

OK

CONTRACT CHANGE ORDER FORM

CHANGE ORDER # 3

PROJECT: Emergency Standby Wells #31 & #24 Rehabilitation

CIP NUMBER: WU29

CONTRACTOR: Layne Christensen Company

BID / RFP #: 16-226

P.O. #: 162256

CHANGE ORDER JUSTIFICATION:

The City has eight emergency standby wells that are maintained in ready status should the City's Lake Michigan drinking water supply from the DuPage Water Commission be interrupted. The combined output of all eight wells can supply the City with adequate water quantity for all domestic uses (no lawn watering), commercial, industrial and fire protection needs.

The work associated with Emergency Standby Deep Well #24 has been completed. However, the work associated with Deep Well #31 was not completed by the April 30, 2017 contract completion date. The contractor has indicated that they had a scheduling problem with their large rigs and could not mobilize at Deep Well #31 until May 1, 2017. Additional time, in the amount of 28 days, is required in order for the contractor to complete the remaining work. This will result in a new completion date of May 28, 2017.

Two previous change orders were approved by the City Council to add a total of 167 days and \$23,420 to the contract. Because these change orders were approved by the City Council, the contingency days and dollars were not used and remain available for this change order.

I, David A. Nykiel, of Department of Public Utilities-Water, certify that this work is necessary for successful completion of this project/contract. I further certify that the circumstances said to necessitate the change in performance were not reasonably foreseeable at the time the contract was signed and the change order is in the best interest of the city and authorized by law.

Account Number	Project Number/Name	Work Order #	Dollar Amount
430-3490-537.70-89	Rehabilitation and Equipment Replacement for Emergency Standby Deep Wells #31 & #24	WF#62585 for Deep Well #24 & WF#62586 for Deep Well #31	\$0

CONTRACT		Authorized Contingency	Days	Dollars
Original Contract	\$469,449.00	Original Amount	30	\$24,824.95
Prior Cumulative Changes	\$23,420.00	(-) Previously Authorized	0	\$0
Subtotal	\$492,869.00	Subtotal	30	\$24,824.95
(+) This Change	\$0	(-) This Change	28	\$0
Total Contract	\$492,869.00	Balance Left	2	\$24,824.95

Authorized Signatures
(cumulative amount of change orders)
Division and Department Required
\$0 - \$25,000 – Purchasing Manager
Over \$25,000 – City Manager

Requisition Number

[Handwritten signature]

5/3/17

Division Manager/Department

Date

APPROVED:	
<i>Wayne A. King</i>	<i>5/10/17</i>
Signature	Date
Title: <i>City Manager</i>	

- Requires CMO Signature
- DOES NOT Require CMO Signature

*KAS
5/3/17
PM 5/1/17*



Naperville

CITY COUNCIL AGENDA ITEM

SUBJECT: Recommend the Award of Change Order #2 to Contract 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31

TYPE OF VOTE: Simple Majority

ACTION REQUESTED:
 Approve the Award of Change Order #2 to Contract 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31, to Layne-Christensen Co. for an additional 62 days to April 30, 2017.

BOARD/COMMISSION REVIEW:
 N/A

COUNCIL ACTION PREVIOUSLY TAKEN:

Date	Item No.	Action
12/20/16	I5	Award of Change Order #1
6/21/16	I7	Original Award

DEPARTMENT: Water Utilities
 Finance Department

SUBMITTED BY: Jim Holzapfel, Water Utilities Director
 Rachel Mayer, Finance Director

BACKGROUND:
 The City has eight emergency stand-by wells that are maintained in ready status should the City’s water supply from the DuPage Water Commission be interrupted. The combined output of all eight wells could supply water to the City of Naperville for all domestic uses and fire protection needs (no lawn watering). The Utility is rehabilitating all of the it’s eight wells within an eight year period.

16-226, CO 2 Rehab Deep Wells 24 & 31
March 21, 2017
Page 2 of 2

Once completed, the deep wells should last another 20 to 40 years with minimal maintenance. To date, we have completed rehabilitation of one well (#16). We are now finalizing the rehabilitation of Deep Wells Nos. 24 and 31. Bid 16-226 for the rehabilitation, equipment replacement and reactivation of our Emergency Standby Deep Wells Nos. 24 and 31 was awarded by the City Council on June 21, 2016.

DISCUSSION:

Change Order #1 provided a time extension of 105 days and an additional \$23,420 in order to provide an option to equip the new motors with enhanced temperature monitoring capabilities.

The completion of the project has been delayed even further due to unforeseen manufacturing and shipping issues. The time extension is required to allow for the delivery of new motors for both wells. Extending the project completion date by an additional 62 days to April 30, 2017 will be sufficient time to allow the project to be completed with both Deep Wells Nos. 24 and 31 back in active service.

At present, the Contractor is working on site installing the well equipment. After the installation of the new pump and motor and discharge column piping, start up and testing of the new equipment will begin.

