RESOLUTION NO. R16-96

A RESOLUTION AUTHORIZING THE MAYOR TO SIGN CHANGE ORDER NO. 4 WITH WILSON BROTHERS CONSTRUCTION FOR THE WATER TREATMENT PLANT INTAKE PROJECT CONSTITUTING A DECREASE OF $13,605.25.

WHEREAS, the City Council of the City of Laurel previously authorized the Mayor to approve a contract with Wilson Brothers Construction for the Water Treatment Plant Intake Project through Resolution No. R16-45 on June 21, 2016; and

WHEREAS, the original contract price was $8,560,901.00 to complete the project; and

WHEREAS, Change Order Nos. 1 through 3 to the contract with Wilson Brothers Construction are pending approval; and

WHEREAS, Great West Engineering and City Staff reviewed Change Order No. 4 and determined that it was correct, reasonable and necessary to complete the project and recommend the Council's approval of the same.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Laurel, Montana, that the Mayor is authorized to sign Change Order No. 4, a copy of which is attached, to decrease the contract amount by $13,605.25.

Introduced at a regular meeting of the City Council on September 6, 2016, by Council Member Nelson.

PASSED and APPROVED by the City Council of the City of Laurel this 6th day of September, 2016.

APPROVED by the Mayor this 6th day of September, 2016.

CITY OF LAUREL

Mark A. Mace

Mark A. Mace, Mayor

ATTEST:

Shirley Ewan

Shirley Ewan, Clerk/Treasurer

Approved as to form:

Sam S. Painter, Civil City Attorney

EJCDC

Change Order No. 4

Date of Issuance:	September 6, 2016	Effective Date:	September 6, 2016
Owner:	City of Laurel, Montana	Owner's Contract No.:	FEMA: 1996-DR-MT-PW 01679 SRF: EQ 16-1684
Contractor:	Wilson Bros. Construction, Inc.	Contractor's Project No.:	N/A
Engineer:	Great West Engineering, Inc.	Engineer's Project No.:	2-07128-TO26
Project:	Water Treatment Plant Intake	Contract Name:	N/A

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

Description:

This change order is for cost savings proposals as described on RFI 001 and RFI 008. Specific changes in contract quantities and unit prices are as follows:

- The unit price for *Item No. 109 – 24" DIP Transmission Main From Intake to Riverbank* will be decreased from $225.00/LF to $222.65/LF. Decrease in cost = 850 LF x $2.35/LF = ($1,997.50).
- The unit price for *Item No. 110 – 18" ID Casing Pipe for Air & Hot Water Lines From Intake to Riverbank* will be decreased from $185.00/LF to $182.65/LF. Decrease in cost = 655 LF x $2.35/LF = ($1,539.25).
- The unit price for *Item No. 208 – 30" PVC Carrier Pipe* will be decreased from $175.00/LF to $165.55/LF. Decrease in cost = 530 LF x $9.45/LF = ($5,008.50).
- *Item No. 217 – 30" x 6" Tee* will be changed to *30" x 4" Tapping Sleeve* and the unit price will be increased from $12,000.00/EA to $12,375.00/EA. Increase in cost = 10 EA x $375.00/EA = ($3,750.00).
- The contract quantity for *Item No. 222a – 6" x 4" Reducer* will be decreased from 10 EA to 0 EA. Decrease in cost = 10 EA x $800.00/EA = ($8,000.00).
- The unit price for *Item No. 225 – Transmission Main Clean-out Connection* will be decreased from $12,500.00/EA to $12,365.00/EA. Decrease in cost = 6 EA x $135.00/LF = ($810.00).

Attachments: RFI 001 and RFI 008

CHANGE IN CONTRACT PRICE	**CHANGE IN CONTRACT TIMES** *[note changes in Milestones if applicable]*
Original Contract Price: $8,560,901.00	Original Contract Times: Substantial Completion: 240 Ready for Final Payment: 270 days
Increase from previously approved Change Orders No. 1 to No. 3: $ Pending Approval of Change Orders 1 to 3	Increase from previously approved Change Orders No. 1 to No. 1: Substantial Completion: 0 Ready for Final Payment: 0 days
Contract Price prior to this Change Order: $ Pending Approval of Change Orders 1 to 3	Contract Times prior to this Change Order: Substantial Completion: 240 Ready for Final Payment: 270 days

EJCDC

Decrease of this Change Order:	Increase of this Change Order:
$ 13,605.25	Substantial Completion: 0 Ready for Final Payment: 0 days
Contract Price incorporating this Change Order:	**Contract Times with all approved Change Orders:**
$ Pending Approval of Change Orders 1 to 3	Substantial Completion: 240 Ready for Final Payment: 270 days

