



**CITY OF NOVI CITY COUNCIL
JUNE 20, 2022**

SUBJECT: Approval to award the Civic Center Irrigation Replacement contract to Michigan Automatic Sprinkler, the lowest qualified bidder, in the amount of \$75,854.

SUBMITTING DEPARTMENT: Facilities Management Division

EXPENDITURE REQUIRED	\$ 75,854
AMOUNT BUDGETED	\$ 75,854
APPROPRIATION REQUIRED	\$ 0
LINE ITEM NUMBER	101-265.00-976.104

BACKGROUND INFORMATION: The current Civic Center irrigation system is the original system to the building. Over the years, the system has been expanded and pieced together in order to cover required areas. As the system has aged, leaks have developed, reducing our water efficiency. In addition, any adjustments must be made on-site to account for rainy or humid weather conditions.

The proposed new system includes improved sprinkler head designs that have a higher degree of fine tuning; preventing over spray onto sidewalks, and distributing water more evenly. A new controller will be installed, which has a number of features aimed at reducing our water consumption, including remote access, to allow monitoring and adjustments to be made while off-site, and local weather station data pulling to self-adjust when rain is forecasted. To reduce the risk of future leaks and excess water usage, flow sensors and moisture meters will be installed that directly communicate with the main controller.

A mandatory pre-bid meeting was held on June 2nd, 2022, which was attended by 3 firms. All 3 firms submitted bids. Below is a breakdown of the resulting bids.

	Marc Dutton Irrigation	Michigan Automatic Sprinkler	Techseven Co.
A. Lump Sum	\$86,885	\$75,854	\$179,525
B. Start Date	8/1/2022	7/7/2022	7/18/2022
C. Days to Complete	20	9-12 working days weather dependent	21

RECOMMENDED ACTION: Approval to award the Civic Center Irrigation Replacement contract to Michigan Automatic Sprinklers, the lowest qualified bidder, in the amount of \$75,854.



CITY OF NOVI
CIVIC CENTER IRRIGATION REPLACEMENT
BID FORM

We, the undersigned as bidder, propose to furnish to the City of Novi, according to the specifications, terms, conditions and instructions attached hereto and made a part thereof:

- A. Lump Sum \$ 75,854.00
- B. If project is awarded on 6/20/22, we can begin work on 7-7-2022
- C. Days required to complete the work 9 to 12 working Days
Weather Dependent

We acknowledge receipt of the following Addenda: _____
(please indicate numbers)

EXCEPTIONS TO SPECIFICATIONS (all exceptions must be noted here):

COMMENTS: _____

REFERENCES: Please provide at least three client (3) references for projects of similar scope done in the last 3 years.

1. Company Great Oaks landscape
Address 28025 Samuel Linden Ct. Novi MI
Phone 248-349-8555 Contact name Rick Tuttle
2. Company Michael J Dul & Associates Inc
Address 212 Daines St. Birmingham, MI
Phone 248-644-3410 Contact name Patrick Funke
3. Company Donato Landscaping
Address 4605 22 mile Rd Shelby Twp, MI
Phone 586-739-0795 Contact name Tony Donato

NON-IRAN LINKED BUSINESS

By signing below, I certify and agree on behalf of myself and the company submitting this proposal the following: (1) that I am duly authorized to legally bind the company submitting this proposal; and (2) that the company submitting this proposal is not an "Iran linked business," as that term is defined in Section 2(e) of the Iran Economic Sanctions Act, being Michigan Public Act No. 517 of 2012; and (3) That I and the company submitting this proposal will immediately comply with any further certifications or information submissions requested by the City in this regard.

THIS BID SUBMITTED BY:

Company (Legal Registration) Michigan Automatic Sprinkler Inc.
Address 4350 Pineview Drive Suite A
City Commerce State MI Zip 48390
Telephone 248-669-1100 Fax _____
Representative's Name Matthew Haupricht
Representative's Title Estimator / Designer
Authorized Signature Matthew Haupricht
E-mail mhaupricht@micautosprinkler.com
Date 6/8/22

Civic Center Irrigation Replacement

City of Novi

Purchasing Dept.

45175 Ten Mile Rd.

Novi, MI 48375

Rec'd T. Marzonic 6/9/22 1:42 pm



cityofnovi.org

IMPORTANT DATES

NOTICE - CITY OF NOVI

INVITATION TO BID

CIVIC CENTER IRRIGATION REPLACEMENT

Bid Issue Date	Friday, May 27, 2022
Mandatory Pre-Bid Meeting	Thursday, June 2, 2022 at 10:00am Novi Civic Center 45175 Ten Mile Rd Novi, MI 48375
Last Date for Questions	Monday June 6, 2022 by 12:00pm Please submit all questions via email to: Tracey Marzonie, Purchasing Department tmarzonie@cityofnovi.org
Response Due Date	Thursday, June 9, 2022 by 2:00pm Deliver to: City of Novi Purchasing Department 45175 Ten Mile Rd Novi, MI 48375

DESCRIPTION:

The City of Novi is seeking bids from qualified contractors to upgrade the irrigation system at the Novi Civic Center.

