



**PARKS &
RECREATION
DEPARTMENT**

City Hall
Box 1968
Grand Island, NE 68802
(308) 385-5444 ext. 290

**SPECIFICATIONS
AND
BID DOCUMENTS**

**FURNISHING AND
INSTALLATION OF
GOLF COURSE
IRRIGATION VARIABLE
FREQUENCY DRIVE (VFD)**

**JACKRABBIT RUN
GOLF COURSE**

2013

**FURNISHING AND INSTALLATION OF
GOLF COURSE IRRIGATION VARIABLE FREQUENCY DRIVE (VFD)
FOR
JACKRABBIT RUN GOLF COURSE
PARKS AND RECREATION DEPARTMENT
CITY OF GRAND ISLAND, NEBRASKA**

Bid Package
Table of Contents

Advertisement to Bidders

Instruction to Bidders

Contractor Bid Form

Form of Contract Agreement

Form of Purchasing Agent Appointment

Form of Exempt Sale Certificate

Insurance Requirements

Minimum Bid Specifications

**ADVERTISEMENT TO BIDDERS
FOR
FURNISHING AND INSTALLATION OF
GOLF COURSE IRRIGATION VARIABLE FREQUENCY DRIVE (VFD)
FOR
JACKRABBIT RUN GOLF COURSE
CITY OF GRAND ISLAND, NEBRASKA**

Sealed bids will be received **at the office of the City Clerk**, 100 East First Street, Grand Island, Nebraska or P.O. Box 1968, Grand Island, Nebraska, 68802 until **2:30 p.m. (Local Time), February 19, 2013 for Furnishing and Installation of Golf Course Irrigation Variable Frequency Drive (VFD) for the Jackrabbit Run Golf Course**, FOB the City of Grand Island. Bids will be publicly opened at this time in the Conference Room #1 located on 1st floor of City Hall. Bids received after specified time will be returned unopened to sender.

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.

The award-winning bidder will be required to comply with the City's Insurance Requirements.

Bids will be evaluated by the Purchaser based on price, quality, warranty, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of 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 and to waive technicalities therein and to accept whichever bid that may be in the best interest of the City, at its sole discretion. All bidders must agree that such rejection shall be without liability on the part of the Purchaser or their consultant for any penalty brought by any bidder because of such rejections, nor shall the bidders seek recourse of any kind against the Purchaser or their Consultant because of such rejections. The filing of any bid in response to this invitation shall constitute an agreement by the bidder to these conditions.

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

Specifications for use in preparing bids may be obtained from the office of the Parks & Recreation Department, located in City Hall, 100 E. First St., Grand Island, NE 68801, 308-385-5444 extension 290. Bids shall be submitted on forms which will be furnished by the City.

RaNae Edwards, City Clerk

CITY OF GRAND ISLAND, NEBRASKA
FURNISHING AND INSTALLATION OF
GOLF COURSE IRRIGATION VARIABLE FREQUENCY DRIVE (VFD)
JACKRABBIT RUN GOLF COURSE

INSTRUCTIONS TO BIDDERS

EXCEPTIONS TO SPECIFICATIONS: Each bidder shall carefully check all requirements herein set forth and shall offer items which fully comply with these requirements or shall plainly set forth all points, features, conditions, specifications, etc., wherein his/her items offered do not meet these specifications. Such exceptions as are made shall be listed by page number in the following blanks and shall be marked in ink on the pages of these specifications. Exceptions shall be explained in detail in a letter accompanying the bid. Reference shall not be made to the bidder's proposal for exceptions and supplementary terms. Failure to outline such exceptions as specifically stated herein will require the successful bidder to comply with these specifications. In case of conflict between the bidder's proposal and these specifications, these specifications shall govern unless specific exceptions are listed by the bidder.

Exceptions to specifications, pages _____

SUBMISSION OF BIDS: All bids shall be submitted on the bid forms hereto attached, which shall remain with the complete Contract Documents as originally issued and **be addressed to the City Clerk**. Copies of addenda, if any, shall be signed plainly marked, "**BID FOR FURNISHING AND INSTALLATION OF GOLF COURSE IRRIGATION VARIABLE FREQUENCY DRIVE (VFD) – JACKRABBIT RUN GOLF COURSE - PARKS AND RECREATION DEPARTMENT**".

INSURANCE COVERAGE: The Contractor shall purchase and maintain at his/her expense as a minimum insurance coverage of such types and in such amounts as are specified herein to protect Contractor and the interest of Owner and others from claims which may arise out of or result from Contractor's operations under the Contract Documents, whether such operations be by Contractor or by any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. Failure of Contractor to maintain proper insurance coverage shall not relieve him/her of any contractual responsibility or obligation.

BASE BID: The bidder is expected to base his/her bids on materials and items complying fully with these specifications, and in the event he/she names in his/her bid materials or items which do not conform, he/she will be responsible for furnishing materials and items which fully conform at no change in his/her bid price.

