

5. Maintain the roof of a structure free of leaves, needles or other dead vegetative growth.

O-116.2 Corrective actions. Town of Carefree Administration is authorized to instruct the fire code official to give notice to the owner of the property upon which conditions regulated by Section 16.1 exist to correct such conditions. If the owner fails to correct conditions, the Town of Carefree Administration to cause the same to be done and make the expense of such correction a lien upon the property where such condition exists.

Section O-117 Clearance of Brush or Vegetation Growth from Roadways.

O-117.1 Clearance of brush or vegetation. The fire code official is authorized to cause areas within 10 feet on each side of portions of highways and private streets, which are improved, designed or ordinarily used for vehicular traffic to be cleared of flammable vegetation and other combustible growth. The fire code official is authorized to enter upon private property to do so.

Exception: Single specimens of trees, ornamental shrubbery or cultivated ground such as green grass, ivy, succulents or similar plants used as ground cover, provided that they do not form a means of readily transmitting fire.

Section O-118 Unusual Circumstances.

O-118.1 Unusual circumstances. If the fire code official determines that difficult terrain, danger of erosion or other unusual circumstances make strict compliance with the clearance of vegetation provisions of Sections 115, 116, or 117 of Appendix M undesirable or impractical, enforcement thereof may have suspended and reasonable alternative measures shall be provided.

Section O-119 Dumping.

O-119.1 Dumping. Garbage, cans, bottles, papers, ashes, refuse, trash, or rubbish or combustible waste material shall not be placed, deposited or dumped in or upon hazardous fire areas or in, upon all along trails, roadways or highways in hazardous fire areas.

Exceptions: Approved public and private dumping areas

Section O-120 Disposal of Ashes.

O-120.1 Disposal of ashes. Ashes and coals shall not be place, deposited or dumped in or upon hazardous fire areas.

Exceptions:

1. In the hearth of an established fire pit, camp stove or fireplace.
2. In a noncombustible container with a tight-fitting lid, which is kept or maintained in a safe location not less than 10 feet from combustible vegetation or structures.
3. Where such ashes or coals are buried and covered with 1 foot of mineral earth not less than 25 feet from combustible vegetation or structures.

Section O-121 Use of Fire Roads and Firebreaks.

O-121.1 Use of fire roads and firebreaks Motorcycles, motor scooters and motor vehicles shall not be driven or parked upon, and trespassing is prohibited upon, fire roads or firebreaks beyond the point where travel is restricted by a cable, gate or sign. Vehicles shall not be parked in a manner, which obstructs the entrance to a fire road or firebreak.

Exception: Public officers acting within their scope of duty.

Radio and television aerials, guy wires thereto, and other obstructions shall not be installed or maintained on fire roads or firebreaks unless located 16 feet or more above such fire road or firebreak.

Section O-123 Tampering with Fire Department Locks, Barricades and Signs.

O-123.1 Tampering with fire department locks, barricades and sign. Locks, barricades, seals, cables, signs and markers installed within hazardous fire areas, by or under the control of the fire code official, shall not be tampered with, mutilated, destroyed or removed.

Section O-124 Liability for Damage.

O-124.1 Liability for damage. The expenses of fighting fires, which result from a violation of Appendix N, shall be a charge against the person whose violation of Appendix N caused the fire. Damages caused by such fires shall constitute a debt of such person and are collectable by the Town of Carefree Administration in the same manner as in the case of an obligation under a contract, expressed or implied.

APPENDIX P

TOWN OF CAREFREE FIRE RELATED INCIDENTS CITATION PROGRAM

SECTION P-101 Classification of Penalty.

P-101 Classification of penalty. The following classifications shall apply to any violations of Appendix I or this code.

1. Any person, firm, corporation, partnership, enterprise or association whether as principal, owner, agent, tenant, or otherwise who violates, disobeys, omits or refuses to comply with, or who resists the enforcement of any of the provisions of this chapter is subject to a civil sanction.
2. Notwithstanding subsection 1 of this section, a second or subsequent violation of any of the provisions of this chapter within a two-year period shall be deemed a misdemeanor.

SECTION P-102 Civil Penalties.

P-102 Civil penalties.

1. Upon a finding of responsible to civil violation, the court shall impose a fine not to exceed one thousand dollars (\$1,000.00).

Exception: As otherwise determined in this code

2. Upon a conviction of a misdemeanor, the defendant shall be sentenced pursuant to the provisions established by the Town of Carefree Court System.

Exception: As otherwise determined by the court of jurisdiction, if other than the Town of Carefree Court System.

3. The application of the penalties provided for in paragraphs subsections 1 and 2 of this section shall not be held to prevent the enforced removal of prohibited conditions.

P-103 Civil violation, commencement of action.

1. A civil violation may be commenced by issuance of a citation or by long form complaint. The civil violation shall be considered as follows:
 - a. By having the defendant sign the citation with a promise to appear in court on the specified date and time.
 - b. If the defendant refuses to sign the citation, by hand delivering a copy of the citation to the defendant.
 - c. By mailing a copy of the citation to the person charged at his last known address, by certified or register mail, return receipt requested.
 - i. In the event service cannot be accomplished as set forth in 1-a., b., or c., the court of jurisdiction may serve the defendant by any means allowed by the Town of Carefree Procedures or the Arizona Rules of Civil Procedure for the Superior Court.
2. The citation will be substantially in the same form as the Arizona Traffic Ticket and Complaint and shall direct the defendant to appear in the court of jurisdiction Court on the scheduled date and at the scheduled time.
3. The citation will further notify the defendant that if he fails to appear on or before the date and time specified in the complaint, a judgment by default will be entered against him, and the court may, in its discretion, impose a civil sanction not to exceed one thousand dollars (\$1,000.00).
4. Minor civil citations may be issued for non-compliance with the amended International Fire Code, Town of Carefree Code of Ordinances

P-104 Authority to issue citation. Any peace officer, the fire code official, or duly authorized agent of the fire fire code official may issue a civil citation pursuant to this chapter.

P-105 Appearance.

1. The defendant shall, at the specified date and time, appear in person or through his attorney in the court of jurisdiction and shall either admit or deny the allegations contained in the citation. If the defendant admits the allegation, the court shall enter judgment against the defendant and, in its discretion, may impose a civil sanction for the violation. If the defendant denies the allegations contained in the citation, the court shall set dates for a pre-trial conference and for trial of the matter.
2. If the defendant fails to appear for pre-trial conference or trial, the defendant's failure to appear shall be deemed an admission of the offense and the court shall enter judgment against the defendant and may, in its discretion, impose a civil sanction for the violation.

P-106 Rules of procedure. The Arizona Rules of Court for Civil Traffic Violation Cases may be followed by the city court for civil violations of this chapter.

Exception: As modified or where inconsistent with the provisions of this article, local rules of the city court or rules of the Arizona Supreme Court."

P-107 Collection of fines. Any judgment for civil sanctions taken pursuant to this article may be collected as any other civil judgment.

P-108 Violations not exclusive. Violations of this chapter are in addition to any other violation enumerated within the Town of Carefree Code of Ordinances and this code and in no way limit the penalties, actions or abatement procedures which may be taken by the town for any violation of this chapter which is also a violation of any other ordinance or tribal, state or federal laws.

P-109 Each day a separate violation. Each day any violation of any provision of this chapter or the failure to perform any act or duty required by this chapter continues shall constitute a separate offense.

Agenda Item #

**TOWN OF CAREFREE
INFORMATION SUMMARY**



MEETING

DATE: October 4, 2022

SUBJECT: Approval of policy and procedure for taking and posting of meeting minutes

ATTACHMENT: Resolution # 2022-16

SUMMARY:

The current process of drafting and posting Action Minutes and electronic recordings of meetings to the Town website, followed by drafting and posting of more detailed Discussion Minutes is unduly burdensome and redundant. The drafting and posting of Action Minutes meet all the statutory requirements of A.R.S. § 38-431.01 and provides the public with the required information.

A more efficient process includes the elimination of the drafting and posting of Discussion Minutes. The attached Resolution directs staff to draft and post only Action Minutes, together with any available audio or video, to the Town website as directed by statute, thereby creating a more efficient and clean process.

ACTION NEEDED:

Approval of Resolution 2022-16.