NOTICE TO BIDDERS

The City of Novi officially distributes bid documents through the Michigan Intergovernmental Trade Network (MITN). **Copies of bid documents obtained from any other source are not considered official copies.** The City of Novi cannot guarantee the accuracy of any information not obtained from the MITN website and is not responsible for any errors contained by any information received from alternate sources. Only those vendors who obtain bid documents from the MITN system are guaranteed access to receive addendum information, if such information is issued. If you obtained this document from a source other than the source indicated, it is recommended that you register on the MITN site, www.mitn.info and obtain an official copy.

INSTRUCTIONS

QUESTIONS

Please email all questions to the staff member listed above. Please write the name of the bid in the subject line. If you write anything else in the subject line, your email may be deleted as spam. Vendors/contractors are specifically directed not to contact any other City staff. Unauthorized contact of any City department employee may result in rejection of submittal.

MANDATORY PRE-BID MEETING

A mandatory pre-bid meeting may be held. If so, the date, time, and location will be indicated on the cover of this ITB. The meeting will begin promptly at the time listed above and will be closed thereafter to latecomers. It is the vendor/contractor's responsibility to take traffic, weather, etc. into consideration in order to arrive at the pre-bid meeting on time.

TYPE OF CONTRACT

If a contract is executed as a result of the bid, it stipulates a fixed price for products/ services.

CHANGES TO THE BID/ADDENDA

Should any prospective Bidder be in doubt as to the true meaning of any portion of the ITB, or should the Bidder find any patent ambiguity, inconsistency, or omission therein, the Bidder shall make a written request (via email) for official interpretation or correction. Such request shall be submitted to the staff member indicated above. The individual making the request shall be held responsible for its prompt delivery.

Such interpretation or correction, as well as any additional Bid provisions that the City may decide to include, will be made as an addendum, which will be posted on the MITN website at www.mitn.info. Any addendum issued by the City shall become part of the ITB and subsequent contract and shall be taken into account by each bidder in preparing its bid. Only written addenda is binding. It is the Bidder's responsibility to be sure they have obtained all addenda. Receipt of all addenda must be acknowledged on bid form.

BID SUBMITTALS

Provide **one (1)** unbound signed copy of the original bid. No other distribution of the bids will be made by the Contractor. Bids must be signed by an official authorized to bind the Contractor to its provisions.

FAILURE TO SUBMIT PRICING ON THE BID FORM PROVIDED BY THE CITY OF NOVI MAY CAUSE THE BID TO BE CONSIDERED NON-RESPONSIVE AND INELIGIBLE FOR AWARD.

As this ITB is being made available by electronic means, the proposer accepts full responsibility to ensure that no changes are made to the ITB documents. In the event of conflict between a version of the ITB submitted by proposer, the version maintained by the City of Novi Purchasing Department shall govern.

FAILURE TO SUBMIT PRICING ON THE BID FORM PROVIDED BY THE CITY OF NOVI MAY CAUSE THE BID TO BE CONSIDERED NON-RESPONSIVE AND INELIGIBLE FOR AWARD.

SUBMISSION OF BID

To be considered, bids must be submitted as specified in the Notice page, on or before the specified time and date. There will be no exceptions to this requirement. Faxed, emailed, or telephone bids are not acceptable.

Bids must be signed by an Authorized Representative of the submitting company on the enclosed form when one is provided. Bids must show unit and total prices when requested. In case of mistakes in price extension, unit pricing shall govern. *ANY CHANGES MADE ON THE BID FORM MUST BE INITIALED OR YOUR BID MAY BE CONSIDERED NON-RESPONSIVE.*

A bid may be withdrawn by giving written notice to the Purchasing Manager before the stated due date/closing time. After the stated closing time, the bid may not be withdrawn or canceled for a period of One Hundred and Twenty (120) days from closing time.

Bidders are expected to examine all specifications and instructions. Failure to do so will be at the bidder's risk.

Failure to include in the bid all information requested may be cause for rejection of the bid.

No bid will be accepted from, or contract awarded to any person, firm, or corporation that is in arrears or is in default to the City of Novi upon any debt or contract, or that is in default as surety or otherwise, or failed to perform faithfully any previous contract with the City.

INELIGIBILITY OF IRAN LINKED BUSINESS

Under 2012 PA 517, an Iran Linked Business, as defined therein, is not eligible to contract with the City and shall not submit a bid.

CONSIDERATION OF BIDS

In cases where items are requested by a manufacturer's name, trade name, catalog number or reference, it is understood that the bidder/proposer intends to furnish the item so identified or an item of "equal" quality and value as determined by the City of Novi.

Reference to any of the above is intended to be descriptive, but not restrictive, and only indicates articles that will be satisfactory. Bids of "equal" quality and value will be considered, provided that the bidder states in his/her bid what he/she proposed to furnish, including literature, or other descriptive matter which will clearly indicate the character of the item covered by such bid. The Purchasing Manager hereby reserves the right to approve as an "equal", any item proposed which contains minor or major variations from specification requirements, but which may comply substantially therewith.

