

**Racine Water and  
Wastewater Utilities**

Keith E. Haas, P.E.  
General Manager



Michael L. Gitter, P.E.  
Chief of Operations  
Kenneth M. Scolaro, C.P.A.  
Administrative Manager  
Chad W. Regalia, P.E.  
Chief Engineer

December 11, 2020

Board of Waterworks Commissioners:

Mayor Cory Mason  
Alder John Tate II  
Terry McCarthy  
Kathleen DeMatthew  
Stacy Sheppard  
Alder Natalia Taft  
James Spangenberg  
Kathleen Fischer

SUBJECT: Change Order No. 3 – Contract W-19-18– STH 20 Pumping Station Improvements

Dear Commissioners:

Submitted for your review and approval is Change Order No. 3 on Contract W-19-18, STH 20 Pumping Station Improvements, Staab Construction Corp. (contractor) in the amount of \$42,260.00. This Change Order is interzone transfer piping within STH 20 Pumping station and complete dual 20-inch water main connections north.

The original contract amount is \$ 1,587,000.00. Previous Change Orders increased the contract amount to \$1,625,807.00. Change Order No. 3 would increase the total contract amount to \$1,668,067.00. This change order reflects an increase of 5.1 % on the original contract amount.

Sincerely,

A handwritten signature in black ink, appearing to be "KE Haas", written over a horizontal line.

Keith E. Haas  
General Manager

KH/eg

Date of Issuance: December 9, 2020	Effective Date: December 9, 2020
Contract: STH Pumping Station Improvements	Owner: Racine Water and Wastewater Utilities
Contractor: Staab Construction Corp.	Owner's Contract No.: W-19-18
Address: 1800 Laemle Avenue	Engineer: Ruekert & Mielke, Inc.
Marshfield, WI 54499	Engineer's Project No.: 8022-10038.301
	Effective Date of Contract: September 5, 2019

The Contract is modified as follows upon execution of this Change Order:

Description:

- 1) Complete interzone transfer piping within STH 20 Pumping Station. The work includes providing all 6-inch diameter piping, fittings, and valves and all 12-inch diameter piping modifications shown on the attached sketch, thus an add of \$10,246.00.
- 2) Remobilize and complete dual 20-inch water main connections north of the STH 20 Pumping Station, thus an add of \$32,014.00

Reason for Change Order:

- 1) The change is to provide a way to return water from the 933 Pressure Zone to the 875 Pressure Zone to reduce water age.
- 2) The dual 20" pipe stub installations (by others) was expected to be installed ahead of work on this Contract. This work (by others) was recently completed necessitating the Contractor's remobilization to the site to complete this work.

Attachments:

- 1) October 28, 2020, email with sketch of proposed work (modified).  
December 9, 2020, Staab Construction change order pricing.
- 2) December 8, 2020, Staab Construction change order pricing.
- 3) December 9, 2020, Letter to Keith Haas summarizing changes required.

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES
Original Contract Price \$ 1,587,000.00	Original Contract Times: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Increase from previously approved Change Orders. \$ 38,807.00	●Increase● ●Decrease● from previously approved Change Orders No. ___ to No. ___: Substantial Completion: _____ Ready for Final Payment: _____ days
Contract Price prior to this Change Order: \$ 1,625,807.00	Contract Times prior to this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Increase of this Change Order: \$ 42,260.00	●Increase● ●Decrease● of this Change Order: Substantial Completion: _____ Ready for Final Payment: _____ days or dates
Contract Price incorporating this Change Order: \$ 1,668,067.00	Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for Final Payment: _____ days or dates

RECOMMENDED:


ACCEPTED:

ACCEPTED:

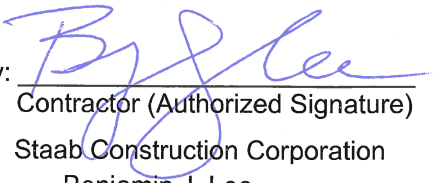
00 63 63-1

12/09/20

Ruekert & Mielke, Inc.

