



City of Grand Island

Tuesday, January 28, 2020

Council Session

Item G-3

#2020-18 - Approving Bid Award - Burdick Generating Station Water Treatment Demineralizer System

Staff Contact: Tim Luchsinger, Stacy Nonhof

Council Agenda Memo

From: Timothy G. Luchsinger, Utilities Director
Stacy Nonhof, Interim City Attorney

Meeting: January 28, 2020

Subject: Burdick Generating Station Water Treatment
Demineralizer System

Presenter(s): Timothy G. Luchsinger, Utilities Director

Background

The Burdick Generating Station has two 40-megawatt combustion turbines that require treated water for NOx control when using #2 fuel oil. The existing water treatment system is in the steam unit building, which is scheduled for demolition. The existing system was installed in 1970 and had been used to supply treated water to the combustion turbines.

Engineering staff developed a specification for the new water treatment system after evaluating the cost of renting a treatment system compared to owning a water treatment system. The new water treatment system will be mounted on a trailer, by maintenance staff, to allow for use at Burdick Generating Station, and be available to Platte Generating Station in an emergency.

Discussion

A Request for Bid was advertised and sent to three potential bidders. Two bids were received and opened on January 7th, 2020. The engineer's estimate for this project was \$150,000.00.

Bidder		Bid Price with tax
Consolidated Water Omaha, Nebraska	Option 1	
		\$104,516.88
		Adjusted for larger demineralizer \$116,358.00
Consolidated Water Omaha, Nebraska	Option 2	
		\$126,715.63
Eco-tec Pickering, OT, Canada		\$625,412.43

Consolidated Water provided two Options. Option 1 included a smaller than specified demineralizer. Option 2 has the specified demineralizer and that cost was corrected in Option 1 to give the adjusted price with tax.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue presented in this motion

Recommendation

City Administration recommends that the Council award the bid for Burdick Generating Station Water Treatment Demineralizer System to Consolidated Water of Omaha, Nebraska as the lowest compliant bid, with the bid price of \$116,358.00.

Sample Motion

Move to approve the bid from Consolidated Water of Omaha, Nebraska for the Burdick Generating Station Water Treatment Demineralizer System in the amount of \$116,358.00.



Stacy Nonhof, Purchasing Agent

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BID OPENING

BID OPENING DATE: January 7, 2020 at 2:00 p.m.

FOR: Burdick Generating Station Water Treatment
Demineralizer System

DEPARTMENT: Utilities

ESTIMATE: \$150,000.00

FUND/ACCOUNT: 520

PUBLICATION DATE: December 12, 2019

NO. POTENTIAL BIDDERS: 6

SUMMARY

Bidder:	<u>Consolidated Water Solutions</u> Omaha, NE	<u>Eco-Tec, Inc.</u> Pickering, Canada
Bid Security:	Cashier Check	Cashier Check
Exceptions:	None	Noted
Bid Price:	<u>Option 1</u>	
Material:	\$88,750.00	\$581,779.00 (includes material and labor)
Labor:	\$ 8,475.00	
Sales Tax:	<u>\$ 7,291.88</u>	<u>\$43,633.43</u>
Total Bid:	\$104,516.88	\$625,412.43
Bid Price:	<u>Option 2</u>	
Material:	\$99,185.00	
Labor:	\$ 8,475.00	
Sales Tax:	<u>\$ 8,074.50</u>	
Total Bid:	\$115,734.50	

cc: Tim Luchsinger, Utilities Director
Jerry Janulewicz, City Administrator
Stacy Nonhof, Purchasing Agent
Karen Nagel, Utility Secretary

Pat Gericke, Utilities Admin. Assist.
Patrick Brown, Finance Director
Lynn Mayhew, Assist. Utilities Director

P2170



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BID SPECIFICATION PACKAGE

for

**BURDICK GENERATING STATION
WATER TREATMENT DEMINERALIZER SYSTEM**

C 128643

Bid Opening Date/Time

**Tuesday, January 7, 2020 at 2:00 p.m. (local time)
City of Grand Island, City Hall
100 East 1st Street, P.O. Box 1968
Grand Island, NE 68802-1968**

Contact Information

Lynn Mayhew
**City of Grand Island – Utilities Department
Platte Generating Station
308/385-5496**

Date issued: December 11, 2019

**ADVERTISEMENT TO BIDDERS
FOR
WATER TREATMENT DEMINERALIZER SYSTEM
FOR
CITY OF GRAND ISLAND, NEBRASKA**

Sealed bids for Burdick Generating Station Water Treatment Demineralizer System will be received at the office of the City Clerk, 100 E. First Street, P.O. Box 1968, Grand Island, Nebraska 68802, until **Tuesday, January 7, 2020 at 2:00 p.m. local time**, FOB the City of Grand Island, freight prepaid. Bids will be publicly opened at this time in the Grand Island City Hall City Clerk's Office located on 1st floor of City Hall. **Submit an original and three copies if submitting by mail.** Bid package and any Addendas are also available on-line at www.grand-island.com under Business-Bids and Request for Proposals-Bid Calendar under the bid opening date. Bidding documents, plans and specifications for use in preparing bids may be downloaded from the QuestCDN website www.QuestCDN.com for a fee. Submitting through QuestCDN requires one original document of the bid to be uploaded. **Bids received after the specified time will not be considered.**

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Successful bidder shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Each bidder shall submit with the bid a certified check, a cashiers check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. **Your certified check, cashiers check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid.** Each envelope must be clearly marked indicating its contents. **Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered.** Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The Purchaser reserves the right to reject any or all bids, to waive irregularities therein, and to accept whichever bid that may be in the best interest of the City, at its sole discretion.

No bidder may withdraw his/her bid for a period of thirty (30) days after date of bid opening.

RaNae Edwards, City Clerk

Advertised

(All bids must be submitted on this form)

BURDICK GENERATING STATION
WATER TREATMENT DEMINERALIZER SYSTEM
BID DATA FORM

CITY OF GRAND ISLAND
 GRAND ISLAND, NE

The undersigned Bidder, having examined all specifications and other bidding documents, and all addenda thereto, and being acquainted with and fully understanding all conditions relative to the specified materials and equipment, hereby proposes to provide equipment, shipping, start up assistance and training for a water treatment system for the Burdick Generating Station FOB the City of Grand Island, freight prepaid, at the following price:

ITEM DESCRIPTION**EXTENDED COST**

Base Bid:

Material	\$	
Labor	\$	
Applicable Sales tax*	\$	
Total Base Bid	\$	

* If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

☐ **Exceptions Noted** - Bidder acknowledges there are *Exceptions* and/or *Clarifications* noted to the above bid, and those exceptions are fully explained on a separate sheet, clearly marked, and included with the Bid.

Bidder Company Name	Date
---------------------	------

Company Address	City	State	Zip
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Print Name of Person Completing Bid	Signature
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Email: _____ Telephone No. _____

According to Nebraska Sales and Use Tax Requirements, Section 1-017, Contractors, check which option you have selected to file with the Nebraska Department of Revenue:

Nebraska law provides a sales and use tax exemption on contractor labor charges for the construction, repair, or annexation of any structure used for the generation, transmission, or distribution of electricity. Separately stated contractor labor would be exempt, all materials are taxable according to the contractor's option.

Option 1 (Section 1-017.05) _____ Option 2 (Section 1-017.06) _____ Option 3 (Section 1-017.07) _____

If the Nebraska sales and use tax election is not filed or noted above, the contractor will be treated as a retailer under Option 1 for sales and use tax purposes.

☐ By checking this box, Bidder acknowledges the specified completion date of the project is **June 1, 2020**.

☐ By checking this box, Bidder acknowledges that Addenda Number(s) _____ were received and considered in Bid preparation.

Note: If Bidder supplies individual unit pricing information as supplemental pricing to the base material and labor cost above, said individual pricing is proprietary information and should not be released under a public records request. The total base bid is not considered proprietary information and will be released pursuant to City Procurement Code.

CHECKLIST FOR BID SUBMISSION
FOR
BURDICK GENERATING STATION
WATER TREATMENT DEMINERALIZER SYSTEM

Bids must be received by the City Clerk before 2:00 p.m. on Tuesday, January 7, 2020.

The following items must be completed for your bid to be considered.

- ☐ Submittal of bid documents:
 - ☐ **Option 1 – Mailing:** A signed original and three (3) copies of the bidding documents. Failure to submit the correct number of copies may result in your bid not being considered.
 - ☐ Note: Your certified check, cashiers check or bid bond should be clearly marked in a separate envelope attached to the signed original bid.
 - ☐ **Option 2 – QuestCDN (online):** Purchase the bid specification through QuestCDN. Upload the signed original of the Bid Data Form, along with any supporting material required to meet the bid specification through QuestCDN. Upload your bid bond online through QuestCDN. *Bidders using Certified check or Cashiers' Check must mail said check to the office of the City Clerk no later than the scheduled bid opening date and time and clearly marked with the project name.*
- ☐ Bidders must complete and sign the Bid Data Form provided in these Documents. All blank spaces must be filled in. Bidders shall acknowledge receipt of any Addenda information on the Bid Data Form.
- ☐ Selection of Nebraska Sales Tax Option. If the Nebraska sales and use tax election is not filed or noted above, the Contractor will be treated as a retailer under Option 1 for sales and use tax purposes.
- ☐ A reference list of at least three (3) projects of similar scope and complexity.
- ☐ Firm lump sum pricing; firm unit pricing in case adjustments are necessary, and breakout of sales tax pricing.
- ☐ Firm unit pricing for temporary water treatment based on 1000 treated gallons, if unable to utilize new equipment for water production in a temporary location.
- ☐ A proposed delivery schedule.
- ☐ Details of the proposed warranty.
- ☐ Chemical and power consumption for new system.
- ☐ Dimensional layout required for equipment
- ☐ Any exceptions to the specification or Owner's Contract Document.
- ☐ Acknowledgment of Addenda Number(s) _____.

Please check off each item as completed to ensure compliance. If you have any questions, please feel free to contact our office prior to the bid opening date/time.

INSTRUCTIONS TO BIDDERS

1. GENERAL INFORMATION.

The following instructions outline the procedure for preparing and submitting Bids. Bidders must fulfill all requirements as specified in these Documents.

2. TYPE OF BID.

Bidders shall be required to submit prices for all items listed in the Bid Data Form.

3. PREPARATION OF BIDS.

Bidders shall use only the Bid Data Form provided in these Documents. All blank spaces in the Bid Data Form must be filled in, preferably in BLACK ink, in both words and figures where required. No changes to the wording or content of the forms is permitted. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures.

Prices stated shall be f.o.b. with freight and full insurance paid by Bidder, to the job site located in Grand Island, Nebraska.

The Bidder shall acknowledge receipt of all Addenda in the Bid Data Form. Bids received without acknowledgement or without the Addendum enclosed will be considered informal.

Individual unit pricing as listed on the Bid Data Form or supplied as supplemental information may be deemed proprietary information and not be released under a public records request. The total amount of the bid is not considered proprietary information and will be released pursuant to City Procurement Code.

4. SUBMISSION OF BIDS.

All Bids must be submitted intact with the correct number of copies no later than the time prescribed, at the place, and in the manner set forth in the ADVERTISEMENT FOR BIDS. Bids must be made on the Bid Data Form provided herein. Each Bid mailed must be submitted intact in a sealed envelope, so marked as to indicate its contents without being opened, and delivered in person or addressed and mailed in conformance with the instructions in the ADVERTISEMENT FOR BIDS.

5. BID SECURITY.

Bids must be accompanied by cash, a certified check, or cashier's check drawn on a bank which is insured by the Federal Deposit Insurance Corporation, or a bid bond issued by a Surety authorized to issue such bonds in the state where the Work is located, in the amount of 5 percent of the bid amount payable to OWNER. This bid security shall be given as a guarantee that the Bidder will not withdraw their Bid for a period of **thirty (30) days after** bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish a properly executed Performance Bond and Payment Bond, each in the full amount of the Contract price, within the time specified.

The Attorney-in-Fact that executes this bond on behalf of the Surety must attach a notarized copy of his/her power of attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond. Where State Statute requires, certification by a resident agent shall also be provided.

