



GATES FIRE DISTRICT

2355 Chili Avenue Rochester, New York 14624
Phone 585-426-2720 Fax 585-426-7444

www.GatesFD.org

Serving Territory in the Towns of Gates and Chili, N.Y.



Sealed Bid Proposal for Fire Hose

**Bids will be accepted until 4:00 p.m. on
Thursday, December 8, 2016 and must
be signed & submitted on the attached form.**

Bidding Information and Requirements

The Gates Fire District will accept sealed bids for fire attack and supply fire hose.

Each length of hose shall be indelibly marked with "Gates FD" including the month and year of manufacture in black letters proportionate to the diameter of the hose.

All 4-inch hose should be free from defects in workmanship and materials for a period of five (5) years from the date of purchase. Manufacturers must state the warranty associated with all other attack hose.

All hose should be U.L. or U.L.C. listed. Each length of fire hose must be tested to its appropriate "test pressure" with couplings installed. A letter of certification shall be presented upon delivery of all hose.

Each manufacturer must supply information relating to flow and friction loss data. Kink test data must be provided for high pressure and low pressure for all fire attack hose.

Hose price quote shall include all shipping and handling charges delivered to the Gates Fire District, 2355 Chili Avenue, Rochester, NY 14624.

The Gates Fire District reserves the right to reject any and all bids and to accept the bid best suited for its specific needs.

The Gates Fire District is requesting sealed bids on the following fire service hoses:

1) 4-Inch Large Diameter Hose

Color: Red
Length: 100 Foot
Couplings: Self-Locking Storz
Total Number of Lengths: 10

Price Per Length: \$ _____

Total Price: \$ _____

2) 3-Inch Attack Hose

Color: Blue
Length: 50 Foot
Coupling Threads: 2.5" National Standard Thread (NST)
Total Number of Lengths: 8

Price Per Length: \$ _____

Total Price: \$ _____

3) 2.5 Inch Attack Hose

Color: Orange
Length: 50 Foot
Coupling Threads: 2.5" NST
Total Number of Lengths: 6

Price Per Length: \$ _____

Total Price: \$ _____

4) 1.75 Inch Attack Hose

Color: Red
Length: 50 Foot
Coupling Threads: 1.5" NST
Total Number of Lengths: 8

Price Per Length: \$ _____

Total Price: \$ _____

6) 1.75 Inch Attack Hose

Color: Yellow
Length: 50 Ft
Coupling Threads: 1.5" NST
Total Number of Lengths: 8

Price Per Length: \$ _____

Total Price: \$ _____

****GRAND TOTAL: \$ _____**

Comments or Exceptions: _____

Vendor Name: _____

Contact Person: _____

Address: _____

Phone #: _____

Fax #: _____

I _____ representing
_____, understanding
**the bid information and requirements of this project submit the above
price quote.**

Signed: _____

Date: _____

1.75", 2.5" and 3" diameter Attack Hose and coupling Specification:

COMPLY

DO NOT
COMPLY

The hose shall be double jacket, service tested to 400 psi. Hose manufactured to this specification shall be of superior quality and workmanship. The heavy-duty double jacket fire hose shall be designed to withstand the rough usage of front line fire fighting.

Jackets:

The inner jacket shall be made with high tenacity filament polyester yarn in both the warp and weft directions, to provide maximum strength.

The outer jacket shall be made with virgin spun polyester warp yarn and a filament polyester weft yarn. Hose made using nylon or other materials shall not be considered as meeting this specification. The hose outer jacket shall have a minimum of 10.0 filler yarns per inch (394 per Meter).

Cold temperature flexibility: The hose must remain flexible to -65°F (-55°C).

Resistance to chemicals and the elements: The hose shall have excellent resistance to most chemical substances, oils and greases. Exposure to salt water shall have no effect on the short or long term performance of the hose and copy of the chemical resistance shall be provided upon request.

Impregnation: The outer jacket shall be treated in one of the following colors; Yellow, Blue, Green, Red, Orange, Black, Tan, Purple and Clear. The treatment shall lock fibers together for greater strength, reduce water pickup and absorption, provide protection against abrasion, provide resistance to Petroleum products and Ozone, and provides for shorter drying times. The treatment's color offerings will provide the ability to identify the hose lines in a variety of applications.

Lining:

The lining (waterway) must be made from polyurethane and must be applied using a fused process that welds the polyurethane directly to the textile while the hose is being woven, without the use of adhesives or hot melt. This process allows for the use of high strength Filament Polyester warp and weft yarn due to the superior liner adhesion, and locks fibers together for greater strength while still allowing for a high flexibility. The fused lining process must create a virtually inseparable unit without the use of adhesives, yielding an extremely low friction (pressure) loss by filling in the corrugations of the weave, creating an amazingly thin and smooth waterway. This process produces lower elongation under pressure, and less pull back when water pressure is suddenly shut-off, resulting in a safer hose to work with.

