### **INVITATION TO BID**

### **ALL HAZARD RESPONSE VESSEL**

POSTED: January 20, 2017

Bid #: 17-01AA

BIDS DUE: FEBRUARY 9, 2017 @ 2:00 PM





Purchasing Division 100 City Hall, 411 W. 1st Street Duluth, MN 55802-1189 TEL. 218-730-5340 purchasing@duluthmn.gov

## INVITATION TO BID ALL HAZARD RESPONSE VESSEL

BID NO.: 17-01AA BID OPENING: THURSDAY, FEBRUARY 9, 2017 AT 2:00 PM

The City of Duluth is requesting bids for **one (1) All Hazard Response Vessel**, including motors and trailer, which will provide maritime firefighting support at the Port of Duluth-Superior in Duluth, MN. The vessel must be built to meet unique specifications. Please refer to the following instructions and specifications for more information.

The City reserves and shall have the sole and exclusive right and discretion to assess the qualifications, acceptability or unacceptability of any Bidder and/or to reject any or all bids, or to negotiate the means of performance, additional and/or altered specifications if necessary, and costs of any bid prior to entering into a final decision on the awarding of any Contract.

#### SPECIAL INSTRUCTIONS TO BIDDERS

- 1. Please review the **General Bid Specifications**, attached.
- 2. Questions and Requests for Substitutions Bidders must submit questions regarding this IFB and any requests for approved equals, in writing via email to <a href="mailto:purchasing@duluthmn.gov">purchasing@duluthmn.gov</a> or postal mail to the Purchasing Division at the address listed at the top of this page.
  - All questions and requests for approved equals must be received no later than **January 31, 2017**. Requests for approved equals must be supported by technical data, test results, or other pertinent information that indicates that the substitute offered is equal to or better than that specified. Requests for approved equals that are received without supporting data will be rejected without further review and may result in rejection of the bid.
- 3. Bids shall include the following:
  - A. A cover letter on official letterhead and signed by an authorized officer of the Bidder.
  - B. The completed Bid Form. The form shall state the total bid price for designing, manufacturing, constructing, fabricating, equipping, and supplying the boat, motors and trailer; the bid price for delivering the boat, motors and trailer to the City at the Port of Duluth-Superior, and the hourly and extended price for training. Any extended warranty options, prepayment discounts or other alternatives shall be listed on a separate sheet.
  - C. Specifications, drawings and schematics for the boat being proposed which clearly depict the overall dimensions and layout from the fore, aft, port, starboard, overhead, and underneath angles.
  - D. Copies of any warranties for component parts and equipment supplied with the boat.
- 4. All bids must be complete, signed, and mailed or submitted in a sealed envelope to the Purchasing Division at the address above. The envelope must be plainly marked with the bid number and title "17-01AA, All Hazard Response Vessel", and bid opening date of 2/9/2017.

The City of Duluth is an Equal Opportunity Employer. Contractor shall comply with all applicable Equal Employment Opportunity laws and regulations.

CITY OF DULUTH

Amanda Ashbach Purchasing Agent

Purchasing Division 100 City Hall, 411 W. 1st Street Duluth, MN 55802-1189 TEL. 218-730-5340 FAX: 218-730-5921 purchasing@duluthmn.gov

