Lighting

Each compartment shall have continuous LED light strips. The LEDs and electronics shall be enclosed in a 5/8-inch diameter Lexan tube that is sealed at both ends with rubber caps to create a waterproof environment and be suitable for mounting in a wet location. The tube shall rotate to adjust the beam direction as required. The lighting shall be secured with molded nylon mounting clips. The lighting in all compartments shall start at the bottom of the compartment and extend up the sides and across the top to provide lighting around the perimeter of the compartment. Placement of the light strips shall be such that they are protected from being impacted by compartment contents or during removal/placement of equipment. The purpose of the LED strip lighting is to provide even lighting throughout the compartment while minimizing shadows and dark zones caused by shelving or equipment stored in the compartment. The lighting shall carry a five (5) year warranty.

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Compartment Venting

Venting shall aid in air circulation and reduce fumes caused by fuel storage. When placed in doors, these round vents shall compliment fit and finish of the body and not impede door function. A permanent and compliant red/white placard noting fuel storage shall be in plain view and permanently affixed to the exterior surface of each door. Specific compartments that shall be vented shall be determined during the pre-work conference.

A permanent warning label shall be affixed to the exterior surface of the passenger side rear compartment. The label shall read "DANGER: Do Not Store Flammable Liquid or Combustible Material in this Compartment". See placard below.



Storage Compartments

Side compartments with flush doors shall be provided on both the driver and passenger sides for storage of equipment such as long handled hand tools, power tools, hoses, fittings, fuel, camping gear, and other supplies. Compartment interiors shall be completely open except for latch and shelving hardware; obstructions caused by body framework, lighting mounts, or other structural features shall not be accepted. The clear inside depth for each compartment shall be no less than 19.00-inches behind the closed door excluding latch hardware.

Each storage compartment shall be sealed to prevent the entry of water, dust or other foreign matter during operations, there shall be no compartment venting holes except those specified for fuel storage. To prevent water entry, compartment openings shall be equipped with rubber weather stripping door seals. Hardware attachments to any portion of a storage compartment shall be completely sealed with weatherproof silicon. Compartment seams shall be completely sealed with weatherproof silicon.

Compartments shall be able to successfully pass a weatherproof test. In order to pass, the interior of the compartment shall remain dry after water from a typical garden hose has been applied to the exterior of each compartment top and side door area for 2 minutes.

Each compartment shall be equipped with commercially available replaceable pop-out style drain plugs for drainage in the event of moisture entering the compartment. The drain plugs shall be positioned in locations that are least prone to damage. The drain plugs shall be sealing type to prevent dirt and debris from entering the compartment; plugs shall be removable from the inside only.

The bottom of each compartment shall be equipped with 3/4-inch thick Dri-Dek black floor matting. The matting shall provide a solid surface with even support that doesn't allow bending or folding. The matting shall be cut to fit the exact dimension of

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the compartment. The matting shall be removable without the use of tools. The matting shall provide maximum drainage and traction and feature fungus, mold and chemical resistance.

Driver's Side Compartments

The driver's side lower module of the apparatus body shall have approximate overall dimensions as specified. It shall consist of three (3) compartments, each with specified approximate clear depth behind the door when the door is shut. Each compartment shall have a "flow through" vent provided to supply air flow and minimize moisture unless designated as fuel storage.

Lower module dimension: 108.00-inches wide x 19.50-inches deep
Clear Depth: 19.00-inches

One (1) rescue style compartment shall be provided forward of the rear wheels, with approximate inside dimensions as specified. The door shall be vertically hinged and shall have approximate clear door opening as specified.

Compartment dimension: 36.00-inches wide x 41.00-inches high x 19.50-inches deep
Clear door opening: 30.00-inches wide x 33.75-inches high

One (1) compartment shall be provided center above the rear wheels, with approximate inside dimensions as specified. The door shall be a horizontally hinged, drop-down door, and have an approximate clear door opening as specified.

Compartment dimension: 40.00-inches wide x 22.00-inches high X 19.50-inches deep
Clear door opening: 37.00-inches wide x 14.75-inches high

One (1) compartment shall be provided aft of the rear wheels, with approximate inside dimensions as specified. The door shall be vertically hinged and shall have an approximate clear door opening as specified.

Compartment dimension: 30.50-inches wide x 41.00-inches high x 19.50-inches deep
Clear door opening: 23.50-inches wide x 33.75-inches high

A composite module shall be mounted to the top of the driver side lower compartments and shall have approximate dimensions as specified. The fit and trim of the compartment shall be integral with the lower compartments in both aesthetics and function. One (1) horizontally hinged, overhead lift-up door shall be located on the outboard side of the module. The forward-facing surface of the compartment shall be equipped with 1/8-inch polished aluminum tread plate to protect the module. The module shall be equipped with a drain to allow moisture out but prevent moisture from entering. The floor of the module shall be equipped with black Dri-Dek compartment matting that shall provide a solid surface and allow drainage.

Upper module dimension: 60.00-inches wide x 18.00-inches high x 18.00-inches deep

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Passenger's Side Compartments

The passenger's side lower module of the apparatus body shall have approximate overall dimensions as specified. It shall consist of three (3) compartments, each with specified approximate clear depth behind the door when the door is shut. Each compartment shall have a "flow through" vent provided to supply air flow and minimize moisture unless designated as fuel storage.

Lower module dimension: 108.00-inches wide x 19.50-inches deep
Clear Depth: 19.00-inches

One (1) rescue style compartment shall be provided forward of the rear wheels, with approximate inside dimensions as specified. The door shall be vertically hinged and shall have approximate clear door opening as specified.

Compartment dimension: 36.00-inches wide x 41.00-inches high x 19.50-inches deep
Clear door opening: 30.00-inches wide x 33.75-inches high

One (1) compartment shall be provided center above the rear wheels, with approximate inside dimensions as specified. The compartment shall be accessible from two (2) sides. The passenger's side door shall be a horizontally hinged, drop-down door, and have an approximate clear door opening as specified. The rear door shall be a horizontally hinged, drop-down door, and have an approximate clear door opening as specified.

Compartment dimension: 71.00-inches wide x 21.50-inches high x 19.50-inches deep
Passenger side door opening: 66.00-inches wide x 13.50-inches high
Rear door opening: 12.50-inches wide x 6.00-inches high

One (1) compartment shall be provided aft of the rear wheels, below the upper horizontal compartment, with approximate inside dimensions as specified. The door shall be vertically hinged and shall have an approximate clear door opening as specified.

Compartment dimension: 30.00-inches wide x 18.00-inches high x 19.50-inches deep
Clear door opening: 24.00-inches wide x 14.25-inches high

A composite module shall be mounted to the top of the driver side lower compartments and shall have approximate dimensions as specified. The fit and trim of the compartment shall be integral with the lower compartments in both aesthetics and function. One (1) horizontally hinged, overhead lift-up door shall be located on the outboard side of the module. The forward-facing surface of the compartment shall be equipped with 1/8-inch polished aluminum tread plate to protect the module. The module shall be equipped with a drain to allow moisture out but prevent moisture from entering. The floor of the module shall be equipped with black Dri-Dek compartment matting that shall provide a solid surface and allow drainage.

