



Strand Associates, Inc.
910 West Wingra Drive
Madison, WI 53715
(P) 608-251-4843
(F) 608-251-8655

October 21, 2014

Dr. Fred Abadi, Ph.D, P.E.
Director of Public Works
City of Waukesha
130 Delafield Street
Waukesha, WI 53188-3616

Re: Change Order No. 1
Wastewater Treatment Plant Improvements
City of Waukesha, Wisconsin

Dear Dr. Abadi:

Enclosed are three copies of Change Order No. 1 and documentation for the change order items for your review and approval. If these are acceptable, please sign and return all copies to Strand Associates, Inc.® This letter also summarizes the items included in Change Order No. 1.

Item 1a—Change size of ERU-500-01

These costs are for an increase in the size of the energy recovery unit, found to be necessary during shop drawing review, to be installed in Vehicle Storage 50028. Add \$4,147.00.

These costs are for the difference in cost between the smaller unit included in the bid and the larger unit. There is no increase beyond what would have been included in the bid had the larger unit been shown on the bidding documents.

Item 1b—Engineer will prepare construction set of drawings and specifications

This item is a credit to cover costs for the Engineer to incorporate addenda items into the drawings for the contractor's convenience. Engineer will be reimbursed for these efforts through the "To Be Authorized" portion of the Post Design Services contract. Deduct \$2,200.00.

Item 1c—Change primary hot water pump control

This is a zero cost change to the control of the hot water pumps that heat the anaerobic digesters. It is included in the change order to document the change to the Contract Documents.

Item 1d—Delete installation of new 12-inch and 18-inch RCY/PD piping

This item is a credit for deletion of installation of the noted pipes. Replacement of these pipes was not required because the existing pipe did not interfere with installation of the new 30-inch raw wastewater pipe or construction of the Structure 500 addition. Deduct \$30,000.00.

Item 1e—Infill door in Structure 500 pipe gallery

The costs are for blocking up a door in the lower pipe gallery to allow that area to be filled after removal of the pipes. Add \$1,833.00.

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There is no increase beyond what would have been included in the bid had the door been shown to be blocked up on the bidding documents.

Item 1f--Change digester cover demolition procedure to contain lead paint

These costs are for changing the procedure for demolition of the covers for the 55-foot digesters because of the discovery of lead paint under the cover insulation. The digesters covers were not identified as an area with potential for lead paint during the lead paint and asbestos survey. Add \$9,400.00.

Item 1g--Relocate energy recovery units ERU-500-01 and ERU-530-01

This is a zero cost change to the location of the energy recovery units to accommodate the units' door location as determined during shop drawing review. It is included in the change order to document the change to the Contract Documents.

Item 1h--Delete duct bank for primary feed conductors

This item is a credit for elimination of the duct bank for the primary conductors. WE Energies requested this change to the project. Deduct \$42,593.00.

Item 1i--Delete installation of new 20-inch final effluent (FE) piping

This item is a credit for deletion of installation of the noted pipes. Rerouting of the FE pipe was not required because the existing pipe did not interfere with installation of the new 30-inch raw wastewater pipe or construction of the Structure 500 addition. Deduct \$12,816.00.

Item 1j--Turn over boiler to contractor for salvage

This item is a credit for allowing the contractor to salvage the existing boiler in Building 510. The Contract Documents called for the boiler to be turned over to the City, but its size would have made it difficult for staff to move. Deduct \$1,600.00.

Item 1k--Install aeration tank drain valve and potable water (W1) shutoff valve

These costs are for the installation of a new aeration tank valve and a W1 shutoff valve (both provided by WWTP). The aeration tank valve was not serviceable and required replacement. The W1 valve is needed to isolate the feed to Building 140, which was not shown on the existing drawings. Add \$11,386.00.

There is no increase beyond what would have been included in the bid had the valves been shown on the bidding documents.

Item 1l--Add concrete fill to five transformer containment pads

These costs are for addition of concrete fill in portions of the transformer containment pads. Addition of this fill will still provide adequate spill containment but will allow better access and snow removal for plant staff and contract service personnel. Add \$6,822.00.

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There is no increase beyond what would have been included in the bid had the concrete fill been shown on the bidding documents.

Item 1m--Change Structure 110 duct to accommodate fire damper

This is a zero cost change to the size of the duct to accommodate the submitted fire damper. It is included in the change order to document the change to the contract.

Item 1n--Change three swivel joints from two-plane to three-plane

This cost is for a change in the type of swivel joint to be installed on the digester gas pipe at the digester cover. This joint, which will better accommodate potential movement in the floating cover, was determined to be required during shop drawing review. Add \$23,676.00.

