



PUBLIC WORKS UTILITY OPERATIONS

DATE: October 17, 2016
FROM: Michelle Klose, Director of Utility Operations
ITEM: Two Change Orders for Grit Classifier at the Water Treatment Plant

REQUEST

Review and approval of change orders for installation and electrical work for a fine grit classifier at the Water Treatment Plant.

Please place this item on the October 25, 2016 City Commission meeting.

BACKGROUND INFORMATION

During completion of the softening expansion at the Water Treatment Plant, it was identified that the new process is more effective in removing the grit. Prior to expansion, the plant was moving approximately six containers per week for disposal during the summer. That has now increased to approximately 28 containers per week. The grit is manually transported from the lower levels to the back bay. A grit classifier will allow automated movement of this material more effectively for disposal.

There are two change orders totaling \$146,493.17. The change order with Edling Electric is for the electrical work (\$16,304.17) and the change order with PKG is to supply and install the classifier (\$130,189).

RECOMMENDED CITY COMMISSION ACTION

Review and approval of attached contract change orders.

STAFF CONTACT INFORMATION

I will be present at the City Commission meeting to respond to questions the Board may have regarding this matter. **Contact:** Michelle Klose, 355-1700, mklose@bismarcknd.gov

CONTRACT CHANGE ORDER FORM

PUBLIC WORKS DEPARTMENT

Contract between the City of Bismarck and **Edling Electric, Inc.**

Contract Number: 2014-38 Change Order Number: **E-8**

Project/Subproject: WTRUTIL.WPSOFTENING.CONSPH2 Original Contract Amt: **\$968,400**

Project Description: **Electrical Construction of BWTP Softening Expansion Project**

Previous Contract Amount: **\$1,026,635.58**

Change Order Amount: **\$16,304.17**

Original Contract Date: **June 1, 2016** Change in Contract Timeline: **May 12, 2017**

Within Project Scope: Y / N*

Within Project Funding: Y / N**

**If not within project scope, attach description of change in scope for Board approval.*

***If not within project funding, attach revised Project Budget for Board approval.*

Type of Change Order

Non Design-related Change Order: These change orders include unforeseen conditions, code-related issues, and building inspector changes.

Design-related Change Order: These change orders include unforeseen conditions that affect the appearance, layout, functionality, dimensions, and/or quality of the project.

Emergency Field Condition Change Orders: These change orders include any condition that causes an emergency situation where safety or other immediate losses may occur.

Other: (describe)

Project Manager Signature: (<\$15,000) _____

Date

Department Head Signature: (<\$25,000) Michelle Kone

10/17/16

Date

ADMINISTRATION

City Administrator Signature: (<\$50,000) _____

Date

Add to Commission Consent Agenda 10/25/16

COMMISSION APPROVAL

Commission Approval Date: _____

Attach minutes for Commission Approval

FISCAL

Comments: _____

Signature

Date Completed

TO ALL DEPARTMENTS: Please attach a copy of the change order

Change Order No. E-8

Date of Issuance: September 13, 2016

Effective Date: October 25, 2016

Project: <i>BWTF - Softening Expansion Project</i>	Owner: <i>City of Bismarck, ND</i>	Owner's Contract No.:
Contract: <i>Electrical Construction</i>	Date of Contract: <u>June 2, 2014</u>	
Contractor: <i>Edling Electric, Inc.</i>	Engineer's Project No.: <i>P00501-2007-015-060</i>	

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

Description of Change: Provide labor, equipment, and materials for the following:

Item	Description	Cost Adjustment
1	<i>WCD E15 - Install new 480V breakers, motor breaker and starter panel, conduit, conductor, electric heater, temperature transmitter and ancillary materials in relation to the remote fine grit classifier system as described in Work Change Directive E15. All work to be completed by March 31st, 2017.</i>	<i>\$16,304.17</i>
Total Net Change - CO E-8		<i>\$16,304.17</i>

Attachments: *WCD E15 Pricing*

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price: <u style="text-align: right;">\$968,400.00</u>	Original Contract Times: <input type="checkbox"/> Working days <input type="checkbox"/> Calendar days Substantial completion (days or date): <u>March 1, 2016</u> Ready for final payment (days or date): <u>June 1, 2016</u>
Increase from previously approved Change Orders No. 1 to No. 7 : <u style="text-align: right;">\$58,235.58</u>	[(Increase) [Decrease] from previously approved Change Orders No. 1 to No. 7 : Substantial completion (days): <u>45</u> Ready for final payment (days): <u>121</u>
Contract with Increase from previously approved Change Orders \$ <u style="text-align: right;">\$1,026,635.58</u>	Contract Times prior to this Change Order: Substantial completion (days or date): <u>April 15, 2016</u> Ready for final payment (days or date): <u>September 30, 2016</u>
Increase of this Change Order \$ <u style="text-align: right;">\$16,304.17</u>	[(Increase) [Decrease] Time of this Change Order: Substantial completion (days or date): <u>0</u> Ready for final payment (days or date): <u>224</u>
Contract Price incorporating this Change Order: \$ <u style="text-align: right;">\$1,042,939.75</u>	Contract Times with all approved Change Orders: Substantial completion (days or date): <u>April 15, 2016</u> Ready for final payment (days or date): <u>May 12, 2017</u>

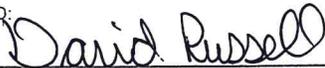
RECOMMENDED:
By: 
Engineer (Authorized Signature)

Date: 10/10/16

Approved by Funding Agency (if applicable):

ACCEPTED:
By: _____
Owner (Authorized Signature)

Date: _____

ACCEPTED:
By: 
Contractor (Authorized Signature)

Date: 10/10/16

Date: _____

WORK CHANGE DIRECTIVE

No. 15

DATE OF ISSUANCE September 12, 2016 EFFECTIVE DATE September 12, 2016

OWNER City of Bismarck, North Dakota

CONTRACTOR Edling Electric, Inc.

Contract: Electrical Construction

Project: Bismarck WTF Softening Expansion

OWNER's Contract No. _____ ENGINEER's Project No. P00501-2007-015

ENGINEER Advanced Engineering and Environmental Services, Inc.

You are directed to provide pricing for the following change(s):

Modify:

- 1.) **Replace:** Install new larger motor breaker and starter provided by RDP Technologies in Slurry Control panel 1 for larger recirculation pump motor. Breaker and starter are for new larger grit recirculation pump motor which will be installed by general contractor. Assist general contractor with disconnecting existing motor and terminate conductor to new motor once installed.
- 2.) **Add:** Furnish and install new 480V 3Pole 20A breaker in existing panel SA1 in the Chemical Storage Room as shown on attached sheet P1. Furnish and install new NEMA 4X Non-metallic combination motor starter panel housing consisting of a new motor circuit protector Allen Bradley 140M-H8P-B30 with adapter for din rail mounting and aux contact side mount kit 140U-H-EA1, new contactor Allen Bradley 300-BOD930 with overload relay Allen Bradley 193-EECD and new separately mounted NEMA 4X Non-Metallic, 600V, 3 pole, 30A Non-fused Heavy Duty rotary disconnect mounted at 48" A.F.F. Size NEMA 4X non-metallic panel to house two motor circuit protectors and two contactors.

Update existing Paneboard SA1 Schedule to reflect the breakers being added.

New Starter Panel shall house new breaker, contactor and motor overload relay and be located near the fine grit classifier shown on sheet P1. Furnish and install conduit and conductor between panel SA1, new breaker/starter panel, classifier motor via local disconnect switch and existing control panel CP-05B, see below for details:

Route 3-1/C-#12-3/4" PLUS #12 GND from existing panel SA1 to New Starter Panel.

Route 3-1/C-#12-3/4" PLUS #12 GND from New Starter Panel to Fine Grit Classifier Motor Via Rotary Disc.

Route 4-1/C-#14-3/4" CONTROL from New Starter Panel to Existing CP-05B

Utilize the following IO Points in CP-05B

RDP #1 Remote Grit Classifier Running into CP-05B 1/7/14 (DI)

RDP #1 Remote Grit Classifier Required into CP-05B 1/9/4 (DO)

Assist with troubleshooting at necessary during startup of new equipment. Provide Myers hubs were necessary as described in previously issue work change directive E-6.

- 3.) **Add:** Furnish and install new 10 kW Q-Mark electric Unit heater # MUH104-UHMT1-MPDS25-B10-JRDSS in the fine grit classifier room as shown on the drawings. Furnish and install a new 480V 3Pole 20A breaker in panel SA1, conduit and conductor for the heater.
Route 3-1/C-#12-3/4" PLUS #12 GND from existing panel SA1 to Electric Unit Heater.