ALTERNATE BIDS: It is the desire of the Owner that the bidder base his/her bid price for this project on the written specifications. If an alternate bid or bids are submitted by a bidder, it is desired that he/she first submit a bid price as above described and then describe his/her alternate proposal. Failure to do so may be reason for not extending any consideration to alternate proposals.

BIDDER QUALIFICATION: Bids will be received only from qualified bidders. A bidder will be considered qualified if he/she is a recognized supplier of materials and items similar to that specified herein. Bidder must comply with all applicable Federal, State and Local rules and regulations.

TAXES: The City of Grand Island is exempt from paying local City and State Sales Tax. Refer to Exempt Sale Certificate enclosed for your information. Contractor must pay any other tax which might be applicable.

REQUESTS FOR PAYMENT: The City of Grand Island will make payments only after approval at regularly scheduled City Council meetings. These meetings typically occur the second and fourth Tuesday each month. Requests for payment must be received no less than ten working days prior to the designated meeting to allow proper review and consideration. Payments will only be made after final completion of the project to City's satisfaction unless otherwise stated in bidding documents.

REQUEST FOR INTERPRETATION: If any person contemplating submitting a bid for this Contract is in doubt as to the true meaning of any part of the specifications or other proposed Contract documents, he/she may submit to the Purchasing Department a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addendum duly issued and/or delivered to each person receiving a set of such documents. The addenda upon closing shall become a part of the Contract. The Purchasing Department will not be responsible for any other explanation or interpretation of the proposed documents.

TIME OF COMPLETION: Time of completion is the essence of this Contract, and all work shall be completed **no later than April 1, 2013 unless "weather circumstances" prohibit working conditions.**

CLEANING UP: Contractor shall maintain a clean and safe work area while on site.

ADDENDA: Any addendum to the specifications issued during the time allowed for preparation of bids shall be covered in the bid and, upon closing, the Contract shall become a part of the specifications. One copy of each addendum issued before the date of the letting will be sent to all bidders. One signed copy of addendum is to be returned immediately to the Purchasing Department as acknowledgement of receipt.

MODIFICATION OF BIDS: Bids may be modified or withdrawn by an appropriate document duly executed in the manner that a bid must be executed and delivered to the place where bids are to be submitted at any time prior to the final time set for receiving bids. Bidders may modify or withdraw bids by Fax communication at any time prior to the time set for receiving bids provided this instruction is positively identified. Any Fax modification should not reveal the amended bid price but should provide only the addition, subtraction or other modifications. A duly executed document confirming the Fax modification shall be submitted within three days after bids are opened.

BID DATA: Bidders shall submit bid data, if required, on items offered in the bid by filling in one set of data sheets supplied by the Purchasing Department. The bid sheets shall be filled out legibly in ink to permit reproduction.

FINANCIAL STATEMENT: The bidder shall furnish upon request a complete financial statement signed by the bidder, if an individual, by all partners of the bidder if a partnership and, by the President or Secretary, if the bidder is a corporation.

EQUAL EMPLOYMENT OPPORTUNITY: The Contractor agrees that during the performance of this Contract not to discriminate in hiring or any other employment practice on the basis of race, color, religion, sex, disability or national origin, and to comply with Executive Order 11,246 of September 24, 1965, and the rules, regulations and relevant orders of the Secretary of Labor, and Chapter 20 of the Reissue Revised Statutes of the State of Nebraska.

LOCAL CONDITIONS: Each bidder shall have an authorized representative visit the site of the work and thoroughly inform himself/herself of all conditions and factors which would affect the work and the cost thereof, including the arrangement and conditions of existing or proposed structures affecting or affected by the proposed work; the procedure necessary for maintenance of uninterrupted operation; the availability and cost of labor and facilities for transportation, handling, and storage of materials and equipment.

It must be understood and agreed that all such factors have been investigated and considered in the preparation of every bid submitted. No claims for financial adjustment to any Contract awarded for the work under these Specifications and documents will be permitted by the City, which are based on lack of such prior information or its effect on the cost of the work.

CORRESPONDENCE: Correspondence regarding drawings, instruction manuals, and other engineering data shall be clearly marked "FOR PARKS & RECREATION DEPARTMENT" and sent through:

Todd McCoy
City of Grand Island
Parks & Recreation Department
P.O. Box 1968
Grand Island, NE 68802-1968
(308) 385-5444, Extension 290

LOCAL BIDDER PREFERENCE: In case of tied low bids, all other things being equal, preference shall be given in the following order:

1. To those bidders who manufacture their products within the limits of the City of Grand Island.
2. To those bidders who manufacture their products within the limits of the County of Hall.
3. To those bidders who package, process, or through some other substantial operation have employees and facilities for these purposes in the City of Grand Island.
4. To those bidders who package, process, or through some other substantial operation have employees and facilities for these purposes in the County of Hall.
5. To those bidders who maintain a bona fide business office in the City of Grand Island, whose products may be made outside the confines of the City of Grand Island.
6. To those bidders who maintain a bona fide business office in the County of Hall, whose products may be made outside the confines of the County of Hall.
7. To those bidders whose commodities are manufactured, mined, produced, or grown within the state of Nebraska, and to all firms, corporations, or individuals doing business as Nebraska firms, corporations or individuals, when quality is equal or better, and delivered price is the same or less than the other bids received.
8. To those bidders whose commodities are manufactured, mined, produced, or grown within the United States of America, and to all firms, corporations, or individuals doing business as firms registered in states other than Nebraska, when quality is equal or better, and delivered price is the same or less than the other bids received.

