



**SPECIFICATIONS
AND
BID DOCUMENTS**

**PARKS &
RECREATION
DEPARTMENT**

**FURNISHING AND
INSTALLATION OF
IRRIGATION SYSTEM
ASHLEY PARK**

PARKS DIVISION

**PARKS & RECREATION
DEPARTMENT**

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

2022

**FURNISHING AND INSTALLATION OF IRRIGATION SYSTEM
ASHLEY PARK
PARKS & RECREATION DEPARTMENT**

CITY OF GRAND ISLAND, NEBRASKA

TABLE OF CONTENTS

Advertisement for Bidders

Instructions to Bidders

Contractor's Bid Form

Form of Contract Agreement

Insurance Requirements

Form of Purchasing Agent Appointment

Form of Exempt Sale Certificate

Scope of Work

Special Provisions

Drawing

**ADVERTISEMENT TO BIDDERS
FOR
FURNISHING AND INSTALLATION OF IRRIGATION SYSTEM
ASHLEY PARK
PARKS & RECREATION DEPARTMENT
FOR
CITY OF GRAND ISLAND, NEBRASKA**

Sealed bids will be **received at the office of the City Clerk**, 100 E. First St., Grand Island, NE 68801 or P.O. Box 1968, Grand Island, Nebraska, 68802 until **2:00 PM (Local Time), March 15, 2022** for **Furnishing and Installation of Irrigation System for Ashley Park**, 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.

Specifications, drawings, and forms for use in preparing bids may be obtained from the Parks & Recreation office, located in City Hall, 2nd floor, 100 East First Street, Grand Island, NE 68801, from 8:00 am - 5:00 pm; Monday through Friday. Bids shall be submitted on forms which will be furnished by the City.

The construction will be located at Ashley Park, 220 W Capital Ave, Grand Island, Nebraska.

The project is for furnishing all labor, equipment and materials for the installation of irrigation system in Ashley Park.

Bid documents, plans, and specifications for use in preparing bid may be downloaded from the Quest CDN website, www.QuestCDN.com for a thirty dollar (\$30) fee. Bids must be uploaded to the Quest CDN website and received before the specified time to 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.

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, 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, 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 of the bidder of these conditions.

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

RaNae Edwards, City Clerk

**CITY OF GRAND ISLAND, NEBRASKA
INSTRUCTIONS TO BIDDERS
PARKS & RECREATION DEPARTMENT
FURNISHING AND INSTALLATION OF IRRIGATION SYSTEM
ASHLEY PARK**

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. If additional space is required for exception explanation, please reference and attach a letter to bid. Reference shall not be made to other attachments 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 bid 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** and plainly marked, **"BID FOR FURNISHING AND INSTALLATION OF IRRIGATION SYSTEM FOR ASHLEY PARK"**.

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 bid. Failure to do so may be reason for not extending any consideration to alternate bids.

BIDDER QUALIFICATION: Bids will be received only from qualified bidders. A bidder will be considered qualified if he/she is a recognized manufacturer or supplier of materials and items similar to that specified herein with complete factory facilities in the United States and has had experience in the design and manufacture of items of equal or greater size than that specified herein. If requested, the Bidder shall supply experience data. Such data will be used to assist in determining the qualifications of the Bidder. Bidder must comply with all applicable Federal, State and Local rules and regulations.

PERFORMANCE BOND: When required, on award of the Contract, the successful Contractor shall furnish a Performance Bond which shall be in an amount equal to the full Contract price, guaranteeing faithful compliance with all requirements of the Contract Documents and complete fulfillment of the Contract, and payment of all labor, material and other bills incurred in carrying out this Contract. According to Nebraska Law, the surety company executing the Performance Bond must be authorized to do business in the State of Nebraska.

PAYMENT BOND: When required, on award of the Contract, the successful Contractor shall furnish a Payment Bond which shall be in an amount equal to the full Contract price, guaranteeing protection of all persons supplying labor and materials to the Contractor or its subcontractors for the performance of the work provided for in the Contract. In accordance with Nebraska Law, the surety company executing the Payment Bond must be authorized to do business in the State of Nebraska.

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 eleven (11) working days prior to the designated meeting to allow for 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 by addendum only 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 June 30, 2022.

CANCELLATION CLAUSE: 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.

The City reserves the right to cancel the contract for the City's convenience. In that event, the contractor will be paid for goods and services actually performed and provided at the time of cancellation.

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 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 is to be returned immediately to the Purchasing Department (or other department if so designated in the Addendum) as acknowledgement of receipt.

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.

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 if the bidder is 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, age 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. 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 with 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.

**FURNISHING AND INSTALLATION OF IRRIGATION SYSTEM
ASHLEY PARK
PARKS & RECREATION DEPARTMENT
CITY OF GRAND ISLAND, NEBRASKA**

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 Bid, (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 location and extent of necessary or probable dewatering requirements, (f) the difficulties and hazards to the work which might be caused by storm and flood water, (g) local conditions relative to labor, transportation, hauling and rail delivery facilities, and (h) 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:

<u>DESCRIPTION</u>	<u>TOTAL COST</u>
Furnishing and Installation of Irrigation system	\$ _____

EXPERIENCE DATA:

All projects shall have been completed a minimum of three (3) years prior.

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

Name of Bidder: _____

<u>Project Owner/Contact/Phone No.</u>	<u>Project Location</u>	<u>Completion Date</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Additional Data: _____

ADDENDA:

Bidder acknowledges that Addenda Number(s) _____ were received and considered in Bid preparation.

The undersigned bidder agrees to furnish the required bonds and to enter into a contract immediately after acceptance of this Bid, and further agrees to complete all work covered by the foregoing bid in accordance with specified requirements. The proposed work will commence as soon as possible after the contract is fully executed, with a completion date of June 30, 2022. **No work shall commence until the certificate of insurance and bonds (when required) are approved by the City and the contract is executed.** 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 thirty (30) days from bid opening.

In submitting this bid, the bidder states that bidder fully complies with, and will continue to comply with, applicable State fair labor standards as required by section 73-102 R.R.S., 1943 and also complies with, and will continue to comply with, section 48-657 R.R.S., 1943 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska.

