CHANGE ORDER NO. 5

Owner: Engineer: Contractor: Project:	City of Oelwein FOX Strand Associates Summers' Enterprise Oelwein 2021 Water Main	Improve	Engineer's Projec	t No.:	3406-18A			
Date Issued:	6/9/2022	Effecti	ve Date of Change Order:	6/13/2	022			
The Contract is mo	odified as follows upon exec	ution of	f this Change Order:					
Additional work associated with the boring issue on 5 th ST SE (8 th AVE SE to 9 th AVE SE). See attached letters and supporting documentation.								
Total Contract Pri	ce Increase of 69,619.13. In	cludes	unit price changes to the c	ontract.				
Total Change Orde	er 5 Adjustments of \$58,611.	98.						
Attachments: May 31, 2022 Letter to Council, June 8 th Letter to Summers, Change Order 5 Summary of Costs, & Change Order 5 Figure								
Cha	ange in Contract Price		Change in Cor	ntract Tim	es			
Original Contract P	Price:		Original Contract Times:					
\$ 1,057,488.83	2		Substantial Completion: Ready for final payment:	Oct 1, 20 Dec 17,				
Net changes Appro	oved (Change Orders 1, 2, 4):		Increase from previously ap Substantial Completion:	oct 6, 20	_			
\$ \$28,388.19			Ready for final payment:	Dec 17,				
Contract Price prio	r to this Change Order:		Contract Times prior to this					
	de en		Substantial Completion:	Oct 6, 2				
\$ 1,085,877.02			Ready for final payment:	Dec 17,	2021			
Adjustment of Ch	ange Order 5:		Increase this Change Order:					
			Substantial Completion:	15 Caler	ndar Days			
\$ \$69,619.13			Ready for final payment:	15 Caler	ndar Day			
Contract Price inco	orporating this Change Order:		Contract Times with all appr		•			
			Substantial Completion:		2021 + 15 days			
\$ 1,155,496.15			Ready for final payment:	Jan 11, 2	2021 + 15 days			
Recomn	nended by Engineer (if requi	red)	Accepted by	/ Contrac	tor			
Title: Project M	√ anager							
Date: 6/9/2022								
	ed by Owner		Approved by Funding A	gency (if	applicable)			
By:								
Title:								
Data								

FOX Strand

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414 South 17th Street, Suite 107 Ames, IA 50010 (P) 515.233.0000 www.strand.com

May 31, 2022

Mayor & City Council City of Oelwein 20 2nd Ave SW Oelwein, IA 50662

RE: 2021 Water Main Improvements, City of Oelwein, Iowa 5th ST SE (8th AVE SE to 9th AVE SE) – Leaking Water Issue

Dear Mayor and City Council,

This letter is to provide a summary of facts regarding the leaking water issue along 5th ST SE (8th AVE SE to 9th AVE SE). Summers' Enterprise (CONTRACTOR) potentially hit water services and sanitary sewer services along 5th ST SE (8th AVE SE to 9th AVE SE) while completing trenchless construction.

CONTRACTOR started preparing for the boring operations at 8:00 am on Friday, May 27, 2022. CONTRACTOR completed the boring of the pilot and reamed the hole in preparation for installation of the 8-inch water main. They did not install the 8-inch water pipe. A water leak was discovered on at approximately 1:00 p.m near STA 415+00 CONTRACTOR coordinated with City Staff (CITY) and attempted to find the water leak. The location of the water service and the leak(s) was not field determined. CONTRACTOR states the exploratory digging to find the water leak(s) compromised the bore hole. CONTRACTOR backfilled the open holes and left the job site at approximately 5:00 p.m.

The water services and sanitary sewer services were not field located by Iowa One-Call. CONTRACTOR was required to televise the sanitary sewer and sanitary sewer services prior to construction. CONTRACTOR states the sanitary sewer services were not able to be televised since they were a vertical tee. The CONTRACTOR did not supply the City of Oelwein the sanitary sewer televising reports. The construction plans did not show any water service or sanitary sewer services in front of 800 5th ST SE (STA 411+50 to STA 416+65).

The contract documents allowed the CONTRACTOR to install the water main be either trenched (open-cut) or trenchless construction. CONTRACTOR elected to utilize trenchless methods on this project.

CONTRACTOR called at FOX Strand at 9:30 a.m. on Tuesday, May 31, 2022 and discussed their concerns. CONTRACTOR states the bore hole is compromised and they can not complete this portion of the project by trenchless methods. CONTRACTOR believes they potentially hit several water and sanitary sewer services during the boring operations. CONTRACTOR is investigating trenching (open-cut) the water main. CONTRACTOR desires to be paid for extra work associated with this issue.

