

Carbon County Fire Department

Wildland Apparatus

Minimum Specifications

The County of Carbon will receive sealed bids for a 2021 or newer, NFPA compliant, all-wheel drive, 4 door crew cab, Wildland Brush Truck, personally delivered or U.S. Mail (No Faxed or Emailed Bids will be Accepted) in the County Clerk's Office at the Carbon County Courthouse, PO Box 6, or 415 W. Pine St. if overnight, Rawlins, Wyoming 82301 until 2 p.m. June 9, 2021, at which time the bids will be publicly opened at the Carbon County Courthouse. Bids shall be clearly marked Wildland Fire Bid and all bids must be valid for at least 30 (thirty) days from the due date.

Bidding documents are available from the County Clerk's office at the address shown above, or by downloading them from the County website at www.carbonwy.com.

Carbon County reserves the right to reject any and all bids, to accept deviations from the specifications and to waive any formality or technicality in the bidding in the sole discretion of the County.

Minimum Requirements:

Chassis:

A Ram 5500, Four Wheel Drive Chassis with a Cummins Diesel Engine or a Ford F-550, with a Diesel Engine.

- Minimum 18,750 LB. GVWR.
- Automatic Transmission.
- Manually locking front hubs.
- Limited slip rear axle, 4.88 ratio.
- Front and Rear heavy duty tow hooks.
- A spare tire/wheel to match size to the vehicle will be provided and mounted on or within the tank area of the apparatus. A jack and lug wrench will also be provided.
- The chassis will be WHITE in color.
- 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 manufacturer's 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 a fully mounted 16,500 pound Warn Winch. The front bumper/grill guard shall be equipped with two (2) integrated external tow eyes with a rated capacity sufficient to mount a 16.5k winch and to extricate the apparatus if necessary. 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.
- Transfer case skid plate.
- An air intake with ember separator installed if available.

- Cruise control.
- Trailer tow package with integrated OEM brake controller.
- Mounted Class III receiver hitch.
- Center console with room for emergency switches, maps, supplied radio(s), and storage.
- Steel Painted Wheels.
- Cab Air Conditioning.
- Equipped with an audible back up alarm.

Striping and Graphics

- All stripes are per NFPA standards and ASTM D 4965, "Standard Specifications for Retro-reflective sheeting for Traffic Control" unless otherwise specified.
- A black reflective stripe shall be affixed to the perimeter of the apparatus. Striping on the engine sides shall cover at least 50-percent of the cab and body length, following the natural contour of the equipment.
- Rear Chevron Graphics - At least 4.00-inches, not to exceed 8.00-inches, of chevron striping, red and yellow in color, shall be provided on the vertical rear facing surface of the apparatus body and 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 4-inch-wide vertical surface is unavailable, multiple strips may be used. Chevron striping shall cover as much of rear surface as practical.
- Reflective DOT Red and White Striping for Doors - A 1" to 2" white and red reflective stripe shall be installed on all vertically hinged interior compartment door faces 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.
- Specific Department Striping -Agency determined unit identifiers will be affixed to the vehicle on the front bumper, sides of the vehicle, rear of the vehicle, and on the roof of adequate sizing. Gold leaf type agency name decal will be affixed to both the front driver side and passenger side doors. Final approval shall be obtained prior to installation based upon a drawing or rendered photograph showing exact placement, color, and configuration.
- 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.

Pump Package:

- A polypropylene tank with baffles and a metering system of with a minimum 300 gallon water capacity.
- Integrated class A foam cell of at least 7 gallons but not exceeding 12 gallons.
- Metered class A foam system.
- Side and Rear LED work lights that are permanently mounted and non-telescopic in nature.
- An electric start diesel powered pump engine with an integrated fuel system, quiet mufflers and automatic water pressure loss /oil pressure loss shut down.

- Water pump capable of producing at least 100 GPM at 150 PSI; 100 GPM at 250 PSI; and 65 GPM at 350 PSI
- An auxiliary primer pump will be provided.
- Plumbing - All plumbing shall be stainless-steel with high pressure flexible hose where appropriate. Sweeping elbows and tees shall be used to improve flow. Victaulic couplings shall be used where appropriate to allow easier disassembly for maintenance. The stainless welds shall be cleaned and polished. Deck mounting of plumbing components shall be maximized to the greatest extent possible to eliminate hanging fixtures and minimize component shifting, loosening, etc.
- Apparatus will be equipped with an electronic water and foam level monitoring system. A monitor for each tank will be mounted on the interior of the apparatus and at the rear.
- 4" liquid filled discharge pressure gauge, labeled in PSI with a minimum range of -30-0-450.
- All discharges will be provided with caps and chains.
- Hannay type electric rewind, booster hose reel with roller guides with an outlet plumbed for 1" NH thread.
- Electric rewind control buttons will be installed so operator can rewind the reel from the ground in a standing position on either side of apparatus unless the reel is mounted to the rear. The rewind button shall be configured so it will not be inadvertently activated.
- 150' of 1" Rubber booster hose will be provided. The hose shall have a minimum working pressure of 800 psi.
- The tank to pump valve will be easily accessible with an extended handle.
- A minimum of (2) 1 ½" rear discharges.
- Valve numbering system in accordance with current DOI/USFS Standards
- The pump and all related equipment will be tested for proper operation prior to delivery.