The undersigned bidder hereby certifies (a) that this bid is genuine and is not made in the interest of or in 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 IRRIGATION SYSTEM FOR ASHLEY PARK**; 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, or themselves, and its, his, 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 of the **FURNISHING AND INSTALLATION OF IRRIGATION SYSTEM FOR ASHLEY PARK**.

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 by a completion date of June 30, 2022. It is understood and agreed that time is the essence of the contract.

CONTRACT AGREEMENT (Continued)

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. 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 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 as of the date and year first above written.

Contractor _____

By _____

Date _____

Title _____

CITY OF GRAND ISLAND, NEBRASKA,

By _____

Mayor

Date _____

Attest: _____

City Clerk

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

Attorney for the City

Date _____

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.**

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

Section A – Purchasing Agent Appointment	
Name and Address of Contractor	Name and Address of Exempt Governmental Unit or Exempt Organization
Name	Name City of Grand Island
Street or Other Mailing Address	Street or Other Mailing Address PO Box 1968
City State Zip Code	City State Zip Code Grand Island NE 68802-1968
Name and Location of Project	
Name	Appointment Information
Street Address	Effective Date (See instructions)
City State Zip Code	Expiration Date
	Nebraska Exemption Number (Exempt Organizations Only) 21-0244767

Provide the contract name, number, and a description of the 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 identified above.

sign here _____ Assistant City Attorney
Authorized Signature of Exempt Governmental Unit or Exempt Organization Title Date

Section B — Delegation of Contractor's Authority A contractor can delegate its authority to its subcontractor.	
Name and Address of Subcontractor	Delegation Information for the Project Identified in Section A
Name	Effective Date
Street or Other Mailing Address	Expiration Date
City State Zip Code	Portion of Project

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

sign here _____ Title Date
Signature of Contractor or Authorized Representative Title Date

Name and Address of Subcontractor	Delegation Information for the Project Identified in Section A
Name	Effective Date
Street or Other Mailing Address	Expiration Date
City State Zip Code	Portion of Project

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

sign here _____ Title Date
Signature of Subcontractor or Authorized Representative Title Date

Name and Address of Subcontractor	Delegation Information for the Project Identified in Section A
Name	Effective Date
Street or Other Mailing Address	Expiration Date
City State Zip Code	Portion of Project

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

sign here _____ Title Date
Signature of Subcontractor or Authorized Representative Title Date

Nebraska Resale or Exempt Sale Certificate for Sales Tax Exemption

Name and Mailing Address of Purchaser			Name and Mailing Address of Seller		
Name City of Grand Island			Name		
Legal Name					
Street or Other Mailing Address PO BOX 1968			Street or Other Mailing Address		
City GRAND ISLAND	State NE	Zip Code 68802-1968	City	State	Zip Code

Check Type of Certificate

- Single Purchase If single purchase is checked, enter the related invoice or purchase order number _____.
- 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 Property or Service Purchased

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

I further certify that we are engaged in business as a: Wholesaler Retailer Manufacturer Lessor

Description of Product Sold, Leased, or Rented

of _____

My Nebraska Sales Tax ID Number is 01-_____.

If none, state the reason _____

or Foreign State Sales Tax Number _____ State _____.

Section B—Nebraska Exempt Sale Certificate

The basis for this exemption is exemption category 1 (See the list of Exemption Categories and corresponding numbers on reverse side).

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

Description of Property or Service Purchased	Intended Use of Property or Service Purchased
--	---

If exemption category 3 or 4 is claimed, enter your Nebraska Certificate of Exemption State ID number. 05-_____ Do not enter your Federal Employer ID Number.

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

Description of Items Sold	Date of Seller's Original Purchase	Was tax paid when purchased by seller? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was item depreciable? <input type="checkbox"/> Yes <input type="checkbox"/> No
---------------------------	------------------------------------	--	---

Section C—For Contractors Only

1. Purchase of building materials or fixtures.

As an Option 1 or Option 3 contractor, I hereby certify that the purchase of building materials and fixtures from the seller listed above are exempt from Nebraska sales tax. My Nebraska Sales or Use Tax ID Number is: _____.

2. Purchases made by an Option 2 contractor under a Purchasing Agent Appointment on behalf of _____ (exempt entity)

As an Option 2 contractor, I hereby certify that the purchase of building materials and fixtures from the seller listed above is exempt from Nebraska sales tax pursuant to the **attached** Purchasing Agent Appointment and Delegation of Authority for Sales and Use Tax, Form 17.

Any purchaser, agent, or other person who completes this certificate for any purchase which is not for resale, lease, or rental in the regular course of the purchaser's business, or is not otherwise exempted from sales and use taxes is 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 applies 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 Stacy R. Nonhof	Assistant City Attorney	Date
Authorized Signature Name (please print)	Title	

**Do not send this certificate to the Nebraska Department of Revenue. Keep it as part of your records.
Sellers cannot accept incomplete certificates.**

The Department is committed to the fair administration of the Nebraska tax laws. It is unlawful to claim an exemption for purchases of property or services that are subject to tax. Sellers are encouraged to notify the Department of any unlawful use of this form.
revenue.nebraska.gov, 800-742-7474 (NE and IA), 402-471-5729

FURNISHING AND INSTALLATION OF IRRIGATION SYSTEM ASHLEY PARK

Contact Person: Barry Burrows, Parks Superintendent
PO Box 1968
Grand Island, NE 68802
308-385-5426

SCOPE OF WORK

SCOPE

The project is for furnishing all labor, equipment and materials to install an irrigation system located at Ashley Park, 220 N. Capital Ave, Grand Island, Nebraska.

ORDER OF WORK

The work is intended to be prosecuted in an orderly manner, such that the project is completed as early as possible.

It is expected that the project will not proceed until all permits by the permitting agencies have been issued. Contractor shall obtain and pay the cost of all required permits and fees.

TIMES OF COMPLETION

City will notify the CONTRACTOR when the project can begin.

The contractor shall complete the work by June 30, 2022.

