



PUBLIC WORKS – UTILITY OPERATIONS

DATE: December 5, 2016

FROM: Michelle Klose, Director of Utility Operations *MK*

ITEM: Approval of sole source contract and completion of emergency repairs at Wastewater Treatment Plant.

REQUEST

Consider and request use of a sole source contract with PKG to complete the replacement of pipes at the Wastewater Treatment Plant.

Please place this item on the December 13, 2016 City Commission meeting.

BACKGROUND INFORMATION

The Wastewater Treatment Plant experienced a pipe failure in the pretreatment building on October 7, 2016. The total estimated costs for the repairs are detailed on the attached spreadsheet. Photos of the corrosion on the pipe and the temporary repair are attached. We have issued contracts under emergency procurement 7-01-04, for removal of gravel from the second chamber to gain better access to potentially affected pipes and ultrasonic testing to determine the extent of the pipe damage. The commission has also approved an open-ended engineering contract to assist with assessing the damage, and management of the repair. We have costs documented for work completed, and estimates for work remaining in the attached spreadsheet, the total expected cost is nearly \$313,000.

We are requesting use of a sole source contract with PKG to complete the replacement of pipes. The attached drawing gives an indication of the extent of the work. The contract amount would be for \$215,271. This includes replacement of pipes and addition of air release valves to better manage hydrogen sulfide. A failure of the pipe before the repairs can be completed would have large impacts. All flow into the plant is moved through this pipeline, and would need to be diverted to the ponds which only have possibly two days of storage. PKG is familiar with the piping and the operations of the plant, and their quote has been evaluated by our engineers and determined fair for the work required.

Bypass piping and pumping is also required when the pipes are being replaced. This work will be highly variable depending on the length of the shutdown and weather conditions. The quotes received are to cover the extended period of two weeks. This request is for the approval up to \$18,500 for the bypass work.