6. RETURN OF BID SECURITY.

Within fifteen (15) days after the award of the Contract, the OWNER will return the bid securities to all Bidders whose Bids are not to be further considered in awarding the Contract. All other retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than Bidders' bonds and guarantees which have been fortified, will be returned to the respective Bidders whose Bids they accompanied.

7. BASIS OF AWARD.

The award will be made by the OWNER on the basis of the Bid from the lowest responsive, responsible Bidder which, in the OWNER's sole and absolute judgment will best serve the interest of the OWNER. All Bids will be considered on the following basis:

Delivery time	Conformance with the terms of the Bid
Bid price	Documents
Cost of installation	
Suitability to project requirements	Responsibility and qualification of Bidder

The OWNER reserves the right to reject all Bids, or any Bid not in conformance with the intent of the Bid Documents, and to waive any informalities and irregularities in said Bids.

8. EXECUTION OF CONTRACT.

The successful Bidder shall, within fifteen (15) days after receiving notice of award, sign and deliver to the OWNER the Contract hereto attached together with the acceptable bonds as required in these Bid Documents. Within fifteen (15) days after receiving the signed Contract with acceptable bond(s) from the successful Bidder, the OWNER's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

9. PERFORMANCE AND PAYMENT BONDS.

The successful Bidder shall file with the OWNER Performance and Payment Bonds in the full amount (100 percent) of the Contract price, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the Work under this Contract, and to cover all guarantees against defective workmanship or materials, or both, for a period of one (1) year after the date of final acceptance of the Work by the OWNER. The Surety furnishing these bonds shall have a record of service satisfactory to the OWNER, be authorized to do business in the State where the OWNER's project is located and shall be named on the current list of approved Surety Companies, acceptable on Federal bonds as published by the Audit Staff, Bureau of Accounts, U.S. Treasury Department.

The Attorney-in-Fact (Resident Agent) who executes these bonds on behalf of the Surety must attach a notarized copy of his/her power-of-attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond.

10. TIME OF COMPLETION.

The time of completion of the Work to be performed under this Contract is the essence of the Contract. The time allowed for the completion of the Work is stated in the Bid Data Form.

11. GRATUITIES AND KICKBACKS.

City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

12. FISCAL YEAR.

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into by and between **[SUCCESSFUL BIDDER]**, hereinafter called the Contractor, and the **CITY OF GRAND ISLAND, NEBRASKA**, hereinafter called the City.

WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published for *BURDICK GENERATING STATION WATER TREATMENT DEMINERALIZER SYSTEM*; and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself/herself, or themselves, and its, his/her, or their successors, as follows:

ARTICLE I. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

1. This Contract Agreement.
2. City of Grand Island's Specification for this project.
3. **[NAME OF SUCCESSFUL BIDDER]** bid signed and dated **[DATE OF BID]**.

In the event of any conflict between the terms of the Contract Documents, the provisions of the document first listed shall prevail.

ARTICLE II. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract documents as listed in the attached General Specifications, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

ARTICLE III. That the City shall pay to the Contractor for the performance of the work embraced in this Contract and the Contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the Contract) of **[DOLLAR AMOUNT] (\$00.00)** for all services, materials, and work covered by and included in the Contract award and designated in the foregoing Article II; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

The total cost of the Contract includes:

Base Bid:	\$.00
Sales Tax on Materials/Equipment:	\$.00
Sales Tax on Labor:	\$.00
Total	\$.00

Contractor Tax Option _____

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

ARTICLE IV. The Contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the Contractor. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The Contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the Contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of the BURDICK GENERATING STATION WATER TREATMENT DEMINERALIZER SYSTEM.

ARTICLE V. That the Contractor shall start work as soon as possible after the Contract is signed and the required bonds and insurance are approved, and that the Contractor shall deliver the equipment, tools, supplies, and materials F.O.B. Burdick Generating Station, and complete the work on or before **June 1, 2020**.

ARTICLE VI. The Contractor agrees to comply with all applicable State and labor standards in the execution of this Contract as required by Section 7-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 7-307, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of the Contract, the Contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis, of race, color, religion, sex, national origin, age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations. The Contractor agrees to maintain a drug-free workplace policy and will provide a copy of the policy to the City upon request. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

ARTICLE VII. Gratuities and kickbacks: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter,

pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

[SUCCESSFUL BIDDER]

By _____ Date _____

Title _____

CITY OF GRAND ISLAND, NEBRASKA

By _____ Date _____
Mayor

Attest: _____
City Clerk

The Contract is in due form according to law and hereby approved.

Attorney for the City Date _____

DRAFT



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REQUEST FOR BIDS - GENERAL SPECIFICATIONS

The Bid shall be in accordance with the following and with all attached BID DATA and DETAILED SPECIFICATIONS.

All prices are to be furnished and installed FOB, Grand Island, Nebraska. **All prices shall be firm, and shall include all sales and use taxes as lawfully assessed under laws and regulations of the State of Nebraska.** * If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

Mailed bids shall include the following on the **outside** of the mailing envelope: **“Burdick Water Treatment Demineralizer System”**. All bids submitted by mail must include **an original and three copies** of the bid. The bid specification and on-line bidding forms are also available at <http://www.grand-island.com/business/bids-and-request-for-proposals/bid-calendar> under the bid opening date and “Click here for bid document link” through QuestCDN. If submitting through QuestCDN, **one** original document of the bid is required to be uploaded. No verbal bids will be considered. All sealed bids are due no later than Tuesday, **January 7, 2020 at 2:00 p.m. local time.** to:

Mailing Address: City Clerk
City Hall
P. O. Box 1968
Grand Island, NE 68802-1968

Street Address: City Clerk
City Hall
100 E. First Street
Grand Island, NE 68801

Bids will be opened at this time in the City Hall City Clerk’s Office located on 1st floor of City Hall. Any bid received after the specified date will not be considered.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Contractor shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

*Platte Generating Station / 1035 W. Wildwood Drive / Box 1968 / Grand Island, Nebraska 68802-1968
Phone (308) 385-5496 / FAX (308) 385-5353*

The equipment and materials must be new, the latest make or model, unless otherwise specified. Prior to approving the invoice for payment, the City reserves the right to thoroughly inspect and test the equipment to confirm compliance with specifications. Any equipment or material which does not meet the City's requirements will be returned at vendor's expense for correction. The invoice will be paid after approval at the next regularly scheduled City Council meeting and occurring after departmental approval of invoice; the City Council typically meets the second and fourth Tuesday of each month. Invoices must be received well in advance of Council date to allow evaluation and processing time.

Each bidder shall submit with the bid a certified check, a cashier's check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the Bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. **Your certified check, cashier's check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid.** Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered. Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Successful bidder shall comply with the City's insurance requirements; performance and payment bonds are required for this project as outlined in the Detailed Specifications and Instructions to Bidders. All bids shall be valid for at least thirty (30) working days after the bid deadline for evaluation purposes.

All bids must be on the bid form and must be signed and dated to be accepted. If exceptions and/or clarifications are noted to the bid, those exceptions must be fully explained on a separate sheet, clearly marked, and included with the Bid. Any changes that are found made to the original bid specification, other than Owner generated Addendums, would result in your bid not being considered. Please contact Lynn Mayhew at 308-385-5495, for questions concerning this specification.

*Platte Generating Station / 1035 W. Wildwood Drive / Box 1968 / Grand Island, Nebraska 68802-1968
Phone (308) 385-5496 / FAX (308) 385-5353*

BURDICK GENERATING STATION **WATER TREATMENT DEMINERALIZER SYSTEM**

1. Scope

- 1.1 The manufacturer shall provide equipment, shipping, start up assistance and training for a water treatment system for the Burdick Generating Station to meet the water quality requirements stated in this specification.

2. Description

- 2.1 The Burdick Generating Station is located at 800 E. Bischeld in Grand Island, Nebraska.

3. Process Detail and Technical Specification

3.1 Process Description

3.1.1. Raw feed water will be supplied at 20-30 psi (by Burdick Cooling water System) to the proposed water treatment system. The feed water will be sent through cartridge filters of 10 micron to remove residual suspended solids from the water. If the cooling water supply pressure is not great enough for the filters a feed booster pump should be supplied.

3.1.2. Filtered water will be treated with an anti-scalant. The water is then passed through Reverse Osmosis (RO) unit where the majority of the dissolved solids content is removed. Permeate is then delivered to the demineralizer unit that removes the remaining dissolved solids to produce very high purity water before being sent to the existing on-site Demineralized Water Storage Tank for downstream process use. The level in the tank will control the start up and shut down of the system.

3.1.3. Waste from the filters and reverse osmosis unit will be discharged to the City Sewer. If there is waste from the demineralizer unit, it is to be sent to a supplied waste neutralization system before being discharged by gravity to the City Sewer.

3.2 Sub-System Process Description

3.2.1. Key sub-system processes are described here:

3.2.2. Filtration

3.2.2.1. Water under pressure will feed the 10 micron cartridge filters for removal of suspended solids.

3.2.3. Antiscalant Addition

3.2.3.1. Due to the nature of the water it will be necessary to add antiscalant to prevent scaling on the RO membranes.

3.2.4. Reverse Osmosis

3.2.4.1. Reverse Osmosis (RO) uses semi-permeable membranes with very small pores, smaller than 0.001 μm . Water is able to diffuse across the membrane much more readily than dissolved solutes (salts). High feed water pressure is used to counteract the natural osmotic pressure enabling the passage of water from the side of high concentration (feed) of the membrane to the side of low concentration (permeate). A percentage of the water fed to the RO is discarded, as it will contain the

salts rejected by the RO membrane.

3.2.4.2. Membrane systems do experience fouling. Pre-filtration (see Filtration above) and an anti-scalant are employed to extend the performance of the RO membranes.

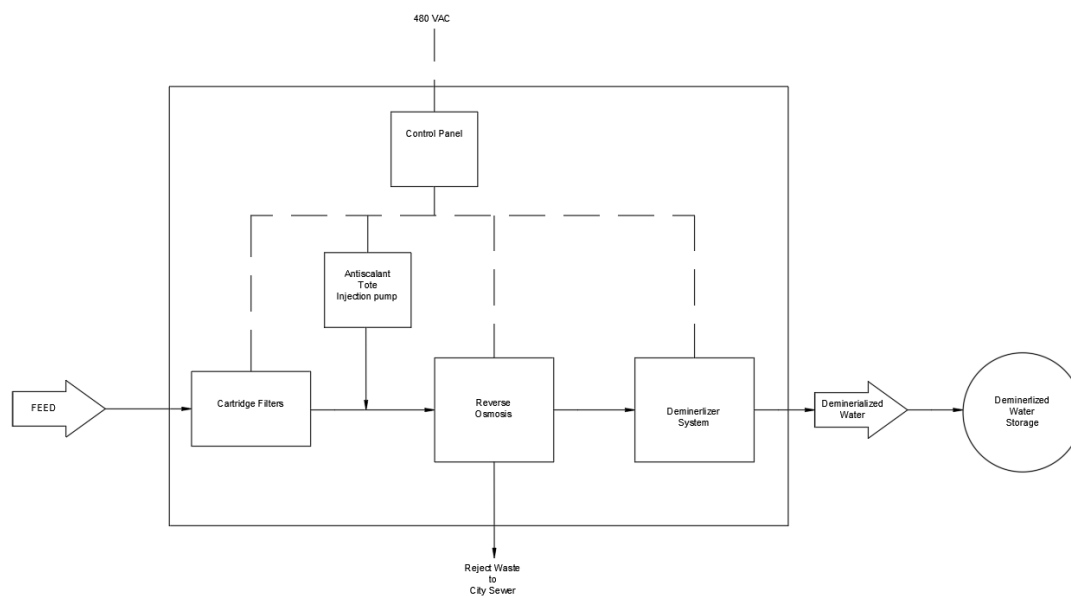
3.2.5. Demineralization

3.2.5.1. Filtered water is to be pumped through the demineralizer unit that will removed the dissolved impurities to meet the specified water quality and sent to the onsite water storage tank. Water quality shall be monitored and if not meeting specs be automatically discharged to waste.

3.2.6. Waste Neutralization System

3.2.6.1. A standard waste neutralization system is required if on site regeneration of the demineralizer system is required.