These costs are for the difference in cost between the two-plane joint included in the bid and the three-plane joint. There is no increase beyond what would have been included in the bid had the three-plane joint been shown on the bidding documents.

Item 1o--Delete chemical tank vent piping

This item is a credit for deletion of installation of new chemical tank vent piping that would have been associated with installation on new chemical tanks. Installation of new piping was not required because the bid alternative for replacement of the tanks was not accepted. The credit includes costs for repainting of the existing piping. Deduct \$2,111.00.

Item 1p--Building 500 structural steel changes

These costs are for changes to the structural steel needed to accommodate changes to the precast concrete recommended by the precast concrete manufacturer and agreed to by structural engineer. Add \$370,00.

These costs are for the additional structural steel recommended by the precast concrete manufacturer. There is no increase beyond what would have been included in the bid had the additional steel been shown on the bidding documents.

Item 1q--Delete lintels for HVAC openings in Building 510

This item is a credit for deletion of steel lintels for new HVAC openings in Building 510. The openings were moved to make use of an existing concrete beam as a lintel. These changes were reviewed by structural engineer. Deduct \$1,441.00.

Item 1r--Add on/off contact to biogas flare controls

This is a zero cost change to add a contact to allow monitoring of the condition of the biogas flare at the plant SCADA system as determined during shop drawing review.

Item 1s--Replace deteriorated Building 500 drain piping

These costs are for replacement of an existing drain pipe in Building 500 that was found to be in deteriorated condition when exposed during floor replacement. Add \$1,837.00.

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Item 1t–Building 500 finish changes

This item is a credit for changes to some of the finishes in Building 500 including deletion of painting of glazed block and use of painted concrete block instead of glazed block in some areas as determined by architect. Deduct \$2,282.00.

Item 1u–Elevator mechanical room ventilation

These costs are for the addition of grilles, ducts, and dampers to provide ventilation to the Elevator Mechanical Room 50012, determined to be required during shop drawing review. Add \$2,039.00.

These costs are for the additional ventilation items. There is no increase beyond what would have been included in the bid had these items been shown on the bidding documents.

Item 1v–Boiler combustion damper louver size change

These costs are for an increase to the size of the louver providing combustion air to the digester boiler. This change was in response to the boiler shop drawing review. Add \$808.00.

These costs are for the difference in cost between the louver included in the bid and larger louver. There is no increase beyond what would have been included in the bid had the larger louver been shown on the bidding documents.

Item 1w–Building 500 and 510 HVAC changes

These costs are for changes to HVAC layout in response to contractor requests for information. Add \$1,265.00.

These costs are for the changes to the ventilation layouts, prior to installation. There is no increase beyond what would have been included in the bid had these layouts been shown on the bidding documents and there was no rework associated with this change.

Item 1x–Grit pump junction box change

This is a zero cost change to configuration of the power and control junction boxes found to be necessary during shop drawing review. It is included in the change order to document the change to the contract.

Item 1y–Polymer system panel deletion

This item is a credit for deletion of the two control panels that the polymer manufacturer included in its scope but were not required in the contract as determined during shop drawing review. Control of the polymer system is achieved through the centrifuge control panel and the plant SCADA system. Deduct \$2,678.00.

Item 1z–Grade beam to support column in Building 500

These costs are for construction of a grade beam to support a column that was to be supported by an existing footing. The footing was found to be different than shown on the existing drawings when the floor was removed. Add \$901.00.

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Item 1aa--Unforeseen underground conditions

These costs are for tracked time spent by the underground contractor, to date, to remove unforeseen foundations or otherwise deal with unexpected underground conditions during pipe installation. Add \$2,551.00.

Item 1bb--Turn over chiller to contractor for salvage

This item is a credit for allowing the contractor to salvage the existing chiller in Building 500. The Contract Documents called for the chiller to be turned over to the City, but Freon disposal requirements would have made it difficult for staff to salvage. Deduct \$5,000.00.

Item 1cc--Primary sludge piping changes

These costs are for installation of piping and valves to maintain the ability to pump primary sludge to the dissolved air flotation thickeners. The actual valve configuration was not shown correctly on the record drawings. Add 6,024.00.

Item 1dd--Door hardware and keying changes

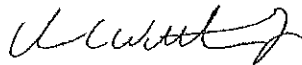
These costs are for replacing additional doors and hardware beyond those included in the contract documents. Two doors were found to have requirements for fire rating during shop drawing review. One door was left off the door schedule. Replacement of one door, in poor condition, was added at the request of WWTP staff. There are also costs included for rekeying some existing doors to standardize the key system throughout the facility. Add \$16,460.00

The sum of the above items in Change Order No. 1 results in a credit of \$13,142.00.