FISCAL IMPACT:

CIP #: WU29 - Emergency Standby Well Rehabilitation

Change Order #2 to Contract 16-226 is expensed to the capital account below. This work is related to WU29, Emergency Standby Well Rehabilitation, for which \$275,000 has been budgeted in CY2017. This change order is a time extension, and is not anticipated to have a fiscal impact.

Account Number	Fund Description	Total Budget Amount
430-3490-537.70-89	Water & Wastewater Utility Fund	\$8,852,500

RECOMMENDATION:

Approve the Award of Change Order #2 to Contract 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31, to Layne-Christensen Co. for an additional 62 days to April 30, 2017.

ATTACHMENTS:

1. Prior Awards



Naperville

CITY COUNCIL AGENDA ITEM

SUBJECT: Recommend the Award of Change Order #1 to Contract 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31

TYPE OF VOTE: Simple Majority

ACTION REQUESTED:

Approve the Award of Change Order #1 to Contract 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31, to Layne Christensen Co. to extend the project completion date by 105 days to February 27, 2017 and for an amount not to exceed \$23,420 and a total award of \$492,869, plus a 5% contingency.

BOARD/COMMISSION REVIEW:

N/A

COUNCIL ACTION PREVIOUSLY TAKEN:

Date	Item No.	Action
6/21/16	I7	Original Award

DEPARTMENT: Department of Public Utilities-Water (DPU-W)
Finance Department

SUBMITTED BY: Jim Holzapfel, DPU-W Director
Rachel Mayer, Finance Director

BACKGROUND:

The City has eight emergency stand-by wells that are maintained in ready status should the City's water supply from the DuPage Water Commission be interrupted. The combined output of all eight wells could supply the City of Naperville with adequate water quantity for all domestic uses (no irrigation) and fire protection needs. The goal of the program is to rehabilitate all of the City's eight wells within an eight year period. Once completed, the well system should last another 20 to 40 years with minimal maintenance. To date, we have rehabilitated one Deep Well (#16).

16-226, CO 1 Rehab Deep Wells 24 & 31
 December 20, 2016
 Page 2 of 2

The City Council awarded Contract 16-226 to Lane Christensen Co. (Layne) on June 21, 2016. The purpose of this contract is to complete the rehabilitation, equipment replacement and reactivation of the City’s Emergency Standby Deep Wells Nos. 24 and 31. The pumps, motors, drop pipe and associated equipment at both well sites were removed in late 2015, and inspected. Based on the inspection report, both well motors and drop pipe were not suitable for reinstallation requiring the purchase and installation of new equipment. The pumping units were reconditioned and will be reused.

DISCUSSION:

This change order is necessary to provide a time extension of 105 days and an additional \$23,420.

The primary reason for the extension request is due to a manufacturer delay in building and installing the motors. However, in reviewing the equipment submittals, the motor manufacturer Submerible Motor Engineering USA, Inc. (SME) noted an option to equip the new motors with enhanced temperature monitoring capabilities. Monitoring motor temperatures allows staff the capability to detect motor problems, which if undetected, could develop into expensive catastrophic failures. The cost to add the sensors (4 per motor), control cables and above ground instrumentation is \$16,720.

Additionally, Layne has notified us that the existing motor adapter plates have extensive corrosion and are not suitable for reuse. The cost for replacing the motor adaptor plates with stainless steel units is \$6,700.

FISCAL IMPACT:

CIP #: WU29

Change Order #1 to Contract 16-226 is expensed to the Capital Improvement Program line below. This work is related to WU29, Emergency Standby Wells Rehabilitation, for which \$400,000 has been budgeted in CY2016. The requested change order award of \$23,420 is within the budgeted amount for this project.

Account Number	Fund Description	Total Budget Amount
430-3490-537.70-89	Water & Wastewater Fund	\$8,857,000

Per Council directive, contingency on construction projects is set at 3% on projects over \$500,000 and 5% on projects under \$500,000.

RECOMMENDATION:

Approve the Award of Change Order #1 to Contract 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31, to Layne Christensen Co. to extend the project completion date by 105 days to February 27, 2017 and for an amount not to exceed \$23,420 and a total award of \$492,869, plus a 5% contingency.

ATTACHMENTS:

1. Original Award



Naperville

CITY COUNCIL AGENDA ITEM

SUBJECT: Recommend the Award of Bid 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31

TYPE OF VOTE: Simple Majority

ACTION REQUESTED:
Approve the Award of Bid 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31, to Layne Christensen Co. for an amount not to exceed \$469,449 plus a 5% contingency.

BOARD/COMMISSION REVIEW:
N/A

COUNCIL ACTION PREVIOUSLY TAKEN:

Date	Item No.	Action
N/A		

DEPARTMENT: Department of Public Utilities-Water (DPU-W)
Finance Department

SUBMITTED BY: Jim Holzapfel, DPU-W Director
Rachel Mayer, Finance Director

BACKGROUND:
The City has eight emergency stand-by wells that are maintained in ready status should the City's water supply from the DuPage Water Commission be interrupted. The combined output of all eight wells could supply the City of Naperville with water for all domestic uses (no irrigation) and fire protection needs. The goal of the program is to rehabilitate all of the City's eight wells within an eight year period. To date, we have rehabilitated one well (#16). Once completed, the well system should last another 20 to 40 years with minimal maintenance.

