



PW013101-01B2

MEMORANDUM

January 24, 2001

TO: Mr. Dan Coon, Project Manager
City of Rapid City

FROM: Terry Kenyon, Rick Hasbrouck
McLaughlin Water Engineers

RE: **Equipment Procurement Bid Evaluation**
Schedule C: Mechanical Screens

We have evaluated the equipment bids for Schedule C, the Mechanical Screens that were received on January 9, 2001. Of the four bids received, it is our opinion that only one – JWC Environmental – complied with all of the requirements of the Contract Documents. Among other requirements, the documents called for a mandatory site visit so that they could assess and detail how their equipment would fit in the existing building/channel. Attached to this memo is a spread-sheet noting specific requirements contained in the specifications and our opinion as to whether the other three bidders comply. Major points of comparison are also discussed in greater detail following:

1. An important requirements is prior installations in the United States, by which we can judge the product's performance. We propose to eliminate Andritz from further consideration based on the fact that they have only two smaller screens installed in the U.S., and they were both installed last year. They did not make the required site visit, and have several non-conforming items in their product specifications. (They were the high bid, so this should not be an issue.)
2. We recommend that the bid from Jones & Atwood be rejected for substantially failing to meet the bidding requirements. They provided no U.S. references at all. They also did not make the compulsory site visit and have several non-conforming items in their product description. All their product information was provided on a short line item narrative, with no supporting drawings, specifications, or other required technical information.
3. Waste-tech had the lowest bid, but also failed to meet many of the bidding requirements, and are not, in our opinion, equal to the specified equipment. They do not have the required number of U.S.

installations of a comparable size to this project. Five U.S. installations of screens over one meter wide were listed, while the requirement is for ten of similar size, and only one screen over five years old was listed. Again, they did not make the required site visit. Major non-conforming items are discussed following:

- Hardwood tracks support conveyor links, where stainless steel is required by the specifications.
- Screen segments are supported on submerged bushings and sprockets, which is not allowed by the specifications (“no submerged bearings or sprockets are allowed”). This could be an expensive maintenance problem in the future, since the screen would either have to be removed or the channel dewatered to access the parts.
- We question whether the screen can reasonably be installed, or removed because of the large size (almost 16 feet long). The manufacturer has stated they can install it in “three pieces” in order to get it in the building; however, no details or drawings were submitted to verify this. This could also add costs to the installation contract. It appears that if this is to be accomplished, removal of the existing screens may be necessary, leading to operation/maintenance problems for City staff during this period. Also, if removal became necessary for future maintenance/repair it might require removing a portion of the roof to get the screen out. Note that this is a serious problem with the existing screens; we would like to avoid this in the future.
- The screen does not meet the “headloss” requirements for the specified 6 mm (1/4”) openings. No screen can be used if it does not meet these existing hydraulic conditions. They have provided larger (10 mm, 3/8 inch) openings in order to meet the hydraulic conditions. It should be noted that Parkson Equipment decided not to bid at the last minute because they could not meet these hydraulic conditions.
- Drive shaft and compactor auger are high tensile steel instead of the required stainless steel.
- A revolving brush is used to clean the screen, while “automatically self-cleaning” screens “without external mechanical devices” are specified.
- No air aspirators, knife gate valve, or compressed air system is provided with the washer/compactor, as specified. Also, no drawings or details were provided with the bid. We are very concerned about this and consider proper washing (cleaning) of the screenings to remove organic material to be very important. One of the goals for all the processes and equipment for the improvements at the WRF was to eliminate odors and corrosive gases. It is our opinion that their equipment will not meet the intent of the specifications for the washer/compactor.

In summary, a good case could be made that none of the above three bidders was responsive. In that case, the only responsive (and the bonafide low) bidder would be JWC Environmental, who did make the required site visit, has provided a sufficient list of U.S. references and complied with all the bid requirements.

If you have any questions on the above, please contact us.

cc: Dave Van Cleave, City of Rapid City

Attachment