**CITY OF GRAND ISLAND, NEBRASKA
FURNISHING AND INSTALLATION OF
GOLF COURSE IRRIGATION VARIABLE FREQUENCY DRIVE (VFD)**

JACKRABBIT RUN GOLF COURSE

CONTRACTOR'S BID

TO THE MEMBERS OF THE COUNCIL
CITY OF GRAND ISLAND
GRAND ISLAND, NEBRASKA

THE UNDERSIGNED BIDDER, having examined the plans, specifications, general and special conditions, and other proposed contract documents, and all addenda thereto and being acquainted with and fully understanding (a) the extent and character of the work covered by this Proposal, (b) the location, arrangement, and specified requirements for the proposed work, (c) the location, character, and condition of existing streets, roads, highways, railroad, pavements, surfacing, walks, driveways, curbs, gutters, trees, sewers, utilities, drainage courses and structures, and other installations, both surface and underground which may affect or be affected by the proposed work, (d) the nature and extent of the excavations to be made and the handling and re-handling of excavated materials, (e) the difficulties and hazards to the work which might be caused by storm and flood water, (f) local conditions relative to labor, transportation, hauling and rail delivery facilities, and (g) all other factors and conditions affecting or which may be affected by the work;

HEREBY PROPOSES to furnish all required materials, supplies, equipment, tools and plans, to perform all necessary labor and supervision, and to construct, install, erect, equip and complete all work stipulated in, required by and in accordance with the contract documents and the plans, specifications and other documents referred to therein as altered, amended or modified by all addenda thereto for and in consideration of the following prices:

Installation of Golf Course Irrigation Variable Frequency Drive (VFD) to be at Jackrabbit Run Golf Course, 2803 N Shady Bend Rd, Grand Island, NE.

ADDENDA: Bidder has received and considered addenda numbers: _____

BID FORM

<u>QTY</u>	<u>ITEM DESCRIPTION</u>	<u>UNIT COST</u>	<u>EXTENDED COST</u>
2 each	100 HP 460 VAC 3 phase in NEMA 4 Enclosures with integral fuses	_____	_____
1 each	100 HP 460 VAC 3 phase in NEMA 1 Enclosures with integral fuses	_____	_____
1 each	20 HP 460 VAC 3 phase in NEMA 1 Enclosures with integral fuses	_____	_____
	TOTAL		_____

EXPERIENCE DATA:

Each bidder shall supply the following data on his/her experience:

Name of Bidder: _____

Project Owner Project Location Completion Date

Additional Data: _____

The undersigned bidder agrees to enter into a contract within ten (10) days after acceptance of this bid, and further agrees to complete all work covered by the foregoing proposal in accordance with specified requirements. The proposed work will commence as soon as possible after the contract is signed and the required insurance is approved with completion of the total contract to be no later than **April 1, 2013 unless "weather circumstances" prohibit working conditions.**

It is understood and agreed that time is the essence of the contract.

In submitting this bid it is understood that the right is reserved by the City to reject any and all bids; to waive irregularities therein and to accept whichever bid that may be in the best interest of the City. It is understood that this bid may not be withdrawn until after the passage of thirty (30) days from bid opening.

The undersigned bidder hereby certifies (a) that this bid is genuine and is not made in the interest of or on the behalf of any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation, (b) that he/she has not directly or indirectly induced or solicited any person, firm or corporation to refrain from bidding, (c) that he/she has not sought, by collusion or otherwise, to obtain for himself/herself an advantage over any other bidder or over the City of Grand Island, and (d) that he/she has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid.

Dated _____

Signature of Bidder:

If an Individual: _____ doing business

as _____

If a Partnership: _____

by _____, member of firm.

If a Corporation: _____

by _____ (Seal)

Title _____

Business Address of Bidder _____

Telephone number of Bidder _____ Fax number of Bidder _____

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into this _____ day of _____, by and between _____ 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 Furnishing and Installation of Golf Course Irrigation Variable Frequency Drive (VFD) for the Jackrabbit Run Golf Course; 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 the 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 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 II. 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 _____ Dollars \$ _____ for all services, materials, and work covered by and included in the contract award and designated in the foregoing Article I; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications. 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 III. 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 for **Furnishing and Installation of Golf Course Irrigation Variable Frequency Drive (VFD) for the Jackrabbit Run Golf Course**.