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

1. GENERAL

1.1 RELATED DOCUMENTS

- 1.1.1 Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- 1.2.1 Scope of work: Furnish and install the complete underground irrigation system specified herein from water source locations as indicated on the irrigation drawings, including labor, materials, equipment, apparatus, and services for the testing, adjusting, retesting and readjusting as required to place the system in an approved operating condition.
- 1.2.2 Unless otherwise specified, the plans and specifications are intended to include everything obviously requisite and necessary for the proper installation and completion of the work whether each necessary item is mentioned herein or not.
- 1.2.3 The plans and specifications are intended to be cooperative, and any item called for in one and not the other shall be as binding as if called for in both.
- 1.2.4 Any Contractor alterations to the plan, details, or specifications must be approved by the Owner and Irrigation Consultant in writing a minimum of one week prior to bid opening; if not, Contractor's bid may be disqualified.
- 1.2.5 The irrigation systems shall include the following:
1. Source Locations – as indicated in design documents. Contractor to field verify exact location of existing water sources (Provided by Others). New backflows to be provided and installed by Irrigation Contractor.
 2. Control System
 - a. Controller shall be Hunter ACC2 Decoder Wall Mount Outdoor Plastic Controller. Power for controller will be provided by Owner.
 3. Piping
 4. Sprinkler heads
 5. Valves and Valve boxes
 6. Control wiring
 7. Fittings
 8. Electrical connections
 9. Quick couplers
 10. All other necessary accessories
 11. System Manuals
 12. Instructional walk-through with Owner
- 1.2.6 Limits of work: Area within project limits as delineated on the irrigation plan.

1.3 QUALITY ASSURANCE

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

- 1.3.1 Irrigation contractor must be able to provide “Verifiable Documentation” that they have the technical qualifications, experience, trained personnel, and facilities to perform the specified work and have been engaged in sprinkler design and installation, of systems of similar size and scope for a minimum of five years. Contractor must submit, along with bid, a list of three projects of similar scope completed within the last three years, failure to submit all documents at time of bid may cause bid to be rejected.
- 1.3.2 Quality Control Criteria:
 - 1. Provide irrigation products as described in this specification and according to manufacturer’s specifications.
- 1.3.3 Comply with requirements of the State of Nebraska for prevention of backflow and back-siphonage.
- 1.3.4 Comply with requirements of the State of Nebraska for plumbing and other regulations affecting site irrigation.
- 1.3.5 Comply with National Plumbing Code, National Electric Code, and all other applicable city or state codes.
- 1.3.6 Irrigation consultant will be available at the Pre-Bid meeting for questions. Irrigation consultant will be conducting an in-person Pre-Installation Meeting, a 50% Installation completion meeting, and End of the Project Inspection of the irrigation system. The irrigation consultant and a City Representative will be at all of these meetings and inspections. The awarded contractor must provide seven days of notice to irrigation consultant before each meeting date is requested.

1.4 SUBMITTALS

- 1.4.1 Submit a complete layout plan for the irrigation system including piping, valves, heads, wiring, controller, and hook-up to the water source as indicated on the drawings. Submit details for heads, valves, and controller.
- 1.4.2 For purposes of these specifications: Use products only as listed on design documents, submit all other products for approval a minimum of 7 days prior to bid date.
- 1.4.3 Submit manufacturer's literature, technical data, and recommendations for the system as specified including:
 - 1. Pipe
 - 2. Fittings
 - 3. Sprinkler heads
 - 4. Valves
 - 5. Controller
 - 6. Backflow preventer
 - 7. Wiring
 - 8. Valve boxes
- 1.4.4 Closeout Submittals – Submit the following:

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

1. As-built drawings: Following construction of system, submit two (2) reproducible hard-line sets of as-built drawings and an electronic copy (AutoCAD release 2004 or newer).

1.5 JOB CONDITIONS

- 1.5.1 Contractor shall carefully examine the work site, local conditions, specifications and plot plan for any existing conditions and limitations that may apply to the work. Submission of a proposal shall be considered evidence that an examination has been conducted and that any questions and/or concerns have been satisfied.
- 1.5.2 Utilities: Determine location of utilities and perform work in a manner which will avoid possible damage. When necessary, the Contractor shall make any minor adjustments in location or alignment of the new work. Hand excavate, as required. Maintain grade stakes set by others until removal is mutually agreed upon by parties concerned. Contact Owner if potential conflicts are apparent.

1.6 SEQUENCING AND SCHEDULING

- 1.6.1 Schedule and coordinate to facilitate the most expeditious completion of the project in a workmanlike manner.
- 1.6.2 Consult all other relevant specification sections to determine the extent of work specified elsewhere but related to that included herein.
- 1.6.3 Schedule and coordinate all required irrigation utility connections with other project trades and/or utility companies.
- 1.6.4 Obtain information pertaining to location of all proposed lines and accessories prior to irrigation installation.
- 1.6.5 Contractor shall assume responsibility for locating all site utilities and perform work in a manner to avoid damage.

1.7 PROTECTION OF EXISTING CONDITIONS

- 1.7.1 Any existing structures, equipment, utilities, pavement, landscaping, etc., damaged by Contractor during the course of the work including any subsequent damage caused by leakage or settling of piping shall be restored at Contractor's expense.

1.8 HANDLING

- 1.8.1 Deliver irrigation system components in manufacturer's original undamaged and unopened containers with labels intact and legible.
- 1.8.2 Over plastic piping in bundles, packed to provide adequate protection of pipe ends, both threaded and plain. Pipe and accessories shall be handled in such manner as to ensure delivery to the trench in sound, undamaged condition. Before installation, the pipe shall be inspected for defects. The interior of pipe and accessories shall be thoroughly cleaned

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

of foreign matter before being lowered into the trench and shall be kept clean during laying operations by plugging or other approved method.

- 1.8.3 Store and handle materials to prevent damage and deterioration.
- 1.8.4 Provide secure, locked storage for valves, sprinkler heads, and similar components that cannot be immediately replaced to prevent installation delays.
- 1.8.5 Manufacturer’s Specifications: The latest printed specifications of approved manufacturer of materials shall become part of these specifications.