#### **GENERAL BID SPECIFICATIONS**

- General. This document covers bids requested by the City of Duluth ("City"), including those requested on behalf of its Agents and Authorities. Each authority may issue their own purchase order or contract and will be responsible for it. The City of Duluth Authorities are as follows:
  - a. Duluth Airport Authority
  - b. Spirit Mountain Recreational Area Authority
  - c. Duluth Entertainment and Convention Center
  - d. Duluth Transit Authority
  - e. Duluth Economic Development Authority
  - f. Duluth Housing and Redevelopment Authority
- 2. <u>Investigation by Bidders.</u> Bidders are responsible for thoroughly reading and understanding the information, instructions, and specifications contained in this Invitation for Bids, and for investigating the site conditions at the Project location(s), if applicable. At the time of the opening of bids, each bidder will be presumed to have read and to be thoroughly familiar with the plans, specifications and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument, or document shall in no way relieve the bidder from any obligation in respect to their bid.
- 3. <u>Bidder Questions.</u> Responses to general questions regarding the Invitation for Bids may be made at the discretion of the City. Every request for such interpretation should be in writing and delivered via email or postal mail to the Purchasing Division before the deadline indicated on the Invitation for Bids, or if no deadline is specified, at least five (5) days prior to the scheduled bid opening. Responses will be issued in writing in the form of an Addenda or e-mail to prospective bidders.
- Changes, Corrections & Withdrawal of Bids. Erasures or other changes to the bid must be initialed and dated, however no special conditions shall be made or included in the bid form by the bidder.
  - Bidders may make requests to withdraw/replace their bids by notifying the Purchasing Division in writing prior to the bid opening date and time.
- 5. <u>Unit Pricing.</u> If the total bid price is based on unit pricing, the City will verify the extended bid price for each item (obtained by multiplying the unit bid price by the bid item quantity). If any item is incorrectly calculated, the City will use the unit bid price to recalculate the extended item price and the total bid price.
- Sales Tax. Do not include sales tax in the unit price. A sales tax exemption certificate will be provided upon request.
- Bid Submission. All bids must be complete, signed, and transmitted in a sealed envelope plainly marked with the bid number, subject matter, and opening date.
  - Bids may be mailed to the Purchasing Office, City Hall, 411 West 1st Street, Room 100, Duluth, MN 55802 or dropped off in person at the same address. Bids must be received by Purchasing before 2:00 PM local time on the date specified. Bids will not be accepted via e-mail unless specifically stated in the Invitation for Bids.
- 8. Non-Collusion Clause. By submitting a bid, the bidder, their agent and/or employee(s) hereby affirm that the attached bid or bids have been arrived at by the bidder independently and have been submitted without collusion with, and without agreement, understanding or planned common course of action with any other vendor of materials, supplies, equipment or services described in the Invitation for Bids, designed to limit independent bidding or competition
- Award. Award, if made, will be to the responsible bidder submitting the lowest bid which complies with the conditions of the Invitation for Bids

- and specifications. A bid summary will be posted on the City website immediately following the bid opening. Awards for construction services and parts /supplies over \$100,000 must be approved by City Council.
- 10. <u>Bidder Qualifications.</u> Per Sec 41.23(e) of Duluth City Code, price may not be the only consideration for award. The City will make such investigations as deemed necessary to determine the ability, capacity and skill of the bidder to perform the work and perform it in the time specified without delay or interference, the character, integrity, reputation, judgment, experience and efficiency of the bidder, the quality of the bidder's performance of previous contracts or services, and the sufficiency of the financial resources, equipment available and ability of the bidder to perform the contract. Bidders shall furnish to the City all such information and data for this purpose, when requested.
- 11. <u>Bid Opening.</u> The City Purchasing Agent or her designee will conduct a public bid opening in Room 100 immediately following receipt of the bids. Results will be posted online at http://www.duluthmn.gov/purchasing/bids-request-for-proposals/ once all bids have been reviewed.
- 12. <u>Rejection of Bids.</u> The City of Duluth reserves the right to reject any and all bids and to waive any informalities or irregularities in bids received whenever such rejection or waiver is in its best interests.
  - The City reserves the right to reject any bid if the evidence obtained by the City through such investigation fails to satisfy the City that the bidder is properly qualified to carry out the obligations of the contract and to complete the work as required by the plans and specifications.
- 13. <u>Liquidated Damages for Failure to Enter into Contract.</u> The successful bidder, upon their failure or refusal to accept a purchase order or execute and deliver the contract, proof of insurance and bonds required within 10 days after receipt of a notice of the acceptance of their bid, shall forfeit to the City, as liquidated damages for such failure or refusal, the security deposited with their bid (if required).
- 14. Equal Employment Opportunity. Contractor will be required to comply with all applicable Equal Employment Opportunity (EEO) laws and regulations. Affirmative action must be taken to insure that the employees and applicants for employment are not discriminated against because of their race, color, creed, sex or national origin. The City of Duluth is an equal opportunity employer.
- Quantities. The City reserves the right to increase or decrease the quantities of items within reason, unless otherwise noted.
- 16. <u>Prevailing Wages.</u> Per Sec 2-26 of Duluth City Code, payment of not less than the prevailing wage and salary rates specified in the contract documents and the conditions of employment with respect to certain categories and classifications of employees is required for all "Public Works" type projects estimated to exceed \$2,000. This does not apply to off-site production and manufacturing of parts and supplies.
  - The rates set forth under the General Conditions are the minimums to be paid during the life of the contract. It is therefore the responsibility of bidders to inform themselves as to local labor conditions, such as the length of work day and work week, overtime compensation, health and welfare contributions, labor supply, and prospective changes or adjustments of rates.
- Validity of Bids: All bids must remain firm for 60 days from the date of bid opening, unless another period is noted in bid documents or if an extension is agreed upon, in writing prior to the end of the 60-day period.
- Insurance. All vendors doing work on City property, except vendors making routine deliveries, shall submit an insurance certificate verifying insurance coverage as per current city requirements.