RESPONSIVE BIDS

All pages and the information requested herein shall be furnished completely in compliance with instructions. The manner and format of submission is essential to permit prompt evaluation of all bids on a fair and uniform basis. Unit prices shall be submitted if space is provided on bid form. In cases of mistakes in extension, the unit price shall govern. Accordingly, the City reserves the right to declare as non-responsive, and reject an incomplete bid if material information requested is not furnished, or where indirect or incomplete answers or information is not provided. Any exceptions to the specifications must be noted on the bid form.

EXCEPTIONS

The City will not accept changes or exceptions to the bid documents/specifications unless Contractor indicates the change or exception in the "Exceptions" section of the bid form. If Contractor neglects to make the notation on the bid form but writes it somewhere else within the bid documents and is awarded the contract, the change or exception will not be included as part of the contract. The original terms, conditions and specifications of the bid documents will be applicable during the term of the contract.

CONTRACT AWARD

The contract will be awarded to that responsible, responsive bidder whose bid, conforming to this solicitation, will be most advantageous to the City of Novi. Qualifications, experience, references, comparable projects, price, previous experience with vendor/contractor, delivery, and other factors will be considered in the evaluation process and award of contract. The City reserves the right to accept any or all alternative bids and award the contract to other than the lowest bidder, to waive any irregularities or informalities or both; to reject any or all bids; and in general to make the award of the contract in any manner deemed by the City, in its sole discretion, to be in the best interest of the City of Novi.

After contract award, a summary of total price information for all submissions will be posted on the MITN website at www.mitn.info .

The City may, from time to time, find it necessary to continue this contract on a month-to-month basis only, not to exceed a six (6) month period. Such month-to-month extended periods shall be by mutual agreement of both parties, with all provisions of the original contract or any extension thereof remaining in full force and effect.

VENDOR DISQUALIFICATION

The City maintains the right to disqualify vendors under the following conditions:

1. In addition to any other remedies authorized by law, a vendor may be disqualified from bidding on any City contracts for up to three (3) years if it has been determined that the vendor, after award of the contract:
 - (a) Failed to provide the service or supplies required;
 - (b) Provided the service or supplies in an untimely manner causing delays and interference;

- (c) Lacked financial resources and the ability to satisfactorily perform the contract or provide the services or supplies;
 - (d) Exhibited poor quality of performance in delivering the service;
 - (e) Delivered poor quality of goods;
 - (f) Failed to comply with laws and ordinances relating to the contract performance;
 - (g) Defaulted on its quotations;
 - (h) Such other action what leads the City to believe that the contractor's duties will not comport or comply with the bid requirements.
2. Vendors who are listed on the Excluded Parties List System at www.sam.gov

GENERAL CONDITIONS

INSURANCE

A certificate of insurance naming the City of Novi as an additional insured must be provided by the successful bidder prior to commencement of work. A current certificate of insurance meeting the requirements in Attachment A is to be provided to the City and remain in force during the entire contract period.

PERMITS

Where required by code, permits and all required inspections must be obtained by the Contractor. Fees for permits and inspections obtained from the City of Novi will be waived by the City for work on City buildings. Upon completion, all work will be subject to the State Laws and City Ordinance Codes.

CLEAN UP

The contractor shall keep the work area and surrounding area reasonable free from rubbish at all times and shall remove debris from the site from time to time or when directed to do so by the City's designated representative(s). Before final inspection and acceptance of the work, the Contractor shall clean his portion of the work area. All materials removed/replaced shall be the responsibility of the contractor to properly dispose of.

SAFETY REQUIREMENTS

The Contractor shall be solely responsible for the entire work site and provide all necessary protections as required by laws or ordinances governing such conditions and as required by the Owner. He shall be responsible for any damage to the Owner's property or that of others on the job, by himself, his personnel or his subcontractors, and shall make good such damages. He shall be responsible for and pay for any claims against the owner arising from such damages.

The Contractor shall provide all necessary safety measures for the protection of all persons on the work, and shall fully comply with all state laws or regulations and Michigan State building code requirements to prevent accident or injury to persons on or about the location of the work. He shall clearly mark or post signs warning of hazards existing, and shall barricade excavations and similar hazards. He shall protect against damage or injury resulting from falling materials and he shall maintain all necessary protective devices and signs throughout the progress of the work.

NO EXCLUSIVE CONTRACT

Contractor agrees and understands that the contract shall not be construed as an exclusive agreement and further agrees that the City may, at any time, secure similar or identical products/services at its sole option. The Contractor will not be reimbursed for any anticipatory profits should the City exercise this option.

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TAX EXEMPT STATUS

It is understood that the City of Novi is a governmental unit, and as such, is exempt from the payment of all Michigan State Sales and Federal Excise taxes. Do not include such taxes in the bid prices. The City will furnish the successful bidder with tax exemption certificates when requested. The City's tax-exempt number is 38-6032551.

The following exception shall apply to installation projects: When sales tax is charged to the successful bidder for materials to be installed during the project, that cost shall be included in the "Complete for the sum of" bid price and not charged as a separate line item. The City is not tax exempt in this case and cannot issue an exemption certificate.

FREIGHT CHARGES/SHIPPING/HANDLING

All bid/proposal pricing is to be F.O.B. destination.

DOWN PAYMENTS OR PREPAYMENTS

Any bid submitted which requires a down payment or prepayment prior to delivery and full acceptance, as being in conformance with specifications, will not be considered for award. No payments will be made until work is performed/goods are received to the satisfaction of the authorized City representative.

