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Addendum # 1
File # 16-0628
Minnesota Slip Bridge Parallel Shaft Reducers

Please note the following changes to the bid package and/or specifications:

**THE BID OPENING DATE HAS BEEN EXTENDED TO
MONDAY, NOVEMBER 7, 2016 AT 2:00 PM.**

In addition, responses to submitted questions are attached, and are hereby incorporated into the bid package and specifications.

Please acknowledge receipt of this Addendum by initialing and dating Addendum #1 on the bid form.

Posted: October 28, 2016

Parallel Shaft Reducers- Mn Slip Bridge
Response to Bidder Questions- 10-27-16

Item 1:

The second to last sentence of the last paragraph on the Invitation To Bid front cover page reads: "Lubrication provisions shall allow the reducer to operate and/or lay dormant through 81 degrees of anticipated travel." A question was asked "Will the reducer lay dormant at any angle?" The response is as follows:

The bridge operating season is generally May through October of any given year. The bridge remains in the closed (down) position (reducers 2-degrees off horizontal) generally between the hours of 8am and 8pm unless requested to open for boat traffic. The bridge remains open (reducers at 83-degrees off horizontal) between the hours of 8pm and 8am during the operating season.

During the off season the bridge is typically not operated. The off season is generally November through April and the bridge normally remains closed (reducers at 2-degrees off horizontal) and the reducers lay dormant.

Item 2:

Can the reducer helical gearing as specified in the first paragraph on page 2 of the Bid Specification be manufactured from AISI 4150 steel with pinion hardness 390 BHN minimum and gear hardness 360 BHN minimum provided all torque ratings are achieved? The response is as follows:

Use of AISI 4150 steel would be considered 'approved equal'.

Item 3:

A question was asked whether the "83 degrees off horizontal" listed in the second paragraph on page 4 of the Bid Specification should be 81 degrees. The response is as follows:

The noted '83-degrees' is accurate. The reducers will be mounted 2-degrees off horizontal when the bridge is in the closed position and subject to approximately 81-degrees of rotation when the bridge is raised to the open position.

Item 4:

A question was asked regarding measurement of "Surface temperature of each shaft extension adjacent to shaft seal" as referenced on page 4 of the Bid Specification and if as an alternate the temperature could be measured on the bearing endcaps near the outer diameter of the seal holder. Response is as follows:

Measurement of surface temperature on the bearing endcaps near the outer diameter of the seal holder would be acceptable.

Item 5:

A question was asked concerning the temperature thresholds listed in the following sentence from page 4 of the Bid specification. "During testing, the temperature of the oil is to rise no more than 40 deg. F from ambient and no shaft is to experience a temperature rise of more than 50 deg. F from the ambient." Response is as follows:

The quoted sentence from page 4 of the Bid Specification shall be deleted and replaced with the following: "During testing, the temperature of the oil is to rise no more than 60 deg. F from ambient and no shaft is to experience a temperature rise of more than 70 deg. F from the ambient. Should the final test results show themselves to be slightly higher than what is defined within the specification, the City will assess the results along with input from the reducer manufacturer to determine final acceptance."