



**CONTRACT MODIFICATION**  
**CITY OF APPLETON, WISCONSIN**

CHANGE ORDER

WRITTEN AMENDMENT

MODIFICATION NO<sup>1</sup>: 005

TO CONTRACTOR: Staab Construction Corporation

PROJECT: Regulatory Upgrade and Process Improvement PROJECT NO: 488399

OWNER: City of Appleton

ENGINEER: CH2MHILL

**The following modification(s) to the Contract are hereby ordered (use additional pages if required):**

See RFQ Log attached. Includes RFQs 43 through 56, excluding 47 and 55.

**Reason for Modification(s):**

Various. See RFQs 43 through 56, excluding 47 and 55, attached.

**Attachments (List Supporting Documents):**

RFQs 43 through 56, excluding 47 and 55, attached.

Contract Amount or Price		Contract Times (Calculate Days)	
Original	<u>\$4,867,000</u>	Original Duration	<u>365</u> Days
Previous Contract Modification(s) (Deduct)	<u>\$(6,116)</u>	Previous Contract Modification(s) (Add)	<u>180</u> Days
This Contract Modification (Add)	<u>\$43,891</u>	This Contract Modification (Add/Deduct)	<u>0</u> Days
Revised Contract Amount	<u>\$4,895,776</u>	Revised Contract Time	<u>545</u> Days
The Revised Contract Completion Date is:			
<u>July 27</u> , 20 <u>15</u>			

Owner	Contractor	Engineer Recommendation <sup>2</sup>
By: <u>[Signature]</u>	By: <u>[Signature]</u>	By: <u>Tony Myers</u>
Date: <u>5/7/15</u>	Date: <u>5/6/15</u>	Date: <u>May 6, 2015</u>

<sup>1</sup> Number all Modifications consecutively.

<sup>2</sup> Recommendation necessary for Change Orders.

Copies: Owner

City of Appleton RFQ Log

Regulatory Upgrade and Process Improvement Project

Number	Date Initiated	Description	Comments	Status	Amount
001	2/21/14	SST Ladders in Clearwell	Owner decided to stay with FRP ladders based on additional \$15,170 cost for SST ladders.	Not-accepted	\$ -
002	2/27/14	SCADA Software	Additional software and licenses to meet plant needs.	Accepted	\$ 13,988
003	3/7/14	Contractor Plating Alternate	Contractor suggested alternative for Concrete gullet cap instead of SST plates. Easier installation and lower cost.	Accepted	\$ (95,719)
004	3/12/14	10" SS Drain Pipe Modifications	Unforeseen conditions in the Membrane wet well require relocation of SST purge valve pipe and copper pipe to avoid interference with new dual concrete wall.	Accepted	\$ 1,231
005	3/13/14	Membrane Wetwell Rebar	Additional rebar recommended during shop drawing review to reduce potential for concrete shrinkage and water leakage at the wall base.	Accepted	\$ 4,362
006	3/14/14	Galvanized Pipe Flanges	Substitute galvanized back-up flanges for SST back-up flanges to match existing pipe materials.	Accepted	\$ (33,836)
			<b>Change Order 1 Processed for RFQs 1 through 6. Total Cost = Deduct of \$109,974</b>		
007	3/21/14	Existing Contactor Slabs crack repair	95.00 /lf for the first 100 lineal feet. \$60.00 per lf thereafter and not to exceed \$15,000. Time and materials for contactors #5 through #8 was \$9,885. Cost for contactors #1-#4 will be determined later when work is complete.	Accepted	\$ 9,885
008	4/9/14	Leak Monitoring in Membrane Wetwell walls	Add leak monitoring device in membrane wetwell air gap.	Accepted	\$ 2,333
009	4/10/14	Change Pinch valves to ball valves	Change lime system pinch valves to SST ball valves.	Accepted	\$ (10,140)
010	4/10/14	Tideflex Valves	Delete four 1" tideflex valves in softening basins.	Accepted	\$ (368)
011	4/11/14	Filter Gullet Drain Valve Support	Add a support bar to the 30" filter drain valve	Accepted	\$ 2,040
012	4/11/14	Ammonia vacuum valves	Add vacuum valves on each storage tank.	Accepted	\$ 892
013	4/14/14	Hach WIMS software licenses	Add 4 concurrent licenses so more people can access data at the same time.	Accepted	\$ 4,305