INVOICING

Invoices may be mailed to: City of Novi, Attn: Finance Department, 45175 Ten Mile Road, Novi, MI 48375, OR emailed to: invoices@cityofnovi.org. *This email is to be used for invoices and statements only and not for any other type of communication or sales. We are unable to respond to any inquiries from this email.*

CONTRACT TERMINATION

The City may terminate and/or cancel this contract (or any part thereof) at any time during the term, any renewal, or any extension of this contract, upon thirty days (30) days written notice to the Contractor, for any reason, including convenience without incurring obligation or penalty of any kind. The effective date for termination or cancellation shall be clearly stated in the written notice.

TRANSFER OF CONTRACT/SUBCONTRACTING

The successful bidder will be prohibited from assigning, transferring, converting or otherwise disposing of the contract agreement to any other person, company or corporation without the expressed written consent of the City of Novi. Any subcontractor,

so approved, shall be bound by the terms and conditions of the contract. The contractor shall be fully liable for all acts and omissions of its subcontractor(s) and shall indemnify the City of Novi for such acts or omissions.

ACCEPTANCE OF BID CONTENT

Should a contract ensue, the contents of the bid of the successful Bidder may become contractual obligations. Failure of a contractor to accept these obligations may result in cancellation of the award.

DISCLOSURE

All documents, specifications, and correspondence submitted to the City of Novi become the property of the City of Novi and are subject to disclosure under the provisions of Public Act No. 442 of 1976 known as the "Freedom of Information Act". This Act also provides for the complete disclosure of contracts and attachments hereto. This means that any informational material submitted as part of this ITB is available without redaction to any individual or organization upon request.

ECONOMY OF PREPARATION

Bids should be prepared simply and economically, providing a straightforward and concise description of the bidder's ability to meet the requirements of the bid. Emphasis should be on completeness and clarity of content. Included in the response must be a point by point response to the Requirements and other sections of the bid.

The City of Novi is not liable for any costs incurred by bidders prior to issuance of a contract.

SAMPLES

Samples for testing may be requested by the City of Novi during bid evaluation. Samples shall be free to the City. Failure to provide samples or demonstrations on a timely basis will be justification for bid rejection.

SAFETY DATA SHEETS (SDS)

All City of Novi purchases require a Safety Data Sheet, ("SDS"), where applicable, in compliance with Miosha "Right To Know" law. The SDS must include the following information:

1. The chemical name and the common name of the toxic substance.
2. The hazards or other risks in the use of the toxic substance, including:
 - a) The potential for fire, explosion, corrosivity, and reactivity;
 - b) The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
 - c) The primary routes of entry and symptoms of overexposure.
3. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic substances, including appropriate emergency treatment in case of overexposure.
4. The emergency procedure for spills, fire, disposal, and first aid.
5. A description in lay terms of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.

6. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.

ROAD WEIGHT RESTRICTIONS

The City of Novi has several Restricted Commercial Vehicle Routes. These sections of roadway are closed to commercial thru traffic. You may drive on these sections of road only if you are providing the contracted service within that particular section. At no time will the contractor drive more than a one (1) mile distance on a restricted road. For a poster-sized map with additional details, contractors can check our Map Gallery: <http://cityofnovi.org/Community/PDFMaps/RoadwayWeightClassifications.pdf>

INDEPENDENT PRICE DETERMINATION

By submission of a bid, the offeror certifies, and in case of a joint bid, each party hereto certifies as to its own organization, that in connection with the bid:

- a. The prices in the bid have been arrived at independently without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other offeror or with any other Competitor; and
- b. No attempt has been made or will be made by the offeror to induce any other person or firm to submit or not submit a bid for the purpose of restricting competition.

Each person signing the bid certifies that:

- c. He is the person in the offeror's organization responsible within that organization for the decision as to prices being offered in the bid and that he has not participated and will not participate in any action contrary to (a) and (b) above; or
- d. He is not the person in the offeror's organization responsible within that organization for the decision as to prices being offered in the bid but that he has been authorized in writing to act as agent for the persons responsible for such decisions in verifying that such persons have not participated, and will not participate, in any action contrary to (a) and (b) above, and that as their agent, does hereby so certify; and that he has not participated, and will not participate in any action contrary to (a) and (b) above.

A bid will not be considered for award if the sense of the statements required in the bid has been altered so as to delete or modify the above.

EQUAL EMPLOYMENT OPPORTUNITY

The Contractor shall comply with Executive Order 11246 of Sept. 24, 1965, entitled "Equal Employment Opportunity", as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60).

COPELAND "ANTI-KICKBACK" ACT

The Contractor shall comply with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR part 2). (Applies to contract and subgrants for construction or repair)

DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

The Contractor shall comply with the provisions of 24 CFR Part 24 that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this contract. Additionally, the Consultant shall not use, directly or indirectly, any of the funds provided by this contract to employ, award contracts to, or otherwise engage the services of, or fund any contractor/subcontractor during any period that the contractor/subcontractor is debarred, suspended or ineligible under the provisions of 24 CFR Part 24.