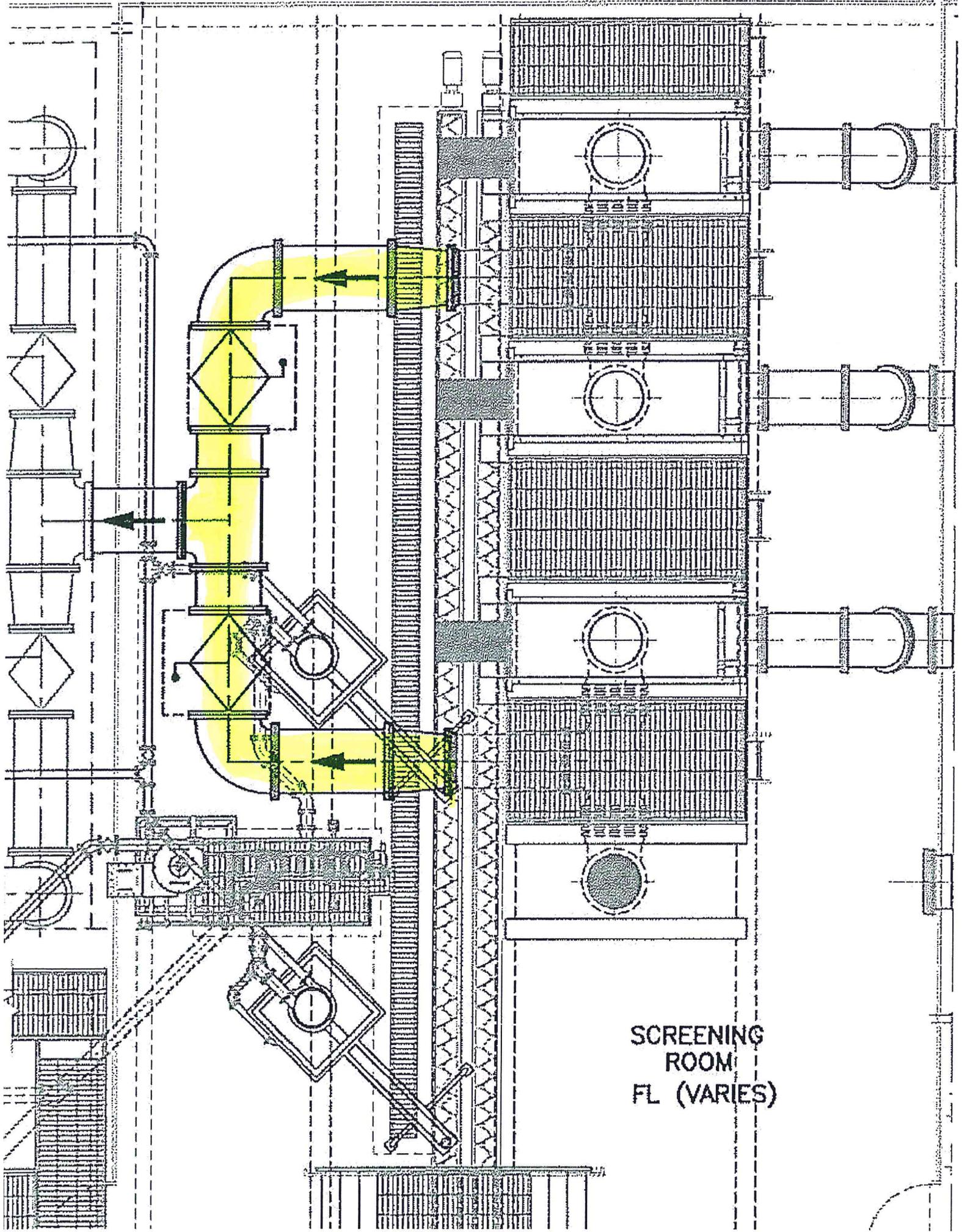
RECOMMENDED CITY COMMISSION ACTION

Approval to use a sole source contract with PKG to complete the emergency replacement of pipes at the Wastewater Treatment Plant, and approval of up to \$18,500 for the bypass work.

STAFF CONTACT INFORMATION

Michelle Klose, Director of Utility Operations, 355-1700, mklose@bismarcknd.gov





SCREENING
ROOM
FL (VARIES)

OPINION OF PROBABLE COST - HDPE PIPE - UNDER SCREENING ROOM ONLY							
ITEM	ITEM DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	COST	LEAD TIME	COMMENTS
LABOR							
1	PREP AND SETUP	HR	\$75.00	200.00	\$15,000.00	-	PKG quote
2	DEMO AND REPLACEMENT	HR	\$75.00	300.00	\$22,500.00	-	PKG quote
MATERIAL AND EQUIPMENT							
3	PIPE AND FITTINGS FROM HD SUPPLY, PIPE SUPPORTS, 30" FULL PORT PLUG VALVES WITH HANDWHEEL OPERATORS, MISC. ACCESSORIES, 2" AIR RELEASE PIPING	LUMP SUM	\$117,840.12	1.00	\$117,840.12	4 TO 6 WEEKS	PKG quote - HD supply piping and valves. Kennedy valves quoted. Savings if Pratt valves are used but longer lead time.
4	PICKUPS, FORKLIFT, EQUIPMENT HOISTS, AND OTHER EQUIPMENT. DISPOSAL OF OLD MATERIAL	LUMP SUM	\$7,000.00	1.00	\$7,000.00	-	PKG quote
5	15% FEE - OVERHEAD AND PROFIT ON MATERIAL AND EQUIPMENT	LUMP SUM	\$24,351.02	1.00	\$24,351.02	-	PKG quote
SUBCONTRACTOR							
6	CONCRETE SAW CUTTING AND CORING ALLOWANCE	LUMP SUM	\$15,000.00	1.00	\$15,000.00	-	PKG quote but since this is an allowance item, could go up or down slightly. Estimated based on price from Edson's
7	2.5% OVERHEAD AND PROFIT ON SUBCONTRACTOR	LUMP SUM	\$750.00	1.00	\$750.00	-	PKG quote but since this is an allowance item, could go up or down slightly. Estimated based on price from Edson's
SUPPLEMENTAL COSTS							
8	SMALL TOOLS/EQUIPMENT AND EXPENDABLES	LUMP SUM	\$3,750.00	1.00	\$3,750.00	-	PKG quote. Equal to 10% of labor
9	SAFETY EXPENSE	LUMP SUM	\$750.00	1.00	\$750.00	-	PKG quote. Equal to 2% of labor
10	TEMPORARY CONSTRUCTION FACILITIES	LUMP SUM	\$4,123.82	1.00	\$4,123.82	-	PKG quote. Equal to 2% of project costs.
11	BONDS & INSURANCE PREMIUMS	LUMP SUM	\$4,206.30	1.00	\$4,206.30	-	PKG quote. Equal to 2% of project costs.