By:   
Engineer (Authorized Signature)  
David G. Lipski  
Ruekert & Mielke, Inc.

By: \_\_\_\_\_  
Owner (Authorized Signature)  
Racine Water and Wastewater Utilities  
Chad Regalia

By:   
Contractor (Authorized Signature)  
Staab Construction Corporation  
Benjamin J. Lee

Date: December 9, 2020

Date: \_\_\_\_\_

Date: December 9, 2020

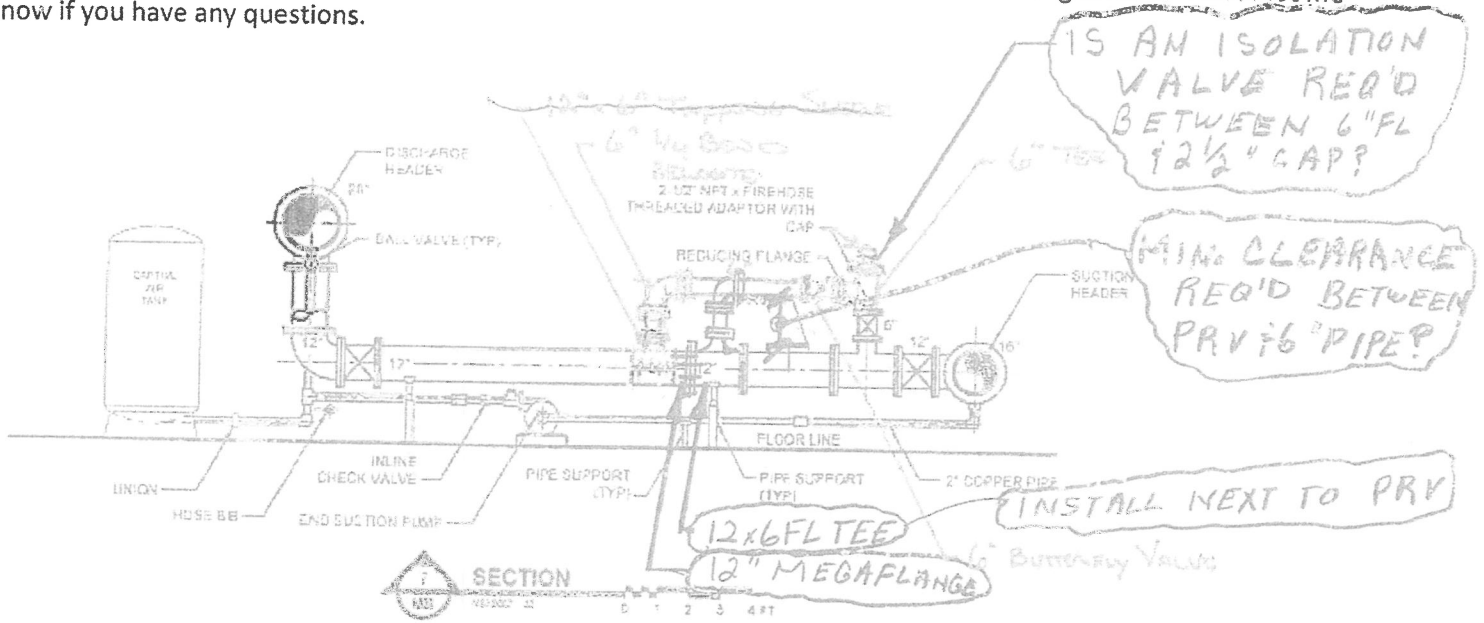
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Haffenbredl, Leon

From: Schultz, Ryan <RSchultz@ruekert-mielke.com>  
 Sent: Wednesday, October 28, 2020 5:00 PM  
 To: Haffenbredl, Leon  
 Cc: Arnott, David  
 Subject: [EXTERNAL]STH 20 Piping Modifications

Hi Leon:

I have a favor to ask. Could you provide a quick budgetary cost for performing the following piping modifications (furnish and install) at Racine's STH 20 Pumping Station. The cost just needs to be in the ballpark in order to help us decide if we want to proceed with the work and would be performed outside of the existing contact. Please let me know if you have any questions.