Upper module dimension: 60.00-inches wide x 18.00-inches high x 18.00-inches deep

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Load Bed Area

Load Bed Wall Liners

The load bed area shall be equipped with a minimum 1/8-inch smooth aluminum sheeting permanently attached to the vertical surfaces of the driver and passenger side compartment walls.

Durable Coating

The entire load bed floor and vertical surfaces shall be equipped with a durable coating.

Tailgate

The load bed area shall be equipped with a tailgate with automotive style hinge. When opened, the tailgate shall be capable of supporting a 300-pound individual standing at any location without flexing or becoming distorted. The inside surface of the tailgate shall have a durable coating applied to it to create a non-skid walking surface. All exterior surfaces (unless stainless steel) of the entire tailgate assembly shall be coated with a 1-2 mm (minimum) flat black powder coated finish. The tailgate assembly shall be easily removable using basic tools.

Custom Fuel Can Storage

A custom fuel can storage basket shall be fabricated from aluminum tubing and sheet metal and powder coated flat black. The basket shall have approximate dimensions of 54.00-inches length x 16.00-inches width x 12.00-inches tall. The floor of the basket shall be mounted flush with the top of the side compartment tops. The final design shall be approved by the department before fabrication.

Rear Cab Protection

There shall be a permanently mounted aluminum square tube cab window guard mounted at the front of the body directly behind the cab. The purpose of the guard is to protect the rear cab area and rear window, add structural integrity of the apparatus body, and provide mounting points for the apparatus' light bar and two (2) flood lights. The guard shall contain a means of concealing and protecting the wiring required to supply power to the lights. The mounting point of the apparatus light bar shall extend approximately 2 inches above the roof height of the cab and shall be removable. The guard shall be constructed in a manner that allows for clear vision into and out of the cab area by the use of an aluminum mesh window screen. The window screen shall be an integral part of the guard with the tube being slotted for installation of the screen. The window screen shall be welded to the tube to prevent vibration. This design shall protect the user from possible snagging of clothing or equipment on rough edges. There shall be drain holes in the bottom of the tubes to allow for water to exit. The cab shield assembly shall be powder coated black.

Spare Tire Mount

A lockable spare tire mount shall be mounted in the load bed area in a location to be determined during the pre-work conference. The mount shall be powder coated black and be equipped with a keyed pad lock.

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Air Compressor

A Viar Corporation ultra-duty air compressor system shall be installed in the driver front compartment forward of the rear wheels. One (1) quick disconnect air outlet shall be installed on the operator's panel and one (1) quick disconnect air outlet shall be installed near the air compressor in the specified compartment. The compressor shall have an "ON/OFF" switch, tire inflation gun with 200 pounds per square inch gauge and 30' coiled hose.

A 2.5-gallon air storage tank shall be supplied. The tank will be located under the chassis cab and protected for off road use.

Wheel Chocks

Two (2) Zephyr Industries wheel chocks shall be provided with the completed apparatus, one (1) each side. The chocks shall be yellow in color and shall be mounted horizontally in a quick release mounting bracket on the outboard corners on the top of the side packs.

Rear License Plate Mount / Light

One (1) TecNiq, Inc. model number L11-WC00-1 clear LED light shall be provided at the rear of the body on the driver's side to illuminate the license plate. Two (2) mounting bolts, washers, and nylon locking nuts shall be properly spaced to accommodate the hole pattern of a Federal Government license plate.

Apparatus Body Trim

The vertical surface at the **front** of the body shall be covered with a minimum 1/8-inch-thick polished aluminum tread plate for appearance, wear, and enhanced visibility at night. The tread plate shall be designed so that joints are minimized and shall cover the entire vertical surface area.

The vertical surface at the **rear** of the body shall be covered with a minimum 1/8-inch-thick smooth aluminum for the application of the rear chevron striping described elsewhere in this specification. The aluminum panel shall be designed so that joints are minimized and shall cover the entire vertical surface area.

All outside vertical edges (on the four (4) outer corners) shall be equipped with polished stainless angle trim pieces fabricated to fit tightly and sealed with silicone for added protection and visual appeal.

Outside horizontal edges along the bottom of each side shall be equipped with polished stainless angle fabricated to fit tightly and sealed with silicone for added protection and visual appeal.

There shall be a minimum 18-gauge stainless-steel liner attached to the underside of the four (4) vertical compartments to protect from damage caused by rocks, brush, blown tires, etc. The liners shall be attached with stainless-steel bolts and nylon-locking nuts.

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General Wiring Specification

A single Original Equipment Manufacturer (OEM) battery system shall be installed consisting of matching batteries to operate both the chassis and package electrical system. A single Cole Hersee on/off switch shall be supplied by the body builder. This switch labeled "BODY MASTER ON" shall mount separately or as a part of the master console. When in the "OFF" position, all electrical power to the apparatus fire package shall be off. The batteries shall be installed in an accessible location.

The apparatus electrical system shall remain independent of the OEM system unless there is authorization from the OEM chassis manufacturer.

The apparatus body, modules of the apparatus body (i.e. pump house) and chassis shall be individually wired as independent modules and connected as a completed unit at the final assembly via waterproof electrical connectors located in the electrical compartment. The intent of this is to be able to remove portions of the completed apparatus for major service and repair without requiring the electrical system to be cut. Seals shall be provided on each individual wire and the assembly. All GXL/SXL wiring for the apparatus body shall be within a temperature resistant harness rated at a minimum of 280-degrees. All wires in each harness shall be color and function coded. Wiring shall be run along structural rails and tied in a neat and orderly manner. Wiring passing through compartments shall be protected from tears, abrasions, and cuts caused by loose items moving in the compartment space. Wiring shall comply with OEM / component manufacturers recommendations and standards.

The completed body shall be grounded to the chassis with a minimum "0" gauge wire with crimped and soldered lugs. The lug shall be bolted to the chassis after the removal of all paints, rust, etc. Additionally, a minimum 3/4-inches braided ground strap shall be furnished between the body and chassis. The ground strap shall have soldered tabs on each end and attached to the chassis as above except that stainless steel star washers shall be used between the ground strap tab and bolt. After attachment, all ground connection points shall be sprayed (soaked) with non-hardening battery terminal sealer.

Electrical Components and Ratings

Electrical Components - All electrical components such as solenoids, speakers, motors, etc. shall be environmentally rated to a minimum of IP67 and shall be MIL-STD 810 compliant for temperature, humidity, vibration, altitude, shock, sand and dust, immersion, contamination by fluids, humidity and solar radiation.

Wire Grade

GXL or SXL Grade Rated from 60-260 F.

Connections Terminations

Connections shall be environmentally sealed to prevent corrosion.

Loom and Ties

All wire loom and wire ties shall be rated to a minimum of 260 F.

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Indicator / Warning Light(s)

The following indicator lights are described in greater detail elsewhere in this specification:

- Battery On: There shall be a green LED indicator light visible to the driver which illuminates when the master body switch is activated. The light shall be labeled "BODY MASTER". The LED light shall be mounted adjacent to the master switch, in a position that will help reduce glare within the cab during night operations; this light may be programmed to dim when the headlights are on.
- Door Ajar "DO NOT MOVE APPARATUS": Red LED indicator light shall be provided in the cab and shall flash automatically when the ignition switch is "ON", and a lighted compartment door is "OPEN", or a chassis cab door is "OPEN".
- Low Voltage Alarm: Red LED indicator light shall be provided in the cab. The light shall flash when the apparatus 12-volt electrical system voltage drops below 11.90-volts. The LED light shall be mounted in a position that will help reduce glare within the cab during night operations.