# BID FORM BID # 17-01AA ALL HAZARD RESPONSE VESSEL

ITEM	PRICE			
All Hazard Response Vessel in accordance with the attached specifications.				\$
Delivery charges, if applicable.	\$			
Training	\$	per hour	x 24 hrs	\$
			TOTAL	\$

TOTAL PRICE IN WRITING

#### **ACKNOWLEDGMENT OF ADDENDA**

ADDENDUM #	INITIAL/DATE	
ADDENDUM#	INITIAL/DATE	
ADDENDUM #	INITIAL/DATE	
ADDENDUM #	INITIAL/DATE	

Signature		Date
Name/Title		
Company Name		
Address		
City, State, Zip		
Tel	E-Mail	
If your organization is certified as a Disadvantaged	Business Enterprise, please of	check here:

<sup>\*\*</sup> Please list any options on a separate sheet \*\*

#### BIDS MUST BE RECEIVED IN PURCHASING BEFORE 2:00 PM LOCAL TIME ON FEBRUARY 9, 2017.

The City may waive minor differences in the specifications, provided these differences neither violate the specification intent nor materially affect the operation or performance of the equipment being purchased, and do not increase estimated maintenance and repair costs to the City.

Wherever brand names may appear in this specification, they are included for the purpose of establishing identification and a general description of the item. Wherever such names may appear, the term "or approved equal" is considered to follow. The City of Duluth will render the decision on acceptability of the approved equal at its sole discretion. Bidders must submit requests for approved equals following the instructions provided in the Invitation for Bids.

#### A. GENERAL SPECIFICATIONS:

- 1. Hull Length 32' (not including engines, guards, or rub rails)
- 2. Beam 10 feet 6 inches (not including engines, guard, or rub rails)
- 3. Overall height while on trailer and attached to a tow vehicle cannot exceed 13'6". Requires electro-mechanical fold down radio tower mast/nav arch.
- 4. Boat must have a minimum carrying capacity of not less than 3,500 lbs.
- 5. Combined boat and trailer weight shall be approximately 14,300 lbs.
- 6. Boat must include a fire pump rated at a minimum of 1500 GPM.
- 7. All metals used in construction must meet the most recent American Society for Testing and Materials (ASTM) standard.