Please call me if you have any questions.

Sincerely,

STRAND ASSOCIATES, INC.®



Vernon C. Witthuhn, Jr., P.E.

Enclosure



Strand Associates, Inc.
 910 West Wingra Drive
 Madison, WI 53715
 (P) 608-251-4843
 (F) 608-251-8655

October 16, 2014

CHANGE ORDER NO. 1

PROJECT: Wastewater Treatment Plant Improvements
 OWNER: City of Waukesha
 CONTRACT: 1-2013
 CONTRACTOR: C.D. Smith Construction, Inc.

Description of Change

1a	Change size of ERU-500-01 (CPR002).	ADD	\$4,147.00
1b	Engineer will prepare construction set of drawings and specifications (WCD005).	DEDUCT	(\$2,200.00)
1c	Change primary hot water pumps control (WCD006).	ADD	\$0.00
1d	Delete installation of new 12-inch and 18-inch RCY/PD piping between points delineated by Keynote 6 on Sheet 38 (WCD007).	DEDUCT	(\$30,000.00)
1e	Infill door in Structure 500 pipe gallery (CPR006).	ADD	\$1,833.00
1f	Change digester cover demolition procedure to contain lead paint (WCD008).	ADD	\$9,400.00
1g	Relocate energy recovery units ERU-500-01 and ERU-530-01 (CPR008).	ADD	\$0.00
1h	Delete duct bank for primary feed conductors (CPR004).	DEDUCT	(\$42,593.00)
1i	Delete 20-inch FE piping (WCD010).	DEDUCT	(\$12,816.00)
1j	Turn over boiler to contractor for salvage (WCD011).	DEDUCT	(1,600.00)
1k	Replace aeration tank valve and add W1 shutoff valves (CPR010).	ADD	\$11,386.00
1l	Add concrete fill to five transformer containment pads (WCD012).	ADD	\$6,822.00
1m	Change Structure 110 duct to accommodate fire damper (WCD009).	ADD	\$0.00
1n	Change digester swivel joints from two-plane to three-plane (CPR001).	ADD	\$23,676.00
1o	Delete new chemical tank vent piping (CPR003)	DEDUCT	(\$2,111.00)
1p	Building 500 structural steel changes (CPR011).	ADD	\$370.00
1q	Delete lintels for HVAC openings in Building 510 (CPR013).	DEDUCT	(\$1,441.00)
1r	Add on/off contact to biogas flare controls (CPR012).	ADD	\$0.00
1s	Replace Bldg 500 deteriorated drain pipe (WCD013).	ADD	\$1,837.00
1t	Building 500 finish changes (CPR018).	DEDUCT	(\$2,282.00)
1u	Elevator mechanical room ventilation change (CPR020).	ADD	\$2,039.00

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1v	Boiler combustion dampler louver size change (CPR021).	ADD	\$808.00
1w	Building 500 and 510 HVAC changes (WCD014).	ADD	\$1,265.00
1x	Grit pump junction box change (CPR017).	ADD	\$0.00
1y	Polymer system control panel deletion (CPR019).	DEDUCT	(\$2,678.00)
1z	Grade beam to support column in Bldg 500 (WCD015).	ADD	\$901.00
1aa	Unforeseen underground conditions (WCD016).	ADD	\$2,551.00
1bb	Turn over chiller to contractor for salvage (WCD017).	DEDUCT	(\$5,000.00)
1cc	Primary sludge yard piping changes.	ADD	\$6,024.00
1dd	Door hardware and keying changes.	ADD	\$16,460.00
TOTAL VALUE OF THIS CHANGE ORDER:		(DEDUCT)	(\$13,142.00)

Contract Price Adjustment

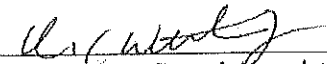
Original Contract Price	\$41,800,000.00
Previous Change Order Adjustments	\$0.00
Adjustment in Contract Price this Change Order	(\$13,142.00)
Current Contract Price including this Change Order	\$41,786,858.00

Contract Completion Date Adjustment

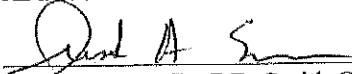
Original Contract Completion Date	July 23, 2016
Contract Completion Date Adjustments due to previous Change Orders	0 days
Contract Completion Date Adjustments due to this Change Order	0 days
Current Contract Completion Dates including all Change Orders	July 23, 2016

This document shall become a supplement to the Contract and all provisions will apply hereto.

RECOMMENDED


 ENGINEER-Strand Associates, Inc.® 10/16/14
Date

APPROVED


 CONTRACTOR-C.D. Smith Construction, Inc. 10/20/14
Date

APPROVED

 OWNER-City of Waukesha Date