- 4.) Add: New Temperature Transmitter on a 4"x4" junction box mounted at 60" A.F.F. Match existing TCS Basys Temperature Transmitters provided for softening basin expansion project.
Route 1-2/C-#16-SHLD-3/4" from New Temperature Transmitter to Existing CP-05B
Utilize the existing IO Point in CP05B
Remote Classifier Room Temperature into CP-05B 1/3/2 (A1)

Purpose of Work Change Directive:

- 1.) Owner requested addition of fine grit classifier to ease grit handling operations. Fine grit classifier requires power and controls.
- 2.) Adding heater to area of fine grit classifier to keep area warm during winter operations, area currently doesn't have a source of heat.

Attachments:

P1
P2

If CONTRACTOR believes that the above change has affected Contract Price, please submit your itemized proposal immediately and before proceeding with this work. If your proposal is found to be satisfactory and in proper order, this Change Directive will, in that event, be superseded by a Change Order. Any Claim for a Change Order will involve one or more of the following methods as defined in the Contract Documents.

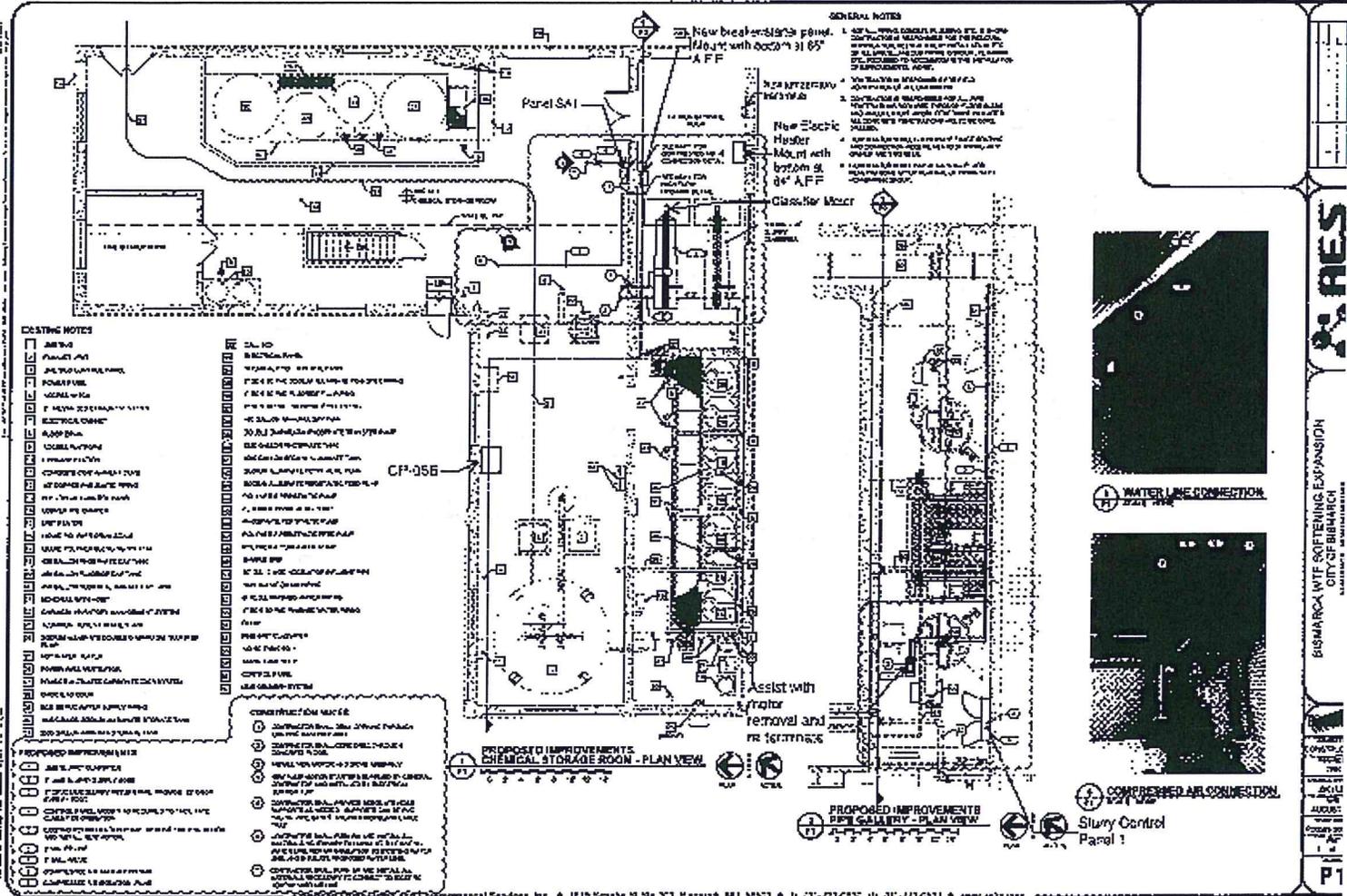
Method of determining change in Contract Price:

- Unit Prices
- Lump Sum To Be Determined and Submitted by Contractor
- Cost of the Work _____

Signed:

Alec Bry, EIT

Resident Project Representative



COST PROPOSAL FOR CHANGE ORDER

PROJECT NAME: BISMARCK WTP SOFTENER EXPANSION
 CONTRACT NO:
 CONTRACTOR: EDLING ELECTRIC, INC.
 DATE :9/24/16

FIELD ORDER E15
 CHANGE ORDER _____

DESCRIPTION OF WORK: Addition of fine grit classifier and additional heater

REASON:

LABOR

Job Classification	# Manhours	Rate	Amount
JOURNEYMAN	57.14	54.81	3,131.84
			0.00
			0.00
			0.00
			0.00
			0.00
TOTAL \$			3,131.84

MATERIAL *

Type	Qty	Unit	Unit Cost	Amount
MISC. MATERIAL	1	1	486.07	486.07
quote heater/breakers	1	1	2633.03	2,633.03
quote starter panel, disc., temp. transmitter	1	1	7786.22	7,786.22
				0.00
				0.00
				0.00
				0.00
TOTAL \$				10,905.32

OTHER DIRECT COSTS

Description	Amount	
TOTAL \$		-

SUBCONTRACT WORK **

Description	Amount	
TOTAL \$		-

* Material costs must be supported with price quotes from suppliers.
 ** Subcontract work must be supported with copies of subcontractor price quotes.

COST PROPOSAL FOR CHANGE ORDER

(Reference Article 7, paragraph 7.2.3 of
Supplementary General Conditions AGND Document 415)

a. Total Labor costs (from page 1) -----	\$ 3,131.84	
b. Subtotal -----	\$ 3,131.84	
c. Total Material Costs (from page 1) -----	\$ 10,905.32	
d. Total Other Direct Costs (from page 1) -----	\$ -	
e. Total of "b", "c", and "d" above -----		\$ 14,037.16
Plus 15% Overhead and Profit -----		\$ 2,105.57
f. Subtotal -----		\$ 16,142.74
g. Total Subcontract Work (from page 1) -----	\$ -	
Plus 5% Overhead and Profit -----	\$ -	
h. Subtotal -----		\$ -
i. TOTAL		\$ 16,142.74
j. Bond (1% unless substantiated)		161.43
k. Permit		40.76
TOTAL PROPOSAL AMOUNT		\$ 16,304.17

Signed: David Russell
(Contractor)

Date: 9/24/16

* * * * *

A/E Review Comments:

Signed: _____

Date:

Job Name: BISMARCK WTP SOFTENER

Contractor:

Estimator: Dave

Notes:

Bld Date: Tuesday, May 06, 2014

Report Name: Price 1 & NECA 1 by Schedule Code

Standard

Extension Labelsets

<u>Column 1</u> <u>Combined</u>	<u>Column 2</u> <u>Combined</u>	<u>Column 3</u> <u>Combined</u>	<u>Column 4</u> <u>Combined</u>	<u>Column 5</u> <u>Combined</u>
		* ch 15	1	
* ch ord 15	1			* ch 15
				1
	* ch 15	1		
			* ch 15	1

Users

Users are Combined

Name:

* Dave

Items+ByProducts

Item #	Item Name	Quantity	Price 1	Ext Price 1	NECA 1	Labor 1 Ext
Category: Schedule Code = <none>						
60,119	breaker/starter panel	1.00	\$.00 Q	\$.00	5.00 E	5.00
60,121	disc/reconnect/demo motor	1.00	\$.00 X	\$.00	3.00 E	3.00
60,122	cp-05b work	1.00	\$.00 X	\$.00	.75 E	.75
60,123	startup time	1.00	\$.00 X	\$.00	2.00 E	2.00
60,124	lamp. transmitter	1.00	\$.00 Q	\$.00	.75 E	.75
Totals for Schedule Cod				\$.00		11.50

Category: Schedule Code = Branch						
60,038	TYPE 7 SIGNAL CABLE 1 PR	93.00	\$.89 E	\$82.77	15.00 M	1.39
Totals for Schedule Cod				\$82.77		1.39

