



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333-0016

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID A. COLE  
COMMISSIONER

June 5, 2009  
Subject: **Ferry Boat Construction**  
Federal Project No: FBD-1168(100)X  
State Pin No: 011681.00  
**Amendment No. 3**

Dear Sir/Ms:

The following questions have been received:

**Question:** Construction Specification Section 35.2 Rudders states that the Rudder Stock is to be ABS Grade 2 Forged Steel. Can the rudder stock be substituted with C-1045 Cold Rolled Steel which is common for most rudder stock?

**Response:** No. The rudder stock is to be as specified.

**Question:** Construction Specification Section 15.6 Shaft Brakes, ZF has concerns with the specified shaft brake system, below is their inquiry: "Using the engine and ZF transmission ratio, the torque works out to be 83,686 inch lbs. The SB30-06612 can handle up to 110,000 inch lbs. of torque. If we size the smallest dual caliper, it is rated for 220,000 inch lbs. and will stop the shaft to quickly. The specs ask for 3 to 4 seconds. If the dual caliper is used, it would be about 1/2 to 1 second. This is too quick and can cause stress damage to the coupling arrangement. We think someone is trying to oversize the brake thinking it is better, when it really is not, or the specifications changed to a smaller engine and gear ratio and no one updated the shaft brake requirements. If you insist on using the dual caliper, we would ask you to sign a release acknowledging that this is not recommended. Please address."

**Response:** The shaft brakes are to have two calipers per shaft located approximately 180 deg apart from each other. The reason for this arrangement is to reduce the side thrust developed on the shaft line if one caliper were used while braking. We recognize that the shaft brakes that ZF can supply have significantly more braking capacity than recommended by ZF for the shaft system. However, ZF also indicated that the braking capacity can be modulated by reducing the air pressure supply to the shaft brake. It may also be possible to modulate the application time.

**Question:** The current 2009 proposal states on page 4: "Bids must be accompanied by a Bid Bond at 5% of the bid amount or the amount specified in the Notice to Contractors."



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We ask the language in the 2009 proposal be changed to the language used in your 2007 proposal which states: "Bids must be accompanied by a Bid Bond at 5% of the bid amount or an official bank check, cashier's check, certified check, certificate of deposit, or United States postal money order in the amount of \$50,000 payable to Treasurer, State of Maine as a Bid guarantee."

**Response:** We have reduced the Bid Bond amount from 5% to 1 1/4% and this same calculated value may be applied to the other specified bid guarantee options.

**Question:** The current 2009 proposal states on page 43 that the contractor will furnish performance and payment bonds in the sum of 100% each. We ask that the bonding requirements be changed to those stated in the 2007 proposal which include a sliding scale from 50% to 100% with points awarded to the contractor based on the percentage indicated.

**Response:** This can not be done, the requirements remain as written.

**Question:** Please see the attached Financial Risk section from a current bid for the Army Corps of Engineers. We would like to suggest this as an alternative to the regular bond.

**Response:** This alternative can not be used.

**Question:** Construction Specification Section 14.1 calls for "Temp-Coat 101 (or equivalent) coating, shall be applied to all non-insulated areas of steel work and piping in interior spaces which are exposed to heat or cold to prevent sweating." Can you please have someone clarify those areas so we are not guessing? The Temp Coat manufacturer is recommending 60 mils of this product that is four 15 mil applications in addition to the primer and two finish coats of paint. It sounds like your intent is for all the voids and any piping in those voids. We also need clarification on coating the piping. Other specification sections call for Fiberglass insulation for hot and cold pipes. Which would you prefer?

**Response:** These areas are the void spaces and any piping in the void spaces. The coating requirement is the builders primer and then three 20 mil applications of Tempcote 101. There are no finish coats required on the Tempcote 101. No fiberglass insulation is required in the void spaces where Temp-Coat is being applied to the piping.

**Question:** Construction Specifications and specifically Plan #575-02-521, call for 20 HP Durco Fire and Bilge Pumps. According to the pump manufacturer both motor sizes need to be at 30 HP to meet the performance that is specified. Should the Switchboard, Breakers, Wire and Controllers be updated accordingly?

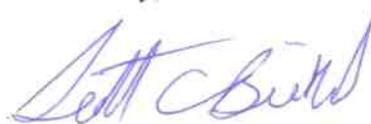
**Response:** The fire pump selected and the power required per the manufacturer was 20hp not 30. The rating of this pump was 166 gpm @ 230 TDH and the model was 1K3x1.5V-81RV M3V. If the manufacturer has restated their motor size, then, yes, the cables, circuit breakers, motor starters will all need to be upgraded to meet the new requirement. Additionally, the circuit breaker for the main fire pump on the main switchboard needs to be changed to 100A.

**Question:** Should there be an EPIRB for this as required in 46 CFR Subchapter W?

**Response:** Vessels operating in lakes, bays, & sounds (us) are exempt per 46CFR199.610(a).

Consider this information prior to submitting your bid on June 10, 2009.

Sincerely,



Scott Bickford  
Contracts & Specifications Engineer