FOX Strand requested the CONTRACTOR research and supply any proposed extra costs associated with this issue for CITY consideration prior to proceeding with the trenching work.

CONTRACTOR found the a copper water service near the leak on Tuesday, May 31, 2022 and pitched it off at approximately 11:30 a.m. It appears this has stopped the water leak in this area.

Sincerely, FOX Strand

John Gade, P.E.

John Gade, P.E. Senior Project Manager



414 South 17th Street, Suite 107 Ames, IA 50010 (P) 515.233.0000 www.strand.com

DATE: June 8, 2022

TO: Summers Enterprise

1776 Buchanan Delaware Ave

Masonville, IA 50654

RE: Oelwein 2020 Water Main Replacement – Change Order 5

Summers' Enterprise has requested additional payment for exploratory digging and the failed bore attempt along 5th ST SE (8th AVE SE to 9th AVE SE). FOX Strand has reviewed the requests and propose the following for Summers' consideration:

CHANGE ORDER 5.1 - 1st ST NE: Exploratory Digging for water services:

Areas: 106+70 & 110+00 – 1st ST NE

Workers: JQ (4) Equipment: Mini Excavator, Skid Steer, Backhoe with plate packer

Date: 5/2/2022 Time: 106+70 (4 Hours) Date: 5/5/2022 Time: 110+00 (4 Hours)

DESCRIPTION: City field marked existing water services. JQ explored and could not find the water

services.

CHANGE ORDER PROPOSAL: Exploratory Digging. \$350 x 8 hr = \$2,800. Payment for pavement removal/granular/HMA patch is paid by unit prices.

CHANGE IN CONTRACT DAYS: 1 DAY

SUMMERS' RESPONSE: AGREE

CHANGE ORDER 5.2 - 1st ST NE & 8th AVE NE: Capping of existing 4-inch water main:

Area: 51+40 - 8th Ave NE & 1st St NE

Workers: JQ (3) Equipment: Backhoe Date: 5/26/2022 Time: 4 Hours

DESCRIPTION: Work involved to shut off and cap existing 4-inch, but an existing water service was found active on the to be abandoned water main. JQ opened the trench, found the 4-inch main, and shut off the water. The shut off water caused 103 8th AVE NE to lose water service. JQ turned the water service back on. JQ did not backfill the excavation pit. On different dates, the city field marked the water service location, JQ potholed this location and found the water service.

CHANGE ORDER PROPOSAL: Water service and curb stop paid per the contract unit prices. No payment for exploratory digging.

CHANGE IN CONTRACT DAYS: 1 DAY

SUMMERS' RESPONSE: AGREE

CHANGE ORDER 5.3 - 5th ST SE (8th AVE SE to 9th AVE SE): Boring from STA 411+65 to 146+63

Length: 411+65 to 416+63

Workers: Summers (6) Equipment: Bore machine

Date: 5/27/2022 Time: 7am to 1pm (Boring Operations).

DESCRIPTION: Stopped drilling (reaming) at 1 pm. Reaming 50% completed. Crew discovered leaking water. Crew packed up and left by 4pm.

CHANGE ORDER PROPOSAL: Pay for 498-ft for the boring efforts at \$46.21 per foot which is 100% of Bid Item 5.20, but excludes the pipe material cost at \$16.79 per foot for a total of \$23,012.60. Summers' completed 50% of the hole reaming and did not pull the pipe. The delays associated with de-mobilization is proposed to be paid under a separate item.

CHANGE IN CONTRACT DAYS: No additional days for this item since we are proposing ½ day for JQ work to find the water service (see Change Order 5.4).

SUMMERS' RESPONSE: AGREE

CHANGE ORDER 5.4 - 5th ST SE (8th AVE SE to 9th AVE SE): Exploratory Digging to find water leak

Area: 414+60 to 415+00

Workers: JQ (4) Equipment: Backhoe, Mini Excavator, Vac Truck, Skid Steer

Date: 5/27/2022 Time: 1pm to 5pm

DESCRIPTION: JQ removed pavement and attempted to find water service leak. It was determined to leave the leak over the weekend and fix on 5/31/2022.

CHANGE ORDER PROPOSAL: Exploratory Digging: $$350 \times 4 \text{ hr} = $1,400$

CHANGE IN CONTRACT DAYS: 1/2 DAY

SUMMERS' RESPONSE: Summers' request is for \$6,145 per the following breakdown.