Category: Schedule Code = Branch Conduit						
519	3/4 EMT	189.00	\$.46 E	\$85.43	5.50 C	10.40
612	3/4 EMT CONN SIS/	9.45	\$.32 E	\$3.01	10.00 C	.94
672	3/4 EMT COUP SIS	18.90	\$.29 E	\$5.40	5.00 C	.94
709	3/4 EMT LB BODY	1.00	\$4.47 E	\$4.47	.30 E	.30
794	3/4 EMT FLAT COVER	1.00	\$1.89 E	\$1.89	.00 X	.00
807	3/4 EMT GASKET	1.00	\$.64 E	\$.64	.00 X	.00
819	3/4 EMT 1 HOLE STP	22.88	\$.27 E	\$6.23	8.00 C	1.81
880	3/4 GRC	15.00	\$143.67 C	\$21.55	8.00 C	1.20
1,131	3/4 GRC LB BODY	3.00	\$8.24 E	\$24.72	.65 E	1.95
1,191	3/4 GRC FLAT COVER	3.00	\$2.28 E	\$6.83	.00 X	.00
1,203	3/4 GRC GASKET	3.00	\$1.64 E	\$4.93	.00 X	.00
1,501	3/4 BUSH PLASTIC	8.00	\$17.59 C	\$1.41	5.00 C	.40
1,564	3/4 HUB - MEYERS	8.00	\$535.44 C	\$42.83	35.00 C	2.80
1,766	3/4 GRC 1H MAL STP	1.80	\$1.24 E	\$2.22	4.00 C	.07
1,779	3/4 GRC CLAMP BACK	1.80	\$1.45 E	\$2.60	3.00 C	.05
11,809	2G BELL BOX 3HUBS 3/4"	1.00	\$1,903.69 C	\$18.04	135.00 C	1.35
Totals for Schedule Cod				\$233.20		22.23

Category: Schedule Code = Branch Rough						
13,529	12" WALL PENETRATION	4.00	\$5.00	\$20.00	1.00 E	4.00
Totals for Schedule Cod				\$20.00		4.00

Category: Schedule Code = Branch Wire						
36	12 THHN CU SOLID	280.00	\$91.52 M	\$25.63	6.00 M	1.68
112 37	10 THHN CU SOLID	24.00	\$144.72 M	\$3.47 -1.26	7.50 M	.18 -1.04
40	14 THHN CU STRANDED	320.00	\$61.26 M	\$19.60	5.00 M	1.60
3,284	GRAY WIRE NUT	6.00	\$30.38 C	\$1.82	2.00 C	.12
Totals for Schedule Cod				\$50.52		3.58

Category: Schedule Code = Equipment						
2,985	3/4 FLEX WP	6.00	\$1.48 E	\$8.76	7.50 C	.45
3,009	3/4 FLEX WP CONN,IT	2.00	\$3.96 E	\$7.92	15.00 C	.30

Job Name: BISMARCK WTP SOFTENER

3,057	3/4 FLEX WP 90 CON.IT	2.00	\$625.25 C	\$12.51	15.00 C	.30
3,202	10 GA TERMINATION	6.00	\$5.55 E	\$3.30	.18 E	1.08
5,958	20A MAIN CB 3P 600V	2.00	\$0.00 Q	\$0.00	.82 E	1.65
7,595	30A 600V 3 PH 3 NF SW	1.00	\$0.00 Q	\$0.00	2.50 E	2.50
13,059	UNIT HTR 10KW	1.00	\$0.00 Q	\$0.00	4.00 E	4.00
Totals for Schedule Cod				\$32.48		10.28

Category: Schedule Code = Hanger						
1,927	3/8" X 3" LAG BOLT	2.00	\$25.80 C	\$5.2	.10 E	.20
1,948	1/4" DROP-IN ANCHOR	31.00	\$52.86 C	\$16.39	.10 E	3.10
1,947	3/8" FLUSH SHELL	2.00	\$72.25 C	\$1.44	.20 E	.40
2,004	3/8" SADDLE WASHER	2.00	\$10.36 C	\$2.1	.00 X	.00
2,008	3/8" WASHER	2.00	\$43.65 C	\$8.7	.00 X	.00
2,076	1 5/8 SLOTTED STRUT	10.00	\$1.93 E	\$19.25	11.00 C	1.10
Totals for Schedule Cod				\$38.68		4.80

Totals:

$$\begin{array}{r}
 \$457.66 \\
 -1.26 \\
 \hline
 456.40 \\
 + 29.67 \\
 \hline
 486.07
 \end{array}$$

$$\begin{array}{r}
 57.78 \\
 -64 \\
 \hline
 57.14
 \end{array}$$

Report Totals:

Items+ByProducts

Ext Price 1	Labor 1 Ext
\$457.66	57.78



Integrated Process Solutions, Inc.

34696 412 SE SE
Fosston, MN 56542
218.435.1703

6145 235 St. W
Farmington, MN 55024
218.791.6998

606 Cooper Road
Waunakee, WI 53597
608.849.4375

WORK CHANGE REQUEST

Reference No. 15

DATE 09/21/16 Project No. 14071137
 OWNER City of Bismarck
 CONTRACTOR Edling Electric
 Contract: Bismarck WTF Softening Expansion
 Project: Bismarck WTF Softening Expansion

Integrated Process Solutions, Inc. is pleased to provide the following proposal for:

Description:

Provide:

NEMA 4X Non-metallic combination motor starter panel

NEMA 4X Non-Metallic, 600V, 3 pole, 30A Non-fused Heavy Duty rotary disconnect

Temperature Transmitter on a 4"x4" junction box

Purpose of Work Change Directive:

Owner requested addition of fine grit classifier to ease grit handling operations. Fine grit classifier requires power and controls.

Method of determining change in Contract Price:

Unit Prices

Lump Sum

Estimated **INCREASE** in Contract Price:

\$ 7,311.00

Estimate increase (decrease) in Contract

Times: N/a

If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Substantial Completion: zero days;

Ready for final payment: zero days.

6 -pic tax 475.00
7786.00



BORDER STATES

Supply Chain Solutions™

Border States Electric Supply
Electrical Wholesale Supply of Utah | Western Extralite
Shelby Electrical Wholesalers

Border States Electric - BIS
5205 E Thayer Avenue
Bismarck ND 58501-3353
Phone: 701-258-6060

Quote

Page: 1 of 1

BSE Quote: 24109405
Sold-To Acct #: 2327
Valid From: 09/14/2016 To: 09/21/2016
PO No: BWTF Softening WCD E-15

Created By: Cody Hanson
Tel No: 701-355-7913
Fax No: 701-258-6106

Edling Electric
PO Box 1451
Bismarck ND 58502-1451

Inco Terms:
FOB ORIGIN

Payment Terms:
1.0 % 10th prox net 25th (25)

Taxes, if applicable, are not included.

Cust Item	BSE Item	Material MFG - Description	Quantity	Price Per	UoM	Value
	000018	111887 QMRK - MUH104 480V 10KW 3PH UNIT HEATER	1 EA	785.37 / 1	EA	785.37
	000020	111896 QMRK - UHMT1 1P INTERNAL STAT (MT1)	1 EA	84.90 / 1	EA	84.90
	000030	667530 QMRK - MPDS25 25A 3P PWR DISCONN SW	1 EA	153.28 / 1	EA	153.28
	000040	111892 QMRK - B10 MOUNTING BRKT F/3.5 TO10KW (MMB10)	1 EA	55.92 / 1	EA	55.92
	000050	2658701 QMRK - JRDS8 DUST SHIELD FOR 3 TO 10KW	1 EA	45.68 / 1	EA	45.68
	000060	140196 ITE - ED43B020 CKT-BKR 3P 480V 20A BLTON	1 EA	673.59 / 1	EA	673.59

Total Value

~~1,790.74~~

To access BSE's Terms and Conditions of Sale, please go to
<https://www.borderstateselectric.com>

tax @ 6.50%

2,477.30
160.70
2,638.00

This quote has not been reviewed for compliance with the Buy American Act or the American Recovery and Reinvestment Act requirements. BSE reserves the right to amend both our bill of material and our proposal accordingly if BAA/ARRA compliance is required.

CONTRACT CHANGE ORDER FORM

PUBLIC WORKS DEPARTMENT

Contract between the City of Bismarck and

PKG Contracting, Inc.

Contract Number: **2014-25**

Change Order Number: **G-6**

Project/Subproject: WTRUTIL.WPSOFTENING.CONSPH2 Original Contract Amt: **\$10,961,900**

Project Description: **Bismarck WTP Softening Expansion – General Construction**

Previous Contract Amount: **\$11,140,984.70**

Change Order Amount: **\$130,189**

Original Contract Date: **June 1, 2016** Change in Contract Timeline: **May 12, 2017**

Within Project Scope: Y / N*

Within Project Funding: Y / N**

**If not within project scope, attach description of change in scope for Board approval.*

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Emergency Field Condition Change Orders: These change orders include any condition that causes an emergency situation where safety or other immediate losses may occur.