Thanks,

Ryan M. Schultz, P.E. (WI)  
 Project Engineer



262-290-2793  
 262-623-4379  
 RSchultz@ruekert-mielke.com  
 ruekertmielke.com



DAVID LIPSIG  
 RUEKERT MELKE  
 W233 HEMLOCK RIDGEVIEW PARKWAY, SUITE 302  
 WAUKESHA, WI 53188-1020

File: 4577- CO      PCO: 7      PCO Item #: 1  
 Date: 12/09/2020  
 Project: 4577- RACINE STH 20 PUMPING STATION  
 R: Cost to provide 6" Bypass pipe line over 12" PRV

Phase	Description	Comments	Qty	UM	Material	Indirect	Rate	Hours	Rate	Labor	Sub	Equip	Totals
95100-	Painting		1	LS							1.075		1.075
331100-	Disinfection Water Pipe System		0	LF	10			1	105	105			115
400506-	Pipe Accessories: Materials		1	LS	182								182
400512-005-	Exposed DI Pipe Materials		1	LS	3,049								3,049
400219-112-	12" Ductile DI Pipe LBR		0	LF				4	105	420			420
400219-506-	6" Flanged DI Pipe LBR	Includes 12"	0	PCS				10	105	1,050			975
400564-	Butterfly Valves		0	EA	975								975
404203-	Exposed Pipe Insulation		0	SF							1,830		1,830
	<b>Total Cost</b>				4,196			21		2,205	2,965		9,356
	<b>Percent Margin</b>				15.00%						5.63%		
	<b>Margin</b>				629						148		777
	<b>Contract Price Sub-Total</b>				4,825					2,205	3,103		10,133
12230-	BONDS												113
	<b>Contract Price Total</b>												10,246

Clarifications / Exceptions:

Project Manager: *Leon Haffenedred* 12/9/2020  
 LEON HAFFENBREDL lhaffenedred@staabco.com  
 p. 715-387-8429201 f. 715-387-4946  
 The contract completion date to be increased TBD calendar days.  
 Price subject to change after 30 days.

①

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.

SCALE: 3/16" = 1'-0"