4. Process Schematic Drawing



5. Basis of Design

5.1 Water Analysis

5.1.1. The system is to be designed based on the Burdick Cooling water system supplied water analysis; some assumptions may need to be made.

Parameter	Units	Design
Temperature	° Fahrenheit	55 – 60
		6.8 – 7.8
Total Organic Carbon	mg/L as C	Not indicated
Turbidity	NTU	0.3
Barium	mg/L as Ba	0.01 – 0.16
Calcium	mg/L as Ca	120-280
Chloride	mg/L as Cl	23 – 34.5
Fluoride	mg/L as F	0.4 – 0.5
Free chlorine	mg/L as Cl ₂	Not indicated
M-Alkalinity	mg/L as HCO ₃	180 – 230

Magnesium	mg/L as Mg	23
Nitrate	mg/L as NO ₃	5.1 – 76
Potassium	mg/L as K	6.0
Silica	mg/L as SiO ₂	16 – 25
Sodium	mg/L as Na	43 – 69
Strontium	mg/L as Sr	0.58 – 0.77
Sulfate	mg/L as SO ₄	150 – 220

6. System Performance

6.1 For treatment of water outlined in section 6.3, the system product quality and flow will be as follows:

6.2 System Demineralized Product Flow:

Average Net Product per Train 50 US gpm

Number of Trains:

Filtration	1
Reverse Osmosis	1
Ion Exchange (demineralizer)	1

Redundancy of Trains:

(100% = 55 USgpm product flow)

Filtration	1 x 100%
Reverse Osmosis	1 x 100%
Ion Exchange	1 x 100%

6.3 Quality:

Parameter	Units	Design
Specific Conductivity	µS/cm	< 0.1
Silica	mg/L as SiO ₂	≤ 0.010
Total Trace Metals (Sodium+potassium+lithium+lead)	ppm	5 max
Total of both dissolved and undissolved solids	ppm	5 max

The average net demineralized water discharge flow-rate in USgpm shall be calculated as the quantity of demineralized water produced over a 24-hour period divided by 24 hours.

7. Scope of Supply

7.1 Vendor shall propose to supply a system that will provide water as described in Section 6.3 of this proposal.

7.2 Demineralization System Equipment

- 7.2.1. One (1 x 100%) Cartridge Filters, complete with elements, fittings, inlet pressure gauge and common differential pressure switch;
- 7.2.2. One (1) Antiscalant addition system with two (1 x 100%) metering pumps, fittings and stand;
- 7.2.3. One (1 x 100%) RO Train consisting of the following:
- 7.2.4. One (1) Centrifugal RO feed pump with motor and fittings;
- 7.2.5. RO vessels each containing six (6) elements.
- 7.2.6. Stainless steel piping for the feed and reject lines
- 7.2.7. PVC piping on permeate line
- 7.2.8. Instrument air tubing;

- 7.2.9. Modulating control valves on the feed and reject lines;
- 7.2.10. Flow transmitters on the feed and reject lines;
- 7.2.11. Conductivity controller on the permeate line;
- 7.2.12. One (1 x 100%) Demineralizer Train
- 7.2.13. One (1) Control System complete with the following:
- 7.2.14. NEMA 12 Control Panels
- 7.2.15. Distributed Control Panels on each RO and demineralizer skid with Allen Bradley PLC, touchscreen and Ethernet communication module
- 7.2.16. Central Control Panel with Allen Bradley PLC, touchscreen and Ethernet communication module
- 7.2.17. Equipment Name Plates
- 7.2.18. 480 VAC Power will be connected into a single point.
- 7.2.19. 480/120 VAC transformer if required.
- 7.2.20. Motor starters / VFDs

7.3 System Services

- 7.3.1. Functionality testing at the factory.
- 7.3.2. One (1) factory representatives for on-site start-up and commissioning supervision and operator training.

7.4 Documentation

- 7.4.1. Three (3) Training manuals
- 7.4.2. Three (3) O&M manuals

8. Items Not Included in Scope of Supply

8.1 Chemical Supply

- 8.1.1. A supply of antiscalant, acid and caustic will be sourced locally. Based upon the consumption rates, Vendor should recommend what storage capacity will be required for suitable supply of chemistry.

8.2 Interconnecting Piping

- 8.2.1. The supply of piping, fittings (as required), and assembly between system equipment will be provided by City of Grand Island. Vendor shall supply interconnecting piping up to the boundaries of the supplied equipment skids.

8.3 Interconnecting Wiring

- 8.3.1. The supply of wiring, fittings (as required), and assembly between system equipment will be provided by City of Grand Island. Vendor shall supply interconnecting wiring up to the boundaries of the supplied equipment skids.

8.4 Civil Work

- 8.4.1. The required civil work for the system is under the City of Grand Island's scope of supply.

8.5 Installation

- 8.5.1. Unloading, storage, and installation services.
- 8.5.2. Foundations, anchor bolts, structures and equipment on which the Vendor's equipment will be installed.
- 8.5.3. Insulation and/or heat tracing where required.
- 8.5.4. All solutions and chemicals for start up and operation.

8.6 Power Supply

- 8.6.1. Supply 480 VAC – 60 amp power for operation of the system.

8.7 System Grounding

- 8.7.1. Grounding of the system.

8.8 Air Supply

8.8.1. Supply Instrument air for operation of the system.

8.8.2. System Operating Personnel

8.8.2.1. Plant personnel will be appointed by the City of Grand Island to provide monitoring and maintenance of the system on an on-going basis.

8.8.3. Chemical & Utility Consumption

8.8.3.1. **Consumption per 1000 US gal of demineralized water produced as per the water analysis stated in section 5.1.1:**

8.8.3.2. Vendor shall provide estimates for chemical and utility consumptions and operating/maintenance costs for their proposed demineralization system.

Chemical:

Antiscalent (neat)	--	USgal
Sulfuric Acid (as 96% w/w)	--	USgal
Sodium Hydroxide (as 50% w/w)	--	USgal

Waste:

Reverse Osmosis	--	USgal
Demineralizer Train	--	USgal

Electrical:

Reverse Osmosis	--	kWh
Demineralizer Train	--	kWh
Misc. pumps, etc.	--	kWh

Compressed Air:

Instrument-	--SCF	
Saturated Steam at 75 psig:		
Warm Water Heating System	--	lbs

8.9 Preliminary Equipment Specifications

8.9.1. Purchaser's preferred specifications for the process equipment are included in the following subsections.

9. Reverse Osmosis Equipment Specifications

9.1.1. Pre-assembled, automatic reverse osmosis system for freshwater applications, skid mounted, complete with membrane modules, feed water pump, valves, and on-skid instrumentation.

Vessels and Housing

Item	Specifications
Design Conformance	In accordance to ASME coding Section X
Housing Dimensions	20.3 cm diameter
Elements per housing	6
Test pressure	1.3 times design
Connections	Victaulic, Side Port
Material of Construction	Fiberglass

Membrane Elements

Item	Specifications
Membrane type	Spiral wound, composite polyamide
Element Dimensions	20.3 cm diameter, 152.4 cm long

Skid Frame

Item	Specifications
Material of construction	Welded carbon steel
Exterior finish	Sand blasted to SSPC-SP5 (near white metal) and painted with two part epoxy 6-8 mil (0.152 – 0.204 mm)
Seismic Design	International Building Code 2016 $S_s=12.6$, $S_1=4.1$

Piping

Item	Specifications
Feed and Reject Piping Material of Construction	304 stainless steel
Permeate Piping Material of Construction	PVC
Test pressure	1.5 times design
Instrument Air Tubing Material of Construction	Polyethylene with polypropylene fittings

Feed Pump

Item	Specifications
Type	Centrifugal
Material of construction	Stainless steel
Motor	High efficiency TEFC, VFD, 460V, 3 phase, 2900 rpm (60 Hz)
Seal	Single, mechanical

Valves

Item	Specifications
Valve Type	2" and above: wafer type butterfly valves, rubber lined metal body with stainless steel disc c/w air to open spring closed actuator. Below 2": diaphragm or ball valve, c/w spring closed actuator. Modulating feed and reject valves.
Tags	Engraved phenolic attached with stainless steel chain
Position Switch	Not Included

Instrumentation**Flow Measurement**

Item	Specifications
Flowmeter type	Magnetic on Feed, Paddlewheel on Permeate
Quantity	Two: feed and permeate flow
Panel display	Digital (4-20mA)

Pressure Gauges

Item	Specifications
Type	Glycerine filled, dial indication, Bourdon tube gauge with stainless steel case and internals, 100 mm (4") diameter
Quantity	Three (3)
Location	Inlet of first stage Between the stages 3) Reject stream
Isolation valves	None

Pressure Control

Item	Specifications
Type	Feed pressure switch

Temperature Control

Item	Specifications
Type	Feed temperature switch

Electrical Control

Item	Equipment Specifications
Design Conformance	National Electrical Code
Certification of the Manufactured Panel	None
Control Panel Rating	NEMA 12
Power Supply Frequency	1 phase, 120V, 60 Hz
Control Voltage	24 VDC (internal power supply in panel)
Electrical Enclosure Material	Painted Steel
PLC, HMI and Communication	Allen Bradley MicroLogix PLC with 6" greyscale touchscreen and Ethernet communication module
Conduit	Rigid PVC with short flexible runs where required
Lights/Switches	Allen Bradley 22 mm, NEMA 4X/IP64
Labels	English
Wire Marking	Computer generated label
Control Wire Size	16 AWG (1.25 mm ²)
Wire Termination	Tension Clamp Terminal Blocks with bare wire insertion

Demineralizer Equipment Specifications

Pre-assembled, skid-mounted two-bed (cation/anion) demineralizer, complete with fully charged resin beds, feed/regenerant water pump, automatic valves, on-skid regenerant dilution, instrumentation and controls. Factory tested prior to shipment.

Vessels

Item	Equipment Specifications
Design Conformance	In accordance to ASME coding Section VIII, Div. 1, strength formulas
Test Pressure	1.3 times design pressure (per ASME guidelines)
Thermal Relief Valves	Not Included
Material of Construction	Carbon steel
Internal Lining	5 mm (3/16") butyl rubber
Fasteners	Zinc plated carbon steel
Exterior Finish	Sand blasted to SSPC-SP10 (near white metal), and painted with two part epoxy 6 mil (0.152 mm) minimum
Exterior Color	Light Gray

Cation Exchange Resin

Item	Equipment Specifications
Bed Diameter	TBD

Anion Exchange Resin

Item	Equipment Specifications
Bed Diameter	TBD

Skid Frame

Item	Equipment Specifications
Material of Construction	Welded carbon steel
Exterior Finish	Sand blasted to SSPC-SP6 (near white metal), and painted with two part epoxy 4-8 mils (0.1-0.2 mm), paint suitable for exposure to salt and sand laden air
Seismic Design	International Building Code 2016 $S_s=12.6$, $S_1=4.1$

Piping

Item	Equipment Specifications
Main Piping Material of Construction	304 stainless steel
Acid Piping Material of Construction	304 stainless steel
Caustic Piping Material of Construction	304 stainless steel
Test Pressure	1.5 times design pressure for metal 1.0 times design pressure for plastic

Valves

Item	Equipment Specifications
Valve Type	2" and above: wafer type butterfly valves, rubber lined metal body with stainless steel disc c/w air to open spring closed actuator. Below 2": diaphragm or ball valve, c/w spring closed actuator.
Tags	Engraved phenolic attached with stainless steel chain
Limit Switches	Not Included

Air Solenoids

Item	Equipment Specifications
Type	Sliding soft seat spool
Instrument/Air Tubing Material of Construction	Polyethylene with polypropylene fittings

Air Requirements

Item	Equipment Specifications
Operating Pressure - Minimum	5.6 kg/cm ² (80 psi)
Operating Pressure - Maximum	7.0 kg/cm ² (100 psi)

Water Pump

Item	Equipment Specifications
Type	Centrifugal Pump
Material of Construction	Stainless steel
Motor	High efficiency TEFC, VFD, 3 phase, 460V, 2900 rpm (60 Hz)
Seal	Single mechanical

Caustic Injection Pump

Item	Equipment Specifications
Type	Air operated diaphragm pump or functional alternate
Material of Construction	Polypropylene body with teflon diaphragm