\$ (109,974)

City of Appleton RFQ Log

Regulatory Upgrade and Process Improvement Project

Number	Date Initiated	Description	Comments	Status	Amount
014	4/22/14	Lime Feed Motor Heaters	Add motor heaters to lime mix system (not feed pumps) \$18,912	Rejected	
015	4/24/14	Electrical UPS connections	Connect UV PLC to UPS power, per RFI 12.	Accepted	\$ 6,221
016	5/5/14	Electrical Conduit	Change from PVC coated to Aluminum in polymer and ammonia areas.	Accepted	\$ (2,305)
017	5/10/14	Air Line Vent	Do not replace 1" air line vent with 2" vent	Accepted	\$ (3,400)
018	5/9/14	Ammonia Tank Weigh Scales	Upsize weigh scales	Accepted	\$ 6,563
019	5/12/14	CT sample piping	Increase sample piping from 3/4" to 1" to match existing	Accepted	\$ 1,145
020	5/14/14	Krohne Flow Meters	Change from ABB to Krohne flow meters to match existing plant meters.	Accepted	\$ 2,995
021	5/30/14	Polymer Diffuser Modifications	The Polymer Detail was modified to 1" SST	Accepted	\$ 564
022	6/5/14	24V DC signals	Change leak detection signals from 120V AC to 24V DC	Accepted	\$ 2,209
			<b>Change Order 2 Processed for RFQs 7 through 22. Total Cost = Add \$22,939</b>		
023	6/5/14	Expansion Joint Repair	Repair cleanwell exterior wall expansion joint		
024	7/2/14	Valve Shaft Replacement	Replace corroded valve shaft in cleanwell with 316 SST shaft	Accepted	\$ 3,191
025	7/7/14	Electrical Conduit Lime Room	Change from PVC coated to Aluminum in lime areas.	Accepted	\$ (5,972)
026	7/15/14	Polymer Rotometers	Reduce size of rotometers from 20 gpm to 10 gpm. (add \$625)	Rejected	
027	7/23/14	UV Cable Length	Increase length of UV cable to reach equipment	Accepted	\$ 4,304
028	7/28/14	Remove 12" SST Pipe	Remove 12" SST pipe in membrane wet well	Accepted	\$ 1,618

\$ 22,939

City of Appleton RFQ Log

Regulatory Upgrade and Process Improvement Project

Number	Date Initiated	Description	Comments	Status	Amount
029	8/6/14	Hach WIMS Programming	Cost for Hach WIMS programming services per WCD #1 dated 7/21/14	Accepted	\$ 9,964
030	8/7/14	Expansion Joint Leakage Repair	Water Leakage under walls at the expansion joint	Accepted	\$ 1,541
031	8/15/14	Hub Drains	Eliminate hub drains and drain piping near UV reactors, per RFI 032.	Accepted	\$ (4,773)
032	8/20/14	Vertical Expansion Joints	Install vertical expansion joint in 2 new CT tank walls	Accepted	\$ 12,354
033	8/21/14	Post-UV Chemical Injection Ports	Modify post-UV chemical injection ports as shown in sketches	Accepted	\$ 1,733
034	8/25/14	Repair existing clearwell floor expansion joint	Previously identified repair work Owner would like done in this contract	Accepted	\$ 6,702
035	8/25/14	16" pipe Expansion Joint	Installing a 16" expansion joint in the 16" RTN line	Accepted	\$ 3,175
036	9/5/14	Chemical Table Drip Pan	Add a drip pan to the ammonia chemical feed pump table.	Accepted	\$ 1,338
037	9/19/14	Contact Valve Positioner Wiring	Add electrical wire/conduit for position feature on FTW valves <b>Change Order 3 Processed for RFQs 24, 25 and 27 through 37. Total Cost = Add of \$40,029</b>	Accepted	\$ 4,854
038	10/1/14	CT Tank Expansion Joint Support	Add SST support bars on CT tank expansion joints	Accepted	\$ 19,671
039	10/2/14	Contact Gullet Crack Injection	Repair cracks in existing GAC Contactor gullet slab.	Accepted	\$ 13,105
040	10/2/14	Contact Wall Repair	Repair wall in existing Contactor 1	Accepted	\$ 4,869
041	11/19/14	UVT Analyzer Rotameters	Smaller rotameters for better accuracy. Hedland units are more cost effective. Owner can keep original rotameters provided.	Accepted	\$ 2,117
042	12/3/14	UPS power to S::CAN units	Connect S::CAN UV analyzers to backup UPS power source <b>Change Order 4 Processed for RFQs 38 through 42. Total Cost = Add of \$41,891</b>	Accepted	\$ 2,129
					\$ 40,029
					\$ 41,891