1.9 EXTRA MATERIALS

- 1.9.1 Provide extra materials as follows:
 - 1. Two extra sprinkler heads of each type and size.
 - 2. Two valve keys for manual valves
 - 3. Two Quick-Coupler Keys with hose swivels.

2. PRODUCTS

2.1 MAIN LINE

- 2.1.1 Piping on pressure side of irrigation control valves:
 - 1. Polyvinyl chloride (PVC) 1120-1220, SDR 21 Class 200, and conform to ASTM standards D2241-05 & D2672 or latest revision. Materials shall conform to all requirements of D1784, or latest revision.

2.2 LATERALS

- 2.2.2 Piping on non-pressure side of irrigation control valves:
 - 1. Polyvinyl chloride (PVC) 1120-1220, SDR 21 Class 200, and conform to ASTM standards D2241-05 & D2672 or latest revision. Materials shall conform to all requirements of D1784, or latest revision.
 - 2. Polyethylene Pipe.
 - a) Pipe shall be flexible non-toxic polyethylene pipe made from 100 percent virgin polyethylene material meeting NSF (National Sanitation Foundation) Standard 14 for use in pressure potable water applications, for 800 design stress.
 - b) Sizes shall have a minimum 100 PSI working pressure rating. Polyethylene pipe shall be continuously and permanently marked with the manufacturer’s name, material, size, and schedule. Pipe shall meet requirements of ASTM D2239 and D1248 (3C5PE34) or latest version.

2.3 FITTINGS

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

2.3.1 All fittings conforming shall conform to ASTM D 2466 (Schedule 40 PVC). Solvent cement shall conform to ASTM D 2564.

2.4 SPRINKLER HEADS

2.4.1 Sprinkler heads shall be Hunter PROS04 with MP or I20 Series as shown in design documents and requested by the Owner.

2.5 CONTROL VALVES

2.5.1 Remote control valves shall be Hunter PGV as shown in the design documents and requested by the Owner. Valves shall have Heavy-duty solenoid/decoder, High grade construction (220psi rating), Internal and External manual bleed, Flow control with non-rising handle, Rigid diaphragm support, Fabric reinforced diaphragm, Globe and angle configurations.

2.6 CONTROLLERS

2.6.1 Provide Rain Bird ACC2 Decoder Wall Mount Outdoor Plastic Controller. Irrigation Contractor responsible for the wiring both line voltage (120 volt) and low voltage (Decoder) circuits of the controller.

- a. Controller shall be Hunter ACC2 Decoder, 75 station controller
- b. Rain Sensor shall be Hunter WRF-CLik wireless rain sensor

2.6.2 Mount the controller in such a way as to simplify the programming/visibility of the controller. Verify the exact location with the Owner and/or Consultant while still adhering to the manufacturer's recommendations. In addition, the rain sensor device shall be mounted in a location unobstructed by walls, trees, or other hindrances (as not to be vandalized).

2.7 QUICK-COUPLING VALVES

2.7.1. Provide quick coupling valves and install in locations as directed by the Owner and Consultant and shown on irrigation design.

2.7.2 Provide three (3) valve keys fitted with 3/4" swivel hose cells.

2.7.3 Quick Coupling Equipment:

1. Valves: One-piece body constructed from heavy-duty cast bronze with a 1" FIP riser connection.
2. 1" Quick Couplers: Single lug coupler of heavy cast bronze and detachable handle.
3. Swivel Hose ELL: Heavy cast bronze, connected to quick couplers for hose connection. Hose ells; 1" FPT x 3/4" Male Hose Threads.

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

4. Each quick coupler should be installed in a 10” round valve box by Ametek (or approved equal) and packed with pea gravel, 4" in depth, per detail.

2.8 VALVE BOXES

- 2.8.1 Provide valve box and cover, with open bottom and openings for piping; designed for installing flush with grade. Include size as required for valves and service – 10” round minimum for quick couplers and isolation valves, 12” minimum to be provided per electric valve set up. The box shall be of plastic construction with UV protection. Boxes shall be vandal resistant including lockable lid. Permanently label valve box cover with zone number. Box and lid assembly color shall be green color.
- 2.8.2 All valve boxes shall be supported with brick pavers, and packed with pea gravel, 4” in depth. Install only one valve per valve box.
- 2.8.3 Accepted manufacturers: Ametek.

2.9 CONTROL WIRE

- 2.9.1 Electrical control wires shall be Hunter ID Wire, minimum of #14-gauge wire. There shall be two separate (2 wire) wire path (different colored), each path strategically placed to run approximately ½ of the zones.
- 2.9.2 All exposed wiring above ground shall be installed inside PVC conduit.
- 2.9.3 Ground Rods shall be Model #18200IC6 Ground Rod or Model #182201IC Ground Plate connect ICD Decoder. Decoder shall be installed in a 10” Round Valve Box and Rod shall be installed in a 6” Round Valve Box. Ground Rods shall be installed per manufacturer spec for controller and two wire path.

2.10 BACKFLOW PREVENTER

- 2.10.1 Irrigation Contractor shall replace the two existing backflows with two new backflows and have them installed as part of this contract.

2.11 ISOLATION VALVES

- 2.11.1 Isolation valves shall be Matco 10RT type. Isolation valves shall be sized according to the line size they are being installed on (2 ½” on the mainline). Manual Valves to be installed in 10” Round Valve Box.
- 2.11.2 Isolation valve location(s) - refer to plan

3. EXECUTION

3.1 PERMITS, LICENSES AND CERTIFICATES

3.1.1 The Contractor shall procure all permits and licenses, except as otherwise indicated, pay all charges and fees, and give all notices necessary and incident to the proper and lawful prosecution of the work. Contractor shall also obtain and supply the Owner all certificates required to show that the work has been performed in accordance with the building, plumbing, other authorities, the Board of Fire Underwriter's, or such other like bodies, as the specifications may require directly or by implication.

3.1.2 When the work performed affects the property of facilities of public utility or other corporations or of private persons, he shall obtain and supply from such corporations or person if required, statements that the work has been performed satisfactorily so far as their interests are affected and that all claims therefore have been settled by the Contractor.