Other: (describe)

Project Manager Signature: (<\$15,000) _____
Date

Department Head Signature:(<\$25,000) _____
Date

ADMINISTRATION

City Administrator Signature: (<\$50,000) _____
Date

Add to Commission Consent Agenda 10/25/16

COMMISSION APPROVAL

Commission Approval Date: _____

Attach minutes for Commission Approval

FISCAL

Comments: _____
Signature Date Completed

TO ALL DEPARTMENTS: Please attach a copy of the change order

Change Order No. G-6

Date of Issuance: September 2, 2016

Effective Date: October 25, 2016

Project: <i>Bismarck WTF Softening Expansion</i>	Owner: <i>City of Bismarck, ND</i>	Owner's Contract No.:
Contract: <i>General Construction</i>	Date of Contract: <u>April 8, 2014</u>	
Contractor: <i>PKG Contracting, Inc.</i>	Engineer's Project No.: <u>P00501-2007-015-060</u>	

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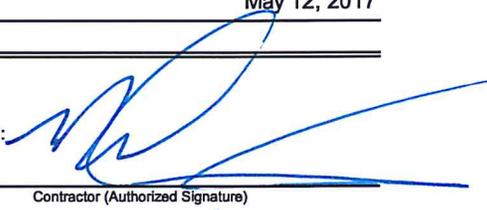
Item	Description	Cost Adjustment
1	<i>PCO 27 - Furnish and install new grit classifier by RDP Technologies, hose, piping, fittings, supports and ancillary materials as described in Work Change Directive G12. Fine grit classifier shall be installed, commissioned and operational by March 31st, 2017.</i>	<i>\$130,189.00</i>
Total Net Change - CO G-6		<i>\$130,189.00</i>

Attachments: PCO 27

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price: <u style="text-align: right;">\$10,961,900.00</u>	Original Contract Times: <input type="checkbox"/> Working days <input type="checkbox"/> Calendar days Substantial completion (days or date): <u>March 1, 2016</u> Ready for final payment (days or date): <u>June 1, 2016</u>
Increase from previously approved Change Orders No. 1 to No. 5 : <u style="text-align: right;">\$179,084.70</u>	[(Increase) [Decrease] from previously approved Change Orders No. 1 to No. 5 : Substantial completion (days): <u>45</u> Ready for final payment (days): <u>121</u>
Contract with Increase from previously approved Change Orders \$ <u style="text-align: right;">\$11,140,984.70</u>	Contract Times prior to this Change Order: Substantial completion (days or date): <u>April 15, 2016</u> Ready for final payment (days or date): <u>September 30, 2016</u>
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Contract Price incorporating this Change Order: \$ <u style="text-align: right;">\$11,271,173.70</u>	Contract Times with all approved Change Orders: Substantial completion (days or date): <u>April 15, 2016</u> Ready for final payment (days or date): <u>May 12, 2017</u>

RECOMMENDED:
By: 
Engineer (Authorized Signature)
Date: 10/17/16

ACCEPTED:
By: _____
Owner (Authorized Signature)
Date: _____

ACCEPTED: 
By: _____
Contractor (Authorized Signature)
Date: 10-10-16

Approved by Funding Agency (if applicable): _____

Date: _____

PKG CONTRACTING, INC.

4301 SOUTH UNIVERSITY DRIVE, FARGO, ND 58104

PHONE (701) 232-3878 • FAX: (701) 232-3935

e-mail: admin@pkg-inc.com

9/23/16

Mr. Laith Hintz, PE

AE2S, Inc.
1815 Schafer Street, Suite 301
Bismarck, ND 58501

RE: Bismarck Water Treatment Facility
Softening Expansion / Bismarck, ND

SUBJECT: Change Order Proposal **PCO-27**

Dear Mr. Hintz

Below is a change order proposal for modifications to the contract drawings for your review and response.

PCO-27 Below are costs associated with WCD #12. See attached quotes for proposed materials utilized in the pricing below. Lime slurry hose bends utilized hose only, no fittings. RDP pricing is as furnished by AE2S per attached 9/19 email. No electrical control or painting work is included in this proposal.

A.)	1. Labor / Burden / Lodging / Per Diem (312 mhrs)	20,280.00	
	2. Material (including tax):	79,080.00	
	3. Equipment: (Fuel, Oil, & Other)	1,500.00	
	4. 15% Fee (Overhead & Profit on items A.1,2,3)	15,129.00	
	<i>Subtotal Section A</i>		\$115,989.00
B.)	1. Subcontractor: Plumbing / Core Driller.	6,406.00	
	2. 5% Fee (Overhead & Profit on item B.1)	320.30	
	<i>Subtotal Section B</i>		\$6,726.30
C.)	Supplemental Costs:		
	1. Small Tools/Equip. & Expendables (10% of A.1)	2,028.00	
	2. Safety Expense (2% of A.1)	405.60	
	3. Temporary Construction Facilities (2% of Section A, B & C.1)	2,494.87	
	4. Bonds & Insurance Premium (2% of Section A, B, C1., C.2)	2,544.76	
	<i>Subtotal Section C</i>		\$7,473.23
TOTAL CHANGE REQUEST			\$130,189

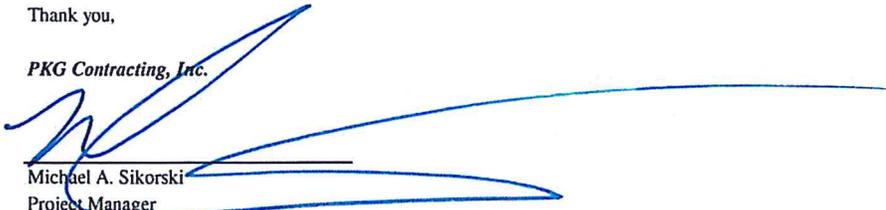
Anticipated 3 weeks for grit equip. installation and piping / hose modifications. With a week for electrical and startup, figure one month after grit classifier arrival, for completion.

If long 3" long radius 90's with hose camlock adapters are needed, add \$870 each.

Should you need additional information, please do not hesitate to contact me.

Thank you,

PKG Contracting, Inc.


Michael A. Sikorski
Project Manager

cc: 1403 PCO file
attachments

Mike Sikorski

From: [REDACTED]
Sent: Monday, September 19, 2016 5:07 PM
To: Mike Sikorski
Subject: RE: BWTF Softening - WCD G12 RDP Remote FGC

Mike,

The scope is written in item #1 of the work change directive. In general this is:

- Furnish 1 new “300 series” rectangular fine grit classifier per the attached drawings in the WCD
- Furnish 1 new grit pump motor, drive assembly, and electrical component for installation on slurry aging tank #1 system.
- Provide shop drawing submittals for approval prior to fabrication of equipment
- Provide field services to startup equipment, make modifications to existing RDP HMI and PLC programming [**didn't** tie any duration to this (i.e. 3 days)]
- Provide updates to original RDP O&M manuals part of base project.

— We were quoted \$55,900 for that scope of work, which Brian DeWolf was included on the e-mail.

Alec

From: Mike Sikorski [REDACTED]
Sent: Monday, September 19, 2016 4:52 PM
To: Alec Bry
Subject: RE: BWTF Softening - WCD G12 RDP Remote FGC

Alec:

Do you have a scope and pricing from RDP?

Mike Sikorski
Project Manager
PKG Contracting, Inc.
4301 South University Drive
Fargo, ND 58104
Phone 701-232-3878
Fax 701-232-3935

From: Alec Bry [REDACTED]
Sent: Friday, September 02, 2016 1:58 PM
To: Mike Sikorski [REDACTED]
Cc: Laith.Hint [REDACTED]; Brian Young [REDACTED]
Subject: BWTF Softening - WCD G12 RDP Remote FGC

Mike,

Attached is the work change directive for the remote fine grit classifier installation at the Bismarck WTF. Please review, let us know if you have any questions and provide pricing for the work.

Thanks,

Four Peaks Fasteners, Inc.

3618 E. LA SALLE STREET
 PHOENIX, AZ 85040
 PHONE# 602-437-0006
 FAX#602-437-0044

Project: Bismarck, ND

Customer: PKG Contractors

Bid Date: 09/21/2016
 Estimator: Brandon Busch

Quantities shown are an estimate only for this unit price quotation.

Exclusions:

1. Engineering, Siesmic Load Calculations & Testing or Shop Inspection.
2. Pipe scheduling & Installation of materials.
3. All anchor & expansion bolts, pipe wrap, pipe shields & special painting or coatings except as noted on quotation.
- This also excludes electro-polishing, pickling & pasivation unless otherwise noted.
4. Taxes, fees or bonds.

Notes: F.O.B. Four Peaks Fasteners Yard in Phoenix, AZ.

Due to material price fluctuations, carbon steel prices can only be honored for **thirty (30)** days.

Stainless steel prices cannot be honored beyond **Ten (10)** days from quotation date.

Please note: All items are based on quantities & dimensions shown & are subject to change.

Note: Submittal drawings are non-cancelable.