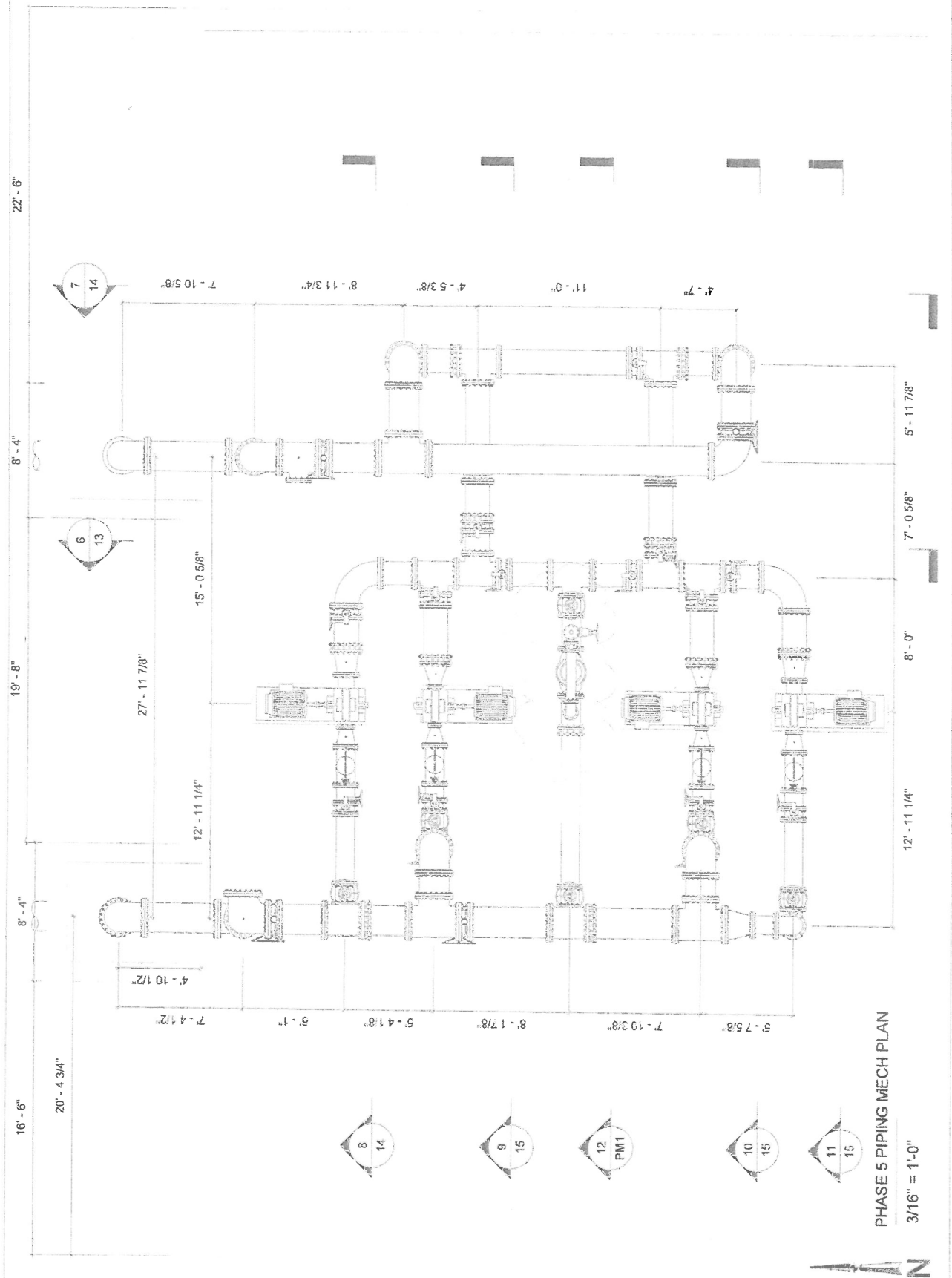
DRAWING STATUS: UNDER REVIEW

NO.	DATE	DESCRIPTION	BY	CHECKED	APPROVED

REVISIONS

PROJECT: RACINE STH 20 BOOSTER  
 (4.0.0) DIVISION 400-400 MECH  
 (4.1.0) STRUCTURE 1  
 (4.1.2) PUMP HOUSE  
 SHEET NO: PHASE 5 MECH PLANS  
 SHEET 1 OF 10

RELEASE DATE: 12/20/2020  
 08:10:00 AM  
 DRAWN BY: AS  
 CHECKED BY: LH  
 APPROVED BY: [Signature]



FILE: ST14500-5504517-Racine STH 20 Pumping Station Improvements - Drafting Revit Formset.rvt - RACINE STH 20 PG. 04

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12 MECH SECTION 12  
10 1/2" = 1'-0"

GRAYSCALE PIPE AND COMPONENTS ARE EXISTING

UNDER REVIEW

REVISIONS

RELEASE DATE: 12/9/2020  
 RELEASE REASON: AS  
 DRAWN BY: AS  
 CHECKED BY: LH  
 APPROVED BY: [Signature]

PROJECT: RACINE STH 20 BOOSTER  
 (4.00) DIMENSION 400-400, MECH  
 (4.10) STRUCTURE 1  
 (4.13) SECTION VIEWS  
 SHEET TITLE: STH 20 PIPING MODS  
 SHEET NO.: PM1

### PIPE SCHEDULE (PIPING MOD)

MARK	QTY	UNIT	DESCRIPTION	COMMENTS
	1	EA	16" x 1'-7 1/4" FIBER GLASS 30, FL x FL, CL	
	1	EA	16" x 1'-7 1/4" FIBER GLASS 30, FL x FL, CL	
	1	EA	16" x 9' 10 1/2" PIPE, DI CLASS 53, FL x FL, CL	
	1	EA	16" x 9' 10 1/2" PIPE, DI CLASS 53, FL x FL, CL	