REPORT PREPARED BY:

Kandace French Contreras

Kandace French Contreras,
Town Clerk/Treasurer

**TOWN OF CAREFREE, ARIZONA
RESOLUTION 2022-16**

**A RESOLUTION OF THE COMMON COUNCIL OF THE TOWN
OF CAREFREE, MARICOPA COUNTY, ARIZONA, APPROVING
THE POLICY AND PROCEDURES FOR TAKING AND POSTING
MEETING MINUTES**

WHEREAS, A.R.S. § 38-431.01 requires all public bodies shall provide for the taking of written minutes or a recording of all their meetings, including executive session. The minutes or recording shall include:

1. The date, time and place of meeting.
2. The members of the public body recorded as either present or absent.
3. A general description of the matters considered.
4. An accurate description of all legal actions proposed, discussed or taken, including a record of how each member voted. The minutes shall also include the names of the members who proposed each motion and the names of the persons, as given, who make a statement or present material to the public body and a reference to the legal action about which they made statements or presented material.

WHEREAS, The Town Clerk has, since the incorporation of the Town of Carefree, documented the meetings with *Discussion Minutes* which are defined as lengthy and may include information which is not essential to the focus of the meeting and not required pursuant to A.R.S. § 38-431.01. The Minutes are then approved by Council at a following meeting, and

WHEREAS, The Town Clerk already complies with A.R.S. § 38-431.01(D) by posting *Action Minutes* on the Town's website within three working days of a meeting. *Action Minutes* are defined as minutes excluding any discussions that went into making the decision and capture the conclusion and/or action for a topic to be taken. The action minutes provide an executive overview of decisions within a meeting, and

WHEREAS, The advent of electronic audio or video recording of meetings provides for a record of every word said at a meeting and, when available, is posted on the Town's website together with the *Action Minutes*, and

WHEREAS, The practice of drafting and posting both *Action Minutes* followed by *Discussion Minutes*, together with electronic audio or video is duplicative and unduly burdensome, and

WHEREAS, the drafting and posting of *Action Minutes* within three business days with A.R.S. § 38-431.01 in its entirety. (***Exhibit "A"***)

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Common Council of the Town

of Carefree, Arizona, as follows:

Section 1. The practice and procedure for the taking and recording of meeting minutes by the drafting and posting of *Action Minutes*, together with electronic audio or video, when possible, fully comply with A.R.S. § 38-431.01.

Section 2. The Town Clerk and applicable staff are authorized and directed to eliminate the drafting of *Discussion Minutes* and to develop a policy and procedure or the drafting and posting of *Action Minutes* of each applicable meeting, together with any electronic recording available. the taking of written minutes or a recording of all their meetings, including executive session. The minutes or recording shall comply with A.R.S. § 38-431.01.

PASSED, APPROVED AND ADOPTED by the Mayor and Common Council of the Town of Carefree, Arizona, this _____ day of October, 2022.

___AYES ___NOES ___ABSTENTIONS ___ ABSENT

Les Peterson, Mayor

ATTESTED TO:

REVIEWED BY:

Kandace French Contreras, Town Clerk

Gary Neiss, Town Administrator

APPROVED AS TO FORM:

Michael W. Wright, Town Attorney

Z:\Resolutions\2022\Res. 2022-16 Approving Action Minutes Policy.docx

EXHIBIT "A"

38-431.01. Meetings shall be open to the public

A. All meetings of any public body shall be public meetings and all persons so desiring shall be permitted to attend and listen to the deliberations and proceedings. All legal action of public bodies shall occur during a public meeting.

B. All public bodies shall provide for the taking of written minutes or a recording of all their meetings, including executive sessions. For meetings other than executive sessions, the minutes or recording shall include:

1. The date, time and place of the meeting.
2. The members of the public body recorded as either present or absent.
3. A general description of the matters considered.
4. An accurate description of all legal actions proposed, discussed or taken, including a record of how each member voted. The minutes shall also include the names of the members who propose each motion and the names of the persons, as given, who make statements or present material to the public body and a reference to the legal action about which they made statements or presented material.

C. Minutes of executive sessions shall include items set forth in subsection B, paragraphs 1, 2 and 3 of this section, an accurate description of all instructions given pursuant to section 38-431.03, subsection A, paragraphs 4, 5 and 7 and other matters as may be deemed appropriate by the public body.

D. The minutes or a recording of a meeting shall be available for public inspection three working days after the meeting except as otherwise specifically provided by this article.

E. A public body of a city or town with a population of more than two thousand five hundred persons shall:

1. Within three working days after a meeting, except for subcommittees and advisory committees, post on its website, if applicable, either:

- (a) A statement describing the legal actions taken by the public body of the city or town during the meeting.
- (b) Any recording of the meeting.

2. Within two working days following approval of the minutes, post approved minutes of city or town council meetings on its website, if applicable, except as otherwise specifically provided by this article.

3. Within ten working days after a subcommittee or advisory committee meeting, post on its website, if applicable, either:

- (a) A statement describing legal action, if any.
- (b) A recording of the meeting.

F. All or any part of a public meeting of a public body may be recorded by any person in attendance by means of a tape recorder or camera or any other means of sonic reproduction, provided that there is no active interference with the conduct of the meeting.

G. The secretary of state for state public bodies, the city or town clerk for municipal public bodies and the county clerk for all other local public bodies shall conspicuously post open meeting law materials prepared and approved by the attorney general on their website. A person elected or appointed to a public body shall review the open meeting law materials at least one day before the day that person takes office.

H. A public body may make an open call to the public during a public meeting, subject to reasonable time, place and manner restrictions, to allow individuals to address the public body on any issue within the jurisdiction of the public body. At the conclusion of an open call to the public, individual members of the public body may respond to criticism made by those who have addressed the public body, may ask staff to review a matter or may ask that a matter be put on a future agenda. However, members of the public body shall not discuss or take legal action on matters raised during an open call to the public unless the matters are properly noticed for discussion and legal action.

I. A member of a public body shall not knowingly direct any staff member to communicate in violation of this article.

J. Any posting required by subsection E of this section must remain on the applicable website for at least one year after the date of the posting.

<https://www.azleg.gov/ars/38/00431-01.htm>



Agenda Item #

**TOWN OF CAREFREE
INFORMATION SUMMARY**

MEETING

DATE: October 4, 2022

SUBJECT: Authorization of Public Works Capital Outlay funds to purchase a used Articulated Boom Lift.

ATTACHMENT: Lift Data

SUMMARY:

The Public Works Department has leased a boom lift for activities in and around the Town Center. These activities include street light bulb replacement and repair, fountain repairs, Christmas Tree installation, as well as placing holiday decorations. Since the PW department has been leasing a lift more regularly, the Town has decided to purchase a used lift to eliminate rental fees.

This proposal is to purchase an articulated boom lift for the Town. The costs for the gently used lift is \$46,500. The lift is a Genie brand lift model number Z-34/22 IC. The diesel-powered lift is an articulated lift which only has 1848 hours of usage. The lift is located in Sparks NV and will be transported to Carefree for the lowest shipping bid amount of \$1,348.21. Taxes added \$3999.00. This will put the total amount for acquisition of the lift to \$51,847.21 which includes shipping and sales taxes. This cost is well below the budget line-item cost (\$55,000) placed in the approved budget for this fiscal year.

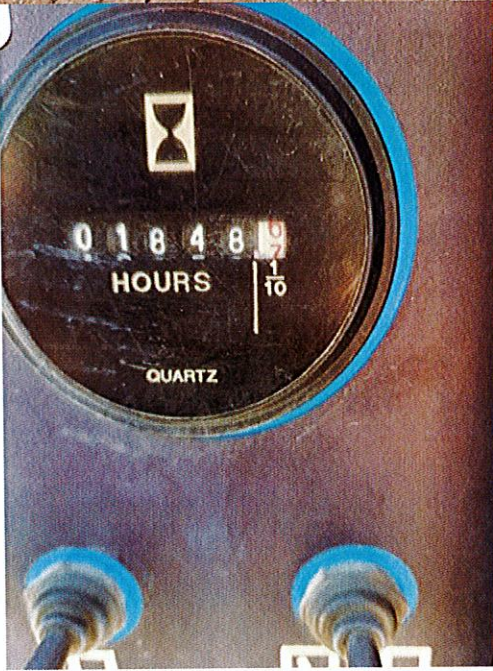
ACTION NEEDED:

Authorization of the the appropriation of the funds in the Public Works Capital Outlay fund to purchase an Articulated Boom Lift in the amount of \$51,847.21.