CONTRACT AGREEMENT (Continued)

ARTICLE IV. That the contractor shall start work as soon as possible after the contract is signed and the required insurance is approved and that the Contractor shall complete the work on or before **April 1, 2013 unless "weather circumstances" prohibit working conditions for furnishing and installation of Golf Course Irrigation Variable Frequency Drive (VFD).** It is understood and agreed that time is the essence of the contract.

ARTICLE V. 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.

ARTICLE VI. 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 therefore. 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.

IN WITNESS WHEREOF, the parties hereto have executed this Contract Agreement.

Contractor _____

By _____

Date _____

Title _____

CITY OF GRAND ISLAND, NEBRASKA,

By _____

Date _____

Mayor

Attest: _____

City Clerk

The contract and insurance are in due form according to law and are hereby approved.

Attorney for the City

Date _____



Purchasing Agent Appointment and Delegation of Authority for Sales and Use Tax

FORM
17

PURCHASING AGENT APPOINTMENT					
Name and Address of Prime Contractor			Name and Address of Governmental Unit or Exempt Organization		
Name			Name		
Street or Other Mailing Address			Street or Other Mailing Address		
City		State	City		State
Zip Code			Zip Code		
Name and Location of Project			Appointment Information		
Name			Effective Date (see Instructions)		
Street or Other Mailing Address			Expiration Date		
City		State	Nebraska Exemption Number (Exempt Organizations Only)		
Zip Code					
Identify Project					

The undersigned governmental unit or exempt organization appoints the above-named contractor and the contractor's delegated subcontractors as its agent to purchase and pay for building materials that will be annexed to real estate by them into the tax exempt construction project stated above.

sign
here

Authorized Signature of Governmental Unit or Exempt Organization

Title

Date

DELEGATION OF PRIME CONTRACTOR'S AUTHORITY					
Name and Address of Subcontractor			Delegation Information		
Name			Effective Date		
Street or Other Mailing Address			Expiration Date		
City		State	Portion of Project		
Zip Code					

The undersigned prime contractor hereby delegates authority to act as the purchasing agent of the named governmental unit or exempt organization to the above-named subcontractor.

sign
here

Signature of Prime Contractor or Authorized Representative

Title

Date

INSTRUCTIONS

WHO MUST FILE. Any governmental unit or organization that is **exempt** from sales and use tax may appoint as its agent a prime contractor to purchase building materials and/or fixtures that will be annexed to property that belongs to or will belong to the governmental unit or exempt organization pursuant to a construction contract with the governmental unit or exempt organization. The appointment of the prime contractor as its agent is completed by issuing a Purchasing Agent Appointment and Delegation of Authority for Sales and Use Tax, Form 17, to the prime contractor. The Form 17 is required to be given to the contractor **BEFORE** he or she annexes building materials. The governmental unit or exempt organization must identify the project (e.g., east wing, chapel construction, or new school auditorium). Most

nonprofit organizations are **NOT** exempt from sales tax in Nebraska. In addition, not all governmental units are exempt from Nebraska sales tax. Refer to Contractor Information on our Web site for additional information on exempt entities. A contractor can confirm the exempt status of a governmental unit or exempt organization by contacting the Nebraska Department of Revenue. The exemption from the payment of the Nebraska and local option sales and use taxes only applies if the governmental unit or exempt organization directly, or through its contractor, pays for the building materials. **IMPORTANT NOTE:** When an organization that requires licensure in order to be exempt (i.e., nonprofit hospitals), but is not licensed at the time of the construction project, the exempt organization **CANNOT**



Nebraska Resale or Exempt Sale Certificate

FORM
13

for Sales Tax Exemption

• Read instructions on reverse side/see note below

NAME AND MAILING ADDRESS OF PURCHASER			NAME AND MAILING ADDRESS OF SELLER		
Name			Name		
Street or Other Mailing Address			Street or Other Mailing Address		
City	State	Zip Code	City	State	Zip Code

Check Type of Certificate

Single Purchase

Blanket

If blanket is checked, this certificate is valid until revoked in writing by the purchaser.

I hereby certify that the purchase, lease, or rental by the above purchaser is exempt from the Nebraska sales tax for the following reason:

Check One

Purchase for Resale (Complete Section A)

Exempt Purchase (Complete Section B)

Contractor (Complete Section C)

SECTION A—Nebraska Resale Certificate

Description of Item or Service Purchased

I hereby certify that the purchase, lease, or rental of from the above seller is exempt from the Nebraska sales tax as a purchase for resale, rental, or lease in the normal course of our business, either in the form or condition in which purchased, or as an ingredient or component part of other property to be resold.

