

Request for Proposal

The Osage Beach Fire Protection District is accepting sealed bids for the purchasing of fire hose.

- All bids should be sealed and clearly marked: "SEALED BID/FIRE HOSE"
- All bids should be delivered to the Osage Beach Fire Station #1 at address listed below no later than **February 11, 2022, at 4:00pm**. Bids will be opened at this time and tabulated for presentation to the Board of Directors at the **February 15, 2022**, Board meeting. No bid delivered after this date and time will be accepted. Bids received after the specified time of closing will be returned unopened.
- A copy of the bid specs can be obtained by calling our Station 1 at 573-348-1221, Monday – Friday 7:30am-4:30pm or on the web at: <http://obfire.com/forms/bid-opportunities/>

Osage Beach Fire Station 1
1170 Bluff Dr
Osage Beach, MO 65065

- Any changes to the specifications must be spelled out completely in the bid and must either meet or exceed the specifications as listed. When bidding on an "or equal," Bids must be accompanied with all descriptive information necessary for an evaluation of the proposed material or equipment such as the detailed drawings and specifications, certified operation and test data, and experience records. Failure of any bidder to furnish the data necessary to determine whether the product is equivalent, may be cause for rejection of the specific item(s) to which it pertains.
- Warranty information and delivery time must be provided with every bid.
- Delivery of all items shall be F.O.B. Destination
- No bidder may withdraw his proposal for a period of sixty (60) days after the date and hour set for the opening herewith. A bidder may withdraw his proposal at any time prior to the expiration of the period during which proposals may be submitted, by written request of the same person or persons who signed the proposal
- The Owner reserves the right to accept or reject any or all bids;

Osage Beach Fire Protection District

573-348-1221

SCOPE:

Hose manufactured to this specification shall be of superior quality and workmanship. The hose shall withstand the rough usage of front-line firefighting. Hose specified shall meet NFPA 1961 standards. Hose furnished under these specifications will have a potential service life and warranty of 10 years with a lifetime warranty against liner delamination, barring mistreatment that would render it unfit for service. Upon delivery, the hose shall be free from defects in materials and workmanship.

Compliance ● Exception ●

HOSE SPECIFICATIONS BY SIZE AND TYPE:

3" AND 2-1/2" SUPPLY LINE ECO-10

JACKET CONSTRUCTION:

Double jacket hose manufactured to this specification shall be tightly woven with filament polyester yarn in the filler and ring spun polyester yarn in the warp of both the inside and outside jackets. The hose shall be resistant to most chemicals and petrol products, and resist deterioration due to exposure to UV rays and ozone. It shall not be affected by rot or mildew. The inside and outside jackets shall be manufactured with a minimum pick count of 11 picks per inch for increased strength and abrasion resistance. The inside jacket shall be manufactured using a reverse twill process to reduce friction loss. The inside jacket shall be manufactured on a circular loom in a clockwise direction and the outside jacket in a counter-clockwise direction. The hose must be of sufficient body and weight to meet the demands of firefighting usage.

Compliance ● Exception ●

LINING: The rubber lining shall be a single-ply extruded tube of synthetic high tensile EPDM compounded to resist ozone. The finished form shall be free of pits or other imperfections and have a smooth finish for better flow characteristics. Polyurethane tubes, SBR and/or PVC tubes that sacrifice durability of the hose life for the sake of weight are not acceptable. The tube thickness shall be a minimum of .020". The adhesion between the tube and jacket shall meet a minimum requirement of 12 pounds on a 1-1/2" strip when tested in accordance to UL-19 standards. Minimum tensile strength requirements for the finished tube requirement shall be 1800 psi. A valid UL/ULC Underwriters inspection procedure shall be in force.

Compliance ● Exception ●

PERFORMANCE:

The minimum burst test pressure, when tested in accordance to NFPA 1961, on all Eco-10 diameters up to 3" shall be 1200 psi / 82 bar. Minimum burst test requirements for 4" and 5" diameters shall be 900 psi / 62 bar. Service test pressures stenciled on the hose shall be in accordance with current minimum requirements of NFPA 1962. *A valid UL/ULC Underwriters 800 psi / 55 bar listing shall be in force.