The lining shall be approved for use with potable water.

Adhesion:

The adhesion shall be such that the rate of separation of a 1 1/2 strip of polyurethane, transversely cut, shall not be greater than 1/4 per minute under a weight of 12 lbs.

Flow and Friction Loss:

Friction Loss for 1.75" hose, flowing 100 GPM shall not exceed 8.1 PSI per 100 feet

Friction Loss for 2.5" hose, flowing 100 GPM shall not exceed 3.6 PSI per 150 feet

Friction Loss for 3" hose, flowing 100 GPM shall not exceed 3.9 PSI per 250 feet

Elongation:

The elongation of the hose at Service Test Pressure will not exceed (2%) when measured from an initial pressure of 10 PSI

1.75", 2.5" and 3" diameter Attack Hose and coupling Specification:
page 2

COMPLY

DO NOT
COMPLY

Twist:

The hose will not twist more than 15 degrees per foot under a pressure of 800 PSI.

Warp:

The hose will not warp more than 10 from a straight line drawn from center to center of the fittings at the ends of the hose.

Weight, Service, Test, Burst Pressures:

Each length of Hose shall not weigh more than the weight indicated below, hose shall have minimum service, test and burst pressures per diameter, as detailed below:

Hose Size:	Weight 50' <u>Un-coupled</u>	Service <u>Pressure</u>	Proof <u>Pressure</u>	Burst <u>Pressure</u>
1.75"	12	400	800	1200
2.5"	19	400	800	1200
3"	26	400	800	1200

Kink Test:

50' length will withstand while kinked, without failure, a hydrostatic pressure of 600 PSI.

Diameter:

The hose has an internal diameter of not less than the trade size of the hose.

Hose Marking:

Each length of fire hose shall be indelibly marked in letters and figures at least 1 inch high with the manufacturer's identification, the country of origin, the month and the year of manufacture, and the words "service test to [the service test pressure the hose is designed to] psi per NFPA1962 [Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose), latest edition. These markings shall be in a minimum of two places on each length of hose, beginning 5 ft ± 6 inch from the ends of the hose unless the hose is marked at continuous intervals not exceeding 12 feet. □ Hose markings shall be as referenced in NFPA 1961 Standard on Fire Hose, latest edition.

Coupling Specifications:

Couplings shall meet or exceed the current NFPA Standard 1963 performance requirements and made of extruded aluminum, hard coated a minimum of .002 thick. □

The fire hose coupling shall be engraved or stamped on the outside surface of the product, with the manufacturer's name or trademark, the thread size and thread designation (e.g., 1 1/2 in. NH). Minimum letter height shall be .10 inch.

Hose coupling shall be stamped or engraved on the outside surface of the each coupling with the country of manufacturing origin.

There shall be three (3) rocker lugs on the female swivel.

Coupling will have two **recessed** identification zones on each coupling, **recessed zone must be engraved into and below the surface** of the coupling to resist abrasion

1.75", 2.5" and 3" diameter Attack Hose and coupling Specification:
page 3

COMPLY

DO NOT
COMPLY

Coupling must be Bar Coded in a recessed identification zone on the coupling Collar and Epoxy coated to preserve the integrity of the Bar Code

Manufacture:

Both hose and couplings must be manufactured in North America and be NAFTA compliant.

Hose must be manufactured after receipt of order

- STOCK HOSE IS NOT ACCEPTABLE.

Warranty: Hose MUST be covered by a minimum Warranty including the following specific warrants:

Ten-year warranty against manufacturing defects

Original hose manufacturer will guarantee these fire hose products to be free from defects in material and/or workmanship for a period of ten (10) years from date of invoice. Any item believed to contain a defect must be returned to the original hose manufacturer for examination and evaluation. If the merchandise is defective as a result of a manufacturing defect, the original hose manufacturer will repair or replace the defective product

Lifetime warranty against liner delamination

Original hose manufacturer will provide a lifetime warranty against liner delamination for the fire hose. Delamination meaning the waterway liner has separated or partially separated from the hose fabric. In case of liner delamination, the original hose manufacturer will replace the defective hose liner

Vender:

Hose vendor shall be a factory authorized, factory direct dealer for the hose being bid, Hose vendor shall have primary offices within a ninety (90) mile radius of fire department location for Warranty Service. Hose vendor shall provide a Letter from the manufacturer of the hose their bidding stating that the vendor is a Factory authorized, factory direct dealer with their bid

4" Large Diameter Hose and 4" Storz coupling Specification:

COMPLY

DO NOT
COMPLY

Hose Type:

The hose shall be double jacket with a minimum Service Test Pressure of 300 PSI

Hose shall have the country of origin legibly marked on the outer Jacket

Hose shall meet or exceed NFPA Standard 1961 performance requirements

Jackets:

The inner hose jacket shall have 100% filament polyester warp and weft yarn. The outer jacket shall be made with virgin spun polyester warp yarn and a minimum of 11.3 filament polyester weft yarn picks per inch. The outer jacket shall be impregnated in one of the standard NFPA colors with high performance polymeric dispersion.