REPORT PREPARED BY:

MS
Mark Milstone, Town Engineer





Agenda Item #

**TOWN OF CAREFREE
INFORMATION SUMMARY**



MEETING

DATE: October 4, 2022

SUBJECT: Authorization of VSS International, Inc. for work to complete the pavement maintenance projects for the Carefree Pavement Maintenance Projects 2022-2023

ATTACHMENT: Bid Results and map of road projects

SUMMARY:


The Bids for the Carefree Pavement Maintenance Projects 2022-2023 were open on 9/16. VSS International was the low bidder in the amount of \$1,351,000.00. The roads planned to be maintained are include on the attachment. These roads are in alignment with the 10-year Pavement Preservation Program. The funding for this project is included in the CIP plan for this fiscal year. The restoration activities will include a cape seal which consists of a chip seal followed by a slurry seal over the top of the chip seal. Due to cooling weather conditions and contractor staffing concerns, this project will most likely be started once the weather is more favorable in the spring of 2023.

The Engineering Department recommends an additional 25% of the bid total to handle any unforeseen conditions, as well as a possible cost adjustment for material (oil) in the new year. The total cost will bring the project cost to \$1,688,750. This cost is within the range anticipated in the CIP Program for this fiscal year.

ACTION NEEDED:

Authorization of VSS International as the preferred bidder and the appropriation of the funds in the CIP for the Carefree Pavement Maintenance Projects 2022-2023 in the amount of \$1,688,750.00

REPORT PREPARED BY:

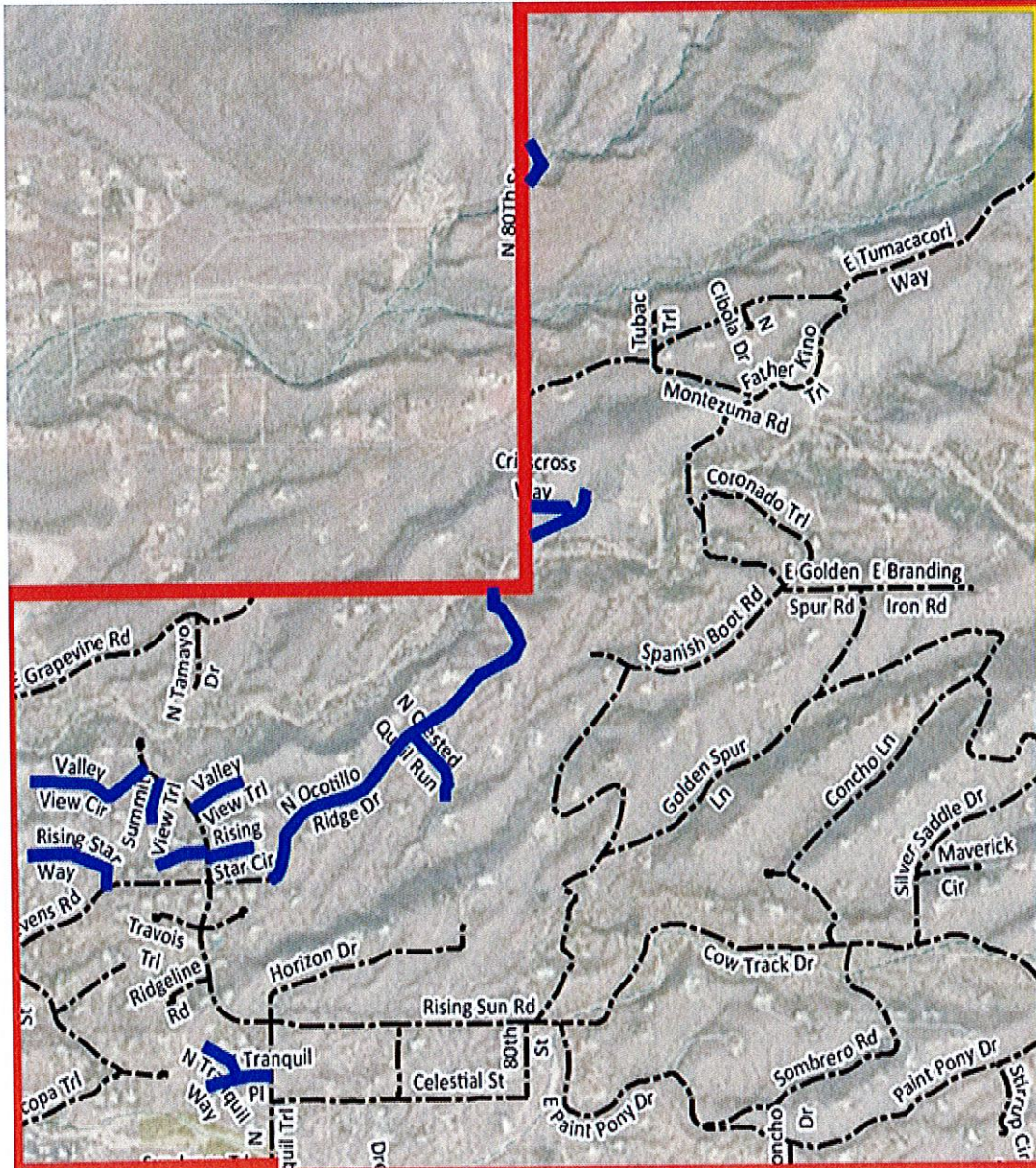


Mark Milstone, Town Engineer

Project Bid Results

Carefree Pavement Maintenance Projects 2022-2023		
	Firm	Total Bid
1	VSS International, Inc.	\$1,351,000.00
2	Sunland Asphalt & Construction, LLC	\$1,732,770.00

PROJECT OVERVIEW MAP INSERT EXHIBIT A-1



* Roadways highlighted in blue above are not part of this project.

Agenda Item #

**TOWN OF CAREFREE
INFORMATION SUMMARY**



MEETING

DATE: October 4, 2022

SUBJECT: Authorization to purchase Rebel Brush Truck with grant funds.

ATTACHMENT: Fire Trucks Unlimited Specifications

SUMMARY:

The Town of Carefree as well as the greater Desert Foothills region is located with an urbanizing, desert interface which is subject to growing risks of wildland fires. To help address this growing risk, many neighboring fire departments have invested in brush trucks which provide more flexibility to quickly respond and access difficult locations and attack small brush fires before they spread. Town staff used the specifications of recently purchased brush trucks from neighboring fire departments within the automatic aid consortium to ensure the equipment will meet automatic aid standards. These brush trucks are purchased from Firetrucks Unlimited. The attached specifications outlines what will come with the purchase of this brush truck.

During the spring budget process Town staff discuss the opportunity to apply for a grant with the Salt River Pima-Maricopa Indian Community. This competitive grant was reviewed by their internal committee which recommended the funding to cover the purchase of this brush truck. The purchase price will be \$177,000. This partnership with the Salt River Pima-Maricopa Indian Community will be recognized in the near term through printed and social media and a decal placed on the truck.

Once the order is placed, it could take between 7-9 months to receive truck. Additionally, approximately \$75,000 of additional wildland equipment to be placed on the truck will need to be ordered. Staff will be working on additional grants to seek additional partnerships to cover these expenses.

ACTION NEEDED:

Authorization to purchase Rebel ATX brush truck from Fire Trucks Unlimited with recently awarded grant funds from Salt River Pima-Maricopa Indian Community as well as additional funding of \$75,000 to purchase supplemental equipment.

REPORT PREPARED BY:



Gary Neiss, Town Administrator



PROPOSAL

REBEL ATX BRUSH TRUCK

Prepared For:

Town of Carefree
37401 N Tom Darlington Road P.O. Box 753
Carefree, AZ 85377
Phone: +1 4804880347
Attn: Ryan Travis
Email: ryan.travis@gmr.net

Prepared By:

FIRETRUCKS UNLIMITED
1175 Center Point Dr.
Henderson, NV 89074
(702) 558-3352
FiretrucksUnlimited.com

REBEL

REBEL BRUSH TRUCKS DELIVER AWESOME PERFORMANCE IN EVERY APPLICATION. FROM RAPID RESPONSE TO RUGGED TERRAIN, WE'VE GOT YA COVERED!