Diameter	Service Test	Proof Test	Burst Test	Bowl Size	Weight Uncoupled
2 1/2 "	400 psi	800 psi	1200 psi	3"	0.42 lbs/ft
3"	400 psi	800 psi	1200 psi	3 3/8"	0.56 lbs/ft

Compliance ● Exception ●

2" AND 1-3/4 COMBAT READY DOUBLE

JACKET ATTACK HOSE:

HOSE CONSTRUCTION:

This hose is designed specifically for aggressive fire attack operations. The outer jacket shall be woven from ring spun staple polyester yarns over an inner liner consisting of a one-piece extruded through-the-weave nitrile/PVC tube. Color or clear coat abrasion resistant "Key-Lok" process shall be standard. Warranty: Hose shall carry a 10-year written warranty, which includes a 1-year wear/tear warranty.

Compliance ● Exception ●

INNER HOSE PROPERTIES:

When the hose is tested in accordance with NFPA 1961, the liner shall have the following properties:

Ultimate Tensile Strength - Shall not be less than 1200 psi.

Ultimate Elongation - Shall not be less than 200%.

Accelerated Aging Test - Shall meet requirements of UL19 for accelerated aging.

Adhesion - Between reinforcement and liner shall be a minimum of 20 pounds.

Ozone Resistance - Shall show no signs of visible cracking of the cover of liner when tested in accordance with ASTM D1149-91 and ASTM D518-86 (R91), Procedure B.

Chemical Resistance - Exposure and contamination by most chemicals will have no effect on the short- or long-term performance of the hose

Compliance ● **Exception** ●

SAFETY FACTORS:

UL Abrasion - The hose shall be capable to pass a burst test after 5000 cycles on a reciprocating abrasion tester - as specified in UL Standard 19.

Cold Resistance Safety Factor - Hose shall be capable of safe use down to -50 °F. The hose shall have no apparent damage to cover reinforcement or lining when subjected to the cold flexibility test:

Flashover Resistance - Shall be capable of withstanding a surface temperature of 1200 °F for a minimum of 30 seconds without bursting with a static pressure of 100 psi.

Water Pick-up Weight - When tested against the procedure listed in MIL-H-24606 latest edition, the maximum weight gain shall not exceed 3 pounds per 50' length.

Diameter	Service Test	Proof Test	Coefficient of flow	Bowl Size	Weight uncoupled
1 3/4"	500 psi	1000 psi	6.42	2 1/4"	0.38 lbs/ft
2"	500 psi	1000 psi	5.25	2 2/5"	0.44 lbs/ft

Compliance ● **Exception** ●

5" Supply Hose Pro Flow

Construction

Made from 100% high tenacity synthetic polyester yarn, circularly woven and completely protected by a through-the-weave extruded PVC/Nitrile rubber, forming a single homogeneous construction without the use of glues or adhesives of any type

Lining Properties

Ultimate Tensile Strength - Tensile strength of the lining and cover shall not be less than 1200 psi.

Ultimate Elongation - 400% minimum.

Accelerated Aging Test - The tensile strength and ultimate elongation of the vulcanized rubber compound which has been subjected to the action of oxygen at a pressure of 300 psi (±10 psi) and a temperature of 158 °F (±18 °F) for a period of 96 hours shall retain 60% of its originally stated properties

Meets or exceeds requirements of NFPA 1961 and carry a 10-year written warranty against defects in materials and workmanship.

EXCEPTIONS TO SPECIFICATIONS

Any and all exceptions to the above specifications must be clearly stated for each heading. Use additional pages for exceptions, if necessary.

COUNTRY OF ORIGIN Fire hose shall be manufactured in the USA.

Bid Sheet:

QUANTITY	ARTICLES Bid on this form ONLY	UNIT	<u>Unit Price</u> Dollars	Cents	<u>Extension</u> Dollars	Cents
1-700 feet	Fire Hose double jacket 3" diameter, 50' length with 2 1/2" NST threaded couplings, service test 400psi, proof test 800psi, burst test pressure 1200 psi, Yellow in color,. Make _____ Model _____ Proof Test Pressure _____					
1-300 feet	Fire Hose double jacket 2 -1/2" diameter 50' length with 2 1/2" NST threaded couplings, service test 400 psi, proof test 800psi, burst test pressure 1200psi, Yellow in color,. Make _____ Model _____ Proof Test Pressure _____					
1-800 feet	Fire Hose combat ready double jacket attack hose 1 3/4 " diameter 50' length with 1 1/2 " NST threaded couplings, service test 500psi, proof test 1000psi, burst test pressure 1500psi, 350' of red, 350' of yellow. Make _____ Model _____ Proof Test Pressure _____					
1-300 feet	LDH supply hose 5" diameter 50ft length with 5" Storz connections,					