3.2 RIGHTS OF WAY

The Contractor shall acquire the necessary right of way or lawful authority that may be necessary for approved crossings or occupation of any roads, street or alleys upon which the contract work will be done.

3.3 UNDERGROUND STRUCTURE

3.3.1 The Contractor shall be responsible for all necessary information regarding the exact location of existing underground structures and utilities and shall mark their location, at the site.

3.3.2 The Contractor shall be liable for the damages to and the cost of repairing or replacing any buried conduit, cables or piping encountered during the installation of the work, unless they were not marked, or the Contractor was not previously informed of such underground utilities. If the Contractor is aware of such utilities, he shall immediately have the incurred damages repaired at his own expense. Conversely, the Owner shall be liable for the cost of repairing to any of those existing utilities of which the Contractor had not been previously informed.

3.4. EXCAVATING AND TRENCHING

3.4.1 Perform excavations as required for installation of work. Restore all surfaces, existing underground installations, etc., damaged or cut as a result of the excavations, to their original condition.

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

- 3.4.2 Dig trenches wide enough to allow a minimum 6" between parallel pipelines. Trench to sufficient depth to provide minimum cover of (18" for all main lines and 12" for all laterals) from finish grade as shown on drawings.

3.5 SLEEVING

- 3.5.1 Install PVC, SDR 21 Class 200 sleeves where any control wire and/or pipe pass through or under walls.
- 3.5.2 Install sleeves for control wiring and pipe under walks and paving.
- 3.5.3 Main line shall be placed in sleeving that is a minimum of two sizes larger than pipe contained. Lateral line sleeving shall be a minimum of two pipe sizes larger than pipe contained.
- 3.5.4 Sleeves to be provided and extend a minimum of 12" beyond edges of walls, walks, and paving.
- 3.5.6 Place wires in separate sleeve (1 ½" minimum).
- 3.5.7 Coordinate sleeve installation with other trades as required.

3.6 PIPE INSTALLATION

- 3.6.1 Install pipe in accordance with manufacturer's instructions.
 - 1. Solvent-weld PVC pipe and fittings, using primer, solvents, and methods recommended by manufacturer, except where screw connections are required. Clean pipe and fittings of dirt and moisture before assembly. Snake pipe from side to side of trench bottom to allow for expansion and contraction. Make all connections between PVC pipe and metal valves or pipe with threaded fittings using PVC male adapters.
 - 2. Use Teflon tape only on threaded joints, plastic to plastic and/or plastic to metal. Assemble threaded PVC fittings finger-tight plus one to two turns - no more.
- 3.6.2 Install thrust blocks on main lines (larger than 2 ½") at locations that make a change of direction.
- 3.6.3 Avoid following piping layout situations:
 - 1. Avoid piping layout along sides of structures.
 - 2. Avoid odd angles in piping layout.
 - 3. Avoid unbalanced friction losses.
 - 4. Avoid high friction losses.
 - 5. Avoid excessive trenching.

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

3.7 ZONE VALVES

3.7.1 Place valve boxes no closer than 12" to edges of walks and set flush with finish grade.

3.8 CONTROLLERS

3.8.1 Install per local code and manufacturer's instructions.

3.8.2. Connect remote control valves to controller in clockwise sequence to correspond with station setting beginning with Stations 1, 2, 3, etc.

3.8.3 Affix a non-fading copy of irrigation as-built to cabinet door. Irrigation as-built drawing shall be sealed between two sheets of plastic and shall clearly show all valves operated by the controller, showing station number, valve size, and location.

3.8.4 Exact field location of controllers to be verified before installation. Coordinate the electrical service to these locations.

3.8.5 Provide a Rain Sensor for the irrigation controller; coordinate locations with Owner.

3.10 CONTROL WIRING

3.10.1 Install control wires with sprinkler mains and laterals in common trenches wherever possible. Lie to the side of pipeline and tie wires in bundles at 10' intervals and allow slack for contraction between ties.

3.10.2 Provide a minimum of 3' of looped extra ground and control wire at each valve location and at 100' intervals on long wire runs. Snake wires in trench to allow for contraction of wires.

3.10.3 All control wire splices shall be installed in a valve box. All wire splices and control wire splices at remote control valves to be sealed with a Direct Burial Splice Kit - 3M DBY-6/DBR-6.

3.11 IMPROPERLY OPERATING OR LOCATED EQUIPMENT

Any equipment which fails to operate properly and/or is located incorrectly shall be promptly corrected or relocated at the Contractor's expense. If the Contractor wishes to make any field changes, he must receive written permission from both the Owner and Consultant.

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

3.13 FLUSHING AND TESTING

- 3.13.1 Cap or plug all openings as soon as lines have been installed to prevent entrance of materials that would obstruct the pipe. Leave in place until removal is necessary for completion of installation.
- 3.13.2 Thoroughly flush out all water lines before installing heads, valves, and quick coupling valves.
- 3.13.3 Testing: All instruments, equipment, facilities, and labor required to conduct the tests shall be provided by Contractor. Piping shall be tested hydrostatically before backfilling and proved tight at a hydrostatic pressure of 100 psi without pumping for a period of one hour with an allowable pressure drop of 5 psi. If hydrostatic pressure cannot be held for a minimum of 4 hours, Contractor shall make adjustments or replacements and the tests repeated until satisfactory results are achieved and accepted by the Owner.
- 3.13.4 Upon satisfactory completion of testing, complete assembly and adjust all heads for proper arc and radius.

3.14 BACKFILL AND COMPACTING

- 3.14.1 After system is operating and required tests and inspections have been made, backfill excavations and trenches with clean soil, free of rubbish.
- 3.14.2 Backfill for all trenches, regardless of the type of pipe covered, shall be compacted to minimum 95% density under pavements, 85% under planted areas.
- 3.14.3 Compact trenches in areas to be planted by thoroughly flooding the backfill. Jetting process may be used in those areas.
- 3.14.4 Dress off all areas to finish grade.