Acid Injection Pump

Item	Equipment Specifications
Type	Air operated diaphragm pump or functional alternate
Material of Construction	Polypropylene body with teflon diaphragm

Instrumentation**Flow Measurement**

Item	Equipment Specifications
Flowmeter Type	Paddlewheel / Turbine Sensor
Location	Two (2) sensors: one (1) vortex for water flow one (1) vortex for regeneration/rinse
Panel Display	Digital

Pressure Gauges

Item	Equipment Specifications
Type and Size	Glycerine filled, dial indication, Bourdon tube gauge with stainless steel case and internals 100 mm (4") diameter dial for location 3, 4, 5, 6 60 mm (2 ½") dial for location 1 & 2

Electrical Control

Item	Equipment Specifications
Design Conformance	National Electrical Code
Certification of the Manufactured Panel	None
Control Panel Rating	NEMA 12
Power Supply Frequency	1 phase, 120V, 60 Hz
Control Voltage	24 VDC (internal power supply in panel)
Electrical Enclosure Material	Painted Steel
PLC, HMI and Communication	Allen Bradley PLC with touchscreen and Ethernet communication module
Conduit	Rigid PVC with short flexible runs where required
Lights/Switches	Allen Bradley 22 mm, NEMA 4X/IP64
Labels	English
Wire Marking	Computer generated label
Control Wire Size	16 AWG (1.25 mm ²)
Wire Termination	Tension Clamp Terminal Blocks with bare wire insertion

Central Control

Item	Equipment Specifications
Design Conformance	National Electrical Code
Certification of the Manufactured Panel	None
Control Panel Rating	NEMA 12
Power Supply Frequency	1 phase, 120V, 60 Hz
Control Voltage	24 VDC (internal power supply in panel)
Electrical Enclosure Material	Painted Steel
PLC, HMI and Communication	Allen Bradley PLC with 17" TFT touchscreen with windows software and Ethernet communication module

Conduit	Rigid PVC with short flexible runs where required
Lights/Switches	Allen Bradley 22 mm, NEMA 4X/IP64
Labels	English
Wire Marking	Computer generated label
Control Wire Size	16 AWG (1.25 mm ²)
Wire Termination	Tension Clamp Terminal Blocks with bare wire insertion

10. Warranty

The Contractor shall warrant the material and workmanship against defects for a minimum of one year from the date placed in-service by the City. Details of all proposed warranties shall be submitted with the bid.

11. Qualifications

The manufacturer shall be a firm specializing in the design of water treatment equipment used in the power generation industry. A reference list of projects of similar scope and complexity shall be provided with the Bid. A list of intended major water treatment components and their source of supply shall be included with the proposal. Items provided by outsourced manufacturing, independent of the label applied to the component, shall be specifically identified as such.

12. Schedule

The completed equipment shall be delivered no later than June 1st, 2020 with an approval to be given by January 25th, 2020.

13. Installation

Installation is to be provided by City of Grand Island. The new system is to be mounted on a trailer to allow for emergency water production with similar water quality.

14. Service Rates

The Contractor shall include a firm lump sum price for providing the specified equipment, supervision, expenses, and all other standard terms and conditions.

The Platte Generating Station is NOT tax exempt and is subject to 7.5% sales tax. See the Nebraska Department of Revenue web site at www.revenue.state.ne.us for contractor's tax information. Applicable taxes shall be included in the proposal price and identified separately on the bidders proposal form.

15. Invoicing

When equipment and similar goods are purchased that cannot immediately be put into operation, the City reserves the right to withhold from payment of such invoice retainage of 10% of the amount pending approval of the operation of such equipment and/or goods. The retainage shall be paid after it is verified that the construction is completed and the system operates satisfactorily.

16. Bid Evaluation

Bids will be evaluated on initial equipment cost, annual chemical and power consumption, space requirements, and installation requirements.

17. Submittals Required

Supplier shall submit the following documentation for review with the bid:

1. References for at least 3 projects of a similar scope, including a description, name, and phone contact.
2. Delivery schedule.
3. Details of the proposed warranty.
4. Firm lump sum pricing.
5. Firm unit pricing for temporary water treatment based on 1000 treated gals, if unable to utilize new equipment for water production in a temporary location.
6. Chemical and power consumption for new system.
7. Dimensional layout required for equipment.

18. Contact

Questions may be directed to Lynn Mayhew at the Platte Generating Station, telephone 308-385-5494.

19. Insurance

The Contractor shall comply with the attached Insurance Requirements.

MINIMUM INSURANCE REQUIREMENTS
CITY OF GRAND ISLAND, NEBRASKA

The successful bidder shall obtain insurance from companies authorized to do business in Nebraska of such types and in such amounts as may be necessary to protect the Bidder and the interests of the City against hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations and completed operations. Failure to maintain adequate coverage shall not relieve Bidder of any contractual responsibility or obligation. Minimum insurance coverage shall be the amounts stated herein or the amounts required by applicable law, whichever are greater.

1. WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

This insurance shall protect the Bidder against all claims under applicable State workers compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The liability limits shall not be less than the following:

Workers Compensation	Statutory Limits
Employers Liability	\$100,000 each accident
	\$100,000 each employee
	\$500,000 policy limit

2. BUSINESS AUTOMOBILE LIABILITY

This insurance shall be written in comprehensive form and shall protect the Bidder, Bidder's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	\$ 500,000 Combined Single Limit
---------------------------------	----------------------------------

3. COMPREHENSIVE GENERAL LIABILITY

The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	\$ 500,000 each occurrence
	\$1,000,000 aggregate

4. UMBRELLA LIABILITY INSURANCE

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	\$1,000,000 each occurrence
	\$1,000,000 general aggregate

5. ADDITIONAL REQUIREMENTS

The City may require insurance covering a Bidder or subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

6. CERTIFICATE OF INSURANCE

Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this Contract. **The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the Bidder cannot have the "endeavor to" language stricken, the Bidder may elect to provide a new certificate of insurance every thirty (30) days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.**



Working Together for a
Better Tomorrow. Today.

BID SPECIFICATION PACKAGE

for

**BURDICK GENERATING STATION
WATER TREATMENT DEMINERALIZER SYSTEM**

C 128643

Bid Opening Date/Time

Tuesday, January 7, 2020 at 2:00 p.m. (local time)
City of Grand Island, City Hall
100 East 1st Street, P.O. Box 1968
Grand Island, NE 68802-1968

Contact Information

Lynn Mayhew
City of Grand Island – Utilities Department
Platte Generating Station
308/385-5496

Date issued: December 11, 2019

Option 1

**ADVERTISEMENT TO BIDDERS
FOR
WATER TREATMENT DEMINERALIZER SYSTEM
FOR
CITY OF GRAND ISLAND, NEBRASKA**

Sealed bids for Burdick Generating Station Water Treatment Demineralizer System will be received at the office of the City Clerk, 100 E. First Street, P.O. Box 1968, Grand Island, Nebraska 68802, until **Tuesday, January 7, 2020 at 2:00 p.m. local time**, FOB the City of Grand Island, freight prepaid. Bids will be publicly opened at this time in the Grand Island City Hall City Clerk's Office located on 1st floor of City Hall. **Submit an original and three copies if submitting by mail.** Bid package and any Addendas are also available on-line at www.grand-island.com under Business-Bids and Request for Proposals-Bid Calendar under the bid opening date. Bidding documents, plans and specifications for use in preparing bids may be downloaded from the QuestCDN website www.QuestCDN.com for a fee. Submitting through QuestCDN requires one original document of the bid to be uploaded. **Bids received after the specified time will not be considered.**

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Successful bidder shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Each bidder shall submit with the bid a certified check, a cashiers check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. **Your certified check, cashiers check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid.** Each envelope must be clearly marked indicating its contents. **Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered.** Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The Purchaser reserves the right to reject any or all bids, to waive irregularities therein, and to accept whichever bid that may be in the best interest of the City, at its sole discretion.

No bidder may withdraw his/her bid for a period of thirty (30) days after date of bid opening.

RaNae Edwards, City Clerk

Advertised

(All bids must be submitted on this form)

BURDICK GENERATING STATION
WATER TREATMENT DEMINERALIZER SYSTEM
BID DATA FORM

CITY OF GRAND ISLAND
 GRAND ISLAND, NE

The undersigned Bidder, having examined all specifications and other bidding documents, and all addenda thereto, and being acquainted with and fully understanding all conditions relative to the specified materials and equipment, hereby proposes to provide equipment, shipping, start up assistance and training for a water treatment system for the Burdick Generating Station FOB the City of Grand Island, freight prepaid, at the following price:

<u>ITEM DESCRIPTION</u>	<u>EXTENDED COST</u>
Base Bid:	
Material	\$ <u>88,750.00</u>
Labor	\$ <u>8,475.00</u>
Applicable Sales tax*	\$ <u>7,291.88</u>
Total Base Bid	\$ <u>104,516.88</u>

* If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

☐ **Exceptions Noted** - Bidder acknowledges there are *Exceptions* and/or *Clarifications* noted to the above bid, and those exceptions are fully explained on a separate sheet, clearly marked, and included with the Bid.

Consolidated Water Solutions 12-31-19
 Bidder Company Name Date

10100 J St. Omaha NE 68127
 Company Address City State Zip

Amber Thompson Amber Thompson
 Print Name of Person Completing Bid Signature

Email: athompson@consolidated Telephone No. 402-697-7800
h2o.com

According to Nebraska Sales and Use Tax Requirements, Section 1-017, Contractors, check which option you have selected to file with the Nebraska Department of Revenue:

Nebraska law provides a sales and use tax exemption on contractor labor charges for the construction, repair, or annexation of any structure used for the generation, transmission, or distribution of electricity. Separately stated contractor labor would be exempt, all materials are taxable according to the contractor's option.

Option 1 (Section 1-017.05) _____ Option 2 (Section 1-017.06) _____ Option 3 (Section 1-017.07) _____

If the Nebraska sales and use tax election is not filed or noted above, the contractor will be treated as a retailer under Option 1 for sales and use tax purposes.

☒ By checking this box, Bidder acknowledges the specified completion date of the project is **June 1, 2020**.

☒ By checking this box, Bidder acknowledges that Addenda Number(s) 0 were received and considered in Bid preparation.

Note: If Bidder supplies individual unit pricing information as supplemental pricing to the base material and labor cost above, said individual pricing is proprietary information and should not be released under a public records request. The total base bid is not considered proprietary information and will be released pursuant to City Procurement Code.

CHECKLIST FOR BID SUBMISSION
FOR
BURDICK GENERATING STATION
WATER TREATMENT DEMINERALIZER SYSTEM

Bids must be received by the City Clerk before 2:00 p.m. on Tuesday, January 7, 2020.

The following items must be completed for your bid to be considered.

- ☐ Submittal of bid documents:
 - ☐ **Option 1 – Mailing:** A signed original and three (3) copies of the bidding documents. Failure to submit the correct number of copies may result in your bid not being considered.
 - ☐ Note: Your certified check, cashiers check or bid bond should be clearly marked in a separate envelope attached to the signed original bid.
 - ☐ **Option 2 – QuestCDN (online):** Purchase the bid specification through QuestCDN. Upload the signed original of the Bid Data Form, along with any supporting material required to meet the bid specification through QuestCDN. Upload your bid bond online through QuestCDN. *Bidders using Certified check or Cashiers' Check must mail said check to the office of the City Clerk no later than the scheduled bid opening date and time and clearly marked with the project name.*
- ☐ Bidders must complete and sign the Bid Data Form provided in these Documents. All blank spaces must be filled in. Bidders shall acknowledge receipt of any Addenda information on the Bid Data Form.
- ☐ Selection of Nebraska Sales Tax Option. If the Nebraska sales and use tax election is not filed or noted above, the Contractor will be treated as a retailer under Option 1 for sales and use tax purposes.
- ☐ A reference list of at least three (3) projects of similar scope and complexity.
- ☐ Firm lump sum pricing; firm unit pricing in case adjustments are necessary, and breakout of sales tax pricing.
- ☐ Firm unit pricing for temporary water treatment based on 1000 treated gallons, if unable to utilize new equipment for water production in a temporary location.
- ☐ A proposed delivery schedule.
- ☐ Details of the proposed warranty.
- ☐ Chemical and power consumption for new system.
- ☐ Dimensional layout required for equipment
- ☐ Any exceptions to the specification or Owner's Contract Document.
- ☐ Acknowledgment of Addenda Number(s) _____.