City of Appleton RFQ Log

Regulatory Upgrade and Process Improvement Project

Number	Date Initiated	Description	Comments	Status	Amount
043	12/3/14	Ammonia tank flex connectors	Provide flexible connections on storage and day tank pipes to improve weigh scale accuracy.	Accepted	\$ 10,183
044	1/6/15	UV Sample Ports	Add 8 sample ports to the UV piping, at the pressure gauges upstream and downstream of each UV reactor	Accepted	\$ 2,082
045	1/6/15	Air Relief Valves	Add air relief valves on north and south UV inlet headers and on each UV reactor.	Accepted	\$ 8,791
046	1/9/15	Aqueous Ammonia Feed Pump Pressure Gauge with seal and PRV	As recommended by pump manufacturer to facilitate PRV field adjustment.	Accepted	\$ 3,537
048	2/26/15	Pressure Gauge on Ammonia Transfer Pumps	Recommended by pump manufacturer to assist with monitoring pump operation during testing.	Accepted	\$ 903
049	2/27/15	VIBRATION ISOLATORS FOR knife gate VALVES	Reduce vibration from lime silo at knife gate valve	Accepted	\$ 381
050	2/27/15	AIR VALVE PUSH FITTINGS	Owner request for better operations and maintenance.	Accepted	\$ 649
051	2/27/15	Ammonia ABSORBER DRAIN SUMP	Trap potential fumes from ammonia absorber.	Accepted	\$ 428
052	5/5/15	Credit for instrument training	Credit to delete training on common instruments that plant staff are already familiar with.	Accepted	\$ (5,001)
053	4/3/15	Sludge Pit Piping	Owner project to interconnect North or South Sludge Pumps to simultaneously pump both pits	Accepted	\$ 10,608
054	4/15/15	UV Air Release Valves	Provide additional air relief for UV system.	Accepted	\$ 10,304
056	4/28/15	Basin 2B Weir Plates	Reduce weir length in CT tank 2B to provide additional operational flexibility.	Accepted	\$ 1,026
			<b>Change Order 5 Processed for RFQs 43 through 56, except for 47 and 55. Total Cost = Add of \$43,891</b>		
055	4/21/15	CT Tank Expansion Joint Waterstop	Provide additional protection against tank leakage.	Accepted	\$ 25,021
			<b>Change Order 6 Processed for RFQ 55. Total Cost = Add of \$25,021</b>		

\$ 43,891

\$

City of Appleton RFQ Log

Regulatory Upgrade and Process Improvement Project

Number	Date Initiated	Description	Comments	Status	Amount
047	4/15/15	UV Valve Position Control	Remote valve position control to assist with air venting from UV system. These controls will also be useful to assist with pump flow control when membranes are bypassed.	Accepted	\$ 22,878
			<b>Change Order 7 Processed for RFQ 47. Total Cost = Add of \$22,878</b>		
		<b>TOTAL</b>			<b>\$ 86,675</b>