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: Jonathan Weaver	By: Mark A Mace	By: Nick Wilson
Engineer	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title: Project Engineer	Title Mayor	Title Operations Manager
Date: 8/25/2016	Date 9/6/2016	Date 8/25/16

Approved by Funding Agency (if applicable)

By: _____ Date: _____

Title: _____

REQUEST FOR INFORMATION (RFI)

RFI # 001

Project: Laurel Treatment Plant Intake

Title: Fittings Clarification/Proposals

To: Great West Engineering, Inc.
Attn: Jonathan Weaver, P.E.
115 N Broadway, Suite 500
Billings, MT 59101
jweaver@greatwesteng.com

From: Wilson Bros. Construction
Attn: Nick Wilson
980 Rd. 7
Cowley, WY 82420
nwilson@wilson-bros.com

Created Date: 6/29/16

Status: open

Location: _____

Due Date: _____

Reference: _____

Drawing No. MULTIPLE

Spec Section: _____

Contractor Question:

1. Bid Item 211 – After reviewing the requirements to cut and cap the existing line, Wilson Bros. would like to propose capping the ends of the pipe with M4000 concrete in lieu of the 20" ductile iron caps and restraints. Since the pipe will be abandoned in place and capped on both end, we feel using the concrete would accomplish the intent. One of our main concerns is the year/condition of the pipe and ensuring we have/can get the proper sized cap and restraint. Ductile iron pipe went into production in 1955, but they still used a lot of cast iron at that time.
2. Sheet P25 – Rather than installing a short section of pipe and a cap on the end of the 42" Tee, we would like to propose installing an MJ plug instead.
3. Sheet D2 Air Release Detail – We would like to propose installing 30" x 4" tapping sleeves on the pipe at these locations instead of the 30"x6" tee with a 6"x4" reducer. Using the sleeves would provide the same level of pressure seal and allow for greater flexibility/constructability in placing the sleeves at the best location for the AR valve vaults.
4. Sheet D2 Cleanout Detail – Similar to the above request, we would like to install 30"x8" tapping sleeves in lieu of the 30"x8" tee.
5. Specification Section 15060-2.2.A – Specs call for Class 52 (Thickness Class) pipe. Addendum #1 states the 18" and 24" DIP should be Class 52, 150psi. Wilson Bros. would like to propose providing pressure class 250psi in lieu of Class 52 pipe for the 18" and 24" DIP pipe. CL52 Pipe provides uniform thickness across the entire pipe, while pressure class pipe thickness can vary (0.01 to 0.02 of an inch) but guarantees a pressure rating. Please advise if pressure class 250 (which provides an additional 100 psi safety factor) would be sufficient in these locations.

Owner/Engineer Reply:

1. The ductile iron pipe connecting the pump house to the 1955 intake was replaced in 1996 and should be in fair condition. The City will accept capping the ends of the pipe with M4000 concrete in lieu of the 20" DI caps only with an acceptable reduction in contract price.
2. – 5. These proposals are acceptable only with an acceptable reduction in contract price.

Contractor Reply:

1. Since the existing material is DIP, Wilson Bros. will install the 20" DI cap as bid.
2. ~~The cost savings on this change would amount to $300. The savings will come only from less bolts to install.~~
3. Reduction in contract price for using 30"x4" tapping sleeves will be $4,250.
4. Reduction in contract price for using 30"x8" tapping sleeves will be $800.
5. Reduction in contract price for using PC250 DIP pipe will be $3,500.

See attached spreadsheet for unit cost changes reflecting the credits above.

Owner	Engineer	Contractor
8/8/2016	8/8/2016	08/11/2016
Date	Date	Date

WILSON BROS. CONSTRUCTION, INC.
P.O. BOX 636
COWLEY, WY 82420
TELEPHONE AND FAX 307-548-6559

08/08/16

RFI001 Price Breakdown

WATER TREATMENT PLANT INTAKE
LAUREL, MT

Bid Item No.	Item Description	Units	Qty.	Unit Price	Total Price
	Revised Pricing from RFI001				
217	30" X 6" TEE	EA	*10*	$ 12,375.00	$ 123,750.00
222a	6" x 4" REDUCER	EA	*10*	$ -	$ -
225	TRANSMISSION MAIN CLEAN-OUT CONNECTION	EA	*6*	$ 12,365.00	$ 74,190.00
109	24" DIP TRANSMISSION MAIN FROM INTAKE TO RIVERBANK	LF	*850*	$ 222.65	$ 189,252.50
110	18" ID CASING PIPE FOR AIR & HW INTAKE TO RIVER	LF	*655*	$ 182.65	$ 119,635.75
	Original Pricing				
217	30" X 6" TEE	EA	*10*	$ 12,000.00	$ 120,000.00
222a	6" x 4" REDUCER	EA	*10*	$ 800.00	$ 8,000.00
225	TRANSMISSION MAIN CLEAN-OUT CONNECTION	EA	*6*	$ 12,500.00	$ 75,000.00
109	24" DIP TRANSMISSION MAIN FROM INTAKE TO RIVERBANK	LF	*850*	$ 225.00	$ 191,250.00
110	18" ID CASING PIPE FOR AIR & HW INTAKE TO RIVER	LF	*655*	$ 185.00	$ 121,175.00
				TOTAL COST CHANGE	**$ 8,596.75**

