

SOLICITATION#: N40085-15-R-0871

TITLE: EXPLOSIVE ORDNANCE DISPOSAL (EOD) EMERGENCY RESPONSE TRAILER

ATTACHMENTS: EOD Emergency Response Trailer Layout, Electrical Layout, Plumbing Layout, Outlets and D rings layout, and Elevation diagram.

SCOPE OF WORK (SOW): The contractor shall provide all material, labor, equipment and supervision required to fabricate and deliver the 36 foot, 5th wheel emergency response trailer to Marine Corps Base Camp Lejeune, NC 28542.

General description: Enclosed trailer exterior dimensions: 36'L x 8'W x 12'H including all roof mounted attachments. Interior height: 7' 6". Exterior walls of .040 white aluminum. Three 6,000 lbs. axles with 18000 lbs. Gross Vehicle Weight Rating (GVWR) once fully loaded on a toy hauler frame with a 5th wheel connection. Welded steel wall frame with 1" insulation. Walk on welded steel roof frame capable of supporting 440 lbs. with 1" insulation. Tire size ST235/85R16 on rims that are 16x16 psi 80. It will have electric brakes, electric front landing gear and electric stabilizer jacks. LED D.O.T. required clearance and running lights. 7 way tow vehicle trailer plug. A 36" wide entrance door with screen door, paddle handle and deadbolt. It will include one manual folding exterior steps at entrance door. An Assisted, lockable rear ramp door that is 7' wide and able to support 1000 lbs. being rolled over it repeatedly without failure and two 21' x 8' electric awnings. Internally there will be a pocket door separating the rehab and garage area. The electrical will consist of a 4 prong electric inlet rated at 50 amps providing shore powered electricity to the trailer. The power cord is removable 50 amp 125v EEL cord set, yellow 25' in length. It will have a 10kw diesel generator with 22 gallon fuel cell, remote start, Automatic Transfer Switch (ATS), and an in trailer monitoring of power output, power usage and fuel. There will be two deep cycle batteries and are installed to serve as the starter for the generator and will power the 12v lights in the trailer when not plugged into shore power. Two 80 amp solid state converters to provide ultra-clean DC power. The well filtered power will keep the operating electric free of spikes or surges. With no load the output voltage will be 14 VDC which recharges the 12 volt batteries to 100% with timed voltage setback for long term float service without overcharging. The trailer will also contain an inline surge protection system that offers complete protection between ground, neutral and phase. A 12 volt disconnect switch will be installed in the front hitch area which will shut down all 12 volt operated equipment to prevent battery discharge. The exterior will include two 110 volt duplex GFI protected receptacles with self-closing waterproof duplex cover; one located to the right side of the main entrance and one to the rear of the roadside of the trailer. The interior will contain sixteen duplex 110 volt receptacles which are laid out in the accompanying documentation. The interior of the trailer will be illuminated with fluorescent 12 volt lights down each side of the interior. All wiring shall meet or exceed applicable N.E.C standards. The interior will be covered in a high durability polyurea floor covering that is microbial and bacteria resistant as well as impact and oil resistant and can withstand 1000 pound tracked robotics platforms to be run, turned and slid across them without being compromised. Heating, ventilation and air conditioning will consist of 4 ventline northern breeze power vents installed each with intake/exhaust mode and a variable speed. It will be run off of two 13500 high capacity BTU heat pumps installed on the roof. The fifth wheel storage area will contain the Onan 10kw diesel generator securely mounted in a sound proof box with an access door on the roadside of the trailer and be able to be refilled with diesel fuel from the 3' to 5' height externally on the roadside of the trailer. The storage area will also have two 36" x 36" access doors one from the outside on the curbside of the trailer and one internally accessible from the marine rehab area. The Marine rehab and changing area will include a 48" x 18" x 72" locker