3.15 CLEANUP

- 3.15.1 Keep areas of work clean, neat, and orderly at all times. Keep paved areas clean during installation. Clean up and remove debris from the entire work areas prior to final acceptance.
- 3.15.2 Protect irrigation system and materials from damage due to performance of work, operations by other contractors, trades and trespassers. Maintain protection during installation and testing period.
- 3.15.3 The Contractor shall be responsible for all damage caused by his operations to trees, turf, shrubs, curbs, paving, structures, utilities, etc.,

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

on the site or adjacent to the site of the work and shall repair, replace or otherwise make good any damage caused by their work.

3.15.4 The Contractor shall check the system four weeks after acceptance for proper operation. The Contractor shall winterize the entire system in the fall following the installation. The Contractor shall start-up and completely check the entire system in the spring following installation. First year's winterization and start-up shall be provided at No additional cost to the Owner.

4. ACCEPTANCE

4.1 ACCEPTANCE

4.1.1 Demonstrate operation of all irrigation zones for the Owner and/or Consultant, a current as-built drawing shall be provided to the Owner/Consultant for purposes of the walk-thru. All irrigated areas are to have 100% coverage. Contractor shall add additional heads, as necessary, at no cost to the Owner. Adjust all heads as required for proper operation, alignment, elevation, radius, and arc. All future visits required by the Consultant, after initial punch list, may be charged to the irrigation contractor.

4.1.2 A field training course shall be provided for designated operating and maintenance staff members. Training shall be provided for a total period of up to 4 hours of normal working time. Field training shall cover all of the items contained in the operating and maintenance manuals.

4.2 GUARANTEE

4.2.1 The entire sprinkler system will be unconditionally guaranteed against defects in material and workmanship, including settling of backfilled areas below grade and adjusting heads to proper level for a period of one year from date of acceptance.

4.2.2 In addition to minor adjustments, any defective electrical controls, valves, sprinkler heads or other working parts will be repaired or replaced without cost to the Owner for a period of one year from date of acceptance.

4.2.3 Contractor to provide one winterization, and spring start-up of irrigation system.

4.2.4 Damage by others during the one-year guarantee period will be the Owner's responsibility.

SECTION 328400 - LANDSCAPE IRRIGATION – SPECIAL PROVISIONS

4.3 RECORD INFORMATION

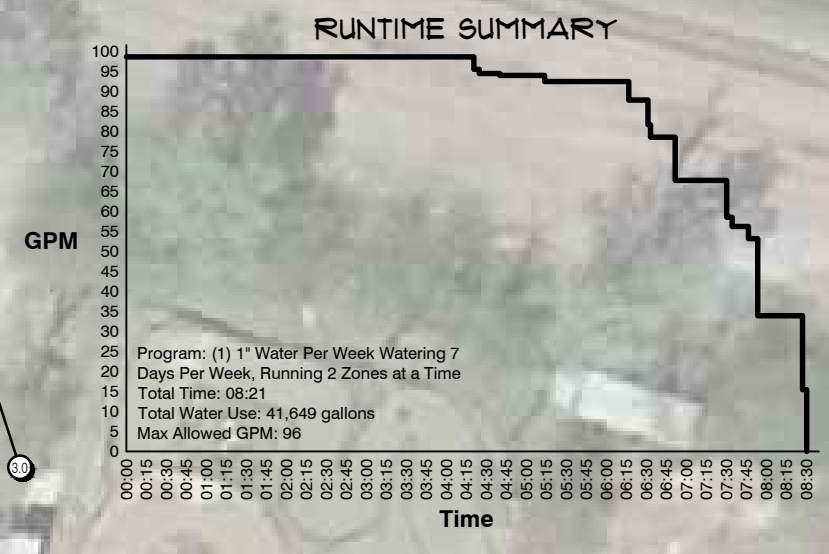
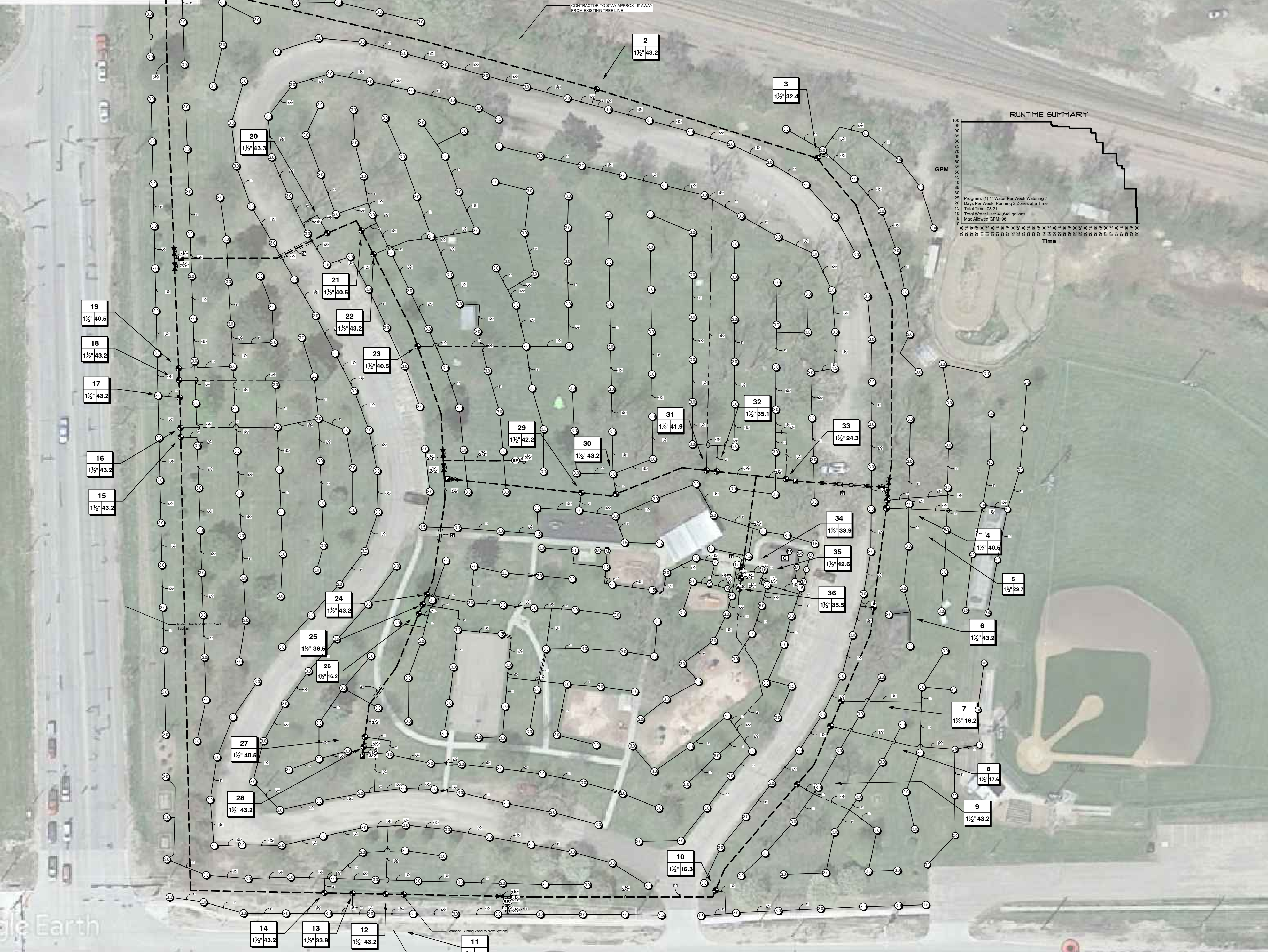
4.3.1 Furnish record drawings of the complete irrigation system.