#### B. HULL DESIGN & OUTFITTING:

- 1. Boat must be designed with a progressive, deep-V mono hull with 16 degrees of dead-rise at the transom.
- 2. Boat must have a fold out step system or other easily accessible and traversable means of egress directly from the bow to allow firefighters and medical personnel to deploy during a beach landing.
- 3. Boat must have a door on the starboard side, aft of the pilot house. This door must swing inside the boat. There must also be a dive door on the port side, also aft of the pilot house, to provide diver access. This access point must include a telescoping dive ladder capable of supporting a minimum of 400 lbs.
- 4. Boat must be equipped with Bennett hydraulic trim tabs; properly sized for the vessel.
- 5. There must be sufficient storage area below deck in the bow area and/or in the pilot house for a ladder measuring 8' long x 20" wide x 3" deep, and a 84"x24"x8" Stokes basket.
- 6. Swimmer's rails must be available on both sides of the vessel, above the waterline.
- 7. Vessel must have a tread plate gunnel, a minimum of 5" wide, from fore to aft.
- 8. All decks must be self-bailing and provide sufficient water egress.
- 9. Engine and pump compartments must be under deck aft of the pilot house and must be easily accessible for pump, engine, and mechanical maintenance. Compartments must be lockable.
- 10. The bow area must include a sealed anchor locker.
- 11. The fore deck area must allow for hose storage; estimate 600' of 4" hose, 400' of 2.5" and 300' of 1.75" hose. Hose storage must have four (4) adjustable dividers and the storage compartments must be lockable.

- 12. A double pad eye must be incorporated onto the keel to allow the boat to be winched onto the trailer.
- 13. Boat must be equipped with a davit crane with a lift capacity of not less than 900 pounds. Crane must have mounts on port and starboard side aft of the pilot house. Crane must include a manual winch.
- 14. Boat must have sufficient floatation below deck to stay afloat in the event of swamping.
- 15. Safety railing must be installed above the gunnels.
- 16. Eight (8) 10" aluminum cleats must be evenly spaced and mounted to allow for efficient hitching. Exact placement to be determined at the prebuild meeting.
- 17. Hull bottom must be plated with a minimum .250" thick 5083 or 5086-H116 aluminum plate.
- 18. Hull sides must be plated with a minimum .190" thick 5083 or 5086-H32 aluminum plate.
- 19. Deck must be plated with a minimum .124" thick 5052-H32 aluminum diamond tread plate.
- 20. Deck structure and component materials must be at a minimum 5083 or 5086 aluminum alloy; fully welded to the hull and all deck height transverse bulkheads and longitudinal girders to contribute to the strength of the hull. Floor must be constructed to be able to support typical usage.
- 21. Hull must be protected with a minimum 3" rub rail to include diagonal strakes along the hull.
- 22. Boat must be equipped with automatic bilge pumps of sufficient rating and size to effectively control and efficiently remove from the vessel any accumulation of water due to seepage, spillage, trim changes, etc.
- 23. Hull must have a T-handle drain plug.
- 24. Boat must be equipped with a carbon monoxide detector meeting the American Boat and Yacht Society (ABYC) standard A-24 in the cab, and a gas fume detector in the pump engine compartment.
- 25. 110 volt, thermostatically-controlled bilge heaters meeting ABYC and US Coast Guard (USCG) specifications must be permanently installed in the below deck areas.

#### C. WELDING:

The hull and superstructure must be constructed of marine grade aluminum and MIG and TIG welded throughout the entire vessel. All water seams must be welded 100% on both sides. All longitudinal structural members must be, at minimum, stitch welded on opposite sides.

#### D. FUEL SYSTEM:

Boat must be equipped with a minimum 150-gallon fuel tank capable of supplying fuel to both the fire pump and the vessel. The tank must be internally baffled to prevent the fuel load from shifting. Withdrawal tubes shall be of stainless steel. The operator of the vessel must be able to monitor the fuel levels via an electronic gauge in the pilot house.

#### E. TOWING EQUIPMENT:

Boat shall be equipped with a tow post at the rear bulkhead. The tow post shall include a backlash safety plate. There shall be a 2'' double pipe motor guard with tow line guides. Nylon double braided tow line,  $5/8'' \times 300'$  will be included. Two push knees with protective bumpers will be installed on the forward bow.