"Do Not Move Apparatus" Alarm

There shall be an audible alarm that sounds a tone when the door ajar light is flashing, and the parking brake is released.

Light Bar

The front and front side zones shall be covered by one (1) Whelen Justice series 56.00-inch-long LED light bar mounted on the cab guard approximately 2.00-inches above the cab roof to provide good visibility to the front and sides of the vehicle. The light bar shall have approximate dimensions of 56.00-inches-long, 2.25-inches high without mounting feet, and 12.00-inches wide. The LEDs shall be red/white/red. The white section of the light bar shall be wired so that it turns off when the parking brake is set, to meet the NFPA requirements for blocking mode. The light bar wiring shall incorporate a quick disconnect feature to allow for the removal/replacement of the light bar in the event the OEM cab must be removed for repairs.

Lower Zone A Warning Lights

Two (2) Whelen ION-T Series red LED light head shall be mounted with the OEM chassis front grille, forward facing. Each light head shall have a clear lens and be mounted in a chrome flange. The light heads shall be controlled with the "EMR LIGHTS" switch located on the SPS panel in the chassis cab.

Forward Zone B/D Warning Lights

One (1) Whelen ION-T Series red LED light head shall be mounted on each side of the chassis within the front fender, side facing. Each light head shall have a clear lens and be mounted in a chrome flange. The light heads shall be controlled with the "EMR LIGHTS" switch located on the SPS panel in the chassis cab.

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Aft Zone B/D Warning Lights

One (1) Whelen ION-T Series red LED light head shall be mounted on each side of the apparatus body within the apparatus body fender. The wiring for the light heads shall be routed in a manner that protects it from foreign debris during off-road driving conditions. Each light head shall have a clear lens and be mounted in a chrome flange. The light heads shall be controlled with the "EMR LIGHTS" switch located on the SPS panel in the chassis cab.

Lower Zone C Warning Lights

Two (2) Whelen C7 SurfaceMax Series red LED light heads shall be provided on the lower rear of the apparatus, rear facing, and one (1) each side. The light shall be positioned below the stop/tail lights and turn signal lights. The lights shall be wired to the "EMR LIGHTS" switch located on the cab center console.

State Specific Compliant

The apparatus shall be fully compliant for the State of New Mexico.

Electronic Siren

One (1) Whelen 100/200-watt full function siren amplifier with microphone shall be provided. The control head shall be mounted in the floor mounted console in a location readily accessible to the driver/operator.

Speaker

One (1) Federal Signal 100-watt speaker shall be mounted behind the heavy-duty front bumper/brush guard. The speaker shall be wired to the electronic siren control head and a customer specified mobile radio.

DOT/Clearance Lighting

Clearance lights shall be provided and mounted on the vehicle in compliance with FMVSS. Each light shall be LED and sealed from the environment. All lights shall be easily replaceable in the event of failure or damage. Each light shall be constructed from high impact-resistant plastic to prevent damage from gravel and other debris.

Tail Light Assembly

One (1) four taillight assembly shall be mounted on each side of the rear panel, two (2) assemblies total, as low as possible without affecting the functionality of the rear bumper and bumper skin. Each assembly shall consist of a Whelen C7 SurfaceMax Series red LED stop/tail light, a Whelen C7 SurfaceMax Series amber LED arrow turn signal light, a Whelen C7 SurfaceMax Series emergency flasher described elsewhere in this specification, and a Whelen C7 SurfaceMax Series back up light described elsewhere in this specification. Each light shall be approximately 7.00-inches wide by 3.00-inches tall. All four (4) lights shall be mounted together in a polished aluminum four light surface mount vertical bezel.

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Taillight Assembly Layout:

- Emergency LED Flasher
- Red LED Stop/Tail Light
- Amber LED Arrow Turn Signal
- Back Up Light

Moveable/Adjustable Work Lights

Two (2) Buyers Products LED work lamps shall be mounted on the right and left sides of the rear cab protection. Each lamp shall be controlled independently by a switch located on the SPS panel and with a switch located on the work lamp. The work lamp(s) shall have the capability to rotate a full 360 degrees on both horizontal and vertical axis. The mounting height will be compatible with a person standing on the ground and will not block the view of the light bar. Each work lamp shall be black in color.

LED Push-Up Scene/Work Lights

Two (2) Whelen Pioneer Plus™ push-up shall be provided at the front of the apparatus body. The 168 watts +12v DC Pioneer light head(s) shall incorporate a Super-LED® dual flood light installed in a die-cast white powder coated aluminum housing. The PFP2 configuration shall consist of 60 white Super-LEDs with a clear optic collimator/metalized reflector assembly and a clear non-optic polycarbonate lens. Each Pioneer flood light shall have 16,000 usable lumens.

The lens/reflector assembly shall utilize a liquid injected molded silicone gasket to be resistant to water, moisture, dust, and other environmental conditions. The hard-coated lens shall provide extended life/luster protection against UV and chemical stresses. The PFP2 shall be vibration resistant. The Pioneer™ PC boards shall be conformal coated for additional protection. Two breathable membrane patches shall be installed to the bottom of the housing to maintain a consistent internal pressure. The PFP2 shall have extended LED operation with low current consumption and low operating temperature.

Each PFP2 shall be furnished with a 20' 4/C 16GA input cable. The Pioneer shall have the ability to flash as a secondary warning light in the "Clearing Right of Way" mode when installed with an external flasher, model number PFLASH, purchased separately. The Pioneer light shall be SAE 1113-42 compliant and Class 5 testing for EMI. The PFP2 is covered by a five-year factory warranty. Mounting options are purchased separately.

- Voltage: +12v DC
- Size: H=4.125", W=14.00", D=2.50"
- Amp Draw: Spot Light = 13 Amps
- Lens Color: Clear

Step Lights

Four (4) 4.00-inch diameter round or rectangular LED step lights shall be mounted in the following locations with a stainless-steel security flange. The lights shall be programmed to illuminate when any of the cab doors are opened or when the "STEP LTS" switch is in the "ON" position. These lights shall be mounted in the following locations to provide step area lighting around the apparatus:

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- One (1) 4.00-inch round diameter, forward facing, flush mounted on the front of the driver apparatus body
- One (1) 4.00-inch round diameter, forward facing, flush mounted on the front of the passenger apparatus body
- Two (2) 4.00-inch round diameter, downward facing, flush mounted in the rear bumper to illuminate the rear step area

Off-Road Combo Light

One (1) PIAA Quad Series 20.00-inch dual row LED light bar, with combination spot/flood illumination, shall be provided at the front of the vehicle. The light bar shall be mounted on the middle/bottom bar of the heavy-duty front bumper and brush guard to permit maximum illumination coverage. The wiring harness shall be routed in a manner to protect it from being snagged by branches or foreign objects. The light shall be wired to one (1) of the OEM auxiliary switches and labeled "FRNT SCENE".