LINE NO.	QTY.	SIZE	DIMENSION	DESCRIPTION	MATERIAL	UNIT	EXTENDED
1	4	6"	48" CL	CLEVIS HANGER SUPPORT EQ.	304SST	\$71.67	\$286.68
2	7	4"	48" CL	CLEVIS HANGER SUPPORT EQ.	304SST	\$52.33	\$366.31
3	1	4"	N/A	RISER CLAMP ONLY	304SST	\$19.58	\$19.58
4	10	6"	9" CL	WALL BRACKET w/ U-BOLT EQ	304SST	\$206.19	\$2,061.90

Notes: SQ. TUBE IS IMPORT

TOTAL:
\$2,734.47

+ Anchors
+ Right

2
1

250
300
3284.47
Tax

(6)

QUOTATION

Dakota Hose & Fittings LP
 P.O. BOX 2220
 1287 NORTH 47TH STREET
 FARGO, ND 58108
 701-235-6484

Order Number	
1061409	
Order Date	Page
9/21/2016 11:14:50	1 of 1

Quote Expires On 12/31/2049

Bill To:
 PKG CONTRACTING
 4301 S. UNIVERSITY DRIVE
 FARGO, ND 58104

Ship To:
 PKG CONTRACTING
 4301 S. UNIVERSITY DRIVE
 FARGO, ND 58104

232-3878

Requested By: . .

Customer ID: 18569

PO Number	Ship Route	Taker
MIKE		DAN

Quantities				Item ID Item Description	Pricing UOM Unit Size	Unit Price	Extended Price
Ordered	Allocated	Remaining	UOM Unit Size				
2.00	0.00	2.00	EA	(001) 3 IN X 30 FT T509 CPLD C ONE END 3" X 30' T509 ACID SUCTION/ DISCHARGE HOSE CPLD G300-C-SS X PLAIN END	EA 1.0	707.2300	1,414.46
3.00	0.00	3.00	EA	(002) 3 IN X 25 FT T509 CPLD C&E SS 3" X 25' T509 ACID SUCTION/ DISCHARGE HOSE CPLD G300-C-SS & G300-E-SS	EA 1.0	693.1667	2,079.50
2.00	0.00	2.00	EA	(003) G300-C-SS 3 IN COUPLER X HOSE GLOBAL S.S.	EA 1.0	75.2800	150.56
4.00	0.00	4.00	EA	(004) STBC375 S.S. T-BOLT CLAMP	EA 1.0	5.7900	23.16
4.00	0.00	4.00	EA	(005) 300-AL-SS FLANGE ADAPTOR STAINLESS 3	EA 1.0	194.3500	777.40

Total Lines: 5

w/ an. l's c
 go 41500

SUB-TOTAL: 4,445.08
TAX: 284.76
AMOUNT DUE: 4,729.84
 U.S. Dollars

(4)

DAKOTA SUPPLY GROUP INC
P.O. BOX 128
4557 15TH AVE N.
FARGO, ND 58107
PH #: 701-237-0222
SUBMITTED BY: AARON RETZER

DATE: 9/22/2016

PAGE 2

QUOTATION TO:

PROJECT: BISMARCK, ND CO NO.12

QUOTE NO: 5612972

009301

ORDERED BY:

PKG CONTRACTING INC
 4301 S UNIVERSITY DRIVE
 FARGO, ND
 58104

BID DATE: 9/22/16

BID TIME: 11:45:00

QTY	PROD #/DESCRIPTION	UNIT PRICE	UOM	EXT PRICE
1 EA	6" FLEX CPLG PVC X PVC	10.02000	EA	10.02
2 EA	72032T LF 3" FULL PORT BALL VAL PORT BALL VAL 5420019 T21003 AY2032T-3 LNAYMC 2032T-3 (COVER SHEET CALLS FOR TREADED VALVE AND BOM CALLS FOR FLANGE CLARIFICATION REQUIRED)	221.61000	EA	443.22
1 EA	3" FLG FLOW-TEK MPF-316-150-D 3WAY BALL VALVE, T PORT, FLOW PLAN F	2,874.00000	EA	2,874.00
1 EA	11/2" BRS BALL VAL THRD FP LF	25.55000	EA	25.55
21 EA	3" SCH40 304 SS PIPE	20.00000	EA	420.00
3 EA	1-1/2" 304 SS SLIP ON WELD FLG	20.00000	EA	60.00
12 EA	3" 304 SS SLIP ON WELD FLG	34.91000	EA	418.92
1 EA	4" 304 SS SLIP ON WELD FLG	47.52000	EA	47.52
1 EA	3" X 1-1/2" TAPT 304 SS BLIND FL	866.67000	EA	866.67

5

QTY	PROD #/DESCRIPTION	UNIT PRICE	UOM	EXT PRICE
2 EA	3" X 1-1/2" 304 SS WELD CONC RED	14.40000	EA	28.80
1 EA	3" 304 SS WELD 45 LATERAL	480.00000	EA	480.00
1 EA	1-1/2" X 4" 304 SS NIPPLE	33.33000	EA	33.33
3 EA	829-040C 4" SCH 80 CPVC CLPG SPEARS (829-040C) LASCO (9829-040)	22.24000	EA	66.72
3 EA	CPVC 806-040C 4" X 90 SCH-80	44.65000	EA	133.95
3 EA	CPVC 835-040C 4" FIPT ADPT	90.39000	EA	271.17
80 FT	CPVC PD-800-040C 4" SCH-80 PIPE PD-800-040C	11.76000	FT	940.80
20 FT	CPVC 6" SCH-80 PIPE	22.61000	EA	452.20
3 EA	CPVC 850-040C 4" MIPT PLUG SCH80	27.45000	EA	82.35
1 EA	CPVC 837-532C 6X4 BUSHING SCH80	47.73000	EA	47.73
3 EA	CPVC 875-040C 4" WYE SCH80	158.28000	EA	474.84
3 EA	CPVC 8097-040C 4" UNION SCH80 EPDM SEAT	81.97000	EA	245.91
5 EA	429-060 6" SCH40 CPLG SW PVC NIBCO 4601-6	12.09000	EA	60.45
100 FT	6 SCH40 PVC PIPE BE 10FT	3.80800	FT	380.80
4 EA	1/2" X 2" STN-STL HEX BOLT	.64000	EA	2.56
4 EA	1/2" STN-STL HEX NUT #304	.21000	EA	.84
1 EA	1.5IN 1/8 FF RUBBER GSKT	1.19000	EA	1.19
8 EA	3" FLNG 304 SS B&N PK	5.78000	EA	46.24
8 EA	3IN 1/8 FF RUBBER GSKT	1.19000	EA	9.52
1 EA	11/2 MNST X 11/2 MIP BRS ADPTR	12.33000	EA	12.33
2 EA	031037 CPVC HD GRAY CEMENT QT	28.69000	EA	57.38

*-ocq/12
AS
needed*

QUOTE NO.: 5612972
PROJECT: BISMARCK, ND CO NO.12

FROM: DAKOTA SUPPLY GROUP INC

PAGE 4

QTY	PROD #/DESCRIPTION	UNIT PRICE	UOM	EXT PRICE
2 EA	PRIMER CLNR PVC CPVC PUR QT <HAZARDOUS MATERIAL PER HM-126C> TETRAHYDROFURAN AND METHYL ETHYL KETONE (FLAMMABLE LIQUID) APPLY STICKERS O-30806 OQTPUR 1QTPUPROA L7-30806 LNOATY 6113 OPP QTPP PURP	11.06000	EA	22.12
1 EA	CMNT PVC ALL WTHR CLR QT 31133 <HAZARDOUS MATERIAL PER HM-126C> TETRAHYDROFURAN AND METHYL ETHYL KETONE (FLAMMABLE LIQUID) CMNT APPLY STICKER O-31133 OQTAW 1QTPVCCWOA L7-31133 LNOATY 6124 COLD WTHR QTA AWGL	10.27000	EA	10.27
1 EA	FREIGHT OUT	600.00000	EA	600.00
BID TOTAL				9,627.40

TOTAL MAXI
Aide. Supts, RDP, VOS

73,313

**** END OF BID ****

MS :
OT ITF New PIPE
w/anchors, etc
OT Fore GRIP clench
anchors / mount etc.

SI
465
\$ 475

74,253
w/ Ray

79,080
TOTAL MAXI
w/ Ray

(7)

WCD #12 3" LR 90 ALT.

Mike Sikorski

From: ARetze [REDACTED]
 Sent: Thursday, September 22, 2016 2:18 PM
 To: Mike Sikorski
 Subject: RE: FW: Send data from MFP07856492 09/21/2016 08:22
 Attachments: 5612972.PDF

Revised quote. They system likes to pick and choose which pipes are priced by the foot or by 100'....its annoying...