ANTI-DISCRIMINATION

The Contractor shall not discriminate against any employee or applicant for employment because of religion, race, color, national origin, age, sex, height, weight, handicap, ancestry, place of birth, sexual preference or marital status. The Contractor further covenants that it will comply with the Civil Rights Act of 1973, as amended; and the Michigan Civil Rights Act of 1976 (78. Stat. 252 and 1976 PA 453) and will require a similar covenant on the part of any consultant or subcontractor employed in the performance of this contract.

PROHIBITION OF POLITICAL AND RELIGIOUS ACTIVITY

There shall be no religious worship or instruction as part of, or in connection with, the performance of this agreement. None of the funds, materials, property or services under this agreement shall be used in the performance of this agreement for any partisan political activity, including lobbying, as specified in Federal Circular A-122 Cost Principles for Nonprofit Organizations -- lobbying revisions, or to further the election, defeat, recall, impeachment, appointment or dismissal of any candidate for or from any public office.

VENDOR ASSISTANCE IN SPECIFICATION PREPARATION

On occasion the City of Novi finds it advantageous to accept technical assistance in preparing/researching specifications from vendors who may bid on the equipment or services. This assistance may or may not be compensated depending upon the type of assistance required.

The purpose of this clause is to insure that such vendor assistance does not compromise our policy of fair and open competition.

When vendor assistance is utilized the following disclosure statement shall be included in the specification package:

Disclosure Statement: The following specification has been prepared with the assistance of Spartan Distributors, 487 W Division St, Sparta, MI 49345. It is our policy to disclose this vendor's participation.

If you have any questions or concerns regarding the specifications please contact:

City of Novi
Tracey Marzonie, Purchasing Department
tmarzonie@cityofnovi.org
(248) 347-0466



CITY OF NOVI
CIVIC CENTER IRRIGATION REPLACEMENT
SPECIFICATIONS

1 GENERAL

1.1 SUMMARY

A. Scope of Work:

1. The objective of these specifications is to provide an assembled and installed automatic irrigation system, which will efficiently irrigate all areas to be covered and shall prove satisfactory in all aspects to the Owner.
2. Sprinkler lines shown on the drawings are essentially diagrammatic. Locations of all sprinkler heads, valves, piping, wiring, etc., shall be established by the contractor at the time of construction. Spacing of the sprinkler heads or quick coupling valves are shown on the drawings and shall not be exceeded without the permission of the Owner's authorized representative.
3. Unless otherwise specified or indicated on the drawings, the construction of the sprinkler system shall include the furnishing, installing and testing of: valves, gate valves, control valves, controllers, electric wire, pumps, controls and all necessary specialties. The removal and/or restoration of existing improvements, excavating and backfill, and all other work in accordance with the plans and specifications shall be included as required for a complete system.
4. All work herein specified or called for on the drawings shall be executed in accordance with all governing ordinances, laws and regulations that meet all local conditions. Additionally, any changes and/or additions in the work necessary to meet these ordinances, laws, regulations, and/or conditions will be made without additional cost to the Owner.
5. Adjustments of heads shall be made as deemed necessary and approved by Owner to assure 100% coverage for turf zones and 90% for landscape beds.
6. The Contractor shall take out all required permits, arrange for all necessary inspections and shall pay any fees and expenses in conjunction with the same as a part of the work under this contract.
7. Equipment, Tools and Labor: The contractor shall furnish all such equipment, tools and labor necessary to pursue work in the acceptable manner, to a speedy completion. This contract is based on the contractor furnishing and using his own equipment, tools and labor which are suitable to carry out this contract in a first-class manner, unless herein specified.
8. Owner's Supervision: The owner assumes no responsibility in the supervision and inspection of the work involved in the execution of this contract beyond insuring, to the Owner's satisfaction, that the plans and specifications are being properly interpreted. This supervision and checking will not relieve the Contractor of any responsibility for the performance of his work in

accordance with the plans and these specifications.

- B. Award of Contract: The Owner reserves the right to accept a bid other than the lowest.

1.2 SUBMITTALS

- A. Product Data, Shop Drawings, and Samples: Shop drawings on all equipment and systems to be furnished shall be provided for review within 30 days of contract award. (If other than specified). Product Data sheets must be marked or highlighted to indicate specific model(s) of equipment/material intended to be installed. Submittals will be rejected if this instruction is not followed.
- B. Design Data, Test Reports, Certificates, Manufacturer's Instructions, and Manufacturer's Field Reports.
- C. As-Built Drawings: After completion of the piping installation, the Contractor shall furnish an "as-built" drawing showing all sprinkler heads, valves, drains, and pipelines to scale. Dimensions are required for all electric valves, isolation valves, sleeves, quick couplers, mainline and wires that do not follow the mainline pipe. Instruction sheets and parts lists covering all operating equipment will be bound into a folder and furnished to the Owner in duplicate.