I further certify that we are engaged in business as a: Wholesaler Retailer Manufacturer Lessor.
of Description of Product Sold, Leased, or Rented

If None, State Reason

and hold Nebraska Sales Tax Permit Number 01-

or Foreign State Sales Tax Number

State

SECTION B—Nebraska Exempt Sale Certificate

The basis for this exemption is exemption category (Insert appropriate category as described on reverse of this form.)

If exemption category 2 or 5 is claimed, enter the following information:

Description of Item(s) Purchased

Intended Use of Item(s) Purchased

If exemption categories 3 or 4 are claimed, enter the Nebraska Exemption Certificate number. 05-

If exemption category 6 is claimed, seller must enter the following information and sign this form below:

Description of Item(s) Sold

Date of Seller's Original Purchase

Was Tax Paid when Purchased by Seller?

Was Item Depreciable?

YES NO

YES NO

SECTION C—For Contractors Only

1. Purchases of Building Materials or Fixtures:

As an Option 1 or Option 3 contractor, I hereby certify that purchases of building materials and fixtures from the above seller are exempt from Nebraska sales tax. My Nebraska Sales or Consumer's Use Tax Permit Number is: 01-

2. Purchases Made Under Purchasing Agent Appointment on behalf of _____ (exempt entity):

Pursuant to an attached Purchasing Agent Appointment and Delegation of Authority for Sales and Use Tax, Form 17, I hereby certify that purchases of building materials, and fixtures are exempt from Nebraska sales tax.

Any purchaser, or their agent, or other person who completes this certificate for any purchase which is other than for resale, lease, or rental in the regular course of the purchaser's business, or is not otherwise exempted from the sales and use tax under Neb. Rev. Stat. §§77-2701 through 77-27,135, shall in addition to any tax, interest, or penalty otherwise imposed, be subject to a penalty of \$100 or ten times the tax, whichever amount is larger, for each instance of presentation and misuse. With regard to a blanket certificate, this penalty shall apply to each purchase made during the period the blanket certificate is in effect. Under penalties of law, I declare that I am authorized to sign this certificate, and to the best of my knowledge and belief, it is correct and complete.

sign
here▶

Authorized Signature

Title

Date

NOTE: Sellers must keep this certificate as part of their records. DO NOT SEND TO THE NEBRASKA DEPARTMENT OF REVENUE.

Incomplete certificates cannot be accepted.

www.revenue.ne.gov, (800) 742-7474 (toll free in NE and IA), (402) 471-5729

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 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.**

**GOLF COURSE IRRIGATION
VARIABLE FREQUENCY DRIVE (VFD) SPECIFICATIONS**

1.0 SCOPE OF WORK

- 1.1 General: This specification defines the minimum requirements for Variable Frequency Drives (VFD) and accessories for speed control of either constant or variable torque loads.
Two (2) each 100 HP 460 VAC 3 phase in NEMA 4 Enclosures with integral fuses
One (1) each 100 HP 460 VAC 3 phase in NEMA 1 Enclosures with integral fuses
One (1) each 20 HP 460 VAC 3 phase in NEMA 1 Enclosures with integral fuses
- 1.2 Related Work: None
- 1.3 References:
- A. UL 508C
 - B. CE
 - C. NEC
 - D. Canadian Underwrites Laboratory (cUL)
 - E. ISO 9001
 - F. IEEE519-1992

2.0 PRODUCTS

- 2.2 General:
- A. Furnish complete VFD as specified herein or in the equipment schedule for loads designated to be variable speed. VFD's shall be user-selectable for either constant or variable torque loads.
 - B. The VFD shall convert incoming fixed frequency three-phase AC power into a variable frequency and voltage for controlling the speed of three-phase AC induction motors. The VFD shall be a six-pulse input design. The VFD shall be of a PWM output design utilizing current IGBT inverter technology and voltage vector control of the output PWM waveform and shall output a waveform that closely approximates a sine wave.
 - C. Two of the VFD's shall be provided with an enclosure that is rated Nema Type 4X/IP-66 with back panel cooling. The drives shall be capable of din rail mounting in an open air environment. A VFD that is mounted in a separate enclosure is not acceptable. The enclosure shall be suitable for all installations that require protection against windblown dust and rain or splashed water. All cast aluminum parts shall be powder-coated with a durable epoxy that is capable of withstanding harsh environments including sun and weather protection of the keypad display.
 - D. The manufacturer of the VFD shall demonstrate a continuous period of manufacturing and development of VFD's. Strong golf course experience and reference list required.
 - E. The VFD shall produce an output waveform capable of handling maximum motor cable distances of up to 1,000 ft. (unshielded) without tripping or derating.