Off-Road Driving Lights

Two (2) PIAA LP560 Series LED off-road driving lights shall be mounted off-center of the grille guard portion of the replacement front bumper. The lights shall be recessed into the front bumper to aid in protecting the lights and include stone guards. The lights shall be wired to the "OFFROAD LTS" switch panel located inside the chassis cab.

Back-Up Camera/Monitoring System

One (1) Alliance Wireless Technologies, Inc. (AWTI) heavy duty slim line back up camera shall be installed on the finished apparatus. The installation of the camera shall follow the manufactures recommendations and comply with federal and state laws.

- HD Slim Line 3 Port Monitor, part number AWTSL503M
- 10G shock and vibration rating
- 5.00-inch diagonal screen size
- Supports up to three (3) cameras
- LED panel technology
- Auto / Manual dimmer function

Heavy Duty Camera, part number AWT1020T

- 150-degree lens angle
- Microphone
- IR for optimal view in total darkness
- 510 x 492 effective pixels

The camera shall have the ability to see the rear of the apparatus without the chassis being placed in the "REVERSE".

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The mounting location shall be centered in the rear tail skirt. The hole for the camera lens shall be size appropriately and the camera shall be mounted in a fashion that does not decrease the functionality of the camera lens. The camera shall be protected and easily accessible in the need of repair(s).

Cell Phone Booster

One (1) weBoost Drive 4G-X Fleet cell phone signal booster shall be installed within the interior of the chassis cab. The external antenna shall be centered on the chassis cab roof and the internal antenna shall be mounted within the driver's side front seat. The booster shall be installed within the floor mounted center console. The booster shall be installed in the chassis cab per the manufacturer's recommendation.

Multiplexed Electrical System

The electrical system shall be equipped with a Class 1 ES-Key multiplex solid state management system. The system shall have capabilities of performing load management functions, system monitoring and reporting, system data recording, remote or at the vehicle diagnostics, and be fully programmable. The system shall be programmed to discontinue functions, by priority, when the apparatus 12-volt electrical system voltage drops below 11.9-volts.

A single enclosed electrical junction compartment for all apparatus modules, connections, relays, circuit breakers, etc., shall be located inside the cab, in a protected location that does not interfere with available floor space. Wire length within the box shall be sufficient to allow a minimum of two (2) inches of slack to allow for secure connections and ease of service. All wire shall be installed in an organized fashion and located so that they cannot be disturbed when loading personnel or equipment.

Supernode II

The Supernode II shall be installed with data recorder functionality. Shall be mounted in a weather / dust protected compartment. The compartment shall be separate from an equipment storage compartment.

Remote Diagnostics Capabilities

Remote diagnostic shall be accomplished by using a supplied USB 2.0 "A" male to "A" male cable. One (1) end of the cable will connect directly to the Class 1 ES-Key Supernode II and one (1) end will connect to a laptop computer. The remote diagnostic feature(s) will be done through Class 1's ES-Key Live software.

SPS Switch Panel and Programming

All accessory and emergency lighting shall be controlled by a master electrical control module mounted in a location within the cab that is easily accessible by driver and operator. The module shall consist of a multiplex smart programmable switch (SPS) module of sixteen (16) lighted switches. The module shall have back lighted identification plates on a non-glare panel face illuminated when the master switch is "ON". The bundle of wires visible through the front glass shall be loomed to present a neat and professional appearance.

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The function and layout of the sixteen (16) lighted switches are as follows:

Switch 1	Switch 2	Switch 3	Switch 4	Switch 5	Switch 6	Switch 7	Switch 8
Switch 9	Switch 10	Switch 11	Switch 12	Switch 13	Switch 14	Switch 15	Switch 16

Switch 1: EMR LIGHTS:

- Description: Activates all emergency or hazard lights
- Function: Switch is press on press off
- Indicator: Indicator light is solid when on
- Requires Body Master to be "ON": No

Switch 2: UNUSED

- Description:
- Function:
- Indicator:
- Requires Body Master to be "ON":

Switch 3: UNUSED

- Description:
- Function:
- Indicator:
- Requires Body Master to be "ON":

Switch 4: FRONT SCENE:

- Description: Activates/Deactivates the front LED bar
- Function: Switch is press on press off
- Indicator: Indicator light is solid when on
- Requires Body Master to be "ON": Yes

Switch 5: DS FLOOD:

- Description: Activates/Deactivates the left side swivel flood light
- Function: Switch is press on press off
- Indicator: Indicator light is solid when on
- Requires Body Master to be "ON": Yes

Switch 6: STEP LIGHTS:

- Description: Activates /Deactivates the step lights on the apparatus body and rear bumper
- Function: Switch is press on press off
- Indicator: Indicator light is solid when on
- Requires Body Master to be "ON": Yes

Switch 7: HIGH IDLE:

- Description: Activates/Deactivates the high idle function of the chassis motor. This function shall only function if the chassis transmission is in "PARK" and the parking brake is set. The function deactivates if any of the following happen; the chassis transmission is shifted out of "PARK", brake pedal is pressed, parking brake is released, or the switch is pressed again.
- Function: Switch is press on press off
- Indicator: Indicator light is solid when on
- Requires Body Master to be "ON": Yes

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Switch 8: DIMMER UP:

- Description: Adjusts the back light of the switch panel to increase intensity of the back light
- Function: Switch is single press to adjust the back light five (5) settings
- Indicator: No indicator
- Requires Body Master to be "ON": Yes

Switch 9: UNUSED

- Description:
- Function:
- Indicator:
- Requires Body Master to be "ON":

Switch 10: LOWER CANCEL:

- Description: Deactivates all lower zone emergency or hazard lights
- Function: Switch is press on press off
- Indicator: Indicator flashes when activated
- Requires Body Master to be "ON": No

Switch 11: ALARM CANCEL:

- Description: Cancels the audible alarm that sounds to alert the driver that a cab or compartment door is "OPEN" when the parking brake is released, or the vehicle has a low voltage condition. This alarm cancel function is reset when any of the following actions happen the chassis ignition is turned "OFF", the parking brake is set, or the switch is pressed again. **Cancels the "LOW VOLTAGE ALARM" as well.**
- Function: Switch is press on press off
- Indicator: Indicator flashes when activated
- Requires Body Master to be "ON": no

Switch 12: REAR FLOOD:

- Description: Activates/Deactivates the rear panel flood (backup) lights
- Function: Switch is press on press off
- Indicator: Indicator light is solid when on
- Requires Body Master to be "ON": Yes

Switch 13: PS FLOOD:

- Description: Activates/Deactivates the right-side swivel flood light
- Function: Switch is press on press off
- Indicator: Indicator light is solid when on
- Requires Body Master to be "ON": Yes

Switch 14: CMPT LIGHT:

- Description: Activates/Deactivates strip lighting in compartments
- Function: Switch is press on press off
- Indicator: Indicator light is solid when on
- Requires Body Master to be "ON": Yes

Switch 15: HORN / SIREN:

- Description: Designates whether the chassis horn toggles the siren or sounds the electrical horn
- Function: Switch is press on press off
- Indicator: Illuminates solid in siren mode
- Requires Body Master to be "ON": No

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Switch 16: DIMMER DOWN:

- Description: Adjusts the back light of the switch panel to dim of the back light
- Function: Switch is single press to adjust the back light five (5) settings
- Indicator: No indicator
- Requires Body Master to be "ON": Yes

NFPA 1906 Electrical Testing

Electrical system tests shall be performed in accordance with NFPA 1906 current edition. At the time of delivery, all documentation outlined in NFPA 1906 current edition shall be provided.