1.3 QUALITY ASSURANCE

- A. Qualifications: Installer shall have satisfactorily installed acceptable underground sprinkler system(s) on at least five (5) other projects of comparable complexity. A list of these shall be provided with the proposal.
- B. Regulatory Requirements & References: All work herein specified or called for on the drawings shall be executed in accordance with all governing ordinances, laws and regulations that meet all local conditions. Additionally, any changes and/or additions in the work necessary to meet these ordinances, laws, regulations, and/or conditions will be made without additional cost to the Owner.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Prevent damage to system components during loading, transporting, and unloading.
- B. Store system components in a dry and clean location.
- C. Contractor shall arrange his material storage so as not to interfere with the Owner's operation of the job.
- D. The Contractor shall provide and pay for all transportation required to deliver and remove from the site all materials and equipment, as required for all the work shown and specified.

1.5 PROJECT/SITE CONDITIONS

- A. Utilities and Protection: The Owner shall make available to the Contractor all of the necessary information regarding the exact location of existing utilities, and shall mark the location of such utilities and/or any underground obstructions, both at the site and on all copies of the installation plans. 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 he was not previously informed of such underground

utilities. If the Contractor is aware of such buried lines, he shall immediately have the incurred damages repaired at his own expense. Conversely, the Owner shall be liable for the cost of replacing or repairing damages to any of those existing utilities of which the Contractor had not been previously informed.

1.6 SEQUENCING AND SCHEDULING

- A. Coordinate all work with job site superintendent and all applicable trades.

1.7 WARRANTY

- A. For a period of one year from date of final acceptance of the work performed under this contract, the Contractor shall promptly furnish, without cost to the Owner, any and all parts and labor which prove defective in material or workmanship.
- B. A full 5-year manufacturer's warranty on all sprinkler heads, electric valves and controllers shall be provided by the Irrigation Contractor. Any of these parts proven to be defective within the 5-year warranty period shall be replaced with no cost to the owner for parts. After the 1-year labor warranty has expired, the owner shall be responsible for the cost of labor to replace defective sprinkler heads, electric valves and controllers.
- C. In the fall following the installation, the Contractor shall winterize the system and the following spring shall put the system back into operation. Winter damage due to improper winterization is the responsibility of the Contractor.
- D. It shall be the contractor's responsibility to insure and guarantee complete coverage of the areas shown on the drawings to be irrigated. He shall also guarantee the satisfactory operations of the entire system and the workmanship and restoration of the area. Adjustment of the sprinkler heads and automatic equipment will be done by the contractor, upon completion of installation, to provide optimum performance.

2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. The Toro Company, Bloomington, MN
- B. Weathermatic, Garland, TX

2.2 MATERIALS

- A. All materials to be incorporated in this system shall be new and without flaws or defects and of quality and performance as specified and meeting the requirements of this system. All material overages at the completion of the installation are property of the contractor and are to be removed from this site.
- B. Pipe and Fittings: Pipe sizes shall conform to those shown on the drawings. No substitutions of smaller pipe sizes will be permitted but substitutions of larger sizes may be approved. All pipe damaged or rejected because of defects shall be removed from the site at the time of said rejection.
- C. Mainline Piping: Mainline piping shall be rigid un-plasticized PVC class 200 PSI working pressure extruded from high-impact virgin polyvinyl-chloride (PVC-1120) conforming to NSF Standard 14 and ASTM D-2241 for thermal plastic pipe dimension ratio of SDR-21 and shall be marked or stamped every 5 feet to indicate brand, strength rating, size and standards. The pipe shall be homogeneous throughout and free from visible cracks, holes, foreign materials,

blisters, deleterious, wrinkles and dents.

- D. Lateral Piping: Lateral piping 2" and smaller shall be high-density (HD) flexible, non-toxic polyethylene made from 100% virgin polyethylene material, and all sizes shall have a minimum 100 PSI working pressure rating (ASTM D2239) conforming to NSF standard for thermoplastic pipe dimension ratio of SDR-15. All polyethylene pipe shall be continuously and permanently marked with the manufacturer's name, materials, size and schedule. Pipe shall conform to the U.S. Department of Commerce Commercial Standard CS255-63-PE-3408 or latest revision thereof. Pipe shall be suitable for potable water and shall bear the "NSF" trademark. All stainless-steel screw clamps shall be used to secure joints.
- E. PVC Pipe Fittings: All fittings 1-1/2" through 3" shall be Schedule 40 PVC solvent weld, type 1, meeting the requirements of STM D-2466. No saddles will be permitted. All 4" fittings shall be gasketed joint Harco PVC Class 200 meeting ASTM D1784 DR21 requirements. Bell shall be gasket joint conforming to ASTM3139 with gaskets conforming to AST F477. Fittings 6" and larger shall be Harco Ductile Iron Fittings manufactured with a grade of 65-45-12 in accordance with ASTM A-536. Fittings shall have deep push-on joints with gaskets meeting ASTM F-477 requirements. Only schedule 80 pipe may be threaded.
- F. Polyethylene Fittings: All fittings 2" and smaller downstream of control valve shall be plastic or insert type fittings where applicable. All 2" to 1-1/4" fittings shall be double clamped with all stainless-steel worm gear clamps. All 1" and smaller fittings shall be clamped with all stainless-steel worm gear clamps or all stainless-steel crimp clamps.
- G. Controllers:
 - 1. Irrigation system controller shall be type and size as indicated on the drawings.
 - 2. The controller shall be mounted in location shown on drawings.
 - 3. All control wire to the valves from the controller shall be 600-volt soft annealed copper, PVC insulated, UL approved type UF. Wire sizes shall be as called for on drawing. All 24V splices to be connected with water-tight 3M-DBR/Y connectors. All field splices shall be contained in a minimum 6" valve box.
 - 4. Electrical supply to the controller shall be by others.
- H. Sprinkler Heads:
 - 1. Gear Heads: Toro Gear Driven Pop-Up T5PCK
 - a. The sprinkler shall be of the gear driven type, capable of covering 25-50 feet radius at 25-75 psi.
 - b. The sprinkler shall be available with 9 standard and 4 low angle nozzles ranging from .75 GPM to 9.50 GPM. All sprinklers shall be available in a full and part circle type. It shall be water lubricated with 5" pop-up. (as indicated on drawings).
 - 2. Fixed Spray Heads - Turf: Toro Fixed Spray Pop-Up 570z-4P-COM
 - a. The full or part circle pop-up spray sprinkler shall be capable of covering 2 to 26 -foot radius at 20-50 psi. The sprinkler shall have a matched