room style two steel post bench that is removable with covers included for the floor anchor points when the bench is removed. The bench must be able to handle 400lbs and be coated in a material that is water, solvent and warp resistant. A gear locker 34" x 34" x 72" must be included with continuous angle frames and an all welded steel construction with heavy duty 200 pound rated 1" bar for hanging the bomb suit. This locker must be fully ventilated mesh metal sides, door latching system and powder coat finish. A security cage must also be included on the roadside wall with shelving 36"W x 36"D x 72"H of all welded steel construction with 6" solid caster wheels, two lockable swivels and two rigid capable of supporting a total load capacity of 3000 lbs. The security cage shall have two lockable front doors and meet all standards for storing classified cryptographic items (CCI); the interior shall have solid steel shelves that adjust in 3.5" increments. The restroom will contain a cassette style toilet with 20 gallon fresh water tank and 40 gallon grey and 30 gallon black water tanks which will all contain an electronic monitoring system with display inside the trailer viewable in the bathroom and deep sink area. There will be an instant hot water heater and removable clothing rod in the shower. The kitchenette will include a deep sink that is 22" x 25", a .7 cu ft. microwave, 1.7 cu ft. refrigerator, coffee maker and laminated cabinetry. The garage area will consist of 2 fold down counter tops and shelving with a lipped edge as indicated on the floor plan. Counters will be 72" long and be covered in sheet steel material. 20 D-rings will be mounted on the walls and floor as indicated in the accompanying documentation. Three rows of recessed E-Track will also be installed on the floor which is also indicated in the accompanying documentation. Two charging stations consisting of lipped shelving 21" deep x 41" long containing two 110v duplex outlets per shelf. Two 46" LED TVs with HDMI, RCA, S-Video and Serial inputs will be included. One will be mounted on an accordion style adjustable swing mount that can swing 180 degrees and be moved off the wall at least 24". The second will be able to be viewed from the exterior of the trailer through an internally lockable roll up style security door and window. There will be a 15' Electronic antenna mast with hand crank backup installed on the exterior of the trailer near the rear or rear curbside of the trailer. This antenna mast will contain antenna connections for user supplied antennas and contain a camera with day and night visibility. This camera will also be able to pan 360 degrees, tilt, 36x zoom and be controlled internally from the trailer including height adjustment of the mast. It must also contain a built in defogger and lens wiper. The exterior of the trailer will also contain eight Whelen M4 series emergency lighting, two per side and eight Whelen 900 series LED scene lights two per side. The TVs and camera will all be connected to an easily accessible matrix switch with multiple audio/video sources to multiple audio/video destinations. This switcher must accept audio/video signals from a range of input sources to include DVD, Blu-ray, robotics, and Computers. The output destination will be monitors, projectors and video conference codecs. It must support video up to 1920x1200 including HDTV 1080p/120 and HDMI features including a data rate of up to 6.75 Gbps, deep color up to 12 bit, 3D and HD lossless audio formats. The trailer will also come with a husky silver series 26k 5th wheel trailer hitch kit, single jaw bolt on to fit a 2012 Chevrolet 3500.

Detailed External Requirements:

- a. 5th wheel connection
- b. .040 inch thick aluminum external walls painted white
- c. Heavy duty toy hauler frame with three 6000 lbs. axles rated at 18000 lbs. GVWR
- d. Heavy duty full sized rear ramp rated at 1000 lbs. with assisted open and close, and lockable dual cam door latches.
- e. 36" wide side access door with peep hole, internally and externally lockable with deadbolt and a screen door
- f. Secure roll up door internally lockable for external view of 2nd 46 inch LED TV
- g. Two 21' x 8' electric awnings, one curbside and one roadside

- h. Electric front landing gear and electric stabilization jacks
- i. 15 foot antenna and camera mast
 - 1. Electrically extended with hand crank backup
 - 2. Pre-wired with robotics antenna connections internal and external
 - 3. Day and night viewing camera with defogger and lens wiper
 - 4. 1" Nycoil wire management system
 - 5. Internal controls for raising and lowering
 - 6. Joystick/keyboard controlled
 - 7. Capable of being connected to the Matrix switch and TVs
- j. Porch light, and LED D.O.T. required clearance, running and scene lights on all sides
- k. External shore power attachment four prong 50A 125V with 25' cordset
- l. External generator access and refueling
- m. 5th Wheel overhead storage access
- n. 18,000 pounds GVWR
- o. External dimensions no greater than 36'L x 8'W x 12'H including all external attachments
- p. Interior height 7' 6"
- q. Welded steel wall frame with 1" insulation
- r. Walk on steel roof frame rated at 440 lbs. with 1" insulation
- s. Tire size ST235/85R16 on 16x16 90 psi rims
- t. Equipped with Electric brakes
- u. 7 way tow vehicle trailer plug
- v. Manual folding exterior steps at entrance door

Detailed Internal Requirements:

- a. Rear ramp door able to withstand 1000 lbs. finished with heavy duty coating assisted open and close with cam style locking latches.
 - b. Rear flooring with heavy duty coating and 3 rows recessed E-track for tie downs
 - c. 3' x 5' white boards on both sides of the rear area
 - d. Overhead shelving with fold down counter tops with lipped edges below both sides rear area
 - e. Floor to ceiling shelving on both sides forward of the counter tops
 - f. Fully contained head with shower and toilet
 - g. Deep sink, refrigerator, microwave and coffeepot next to deep sink.
 - h. Pocket door between garage area and changing/marine rehab area
 - i. 34" x 34" x 72" gear locker built with continuous angle frames all welded steel construction fully ventilated mesh metal sides, locking door latching system and powder coat finish with heavy duty 200 pound rated 1" bar for hanging the bomb suit.
 - j. 36"W x 36"D x 72"H security cage on the roadside wall, with shelving that adjust in 3.5" increments, of all welded steel construction, two lockable front doors and meet all standards for storing classified cryptographic items (CCI) with 6" solid caster wheels, two lockable swivels and two rigid capable of supporting a total load capacity of 3000 lbs.
 - k. 48" x 18" x 72" locker room style two steel post bench capable of handling 400lbs, coated in a material that is water, solvent, and warp resistant and is removable with covers included for the floor anchor points when the bench is removed.
 - l. Above 5th wheel storage access.
 - m. Dual 46 inch LED TVs, with HDMI, RCA, S-Video and serial inputs one facing inboard, one facing outboard behind internally locking roll up door, with a second on an accordion style 180 degree rotating swing mount.
 - n. Internal switches for external electric leveling and landing gear, external lights, antenna mast and awnings.

o. Monitor for fresh water, grey and black waste water, generator output, usage, and fuel levels

p. 12V fluorescent lighting down both sides internally that does not hang low

q. Interior height of 7' 6"

r. 20 D-rings installed (see outlets & D-ring layout)

s. 2 large charging stations 21 inches deep by 41 inches long

t. Matrix switch with multiple audio/video sources to multiple audio/video destinations.

This switcher must accept audio/video signals from a range of input sources to include DVD, Blu-ray, robotics, and Computers. The output destination will be monitors, projectors and video conference codecs. It must support video up to 1920x1200 including HDTV 1080p/120 and HDMI features including a data rate of up to 6.75 Gbps, deep color up to 12 bit, 3D and HD lossless audio formats.

u. Polyurea floor covering on ramp door and garage area that resists bacteria, oil, chemicals and has anti-microbial properties.

Detailed Electrical Requirements:

a. Onan 10kw diesel generator

1. 3 year factory warranty

2. Internally and externally startable, internal power output display, used power percentage, and breakers and fuel monitoring

3. 22 Gallon fuel cell able to be filled from a 3'-5' height from the ground

4. Includes two deep cycle batteries

5. Two 80 amp solid state converters mounted in a sound proof box in the storage area with access door facing roadside

b. 16 110V duplex outlets spread throughout the trailer 4 on each side at the charging station and countertop

c. Internal power distribution box and circuit breakers and surge suppression system

d. External shore power connection with 125V 50A four pin connector with 25' detachable cordset

e. Four ventline norther breeze power vents installed with intake/exhaust mode and a variable speed connected to two 13500 high capacity BTU heat pumps installed on the roof of the trailer.

f. (2) 46 inch LED TV 1 mounted by the rear countertop and 1 externally viewable behind roll up door

g. Refrigerator 1 cu ft, microwave .7 cu ft and coffee maker

h. 2 strips of fluorescent lighting for the entire inside down both sides of the ceiling in the garage area and one strip down the middle of the marine rehab and changing area.

i. LED strip lighting inside above 5th wheel storage area

j. External emergency response flashers and wig wags that can be seen 360 degrees

k. External 12V shut off switch installed in hitch area

l. 2 external GFI outlets with self-closing weatherproof covers

m. Two outlets in the rear of the garage area one on each side, on a 20A circuit

n. Two outlets in the forward storage area one by each access door.

o. All wiring must meet or exceed applicable N.E.C. Standards

Detailed Facility Requirements:

- a. Head with shower internal including removable heavy duty closet rod
- b. Water spaying wand with 10' hose externally located in rear roadside of trailer contained in an under trailer box
- c. Toilet
- d. Deep sink 22 inches by 25 inches
- e. 20 gallon fresh water tank
- f. 40 gallon grey waste tank
- g. 30 gallon black waste tank
- h. Electronic waste and water tank monitoring in kitchenette and toilet areas

Special Instructions:

1. The contractor shall install the appropriate hitch on a 2012 Chevrolet 3500 government vehicle capable of towing the trailer.