Vehicle Paint, Finish, Striping, Identification

The chassis shall be painted by the Original Equipment Manufacturer and the apparatus body shall be gel coated to match the chassis paint color.

Paint color and code: Vermillion Red (E4)

Paint and Finish General

The finished apparatus and chassis shall be presented in as new condition. Any dents, scratches, rust spots, or blemishes of any kind on the apparatus will not be accepted. All exposed ferrous metal surfaces that are not plated or stainless steel shall be cleaned and prepared and shall be painted or coated. The paint or coating, including primer, shall be applied in accordance with the paint or coating manufacturers' recommendations. The paint shall be applied by individuals who have been certified by the paint manufacturer.

Apparatus Body Exterior

The exterior of the apparatus body shall be a single-color pigmented gel coat.

Apparatus Body Interior

The apparatus body compartment interiors shall be finished with a marble color Zolatone paint to provide a durable finish.

Other Metal Item Finish

All aluminum and stainless steel shall remain unpainted unless specified otherwise. Metal parts that are powder coated flat black.

Powder-Coating Standard

Items that are specified to be powder coated shall have a minimum 1-2 mm flat black powder coated finish.

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Anti-Slip Surface

Horizontal walking surfaces specified to have an anti-slip coating shall meet or exceed OSHA and NFPA 1906 (current edition) requirements. Coating shall be durable and last the life of the apparatus.

Striping and Graphics

Body General

All stripes are per NFPA standards and ASTM D 4965, "Standard Specifications for Retro-reflective sheeting for Traffic Control (unless otherwise specified)." Finish of the striping and emblems shall be void of air pockets, and other blemishes, and edges shall be smooth.

Final approval shall be obtained prior to installation based upon a drawing or rendered photograph showing exact placement, color and configuration.

Front

At least four inches, not to exceed eight inches, of chevron striping (red and fluorescent yellow) shall be provided on the wings of the heavy-duty front bumper. The pattern shall slope downward and away from the centerline of the vehicle at an angle of 45 degrees. If a single four-inch-wide vertical surface is unavailable, multiple strips may be used.

Sides

A reflective stripe shall be affixed to the perimeter of the apparatus. Striping on the engine sides shall cover at least 50% of the cab and body length, following the natural contour of the equipment.

Rear

At least four inches, not to exceed eight inches, of chevron striping (red and fluorescent yellow) shall be provided on the vertical rear facing surface of the apparatus body; the edge of the bumper shall be included. The pattern shall slope downward and away from the centerline of the vehicle at an angle of 45 degrees. If a single four-inch-wide vertical surface is unavailable, multiple strips may be used.

Reflective DOT Red and White Striping for Doors

A 2.00-inch white and red reflective stripe shall be installed on the vertically hinged interior compartment door face near the edge(s). Red reflective stripe(s) shall be installed on the bottom edge of the chassis cab doors. The reflective striping shall meet and/or exceed the current edition of NFPA 1906.

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Department Striping

Front

A 4.00-inch white stripe shall be positioned at the front of the apparatus on the wings of the bumper.

Sides

A reflective 1.00-inch wide stripe by 3.00-inch wide stripe by 1.00-inch wide stripe, with 1/2-inch space between the stripes, shall be affixed to the perimeter of the apparatus. Striping on the apparatus sides will cover at least 50% of the cab and body length and be white in color, following the natural contour of the apparatus body.

Department Lettering and Numbering Graphics Package

All lettering and numbering shall be in Block Bold font. All lettering and numbering shall be reflective in nature and conform to the minimum requirements of ASTM D 4956, Standard Specification for reflective Sheeting for Traffic Control, Type I, Class 1 or Class 3. Finish of the lettering and numbering shall be void of air pockets, and other blemishes, and edges shall be smooth.

Final approval shall be obtained prior to installation based upon a drawing or rendered photograph showing exact placement, color and configuration.

Cab Door

The vehicle shall have an appropriate sized emblem centered on the front driver and passenger doors and set within the striping.

The department's state identifier "NM-N5S-CAR" shall be centered on the bottom of the front driver and passenger doors in 3.00-inch white reflective.

Front

The vehicle shall have 4.00-inch White Block Bold reflective numbers placed on the driver side of the front bumper. Numbers shall be centered horizontally and read left to right.

Rear

The vehicle shall have 4.00-inch White Block Bold reflective numbers placed on the upper driver side of the package. Numbers shall not be placed in an area that reduces visibility; across door seams or reflectors and lights.

Top

The vehicle shall have a 12.00-inch White Block Bold reflective numbers centered on the top of the cab of the chassis. Numbers shall be placed to read from the rear of the vehicle and visible from above. Numbers shall not be placed under the lighting package or antennas.

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Specifications

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Compartment Numbering / Lettering

Each compartment shall have a 1.00-inch to 1.50-inch label. The numbering/lettering shall be black in color and match other numbering lettering in this specification. The compartment lettering scheme, for the driver side compartments shall be, D1 through D3 starting from the front of the apparatus body working toward the rear. The compartment lettering scheme for the passenger side compartments shall be, P1 through P3 starting from the front of the apparatus body working toward the rear. The labels shall be in the forward upper corner of the compartment.

Placards and Labels

All required signs, plates and labels shall be permanent in nature and securely attached and shall meet the requirements of NFPA 1906 current edition, and UL 969, *Standard for Marking and Labeling System*.

All signs, plates and labels shall be similar in appearance, style and design. The following signs, plates and labels shall be installed on the apparatus:

All applicable signs, plates and labels listed in NFPA 1906 current edition.

Fluids Placard

The contractor will affix a permanent placard in the driver's compartment specifying the correct type of the following fluids used in the vehicle:

- Engine Oil
- Engine Coolant
- Chassis Transmission Fluid
- Power Steering Fluid
- Front Drive Axle Lubrication Fluid
- Rear Drive Axle Lubrication Fluid
- Transfer Case Lubrication Fluid
- *Any other information deemed necessary by the contractor or its subcontractors to prolong the life of the equipment*

Dimension Placard

The contractor shall affix a permanent placard in the driver's compartment specifying the empty/dry vehicle dimensions after constructions. The placard shall include the following minimum information:

- Overall Length
- Overall Height, the highest point on the vehicle excluding antennas when empty
- Overall Width
- Empty Weight

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Air Intake

The Chassis engine air intake (air-box) cover shall be equipped with a Warning label/placard (approved by the COR prior to installation) that depicts the following information:

WARNING! Prior to removing cover:

1. Remove Ignition Key
2. Disconnect Mass Air Flow Sensor
3. Reassemble completely prior to Starting

DO NOT CLEAN FILTER WITH COMPRESSED AIR!

Seating Capacity

The completed apparatus shall be designed to have a fully enclosed seat with an approved seat belt for each occupant. The term "fully enclosed" shall mean four sides, a top and a bottom, with an appropriate door for easy entrance to and exit from the seating position.