REBEL brush trucks are the perfect solution for your department's wildland and rapid response needs. Our nation's largest fire departments trust their REBELs to perform in the most extreme situations year after year. When you choose REBEL, you get a solid brush truck that goes where Class A pumper just can't, and for a fraction of the price!

HOW IT WORKS

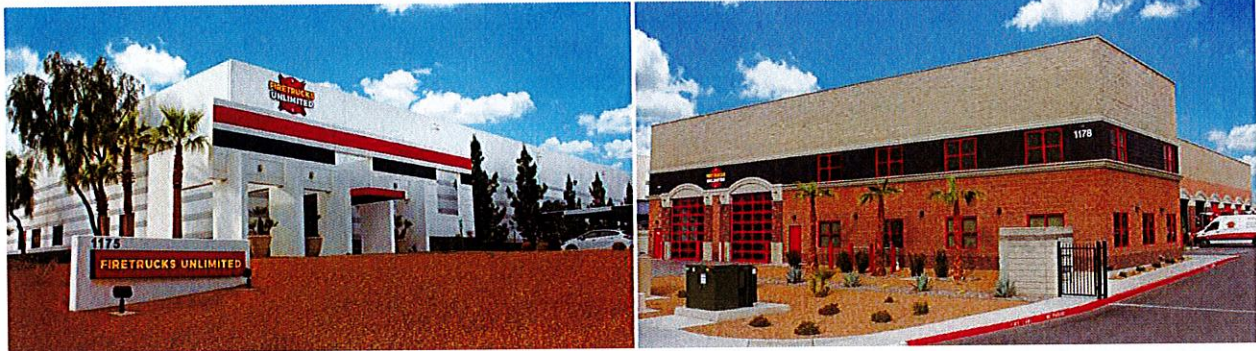
Customize Your Truck: We work with you to customize your truck to meet the specific needs of your department.

EVTs Build Your Truck: Our certified EVT's build your truck at our 50,000 sq. ft. facility. Your Project Coordinator will be in constant contact to keep you current with the build progress of your REBEL.

Final Inspection & Delivery: Your team will visit our facility near Las Vegas to inspect your finished REBEL. We review the project scope together to ensure you are fully satisfied with the build. Your REBEL will be driven to your station or delivered via heavy hauler.

Ongoing Support: You can count on Firetrucks Unlimited for support before, during and after the project. Every REBEL comes with a one-year warranty and any issues you may have will be immediately addressed by our support team.

WHY CHOOSE FIRETRUCKS UNLIMITED?



Best Price

You get the most value for your money when you choose Firetrucks Unlimited for your brush truck needs. Our goal is to have an ongoing relationship with your department, so we always give you the best possible price.

Emergency Vehicle Experience

Experience matters when it comes to your trucks! Our master EVT technicians have built hundreds of trucks of all types for fire departments all over the world.

Specialized Facilities

Our 50,000 sq. ft. facilities are specially designed for emergency vehicle builds and upfits which results in higher quality, faster turnaround and lower costs for our customers.

Fast Turnaround Times

Your REBEL will be delivered to your department within 6 months of signing.

Top Equipment Brands

We're partnered with all the industry leading equipment brands. The equipment on your REBEL will be top of the line!

Best Warranty

You can count on Firetrucks Unlimited to support you before, during and after the build. Your REBEL comes with an industry leading one-year warranty. In addition, all warranties offered by the manufacturers of new components are extended to you. Our nationwide service capabilities ensure any warranty claims you may have will be addressed asap.

WHAT CUSTOMERS ARE SAYING

Scott Schuster

North Las Vegas Fire Department



“The product they provide is high quality and built to last. Every employee from their top management staff all the way down to their team building your unit is very supportive, educated, and informative. The TEAM keeps you informed on your build process and ensures that you are well involved in the build process from start to finish.”

Rusty Coleman

Northstar Fire Department



“The mechanic team was professional and skilled. All of us who attended the final commented on how the mechanics all showed so much pride in their work. This definitely left us feeling good about the project. We are very happy with the experience and would use your company again.”

Eric Staten

Unified Fire Authority



“Firetrucks Unlimited has exceeded our expectations!”

Shawn Murphy

Buckeye Valley Fire District



“The staff and mechanics are great. Everything on the truck works flawlessly. Thanks Again!”

Clair Provost

Wasatch Fire District



“Our Experience with Firetrucks Unlimited was exceptional. Their customer service was exactly what you would expect for an A + business, as well as taking care of the equipment. When we were at their facility we were treated like family. Thank you!”

CONDITION & SCOPE

50.01 General Information

The proposed apparatus will be constructed to withstand severe and continuous circumstances encountered during emergency firefighting operations. The apparatus shall be designed and constructed with consideration to the nature and distribution of the load to be sustained. This proposal details the general design criteria of the cab and chassis, fire body, fire pump, water tank, electrical components, paint and graphics, and equipment. All proposed items shall conform to NFPA 1906, latest edition. The Seller shall furnish satisfactory evidence of the ability to construct, supply service parts, and technical assistance for the proposed apparatus.

51 CHASSIS

51.01 Seller Provided Chassis

The Seller shall provide the following chassis:
2022 Dodge RAM 5500 Cab/Chassis, Crew Cab, 60" CA, 4X4, Diesel, OEM Red

51.06 Front Bumper & Brush Guard RAM

A heavy-duty bumper with brush guard shall be installed on the front of the apparatus. The complete assembly shall follow the chassis body lines and encompass the perimeter of the chassis front. The bumper shall be coated with a black powder coat finish. The bumper shall provide a solid mounting area for warning lights, speakers, and other specified equipment.

51.09 Electric Winch 12,000 lbs.

A Warn 12-volt electric powered winch shall be permanently installed at the front center bumper extension area. The unit shall include the following:

- 12,000 lbs. load rating
- Thermo-metric indicator for motor temperature monitoring
- Cable roller guide assembly
- 90 feet of 7/16" diameter galvanized cable and hawse fairlead & safety hook assembly shall be supplied.
- Winch speed shall be constant with forward and reverse modes controlled with a push button device at the end of 12 feet (12') minimum control cable which connects to the winch through a weatherproof receptacle.

51.11 Nerf Bars

Two (2) 3" black nerf bars shall be installed on the chassis.

51.13 Chassis Protection

Air Intake Ember Guards: The chassis air intake and cabin air filter shall be protected by an ember guard of 18 Mesh, 0.017-inch wire diameter, and a maximum mesh opening of 0.039 inches. The ember guard shall be sized to fit and located at the intake opening. The screen shall be readily accessible for inspection and maintenance.

Fuel Line & Harness Protection: Any fuel lines or electrical harnesses below the chassis frame rails shall be protected with a fireproof sleeve.

BODY & ACCESSORIES

52.02 Fire Apparatus Body REBEL ATX

Body Mounting: Rubber Rail Cushion shall be 1" X 4" X 11" with a 65-durometer hardness rating. Attached cushion to the frame with 12 countersunk bolts 2.50" x 0.375" NC washers and Nylocks. A four position (2 springs each) springer body mounting system shall be used to mount the platform to the chassis. This system shall be designed to allow independent movement between the platform frame and the chassis frame protecting the module from the stresses and twisting rendered by the flexing of the chassis frame. The 2-spring top modules will be attached to the platform long sill with an electrolysis/corrosion barrier. The spring collapse shall be rated at 1250-lbs and 2" of collapse travel. All of the mounting hardware (nuts, bolts, washers) required for complete body installation shall be Grade 8. All nuts shall be self-locking style. All mounting components shall be painted black.

Flatbed Construction: The apparatus body shall consist of a flatbed aluminum construction with overall dimensions of approximately 96" W X 111" L. The body shall be flat with +/- 0.125" deviation over the entire length or width and shall be square with 0.125" or less offset from the opposite parallel side.

Long Sills (LS): Two (2) Long Sills shall run full length in alignment with and perpendicular to the chassis frame rails. LS on bodies shall be rectangular c-channel aluminum alloy 4" H X 2" W X 0.25" wall thickness material.

Cross Sill Member (CSM): CSM on bodies shall be rectangular C-channel aluminum alloy 4" H X 1.50" W X 0.18" wall thickness material. CSM shall be located on maximum 12" centers. CSM to LS welds shall be 100% of the length of the contact edges on two opposing sides of the LS.

Outer Rail: The outer rail shall be rectangular C-channel aluminum alloy 6" tall X 1.90" wide minimum 0.20" wall thickness material. The outer rail shall form the complete bed perimeter without any open or offset seams. The outer rail shall consist of square rear corners.