4 EA - 3" x 90 LR 304SS WELD BEND - \$19.80/EA
 8 EA - 3" 304 SS SLIP ON WELD FLG - \$34.91/EA
 8 EA - 3" FLNG 304 SS B&N PK - \$2.66/EA
 8 EA - 3IN 1/8 FF RUBBER GSKT - \$1.19/ea

79.20
 279.28
 21.28
 9.52

389.28

Aaron Retzer | Plant Quotation/Project Manager
 Dakota Supply Group | P 701-237-0222, Ext: 1132
 4557 15th Ave N | Fargo, ND 58103
 D 701-893-3332 | C 701-781-3430 | F 701-234-0116



dakotasupplygroup.com

(%) FLANGE X Comlock adapter 194.35 = 1554.8 - *FOR NOSE Removal
 1944.08 w/tax 2070.45

From: Mike Sikorski [REDACTED]
 To: "ARetze" [REDACTED]
 Date: 09/22/2016 01:31 PM
 Subject: RE: FW: Send data from MFP07856492 09/21/2016 08:22

4 ea - 3" x 90 LR 90 = 900

2970.45
 x 1.15
 x 1.02

Aaron:

Can you revise, looks like you miss entered 4" CPVC material price.

Also can you send a separate quote for (4) 3" LR 90's with 8 flanges all 304SS and 8 3" BNG's kits.

Thanks

Mike Sikorski
 Project Manager
 PKG Contracting, Inc.
 4301 South University Drive
 Fargo, ND 58104
 Phone 701-232-3878

3484
 w/comlocks.
 \$871 EA FOR (4)

(a)

RDP FINE GRIT CLASSIFIER

TECHNICAL PROPOSAL

FOR

BISMARCK, ND -
FINE GRIT CLASSIFIER UPGRADE

September 29, 2016

TABLE OF CONTENTS

1. Executive Summary
2. Equipment Specification
3. Pricing
4. Drawings
5. Terms and Conditions

EXECUTIVE SUMMARY

- A. This proposal includes one (1) Fine Grit Classifier and miscellaneous parts to upgrade the existing Grit Pump. Certain items are excluded from this proposal. These items are listed in Section 3 of this proposal.
- B. The Fine Grit Classifier is in contact with water and will be provided in 304 stainless steel.
- C. Any control panels, local stations and local motor disconnects necessary for the installation of the Fine Grit Classifier are not included in the this proposal.
- D. This proposal includes description of materials, construction details, programing and drawings that involve extensive experience, design, knowledge as well as time to prepare. RDP's proposals represent a considerable amount of investment in developing RDP's intellectual property. The contents of this proposal are offered exclusively for your evaluation of our system. The details of RDP's intellectual property, methods and trade craft techniques shall not be shared with third parties, including our competitors and shall not be used on other projects. The recipient, by accepting this material acknowledges such confidential status and agrees to retain this document and the contents, within its own organization, and further agrees not to reproduce or disclose to third parties, or allow this material to be used by anyone for any other project, without written permission from an officer of RDP Technologies, Inc.

PART 1 GENERAL

1.01 WORK OF THIS SECTION

- A. The WORK of this Section includes providing one (1) Fine Grit Classifier and miscellaneous components for the existing Grit Pump.
- B. The Fine Grit Classifier is furnished by RDP Technologies, Inc. The Process is covered under U.S. Patents 5,746,983, 7,416,673, 8,133,401 B2, 9,023,312 B2 and other U.S. Patents and Patent Pending. As such, a License Agreement shall be provided to the Owner, after receipt of final payment to RDP Technologies. The License Agreement shall be provided without charge to the owner.
- C. The WORK also requires that one System Supplier be made responsible for furnishing the WORK of this Section, but without altering or modifying the CONTRACTOR'S responsibilities under the Contract Documents.
- D. The WORK also includes coordination of design, assembly, testing and installation.

1.02 RELATED SECTIONS

- A. Non-applicable.

1.03 CODES

- A. The WORK of this Section will comply with the current editions of the following codes:
 - 1. Uniform Building Code
 - 2. National Electrical Code

1.04 SPECIFICATIONS AND STANDARDS

- A. Except as otherwise indicated, the current editions of the following apply to the WORK of this Section:
 - 1. Commercial Standards:
 - ASTM A 36 Specification for Structural Steel

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ASTM A 283	Specification for Low and Intermediate Tensile Strength Carbon Steel Plates, Shapes and Bars
AISI 8620	Alloy Steel, Hot Rolled and Cold Finished
ASTM A48	Iron Castings
SSPC-SP No. 6	Commercial Blast Cleaning
ANSI/ASME B20.1	Safety Standards for Conveyors and Related Equipment

2. System Supplier's Standards:

Conveyor Equipment System Suppliers Association (CEMA) standards

American Gear System Suppliers Association (AGMA) standards

Institute of Electrical and Electronics Engineers (IEEE) standards

National Electrical System Supplier's Association (NEMA)

3. The following service factors will be applied:

Pumps	1.0
Mixers	1.25

1.05 SHOP DRAWINGS AND SAMPLES

A. The following will be submitted:

1. Catalog cut sheets containing descriptive information and drawings of equipment and their components.
2. Submittal drawings including capacities and sizes, anchor bolt plan, parts nomenclature, material list and outline dimensions.
3. Drive and motor sizes and specifications.
4. Design loading to be transmitted to foundation or supports.
5. Electrical drawings including panel arrangement drawings, catalog cuts, wiring diagrams, and a P&ID diagram for the entire system.

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6. Electronic or hard copies of the system PLC program will not be provided as it embodies the proprietary control features which are patented.

1.06 OWNER'S MANUAL

- A. The following will be included for the OWNER'S MANUAL. Three copies of operation and maintenance information will be provided to update the OWNER's existing manuals.
 1. Technical manuals and spare parts lists.
 2. Instructions for field procedures for erection, adjustments, inspection, and testing.
 3. Certification that the equipment complies with requirements.

1.07 SERVICES OF SYSTEM SUPPLIER

- A. An authorized service representative of the System Supplier will visit the site and provide the following services. A total of (3) days of field service will be provided as described herein.
 1. Inspection, checking, and adjusting the equipment for two [2] days.
 2. Field testing for proper operation and training for [1] day.

1.08 SYSTEM SUPPLIER

- A. The System Supplier will have a minimum of (20) Fine Grit Classifiers and at request will provide written list of contact names of both the Engineer and the Owner of each of the 20 installations. The Fine Grit Classifier will be the product of a single System Supplier and will be as manufactured by RDP Technologies, Inc. No alternates will be accepted or considered.

PART 2 PRODUCTS

2.01 BASIS OF DESIGN

- A. The Fine Grit Classifier will be provided conforming to the design shown on the attached drawings.

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2.02 EQUIPMENT SCHEDULE

- A. One (1) Fine Grit Classifier will be provided to separate grit from the slurry stream. Wetted components will be 304 SST. The Classifier will be provided with a 1 HP motor.
- B. Pump components required to increase the existing Grit Pump performance to 100 gallons per minute at 53' total dynamic head.
- C. Components and services required to control the provided Fine Grit Classifier, specifically internal to the existing Slurry Control Panel. Power and components to supply power to the Fine Grit Classifier are not provided by RDP.
- D. All stainless steel fabrication will be provided mill finish, without paint or protective coatings. Motors, reducers, bearings, etc. incorporated into the equipment will be provided with the manufacturers standard coating system.

2.03 FINE GRIT CLASSIFIER

- A. The hopper and trough of the unit shall be fabricated of 10 gauge, 304 SST and configured as shown on the drawings. An overflow and weir shall be provided for overflow and return to the Aging Tanks. An adjustable baffle shall also be provided to adjust the settling area and the grit size removal.
- B. The auger shall be of the sectional flight type 3/16 inch thick, 304 SST. The flighting shall be half pitch. The flights shall be 9-inches in diameter and directly connected to the drive unit.
- C. The trough shall be 10 gauge, 304 SST. A trough cover shall be provided at the incline of the unit and shall be 14 gauge also 304 SST.
- D. The conveyor shall be supported by steelwork of angle construction, made of 304 SST as shown on the drawing.
- E. The conveyor shall be provided with a flange-mounted gearmotor. The motor shall be 480 volt, 60 Hz, 3 phase.

2.04 GRIT PUMP COMPONENTS

- A. Components will be provided to increase the existing Grit Pump performance to 100 gallons per minute at 53 feet total dynamic head. Components provided include (1) 7.5 HP TEFC motor, (1) motor base and required sheaves and v-belts.

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The motor will be supplied for 460 VAC, 3 phase, 60 Hz power supply provided by others.

- B. The CONTRACTOR shall be responsible for installing the supplied Grit Pumps components.

2.05 CONTROL PANEL COMPONENTS AND SERVICES

- A. Components will be provided within the existing Slurry Control Panel to control the Fine Grit Classifier and control the revised Grit Pump motor. Components will include (1) new motor starter for the revised Grit Pump, panel wiring and panel terminal blocks.
- B. Services include the installation of the motor starter, panel wiring and terminal blocks within the Slurry Control Panel for the Grit Pump. Services also include writing and loading of the revised PLC and MMI logic for the Slaking Panel and Slurry Control Panel to control the Fine Grit Classifier.
- C. Power and components necessary to supply power to the Fine Grit Classifier are not provided by RDP.