A warning label, listing the seating capacity of the completed apparatus, shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

This apparatus shall have a seating capacity of two (2) personnel in front, and three (3) personnel in the rear for a total seating capacity of five (5).

Seating

The center portion of the 40/20/40 split bench seat shall be removed to accommodate the installation of the center console.

Seat Belt Warning

A warning label, stating: "**DANGER- Personnel Must Be Seated and Seat Belts Must Be Fastened While Vehicle Is in Motion or DEATH OR SERIOUS INJURY MAY RESULT,**" shall be provided in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

Final Stage Manufacturer Vehicle Certification

A Final Stage Manufacturer vehicle certification label shall be provided and installed in the apparatus cab driver's door jamb.

Noise Hazard Warning

A warning label, stating: "**WARNING: Noise Hazards Occur During Siren Operation**", shall be provided and installed in the apparatus cab interior. This label shall be located so that it is visible from all seating positions.

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Additional Equipment

The following components shall provide with the completed apparatus. These items shall be available for inspection at the final acceptance inspection. The loose equipment shall be presented in an identically organized fashion; small items shall be contained in a high durability reusable container for storage and transport.

Jack

12-ton hydraulic bottle Jack

Fire Extinguisher

5-pound Class B&C fire extinguisher with heavy-duty metal mounting bracket, installed on the plumbing area cover horizontally on the inboard side.

Safety Triangle Reflectors

A set of three (3) reflective safety triangles.

Keys

A minimum of two (2) complete key sets including: chassis ignition and door electronic key fobs and a minimum of four compartment keys.

Spare Fasteners

A quart size bag of miscellaneous stainless-steel fasteners commonly used in the construction of the apparatus.

Self-Adhesive Labels

The following list of self-adhesive labels shall be included in the loose equipment box:

- Two (2) "FIRST AID" labels approved
- Two (2) "FIRE EXTINGUISHER" labels
- Four (4) "Arrow" labels the same height and color as the "FIRST AID" and "FIRE EXTINGUISHER" labels
- Two (2) fuel storage compartment labels
- Two (2) additional Fluid Data labels
- Two (2) "Do not exceed MPH" labels.

All labels to be finalized during the pre-work conference.

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Chassis Manuals

A minimum of one (1) printed chassis operator manual.

Component Manuals

One (1) set of operating manuals for major components such as emergency light heads, light bar, etc.

Vendor Training

One (1) digital copy (USB Drives) of the vendor provided training.

City of Carlsbad
Purchasing Department
Standard Terms and Conditions
(Unless otherwise specified)

Instructions to Bidders

1. Bid pricing must be exclusive of any applicable gross receipts tax.
2. Bids must be received in a sealed envelope or package.
3. Bids must be clearly marked on the outside of the envelope: "Bid No. 2018-23"
4. Bids must be received by the due date and time indicated on the bid form. Late bids will not be accepted.
5. The campaign contribution form must be submitted with your bid, even if no contributions were made. Failure to return the signed campaign contribution form will disqualify the bid from consideration.
6. The financial interest disclosure statement must be submitted with your bid. Failure to do so will disqualify the bid from consideration.
7. In order to receive credit for any applicable resident business preference, a copy of the Resident Business Preference Certificate must be included with the bid submittal.
8. The City Council reserves the right to reject any or all bids received and, in the case of ambiguity or lack of clearness, to determine the best bid or to reject the same.
9. The Procurement Code, Sections 13-1-128 through 13-1-199, NMSA 1978, imposes civil and criminal penalties for its violations. In addition, the New Mexico criminal statutes impose felony penalties for illegal bribes, gratuities or kickbacks.

CITY OF CARLSBAD

PURCHASING DEPARTMENT

BID FORM

BID # 2018-23

Rapid Extraction Module Vehicle

Bid Price \$ _____

Name of Bidder _____

Name of Company Representative _____

Title _____

Email Address _____

Phone Number _____

X _____

Company Representative Signature

CAMPAIGN CONTRIBUTION DISCLOSURE FORM

Pursuant to the Procurement Code, Sections 13-1-28, *et seq.*, NMSA 1978 and NMSA 1978, § 13-1-191.1 (2006), as amended by Laws of 2007, Chapter 234, any prospective contractor seeking to enter into a contract with any state agency or local public body **for professional services, a design and build project delivery system, or the design and installation of measures the primary purpose of which is to conserve natural resources** must file this form with that state agency or local public body. This form must be filed even if the contract qualifies as a small purchase or a sole source contract. The prospective contractor must disclose whether they, a family member or a representative of the prospective contractor has made a campaign contribution to an applicable public official of the state or a local public body during the two years prior to the date on which the contractor submits a proposal or, in the case of a sole source or small purchase contract, the two years prior to the date the contractor signs the contract, if the aggregate total of contributions given by the prospective contractor, a family member or a representative of the prospective contractor to the public official exceeds two hundred and fifty dollars (\$250) over the two year period.

Furthermore, the state agency or local public body may cancel a solicitation or proposed award for a proposed contract pursuant to Section 13-1-181 NMSA 1978 or a contract that is executed may be ratified or terminated pursuant to Section 13-1-182 NMSA 1978 of the Procurement Code if: 1) a prospective contractor, a family member of the prospective contractor, or a representative of the prospective contractor gives a campaign contribution or other thing of value to an applicable public official or the applicable public official's employees during the pendency of the procurement process or 2) a prospective contractor fails to submit a fully completed disclosure statement pursuant to the law.

The state agency or local public body that procures the services or items of tangible personal property shall indicate on the form the name or names of every applicable public official, if any, for which disclosure is required by a prospective contractor.

THIS FORM MUST BE INCLUDED IN THE REQUEST FOR PROPOSALS AND MUST BE FILED BY ANY PROSPECTIVE CONTRACTOR WHETHER OR NOT THEY, THEIR FAMILY MEMBER, OR THEIR REPRESENTATIVE HAS MADE ANY CONTRIBUTIONS SUBJECT TO DISCLOSURE.

The following definitions apply:

“Applicable public official” means a person elected to an office or a person appointed to complete a term of an elected office, who has the authority to award or influence the award of the contract for which the prospective contractor is submitting a competitive sealed proposal or who has the authority to negotiate a sole source or small purchase contract that may be awarded without submission of a sealed competitive proposal.

“Campaign Contribution” means a gift, subscription, loan, advance or deposit of money or other thing of value, including the estimated value of an in-kind contribution, that is made to or received by an applicable public official or any person authorized to raise, collect or expend contributions on that official’s behalf for the purpose of electing the official to statewide or local office. “Campaign Contribution” includes the payment of a debt incurred in an election campaign, but does not include the value of services provided without compensation or unreimbursed travel or other personal expenses of individuals who volunteer a portion or all of their time on behalf of a candidate or political committee, nor does it include the administrative or solicitation expenses of a political committee that are paid by an organization that sponsors the committee.

“Family member” means spouse, father, mother, child, father-in-law, mother-in-law, daughter-in-law or son-in-law of (a) a prospective contractor, if the prospective contractor is a natural person; or (b) an owner of a prospective contractor.

“Pendency of the procurement process” means the time period commencing with the public notice of the request for proposals and ending with the award of the contract or the cancellation of the request for proposals.

