




POSSIBLE MOTION

I MOVE TO APPROVE a purchase contract for the Japonski Lift Stations Electrical Equipment to Boreal Controls Inc. for \$328,500.00 pending DEC approval.

MEMORANDUM

To: Mayor Westover and Members of the Assembly
Jim Dinley, Municipal Administrator

Through: Michael Harmon, Public Works Director 
Stephen L. Weatherman, P.E. Municipal Engineer 

From: Lance E. Henrie, P.E. Senior Engineer 

cc: Larry Fitzsimmons, Acting Finance Director
Mark Buggins, Environmental Superintendent

Date: April 20, 2011

Subject: Japonski Sewer Lift Station Electrical Components Pre Purchase
Approval to Award Material Supply Contract

Background:

Japonski Island includes 6 lift stations which have reached the end of their service life. The existing lift pumps are vacuum prime pumps which are no longer manufactured. We are replacing the existing pumps with new state of the art submersible pumps. Included with the pump replacement will be new electrical components and control systems.

The design consultant for the project is Carson Dorn Inc. who has been working with their sub-consultant Boreal Controls Inc. (BCI) for the design of the electrical equipment. The Wastewater Department has specified Boreal electrical controls for many of their new and rebuilt lift stations. Having BCI supply the required electrical equipment and services will ensure that the City gets the equipment that they want, as well as, decrease the overall cost of design and specification. Boreal controls are high quality, durable and have a long life cycle. Their costs are comparable with other brands. Having all of the Wastewater Department sewer lift stations equipped with Boreal electrical equipment provides future cost savings for parts and maintenance.

Analysis

Typically the electrical equipment is specified by the design consultant and then provided by the construction contractor for installation. However, we have found from the last construction season, the electrical equipment along with the pumps, have very long lead times which can adversely delay the construction of the lift stations. A delay in construction for this project would be detrimental due to the high sewer flows from Mt. Edgecumbe High School and dormitory during the school year.

The design consultant, Carson Dorn Inc., has developed pump specifications for the required pumps and the pumps have been ordered. The sub-consultant, BCI, has developed electrical equipment specifications based upon the pumps selected. The size of the selected pump (or future size) controls the demand for either a 100 amp or 200 amp service and design for the duplex pump stations. BCI has provided a quote for the required electrical equipment and services for both 100 amp and 200 amp services.

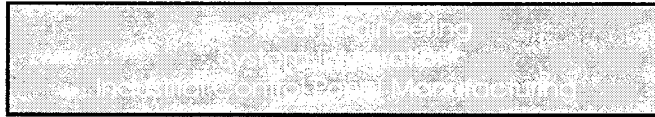
In order to complete the project in time for the 2011 fall school year we need sole source approval to purchase the electrical equipment (3 - 200 amp services \$67,300 each and 2 – 100 amp services @ \$63,300 each) from Boreal Controls Inc. for \$328,500.00

Fiscal Note

The funding is from a FY 2011 \$1,089,700 DEC Wastewater Loan and \$192,300 principal forgiveness.

Recommendation:

Approve award of a Purchase Contract for the Japonski Lift Stations Electrical Equipment to Boreal Controls Inc. for an amount of \$328,500.00 upon DEC approval.



3100 Channel Dr. Ste. 210N
Juneau, AK 99801

Phone: 907-586-8367
FAX: 907-586-4010

QUOTE

DATE: 04/04/2011

QUOTE NO: Q110404A

TO: Jim Dorn

COMPANY: Carson Dorn

BY: _____
Vince McElmurry

PROJECT: Japonski Lift Station

Boreal Controls Inc. is pleased to offer a quotation for the Japonski lift station project.

SERVICES INCLUDED

- Engineered electrical drawings showing service connection, feeder sizes, fault current protection, panel schedule, and motor loads.
- Engineered electrical control drawings showing all major control devices with connected wiring, VFD settings, and material list.
- PLC programming.
- SCADA programming.

HARDWARE AND SOFTWARE INCLUDED

1 ea **Lift Station Control Building:** The lift station control building will be a 6'X6'X7'-6" insulated fiberglass building with interior and exterior lighting, one 36" door, and a heavy equipment mounting panel laminated into the back wall. The building will be delivered as a completed structure with all of the electrical equipment mounted and tested at the factory. Installation will only require the building be positioned in place on a concrete pad to align underground conduit penetrations for service power and pump control. The lift station control building will include the following electrical equipment that will be pre-wired and factory tested before delivery.