4.3.2 Record Drawings and Controller Chart:

1. Provide a complete set of up to date as built drawings, and an electronic copy (AutoCAD release 2004 or newer).
2. Prepare a controller chart showing:
 - a. Location of all sections, valves, lateral lines, and routes of control wires.
 - b. Identify all valves as to size, station, number, and type of irrigation.
 - c. Provide chart as a black line print with a different color used to show area of coverage for each station.
 - d. Locate chart inside controller door. Seal chart between two pieces of plastic.
 - e. Provide suggested irrigation schedule at time of acceptance.
 - f. Complete chart and receive approval prior to final inspection of irrigation system.

END OF SECTION

itled Map
description for your map



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY
☉	Hunter MP1000 PROS-04	10
☉	Hunter MP2000 PROS-04	2
⊙	Hunter I-20-04	22
⊙	Hunter I-20-04	4
⊙	Hunter I-20-04	462
⊙	Hunter I-20-04	4

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
⊙	Hunter PDU-151 Globe 1-1/2"	1
⊙	1-1/2" Plastic Electric Remote Control Valve, for Residential/Light Commercial Use, Female NPT Inlet/Outlet, With Flow Control, Globe Configuration.	38
⊙	Flan Birt 5-IRC 1"	4
⊙	1" Brass Quick-Coupling Valve, with Corrosion-Resistant Stainless Steel Spring, Thermoplastic Rubber Cover, and 1-Piece Body.	4
⊙	Shut Off Valve Matco 10RT	10

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
⊙	NEW Watts 800MGT 2"	1
⊙	An anti-siphon pressure vacuum breaker shall be installed where indicated on the plans to prevent the back-siphonage of contaminated water. See specification sheet for more information.	1
⊙	NEW Watts 800MGT 2"	1
⊙	An anti-siphon pressure vacuum breaker shall be installed where indicated on the plans to prevent the back-siphonage of contaminated water. See specification sheet for more information.	1
⊙	Hunter AZC-750-P	1
⊙	Grounding Min Every 500' of Mainline and At All Mainline Dead Ends.	1
⊙	Hunter WRF-CLK	1
⊙	Blowdown Sensor, install within 1000 ft of controller, in line of sight, 22-28 VAC/VDC, 100 mA power from timer transformer. Mount as noted. Includes Gutter Mount.	1
⊙	POC 2"	1
⊙	Existing 2" Line Using Both Existing Taps	1
⊙	POC 2"	1
⊙	Existing 2" PVB	1

---	Irrigation Lateral Line: Polyethylene Pipe NSF Approved 1" 80#	9,140 LI.
---	Irrigation Lateral Line: Polyethylene Pipe NSF Approved 1 1/4" 80#	4,111 LI.
---	Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/2"	1,831 LI.
---	Irrigation Lateral Line: PVC Class 200 SDR 21 2"	828.5 LI.
---	Irrigation Lateral Line: PVC Class 200 SDR 21 2 1/2"	506.0 LI.
---	Irrigation Mainline: PVC Class 200 SDR 21 2 1/2"	3,487 LI.
---	Pipe Sleeve: PVC Class 200 SDR 21	72.2 LI.
---	Pipe Sleeve: PVC Class 200 SDR 21 4"	146.9 LI.

CRITICAL ANALYSIS

Generated:	2022-02-03 13:34
P.O.C. NUMBER: 01	Existing 2" Line Using Both Existing Taps
Water Source Information:	Existing 2" Line Using Both Existing Taps
FLOW AVAILABLE	Point of Connection Size: 2"
	Flow Available: 70.55 GPM
PRESSURE AVAILABLE	Static Pressure at POC: 55.00 PSI
	Pressure Available: 55.00 PSI
DESIGN ANALYSIS	Maximum Station Flow: 43.3 GPM
	Flow Available at POC: 70.55 GPM
	Residual Flow Available: 27.25 GPM
Critical Station:	12
Design Pressure:	35 PSI
Friction Loss:	3.34 PSI
Fittings Loss:	0.31 PSI
Elevation Loss:	0 PSI
Loss through Valve:	3.58 PSI
Pressure Req. at Critical Station:	41.76 PSI
Loss for Frittings:	0.29 PSI
Loss for Main Line:	1.52 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	4.09 PSI
Critical Station Pressure at POC:	47.22 PSI
Pressure Available:	55 PSI
Residual Pressure Available:	7.48 PSI

