

April 26, 2017

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. 4  
Wastewater Treatment Plant Improvements  
City of Waukesha, Wisconsin

Dear Dr. Abadi:

Enclosed are three copies of Change Order No. 4 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.<sup>®</sup> This letter also summarizes the items included in Change Order No. 4.

**Item 4a–Stormwater pumping station electrical**

This cost is for providing new conduit and wiring to the stormwater pumping station. The existing electrical service was fed from the southern stormwater pumping station that is now abandoned. Add \$6,370.00.

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

**Item 4b–Bioretention basin compost**

This is a credit for the City furnishing compost for use in the three bioretention basins. Staff from the Wisconsin Department of Natural Resources confirmed the material is acceptable. Deduct \$11,160.00.

**Item 4c–Structure 410 swing check valves**

This cost is for replacing three swing check valves in the sludge piping of Structure 410. The existing valves were in poor condition and did not operate properly. Add \$7,357.00.

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

**Item 4d–Relocate wiring in Structure 430**

This cost is for relocating wiring that was found in the wall of Structure 430 that was demolished. The wiring was required to maintain the lighting circuits. Add \$1,476.00.

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

**Item 4e–Delete portion of Digester No. 3 painting**

This is a credit for not painting a portion of the Digester No. 3 interior. Painting was not necessary for the portion of the digester interior that was covered by an existing PVC liner. Deduct \$3,188.00.

**Item 4f–Structure 320 washwater basin floats**

This cost is for providing floats and controls associated with the washwater basin at Structure 320 to alert plant staff if water reaches a high level. Add \$9,111.00.

There is no increase beyond what would have been included in the bid had the floats and controls been included in the bidding documents.

**Item 4g–Structure 410 flow meter and valves**

This cost is for providing a flow meter on the raw sludge feed piping and rebuilding six plug valves in the sludge piping. Add \$23,984.00.

There is no increase beyond what would have been included in the bid had the flow meter and valve work been included in the bidding documents.

**Item 4h–Site roadway improvements**

This cost is for providing grading, base course, asphalt pavement, and restoration to eliminate an existing low spot in the site roadway near the final clarifiers. Add \$38,521.00.

There is no increase beyond what would have been included in the bid had the road improvements been included in the bidding documents.

**Item 4i–Digester No. 3 gas piping**

This cost is for adjusting the elevation of the digester gas piping above the maximum water level inside Digester No. 3. Add \$6,306.00.

There is no increase beyond what would have been included in the bid had the higher pipe elevation been included in the bidding documents.

**Item 4j–Pump station radios and antennas**

This cost is for changing the radios and antennas associated with the pumping station communication system. This was necessary due to interference concerns with the specified radio/antenna system. Add \$19,526.00.

There is no increase beyond what would have been included in the bid had the alternative radios and antennas been shown on the bidding documents.

**Item 4k–Miscellaneous electrical changes**

This cost is for miscellaneous electrical work in Structures 110, 210, 310, 430, and 500. Add \$11,617.50.

There is no increase beyond what would have been included in the electrical work been shown on the bidding documents.

**Item 4l–Structure 150, 310, 410, and 430 piping**

This cost is to provide flushing connections in Structure 310/410, piping changes in Structure 430 recommended by the centrifuge manufacturer, and a cross-connection in the air compressor piping in Structure 150. Add \$6,151.00.

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

**Item 4m–Structure 500 chiller**

This cost is to replace the water-cooled chiller system in Structure 500 with an air-cooled chiller system. Add \$59,115.96.

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

**Item 4n–Unsuitable material for structures allowance adjustment**

This item deletes the unsuitable materials for structures. There was no unsuitable material found during excavation for new structures, and all excavation work has been completed. Deduct \$77,500.00.

**Item 4o–Unsuitable material for trenches allowance adjustment**

This item deletes the utility trench unsuitable materials. There was no unsuitable material found during utility trench excavation, and all excavation work has been completed. Deduct \$44,000.00.

**Item 4p–Backfill void areas allowance adjustment**

This item deletes the allowance for backfilling void areas at Structure 500. There were no void areas discovered during construction at Structure 500. Deduct \$800.00

**Item 4q–Solid waste fill material allowance adjustment**

This item deletes the solid waste fill material. There was no solid waste material found during excavation, and all excavation work has been completed. Deduct \$5,000.00.

**Item 4r–Excess fill material allowance adjustment**

This item adjusts the excess fill material to actual costs for placement of excess fill. A total of 18,306 cubic yards of excess material was placed. Add \$58,856.00.