“Prospective contractor” means a person or business that is subject to the competitive sealed proposal process set forth in the Procurement Code or is not required to submit a competitive sealed proposal because that person or business qualifies for a sole source or a small purchase contract.

“Representative of a prospective contractor” means an officer or director of a corporation, a member or manager of a limited liability corporation, a partner of a partnership or a trustee of a trust of the prospective contractor.

CURRENT CITY OF CARLSBAD ELECTED OFFICIALS

Mayor – Dale Janway
Municipal Judge – Collis Johnson

City Council Ward 1
Edward T. Rodriguez
Lisa A. Anaya-Flores

City Council Ward 3
Jason Chavez
Leo Estrada

City Council Ward 2
Jason Shirley
Judith Waters

City Council Ward 4
Wesley Carter
Mark Waltersheid

DISCLOSURE OF CONTRIBUTIONS BY PROSPECTIVE CONTRACTOR:

Name(s) of Applicable Public Official(s) if any:

Contribution Made By:

Relation to Prospective Contractor:

Date Contribution(s) Made:

Amount(s) of Contribution(s)

Nature of Contribution(s)

Purpose of Contribution(s)

(Attach extra pages if necessary)

Signature

Date

Title (position)

--OR--

NO CONTRIBUTIONS IN THE AGGREGATE TOTAL OVER TWO HUNDRED FIFTY DOLLARS (\$250) WERE MADE to an applicable public official by me, a family member or representative.

Signature

Date

Title (Position)

City of Carlsbad
Purchasing Department
Standard Terms and Conditions
(Unless otherwise specified)

Important Bidding Information

All Bidders must notify the City Procurement Officer or his/her designee if any employee(s) of the City or elected City officials have a financial interest in the Bidder:

No financial interest Yes financial interest

If yes specify by name: _____

Bid tabulations will be posted to our website approximately twenty-four (24) hours after bid opening date. To access go to <http://www.cityofcarlsbadnm.com/purchasing.cfm>

Failure of Bidder to complete bidding documents, in accordance with all instructions provided, is cause for this office to reject their bid.

Brand names and numbers are for reference only; equivalents will be considered. If bidding "equivalent" bidders must be prepared to furnish "complete data" upon request, preferably with bid, to avoid delay in award.

Specifications on the bid are not to exclude any bidder or manufacture. Where a brand name or equal is indicated, it is for the purpose of describing the standard of quality, performance and characteristics desired and is not intended to restrict competition. "No substitute" specifications may be authorized ONLY if required to match existing equipment.

If any Bidder is of the opinion that the specifications as written preclude him from submitting a proposal on this bid, it is requested that his opinion be made known to the City Procurement Officer or his/her designee, in writing, at least seven (7) days prior to the bid opening date.

Bidders must, upon request of the City Procurement Officer or his/her designee, provide information and data to prove that the financial resources, production of service facilities, service reputation and experience are adequate to make satisfactory delivery of the materials and/or services. The City Procurement Officer or his/her designee reserves the right to require a Bidder to furnish a Performance Bond prior to award, where the Bidder is unable to furnish the required information or data, or for other reasons which would insure proper performance by the Bidder.

Unless otherwise indicated in the bid specifications, samples of the items, when required, shall be free of expense to the State of New Mexico. Samples not destroyed or mutilated in testing will be returned upon request, at Bidders expense. Each sample must be labeled to clearly show the bid number and item number that it pertains to. Unsolicited bid samples or descriptive literature, which is submitted at the Bidder's risk, will not be returned.

New Mexico Resident Business Preference

The State of New Mexico Procurement Code mandates a New Mexico Resident Business Preference on all bids and request for proposals (RFP).

Qualified resident businesses will be given a 5% preference on all bids. When bids are evaluated, New Mexico Businesses registered with the Department of Taxation and Revenue, will have its bid reduced by a factor of 5%.

Qualified resident businesses will be given a 5% preference on all RFP's. When proposals are evaluated, New Mexico resident businesses that are registered with the Department of Taxation and Revenue, will receive an additional points equivalent to 5% of the total points possible for award.

As of October 5, 2011, applications for in-state preference will no longer be processed through the State Purchasing Division. All resident businesses, veterans and contractors will have to obtain a preference number with the NM Department of Taxation & Revenue. For additional information please call 505-827-0951.

Qualifications

- A. To receive a **resident** business **preference** pursuant to Section 13-1-21 NMSA 1978 or a **resident** contractor **preference** pursuant to Section 13-4-2 NMSA 1978, a business or contractor shall submit with its bid or proposal a copy of a valid **resident** business certificate or valid **resident** contractor certificate issued by the taxation and revenue department.
- B. An application for a **resident** business certificate shall include an affidavit from a certified public accountant setting forth that the business is licensed to do business in this state and that:
- (1) the business has paid property taxes or rent on real property in the state and paid at least one other tax administered by the state in each of the three years immediately preceding the submission of the affidavit;

(2) if the business is a new business, the owner or majority of owners has paid property taxes or rent on real property in the state and has paid at least one other tax administered by the state in each of the three years immediately preceding the submission of the affidavit and has not applied for a **resident** business or **resident** contractor certificate pursuant to this section during that time period;

(3) if the business is a relocated business, at least eighty percent of the total personnel of the business in the year immediately preceding the submission of the affidavit were **residents** of the state and that, prior to the submission of the affidavit, the business either leased real property for ten years or purchased real property greater than one hundred thousand dollars (\$100,000) in value in the state; or

(4) if the business is a previously certified business or was eligible for certification, the business has changed its name, has reorganized into one or more different legal entities, was purchased by another legal entity but operates in the state as substantially the same commercial enterprise or has merged with a different legal entity but operates in the state as substantially the same commercial enterprise.

C. An application for a **resident** contractor certificate shall include an affidavit from a certified public accountant setting forth that the contractor is currently licensed as a contractor in this state and that:

(1) the contractor has:

(a) registered with the state at least one vehicle; and

(b) in each of the five years immediately preceding the submission of the affidavit: 1) paid property taxes or rent on real property in the state and paid at least one other tax administered by the state; and 2) paid unemployment insurance on at least three full-time employees who are **residents** of the state; provided that if a contractor is a legacy contractor, the requirement of at least three full-time employees who are **residents** of the state is waived;

(2) if the contractor is a new contractor, the owner or majority of owners has paid property taxes or rent on real property in the state and has paid at least one other tax administered by the state in each of the five years immediately preceding the submission of the affidavit and has not applied for a **resident** business or **resident** contractor certificate pursuant to this section during that time period;

(3) if the contractor is a relocated business, at least eighty percent of the total personnel of the business in the year immediately preceding the submission of the affidavit were **residents** of the state and that, prior to the submission of the affidavit, the contractor either leased real property for ten years or purchased real property greater than one hundred thousand dollars (\$100,000) in value in the state; or

(4) if the contractor is a previously certified contractor or was eligible for certification, the contractor has changed its name, has reorganized into one or more different legal entities, was purchased by another legal entity but operates in the state as substantially the same enterprise or has merged with a different legal entity but operates in the state as substantially the same commercial enterprise.