- 1. JQ 4hrs * \$100/hr * 4 people = \$1600 (Summers' crew also present for majority, Todd stayed entire time cost not added in)
- 2. Backhoe 4hrs * \$100/hr = \$400
- 3. Mini excavator 4 hrs @ \$100/hr = \$400
- 4. Dump Truck @ \$100/hr = \$400
- 5. Saw 40ft @ 10/ft = 400
- 6. Skid steer 4hrs @ 100/hr = 400
- 7. Vac Truck 4hrs @ \$235/hr = \$940
- 8. Load of rock = \$405
- 9. Hydro Excavation truck 4hrs @ \$300 = \$1,200

FOX STRAND RESPONSE: Recommend approval \$4,000 (subject to justification below). Per the contract documents:

- A. Cost of Work. The cost of labor is limited to the employees hourly rate, fringe benefits, and overtime. The Contractor is allowed a fee of 15% of the total of the labor for overhead and profit. Summers' shall provide a breakdown of the laborers (power equipment operator) for our review.
- B. Equipment Costs will need to be verified. Per the Contract documents the equipment charges shall be based on monthly rental costs divided by 176 to determine an hourly rate.
- C. Dump Truck: The dump truck was only used for 0.5 hrs.
- D. Load of Rock: Contract documents have a bid item for temporary rock. 16.89 tons was used at \$16.00 per ton for a total of \$270.24.

CHANGE ORDER 5.5 - 5th ST SE (8th AVE SE to 9th AVE SE): Exploratory Digging to find water leak

Area: 414+60 to 415+00

Workers: JQ (4) Equipment: Backhoe, Mini Excavator, Vac truck, Skid Steer

Date: 5/31/2022 Time: 8am to noon (4 guys) and 1pm to 2pm (2 guys)

DESCRIPTION: Found the water service and the leak. Pinched off the service line (stopped leak).

Backfilled excavation and placed temporary granular (pay item).

CHANGE ORDER PROPOSAL: Exploratory Digging. $$350 \times 5 \text{ hr} = $1,750$. Payment for temporary rock and pavement removal/granular/HMA patch is paid by unit prices.

CHANGE IN CONTRACT DAYS: 1/2 DAY

SUMMERS' RESPONSE: Summers' request is for \$3,000. Summers' did not provide a breakdown of the labor costs or equipment costs.

FOX STRAND RESPONSE: Recommend approval of the \$3,000 request.

<u>CHANGE ORDER 5.6 - 5th ST SE (8th AVE SE to 9th AVE SE)</u>: Summers retrieving bore pipes and equipment

Length: 411+65 to 416+63

Workers: Summers (est 5) Equipment: Boring Drill Date: 5/31/2022 Time: 8am (est) to noon

DESCRIPTION: Summers's abandoned the existing bore hole due to the water leak compromising their established hole. Crew removed their boring equipment from the site.

CHANGE ORDER PROPOSAL: Assuming \$700/hr for crew/equipment. \$700 x 4 hr = \$2,800

CHANGE IN CONTRACT DAY: No additional days. Additional ½ day granted for JQ work associated with leaking water service repair at the same time.

SUMMERS' RESPONSE: Summers' request is for \$8,000. Summers' did not provide a breakdown of the labor costs or equipment costs. Summers' states his standby bore crew cost is \$15,000 per day.

FOX STRAND RESPONSE: FOX Strand discussed with another boring contractor. Their high end cost per day for similar work was \$10,000 per day. FOX recommends payment of \$5,000.

CHANGE ORDER 5.7 - 5th ST SE (8th AVE SE to 9th AVE SE): Deduct for Bid Item 5.20, Water Main,

Trenching versus Trenchless

Length: 411+65 to 416+63

DESCRIPTION: Summers' proposal to open-cut the roadway to trench in the 8-inch water main. This will resolve the void space under the pavement due to abandoned bore hole and conflict with the water services. The bid price of \$63.00 per foot was for trenchless construction. Summers' proposes a \$11.00 deduct per foot for open cutting.

CHANGE ORDER PROPOSAL: (\$11.00 per foot) x 498 ft = (\$5,478.00) DEDUCT.

CHANGE IN CONTRACT DAY: 4 Days

SUMMERS' RESPONSE: Summer's agrees with the Change Order Proposal. Summers' request is for an additional 15 calendar days for this work.

FOX STRAND RESPONSE: Recommend no more than 10 calendar days.