#### F. PILOT HOUSE:

- 1. The pilot house shall be full-width of the boat and approximately 11' long, with an interior clearance minimum height of 76".
- 2. The pilot house shall be fully enclosed and constructed of 5086 aluminum alloy of 3/16" thickness.
- 3. The pilot house will be equipped with a Nuclear, Biological and Chemical Overpressure Filter System (CBRNE) that will provide at least one air exchange per hour. The system must have a two piece HEPA filter certified to meet or exceed MIL spec F 51079-1998 and a UL Classification 586. The system must have an activated carbon filter for protection against war gases and it must provide positive pressure inside cabin with an overpressure release valve.
- 4. An air sampling port must be installed in the exterior wall.
- 5. The pilot house shall have a model 5011418A Webasto SD Air Top Evo 40 D 12V Marine diesel furnace. There shall be two air ducts directed at the windshield and at least two ducts providing heated air to the cabin interior.
- 6. Power shall be supplied by a Kohler raw water cooled 5.0 kW generator with hush cover model 5EKD 60Hz, 120V 1PH, 2W.
- 7. The pilot house shall be equipped with a 3-panel clamped, forward-raked windshield with a deluxe twin wiper single motor synchronized heavy-duty wiper system and fresh- water washer system. The 3-panel windshield must have electrically heated glass panels.
- 8. Each side wall and the aft wall of the pilot house must have enough windows to allow sufficient visibility in all directions. One window on each side wall should be sliding. All window and door glass must be ¼" tempered safety glass.
- 9. The forward wall of pilot house must have a door/window to allow direct access to the front deck, and the aft wall of the pilot house must have a hinged door with a window and keypad entry to allow direct access to the aft deck.
- 10. The dash console shall be constructed so as to provide ample room for electronics, throttles, switches, steering wheel and associated components. A minimum of two (2) 12-volt power outlets with USB charging ports shall be provided in the dash console, and two (2) 12-volt cabin circulation fans shall be ceiling-mounted over the dash console.
- 11. The helm station shall include overhead space for radio equipment. Emergency radios will be supplied by the City, to be installed by the vendor.
- 12. The port side station shall be designed to accommodate the fire pump controls and monitors.
- 13. The main cabin should include a desk/work station that can either be removed or stowed when not in use to allow free access throughout the cabin.
- 14. The pilot house must be equipped with two padded benches, minimum 84" in length, one on each side of pilot house walls. The benches should provide storage below, accessible from both the top side and front. Benches shall be covered with a durable-grade vinyl or similar material capable of easy cleaning and decontamination. Cloth will not be acceptable.
- 15. A permanent, thermostatically-controlled, 110 volt A/C electric heater for use at dock on shore power must be included.
- 16. A Garmin VHF 200 marine radio model 010-00755-10 and SS antenna with fold down mount will be supplied. Antenna shall be nav arch mounted.

- 17. Grab bars shall be installed as required. At minimum, there must be grab rails extending along the exterior side walls of the pilot house on both the port and starboard sides, in the pilot house ceiling, in the pump control area, and on the exterior forward and aft walls of the pilot house.
- 18. Six 12V red/white LED dome lights shall be installed overhead inside of the cabin.
- 19. The cabin shall have two shock absorbing Bentley seats in the helm on the port and starboard sides for the helmsman and co-pilot. Seats must be durable grade vinyl or similar material capable of being easily cleaned and decontaminated. Cloth seats will not be accepted.
- 20. The pilot house shall include a portable marine toilet with a curtain or other privacy system.