PART 3 EXECUTION

3.01 INSTALLATION

- A. All sections and loose items will be match-marked prior to shipping.
- B. Installation will be in accordance with the System Supplier's installation requirements and provided by the CONTRACTOR.

3.02 FIELD TESTS

- A. The equipment will be field tested after installation to demonstrate satisfactory operation without causing excessive noise, vibration, and overheating. The field testing will be performed by an experienced field representative of the System Supplier of each major item of equipment, who will certify the installation and will confirm in writing that the equipment and controls have been properly installed, aligned, lubricated, adjusted, and readied for operation.
- B. Three (3) days of onsite services will be provided for inspection, testing and training of plant personnel.

The current pricing for the equipment materials and services proposed is \$55,900.00.

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Pricing is based upon the following Terms and Conditions. Additionally, exclusions include, but are not limited to, the following:

- Grit totes
- Anchor bolts
- Unloading of equipment
- Installation
- Local control stations or powering of equipment
- Disconnect switches
- Field Wiring, conduit and connections including field wiring terminations at RDP panels
- Modifications to existing equipment
- Initial chemicals and lime
- Temporary lime supply during construction
- Initial lubricants
- Extended grease lines
- Field piping including water supply, slurry piping and hoses
- Manual valves, Equipment tags
- Costs for bonds
- Taxes of any type
- Painting over galvanized or stainless steel equipment
- Laboratory testing of material

All pricing is based on F.O.B. Destination, with freight included and prepaid.

Pricing is based upon the following payment terms:

95% of contract upon delivery

100% of contract upon completion of testing and training

Shipments will be made in accordance with the proposal schedule. Partial shipments, billings and payments will be required in accordance with the proposed delivery schedule. In the event that there is no appropriate on site storage RDP will be paid for materials stored off site. 100% of the contract will be paid upon completion of the Performance Test or within 180 days after shipment, whichever occurs first.

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TERMS AND CONDITIONS

This proposal and any resulting contract will be subject to the following terms and conditions except as otherwise agreed to by an officer of the company or in RDP's letter acknowledgment acceptance of a contract. Commencement of the work will not constitute acceptance by RDP of additional or different terms and conditions. The pricing and project schedule is based on many factors and should be considered valid for 30 days. After 30 days, the pricing and/or the project schedule may need to be revised to reflect changes in RDP's costs and availability of our production capabilities.

1. Delivery

- a. Unless otherwise specified, delivery will be made F.O.B. point(s) of shipment with freight allowed to designated job site based on said job site being accessible by common carrier.
- b. Shipment may commence eight (8) weeks after drawing approval and will be complete twenty (20) weeks after receipt of final drawing approval, consummation of all technical/commercial details and/or release for fabrication.
- c. RDP will not, in any event, by contract or otherwise, be liable for delays in performance caused by any factor beyond RDP's control such as, but not limited to; (1) acts of governmental authorities, (2) acts of God, (3) casualty, (4) civil disturbance, (5) insurrection, (6) labor strikes or disputes, (7) inability to obtain materials, (8) delay in consulting engineer's approval of submittal data and drawings, and/or (9) delays by transportation carriers.
- d. CONTRACTOR must accept shipment when RDP advises equipment is ready for shipment in accordance with the contract schedule. If buyer cannot accept shipment, we will attempt to provide for storage at an additional charge.
- e. In the event the contract shipping date is extended by acts of buyer including, but not limited to, unreasonable delays in approval of submittal drawings, escalation of the selling price at the rate of 1.5% per month for each month or partial month of delay, will be applied.

2. Prices

Prices specified herein do not include any sales, use, excise, occupational or similar taxes and/or license fees in connection with the engineering, manufacturing, sale or delivery of the equipment. Such taxes and fees will be paid by the buyer directly to the taxing and/or licensing authorities or the buyer will submit to RDP a proper tax exemption certificate acceptable to such authorities.

3. Terms of Payment

Unless otherwise specified in this scope letter, terms of payment will be 100% of invoice, net thirty (30) days from the date of shipment. Overdue invoices will be subject to 1.5% per month finance charges.

4. Field Service

(Start-Up and Instructions)

- a. If job site field service is included in RDP's prices, it will be so stated in this quotation and the number of days and trips included will be so specified. In the event the Buyer requires such services for additional days or trips, RDP will invoice the Buyer at a rate of \$1,285.00 for each additional day plus travel and lodging expenses incurred by the service personnel during such additional days.
- b. The per diem rate is subject to change to the rate in effect at the time such service is furnished.

- c. The Buyer is to indemnify and hold RDP Technologies, Inc. harmless from and against all suits, legal expenses, claims, judgments for personal injury to or death of our or your employee(s) or third parties or from damage to property resulting from any act of our employee(s) or agents while at the job site except if such injury, death or property damage is directly caused by the sole negligence of RDP's employee(s) or agent, but in no event will RDP be liable for indirect or consequential damages.
5. Safety
The equipment covered in this proposal will be designed in accordance with RDP's engineering standards and interpretation of the requirements of the Occupational Safety and Health Act of 1970.
6. Shortages
(Manufacturing Discrepancies)
 - a. Notify the RDP Technologies, Inc. immediately upon discovery of any apparent manufacturing discrepancies or material shortages.
 - b. Fabricated steel parts and assemblies furnished by RDP are manufactured in accordance with acceptable shop practices and standards of the industry. However, some misfits and imperfect work may arise. In such cases, the American Institute of Steel Construction "Code of Standard Practice, Section 5-150" is to be understood to apply to erection of this equipment. It reads as follows: "Correction of minor misfits and a reasonable amount of cutting and reaming are considered a part of erection. Any error in shop work which prevents the proper assembling and fitting of parts by the moderate use of drift pins or a moderate amount of reaming, chipping or cutting, should be immediately reported to the fabricator so that he may either correct the error or approve the method of correction that is to be used."
7. Backcharge Policy
No backcharges will be allowed without prior approval from RDP. Written authority must be given in the form of a purchase order. Authority will be issued when the extent of such modifications and the price for performing these modifications have been agreed upon between the contracting parties.
8. Title: Lien Rights
The equipment will remain personal property of RDP regardless of how affixed to any realty or structure until the price (including any notes given therefore) of the equipment has been fully paid in cash. RDP will, in the event of the Buyer's default, have the right to repossess such equipment.
9. Order Cancellation
The Buyer may cancel this order at any time but only on terms which will save RDP Technologies, Inc. harmless from all loss.
10. Limitation of Liability
 - a. RDP will not be liable under any Contract, or otherwise, for consequential or economic damages such as, but not limited to: (1) loss of use of property, (2) damage to property, (3) increased costs of operations, (4) loss of capacity, (5) loss of profits, (6) fines, (7) penalties, and/or (8) liquidated damages arising in connection with the delivery, sale or use of or inability to use the equipment covered by this order.
 - b. RDP's liability under any Contract or otherwise, will not (in the aggregate) exceed the Contract value.
11. Changes
Additional engineering work may be required based upon reasonable errors and omissions by third parties. RDP has estimated the cost and bid for this project with the assumption that the plans and specifications are

complete and current. Any additional drafting time will be billed at a rate of \$285/hr., engineering time will be billed at \$425/hr., and project management time at \$585/hr.

This proposal may be changed or revoked and withdrawn by the RDP Technologies, Inc. at any time upon written notice to the Buyer.

12. Disputes

Any controversy or claim arising out of or relating to this contract, or breach thereof, will be settled by arbitration administered by the American Arbitration Association under its Construction Industry Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. The arbitration will be held in Montgomery County, Pennsylvania.

13. Exclusive Warranty

RDP's Warranty is for workmanship and materials. RDP will provide parts only. Labor is specifically excluded. Furthermore, RDP does not warrant that its' goods or services will accomplish any particular result. All other warranties, expressed or implied, are excluded from the contract.

