

COUNCIL ACTION FORM

SUBJECT: NEW WATER PLANT CHANGE ORDER NO. 21 – CONTRACT 2

BACKGROUND:

The new Water Treatment Plant project is budgeted to wrap up in the current fiscal year, with final completion of the work anticipated during FY 17/18. Table 1 below shows the entire project budget from 2008 through the final budget amendment approved by Council.

Table 1: Total Project Budget

	Water Fund	SRF Loan
All Prior Years	\$ 813,792	\$ 39,728,135
Current Year	756,002	29,667,686
Subtotal	\$ 1,569,794	\$ 69,395,821
Total		\$ 70,965,615

On October 14, 2014, City Council awarded a construction contract to Knutson Construction of Minneapolis, Minnesota for the City's new water treatment plant. This contract, along with all other project expenses, is summarized in Table 2.

Table 2: Total Project Costs To Date

Contract	Amount	Total
FOX Engineering		
Original Contract	\$ 8,240,000	
Change Orders 1-11	763,986	\$ 9,003,986
Contract 1: Pipeline – S.M. Hentges & Sons		
Original Contract	\$ 3,197,273	
Change Orders 1-4	54,566	\$ 3,251,839
Contract 2: Treatment Plant – Knutson Construction		
Original Contract	\$ 52,497,000	
Change Orders 1-20	1,095,601	\$ 53,592,601
All Other Expenses		\$ 3,163,437
(e.g., land acquisition, lime sludge disposal, environmental investigations, etc.)		
Subtotal		\$ 69,011,863
Contingency		\$ 1,953,752
Total		\$ 70,965,615

Twenty previous change orders have been executed for Contract 2 with Knutson Construction (see the attached summary for a description of each). Additional items have been identified that need to be addressed and require a change to the contract. Knutson has provided a proposed change order for the work. Each item is described below.

- Solids contact effluent pipe support modification – modifications to piping were needed when a conflict with a valve was discovered. **Total cost is \$4,481.**
- Geogrid at driveway – because of the shallow depth of the gas main, special fabric was needed to protect the main under the driveway. **Total cost is \$811.**
- Dishwasher electrical connection – Electrical outlets were needed for the dishwashers in the break rooms. **Total cost \$2,424.**
- Heat tracing backwash return – heat tracing is needed to prevent the backwash return line from freezing in winter months. **Total cost is \$4,994.**
- Backwash pressure transducer – equipment installed to detect increased pressure during a filter backwash and alarm before structural damage occurs in the filters. **Total cost is \$11,697.**
- Sample return revision – Return sample lines to a common header to eliminate long lengths of tubing. **Total cost is \$3,068.**
- Relocate diffusers in ceiling – diffusers were shown to be in architectural ceiling tiles, but needed to be relocated to preserve the warranty on the tiles. **Total cost is \$1,618.**

The net cost for this change order is an increase of \$29,093. It is the opinion of the consulting team that this is a fair and reasonable price for the requested changes.

The table below shows project contingency before and after approval of this change order.

Table 3: Contingency Balance

	Total
Available Contingency Before Change Order 21	\$ 1,953,752
Contract 2 Change Order 21 (this Council Action)	29,093
Remaining Project Contingency	\$ 1,924,659

There are a few additional changes needed for the project that will result in additional change orders to Contract 2. The contractor and consultant are working to determine

appropriate pricing for these changes. As these are completed, they will appear on future change orders.

ALTERNATIVES:

1. Approve Change Order No. 21 for Contract 2 with Knutson Construction, increasing the contract amount by \$29,093.
2. Do not approve the change order at this time.

MANAGER'S RECOMMENDED ACTION:

The proposed changes are to improve reliability and function of the Water Plant. The consulting engineers, City staff, and Knutson Construction have worked together to come up with reasonable, cost effective recommendations. After approving Change Order No. 21, the remaining contingency available for the project will be \$1,924,659. Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1 as described above.

**New Water Treatment Plant
Summary of Change Orders to Construction Contracts**

Contract 1: S.M. Hentges & Sons (Pipeline)

Description	Net Change
Contract 1, Change Order #1 Raw water realignment, site work, communication structure	\$ 9,256.45
Contract 1, Change Order #2 Piping changes, bypass structure changes, hydrant valves	\$ 21,687.60
Contract 1, Change Order #3 Air relief hydrants, pedestrian ramp, thrust block removal and replacement	\$ 16,974.83
Contract 1, Change Order #4 Road stone, replace lime sludge line laterals, repaint hydrants	\$ 6,647.12
Total Approved Changes to Contract 1	\$54,566.00

Contract 2: Knutson Construction (Treatment Plant)

Description	Net Change
Contract 2, Change Order #1 Sanitary Sewer Realignment	\$ 127,023.00
Contract 2, Change Order #2 Second water service line; additional gate valve; change in pipe material; manhole waterproofing.	\$ 55,634.00
Contract 2, Change Order #3 Minor plumbing changes, tree removal, minor electrical change to elevator, process valve simplification	\$ 5,457.00
Contract 2, Change Order #4 Clearwell access hatches	\$ 6,192.00
Contract 2, Change Order #5 Debris removal, analyzers, access doors, lime pond gates, structural clarifications	\$ 21,790.00
Contract 2, Change Order #6 Electrical modifications, valve floor stand, tracer wire, loss of work time	\$ 22,624.00
Contract 2, Change order #7 Piping modifications to eliminate maintenance in a confined space	\$ 8,985.00

Contract 2, Change order #8 Flooring changes, plumbing modifications, concrete construction changes, valves, concrete pad	\$ 19,341.00
Contract 2, Change order #9 Miscellaneous construction modifications and process piping adjustments	\$ 3,659.00
Contract 2, Change order #10 Service water piping rerouting	\$ 6,027.00
Contract 2, Change order #11 Glass revisions	(\$ 2,360.00)
Contract 2, Change order #12 Natural gas pressure reducing valve and concrete pad	\$ 5,211.00
Contract 2, Change order #13 Lime pond work, water service lines, interior finish selections, hose bib modifications	\$ 21,136.00
Contract 2, Change order #14 Technology revisions, building modifications, equipment relocation, hardware revisions, code requirements	\$ 564,932.00
Contract 2, Change order #15 Finished water sample system, flooring, cabinet modifications	\$ 36,671.00
Contract 2, Change order #16 Low voltage modifications	\$ 130,298.00
Contract 2, Change order #17 Glass modifications and telephone system modifications	\$ 39,825.00
Contract 2, Change order #18 Framing, driveway deletion, painting changes, light fixtures, seeding changes, door lintel	(\$ 10,900)
Contract 2, Change order #19 Elevator safety requirements	\$ 4,153
Contract 2, Change order #20 Minor piping changes, computer monitors, HVAC equipment and safety switches, electric disconnect switch	\$ 29,903
Contract 2, Change order #21 Piping modifications, electrical additions, geogrid, pressure transducer, sample lines	\$ 29,093
Total Approved Changes to Contract 2, including this request	\$ 1,124,694.00