CONSTRUCTION TOTAL \$215,271.00 PKG quote

BYPASS INFLUENT TO PONDS AND BACK TO EQ TANK AND PRIMARY SPLITTER BOX: \$18,500.00 Rain for Rent

ENGINEERING - PREVIOUSLY INVOICED: \$21,234.50
 ENGINEERING - WORK COMPLETED BUT NOT YET INVOICED (THROUGH 11/18/16): \$8,207.03
 ENGINEERING - REMAINING DESIGN AND BIDDING ESTIMATE: \$7,800.00 Includes design time based on quoting by 1 contractor. Will increase if project is bid.
 ENGINEERING - ESTIMATE OF CONSTRUCTION ADMINISTRATION: \$29,500.00 Full time wastewater RPR 2 weeks, local RPR 2 weeks
 VISTEC INVOICE: \$8,144.00 Gravel Vac.
 EDSONS INVOICE: \$2,000.00 Concrete wall cutting
 BRAUN INVOICE: \$1,923.50 Ultrasonice pipe thickness testing - estimate by Braun, will get me exact number soon
 EMERGENCY PIPE REPLACEMENT PROJECT TOTAL: \$312,580.03

PKG CONTRACTING, INC.
 4301 SOUTH UNIVERSITY DRIVE, FARGO, ND 58104
 PHONE (701) 232-3878 • FAX: (701) 232-3935
 e-mail: admin@pkg-inc.com

12/5/16

Mr. Colin Marcusen

SEH, Inc.
 1200 25th Ave S.
 St. Cloud, MN 56302

RE: Bismarck WWTF PTB Piping
 Bismarck, ND

SUBJECT: Proposal

Dear Mr. Marcusen, PE

Below is quote for removal and replacement of existing 30" / 36" Piping under the existing Pretreatment building as we have discussed and as noted below.

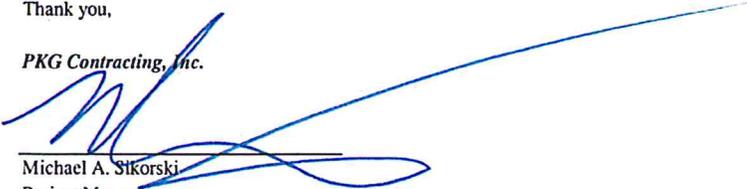
Costs below are associated with the removal of existing DIP pipe, and installation of HDPE spools prefabricated by HD Supply. (See attached drawing showing piping). New valves quoted as Kennedy valves currently on the shelf. Quote also includes (12) HDG adjustable pipe supports. Some to go under existing screens where pea rock was removed. (A saw cutting allowance of \$15,000 is included). Note, no painting, electrical, bypass pumping, or on site HDPE Fab is included. Supports sized based on 30" and 36" IPS pipe. Price may need to be adjusted if OD of HDPE pipe fittings is larger.

A.)	1. Labor / Burden / Lodging / Per Diem	37,500.00	
	2. Material (including tax):	117,840.12	
	3. Equipment: (Fuel, Oil, & Other) / Disposal	7,000.00	
	4. 15% Fee (Overhead & Profit on items A.1.2.3)	24,351.02	
	<i>Subtotal Section A</i>		\$186,691.14
B.)	1. Subcontractor: (Saw cut / Coring Allowance)	15,000.00	
	2. 5% Fee (Overhead & Profit on item B.1)	750.00	
	<i>Subtotal Section B</i>		\$15,750.00
C.)	Supplemental Costs:		
	1. Small Tools/Equip. & Expendables (10% of A.1)	3,750.00	
	2. Safety Expense (2% of A.1)	750.00	
	3. Temporary Construction Facilities (2% of Section A, B & C.1)	4,123.82	
	4. Bonds & Insurance Premium (2% of Section A, B, C1., C.2)	4,206.30	
	<i>Subtotal Section C</i>		\$12,830.12
	TOTAL CHANGE REQUEST		\$215,271

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

Thank you,

PKG Contracting, Inc.


 Michael A. Sikorski
 Project Manager

attachments

PKG CONTRACTING, INC.

4301 SOUTH UNIVERSITY DRIVE • FARGO, ND 58104 • PHONE (701) 232-3878 • FAX: (701) 232-3935 • www.pkg-inc.com

12-5-16

BISMARCK PTB PIPE / VALVE REPLACE

wkst .

LABOR:

PREP / SETUP \approx 200 mh-s
 Demo / Replce \approx 300 wks

$$500 \times 75$$

$$= 37,500$$

LA / Hous / Sub

MAT'L.