- F. The VFD shall utilize VVC^{PLUS}, an output voltage-vector switching algorithm, or equivalent, in both variable and constant torque modes. VVC^{PLUS} provides rated RMS fundamental voltage from the VFD. This allows the motor to operate at a lower temperature rise, extending its thermal life. VFD's that cannot produce rated RMS fundamental output voltage or require the input voltage to be increased above motor nameplate value to achieve rated RMS fundamental output voltage are not acceptable. VFD's that utilize Sine-Coded PWM or Look-up tables shall not be acceptable.
- G. An Automatic Energy Optimization (AEO) selection feature shall be provided in the VFD to minimize energy consumption in variable torque applications. This feature shall optimize motor magnetization voltage and shall dynamically adjust output voltage in response to load, independent of speed. Output voltage adjustment based on frequency alone is not acceptable for single motor VT configurations.
- H. An Automatic Motor Adaptation (AMA) function shall measure motor stator resistance and reactance to optimize performance and efficiency. It shall not be necessary to spin the motor shaft or de-couple the motor from the load to accomplish this optimization. Additionally, the parameters for motor resistance and motor reactance shall be user-programmable.
- I. The VFD selected must be able to source the motor's full load nameplate amperage (fundamental RMS) on a continuous basis, and be capable of running the motor at its nameplate RPM, voltage, current, and slip without having to utilize the service factor of the motor.
- J. The VFD shall offer a programmable motor parameter that allows the total number of poles of a motor to be programmed to optimize motor performance.
- K. VFD shall automatically boost power factor at lower speeds.
- L. The VFD will be capable of running either variable or constant torque loads. In variable torque applications, the VFD shall provide a CT-start feature and be able to provide full torque at any speed up to the base speed of the motor. In either CT or VT mode, the VFD shall be able to provide its full rated output current continuously and 110% of rated current for 60 seconds.
- M. Switching of the input power to the VFD shall be possible without interlocks or damage to the VFD at a minimum interval of 2 minutes.
- N. Switching of power on the output side between the VFD and the motor shall be possible with no limitation or damage to the VFD and shall require no additional interlocks.
- O. The VFD shall have temperature controlled cooling fans for quiet operation, minimized internal losses, and greatly increased fan life.

- P. The VFD shall include an integral RFI filter conforming to the A2 standard as a minimum. VFD enclosures shall be made of metal to minimize RFI and provide additional immunity.
- Q. VFD shall provide full galvanic isolation with suitable potential separation from the power sources (control, signal, and power circuitry within the drive) to ensure compliance with PELV requirements and to protect PLC's and other connected equipment from power surges and spikes.
- R. All inputs and outputs shall be optically isolated. Isolation boards between the VFD and external control devices shall not be required.
- S. There shall be six (6) fully programmable digital inputs for interfacing with the system's external control and safety interlock circuitry. Two of these inputs shall be programmable as inputs or outputs.
- T. The VFD shall have two analog signal inputs. Inputs shall be programmable for either 0 -10V or 0/4-20 mA.
- U. One programmable analog output shall be provided for indication of the drive status. This output shall be programmable for output speed, voltage, frequency, motor current and output power. The analog output signal shall be 0/4-20 mA.
- V. The VFD shall provide two (2) user programmable relays with seventy-five (75) selectable functions. Two form 'C' 230VAC/2A rated dry contact relay outputs shall be provided.
- W. An embedded cascade pump controller shall be included to provide lead pump alternation and provide control for up to three (3) total pumps. The VFD Pump and two (2) other pumps can be controlled either by a starter or softstarter.
- X. The VFD shall accept a N.C. motor over-temperature switch input, as well as possess the capability to accept a motor thermistor input.
- Y. Run permissive circuit shall be provided to accept a "system ready" signal to ensure that the VFD does not start until isolation valves, seal water pumps or other types of auxiliary equipment are in the proper state for VFD operation. The run permissive circuit shall also be capable of sending an output signal as a start command to actuate external equipment before allowing the VFD to start.
- Z. The VFD shall be equipped with a standard RS-485 serial communications port and front-of-drive accessible USB port. Danfoss FC, ModBus RTU, or equal communications shall be integrally mounted.

- AA. A Windows® compatible software program to display all monitoring, fault, alarm, and status signals shall be available. This software program shall allow parameter changes, storage of all VFD operating and setup parameters, and remote operation of the VFD. The software shall connect to the VFD with a standard USB cable.

2.3 Harmonics:

- A. The VFD shall provide internal DC link reactors to minimize power line harmonics and to provide near unity power factor. DC Link reactor shall be installed so that power fluctuations to the DC Capacitors shall be reduced to increase Capacitor life. VFD's without a DC link reactor shall provide a 5% impedance line side.