Please check off each item as completed to ensure compliance. If you have any questions, please feel free to contact our office prior to the bid opening date/time.

INSTRUCTIONS TO BIDDERS

1. GENERAL INFORMATION.

The following instructions outline the procedure for preparing and submitting Bids. Bidders must fulfill all requirements as specified in these Documents.

2. TYPE OF BID.

Bidders shall be required to submit prices for all items listed in the Bid Data Form.

3. PREPARATION OF BIDS.

Bidders shall use only the Bid Data Form provided in these Documents. All blank spaces in the Bid Data Form must be filled in, preferably in BLACK ink, in both words and figures where required. No changes to the wording or content of the forms is permitted. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures.

Prices stated shall be f.o.b. with freight and full insurance paid by Bidder, to the job site located in Grand Island, Nebraska.

The Bidder shall acknowledge receipt of all Addenda in the Bid Data Form. Bids received without acknowledgement or without the Addendum enclosed will be considered informal.

Individual unit pricing as listed on the Bid Data Form or supplied as supplemental information may be deemed proprietary information and not be released under a public records request. The total amount of the bid is not considered proprietary information and will be released pursuant to City Procurement Code.

4. SUBMISSION OF BIDS.

All Bids must be submitted intact with the correct number of copies no later than the time prescribed, at the place, and in the manner set forth in the ADVERTISEMENT FOR BIDS. Bids must be made on the Bid Data Form provided herein. Each Bid mailed must be submitted intact in a sealed envelope, so marked as to indicate its contents without being opened, and delivered in person or addressed and mailed in conformance with the instructions in the ADVERTISEMENT FOR BIDS.

5. BID SECURITY.

Bids must be accompanied by cash, a certified check, or cashier's check drawn on a bank which is insured by the Federal Deposit Insurance Corporation, or a bid bond issued by a Surety authorized to issue such bonds in the state where the Work is located, in the amount of 5 percent of the bid amount payable to OWNER. This bid security shall be given as a guarantee that the Bidder will not withdraw their Bid for a period of thirty (30) days after bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish a properly executed Performance Bond and Payment Bond, each in the full amount of the Contract price, within the time specified.

The Attorney-in-Fact that executes this bond on behalf of the Surety must attach a notarized copy of his/her power of attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond. Where State Statute requires, certification by a resident agent shall also be provided.

6. RETURN OF BID SECURITY.

Within fifteen (15) days after the award of the Contract, the OWNER will return the bid securities to all Bidders whose Bids are not to be further considered in awarding the Contract. All other retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than Bidders' bonds and guarantees which have been fortified, will be returned to the respective Bidders whose Bids they accompanied.

7. BASIS OF AWARD.

The award will be made by the OWNER on the basis of the Bid from the lowest responsive, responsible Bidder which, in the OWNER's sole and absolute judgment will best serve the interest of the OWNER. All Bids will be considered on the following basis:

Delivery time	Conformance with the terms of the Bid
Bid price	Documents
Cost of installation	
Suitability to project requirements	Responsibility and qualification of Bidder

The OWNER reserves the right to reject all Bids, or any Bid not in conformance with the intent of the Bid Documents, and to waive any informalities and irregularities in said Bids.

8. EXECUTION OF CONTRACT.

The successful Bidder shall, within fifteen (15) days after receiving notice of award, sign and deliver to the OWNER the Contract hereto attached together with the acceptable bonds as required in these Bid Documents. Within fifteen (15) days after receiving the signed Contract with acceptable bond(s) from the successful Bidder, the OWNER's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

9. PERFORMANCE AND PAYMENT BONDS.

The successful Bidder shall file with the OWNER Performance and Payment Bonds in the full amount (100 percent) of the Contract price, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the Work under this Contract, and to cover all guarantees against defective workmanship or materials, or both, for a period of one (1) year after the date of final acceptance of the Work by the OWNER. The Surety furnishing these bonds shall have a record of service satisfactory to the OWNER, be authorized to do business in the State where the OWNER's project is located and shall be named on the current list of approved Surety Companies, acceptable on Federal bonds as published by the Audit Staff, Bureau of Accounts, U.S. Treasury Department.

The Attorney-in-Fact (Resident Agent) who executes these bonds on behalf of the Surety must attach a notarized copy of his/her power-of-attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond.

10. TIME OF COMPLETION.

The time of completion of the Work to be performed under this Contract is the essence of the Contract. The time allowed for the completion of the Work is stated in the Bid Data Form.

11. GRATUITIES AND KICKBACKS.

City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

12. FISCAL YEAR.

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into by and between **[SUCCESSFUL BIDDER]**, hereinafter called the Contractor, and the **CITY OF GRAND ISLAND, NEBRASKA**, hereinafter called the City.

WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published for *BURDICK GENERATING STATION WATER TREATMENT DEMINERALIZER SYSTEM*; and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself/herself, or themselves, and its, his/her, or their successors, as follows:

ARTICLE I. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

1. This Contract Agreement.
2. City of Grand Island's Specification for this project.
3. **[NAME OF SUCCESSFUL BIDDER]** bid signed and dated **[DATE OF BID]**.

In the event of any conflict between the terms of the Contract Documents, the provisions of the document first listed shall prevail.

ARTICLE II. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract documents as listed in the attached General Specifications, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

ARTICLE III. That the City shall pay to the Contractor for the performance of the work embraced in this Contract and the Contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the Contract) of **[DOLLAR AMOUNT] (\$00.00)** for all services, materials, and work covered by and included in the Contract award and designated in the foregoing Article II; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

The total cost of the Contract includes:

Base Bid:	\$.00
Sales Tax on Materials/Equipment:	\$.00
Sales Tax on Labor:	\$.00
Total	\$.00

Contractor Tax Option _____

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

ARTICLE IV. The Contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the Contractor. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The Contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the Contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of the BURDICK GENERATING STATION WATER TREATMENT DEMINERALIZER SYSTEM.

ARTICLE V. That the Contractor shall start work as soon as possible after the Contract is signed and the required bonds and insurance are approved, and that the Contractor shall deliver the equipment, tools, supplies, and materials F.O.B. Burdick Generating Station, and complete the work on or before **June 1, 2020**.

ARTICLE VI. The Contractor agrees to comply with all applicable State and local labor standards in the execution of this Contract as required by Section 7-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 7-107, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of this Contract, the Contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis, of race, color, religion, sex, national origin, age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations. The Contractor agrees to maintain a drug-free workplace policy and will provide a copy of the policy to the City upon request. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

ARTICLE VII. Gratuities and kickbacks: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter,

pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

[SUCCESSFUL BIDDER]

By _____ Date _____

Title _____

CITY OF GRAND ISLAND, NEBRASKA

By _____ Date _____
Mayor

Attest: _____
City Clerk

The Contract is in due form according to law and hereby approved

Attorney for the City Date _____

DRAFT



*Working Together for a
Better Tomorrow, Today.*

REQUEST FOR BIDS - GENERAL SPECIFICATIONS

The Bid shall be in accordance with the following and with all attached BID DATA and DETAILED SPECIFICATIONS.

All prices are to be furnished and installed FOB, Grand Island, Nebraska. **All prices shall be firm, and shall include all sales and use taxes as lawfully assessed under laws and regulations of the State of Nebraska.** * If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

Mailed bids shall include the following on the **outside** of the mailing envelope: **"Burdick Water Treatment Demineralizer System"**. All bids submitted by mail must include an original and three copies of the bid. The bid specification and on-line bidding forms are also available at <http://www.grand-island.com/business/bids-and-request-for-proposals/bid-calendar> under the bid opening date and "Click here for bid document link" through QuestCDN. If submitting through QuestCDN, one original document of the bid is required to be uploaded. No verbal bids will be considered. All sealed bids are due no later than Tuesday, **January 7, 2020 at 2:00 p.m. local time.** to:

Mailing Address: City Clerk
City Hall
P. O. Box 1968
Grand Island, NE 68802-1968

Street Address: City Clerk
City Hall
100 E. First Street
Grand Island, NE 68801

Bids will be opened at this time in the City Hall City Clerk's Office located on 1st floor of City Hall. Any bid received after the specified date will not be considered.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Contractor shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

*Platte Generating Station / 1035 W. Wildwood Drive / Box 1968 / Grand Island, Nebraska 68802-1968
Phone (308) 385-5496 / FAX (308) 385-5353*

The equipment and materials must be new, the latest make or model, unless otherwise specified. Prior to approving the invoice for payment, the City reserves the right to thoroughly inspect and test the equipment to confirm compliance with specifications. Any equipment or material which does not meet the City's requirements will be returned at vendor's expense for correction. The invoice will be paid after approval at the next regularly scheduled City Council meeting and occurring after departmental approval of invoice; the City Council typically meets the second and fourth Tuesday of each month. Invoices must be received well in advance of Council date to allow evaluation and processing time.

Each bidder shall submit with the bid a certified check, a cashier's check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the Bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. **Your certified check, cashier's check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid.** Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered. Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Successful bidder shall comply with the City's insurance requirements; performance and payment bonds are required for this project as outlined in the Detailed Specifications and Instructions to Bidders. All bids shall be valid for at least thirty (30) working days after the bid deadline for evaluation purposes.

All bids must be on the bid form and must be signed and dated to be accepted. If exceptions and/or clarifications are noted to the bid, those exceptions must be fully explained on a separate sheet, clearly marked, and included with the Bid. Any changes that are found made to the original bid specification, other than Owner generated Addendums, would result in your bid not being considered. Please contact Lynn Mayhew at 308-385-5495, for questions concerning this specification.

*Platte Generating Station / 1035 W. Wildwood Drive / Box 1968 / Grand Island, Nebraska 68802-1968
Phone (308) 385-5496 / FAX (308) 385-5353*

BURDICK GENERATING STATION **WATER TREATMENT DEMINERALIZER SYSTEM**

1. Scope

- 1.1 The manufacturer shall provide equipment, shipping, start up assistance and training for a water treatment system for the Burdick Generating Station to meet the water quality requirements stated in this specification.

2. Description

- 2.1 The Burdick Generating Station is located at 800 E. Biscield in Grand Island, Nebraska.

3. Process Detail and Technical Specification

3.1 Process Description

3.1.1. Raw feed water will be supplied at 20-30 psi (by Burdick Cooling water System) to the proposed water treatment system. The feed water will be sent through cartridge filters of 10 micron to remove residual suspended solids from the water. If the cooling water supply pressure is not great enough for the filters a feed booster pump should be supplied.

3.1.2. Filtered water will be treated with an anti-scalant. The water is then passed through Reverse Osmosis (RO) unit where the majority of the dissolved solids content is removed. Permeate is then delivered to the demineralizer unit that removes the remaining dissolved solids to produce very high purity water before being sent to the existing on-site Demineralized Water Storage Tank for downstream process use. The level in the tank will control the start up and shut down of the system.

3.1.3. Waste from the filters and reverse osmosis unit will be discharged to the City Sewer. If there is waste from the demineralizer unit, it is to be sent to a supplied waste neutralization system before being discharged by gravity to the City Sewer.

3.2 Sub-System Process Description

3.2.1. Key sub-system processes are described here:

3.2.2. Filtration

3.2.2.1. Water under pressure will feed the 10 micron cartridge filters for removal of suspended solids.

3.2.3. Antiscalent Addition

3.2.3.1. Due to the nature of the water it will be necessary to add antiscalent to prevent scaling on the RO membranes.

3.2.4. Reverse Osmosis

3.2.4.1. Reverse Osmosis (RO) uses semi-permeable membranes with very small pores, smaller than 0.001 μm . Water is able to diffuse across the membrane much more readily than dissolved solutes (salts). High feed water pressure is used to counteract the natural osmotic pressure enabling the passage of water from the side of high concentration (feed) of the membrane to the side of low concentration (permeate). A percentage of the water fed to the RO is discarded, as it will contain the

salts rejected by the RO membrane.

3.2.4.2. Membrane systems do experience fouling. Pre-filtration (see Filtration above) and an anti-scalant are employed to extend the performance of the RO membranes.