PIPE / FINING 17 DS

33,540

SUPPORTS

10,800

VALVES

63,300

MISC. ACCESSORIES: 2" IRV
 Piping allow

3,000

110,640

w/ 6.5%

117,840.12

EQ. TOOLS.

ACCUPS.

1500

FLLIFT

1500

MIC EQ HANDSEK

1500

RT

4,000

5500

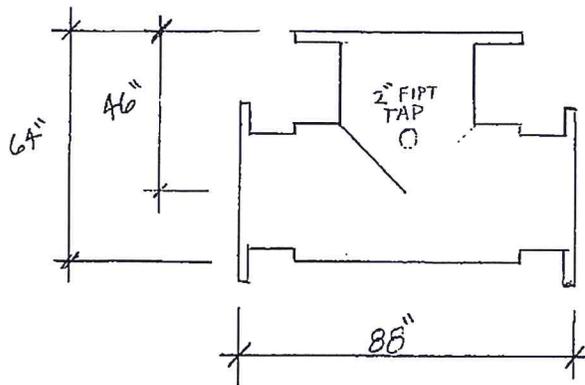
Disposal old mat'l

1500

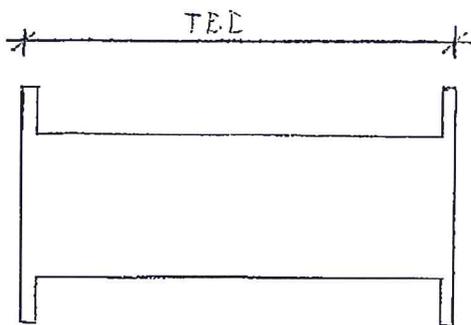
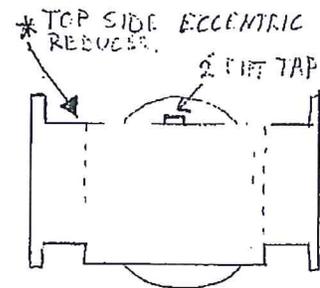
7,000

SUPPLY®

WATERWORKS

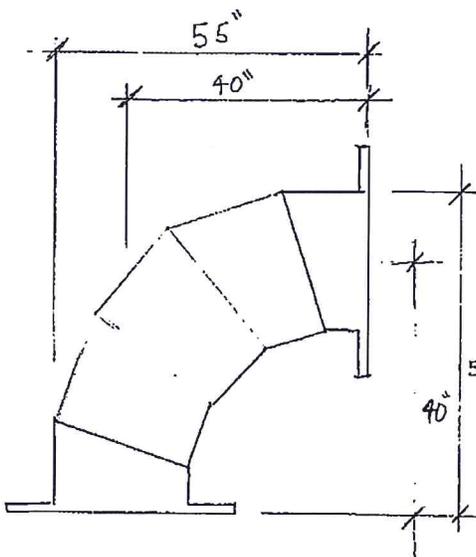


SDR32.5 IPS HDPE
 36" TEE W/ 36"x30" ECC.
 REUSEL. ENDS ON 2 RUNS
 FLG ENDS W/ DI RINGS



SDR32.5 IPS HDPE
 30" FLG X FLG STOOD
 W/ DI RINGS

1 1/2" HDPE THICK FLANGE



30" SDR32.5 IPS HDPE
 FLG 90 BEND
 W/ DI RINGS



Bid Proposal for Bismarck WWTF Improvement

ALL BIDDING CONTRACTORS #230
 Job Location: Bismarck, ND
 Engineer: SEH
 Bid Date: 12/02/2016 12:00 p.m.
 HD Supply Bid #: 209289

HD Supply Waterworks
 16195 54th St NE
 St Michael, MN 55376
 Phone: 763-428-7473
 Fax: 763-428-7559