CHANGE ORDER 5.8 & 5.9 - 5th ST SE (8th AVE SE to 9th AVE SE): HMA Pavement

Removal/Replacement

Length: 411+65 to 416+63

DESCRIPTION: Summers' proposal to open-cut the roadway to trench in the 8-inch water main. The HMA pavement will need to be removed and replaced. Summers' bid price for HMA Removal/Replacement was lump sum based on trenchless construction. The unit price needs to be adjusted for full HMA removal/replacement for trenching construction. \$96.85 per SY includes (\$19.00/SY for Removal, \$28.00/SY for granular base, \$49.85/SY for HMA Pavement). The lump sum bid items for HMA Pavement will also be adjusted (decreased).

CHANGE ORDER PROPOSAL: \$26,277.40 ADD to the project.

CHANGE IN CONTRACT DAY: 2 Days

SUMMERS' RESPONSE: AGREE

<u>CHANGE ORDER 510.-5.13 - 5th ST SE (8th AVE SE to 9th AVE SE)</u>: Adjustment of unit price items such as water service, omitting curb/gutter, and PCC Patch replacement

Length: 411+65 to 416+63

DESCRIPTION: Summers' proposal to open-cut the roadway to trench in the 8-inch water main. A portion of 5th ST SE is PCC and will need to be removed/replaced. The contract unit price of \$135.50 can be used for this work. The water service lengths will be reduced slightly, and unit price will be used for those adjustments.

CHANGE ORDER PROPOSAL: \$11,007.15 ADD to the project adjusted by unit prices.

CHANGE IN CONTRACT DAY: 2 Days

SUMMARY OF PROPOSAL:

CHANGE ORDER 5 TOTALS (SUMMER'S PROPOSAL) = \$74,764.13 CHANGE ORDER 5 TOTALS (FOX STRAND RESPONSE) = \$69,619.13

ADDITIONAL CONTRACT DAYS (SUMMERS' PROPOSAL) = 20 Days ADDITIONAL CONTRACT DAYS (FOX STRAND RESPONSE) = 15 Days

Oelwein City Council will discuss and consider Change Order 5 on June 13, 2022.

Respectfully submitted,

FOX Strand

John Gade, P.E. Project Manager

Attachment: May 31, 2022 letter to Council

Change Order 5 Summary
Change Order 5 Figure

CHANGE ORDER 5: 5TH ST SE (8TH AVE SE to 9TH AVE SE) - SUMMERS' REQUEST

CHANGE ORDER	ITEM NO.	BID ITEM REF	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE ADJUSTMENT	NOTES:
CO#5	1		EXPLORATORY DIGGING, 1ST ST NE	8.0	HR	\$350.00	\$2,800.00	FOX Strand counter proposal. JQ exploration digging for water service along 1st Ave.
CO#5	3		ADD TRENCHLESS OPERATIONS, PILOT HOLE, REAMING OF HOLE	498	LF	\$46.21	523 012 5X	STA 411+65 -STA 416+63. Cost to bore the pilot hole & ream the hole for the pipe. Reduction for pipe material cost of \$16.79/ft since the 8-inch pipe was not pulled with the bore). Needs to also include the
CO#5	4		EXPLORATORY DIGGING, 5TH ST SE	1.0	LS	\$6,145.00	\$6,145.00	FOX Strand counter proposal. JQ exploration digging for leaking water service
CO#5	5		EXPLORATORY DIGGING, 5TH ST SE	1.0	LS	\$3,000.00	\$3,000.00	FOX Strand counter proposal. JQ fixing leaking water service
CO#6	6		BORING CREW DE-MOBILIZATION, 5TH ST SE	1.0	LS	\$8,000.00	\$8,000.00	FOX Strand counter proposal. Summers retrieving bore pipes and equipment.
CO#5	7		DEDUCT FOR BID ITEM 5.20 WATER MAIN, TRENCHED, PVC, 8-INCH	498	LF	(\$11.0)	(\$5,478.00)	STA 411+65 -STA 416+63 (Reduction in price to trench vs trenchless. Todd confirmed \$52/ft vs \$63/ft).
CO#5	8		ADD HMA-26A (HMA REMOVAL/SPECIAL BACKFILL/HMA REPLACEMENT)	335.0	SY	\$96.85	\$32,444.75	Summers' requested price for HMA Patching. Max trench width is 8-ft.
CO#5	10	2.01, 7.01, 7.02	OMIT PORTION OF HMA-26 (HMA REMOVAL/SPECIAL BACKFILL/HMA REPLACEMENT)	(335.0)	SY	\$18.41	(\$6,167.35)	Lump Sum Item needs to be adjusted. Omitting a portion of HMA-26 (8th Ave SE to 9th Ave SE).
CO#5	9	5.24	OMIT PORTION OF WATER SERVICE PIPE, TRENCHLESS, 1-INCH COPPER	(23.0)	LF	\$28.00	(\$644.00)	Water service 817 5th ST SE 7 821 5th ST SE was reduced in Plan length due to relocated water main under the street.
CO#5	11	7.03	OMIT CG-18, PCC CURB/GUTTER REMOVAL & REPLACEMENT, 24-INCH	(15)	LF	\$48.00	(\$720.00)	
CO#5	12	7.01, 7.05	OMIT PCC-13, PCC FULL DEPTH PATCH	(22.7)	SY	\$135.50	(\$3,075.85)	
CO#5	13	7.01, 7.05	ADD PCC-14A, PCC FULL DEPTH PATCH	114.0	SY	\$135.50	\$15,447.00	Item includes pavement removal and PCC Patch per contract. No granular base is required.
						TOTAL:	\$74,764.13	