14. License Agreement

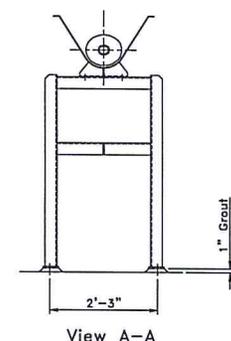
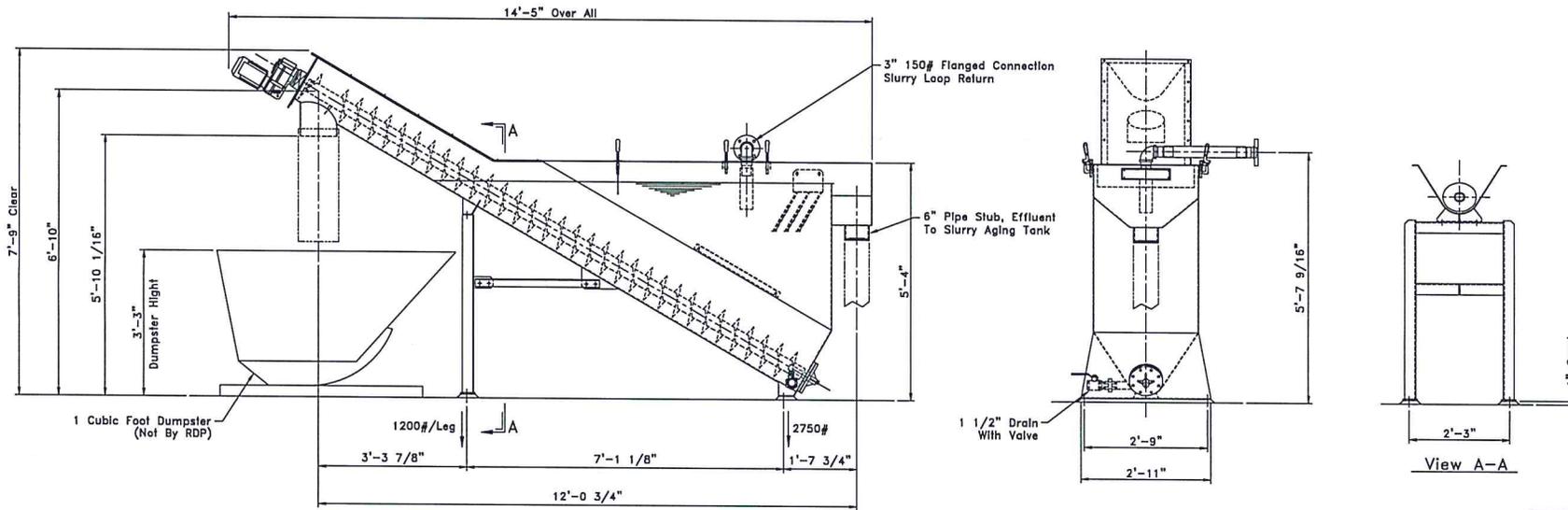
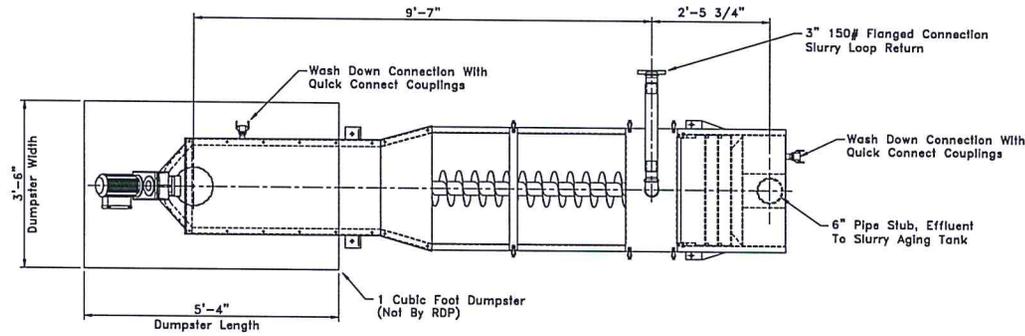
- A. RDP Technologies, Inc. hereinafter designated as the "COMPANY", has obtained, and is the sole owner of U.S. Patents 5,013,458; 5,229,011; 5,346,616; 5,401,402; 5,405,536; 5,433,844; 5,186,840; 5,746,983; 7,416,673, 8,133,401 B2 and 9,023,312 B2 and other Patents Pending relating to apparatus, processes (including the process steps identified in Paragraph G4), and manufacturing techniques for waste sludge treatment and/or Pasteurization, and lime slaking and has filed related divisional and continuation patent applications covering the apparatus and process (all hereinafter referred to as the "Patent Rights").
- B. The COMPANY hereby grants to the City of Bismarck, ND, hereinafter referred to as the "OWNER", a non-assignable, nontransferable, non-exclusive, paid-up license to use (but not any right to make or sell), in the geographic area represented by the boundaries of the OWNER, the equipment sold by the COMPANY for use of the OWNER.
- C. This License Agreement shall apply to the System and equipment to which the COMPANY has said Patent Rights therein, include equipment sold by the COMPANY to or for the benefit of the OWNER in connection with the sales agreement governing the sale of equipment of the COMPANY for use by the OWNER.
- D. The COMPANY and the OWNER desire to operate the equipment to comply with the environmental control standards set forth by the U.S. EPA. Any use under this License Agreement of the System to which the Patent Rights pertain is to be commensurated with the capacity for which the equipment is designed. For use of the COMPANY System covered by the Patent Rights at more than one (1) location within the OWNER, an additional license will be required for each additional location.
- E. The term of the license will commence upon receipt and acceptance of a Purchase Order by the COMPANY and will be in effect through Construction and Final completion of the Contract. The License will renew at that time provided full and final payment, minus any agreed upon penalties that are part of the performance requirements, by the OWNER for all equipment sold under this Agreement by the COMPANY for use by the OWNER under Paragraph C hereof and continue through the life of said Patent Rights for no additional monetary consideration beyond said full and final payment. The parties hereto agree that an unlicensed use of the said Patent Rights, including any equipment, apparatus, or processes covered thereunder, without final payment may occur during a start-up period, but no longer than six (6) months. If payment has not been made in this timeframe a penalty of \$1,000.00 per day will be assessed for every day in operation without being provided a License.

- F. The License to use the Patent Rights thereunder is personal to the OWNER and the OWNER will not transfer, sublease, assign, or deliver the apparatus or such license relating to the apparatus or process of the COMPANY'S Patent rights to another without the prior written consent of the COMPANY.

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Materials Of Construction
 Fine Grit Classifier: 304 Stainless Steel.
 Fasteners: 316 Stainless Steel.

Horse Power Requirements
 Fine Grit Classifier: 1 Hp.



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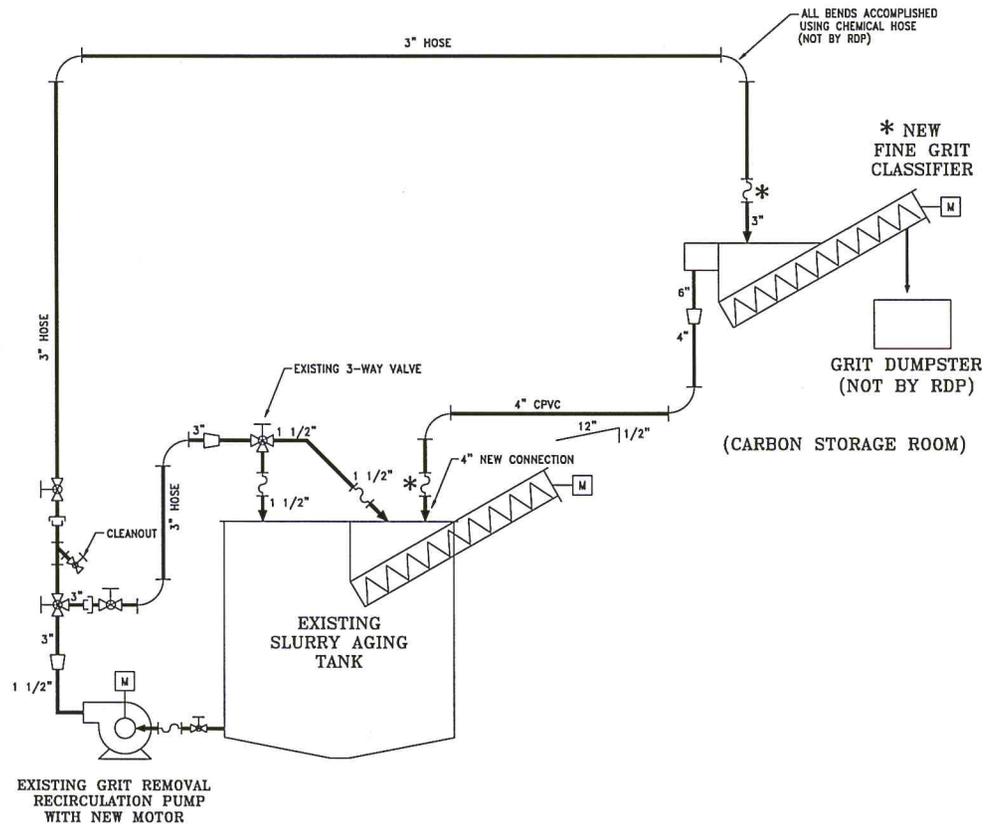
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Revisions		Date	Scale	Dwg.	Date
			3/4" = 1'-0"	Fe2016028-301	8-24-1



Fine Grit Classifier
 Bismarck, ND FGC Upgrade

Drawn: TRC Appr.:



NOTES

* BY RDP

Note: Field Piping, Hose, Elbows, Valves & Fittings (Not By RDP)



FINE GRIT CLASSIFICATION SYSTEM

Bismarck, ND - FGC Upgrad

Drawn TRC Appr.

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Revisions	Date	Dwg. No.	Date
		Pe2016028-302	8-24-11

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