2.4 Protective Features:

- A. VFD shall have input surge protection utilizing MOV's, spark gaps, and Zener diodes to withstand surges of 2.3 times line voltage for 1.5 msec.
- B. Printed Circuit boards shall be conformal coated to reduce the corrosion effect from environmental gases and other conditions. The conformal coating must meet IEC 61721-3-3, Class 3C2.
- C. VFD shall include circuitry to detect phase imbalance and phase loss on the input side of the VFD.
- D. VFD shall include current sensors to monitor all three-output phases to detect and report phase loss or unbalance or other power issues to the motor. The VFD will identify which of the output phases is low or lost.
- E. VFD shall auto-derate the output voltage and frequency to the motor if an input phase is lost. This result will maintain operation without decreasing the life expectancy of the VFD. The use of this feature shall be user selectable and export a warning during the event.
- F. VFD shall auto-derate the output voltage and frequency to the motor in the presence of sustained ambient temperatures higher than the normal operating range, so as not to trip on an inverter temperature fault. The use of this feature shall be user-selectable and a warning will be exported during the event. Function shall reduce switching frequency before reducing motor speed.
- G. VFD shall auto-derate the output frequency by limiting the output current before allowing the VFD to trip on overload. The speed of the load can be reduced, but not stopped.

2.5 Interface Features:

- A. VFD shall provide an alphanumeric backlit display keypad (LCP) which may be remotely mounted using a standard nine (9)-pin cable. VFD may be operated with the keypad disconnected or removed entirely. Keypad may be disconnected during normal operation without the need to stop the motor or disconnect power to the VFD.

- B. VFD Keypad shall feature an INFO key that, when pressed, shall display the contents of the programming manual for the parameter that is currently viewed on the display. The description shall explain the feature and how the settings can be made by the operator.
- C. VFD shall display all faults in plain text; VFD's which can display only fault codes are not acceptable.
- D. The keypad shall feature a six (6)-line graphical display and be capable of digitally displaying up to five (5) separate operational parameters or status values simultaneously (including process values with the appropriate engineering unit) in addition to Hand/Off/Auto, Local/Remote, and operating status.
- E. Two (2) lines of the display shall allow "free text programming" so that a site description or the actual name of the equipment being controlled by the VFD can be entered into the display.
- F. Keypad shall provide an integral H-O-A (Hand-Off-Auto) and Local-Remote selection capability, and manual control of speed locally without the need for adding selector switches, potentiometers, or other devices.
- G. All VFD's shall be of the same series, and shall utilize a common control card and LCP (keypad/display unit) throughout the rating range. The control cards and keypads shall be interchangeable through the entire range of drives used on the project.
- H. VFD keypad shall be capable of storing drive parameter values in non-volatile RAM uploaded to it from the VFD, and shall be capable of downloading stored values to the VFD to facilitate programming of multiple drives in similar applications, or as a means of backing up the programmed parameters.
- I. VFD Display shall have the ability to display five (5) different parameters pertaining to the VFD or the load including: current, speed, DC bus voltage, output voltage, input signal in mA, or other values from a list of 92 different user-selectable parameters.
- J. VFD display shall indicate which digital inputs are active and the status of each relay.
- K. It shall be possible to toggle between three (3) status read-out screens by pressing the [Status] key. Various operating variables, even with different formatting, can be shown in each status screen.
- L. VFD display shall indicate the value of any voltage or current signal, including the engineering units of measurement, connected to the analog input terminals.
- M. VFD display shall indicate the value of the current at the analog output terminals, including the engineering units of measurement.

- N. A red FAULT light, a yellow WARNING light and a green POWER-ON light shall be provided. These indications shall be visible both on the keypad and on the VFD when the keypad is removed.
- O. Two-level password protection shall be provided to prevent unauthorized changes to the programming of the VFD. The parameters can be locked via a digital input and/or the unit can be programmed not to allow any unauthorized user to change the parameter settings.
- P. A quick setup menu with factory preset parameters shall be provided on the VFD to facilitate commissioning. Use of macros shall not be required.
- Q. A digital elapsed time meter and kilowatt hour meter shall be provided in the display.
- R. VFD shall offer as standard an internal clock. The internal clock can be used for: Timed Actions, Energy Meter, Trend Analysis, date/time stamps on alarms, Logged data, Preventive maintenance, or other uses. It shall be possible to program the clock for Daylight Saving Time / summertime, weekly working days or non-working days including twenty (20) exceptions (holidays, etc.). It shall be possible to program a Warning in case the clock has not been reset after a power loss.
- S. The VFD shall store in memory the last 10 faults with time stamp and recorded data.

2.6 Software Features:

- A. The VFD shall have an adjustable output switching frequency.
- B. Four (4) complete programming parameter setups shall be provided, which can be locally selected through the keypad or remotely selected via digital input(s), allowing the VFD to be programmed for up to four (4) alternate control scenarios without requiring parameter changes.
- C. In each programming set up, independent acceleration and deceleration ramps shall be provided. Acceleration and deceleration time shall be adjustable over the range from 0 to 3,600 seconds to base speed.
- D. The VFD shall have four (4) programmable "Bypass frequencies" with adjustable bandwidths to prevent the driven equipment from running at a mechanically resonant frequency. The feature shall offer a Semi-Automatic program to simplify the set-up.
- E. In each programming setup, independent current limit settings, programmable between 50% and 110% of the drives output current rating, shall be provided.
- F. PID parameter settings shall be adjustable while the VFD is operating, to aid in tuning the control loop at start up. The VFD will also be capable of simultaneously displaying set-point reference and feedback values with appropriate engineering units, as well as output frequency, output current, and run status while programming the PID function.