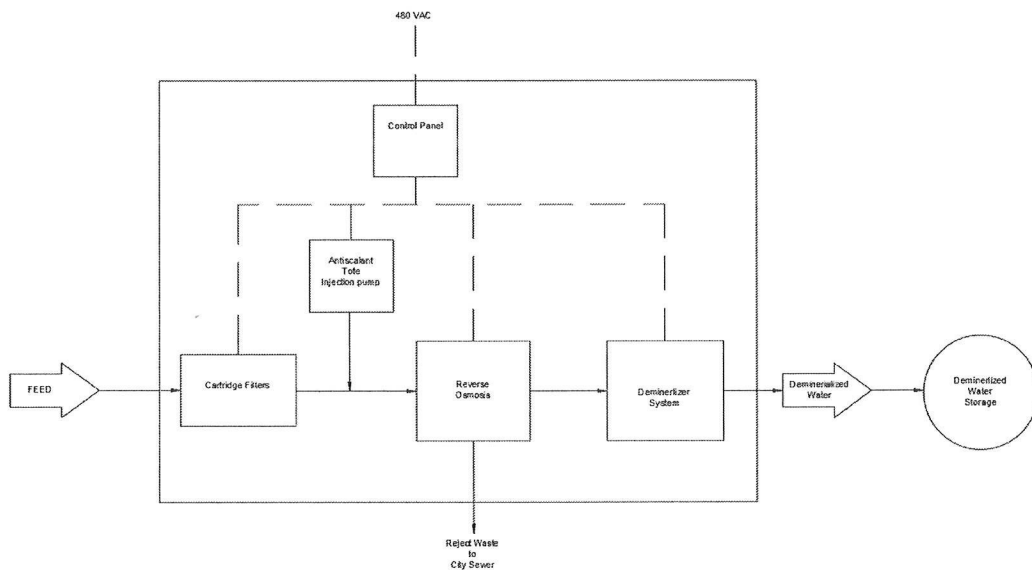
3.2.5. Demineralization

3.2.5.1. Filtered water is to be pumped through the demineralizer unit that will removed the dissolved impurities to meet the specified water quality and sent to the onsite water storage tank. Water quality shall be monitored and if not meeting specs be automatically discharged to waste.

3.2.6. Waste Neutralization System

3.2.6.1. A standard waste neutralization system is required if on site regeneration of the demineralizer system is required.

4. Process Schematic Drawing



5. Basis of Design

5.1 Water Analysis

5.1.1. The system is to be designed based on the Burdick Cooling water system supplied water analysis; some assumptions may need to be made.

Parameter	Units	Design
Temperature	° Fahrenheit	55 – 60
		6.8 – 7.8
Total Organic Carbon	mg/L as C	Not indicated
Turbidity	NTU	0.3
Barium	mg/L as Ba	0.01 – 0.16
Calcium	mg/L as Ca	120-280
Chloride	mg/L as Cl	23 – 34.5
Fluoride	mg/L as F	0.4 – 0.5
Free chlorine	mg/L as Cl ₂	Not indicated
M-Alkalinity	mg/L as HCO ₃	180 – 230

Magnesium	mg/L as Mg	23
Nitrate	mg/L as NO ₃	5.1 – 76
Potassium	mg/L as K	6.0
Silica	mg/L as SiO ₂	16 – 25
Sodium	mg/L as Na	43 – 69
Strontium	mg/L as Sr	0.58 – 0.77
Sulfate	mg/L as SO ₄	150 – 220

6. System Performance

6.1 For treatment of water outlined in section 6.3, the system product quality and flow will be as follows:

6.2 System Demineralized Product Flow:

Average Net Product per Train 50 US gpm

Number of Trains:

Filtration	1
Reverse Osmosis	1
Ion Exchange (demineralizer)	1

Redundancy of Trains:

(100% = 55 USgpm product flow)

Filtration	1 x 100%
Reverse Osmosis	1 x 100%
Ion Exchange	1 x 100%

6.3 Quality:

Parameter	Units	Design
Specific Conductivity	µS/cm	< 0.1
Silica	mg/L as SiO ₂	≤ 0.010
Total Trace Metals (Sodium+potassium+lithium+lead)	ppm	5 max
Total of both dissolved and undissolved solids	ppm	5 max

The average net demineralized water discharge flow-rate in USgpm shall be calculated as the quantity of demineralized water produced over a 24-hour period divided by 24 hours.

7. Scope of Supply

7.1 Vendor shall propose to supply a system that will provide water as described in Section 6.3 of this proposal.

7.2 Demineralization System Equipment

- 7.2.1. One (1 x 100%) Cartridge Filters, complete with elements, fittings, inlet pressure gauge and common differential pressure switch;
- 7.2.2. One (1) Antiscalant addition system with two (1 x 100%) metering pumps, fittings and stand;
- 7.2.3. One (1 x 100%) RO Train consisting of the following:
 - 7.2.4. One (1) Centrifugal RO feed pump with motor and fittings;
 - 7.2.5. RO vessels each containing six (6) elements.
 - 7.2.6. Stainless steel piping for the feed and reject lines
 - 7.2.7. PVC piping on permeate line
 - 7.2.8. Instrument air tubing;

- 7.2.9. Modulating control valves on the feed and reject lines;
- 7.2.10. Flow transmitters on the feed and reject lines;
- 7.2.11. Conductivity controller on the permeate line;
- 7.2.12. One (1 x 100%) Demineralizer Train
- 7.2.13. One (1) Control System complete with the following:
- 7.2.14. NEMA 12 Control Panels
- 7.2.15. Distributed Control Panels on each RO and demineralizer skid with Allen Bradley PLC, touchscreen and Ethernet communication module
- 7.2.16. Central Control Panel with Allen Bradley PLC, touchscreen and Ethernet communication module
- 7.2.17. Equipment Name Plates
- 7.2.18. 480 VAC Power will be connected into a single point.
- 7.2.19. 480/120 VAC transformer if required.
- 7.2.20. Motor starters / VFDs

7.3 System Services

- 7.3.1. Functionality testing at the factory.
- 7.3.2. One (1) factory representatives for on-site start-up and commissioning supervision and operator training.

7.4 Documentation

- 7.4.1. Three (3) Training manuals
- 7.4.2. Three (3) O&M manuals

8. Items Not Included in Scope of Supply

8.1 Chemical Supply

- 8.1.1. A supply of antiscalant, acid and caustic will be sourced locally. Based upon the consumption rates, Vendor should recommend what storage capacity will be required for suitable supply of chemistry.

8.2 Interconnecting Piping

- 8.2.1. The supply of piping, fittings (as required), and assembly between system equipment will be provided by City of Grand Island. Vendor shall supply interconnecting piping up to the boundaries of the supplied equipment skids.

8.3 Interconnecting Wiring

- 8.3.1. The supply of wiring, fittings (as required), and assembly between system equipment will be provided by City of Grand Island. Vendor shall supply interconnecting wiring up to the boundaries of the supplied equipment skids.

8.4 Civil Work

- 8.4.1. The required civil work for the system is under the City of Grand Island's scope of supply.

8.5 Installation

- 8.5.1. Unloading, storage, and installation services.
- 8.5.2. Foundations, anchor bolts, structures and equipment on which the Vendor's equipment will be installed.
- 8.5.3. Insulation and/or heat tracing where required.
- 8.5.4. All solutions and chemicals for start up and operation.

8.6 Power Supply

- 8.6.1. Supply 480 VAC – 60 amp power for operation of the system.

8.7 System Grounding

- 8.7.1. Grounding of the system.

8.8 Air Supply

8.8.1. Supply Instrument air for operation of the system.

8.8.2. System Operating Personnel

8.8.2.1. Plant personnel will be appointed by the City of Grand Island to provide monitoring and maintenance of the system on an on-going basis.

8.8.3. Chemical & Utility Consumption

8.8.3.1. Consumption per 1000 US gal of demineralized water produced as per the water analysis stated in section 5.1.1:

8.8.3.2. Vendor shall provide estimates for chemical and utility consumptions and operating/maintenance costs for their proposed demineralization system.

Chemical:

Antiscalent (neat)	--	USgal
Sulfuric Acid (as 96% w/w)	--	USgal
Sodium Hydroxide (as 50% w/w)	--	USgal

Waste:

Reverse Osmosis	--	USgal
Demineralizer Train	--	USgal

Electrical:

Reverse Osmosis	--	kWh
Demineralizer Train	--	kWh
Misc. pumps, etc.	--	kWh

Compressed Air:

Instrument-	--SCF	
Saturated Steam at 75 psig:		
Warm Water Heating System	--	lbs

8.9 Preliminary Equipment Specifications

8.9.1. Purchaser's preferred specifications for the process equipment are included in the following subsections.

9. Reverse Osmosis Equipment Specifications

9.1.1. Pre-assembled, automatic reverse osmosis system for freshwater applications, skid mounted, complete with membrane modules, feed water pump, valves, and on-skid instrumentation.

Vessels and Housing

Item	Specifications
Design Conformance	In accordance to ASME coding Section X
Housing Dimensions	20.3 cm diameter
Elements per housing	6
Test pressure	1.3 times design
Connections	Victaulic, Side Port
Material of Construction	Fiberglass

Membrane Elements

Item	Specifications
Membrane type	Spiral wound, composite polyamide
Element Dimensions	20.3 cm diameter, 152.4 cm long

Skid Frame

Item	Specifications
Material of construction	Welded carbon steel
Exterior finish	Sand blasted to SSPC-SP5 (near white metal) and painted with two part epoxy 6-8 mil (0.152 – 0.204 mm)
Seismic Design	International Building Code 2016 $S_s=12.6$, $S_1=4.1$

Piping

Item	Specifications
Feed and Reject Piping Material of Construction	304 stainless steel
Permeate Piping Material of Construction	PVC
Test pressure	1.5 times design
Instrument Air Tubing Material of Construction	Polyethylene with polypropylene fittings

Feed Pump

Item	Specifications
Type	Centrifugal
Material of construction	Stainless steel
Motor	High efficiency TEFC, VFD, 460V, 3 phase, 2900 rpm (60 Hz)
Seal	Single, mechanical

Valves

Item	Specifications
Valve Type	2" and above: wafer type butterfly valves, rubber lined metal body with stainless steel disc c/w air to open spring closed actuator. Below 2": diaphragm or ball valve, c/w spring closed actuator. Modulating feed and reject valves.
Tags	Engraved phenolic attached with stainless steel chain
Position Switch	Not Included

Instrumentation**Flow Measurement**

Item	Specifications
Flowmeter type	Magnetic on Feed, Paddlewheel on Permeate
Quantity	Two: feed and permeate flow
Panel display	Digital (4-20mA)

Pressure Gauges

Item	Specifications
Type	Glycerine filled, dial indication, Bourdon tube gauge with stainless steel case and internals, 100 mm (4") diameter
Quantity	Three (3)
Location	Inlet of first stage Between the stages 3) Reject stream
Isolation valves	None

Pressure Control

Item	Specifications
Type	Feed pressure switch

Temperature Control

Item	Specifications
Type	Feed temperature switch

Electrical Control

Item	Equipment Specifications
Design Conformance	National Electrical Code
Certification of the Manufactured Panel	None
Control Panel Rating	NEMA 12
Power Supply Frequency	1 phase, 120V, 60 Hz
Control Voltage	24 VDC (internal power supply in panel)
Electrical Enclosure Material	Painted Steel
PLC, HMI and Communication	Allen Bradley MicroLogix PLC with 6" greyscale touchscreen and Ethernet communication module
Conduit	Rigid PVC with short flexible runs where required
Lights/Switches	Allen Bradley 22 mm, NEMA 4X/IP64
Labels	English
Wire Marking	Computer generated label
Control Wire Size	16 AWG (1.25 mm ²)
Wire Termination	Tension Clamp Terminal Blocks with bare wire insertion

Demineralizer Equipment Specifications

Pre-assembled, skid-mounted two-bed (cation/anion) demineralizer, complete with fully charged resin beds, feed/regenerant water pump, automatic valves, on-skid regenerant dilution, instrumentation and controls. Factory tested prior to shipment.