- precipitation rate plastic nozzle with an adjusting screw capable of regulating the radius and flow.
 - b. The sprinkler shall be capable of no-flush sealing on pop-up. (as indicated on drawings).
3. Fixed Spray Heads - Landscaping: Toro Fixed Spray Pop-Up 570Z-12P-COM
- a. The full or part circle pop-up spray sprinkler shall be capable of covering 8 - 15-foot radius at 20-50 psi. The sprinkler shall have a matched precipitation rate plastic nozzle with an adjusting screw capable of regulating the radius and flow.
 - b. The sprinkler shall be capable of no-flush sealing on pop-up. (as indicated on drawings).
- I. Electric Valve:
- 1. Irritrol 2400TF - The 1" remote control valve shall be a normally closed 24-volt A.C. cycle solenoid actuated straight-through flow pattern diaphragm type capable of having a flow rate of as low as .25 gpm and pressures as high as 150 psi.
 - 2. Toro 252-26-06 - The 1-1/2" remote control valve shall be a normally closed 24-volt A.C. cycle solenoid actuated globe/angle pattern diaphragm type capable of having a flow rate of as low as 20 gpm and pressures as high as 150 psi. The valves shall have a flow control stem with wheel handle for regulating or shutting off the flow of water and a bleed plug for manual operation without electrically energizing the solenoid coil.
- J. Valve Boxes:
- 1. All valves shall be protected by a two-piece valve box assembly consisting of a removable cover and box. Enclosure shall be rigid plastic material composed of fibrous components chemically inert and unaffected by moisture, corrosion and temperature changes. Manufacturer shall be Highline Products or NDS. Boxes shall be sized as follows:
 - 2. Minimum of a 10" valve box and cover shall be used for all automatic valves 1-1/2" and smaller and for all manual gate valves and quick coupling valves. Lids shall be green for automatic valves, black for manual gate valves and quick coupling valves.
 - 3. Side walls to extend at least 2 inches below the bottom of the valve body; for deep mainline appropriate extensions and/or corrugated plastic tile shall be used to reach depth of valves. Valve boxes shall not bear directly on pipe.
- K. Quick Coupler Valve: The quick coupler valve shall be as provided for blow-out of system in fall. It is to be installed on a pre-manufactured PVC three elbow swing joint with a brass thread, specifically designed for quick coupler installation. (as indicated on drawings). Swing joint manufacturer shall be Spears or Lasco.
- L. Backflow Prevention Device: Type and size as specified on drawings.
- M. Solvent and Primer: Solvent and primer used on PVC pipe shall meet the requirements of ASTM D-2564 and shall be approved by the National Sanitation Foundation. All solvent and primer shall be used in accordance with manufacturer's specification. Primer shall be purple in color. Solvent shall be used as is from original container. No thinner shall be added to the solvent to

change its viscosity. If viscosity or consistency is unsuitable, the solvent shall not be used.

N. Swing Joints:

1. All sprinkler heads 6 GPM or less shall be attached to the piping with two-elbow joints consisting of 3/8" flexible pipe and coordinating elbows.

O. Spare Parts:

1. Provide (2) rotors and (2) sprays of each size. All sprinkler heads shall be complete with nozzles. Provide (1) automatic valve of each size.

2.3 FABRICATION

Follow all Manufacturers' recommendations.

3 EXECUTION

3.1 EXAMINATION

- A. Each bidder should visit the site of the proposed work and fully acquaint himself with the conditions there relating to construction and labor, and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The bidder should thoroughly examine and familiarize himself with Drawings, Technical Specs, and all other bid and Contract Documents. The Contractor by the execution of the Contract shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal document or to visit the site and acquaint himself with the conditions there existing and the Owner will be justified in rejecting any claim thereof.

3.2 INSTALLATION

A. Excavating and Backfilling.

1. The Contractor shall do all necessary excavating and backfilling required for the proper installation of the work excepting as noted on the plans.
2. When backfilling, all backfill material shall be free from rock, large stone or other unsuitable substances to prevent damage to the pipe. All backfill material will be **mechanically** compacted in 6" layers as it's brought up to finish grade so as to ensure that no settling results.
3. Trenches shall be made wide enough to allow at least 6" between parallel pipe lines.
4. Maintain all warning signs, shoring, barricades, flares and warning lanterns as required by OSHA and local ordinances.