#### G. ELECTRICAL SYSTEM:

- 1. The vessel's electrical system shall be 12VDC and 120VAC 60 Hz and be properly grounded. A 30-amp shore power system shall be installed to supply two (2) 20-amp Pro Mariner battery chargers.
- 2. There shall be three pilot house 110 volt outlets and one outlet on the aft exterior wall, exact location to be determined.
- 3. All electrical cable shall be marine grade tinned copper wire and sized in accordance with ABYC recommendations. Cables shall be routed in wire ways wherever possible and labeled for each circuit. Cables shall be protected in areas where they may be exposed to potential damage.
- 4. All electrical switches shall be heavy-duty type with toggles properly insulated.
- 5. Wiring for radios, and all electronics shall be protected with circuit breakers. Two additional circuit breakers shall be provided for future expansion of the electrical system.
- 6. Electrical compartments shall be provided in the cabin to house the electrical power, circuit protection and control components. The compartments shall be designed to ensure that serviceable components are accessible, and that all power, circuit protection and control components are protected against corrosion, excessive heat, excessive vibration, water spray and EMI and RFI.
- 7. Electrical system will be wired such that the charging of the battery banks will take place via the generator OR the outboard motor alternators OR the Kohler generator. Voltage sensing relays will direct the charging circuit to send power to the weakest battery first, then sequentially charge the remaining batteries in order of weakness. Generator will also supply power to 110 V outlets.

#### H. BATTERIES:

Four OPTIMA D34 AGM (absorbent glass mat) marine batteries shall be installed complete with battery switches. The batteries shall be fully capable of starting the engines, pump motor, and supporting house bank requirements. An automatic charging relay shall be installed to allow the house bank to be charged via the engine alternators. All of the batteries shall be installed in plastic battery trays.

#### K. PROPULSION:

1. The vessel shall be powered by Twin Mercury Verado 300 HP, 30" shaft, Heavy Duty lower units with counter-rotating stainless steel propellers. Motors must be complete with a fuel management system, dual key management system, dual key switch panel, power trim and tilt, and harnesses.

- 2. Engine monitoring done through Mercury Vessel View gauges.
- 3. Joystick style steering, compatible with the motors, shall be included. The system shall include a digital anchoring system which enables the operator to hold position and keep the boat pointing in a chosen direction with an operator-activated automatic system. A second joystick shall be located at the port side console in the cabin.

#### L. FIRE PUMP:

- 1. The fire pump engine shall be a gasoline-fueled, 365HP, 6.0L Marinized GM V-8.
- 2. The pump end shall be a Darley PSDE 1500 direct for connection to engine flywheel. Jet pump systems are not acceptable and will not be considered.
- 3. Fire pump minimum rating shall be 1500 GPM at 150 psi at the pump.
- 4. Pump compartment shall include a fire suppression system.
- 5. The pump control station shall be a FRC Pump Boss 200 Pressure / RPM controller.
- 6. There is a remote control 6" stainless suction valve with controls at fire pump control station.
- 7. One (1) Darley electric oil-less primer is installed.
- 8. Darley relief valve system as backup to the FRC system, with controller, is mounted at port pump control station.
- 9. A de-watering device, VM1544-2.5, portable water eductor shall be included.
- 10. The remote controlled roof-top monitor shall be a TFT Typhoon 1500 GPM with stream shaper and stacked tips. Two (2) portable TFT Hemisphere monitors shall be included, with four mounting sockets. Two sockets shall be located on the bow gunwale and two on the aft gunwale, final position to be determined at the prebuild.
- 11. There shall be two (2) 4" Storz discharges, and a TFT (VUM) valve under monitor with four (4) 2.5" discharges on main deck in front of pilot house.
- 12. A gated 2.5" discharge to transom area of boat shall be included.
- 13. The pump shall be configured with through-hull suction into a sea chest with a minimum of 6" intake. The sea chest shall have a screened inlet, and a valve at the sea chest outlet.
- 14. The water piping shall be easily drained to prevent freezing.

#### M. FOAM PRO 2002 FIRE SYSTEM:

A FoamPro 2002 System, single point induction with input into the 4" main fire pump line shall be provided by the builder. An additional QD supply port shall be available on the supply side of the foam pump for bulk operations. Connection shall be accessible through a deck hatch. In addition, a twenty (20) gallon plumbed foam tank shall be included.