Platform Deck: The platform deck shall be constructed of 0.125" marine grade aluminum diamond plate. Decking shall be interior perimeter welded to the outer rail, and 6-12 intermittently along the cross sills.

52.02 (CONTINUED) Fire Apparatus Body REBEL ATX

Rear Cab Protection (RCP): One (1) RCP headboard shall be fabricated and installed at the forward end of the apparatus body, directly behind the cab. The RCP frame perimeter shall be rectangular C-channel aluminum alloy 4" tall X 1.5" wide minimum 0.18" wall thickness material. The material will be tapered in a similar fashion to the shape of the chassis cab. One horizontal cross-member located at approximately 0.33" height with 0.125" aluminum diamond tread plate shall be perimeter welded with the tread plate surface forward to the rearward side of the framework on the lower segment. The upper segment shall include a protective framework of 1" X 1" tubing effectively safeguarding the rear window of the chassis cab. The unit shall be attached by a welded rearward gusset and to the lower frame itself by grade 5 bolts. The unit also has twin light bar perches on the top of the bar for easy mounting of emergency light products.

Tailboard: The tailboard shall consist of a framed tail apron integrated with the platform. The apron frame shall be rectangular C-channel aluminum alloy 3" tall X 1.40" wide minimum 0.17" wall thickness material. The interior flat surface of the apron shall consist of 0.125" aluminum smooth plate. The tailboard shall finish with the outside edge of the apron frame even with the corners of the platform. The apron shall house all referenced lighting, steps, and draft tube storage. The apron shall be sufficient in design to grant a departure angle of 24 degrees. The completed tailboard assembly shall meet all other requirements of NFPA 1906 for angle of departure.

Fuel Tank Filler: The fuel filler-neck and urea filler-neck bezels shall be incorporated into the bed channel outer rail unless using an OEM standalone system. Fuel cap shall not protrude past outer rail. The fuel tank filler shall be mounted in accordance with FMVSS 301. The fuel filler hose shall not touch any rough or sharp surfaces and will have no kinks or restrictions. Hose shall be supported by no more than 16" centers, have at least 6 inches clearance from the rear tire with any amount of suspension travel, and if closer than 12" to the tires, have a shield to protect it from objects that may be thrown from the tires.

Draft Line Storage: Draft hose storage shall be mounted under the platform, between the frame rails of the truck. The draft hose box shall be a minimum of 4.75" tall, 24" wide and 100" deep. The opening is covered with a drop hinged, slam shut, Stainless Steel door with push button latches.

Receiver Hitch: A receiver hitch and attached under bar shall be installed on the chassis frame. The under bar is integrated with the lower section of the rear springer mounting system. Trailer wiring and factory brake controller shall be included.

52.03 Compartments REBEL

Compartment Construction: All storage compartment walls shall be constructed from 0.125" aluminum diamond plate. Internal frame work shall be constructed of .125" formed aluminum structural members. Compartment interiors shall be free of exposed electrical harnesses or plumbing components.

Driver's Side:

Top Front Compartment(s): This compartment shall have approximate dimensions of 72"L X 30"H X 18"D and shall include one (1) compartment with double horizontal hinged doors. This compartment is designed for the storage of long handled tools.

Top Rear Compartment(s): This compartment shall have approximate dimensions of 36"L X 30"H X 18"D with a vertical hinged door.

Lower Front Compartment: This compartment shall have approximate dimensions of 36"L X 12"H X 18"D with a horizontal hinged drop door. This compartment shall be attached to the platform by its top.

Passenger's Side:

Top Front Compartment(s): This compartment shall have approximate dimensions of 72"L X 30"H X 18"D and shall include one (1) compartment with double horizontal hinged doors. This compartment is designed for the storage of long handled tools.

Top Rear Compartment(s): This compartment shall have approximate dimensions of 36"W X 12"H X 18"D and shall include a slide out tray.

Lower Front Compartment: This compartment shall have approximate dimensions of 36"L X 12"H X 18"D with a horizontal hinged drop door. This compartment shall be attached to the platform by its top.

Storage Cages: Two (2) storage cages shall be provided and installed above the top front compartments with approximate dimensions of 72"L X 8"H X 18"D. The storage cage shall be constructed of 0.125" aluminum with a punched open mesh material as to allow free air flow from all sides, double folded top 1" section for strength and a solid bottom. Outboard surface on both sides shall be un-punched approximately 5" to accommodate application of vinyl lettering. It shall be open at the top. They will be mounted by rubber cushion leaving a .125" gap underneath and stainless bolts with nylocks.

52.03 (CONTINUED) Compartments REBEL ATX

Compartment Shelves: Four (4) adjustable shelves shall be installed in the top body compartments. The shelving system shall be mounted on a punched finger style slim-line track to allow the change of elevation. Shelves shall be 17.5" in depth, width of the box, with a 2" peripheral lip. Shelves shall be constructed of aluminum and be capable of supporting 250 lbs. of live load without being damaged or permanently distorted. The shelf locations shall be as follows:

- Two (2) in the D/S top front compartment
- Two (2) in the P/S top front compartment

Compartment Doors: All compartment doors shall be recessed into the compartment body sides. All doors shall be weatherproof and maintain contact with all points of the weather stripping. Weather stripping shall be bulb type, attached to the opening flange of the compartment opening. The doors shall have a cross style break in each door for strength.

Door Latches and Hardware: All compartment door latch assemblies shall be installed with threaded stainless steel 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, corrosion resistant stainless steel. All latches shall be of a two-position twist latch type design latching operation. Stainless steel nuts shall be the self-locking type. All latch assemblies shall be keyed alike to 1250. Ten spare keys shall be provided.

Door Hold Devices: All vertically-hinged, outward-opening compartment doors shall be provided with an over center door check to hold the door in the open position. The door check is spring type that when door latch is released the door "springs" to an open position. To release, the spring is moved from the straight position and it folds into the "ready" to open position. It shall be attached to the top of the door and fastened to a plate bolted onto the door. 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.

All horizontally-hinged, drop-down, outward-opening compartment doors shall open flat to the surface below. 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 degree angle without additional support. The gas cylinder hold openers shall dampen the upward movement of the compartment door while opening and will permit closing of the box door without need to release any type of manual locking devices.

52.04 Body Accessories REBEL ATX

Dri-Deck: Dri-Dek shall be installed in all compartment floors and shelves. Dri-Dek provides surface protection and is resistant to fungus, mold, grease, solvents, and most common chemicals.

Mud Flaps: Two (2) flexible rubber mud flaps with manufacturer's stamped logos shall be installed on both sides of the apparatus body behind the rear wheels unless otherwise specified by the Purchaser.

Reflectors: Four (4) Truck-Lite #98034R red reflectors or equal shall be installed on the apparatus. Two (2) on each side, rear corners at the outermost practical location.

Rear Step: One (1) NFPA-compliant fold down step shall be provided and installed at the rear of the apparatus via the receiver hitch. The step shall be fabricated from heavy duty cast aluminum with spring assisted hinges. The stepping surface shall be diamond point and skid resistant so water may flow off without ice formation in cold weather use.

Grab Handles: Two (2) NFPA-compliant chrome-plated grab handles shall be provided and mounted at the rear. Location: vertical right side on manifold enclosure, horizontal top on pump panel.

Nozzle, Nozzle Clips, and Holder: One (1) Akron forestry nozzle shall be included per hose reel. A nozzle clip and tool holder shall be installed on the rear of the apparatus body.

Hydrant Wrench Holder: One (1) National Firefighter brand FEQ 148 or equivalent three position captive latching type/hydrant/spanner wrench holder shall be permanently affixed to the rear facing wall of the rear compartment unless otherwise specified by the Purchaser.

Drip Torch: One (1) drip torch with a heavy-duty 15-GA aluminum canister, welded double-bottom, and full-length handle shall be provided. The torch will meet D.O.T. approval for transport of flammable fuel UN#1B1-Y-150 and is painted red to comply with OSHA regulations 29 CFR 1910.144 while meeting USDA Spec 5100-614 and is USFS approved. The torch shall be mounted behind the rear facing wall of the rear compartment unless otherwise specified by the Purchaser.

Wheel Chocks: Two (2) ZICO wheel chocks shall be mounted rearward of the rear wheels. One (1) wheel chock will be mounted on each side of the apparatus.