CHANGE ORDER 5: 5TH ST SE (8TH AVE SE to 9TH AVE SE) - FOX STRAND RESPONSE

CHANGE ORDER	ITEM NO.	BID ITEM REF	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE ADJUSTMENT	NOTES:
CO#5	1		EXPLORATORY DIGGING, 1ST ST NE	8.0	HR	\$350.00	\$2,800.00	FOX Strand counter proposal. JQ exploration digging for water service along 1st Ave.
CO#5	3		ADD TRENCHLESS OPERATIONS, PILOT HOLE, REAMING OF HOL	498	LF	\$46.21	\$23,012.58	STA 411+65 -STA 416+63. Cost to bore the pilot hole & ream the hole for the pipe. Reduction for pipe material cost of \$16.79/ft since the 8-inch pipe was not pulled with the bore). Needs to also include the time/effort/materials associated with pulling the pipe. Todd estimated 2 hrs.
CO#5	4		EXPLORATORY DIGGING, 5TH ST SE	1.0	LS	\$4,000.00	\$4,000.00	FOX Strand counter proposal. JQ exploration digging for leaking water service
CO#5	5		EXPLORATORY DIGGING, 5TH ST SE	1.0	LS	\$3,000.00	\$3,000.00	FOX Strand counter proposal. JQ fixing leaking water service
CO#6	6		BORING CREW DE-MOBILIZATION, 5TH ST SE	1.0	LS	\$5,000.00	\$5,000.00	FOX Strand counter proposal. Summers retrieving bore pipes and equipment.
CO#5	7		DEDUCT FOR BID ITEM 5.20 WATER MAIN, TRENCHED, PVC, 8-I	498	LF	(\$11.0)	(\$5,478.00)	STA 411+65 -STA 416+63 (Reduction in price to trench vs trenchless. Todd confirmed \$52/ft vs \$63/ft).
CO#5	8		ADD HMA-26A (HMA REMOVAL/SPECIAL BACKFILL/HMA REPLACEMENT)	335.0	SY	\$96.85	\$32,444.75	Summers' requested price for HMA Patching. Max trench width is 8-ft.
CO#5	9		OMIT PORTION OF HMA-26 (HMA REMOVAL/SPECIAL BACKFILL/HMA REPLACEMENT)	(335.0)	SY	\$18.41	(\$6,167.35)	Lump Sum Item needs to be adjusted. Omitting a portion of HMA-26 (8th Ave SE to 9th Ave SE).
CO#5	10	5 24	OMIT PORTION OF WATER SERVICE PIPE, TRENCHLESS, 1-INCH COPPER	(23.0)	LF	\$28.00	(\$644.00)	Water service 817 5th ST SE 7 821 5th ST SE was reduced in Plan length due to relocated water main under the street.
CO#5	11	7.03	OMIT CG-18, PCC CURB/GUTTER REMOVAL & REPLACEMENT, 24-INCH	(15)	LF	\$48.00	(\$720.00)	
CO#5	12	7.01, 7.05	OMIT PCC-13, PCC FULL DEPTH PATCH	(22.7)	SY	\$135.50	(\$3,075.85)	
CO#5	13	7.01, 7.05	ADD PCC-14A, PCC FULL DEPTH PATCH	114.0	SY	\$135.50	\$15,447.00	Item includes pavement removal and PCC Patch per contract. No granular base is required.
						TOTAL:	\$69,619.13	