Body/Compartments:

- The compartments will be configured with adjustable shelving with at least one but no more than three shelves being provided per compartment. The compartments and shelving will be treated with a protective coating or be constructed of a durable material (e.g. stainless steel, resin composite, etc). All shelving must be user adjustable.
- All compartments will have door switched interior lighting.
- At least one compartment will be configured to be ventilated for storage of flammable liquid containers.
- All compartments will be configured with rubber seals to prevent moisture or dirt from entering compartment.
- On the aft of the vehicle there will be a compartment and/or access to suction hose. It is preferred that this is a horizontally hinged, drop-down door. The door shall be positioned as high as possible and shall have a small rubber bumper placed on the outside of the door to prevent contact with the apparatus. Three (3) aluminum square tubes shall be mounted as high as possible and transect the passenger side front compartment and passenger side long horizontal compartment. The tubes shall be mounted in a manner that allows each suction hose to be easily remove or stored with the foot valve and strainer attached.

- 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.
- All compartments will be lined with “Turtle Tiles” or similar lining material.
- The driver side will have an additional storage box, at least 60” in length constructed of materials matching the rest of the bin system. 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 module shall be equipped with a drain to allow moisture out but prevent moisture from entering.
- The passenger side will have an aluminum open basket with dimensions of 55” wide x 14” high x 20.5” deep. The fit and trim of the compartment shall be integral with the lower compartments in both aesthetics and function. The aluminum basket will have “tie-down” provisions spaced evenly along the top edges and have a perforated floor to allow liquids to drain.
- Both sides of the apparatus body will be fitted with a stainless-steel railing protection system. The purpose of this railing will be to prevent any equipment stored on the top of the apparatus from sliding off as well as providing tie-down points for stored equipment. The rails will be 1.25” diameter tubing. The top railing shall be approximately 12” in height. The railing shall have capabilities of up to 300 pounds without distortion and shall be secured to the side packs in such a manner that using them as grab handles/rails shall not tear the uprights out of the side packs. The rails shall start at the cab guard, travel along the outer edge of the apparatus and terminate at the attached bin (driver side) and basket (passenger side).
- Located at the rear of the apparatus, a hose bed will be provided for a 1 ½” truck protection line. This will be configured to pull from the rear of the apparatus.
- All compartments will be equipped with a door ajar warning light in the cab visible to the operator.

Emergency Light Package:

- LED NFPA compliant emergency light package. All lights will be of a low profile design in order to limit snagging on tree limbs. The colors will be Red and White as per Wyoming State Statutes.
- Traffic advisor directional light bar shall be installed at the rear of the apparatus body, mounted to the crossover platform from with a weatherproof electrical quick disconnect feature. The control head shall be mounted in the cab console and shall offer control of the flash pattern for the traffic directing signal. The control head shall indicate the current directional signal in use.

Siren:

- A 100 watt minimum electronic siren will be provided and installed with external speaker.

Manuals:

- A full set of operating manuals for all major components will be supplied.(e.g. chassis, foam proportioner system, hose reel, pump motor, light bars, etc)

Loose Equipment:

- (2) 10' lengths of 1.5" hard suction hose with fittings will be provided.
- An Elkhart model S-200 or similar adjustable booster hose nozzle will be provided.
- Mounted Wheel Chocks accessible from the driver's side.
- Keys - A minimum of two (2) complete key sets including: chassis ignition and door electronic key fobs and a minimum of four compartment keys.
- Decals - The following list of self-adhesive labels shall be included as loose equipment:
 - ▪ Two (2) "FIRST AID" labels approved
 - ▪ Two (2) "FIRE EXTINGUISHER" labels
 - ▪ Four (4) fuel storage compartment labels
 - ▪ Two (2) additional Fluid Data labels
 - ▪ Two (2) "Do not exceed MPH" labels
- Manual hose reel crank

NFPA 1906 Electrical Testing

- Electrical system tests shall be performed in accordance with NFPA 1906 current edition.

Questions about these specifications should be addressed to Fire Warden, John Rutherford at (307) 320-7964.