**Item 4s–Top of wall repair allowance adjustment**

This item deletes the top of wall concrete repair. There was no top of wall concrete repairs performed. Deduct \$10,000.00.

**Item 4t–Vertical surface/underside repair allowance adjustment**

This item adjusts the vertical surface and underside of slab concrete repair to actual costs for repairs. All concrete repair work has been completed. Deduct \$3,600.00.

**Item 4u–Top of slab allowance adjustment**

This item adjusts the top of slab concrete repair to actual costs for repairs. All concrete repair work has been completed. Deduct \$373.00.

**Item 4v–Concrete special crack repair allowance adjustment**

This item adjusts the crack special crack repair allowance to reflect the final quantities crack injection performed by the contractor. All concrete crack repair work has been completed. Add \$714.00.

**Item 4w–Face brick allowance adjustment**

This item adjusts the face brick allowance to actual costs based on the number of brick installed. All brick work has been completed. Add \$956.00.

**Item 4x–100% tuck pointing allowance adjustment**

This item adjusts the 100% tuck pointing allowance to actual costs for repairs. All masonry repair has been completed. Deduct \$17,500.00.

**Item 4y–<100% tuck pointing allowance adjustment**

This item adjusts the <100% tuck pointing to actual costs for repairs at Structures 140, 150, 310, 400, 420, 510, 515, and 530. All masonry repair has been completed. Add \$1,770.00.

**Item 4z–Brick replacement allowance adjustment**

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This item adjusts the brick replacement allowance to actual costs for repairs. All masonry repair has been completed at Structures 140, 150, 310, 400, 420, 510, 515, and 530. ADD \$40,172.00.

**Item 4aa–Expansion joint repair allowance adjustment**

This item adjusts the expansion joint repair allowance to reflect the final quantities joint repair performed by the contractor. All expansion joint repair has been completed. Deduct \$8,250.00.

**Item 4bb–Steel water tank evaluation allowance adjustment**

The Contractor did not have costs associated with the steel water tank evaluation. Deduct \$5,000.00.

**Item 4cc–Interior wet steel repair allowance adjustment**

This item deletes the wet steel repair at the steel water tank. There were no interior repairs necessary. Deduct \$2,000.00.

**Item 4dd–Miscellaneous painting allowance adjustment**

This item adjusts the painting allowance to actual costs for painting that was added to the project. Deduct \$18,772.00.

**Item 4ee–Field office equipment allowance adjustment**

This item adjusts the field office equipment allowance to actual costs for the equipment. Deduct \$5,021.21.

**Item 4ff–Appliances allowance adjustment**

This item adjusts the appliances allowance to actual costs for new appliances at the Administration Building. Deduct \$6,039.00.

**Item 4gg–Office furniture allowance adjustment**

This item adjusts the office furniture allowance to actual costs for installation of new office furniture at the Administration Building. Deduct \$7,657.64.

**Item 4hh–Electrical service allowance adjustment**

This item adjusts the electrical service allowance to actual costs for installation of new electrical utilities. All electrical utility work has been completed. Add \$833.41.

**Item 4ii–Telephone service allowance adjustment**

This item adjusts the phone allowance to actual costs for installation of new phone utilities. All phone installation work has been completed. Deduct \$16,486.60.

**Item 4jj–Video surveillance system allowance adjustment**

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This item adjusts the video surveillance allowance to actual costs for installation of the new video surveillance system. All surveillance installation work has been completed. Deduct \$9,165.00.

**Item 4kk–Structured cabling allowance adjustment**

This item adjusts the structured cabling allowance to actual costs for installation of new fiber utilities. All fiber installation work has been completed. Deduct \$7,978.00

**Item 4ll–SCADA system computers allowance adjustment**

This item adjusts the computer allowance to actual costs for installation of new computers and software. Deduct \$28,562.32.

**Item 4mm–Adjustment to project contingency allowance adjustment**

This is an adjustment to the project contingency allowance to accommodate this change order. Deduct \$267,919.73.

**Change to Final Completion Date**

The Final Completion date has changed from July 23, 2016 to June 15, 2017 due to change order work that extended beyond the original Final Completion date. Final payment will be recommended in accordance with the Contract documents once all Contractor obligations have been satisfied. There will be no increase to the contract price and no increase in engineering costs due to the extension.

The sum of the above items in Change Order No. 4 results in a net deduct of \$263,135.73.

Please call me with any questions.

Sincerely,

STRAND ASSOCIATES, INC.®

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

Enclosure