I-Zone Hose Hooks: Two (2) I-Zone hose hooks shall be provided and installed on the rear of apparatus body.

ELECTRICAL

53.01 Electrical System & Testing

Chassis Electrical System: The commercial chassis electrical system shall be provided as furnished by the original manufacturer. A customized interface shall be provided and designed, so as not to disturb any of the required chassis functions. The necessary interfaces shall only be provided in areas where load management is allowed or with accessory components provided on the chassis.

Body Electrical System: All electrical lines in the body shall be protected by automatic circuit breakers, conveniently located to permit ease of service. Wiring shall be carefully protected from weather elements and snagging. Heavy duty loom shall be used for the entire length. To minimize the risk of thermal damage, wires run in the engine compartment area shall be carefully installed and suitably protected by the installation of heat resistant shielded loom. All lines shall be color coded, easy to identify, oversized for the intended loads and installed in accordance with a detailed diagram. Grommets shall be utilized where wiring passes through panels. Solderless insulated connectors shall be utilized at all splice joints and shall be enclosed with heat shrink tubing for extra corrosion protection. Flashers, heavy solenoids and other major electrical controls shall be located in a central area near the circuit breakers. All electrical equipment shall be installed to conform to the latest federal standards as outlined in NFPA 1901.

Junction Boxes: Two (2) electrical fuse boxes (battery and ignition), for all apparatus modules, connections, relays, circuit breakers, etc. shall be located in the console between the driver and the passenger seats. All connection points shall be labelled according to function.

12-Volt Electrical System Testing and Certification

The apparatus low voltage electrical system shall be tested and certified by the manufacturer. The certification shall be provided with the apparatus. All tests shall be performed with air temperature between 0F and 110F. The following three (3) tests shall be performed in order.

Test #1-Reserve Capacity Test: The engine shall be started and kept running until the engine and engine

compartment temperatures are stabilized at normal operating temperatures and the battery system is fully charged. The engine shall be shut off and the minimum continuous electrical load shall be activated for 10 minutes. All electrical loads shall be turned off prior to attempting to restart the engine. The battery system shall then be capable of restarting the engine. Failure to restart the engine shall be considered a test failure.

53.01 (CONTINUED) Electrical System & Testing

Test #2-Alternator Performance Test at Idle: The minimum continuous electrical load shall be activated with the engine running at idle speed. The engine temperature shall be stabilized at normal operating temperature. The battery system shall be tested to detect the presence of battery discharge current. The detection of battery discharge current shall be considered a test failure.

Test #3-Alternator Performance Test at Full Load: The total continuous electrical load shall be activated with the engine running up to the engine manufacturers governed speed. The test duration shall be a minimum of 2 hours. Activation of the load management system shall be permitted during this test. However, an alarm sounded due to excessive battery discharge, as detected by the system, or a system voltage of less than 11.8-volts DC for a 12-volt system, for more than 120 seconds, shall be considered a test failure.

Low Voltage Alarm Test

Following completion of the preceding tests, the engine shall be shut off. The total continuous electrical load shall be activated and shall continue to be applied until the excessive battery discharge alarm is activated. The battery voltage shall be measured at the battery terminals. With the load still applied, a reading of less than 11.8-volts shall be considered a test failure. The battery system shall then be able to restart the engine.

At time of delivery, documentation shall be provided with the following information:

Electrical system performance test

Nameplate rating of the alternator

An alternator rating at idle while meeting the minimum continuous electrical load

Each component load comprising the minimum continuous electrical load

Additional loads that, when added to the minimum continuous load, determine the total connected load

Each individual intermittent load

53.02 Center Console

The cab shall be equipped with an angled, 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 console shall contain the following components:

One (1) 12V indicator and 2-position 12v power points

One (2) USB charging outlet

One (1) Bracket and pre-wiring for customer-mounted radio

One (1) Grilled area for below surface emergency radio speaker mounting

One (1) Two position cup holder

Two (2) Mic clip brackets

One (1) Pocket storage compartment

One (1) Siren & lighting controller

Electronic Siren, Speaker, & Lighting Controls: A Whelen Model 295SLSA6 200W electronic siren with warning light controls shall be installed in the center console. The siren shall feature 18 scan-lock siren tones and a public address feature with a hardwired microphone. One Whelen SA315 siren speaker shall be installed behind the chassis grill. The electronic siren and speaker shall meet the NFPA required SAE certification. The entire warning light package shall be actuated by the Whelen siren controller located in the

center console. The wiring for the warning light package shall engage all lights required for "Clearing Right of Way" mode when the vehicle parking brake is not engaged. An automatic control system shall be provided to switch the warning lights to the "Blocking Right of Way" mode when the vehicle parking brake is engaged.

53.03 Warning Light Package TOMAR

A TOMAR warning lighting package shall be installed on the apparatus. All lights will be controlled from switches in the center console. The package includes the following:

Zone A Upper:

Lightbar w/Traffic Advisor, Take Down & Alley Spots Part # 970L-53DI-1201A TOMAR "Scorpion", 53" fully populated dual color warning lightbar shall be rigidly mounted on the top of rear cab protection headboard.

The lightbar shall be equipped with following:

Dual color 24 LED Corner Flood W/ Alley spots

(6) Dual color front facing red/white 12 LED warning modules

(2) High powered front-facing take downs

(1) 6 LED front-facing steady-burn red

(9) Rear facing 6 LED red and amber warning modules

Built-in traffic advisor

Aluminum chassis

15' Cable

Zone A Lower: Four (4) TOMAR RECT-14, red LED flashers w/ mounting flanges shall be installed on the front of the apparatus, forward facing, two (2) per side in the brush guard.

Zone B/D Front Lower: Two (2) TOMAR iLED combo emergency/scene lights w/ mounting flanges shall be installed over the wheel well of the apparatus chassis, side facing, one (1) per side for use as "forward intersection" lights. The LED color shall be red/white.

Zone B/D Rear Lower: Two (2) TOMAR iLED combo emergency/scene lights w/ mounting flanges shall be installed on the rear sides of the apparatus body, over the rear wheel, side facing one (1) per side, for use as "rear intersection" lights. The color shall be red/white.

Zone B/D Upper: Two (2) TOMAR iLED combo emergency/scene lights w/ mounting flanges shall be installed on the upper storage baskets on the apparatus body, side facing, one (1) per side for use as "rear intersection" lights. The LED color shall be red/white.

Zone C Lower: Two (2) TOMAR RECT-14, amber LED flashers w/ mounting flanges shall be installed on the lower rear of the apparatus, rear facing one (1) each side.

Warning Light System Certification: The warning light system(s) specified above shall not exceed a combined total amperage draw of 45-amps with all lights activated in either the "Clearing Right of Way" or the "Blocking Right of Way" mode. The warning light system(s) shall be certified by the light system manufacturer(s), to meet all of the requirements in the current revision of the NFPA 1901 Fire Apparatus Standard as noted in the General Requirements section of these specifications. The NFPA required "Certificate of Compliance" shall be provided with the completed apparatus.

53.05 Apparatus Body Lighting

LED Strip Compartment Lights: One (1) 12" LED cargo light, or equivalent shall be provided to illuminate the compartment. Lighting shall be plastic encapsulated, shock resistant, continuous LED light segments. The LED strip lights shall be attached securely on top of each compartment opening. Each compartment light

shall be switched with a compartment lighting mechanical door switch. Each compartment light sets shall be switched with a compartment magnetic switch and relay combination. The switch trigger wire shall run up front to the console to the compartment door open warning system on the console. The system shall also hook to the parking brake switch as a stop gap initiation.

Ground/Perimeter Lights - Front Bumper & body: One (1) E-10 Tecniq clear LED shall or equal shall be provided under the front bumper housed within an enclosure sufficient to protect from damage. This light shall operate from one of the chassis upfitter switches. Four (4) E-10 Tecniq clear LED lights or equal shall be provided under the apparatus body, one (1) forward and one (1) aft of the rear wheel wells, both sides of the body. Two (2) 4" Maxxima round LED lights shall be provided under rear of the apparatus body. The lights shall be housed within an enclosure sufficient to protect from damage. The cab and body ground lights shall be equipped with an activation switch on the pump operator's panel.