P.O.C. NUMBER: 03	Existing 2" PVB
Water Source Information:	Existing 2" PVB
FLOW AVAILABLE	Point of Connection Size: 2"
	Flow Available: 70.55 GPM
PRESSURE AVAILABLE	Static Pressure at POC: 55.00 PSI
	Pressure Available: 55.00 PSI
DESIGN ANALYSIS	Maximum Station Flow: 43.3 GPM
	Flow Available at POC: 70.55 GPM
	Residual Flow Available: 27.25 GPM
Critical Station:	28
Design Pressure:	35 PSI
Friction Loss:	3.34 PSI
Fittings Loss:	0.31 PSI
Elevation Loss:	0 PSI
Loss through Valve:	3.58 PSI
Pressure Req. at Critical Station:	41.77 PSI
Loss for Frittings:	0.29 PSI
Loss for Main Line:	2.34 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	4.09 PSI
Critical Station Pressure at POC:	48.43 PSI
Pressure Available:	55 PSI
Residual Pressure Available:	6.57 PSI

IRRIGATION SPECIFICATIONS

- IRRIGATION POINT OF CONNECTION SHALL BE CAPABLE OF DELIVERING A VARIABLE FLOW RATE OF 55 GPM AT EACH SOURCE AND CONSTANT PRESSURE OF 55 PSI DOWNSTREAM OF BACKFLOW PREVENTION DEVICE. POINT OF CONNECTION SHALL BE ABLE TO MAINTAIN THE MAXIMUM FLOW RATE AND PRESSURE FOR THE DURATION OF AN IRRIGATION CYCLE. CONTRACTOR SHALL VERIFY THESE PARAMETERS PRIOR TO CONSTRUCTION AND NOTIFY OWNER'S REPRESENTATIVE AND IRRIGATION CONSULTANT IF THEY CANNOT BE MET.
- IF THE POINT OF CONNECTION EXCEEDS THE ABOVE PRESSURE REQUIREMENTS, A PRESSURE REGULATOR SHALL BE INSTALLED AT THE OWNER'S EXPENSE. PRESSURE REGULATOR SHALL BE SET AT THE PRESSURE RECOMMENDED ABOVE.
- AN RPZ TYPE BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED IN A MANNER SATISFYING LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS.
- POWER FOR THE IRRIGATION CONTROLLER, PUMP AND OTHER ELECTRICAL COMPONENTS SHALL BE PROVIDED BY OTHERS. CONTRACTOR SHALL VERIFY POWER AVAILABLE MEETS THE REQUIREMENTS OF THE COMPONENTS MANUFACTURER. IF POWER AVAILABLE IS INADEQUATE, CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
- IRRIGATION SYSTEM IS DISPLAYED SCHEMATIC IN NATURE. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY TO ACCOMMODATE FOR LANDSCAPING CHANGES, PLANTING BEDS OR OTHER OBSTRUCTIONS. THESE ADJUSTMENTS MAY BE MADE ONLY AFTER NOTIFYING THE OWNER'S REPRESENTATIVE.
- SOME IRRIGATION COMPONENTS AND PIPING ARE SHOWN IN HARDSCAPE AREAS AND OUTSIDE OF PROPERTY LINES TO IMPROVE ON THE READABILITY OF THE IRRIGATION PLAN. ALL COMPONENTS AND PIPING SHALL BE INSTALLED INSIDE OF THE PROPERTY LINES AND OUTSIDE OF HARDSCAPE AREAS.
- MAINLINE, LATERALS AND CONTROL WIRES SHALL BE INSTALLED INSIDE THE SAME TRENCH WHENEVER POSSIBLE.
- SYSTEM TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- CONTROLLER SHALL BE GROUNDED PER MANUFACTURER'S SPECIFICATIONS.
- ALL CONTROLLER/DECODED WIRE SHALL BE THE 2-WIRE CABLE SPECIFIED BY THE CONTROLLER MANUFACTURER.
- ALL FIELD WIRE ABOVE GRADE OR WITHIN STRUCTURE TO BE INSTALLED IN CONDUIT PER LOCAL CODE.
- ALL UNDERGROUND SPLICES TO UTILIZE 3M DRY OR KING WATER PROOF SPLICE KITS, DEPENDING ON NUMBER AND SIZE OF WIRES. ALL SPLICES SHALL BE MADE INSIDE A VALVE BOX.
- DEPTH OF IRRIGATION PIPING: 18" ON MAINLINE; 12" ON LATERALS.
- SLEEVING UNDER PAVED AREAS SHALL BE INSTALLED AT A DEPTH OF 24".
- CONTRACTOR'S RESPONSIBILITY TO VERIFY SCALE & ACCURACY.
- CHAD ROWLEY C.I.D. WITH GRIDS IS THE IRRIGATION CONSULTANT ON THE PROJECT. 402.704.9936



Project Name :
Ashley Park
Grand Island, NE

Customer Name :

Design Date: 2/3/22

NOT FOR CONSTRUCTION

REVISIONS

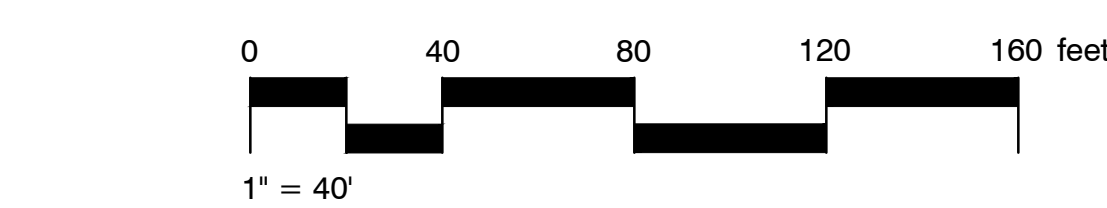
Description	Date
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△	REV 2/9/22
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Drawing Title:
Irrigation Plan

Drawing Scale: 1" = 40'

Project Number: CM144

Sheet Number:
IR-1



CONTRACTOR TO NOTE UNDER GROUND UTILITIES IN THIS AREA AND RESPONSIBLE TO VERIFY FOR ALL AREAS IN THE PARK BEFORE INSTALLATION.

CONTRACTOR TO STAY APPROX 15' AWAY FROM EXISTING TREE LINE

Current Existing Zone to New System