- G. The VFD will include a “loss of follower” function to detect the loss of process feedback or reference signals with a live-zero value and a user-selectable choice of responses (go to set speed, min speed, max speed, stop, stop, and trip).
- H. A Sleep Mode function shall be provided to reduce wear and heating of the pump and other equipment in periods where system demand is minimal. This function will operate in both open and closed loop modes:
 - 1. In closed loop process control, when the output speed drops to a user-programmed minimum value (“sleep frequency”) for a specified time (“sleep mode timer”), the drive will enter a sleep mode and either go into standby, or boost mode before entering standby. The drive shall automatically restart the motor once the output of the PID processor exceeds a programmable value “wake up frequency”.
 - A. Boost mode shall prevent short-cycling of the motor by temporarily adjusting the set-point by a user-programmable percentage. Upon reaching this value, the unit will go into standby.
 - 2. In open loop, the drive shall be capable of entering sleep mode if the input reference drops below a user-programmable value. When the input reference increases above a user-programmable reference, the drive will automatically start.
- I. An initial ramp function shall be available to provide a user-selectable ramp, up to 60 seconds, for applications requiring a faster or slower ramp than the normal ramp.
- J. A Dual Ramp feature shall include a Check Valve Ramp and a final Ramp feature. The Check Valve Ramp shall be programmable to gently seat a check valve and reduce the potential of damage from excess pressure while shutting-down the system. Both time and end speed shall be programmable. On the Final Ramp, the VFD shall be programmable to quickly stop the motor after seating of a check valve or for a more rapid stopping than the normal ramp down setting.
- K. VFD shall offer up to four (4) separate PID controllers. One controller shall operate the drive in closed loop, while the other three (3) provide control signals to other equipment. VFD’s with PI controllers only are not acceptable.
- L. An Autotuning PI controller output feature shall provide automated PI controller settings. Once the user accepts the settings, the VFD will save the settings to memory.
- M. An empty pipe fill mode shall be available to fill an empty pipe in a short period of time, and then revert to the PID controller for stable operation. Pipe fill mode shall have a programmable time to reduce water hammer in the system or fill the pipe at a unit per time rate.
- N. Automatic “No-Flow Detection” shall be available to detect a no-flow situation in pump systems where all valves can be closed. This shall be functional in closed loop control or when controlled by an external signal.

- O. Dry-pump detection shall be available to detect if the pump has run dry. If this condition occurs, the drive will be safely stopped. A timer shall be included to prevent nuisance tripping.
- P. End-of-Pump curve detection shall stop motor when the pump is operating outside of its programmed pump curve.
- Q. VFD shall provide a flow compensation program to reduce energy by adjusting the Setpoint to match changes in flow (friction loss). Flow compensation shall also operate in Cascade control mode.
- R. The VFD shall have a motor preheat function with the ability to be programmed to induce a small amount of current to the motor whenever it is at rest. This will prevent condensation inside the motor and help to extend its life without the need for space heaters or other external equipment.
- S. The VFD will include a user-selectable Auto-Restart function that enables the VFD to power up in a running condition after a power loss, to prevent the need to manually reset and restart the VFD.
- T. The VFD will include a user-selectable Reset function, which enables the selection of between zero (0) and twenty (20) restart attempts after any self-clearing fault condition (under-voltage, over-voltage, current limit, inverter overload, and motor overload), or the selection of an infinite number of restart attempts. The time between restart attempts shall be adjustable from 0 through 600 seconds.
- U. An automatic "on-delay" function may be selected from 0 to 120 seconds.
- V. VFD shall catch a rotating motor operating either in forward or reverse at up to full speed.

3.2 Quality Assurance:

- A. The manufacturer shall be both ISO-9001 and ISO-14001 certified.
- B. All products shall be CE marked; UL labeled, and meet the requirements of UL-508C and maintain cUL.
- C. To ensure quality and minimize infant-mortality failures on the jobsite, each VFD shall be completely tested by the manufacturer. The VFD shall operate a dynamometer at full load and speed under elevated temperature conditions.
- D. All optional features shall be functionally tested at the factory for proper operation.

E. Factory test documentation shall be available upon request.

3.4 Start-up and Warranty:

1. A factory-authorized service technician shall perform start-up on each drive
2. A five (5)-year on-site warranty shall be provided such that the owner is not responsible for any warranty costs including travel, labor, parts, or other costs for a full five (5) years from the date of installation of the Drive. The warranty shall cover all Drive failures including line anomalies – including lightning strikes, load anomalies, accidental exposure to moisture or corrosives and accidental collision of other physical damage; product misapplications, vandalism and chronic problems due to the misapplication are not covered. The cost of the warranty shall be included in the bid.