### COMPONENT SCHEDULE (PIPING MOD)

MARK	QTY	UNIT	DESCRIPTION	COMMENTS
	1	EA	16" 90° ELBOW, DI, G10, FL, CL	
	1	EA	15" DI MEGALANGE ADAPTER KIT, ZINC-PLATED BRASS, SBR/GASKET	
	1	EA	12" x 6" REDUCING ON BRANCH, DI, G10, FL, CL	
	1	EA	16" x 10" x 10" ANGLE, DI, 11	
	1	EA	16" TEE, DI, G10, FL, CL	

DAVID LIPSKI  
 RUEKERT MELKE  
 W233 N2080 RIDGEVIEW PARKWAY, SUITE 300  
 WAUKESHA, WI 53188-1020

File: 4577- CO  
 Date: 12/08/2020  
 Project: 4577- RACINE STH 20 PUMPING STATION  
 Re: Revised- Cost to make two 20" watermain tie-ins

PCO: 6 PCO Item #: 1

Phase	Description	Comments	Qty	Unit	Material	Indirect	Rent	Hours	Rate	Labor	Sub	Equip	Totals
16100-	Hauling & Trucking		0	CLH				12	105	1,260	2,000		3,260
312324-	Drainage & Bedding Stone		0	CCY	720								720
312333-	Pipe Excavation/Backfill	2 loads to haul off	0	BCY	360		1,800	53	105	5,565			7,725
312340-	Dewatering		0	EA	100			4	105	420			520
329219-	Seed, Fertilizer & Mulch		0	SY	350		200	16	105	1,680			2,230
331300-	Disinfection Water Pipe System		0	LF	50			1	105	105			155
400519-002-	Buried DI Pipe Materials	Pipe to be C-900PVC	1	LS	9,952								9,952
400519-220-	20 Buried DIP LBR		0	LF				46	105	4,830			4,830
	<b>Total Cost</b>				11,532		2,000	132		13,850	2,000		29,392
	<b>Percent Margin</b>				15.00%		15.00%				5.00%		
	<b>Margin</b>				1,730		300				100		2,130
	<b>Contract Price Sub-Total</b>				13,262		2,300			13,860	2,100		31,522
12200-	BONDS												492
	<b>Contract Price Total</b>												32,014

**Clarifications / Exceptions:**

Costs to make two 20" watermain tie-ins on north side of pump house. North site access to be from W36 Right-of-Way/ Easement. We include the following:

- 1) The pipe material will be C-900PVC. If Ductile is required, add \$3,400.00 to the above price.
- 2) We include stone 6" below the pipe and 6" over pipe.
- 3) Disinfection to include spraying pipe with bleach and adding a chlorine tablet on each pipe end. Bact-T- Testing by Owner.
- 4) Pipe testing to include the owner charging the line and visually inspecting the pipe for leaks.
- 5) We include seeding, erosion mat, and fertilizing. Seed to be dormant seed. This only applies to tie-in area approx. 60' x 60'
- 6) Price is based on Dec 2020 work.
- 7) A contract extension is required, Jan 29, 2021.
- 8) We do not include any restoration through the easement.
- 9) This price is based on the understanding the pipe lines are within 3" of vertical and horizontal planes. Thereby, not needing any additional alignment fittings.
- 10) We include removal and disposal of 4 concrete thrust blocks.
- 11) We expect to use site topsoil no additional topsoil in our bid.