#### N. PAINT AND GRAPHICS:

The deck area, exterior of the pilot house shall be painted with Zolatone non-skid texture paint. Environmentally friendly anti-fouling paint shall be applied to the bottom of the hull. Cabin/pilot house and hull paint color and graphics to be determined by customer.

#### O. EMERGENCY LIGHTING, SIREN, AND WORK LIGHTS:

- 1. Boat shall be equipped with a Whelen 43" Liberty Light bar with red fully-loaded LEDs. Mounted on the nay arch.
- 2. Siren system shall consist of a Whelen SA315 P Speaker, WPA3BM Control Head, and WPA112 Siren Amplifier, and include a PA system.
- 3. Two 12V Whelen Pioneer PFP2 Scene Lights on bottom raising pole mounts shall be located on the aft two corners at the aft end of pilot house.
- 4. Six (6) Whelen ION V-series, single color, red LED, black housing, 1-11/16"x5- 15/16" size shall be mounted on the upper edge of the cabin roof two (2) each at the port, starboard and aft exterior walls.
- 5. Two (2) Stryker LED "Go-Lights", remote controlled spot lights shall be mounted to the nav arch.
- 6. One (1) remote controlled search light shall be located on the roof of the pilot house in front of monitor.
- 7. Two (2) LED Work Lights shall be installed, one mounted on the forward wall and one mounted on the aft wall of the pilot house to illuminate the fore and aft decks.
- 8. Strip lights shall be installed in the gunnels for walkway illumination.
- 9. All step areas at the exit and entrance to the pilot house shall be marked with Whelen OS series courtesy lights.

#### **ADDITIONAL EQUIPMENT:**

#### P. TRAILER:

- 1. Boat trailer shall be a minimum 15,000 lb. capacity, aluminum triple-axle bunk trailer, complete with electric disc brakes, spare tire, and tongue jack on trailer. The trailer shall be equipped with galvanized steel wheels. The trailer LED lights must be submersible.
- 2. An adjustable bow stop and winch stand shall be included with a manual 2-speed winch and strap.

#### Q. VIDEO CAMERA:

Boat shall be equipped with a FLIR M-625XP forward looking infrared video camera with zoom, pan and tilt, which shall be mounted on the roof and connected to a Garmin touch screen at helm. The video from the system must be able to viewed on the same screen as a main navigational screen. Systems without this integration capability will not be considered.

#### R. ELECTRONICS:

- 1. Boat shall be equipped with two (2) Garmin 12" TOUCHSCREENS (One 7612xsv and one 7612) with GPS, SONAR with Side Vu and Down Vu. An additional 12" Garmin screen (not installed) shall be provided for land-based training purposes.
- 2. A Garmin GMR Hi Def radar 18xhd model 010-00959-00, arch mounted, shall be included.
- 3. Cabin shall be equipped with a waterproof Fusion Audio Player model 830-MSBB300R with interior 2-way speakers.
- 4. Four (4) Setcom Marine Liberator 900 wireless headsets shall be provided for communication between the cabin and deck crew.

#### S. TRAINING:

Price shall include a minimum of twenty-four (24) hours of on-the-water boat familiarization training at customer's location in Duluth, MN.

#### T. SERVICE:

As a condition of the award of the bid to the successful bidder, such bidder will be required to agree to provide all needed warranty work and repair services needed for the operation of the vessel as set forth below:

- 1. The successful bidder shall be required to demonstrate that they will have a person available on a 7-day-a-week/24-hour-per-day basis to be able to receive when transmitted telephonic and e-mail requests for warranty services and repair services and to respond as hereinafter set forth.
- 2. The successful bidder shall be required to demonstrate that they have the capacity to respond and will respond to requests for warranty services and repair services, except extraordinary services, to the vessel at a location designated by the City on or adjacent to the Duluth-Superior Harbor within twelve (12) hours of City's request therefore as referenced in # 1. above.