Cluster/Clearance Lights: Three (3) round ICC LED clearance lights shall be installed at the rear of the apparatus above the bumper. Additional clearance lights shall be provided to conform to DOT, Federal, and NHTSA specifications for vehicles of 80" wide. All lighting shall be compatible with the 12-volt chassis electrical system. Lighting shall be located according to ICC regulations.

Back-Up Lights: Two (2) Truck-lite LED Oval Sealed 24 Diode Pattern, or equivalent, white LED back up lights shall be provided at the rear of the body, one (1) each side, above the rear step. The backup lights shall illuminate when the chassis is placed in reverse gear and/or when the rear flood light switch is activated in the cab.

Turn Signal Lights: Two (2) Truck-lite LED Oval Sealed 24 Diode Pattern, or equivalent, amber LED arrow style turn signal lights shall be provided at the rear of the body, one (1) each side, above the rear step.

Brake/Tail Lights: Two (2) Truck-lite LED Oval Sealed 24 Diode Pattern, or equivalent, red LED combination tail/brake lights shall be provided at the rear of the body, one (1) each side, above the rear step.

License Plate Bracket and Light: A license plate mounting bracket with LED lighting shall be installed at the rear of the body.

53.06 LED Driving Lights

Two (2) TOMAR TRX-03W-F LED driving lights shall be mounted to the forward face of the bumper.

53.07 Flood Lights

Two (2) Betts Model # 305003 PAR 36 with Trilliant® 36 LED White Light™ work lamps shall be installed, one on each side of the apparatus, on the rear facing surface of the top baskets. The mounting bracket shall enable full 360° rotation both in the horizontal and vertical axis. The lights shall have a grey finish. The lights shall be individually switched at the light head.

53.08 Battery System

Battery Charger System: One (1) Iota DLS-45/IQ4 12 Volt 45 AMP 4 Stage Automatic Smart Battery Charger shall be provided and installed behind rear bucket seat on driver's side. The charger is ruggedized to withstand the shock and vibration encountered by vehicle mounted equipment.

Auto-Eject: One (1) Kusmaul Super Auto Eject shall be provided and installed. The Super auto Eject is a completely sealed automatic power line disconnect. This prevents contamination of the mechanism by road dirt and ensures long reliable life even when mounted in the most severe environment. A novel internal switch arrangement closes and opens the 120-Volt AC circuit after the mating connector is inserted, and

before the connector is removed. This eliminates arcing at the connector contacts and assures long contact life. The Super Auto Eject is connected to the starter circuit so that ejection occurs when the engine is cranked. The unit is mounted in the rail of the rear cab protection. The cover will be red unless otherwise specified by the Purchaser.

Shoreline Power Inlet Plate: A shoreline power receptacle information plate shall be permanently affixed at or near the power inlet. The plate shall indicate the following:

Type of Line Voltage

Current Rating in Amps Power Inlet Type (DC or AC)

Battery Disconnect Switch: One (1) solid state battery disconnect switch with built in timer shall be installed under the hood and near the battery. The disconnect will be controlled by the chassis ignition, and the customer may select between instant on-off or instant on with timed off up to 30 minutes. A green "battery on" indicator will be installed on the center console in view of the operator. The light will be on when the disconnect is active.

53.09 Alarms

Back-Up Alarm: One (1) solid state back up alarm shall be installed at the rear of the apparatus. The backup 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 87 to 112 DBA while in operation.

"Do Not Move Apparatus" Warning Light with Audible Alarm & Marker Lights: A 1" round, red flashing warning light with an integral audible alarm, shall be functionally located in the cab to signal when an unsafe condition is present such as an open cab door or body compartment door which may cause damage to the apparatus if moved. This light shall be activated when the parking brake is engaged. The label shall read "DO NOT MOVE TRUCK".

Cab marker lights and signaling devices shall be as provided on the commercial chassis cab from the original chassis manufacturer. Truck-Lite Model #30 or equal red LED marker lights with integral reflectors shall be provided at the lower side rear, one (1) each side and two (2) each on driver and passenger sides. Truck-Lite Model # 30 LED 3-lamp identification bar or equal will be provided on the apparatus rear center. The lights shall be red in color.

FIRE FIGHTING SYSTEM

54.02 Hale Pump, Primer, Engine & Foam System

Pump: One (1) Hale Model HPX200-KBD24 pump shall be installed and will perform to the standards of NFPA 1906 low pressure pump rating. Maximum pump performance from 5' draft at sea level shall be: 100 GPM @ 150 PSI, 175 GPM @ 100 PSI and 250 GPM @ 50 PSI. Note: These performance points are for the pump as supplied from the pump manufacturer without any manifold. The actual flow may be decreased slightly when installed on the unit.

Engine: One (1) 4-cycle Kubota D902-E4B-KEA-2 diesel engine with overhead cam and water cooled design shall be installed. Engine rating shall be 24.8 hp @ 3600 rpm and shall be designed to meet current CARB (California Air Resources Board) and EPA (Environmental Protection Agency) Tier 4 standards. A 12-volt electric system shall be installed with electric starter and 45A alternator. Engine shall be equipped with a muffler and USDA approved spark arrestor. The engine and pump shall be isolation mounted.

Engine Fuel Supply: The pump engine shall siphon fuel from the chassis fuel tank via an electric fuel pump.

Siphoning shall occur at a level 1.50" above the chassis siphon system.

Primer: One (1) positive displacement, oil-less, rotary vane, electric motor-driven priming pump, conforming to the NFPA requirements, shall be provided and installed on the cross member at the left rear of the body. The primer pump body shall be fabricated from heat-treated anodized aluminum for wear and corrosion resistance. The primer pump electric motor shall be of a 12 VDC totally enclosed design. The priming pump shall not require lubrication from an external source. The priming pump shall be operated by a single push-pull control valve mounted on the pump operator's panel. The control valve shall be constructed of bronze.

Foam System: One (1) Scotty Through-the-Pump foam system shall be installed on the completed unit. The unit shall consist of an eductor and proportioning valve between the inlet and discharge side of the pump. When in operation, it shall draw water flow from the discharge side, route it through the eductor and proportioning valve, draw foam concentrate through the proportioning valve, and provide foam solution back into the inlet side of the pump. Note: When the foam system is in operation, all discharges, including the tank fill, shall be supplied with foam solution. The foam system shall be capable of adjusting the foam concentration up to .5%.

54.05 Water & Foam Tank

Water Tank: One (1) 450 gallon water tank shall be provided and installed.

Foam Tank: One (1) 12 gallon foam tank shall be integrated with the water tank.

Tank Construction: The tank shall have a footprint of 59.5" W x 74" L. The tank shall be designed to be completely independent of the platform structure and compartments and shall be equipped with removable lifting eyes to facilitate ease of removal. All exposed edges on the tank and fill tower shall be rounded off to a 0.25" radius. The tank shall be fabricated with 0.50" thick, non corrosive stress relieved polypropylene, gloss black in color and U.V. stabilized for maximum protection. Materials used shall be compatible with firefighting foams, retardants, and wetting agents. All joints and seams shall be extrusion double welded and tested for maximum strength and integrity. The transverse baffle partitions shall be manufactured of the same material as the main body and extend from the floor of the tank to the cover to allow for positive welding and maximum integrity. Baffling will meet or exceed NFPA 1901. All baffle partitions shall interlock with one another and be welded to each other, as well as to the walls of the tank. All partitions shall be equipped with vent and air holes to permit movement of air and water between compartments. All internal piping shall be constructed of schedule 80 polypropylene pipe. The tank shall have a vent overflow pipe that extends through the tank and exits under the vehicle. The tank sump shall have a plate welded approximately 2" above the sump to prevent water swirl. There shall be piping inside the tank with a suction tube to the sump. The suction tube shall extend down through the anti-swirl plate and baffles. All fittings in the tank shall be heavy duty polypropylene and shall be welded inside and outside using industry acceptable practices. Tank inlets shall have flow deflectors inside the tank. The end wall of the tank, closest to the pump mount location shall have vertical translucent panel sight gauges for water and foam.

Fill Towers: The tank shall have two (2) manual fill towers with vents. One (1) fill tower shall be for water. One (1) fill tower shall be for foam. The towers shall be constructed of 0.50" polypropylene and shall be a minimum dimension of 8" x 8" outer perimeter. The towers shall be located at the rear corners of the tank. The towers shall have 0.25" thick removable polypropylene screens and a PT3 polypropylene hinged cover. A combination vent and overflow pipe shall be fastened inside the fill towers, approximately 1.50" down from the top.