Hose jacket will be available in the following colors at no additional charge:

Red, Orange, Yellow, Tan, Black, Blue, Green, Purple or White

Lining:

The lining (waterway) must be made from polyurethane and must be applied using a fused process that welds the polyurethane directly to the textile while the hose is being woven, without the use of adhesives or hot melt. The fused lining process must create a virtually inseparable unit without the use of adhesives, yielding an extremely low friction (pressure) loss by filling in the corrugations of the weave, creating an ultra thin and smooth waterway. Fire hose made using adhesives of any type do not meet this specification. The lining shall be approved for use with potable water

Adhesion:

The adhesion shall be such that the rate of separation of a 1.5" strip of polyurethane, transversely cut, shall not be greater than 1/4" per minute under a weight of 12 pounds

Cold temperature flexibility: The hose must remain flexible to -65°F

Service, Test, Burst Pressures:

Hose must have a Minimum Service Pressure of 300 PSI

Minimum Test/Proof Pressure of 600 PSI

AND Minimum Burst Pressure of 900 PSI

Hose weight Not to Exceed 34 pounds per 50' length, uncoupled

Hose Bowl Size to be 4 3/8 "

Coil Diameter for 50' un-coupled length not to exceed 16"

Hose MUST be manufactured after receipt of order

- STOCK HOSE IS NOT ACCEPTABLE

Coupling Specifications:

Hose couplings shall meet or exceed NFPA Standard 1963 performance requirements

Couplings shall be stamped with the manufacturer's name or trademark AND county of origin on the each coupling as required in NFPA 1963

Storz couplings shall be gold anodized to provide added resistance to abrasion, wear, salt and corrosion

4" Large Diameter Hose and 4" Storz coupling Specification page 2:

COMPLY

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Storz couplings must have "lock protector" technology that protects the lock lever
From damage when coupling is deployed or dropped

Couplings must have a Single Storz lock lever and must have recessed reflective
material that provides rapid identification of the locks and nighttime visibility

The coupling must have a recessed engraved arrow indicating the direction of
coupling engagement located 180 degrees opposite the lock lever

This recessed reflective arrow and lock indicator must have reflective material to
provide nighttime visibility, reflective material must reflect toward any light source

Coupling will have two **recessed** identification zones on each coupling, **recessed
zone must be engraved into and below the surface** of the coupling to resist abrasion

**Coupling must be Bar Coded in a recessed identification zone on the coupling
Collar and Epoxy coated to preserve the integrity of the Bar Code**

Manufacture: Both hose and couplings must be manufactured in North America
and be Manufactured by the same manufacturer

Hose and couplings shall be NAFTA compliant

Warranty: Hose MUST be covered by a minimum Warranty including the following specific warrants:

Two year "All Hazards" warranty

Original hose manufacturer will repair or replace the fire hose products that incur
accidental damage within this two-year warranty period. Accidental damage can occur due
to fire causes, cuts, abrasion or any other hazards that are present while fighting fires
which could render the products unfit for use. Hose and couplings that are used for
purposes other than fire fighting shall not be included this warranty

Ten-year warranty against manufacturing defects

Original hose manufacturer will guarantee these fire hose products to be free from defects
in material and/or workmanship for a period of ten (10) years from date of invoice. Any
item believed to contain a defect must be returned to the original hose manufacturer for
examination and evaluation. If the merchandise is defective as a result of a manufacturing
defect, the original hose manufacturer will repair or replace the defective product

Lifetime warranty against liner delamination

Original hose manufacturer will provide a lifetime warranty against liner delamination
for the fire hose. Delamination meaning the waterway liner has separated or
partially separated from the hose fabric. In case of liner delamination, the original
hose manufacturer will replace the defective hose liner

Vender:

Hose vendor shall be a factory authorized, factory direct dealer for the hose being
bid, Hose vendor shall have primary offices within a ninety (90) mile radius of
fire department location for Warranty Service. Hose vendor shall provide a
Letter from the manufacturer of the hose their bidding stating that the vendor is a
Factory authorized, factory direct dealer with their bid