(2)



Staab PM Change Order Estimate

DAVID LIPSKI

RUEKERT WIELKE

W233 N2080 RIDGEVIEW PARKWAY, SUITE 300  
WAUKESHA, WI 53188-1020

File: 4577- CO

Date: 12/08/2020

Project: 4577- RACHNE STH 20 PUMPING STATION

Re: Revised- Cost to make two 20" watermain tie-ins

PCO: 6 PCO Item #: 1

Phase	Description	Comments	Qty	UM	Material	Indirect	Rent	Hours	Rate	Labor	Sub	Equip	Totals

Project Manager: *Leon Haffensbredt*  
 LEON HAFFENSBRÉD, lhaffensbredt@staabco.com  
 p. 715-387-8429201 f. 715-384-4846

The contract completion date to be increased \_\_\_\_\_ TBD \_\_\_\_\_ calendar days.  
 Price subject to change after 30 days.

December 9, 2020

Keith Haas, P.E.  
Racine Water and Wastewater Utilities  
City Hall Annex  
800 Center Street, Room 227  
Racine, WI 53403

RE: STH 20 Pumping Station Improvement Project (W-19-18) Changes Required

Dear Keith,

The following letter is in reference to two proposed changes for the STH 20 Pumping Station Improvements project. The changes are necessary to address water age issues in the 933 Pressure Zone as a result of reduced demands and conflicts that occurred resulting from delays with the Spring Street Transmission Main project.

All water system improvements constructed to serve the Foxconn Development and Mount Pleasant TID were designed to serve the initial 2020 Foxconn Develop Demand of 5.8 mgd, as well as, the ultimate development in the 933 Pressure Zone. However, the current demand is far less than originally indicated. As a result, the Racine Water and Wastewater Utility is experiencing water age issues in the 933 Pressure Zone. In attempt to reduce the water age, Ruekert & Mielke, Inc. with Chad Regalia, are proposing to construct an inter-zone recirculation piping system at the STH 20 Pumping Station. This change consists of modifications to the existing piping, and new piping and a valve that will allow the Utility to manually control the flow of water from the 933 Pressure Zone back to the 875 Pressure Zone. This will allow turnover of the water in the 933 Pressure Zone thereby reducing water age. The approximate cost for this change from Staab Construction is \$10,246.

The second change is for the discharge main connections to the Spring Street transmission main. The original project schedules indicated that the Spring Street Transmission Main would be constructed prior to the STH 20 Pumping Station Improvements project. As a result, the design of the STH 20 Pumping Station included making the connections to the proposed transmission main. However, delays with the Spring Street Transmission Main project did not allow for Staab Construction to complete the connections when installing the underground piping for their project. In order to meet their project schedule, Staab Construction added caps, bleeder valves, and buttresses to the end of each water main as part of the pumping station project at no cost (in exchange for not being able to make the connections). The watermain will soon be pressure tested and be ready for the connections at the pumping station.

We have contacted Staab Construction and requested a cost to remobilize and complete the two water main connections. We have also contacted SJ Lewis and requested the same scope of work. Staab Construction and SJ Lewis provided costs of \$32,014 and \$53,000 respectively to complete the connections.

We recommend that Staab Construction remobilize and complete the watermain connections. The total cost will be offset due to a reduction in the full length of pipe installed as part of SJ Lewis's contract. With Staab completing the connection, the total length of pipe included with SJ Lewis's contract will be reduced 28 feet. Based on the unit pipe cost of \$850 per foot, the Utility will save \$23,800 on the SJ Lewis contract. As a result, the actual extra for the watermain connection will be \$8,214.

We recommend that these changes be made to the STH 20 pumping station contract with Staab Construction. Upon your approval, we will issue a Work Change Directive and further coordinate with Staab Construction. We will also prepare a formal Change Order.

Keith Haas, P.E.  
December 9, 2020  
Page 2

Please let us know if you have any questions or concerns.

Respectfully,

RUEKERT & MIELKE, INC.



David W. Arnott, P.E. (WI, IL)  
Team Leader/Senior Project Manager  
[darnott@ruekert-mielke.com](mailto:darnott@ruekert-mielke.com)  
DWA:slc

cc: Chad Regalia P.E., Racine Water and Wastewater Utilities  
Kenneth R. Ward, P.E., Ruekert & Mielke, Inc.  
Ryan Schultz, P.E., Ruekert & Mielke, Inc.  
David Lipski, Ruekert & Mielke, Inc.