Tank Outlets: One (1) 3" female NPT tank to pump suction fitting shall be located on the driver's side rear facing wall of the tank.

Tank Inlets: One (1) 1" female NPT tank fill fitting with flow deflector shall be located on the driver's side rear

facing wall of the tank.

54.06 Intake/Discharge Plumbing & Valves

Plumbing Specifications: All plumbing shall be stainless-steel pipe or high-pressure hose. High-pressure hose and hump hose connections shall be installed where vibration or chassis flexing may damage or loosen piping. Victaulic fittings shall be utilized to join plumbing.

Valves: All valves shall be designed to operate under normal conditions up to 500 PSI and shall have dual seats to work in both pressure and vacuum environments. All valves and controls shall be easily accessible for service, repair, or replacement. The discharge and intake valves shall be either direct-actuated quarter turn type or control rods directly connected to the valve handle from the rear mounted pump panel.

Caps: All discharges and intakes shall have NST thread brass chrome rocker lug style caps with chains unless designed to be pre-connected or otherwise specified.

Suction:

Intake Manifold: One (1) 3" stainless-steel manifold shall be connected to the inlet side of the pump.

Tank to Pump: One (1) 3" tank to pump valve labeled "TANK TO PUMP" shall be attached to the intake manifold. The valve shall be plumbed to the tank by 3" stainless-steel pipe and hump hose.

Primary Suction: One (1) 2.5" primary suction valve labeled "SUCTION 2.5" shall be attached to the intake manifold. The valve shall be plumbed to the intake by 2.5" stainless-steel pipe. The intake will terminate with a NHM fitting. A removable intake screen shall be installed to prevent debris from entering the pump.

Discharge:

Discharge Manifold: One (1) 2.5" stainless-steel manifold shall be connected to the discharge outlet of the pump. Discharge valves shall be attached to the discharge manifold by welded pipe nipples. The manifold shall include a quarter turn petcock drain valve at the base.

Rear Discharge: One (1) 1.5" valve labeled "REAR DISCHARGE 1.5"" shall be attached to the discharge manifold. The discharge shall face the rear of the apparatus and terminate with a NHM fitting.

Mid Body Discharge(s): One (1) 1.5" valve labeled "MID BODY DISCHARGE 1.5"" shall be attached to the discharge manifold. The discharge shall be plumbed with stainless steel pipe through the water tank and shall connect to the two (2) operational valves one (1) on each side of the body via T-adapter. The discharge shall terminate with a NHM fitting.

Hose Reel(s): One (1) 1" valve labeled "HOSE REEL" shall be attached to the discharge manifold.

Tank Recirculation: One (1) 1" valve labeled "RECIRCULATE" shall be attached to the discharge manifold. The valve allows for recirculation of water when discharge valves are closed and for the pump to be used to refill the water tank.

54.07 Hose Reel(s) & Booster Hose

Hose Reel Location(s): One (1) Hannay brand model # EPF 30-23-24 RV shall be provided and installed at the rear of the apparatus body on the passenger's side on top of the slide out compartment. The hose shall

dismount to the passenger's side.

Hose Reel Specifications: The hose reel shall have capacity for 150' of 1" booster hose. The hose reel outlet connection shall be 1" NPSH thread. The hose reel shall include a 2/3 HP 12V electric motor for rewinding the hose. The rewind control shall be located on the rear section of the hose reel frame. The hose reel shall include a 70-amp breaker. The hose reel shall also include manual rewind capability. The pinion shaft for the manual rewind gear shall have an adjustable tension brake controlled at the reel. One (1) FH3 captive roller assembly, or equivalent, shall be included with the reel. The frame and drum shall be fabricated of steel with aluminum powder coat finish and the sprocket shall be chrome plated to minimize maintenance.

Booster Hose: 150' of Reel Lite 1" booster hose shall be provided and installed on the hose reel. The booster hose shall be well suited for fighting applications. The booster hose shall be non-collapsible and extremely kink resistant, even at low pressure, with a bend radius of less than 3.5". The booster hose shall include circular woven construction, single jacket, and combined with a helical interior reinforcement. The booster hose shall be yellow in color.

54.10 Instrument Panel

The instrument panel shall include the following components:

Pump Engine OFF/RUN/START Control
Engine Ignition ON Warning Light
Primer Control
Throttle Control
Oil Pressure Warning Light
Coolant Temperature Warning Light
One (1) E-03 Tecniq LED Light and Switch for Panel Illumination
Tachometer/Hour Meter

Intake & Discharge Pressure Gauges: One (1) 2.5" compound pressure gauge shall be provided and installed on the pump panel. The gauge shall display 30 inHg to 400 PSI. The gauge shall be Class I brand or equivalent.

Water & Foam Level Gauges: One (1) water level gauge and (1) foam level gauge shall be provided and installed. The gauges shall be FRC "TANKVISION PRO" model or equivalent. The gauges include ultra-bright LEDs for sunlight readability and two wide-viewing lenses for 180 degrees of clear viewing. The gauges include a self-calibration feature to allow for use on tanks of different shapes and sizes. The gauges shall flash when the tank level reaches 25% capacity. The gauge level indicators shall be driven by a pressure transducer mounted low on the tank to sense static water pressure.

PAINT, GRAPHICS & LABELS

55.01 Cab Paint

The chassis cab shall be painted red at the OEM.

55.04 Compartment Door Paint

The compartment door shall be painted to match the chassis cab unless otherwise specified by the Purchaser.

55.05 Graphics, Lettering and Striping

3M Scotchlite graphics, lettering, and striping shall be provided on the cab doors and apparatus body. The Purchaser will provide the original artwork to the Seller. The Seller will provide decal mockups to the Purchaser before installation. Premium materials are available for an additional fee.

55.06 Data & Safety Labels

The following labels and signs shall be affixed to the apparatus:

Apparatus Fluid Type and Quantities: A permanently mounted label displaying the following information shall be installed in the apparatus interior near the driver's seat.

- Pump Engine Oil
- Pump Transmission Lubrication Fluid
- Pump Primer Fluid (if applicable)
- Chassis Engine Oil
- Chassis Engine Coolant
- Chassis Transmission Fluid
- Chassis Drive Axle(s) Lubrication Fluid
- Chassis Air Conditioning Refrigerant
- Chassis Air Conditioning Lubrication Oil
- Chassis Power Steering Fluid
- Chassis Front Tire Cold Pressure
- Chassis Rear Tire Cold Pressure
- Chassis Maximum Tire Speed Rating
- Chassis Manufacturer
- Chassis Production Number
- Chassis Year, Month Manufactured
- Chassis Vehicle Identification Number

Unit Identification Placard: A unit identification placard shall be installed on the center console. The placard shall state the name and address of the apparatus manufacturer and the apparatus unit number.

Pump Operating Instructions & Specifications: An identification plate shall be provided near the instrument panel with step-by-step pump operating instructions and pump specifications.

Component Labels: All controls, valves, gauges, ports, drains, and other components shall be labeled.

Warning Labels: The following warning labels shall be installed in the chassis cab and be visible from the driver's seating position.

"Maximum number of personnel the vehicle is designed to carry (5)."

"DANGER: Personnel must be seated and seat belts must be fastened while vehicle is in motion. Death or serious injury may result when apparatus is in motion."

"DO NOT MOVE APPARATUS WHEN LIGHT IS ON"

"This apparatus is equipped with an air filter ember protection screen. Routine inspection is required."

"WARNING: Noise hazards occur during siren operation."

55.07 Chevrons

The interior flat surface of the tailboard apron shall be covered with alternating strips of 6" diamond grade reflective striping. The diamond grade shall be Ruby Red #680-82 and Lemon Yellow #680-81 in color.

OTHER

56.01 Detailing & Finalization

The vehicle the interior and exterior shall be washed and detailed prior to delivery.

56.02 Operation, Service, & Certification Material

The following materials shall be provided with the completed apparatus:

- Operator Safety Information
- Pump Operation and Troubleshooting Instructions
- Maintenance and Lubrication Information
- Component Literature
- Replacement Parts List
- Electrical Diagrams
- Pump Test Certificate
- Weight Certificate
- Warranty Information

56.04 Warranty

The apparatus shall be covered by a 1-year limited warranty. Warranty includes parts and workmanship.