Seq#	Qty	Description	Units	Price	Ext Price
10		HDPE PRICES FIRM THRU 12-16-16			
30	2	30"X7'-0" FLG X FLG SDR32.5 IPS HDPE SPOOL W/ DI BACKUP RINGS	EA	1,515.00	3,030.00
40	2	30" SDR32.5 IPS HDPE FLANGED 90 BEND W/ DI BACKUP RINGS (SHORT RADIUS)	EA	3,455.00	6,910.00
50	1	36" SDR32.5 IPS HDPE FLG TEE W/ 2 EA 30" FLG OUTLETS & DI BU RINGS & 2" FIPT TAP	EA	6,975.00	6,975.00
70	8	30" STAINLESS STEEL FLANGE ACC SET (EPDM GASKET)	EA	797.00	6,376.00
80	1	36" STAINLESS STEEL FLANGE ACC SET (EPDM GASKET)	EA	1,084.00	1,084.00
100	2	30" MEGAFLANGE DIP	EA	1,605.00	3,210.00
110	1	36" MEGAFLANGE DIP	EA	2,455.00	2,455.00
130		*FREIGHT ADD TO JOBSITE			
140		\$3000 TRUCK LOAD* <i>7500 / misc freight direct</i>			
160		HD SUPPLY- WATERWORKS IS NOT			
170		LIABLE FOR DELIVERY DELAYS,			
180		CANCELLATIONS OR PRICE			
190		INCREASES RESULTING FROM ANY			
200		CAUSE BEYOND OUR CONTROL.			
210		THESE INCLUDE BUT ARE NOT			
220		LIMITED TO: MANUFACTURERS'			
230		SHORTAGES, AVAILABILITY OR			
240		TIMELINESS OF TRANSPORTATION,			
250		MATERIALS, FUELS, OR SUPPLIES.			
260		THIS QUOTE IS NOT A CONTRACT			
270		TO SUPPLY MATERIAL OR			
280		GUARANTEE OF PRODUCT			
290		AVAILABILITY.			
				Sub Total	30,040.00
				Freight	3,000.00
				Tax	0.00
				Total	33,040.00

33,540

ACME Construction Supply, Co.

Quotation

Quote PKG Contracting, Inc.
 To: C/O Bismarck WWTF
 601 London Ave.
 Bismarck, ND 58504
 United States

Quote Number:	12540		Contact:	
Quote Date:	11/28/16	Expires: 12/28/16	Inquiry:	
Customer:	PKG		Terms:	Net 30 Days
Salesman:	PATRICKO		Phone:	(701) 232-3878
Ship Via:	Most Economical Option		FAX:	(701) 232-3935

Item	Part Number Description	Revision	Quantity	Price	Ext. Price
1	NCF211-02072 Fig.317/319/216T / 30"IPS / BOP= 33" ; HDG		8	529.3365 /EA	4,234.6920
2	NCF211-02073 Fig.317/319/216T / 36"IPS / BOP= 33" ; HDG		4	528.3472 /EA	2,113.3888
Total:					6,348.0800

*Based on IPS
Pipe OD*

FREIGHT \$ 1,000
 Anchors 1060
 Grout 200
 Isolation? At 200

8808

*+ 1000 ea
+ Allowance
Support @ valve,*

+ 2000

10,808



Bid Proposal for Bismarck Wastewater Treatment Valve

ALL BIDDING CONTRACTORS #230
 Job Location: Bismarck, ND
 Engineer: SEH
 Bid Date: 11/30/2016 12:00 p.m.
 HD Supply Bid #: 209092

HD Supply Waterworks
 16195 54th St NE
 St Michael, MN 55376
 Phone: 763-428-7473
 Fax: 763-428-7559

Seq#	Qty	Description	Units	Price	Ext Price
20	2	30" FLG KENNEDY PLUG VALVE W/ GEAR & HAND WHEEL, EPOXY LINED	EA	31,650.00	63,300.00
40		*FOB JOBSITE*			
50		*2 WEEK LEAD TIME ARO*			
60		*VALVES CURRENTY ON HAND -			
70		SUBJECT TO PRIOR SALE*			
90		HD SUPPLY- WATERWORKS IS NOT			
100		LIABLE FOR DELIVERY DELAYS,			
110		CANCELLATIONS OR PRICE			
120		INCREASES RESULTING FROM ANY			
130		CAUSE BEYOND OUR CONTROL.			
140		THESE INCLUDE BUT ARE NOT			
150		LIMITED TO: MANUFACTURERS'			
160		SHORTAGES, AVAILABILITY OR			
170		TIMELINESS OF TRANSPORTATION,			
180		MATERIALS, FUELS, OR SUPPLIES.			
190		THIS QUOTE IS NOT A CONTRACT			
200		TO SUPPLY MATERIAL OR			
210		GUARANTEE OF PRODUCT			
220		AVAILABILITY.			
				Sub Total	63,300.00
				Tax	0.00
				Total	63,300.00

Freight assumed Inc.