REQUEST FOR INFORMATION (RFI)

RFI # 008

Project: Laurel Treatment Plant Intake

Title: Casing Spacers on Fused PVC

To: Great West Engineering, Inc.
Attn: Jonathan Weaver, P.E.
115 N Broadway, Suite 500
Billings, MT 59101
jweaver@greatwesteng.com

From: Wilson Bros. Construction
Attn: Nick Wilson
980 Rd. 7
Cowley, WY 82420
nwilson@wilson-bros.com

Created Date: 08/05/16

Status: OPEN

Location: 42" Bore

Due Date: 08/12/16

Reference: ____

Drawing No. NA

Spec Section: 02445.2.3

Question:

Please see the attached cut sheet from the PVC Pipe Design Guide. Based on section 13.4.1 Casings Spacers in the design guide, butt-fused PVC installed in a casing does not require casing spacers. Without the bell joints found on typical PVC pipe, no line support is required. Removing the casing spacers will result in a reduction of contract price of approximately $5,000. Please advise.

Reply:

Eliminating casing spacers for butt-fused PVC is acceptable; however, the weld beads on the interior of the casing and the weld beads on the exterior of the fused PVC joints shall be removed and/or ground down to a smooth surface.

The unit price for bid item 208 will be reduced accordingly. The change in contract price will be reflected on Change Order #4.

Owner	Engineer	Contractor
	Jonathan Weaver	Nick Wilson
8-10-16	8/8/2016	08/11/2016
Date	Date	Date

13.4.1 Casing Spacers

When PVC pipe is installed in casings, *casing spacers* (Fig. 13.5) must be used to prevent damage to pipe and bell joints during installation and to provide proper long-term line support. PVC pipe in casings should not rest on bells. For butt-fused PVC, casing spacers are not needed.

Casing spacers must be securely attached at the insertion line of the pipe on the spigot end to ensure that overinsertion does not occur. Caution should be used when attempting longer installations using this method, as the frictional forces of the installation may build to a greater force than the casing spacer at the insertion line can resist. Restrained joints suitable for compressive loads may also be used (or required) if installation forces exceed slippage resistance of casing spacers.

Care must be exercised to avoid damage to pipe or bell joints. Non-petroleum-based lubricants applied to casing interior or spacer exterior makes sliding easier.

Casing spacers must provide sufficient height to permit clearance between bell joint and casing wall.

Table 8.10, in Chapter 8, gives maximum support spacing values for casing spacers. Casings are normally sized to provide an inside diameter at least 2 in. (50 mm) greater than the maximum outside diameter (OD) of pipe bell, casing spacer, or joint restraint device. Approximate maximum ODs of the pipe bell for various PVC products are provided in the tables of the Handbook's Appendix.

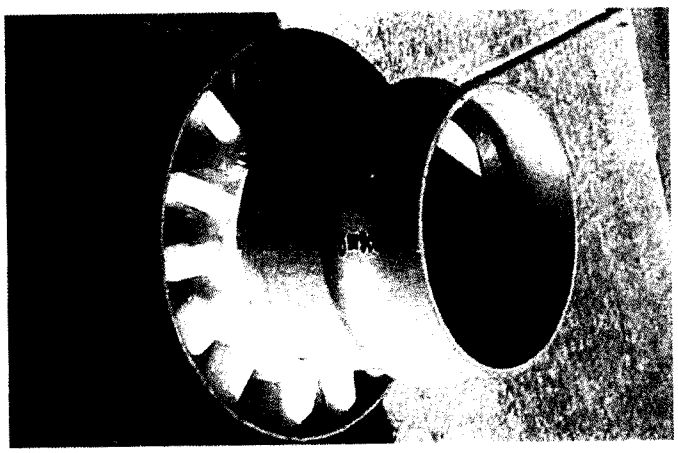

Fig. 13.5 Casing spacer. Note that casing spacers must be securely attached at the insertion line of the pipe on the spigot end to insure overinsertion does not occur.