Vessels

Item	Equipment Specifications
Design Conformance	In accordance to ASME coding Section VIII, Div. 1, strength formulas
Test Pressure	1.3 times design pressure (per ASME guidelines)
Thermal Relief Valves	Not Included
Material of Construction	Carbon steel
Internal Lining	5 mm (3/16") butyl rubber
Fasteners	Zinc plated carbon steel
Exterior Finish	Sand blasted to SSPC-SP10 (near white metal), and painted with two part epoxy 6 mil (0.152 mm) minimum
Exterior Color	Light Gray

Cation Exchange Resin

Item	Equipment Specifications
Bed Diameter	TBD

Anion Exchange Resin

Item	Equipment Specifications
Bed Diameter	TBD

Skid Frame

Item	Equipment Specifications
Material of Construction	Welded carbon steel
Exterior Finish	Sand blasted to SSPC-SP6 (near white metal), and painted with two part epoxy 4-8 mils (0.1-0.2 mm), paint suitable for exposure to salt and sand laden air
Seismic Design	International Building Code 2016 $S_s=12.6$, $S_1=4.1$

Piping

Item	Equipment Specifications
Main Piping Material of Construction	304 stainless steel
Acid Piping Material of Construction	304 stainless steel
Caustic Piping Material of Construction	304 stainless steel
Test Pressure	1.5 times design pressure for metal 1.0 times design pressure for plastic

Valves

Item	Equipment Specifications
Valve Type	2" and above: wafer type butterfly valves, rubber lined metal body with stainless steel disc c/w air to open spring closed actuator. Below 2": diaphragm or ball valve, c/w spring closed actuator.
Tags	Engraved phenolic attached with stainless steel chain
Limit Switches	Not Included

Air Solenoids

Item	Equipment Specifications
Type	Sliding soft seat spool
Instrument/Air Tubing Material of Construction	Polyethylene with polypropylene fittings

Air Requirements

Item	Equipment Specifications
Operating Pressure - Minimum	5.6 kg/cm ² (80 psi)
Operating Pressure - Maximum	7.0 kg/cm ² (100 psi)

Water Pump

Item	Equipment Specifications
Type	Centrifugal Pump
Material of Construction	Stainless steel
Motor	High efficiency TEFC, VFD, 3 phase, 460V, 2900 rpm (60 Hz)
Seal	Single mechanical

Caustic Injection Pump

Item	Equipment Specifications
Type	Air operated diaphragm pump or functional alternate
Material of Construction	Polypropylene body with teflon diaphragm

Acid Injection Pump

Item	Equipment Specifications
Type	Air operated diaphragm pump or functional alternate
Material of Construction	Polypropylene body with teflon diaphragm

Instrumentation**Flow Measurement**

Item	Equipment Specifications
Flowmeter Type	Paddlewheel / Turbine Sensor
Location	Two (2) sensors: one (1) vortex for water flow one (1) vortex for regeneration/rinse
Panel Display	Digital

Pressure Gauges

Item	Equipment Specifications
Type and Size	Glycerine filled, dial indication, Bourdon tube gauge with stainless steel case and internals 100 mm (4") diameter dial for location 3, 4, 5, 6 60 mm (2 ½") dial for location 1 & 2

Electrical Control

Item	Equipment Specifications
Design Conformance	National Electrical Code
Certification of the Manufactured Panel	None
Control Panel Rating	NEMA 12
Power Supply Frequency	1 phase, 120V, 60 Hz
Control Voltage	24 VDC (internal power supply in panel)
Electrical Enclosure Material	Painted Steel
PLC, HMI and Communication	Allen Bradley PLC with touchscreen and Ethernet communication module
Conduit	Rigid PVC with short flexible runs where required
Lights/Switches	Allen Bradley 22 mm, NEMA 4X/IP64
Labels	English
Wire Marking	Computer generated label
Control Wire Size	16 AWG (1.25 mm ²)
Wire Termination	Tension Clamp Terminal Blocks with bare wire insertion

Central Control

Item	Equipment Specifications
Design Conformance	National Electrical Code
Certification of the Manufactured Panel	None
Control Panel Rating	NEMA 12
Power Supply Frequency	1 phase, 120V, 60 Hz
Control Voltage	24 VDC (internal power supply in panel)
Electrical Enclosure Material	Painted Steel
PLC, HMI and Communication	Allen Bradley PLC with 17" TFT touchscreen with windows software and Ethernet communication module

Conduit	Rigid PVC with short flexible runs where required
Lights/Switches	Allen Bradley 22 mm, NEMA 4X/IP64
Labels	English
Wire Marking	Computer generated label
Control Wire Size	16 AWG (1.25 mm ²)
Wire Termination	Tension Clamp Terminal Blocks with bare wire insertion

10. Warranty

The Contractor shall warrant the material and workmanship against defects for a minimum of one year from the date placed in-service by the City. Details of all proposed warranties shall be submitted with the bid.

11. Qualifications

The manufacturer shall be a firm specializing in the design of water treatment equipment used in the power generation industry. A reference list of projects of similar scope and complexity shall be provided with the Bid. A list of intended major water treatment components and their source of supply shall be included with the proposal. Items provided by outsourced manufacturing, independent of the label applied to the component, shall be specifically identified as such.

12. Schedule

The completed equipment shall be delivered no later than June 1st, 2020 with an approval to be given by January 25th, 2020.

13. Installation

Installation is to be provided by City of Grand Island. The new system is to be mounted on a trailer to allow for emergency water production with similar water quality.

14. Service Rates

The Contractor shall include a firm lump sum price for providing the specified equipment, supervision, expenses, and all other standard terms and conditions.

The Platte Generating Station is NOT tax exempt and is subject to 7.5% sales tax. See the Nebraska Department of Revenue web site at www.revenue.state.ne.us for contractor's tax information. Applicable taxes shall be included in the proposal price and identified separately on the bidders proposal form.

15. Invoicing

When equipment and similar goods are purchased that cannot immediately be put into operation, the City reserves the right to withhold from payment of such invoice retainage of 10% of the amount pending approval of the operation of such equipment and/or goods. The retainage shall be paid after it is verified that the construction is completed and the system operates satisfactorily.

16. Bid Evaluation

Bids will be evaluated on initial equipment cost, annual chemical and power consumption, space requirements, and installation requirements.

17. Submittals Required

Supplier shall submit the following documentation for review with the bid:

1. References for at least 3 projects of a similar scope, including a description, name, and phone contact.
2. Delivery schedule.
3. Details of the proposed warranty.
4. Firm lump sum pricing.
5. Firm unit pricing for temporary water treatment based on 1000 treated gals, if unable to utilize new equipment for water production in a temporary location.
6. Chemical and power consumption for new system.
7. Dimensional layout required for equipment.

18. Contact

Questions may be directed to Lynn Mayhew at the Platte Generating Station, telephone 308-385-5494.

19. Insurance

The Contractor shall comply with the attached Insurance Requirements.

MINIMUM INSURANCE REQUIREMENTS
CITY OF GRAND ISLAND, NEBRASKA

The successful bidder shall obtain insurance from companies authorized to do business in Nebraska of such types and in such amounts as may be necessary to protect the Bidder and the interests of the City against hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations and completed operations. Failure to maintain adequate coverage shall not relieve Bidder of any contractual responsibility or obligation. Minimum insurance coverage shall be the amounts stated herein or the amounts required by applicable law, whichever are greater.

1. WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

This insurance shall protect the Bidder against all claims under applicable State workers compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The liability limits shall not be less than the following:

Workers Compensation	Statutory Limits
Employers Liability	\$100,000 each accident
	\$100,000 each employee
	\$500,000 policy limit

2. BUSINESS AUTOMOBILE LIABILITY

This insurance shall be written in comprehensive form and shall protect the Bidder, Bidder's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	\$ 500,000 Combined Single Limit
---------------------------------	----------------------------------

3. COMPREHENSIVE GENERAL LIABILITY

The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	\$ 500,000 each occurrence
	\$1,000,000 aggregate

4. UMBRELLA LIABILITY INSURANCE

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	\$1,000,000 each occurrence
	\$1,000,000 general aggregate

5. ADDITIONAL REQUIREMENTS

The City may require insurance covering a Bidder or subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

6. CERTIFICATE OF INSURANCE

Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this Contract. **The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the Bidder cannot have the "endeavor to" language stricken, the Bidder may elect to provide a new certificate of insurance every thirty (30) days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.**

PRICE QUOTATION

December 30th, 2019

Mr. Lynn Mayhew
City of Grand Island, City Hall
100 East 1st St
Grand Island, NE 68802

Re: Burdick Generating Station Water Treatment Demineralization System

Mr. Mayhew,

We are pleased to submit our technical specifications and price quotation for the 50-GPM Reverse Osmosis (RO) System you requested. It is in accordance with the technical parameters you submitted.

PROPOSED EQUIPMENT SUMMARY

1. CWS MRO-72K-8H-4L Single-Pass Reverse Osmosis (RO) Skid

- ☐ 72,000 Gallons per Day Design Product Water Output (50-GPM) at 50-55°F
- ☐ Qty (1) Grundfos 'CRI' 316SS Vertical Multi-Stage Feed Pump Assembly
- ☐ Qty (1) 20 Hp, 460 VAC, 3-Phase, 60 Hz Motor
- ☐ Capacity for (12) Thin-Film Composite Membrane Elements
- ☐ Qty (3) Codeline ASME Stamped, FRP Membrane Element Housings, 450 psig (4-Element Capacity)
***Alternatively (2) Codeline ASME Stamped, FRP Membrane Element Housings, 450 psig 6 - Element Capacity) can be accommodated at no additional price change
- ☐ Qty (1) 304 Stainless Steel Cartridge Prefilter Housing (5-micron Rating)
- ☐ Epoxy-Coated Structural Carbon Steel Skid/Frame Assembly
- ☐ 304 Stainless Steel Feed and Reject Pressure Piping & Valves (TIG Welded, Sch 10)
- ☐ Sch 80 PVC Product Water Piping & Valves
- ☐ Air-Actuated Butterfly System Inlet Valve
- ☐ Manually Operated Ball Valve for RO Pump Throttling
- ☐ Manually Operated Ball Valve for Reject Flow Control
- ☐ Air-Actuated Butterfly Valve for Membrane Flush Cycle
- ☐ Sampling Valves for Inlet, Product, Reject, and Individual Housing Product
- ☐ Allen-Bradley MicroLogix 1400 Programmable Logic Controller (PLC) Panel
- ☐ Allen-Bradley PanelView 800-7 Operator Interface Terminal (7" Color Screen)
- ☐ Ethernet/Modbus Interface Module for Remote Communication Capability
- ☐ High Pressure Feed Pump Variable Frequency Drive (VFD) with Fused Disconnect Switch
- ☐ NEMA-4 Electrical Enclosures, Painted Carbon Steel
- ☐ Signet Dual-Channel Digital Feed & Product Conductivity Transmitters
- ☐ Signet Digital Product and Reject Flow Transmitters & Sensors
- ☐ Pressure Transmitters for Low Inlet and High Membrane Feed Pressures with Alarm Outputs
- ☐ 316SS Liquid-Filled System Pressure Gauges
- ☐ 316SS Inlet Temperature Gauge
- ☐ Qty (1) Pre-Wired 120VAC Electrical Outlet for Operating Chemical Feed Pump
- ☐ Quick-Connect Style Hose Connections for CIP Feed and Discharge
- ☐ 316SS Inlet Temperature Gauge

- ❑ Qty (2) Pre-Wired 120VAC Electrical Outlets for Operating Chemical Feed Pumps
- ❑ Quick-Connect Style Hose Connections for CIP Feed and Discharge

2. Anti-Scalant Polymer Injection System (Membrane Scale Prevention)

- ❑ Qty (2) Electric Positive Displacement Chemical Injection Pumps (2x100%)
- ❑ PVC Wetted-End Construction
- ❑ 120 VAC, 1-Phase, 60 Hz Rating
- ❑ Pump Mounted to a Polyethylene Chemical Solution Day Tank Assembly (35-Gallon)
- ❑ Spare Metering Pump is Boxed and Shipped Loose.
- ❑ Includes Tank Level Switch with Alarm Output Contact