- UL listed industrial control panel with Allen Bradley (AB) MicroLogix 1500 PLC, AB PanelView 300 with Boreal Controls standard pump program, configured for two pump control.
- Two AB PowerFlex 70 VFDs rated: 208V, 10Hp.
- Stainless steel 100A meter base with 100A circuit breaker disconnect
- 100A panel board
- 100A fused transfer switch, for transfer between utility and generator power

- 100A generator receptacle

1 ea **Radio and Antenna:** Esteem 900Mhz radio configured for communication with local SCADA network. 20' aluminum mounting pole with 900Mhz direction antenna mounted on top.

EXCLUSIONS FROM QUOTATION

- Setting of building in place and securing to the concrete slab furnished by others.
- External wiring and connections to the equipment located in the building.
- Furnish and install all conduit and fittings. Unless specifically included in this quotation all other electrical equipment and work are excluded from this quotation.
- The concrete slab with stubbed up conduits will be supplied by others.

SHIPPING

- Completed structure with equipment is FOB Sitka

DELIVERY

- The first two completed lift station control buildings will be available in Juneau for shipping to site within 8 weeks from receipt of purchase order. The remaining control buildings will be available within 12 weeks.

COST / TERMS

- The cost for the above scope of work is: **\$63,300** for each control building complete and ready to set in place (FOB Sitka barge line).

START-UP / FIELD WORK

On-site startup is included in the quotation, which consists of travel time, expenses and on-site work.

If additional fieldwork is required, the cost will be \$1,100 per day for labor.

Expenses will be billed at cost plus 10%.

Please call if you have any questions, 907-586-8367.



3100 Channel Dr. Ste. 210N
Juneau, AK 99801

Phone: 907-586-8367
FAX: 907-586-4010

QUOTE

DATE: 04/04/2011

QUOTE NO: Q110404B

TO: Jim Dorn

COMPANY: Carson Dorn

BY: _____
Vince McElmurry

PROJECT: Japonski Lift Station

Boreal Controls Inc. is pleased to offer a quotation for the Japonski lift station project.

SERVICES INCLUDED

- Engineered electrical drawings showing service connection, feeder sizes, fault current protection, panel schedule, and motor loads.
- Engineered electrical control drawings showing all major control devices with connected wiring, VFD settings, and material list.
- PLC programming.
- SCADA programming.

HARDWARE AND SOFTWARE INCLUDED

1 ea **Lift Station Control Building:** The lift station control building will be a 6'X6'X7'-6" insulated fiberglass building with interior and exterior lighting, one 36" door, and a heavy equipment mounting panel laminated into the back wall. The building will be delivered as a completed structure with all of the electrical equipment mounted and tested at the factory. Installation will only require the building be positioned in place on a concrete pad to align underground conduit penetrations for service power and pump control. The lift station control building will include the following electrical equipment that will be pre-wired and factory tested before delivery.

- UL listed industrial control panel with Allen Bradley (AB) MicroLogix 1500 PLC, AB PanelView 300 with Boreal Controls standard pump program, configured for two pump control.
- Two AB PowerFlex 70 VFDs rated: 208V, 25Hp.
- Stainless steel 200A meter base with 200A circuit breaker disconnect
- 200A panel board
- 200A transfer switch, for transfer between utility and generator power

- 200A generator receptacle

1 ea **Radio and Antenna:** Esteem 900Mhz radio configured for communication with local SCADA network. 20' aluminum mounting pole with 900Mhz direction antenna mounted on top.

EXCLUSIONS FROM QUOTATION

- Setting of building in place and securing to the concrete slab furnished by others.
- External wiring and connections to the equipment located in the building.
- Furnish and install all conduit and fittings. Unless specifically included in this quotation all other electrical equipment and work are excluded from this quotation.
- The concrete slab with stubbed up conduits will be supplied by others.

SHIPPING

- Completed structure with equipment is FOB Sitka

DELIVERY

- The first two completed lift station control buildings will be available in Juneau for shipping to site within 8 weeks from receipt of purchase order. The remaining control buildings will be available within 12 weeks.

COST / TERMS

- The cost for the above scope of work is: **\$67,300** for each control building complete and ready to set in place (FOB Sitka barge line).

START-UP / FIELD WORK

On-site startup is included in the quotation, which consists of travel time, expenses and on-site work.

If additional fieldwork is required, the cost will be \$1,100 per day for labor.

Expenses will be billed at cost plus 10%.

Please call if you have any questions, 907-586-8367.