16-226, Rehab Deep Wells 24 & 31
 June 21, 2016
 Page 2 of 3

The Department of Public Utilities-Water (DPU-W) conducted a bid for the rehabilitation, equipment replacement and reactivation of our Emergency Standby Deep Wells Nos. 24 and 31. At present, Deep Well Nos. 24 and 31 are out of service with pumping equipment removed and drop pipe (column pipe) stacked at the job sites. Pumps, motors, drop pipe and associated equipment at both deep well sites had been removed in late 2015, and were subsequently inspected and evaluated for extent of repairs/replacement required. Both deep well holes have been inspected as well, and will require rehabilitation with respect to brush cleaning and sand/sediment removal (bailing).

DISCUSSION:

Advertisement Date:	04/22/2016	Notices Sent:	149
Opening Date:	05/09/2016	Planholders:	12
		Bids Received:	3

BID TABULATION

The following bids were received:

<i>Engineer's Estimate</i>	<i>\$400,000</i>
Layne Christensen Company	\$469,449
Great Lakes Resources Group	\$488,164
Municipal Well & Pump	\$564,762

The bid responses are all higher than the engineer's estimate. The cost difference is related to the extensive deterioration of the existing pump motors and column piping, which were not known at the time of budget preparation. The additional costs are consistent with the actual rehabilitation work required on the wells. Additional funding is available from savings in other CIP projects. Layne Christensen Company is a well qualified contractor with many decades of comprehensive and successful deep well installation and rehabilitation projects to their credit.

FISCAL IMPACT:

CIP #: WU29 – Emergency Stand-by Wells - Rehabilitaton

Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31 is expensed to the Capital Improvement Program line below. A total of \$400,000 was budgeted for this project in CY2016. This overage will be accommodated by savings in other Water & Wastewater capital projects.

Account Number	Fund Description	Total Budget Amount
430-3490-537.70-89	Water & Wastewater Fund	\$8,857,000

Per Council directive, contingency on construction projects is set at 3% on projects over \$500,000 and 5% on projects under \$500,000.

RECOMMENDATION:

Approve the Award of Bid 16-226, Rehabilitation of Emergency Standby Deep Wells Nos. 24 and 31, to Layne Christensen Co. for an amount not to exceed \$469,449 plus a 5% contingency.

*16-226, Rehab Deep Wells 24 & 31
June 21, 2016
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ATTACHMENTS:

1. CIP Page

PRIOR ACTION

Project Number: WU29
Department Name: Water/ Wastewater
Project Purpose: This project supports the delivery of municipal utility services that are responsive to the needs of the citizens by providing exemplary public safety.

Project Title: Emergency Standby Well Rehabilitation
CIP Status: Recurring
Category Code: A
Sector: Various
Criteria: Reliability Improvements/Upgrades
WF Number: TBD

Project Narrative:

This project is for the rehabilitation of the City's 8 remaining standby wells. The project includes replacement of old pumps and motors and electrical gear, in addition to rehabilitation of the well downhole which includes the removal of accumulated sand. Replacement of old equipment and rehabilitation of the downhole is estimated at \$275,000 per year for 8 years (FY13 through CY20). Total annual O&M costs to operate and test all 8 wells is approximately \$600,000 per year.

External Funding Sources Available

None

Projected Timetable

Construction: ongoing through CY20 until all 8 remaining wells have been refurbished.

Impact on Operating Budget

No new personnel; nominal impact on operations & maintenance budget.

Project Budget Impact Summary

	2016	2017	2018	2019	2020	Total CIP
Impact Detail	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0
	Prior Year(s) Impact					0
	Total Project Impact					0

Funding Source Summary

	2016	2017	2018	2019	2020	Total Source
Funding Source	400,000	275,000	275,000	275,000	275,000	1,500,000
Water Utility	400,000	275,000	275,000	275,000	275,000	1,500,000
Subtotal	400,000	275,000	275,000	275,000	275,000	1,500,000
	Prior Year(s) Expenditures					455,321
	Total All Sources					1,955,321

Project Cost Summary

Expense Category	Prior Year(s) Expenditures	2015 Budget	2015 Year-to-Date	2016	2017	2018	2019	2020	Total CIP
Benefits	3,748	0	424	0	0	0	0	0	0
Construction	415,875	275,000	3,638	400,000	275,000	275,000	275,000	275,000	1,500,000
Salaries	10,855	0	1,606	0	0	0	0	0	0
Services	7,221	0	11,955	0	0	0	0	0	0
Subtotal	437,699	275,000	17,623	400,000	275,000	275,000	275,000	275,000	1,500,000
	Prior Year(s) Expenditures								455,321
	Total Project Cost								1,955,321