D. The taxation and revenue department shall prescribe the form and content of the application and required affidavit. The taxation and revenue department shall examine the application and affidavit and, if necessary, may seek additional information to ensure that the business or contractor is eligible to receive the certificate pursuant to the provisions of this section. If the taxation and revenue department determines that an applicant is eligible, the department shall issue a certificate pursuant to the provisions of this section. If the taxation and revenue department determines that the applicant is not eligible, the department shall issue notification within thirty days. If no notification is provided by the department, the certificate is deemed approved. A certificate is valid for three years from the date of its issuance; provided that if there is a change of ownership of more than fifty percent, a **resident** business or **resident** contractor shall reapply for a certificate.

E. A business or contractor whose application for a certificate is denied has fifteen days from the date of the taxation and revenue department's decision to file an objection with the taxation and revenue department. The person filing the objection shall submit evidence to support the objection. The taxation and revenue department shall review the evidence and issue a decision within fifteen days of the filing of the objection.

F. If, following a hearing and an opportunity to be heard, the taxation and revenue department finds that a business or contractor provided false information to the taxation and revenue department in order to obtain a certificate or that a business or contractor used a certificate to obtain a **resident** business or **resident** contractor **preference** for a bid or proposal and the **resident** business or contractor did not perform the percentage of the contract specified in the bid or proposal, the business or contractor:

(1) is not eligible to receive a certificate or a **preference** pursuant to Section 13-1-21 or 13-4-2 NMSA 1978 for a period of five years from the date on which the taxation and revenue department became aware of the submission of the false information or the failure to perform the contract as specified in the bid or proposal; and

(2) is subject to an administrative penalty of up to fifty thousand dollars (\$50,000) for each violation.

G. In a decision issued pursuant to Subsection E or F of this section, the taxation and revenue department shall state the reasons for the action taken and inform an aggrieved business or contractor of the right to judicial review of the determination pursuant to the provisions of Section 39-3-1.1 NMSA 1978.

H. The taxation and revenue department may assess a reasonable fee for the issuance of a certificate not to exceed the actual cost of administering the taxation and revenue department's duties pursuant to this section.

I. The state auditor may audit or review the issuance or validity of certificates.

J. For purposes of this section:

(1) "new business" means a person that did not exist as a business in any form and that has been in existence for less than three years;

(2) "new contractor" means a person that did not exist as a business in any form and that has been in existence for less than five years;

(3) "legacy contractor" means a construction business that has been licensed in this state for ten consecutive years; and

(4) "relocated business" means a business that moved eighty percent of its total domestic personnel from another state to New Mexico in the past five years.

History: 1953 Comp., § 6-5-32.1, enacted by Laws 1969, ch. 184, § 1; 1979, ch. 72, § 2; 2011 (1st S.S.), ch. 3, § 2.

Application of Preference

A. For the purposes of this section:

(1) "business" means a commercial enterprise carried on for the purpose of selling goods or services, including growing, producing, processing or distributing agricultural products;

(2) "formal bid process" means a competitive sealed bid process;

(3) "formal request for proposals process" means a competitive sealed proposal process, including a competitive sealed qualifications-based proposal process;

(4) "public body" means a department, commission, council, board, committee, institution, legislative body, agency, government corporation, educational institution or official of the executive, legislative or judicial branch of the government of the state or a political subdivision of the state and the agencies, instrumentalities and institutions thereof, including two-year post-secondary educational institutions, school districts, local school boards and all municipalities, including home-rule municipalities;

(5) "**resident** business" means a business that has a valid **resident** business certificate issued by the taxation and revenue department pursuant to Section 13-1-22 NMSA 1978; and

(6) "recycled content goods" means supplies and materials composed twenty-five percent or more of recycled materials; provided that the recycled materials content meets or exceeds the minimum content standards required by bid specifications.

B. When a public body makes a purchase using a formal bid process, the public body shall deem a bid submitted by a **resident** business to be five percent lower than the bid actually submitted.

C. When a public body makes a purchase using a formal request for proposals process:

(1) five percent of the total weight of all the factors used in evaluating the proposals shall be awarded to a **resident** business based on the **resident** business possessing a valid **resident** business certificate; or

(2) if the contract is awarded based on a point-based system, a **resident** business shall be awarded the equivalent of five percent of the total possible points to be awarded based on the **resident** business possessing a valid **resident** business certificate.

D. When a joint bid or joint proposal is submitted by both **resident** and nonresident businesses, the **resident** business **preference** provided pursuant to Subsection B or C of this section shall be reduced in proportion to the percentage of the contract, based on the dollar amount of the goods or services provided under the contract, that will be performed by a nonresident business as specified in the joint bid or proposal.

E. When bids are received for both recycled content goods and non-recycled content goods, the public body shall deem the bids submitted for recycled content goods of equal quality to be five percent lower than the bids actually submitted. A bid calculation pursuant to this subsection for a **resident** business shall not also receive the bid calculation **preference** pursuant to Subsection B of this section.

F. The procedures provided in Sections 13-1-172 through 13-1-183 NMSA 1978 or in an applicable purchasing ordinance apply to a protest to a public body concerning the awarding of a contract in violation of this section.

G. This section shall not apply when the expenditure includes federal funds for a specific purchase.

History: 1978 Comp., § 13-1-21, enacted by Laws 1979, ch. 72, § 1; 1981, ch. 104, § 1; 1988, ch. 84, § 1; 1989, ch. 310, § 1; 1995, ch. 60, § 1; 1997, ch. 1, § 2; 1997, ch. 2, § 2; 1997, ch. 3, § 1; 2000, ch. 41, § 1; 2011 (1st S.S.), ch. 3, § 1.

Resident Veterans Preference Certification

_____ (NAME OF CONTRACTOR) hereby certifies the following in regard to application of the resident veterans' preference to this procurement:

Please check one box only

I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is less than \$1M allowing me the 10% preference discount on this solicitation. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is more than \$1M but less than \$5M allowing me the 8% preference discount on this bid or proposal. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

I declare under penalty of perjury that my business prior year revenue starting January 1 ending December 31 is more than \$5M allowing me the 7% preference discount on this bid or proposal. I understand that knowingly giving false or misleading information about this fact constitutes a crime.

"I agree to submit a report, or reports, to the State Purchasing Division of the General Services Department declaring under penalty of perjury that during the last calendar year starting January 1 and ending on December 31, the following to be true and accurate:

"In conjunction with this procurement and the requirements of this business' application for a Resident Veteran Business Preference/Resident Veteran Contractor Preference under Sections 13-1-21 or 13-1-22 NMSA 1978, when awarded a contract which was on the basis of having such veterans preference, I agree to report to the State Purchasing Division of the General Services Department the awarded amount involved. I will indicate in the report the award amount as a purchase from a public body or as a public works contract from a public body as the case may be.

"I understand that knowingly giving false or misleading information on this report constitutes a crime."

I declare under penalty of perjury that this statement is true to the best of my knowledge. I understand that giving false or misleading statements about material fact regarding this matter constitutes a crime.

(Signature of Business Representative)*

(Date)

*Must be an authorized signatory for the Business

The representations made in the boxes constitutes a material representation by the business that is subject to protest and may result in denial of an award or unaward of the procurement involved if the statements are proven to be incorrect.