3. Jumbo Portable Exchange Type DI (PEDI) Tank- Mixed Bed Polishing

- ❑ Qty (1) 36" Diameter x 60" Sideshell Pressure Vessel- Carbon Steel
- ❑ Capacity for 35 cu.ft. Mixed Bed Ion Exchange Resin
- ❑ Non-Code Constructed, 100 psig Working Pressure
- ❑ Plasite 4110 Vinylester Interior Lining/Safety Blue Paint Finished Exterior
- ❑ Pre-Piped, Stainless Steel Upper/Lower Internal Distributor Piping Assemblies
- ❑ Two (2) 2.00-inch Pad Flanged Top/Bottom Head Connections
- ❑ Two (2) 2.00-inch Pad Flanged Upper/Lower Sideshell Service Connections
- ❑ One (1) 12" x 16" Lower Sideshell Manhole with Cover, Gasket, and Hardware
- ❑ Four (4) Welded Structural Strap Support Legs
- ❑ One (1) Carbon Steel Support Skid with Fork-Lift Pockets

4. RO Inlet Water Booster Pump System (If Required)

- ❑ Qty (1) 304SS Single-Stage Centrifugal Pump for Low Inlet Pressure Conditions (< 30 psig)
- ❑ 3.0 Hp, 460VAC, 3-Phase, 60 Hz, TEFC Motor
- ❑ Pre-Wired Pump Motor Starter with Fused Disconnect Switch
- ❑ Pump is Mounted, Pre-Piped, and Pre-Wired on the RO Skid

PRICE SUMMARY

Qty (1) CWS-MRO-72K-8H Single-Pass RO Skid (50-GPM)	\$68,965.00
Qty (1) Anti-Scalant Injection System (with spare metering pump)	Included w/ RO System
Qty (1) RO Inlet Water Booster Pump System	Included w/ RO System
Qty (1) 36x60 Portable Exchange Type Deionization (PEDI) Polisher	\$19,785.00
Engineering Drawings / Data / O&M Manuals	Included
NET PACKAGE PRICE:	\$ 88,750.00

PROJECT SCHEDULE

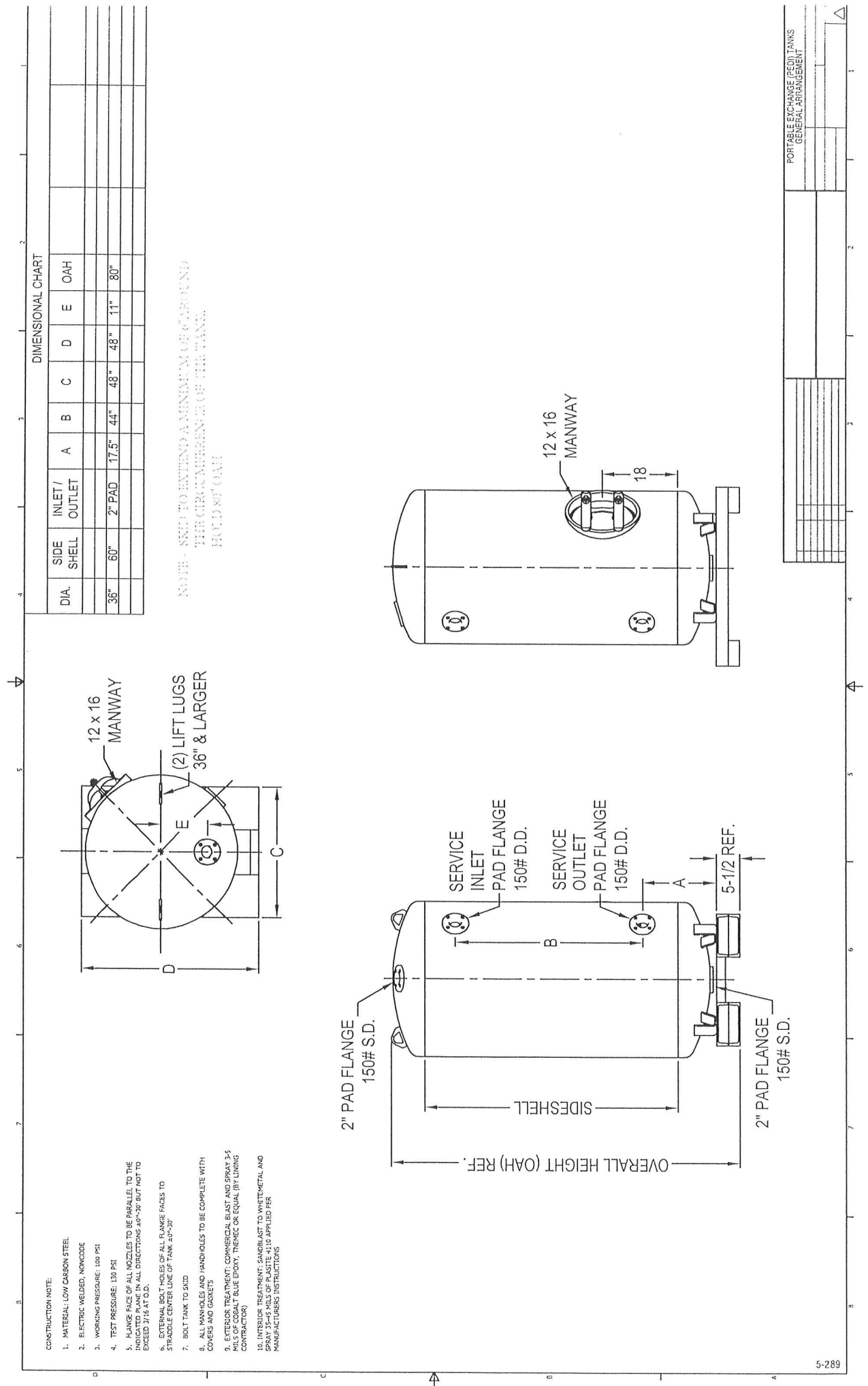
LEAD TIME:	9-11 weeks after submittal approval and fabrication release
TERMS:	Net 30 days after equipment shipment
F.O.B:	Factory. (Freight billed collect, third party, or customer pick-up) Separate freight charges will apply.

NOTES / CLARIFICATIONS

1. Proposal is for packaged process equipment only. Installation including all field interconnecting piping and wiring between equipment is not provided in the CWS scope of supply.
2. Any additional labor or training beyond 5 days of startup included per bid document can be performed by a CWS authorized service engineer is available at a rate of \$1,295.00 per day plus any additional travel and living expenses billed at cost. International destinations are subject to approval prior to ordering start-up services.
3. Equipment design and proposal price are subject to change based on deviations in the raw water feed quality, plant floor space allotment, and the availability/limitations of required plant utilities such as electrical power, compressed air, steam, and water pressure.
4. Membrane cleaning equipment or off-site cleaning services are to be provided by others.
5. The flow regulation valve and its controls of the treated water supply to any atmospheric storage tanks are to be provided by others.
6. RO/DI water storage tanks and RO/DI water transfer pumps are to be provided by others.
7. Prices are valid for 45 days.

Prepared By:

Duane Miller
President
Consolidated Water Solutions





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
1/2/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Arthur J. Gallagher Risk Management Services, Inc. 10050 Regency Circle Suite 300 Omaha NE 68114	CONTACT NAME: Claire Howe		
	PHONE (A/C, No, Ext): 402-829-1065	FAX (A/C, No): 402-810-6061	
	E-MAIL ADDRESS: Claire_Howe@aig.com		
INSURED Consolidated Water Solutions, Inc. 10100 J Street Omaha NE 68127	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A : Travelers Indemnity Co of America		25666
	INSURER B :		
	INSURER C :		
	INSURER D :		
	INSURER E :		
INSURER F :			

COVERAGES **CERTIFICATE NUMBER:** 1038066783 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	Y	Y	Y6300J429581	12/31/2018	12/31/2019	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			Y8100J429581	12/31/2018	12/31/2019	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			CUP0J457776	12/31/2018	12/31/2019	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	H0UB0J45429A17	12/31/2018	12/31/2019	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Sample Certificate for Bidding & Demonstration Purposes only. A properly completed certificate will be executed upon award of contract to Named Insured.

CERTIFICATE HOLDER Sample Certificate For Bidding & Demonstration Purposes Only ...	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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ACORD 25 (2016/03)

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Affiliates in Water Treatment Technologies

REFERENCES

Nebraska Public Power District
Canaday Station
Larry Bomberger
(308) 324-4581
50 GPM RO with DI Bottle

Ashley Energy
St. Louis, MO
Donald Peek
(314) 621-3550 ext 121
(3) 200 GPM RO Skids

CJ Foods
Burn, KS
Jeff Colby
(785) 294-4163
Custom 40K RO Machine with Softener

Tyson Fresh Meats
Dakota City, NE
Alfonso Alvarez
(605) 235-2061 ext. 3398

P.O. Box 24922 * Omaha, NE 68124 * 800.852.1150 * Fax 402.697.7828



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CONTRACT AGREEMENT

THIS AGREEMENT made and entered into by and between **CONSOLIDATED WATER SOLUTIONS**, hereinafter called the Contractor, and the **CITY OF GRAND ISLAND, NEBRASKA**, hereinafter called the City.

WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published for *BURDICK GENERATING STATION WATER TREATMENT DEMINERALIZER SYSTEM*; and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself/herself, or themselves, and its, his/her, or their successors, as follows:

ARTICLE I. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

1. This Contract Agreement.
2. City of Grand Island's Specification for this project.
3. Consolidated Water Solutions' bid signed and dated December 31, 2019.

In the event of any conflict between the terms of the Contract Documents, the provisions of the document first listed shall prevail.

ARTICLE II. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract documents as listed in the attached General Specifications, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

ARTICLE III. That the City shall pay to the Contractor for the performance of the work embraced in this Contract and the Contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the Contract) of **One Hundred Sixteen Thousand Three Hundred Fifty-Eight and no/100 Dollars (\$116,358.00)** for all services, materials, and work covered by and included in the Contract award and designated in the foregoing Article II; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

The total cost of the Contract includes:

Base Bid: Materials	\$	88,750.00	
Adjusted for larger demineralizer			10,215.00
Labor		8,475.00	
Sales Tax		8,918.00	
Total	\$	116,358.00	

Contractor Tax Option 1

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

ARTICLE IV. The Contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the Contractor. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The Contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the Contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of the BURDICK GENERATING STATION WATER TREATMENT DEMINERALIZER SYSTEM.

ARTICLE V. That the Contractor shall start work as soon as possible after the Contract is signed and the required bonds and insurance are approved, and that the Contractor shall deliver the equipment, tools, supplies, and materials F.O.B. **Burdick Generating Station**, and complete the work on or before **June 1, 2020**.

ARTICLE VI. The Contractor agrees to comply with all applicable State fair labor standards in the execution of this Contract as required by Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of this Contract, the Contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis, of race, color, religion, sex, national origin, age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations. The Contractor agrees to maintain a drug-free workplace policy and will provide a copy of the policy to the City upon request. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

ARTICLE VII. Gratuities and kickbacks: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a

purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

CONSOLIDATED WATER SOLUTIONS

By _____ Date _____

Title _____

CITY OF GRAND ISLAND, NEBRASKA

By _____ Date _____
Mayor

Attest: _____
City Clerk

The Contract is in due form according to law and hereby approved.

Attorney for the City

Date _____

RESOLUTION 2020-18

WHEREAS, the City of Grand Island invited sealed bids for Burdick Generating Station Water Treatment Demineralizer System, according to plans and specifications on file with the Utilities Department; and

WHEREAS, on January 7, 2020, bids were received, opened and reviewed; and

WHEREAS, Consolidated Water of Omaha, Nebraska, submitted a bid in accordance with the terms of the advertisement of bids and plans and specifications and all other statutory requirements contained therein, such bid being in the amount of \$116,358.00; and

WHEREAS, the bid of Consolidated Water is less than the estimate for Burdick Generating Station Water Treatment Demineralizer System.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the bid of Consolidated Water, in the amount of \$116,358.00 for the Burdick Generating Station Water Treatment Demineralizer System, is hereby approved as the lowest responsible bid.

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Adopted by the City Council of the City of Grand Island, Nebraska, January 28, 2020.

Roger G. Steele, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
January 24, 2020	☐ City Attorney