B. Minimum Grade Cover on Pipe:

PVC	¾" and 1"	Min.	12" of cover
PVC	1-1/4" to 2"	Min.	16" of cover
PVC	2-1/2" to 4"	Min.	20" of cover
PVC	6" to 8"	Min.	24" of cover
Poly Lateral	All	Min.	10" of cover
Techline	All	Min.	Depth per manufacturer
Sleeving	All sizes	Min.	12" to 18" of cover

- C. Rock Excavation: If rock is encountered in the alignment and depth shown on the plan, the alignment and/or depth shall be adjusted in order to avoid its excavation if at all possible. If alignment and depth adjustment cannot be made and it becomes necessary to remove the same, the Contractor shall be paid for all the additional cost incurred in the handling of it.
- D. Sleeves: All piping run under roadways, sidewalks, or areas of construction shall be sleeved with Schedule 40 PVC or Class 160 to allow for repair. Locate and reuse existing sleeves wherever possible.
 - 1. Any new sleeves required under drives and parking areas shall be directionally bored.
- E. Electrical Installation:
 - 1. The Contractor will be required to make connections to the building electrical system as is required for the proper operation of the automatic control system in accordance with National Electrical Code or local codes. Final connections shall be made by a qualified, licensed Electrical Contractor.
 - 2. All control circuitry, whether electrical or hydraulic, passing through the wall of the building or beneath a sidewalk, road, or drive, shall be installed in a suitable sleeve; whereas in all other locations they shall be installed in the pipe trench and protected by the pipe whenever possible.
 - 3. The joining of all underground wires shall be by the use of wire nuts, covered with 3M-DBR/Y's per installation instructions provided by manufacturer. Wire shall meet UL requirements for direct burial.
 - 4. Sleeve control wire under paving and walks.
- F. Grounding of System: Surge protection devices are not effective unless there is a good grounding electrode located at each control location. This ground rod must be capable of discharging a lightning stroke containing several thousand volts and from 20,000 to 100,000 amperes, still protecting the controller and solenoids from costly damage.
- G. Testing and Flushing:
 - 1. The entire system shall be tested at the normal system working pressure and upon visual inspection of the ground, should any leak be found, it shall be promptly repaired. The line shall then be retested until satisfactory.
 - 2. Flushing: After all piping, risers, and valves are in place and connected, but prior to installation of sprinkler heads, quick coupler assemblies, and hose valves, thoroughly flush piping system under a full head of water. Maintain flushing for 3 minutes through furthestmost valve. After flushing cap all risers.
 - 3. Operation Test: At conclusion of flushing, install sprinkler heads, quick coupling assemblies, and hose valves, and test entire system for operation under normal operating pressure. Test is acceptable if system operates in a satisfactory manner, with uniform coverage of areas to be sprinkled.
- H. Instructions: After completion and testing of the system, the Contractor will instruct the Owner's personnel in the proper operation and maintenance of the system.

3.3 ADJUSTING AND CLEANING

- A. The contractor shall keep the premises free from rubbish and debris at all times. All unused materials, rubbish and debris shall be removed from the site.

- B. Adjust all electric remote-control valve pressure regulators and flow control stems for system balance and optimum performance.
- C. The winter following final acceptance. The Contractor shall winterize/drain the system and in the following spring, put the system into operation at no additional expense to the owner. Winter damage due to improper winterization is the responsibility of the Contractor.
- D. Properly replant all plant material removed during the installation.
- E. Replace all permanent features disturbed by installation of the system.

END OF SECTION



**CITY OF NOVI
INSURANCE REQUIREMENTS
ATTACHMENT A**

1. The Contractor shall maintain at its expense during the term of this Contract, the following insurance:
 - a. **Worker's Compensation** insurance with the Michigan statutory limits and Employer's Liability insurance with minimum limits of **\$100,000** (One Hundred Thousand Dollars) each accident.
 - b. **Commercial General Liability Insurance** – The Contractor shall procure and maintain during the life of this contract, Commercial General Liability Insurance, Personal Injury, Bodily Injury and Property Damage on an "Occurrence Basis" with limits of liability not less than **\$1,000,000** (One Million Dollars) per occurrence combined single limit.
 - c. **Automobile Liability** insurance covering all owned, hired and non-owned vehicles with Personal Protection insurance to comply with the provisions of the Michigan No Fault Insurance Law including Residual Liability insurance with minimum bodily injury limits of **\$1,000,000** (One Million Dollars) each person and **\$1,000,000** (One Million Dollars) each occurrence and minimum property damage limits of **\$1,000,000** (One Million Dollars) each occurrence.
2. All policies shall name the Contractor as the insured and shall be accompanied by a commitment from the insurer that such policies shall not be canceled or reduced without at least thirty (30) days prior notice date to the City; alternately, contractor may agree to provide notice of such cancellation or reduction.
3. The City of Novi shall be named as Additional Insured for General Liability and Auto Liability. Certificates of Insurance evidencing such coverage shall be submitted to City of Novi, Purchasing Department, 45175 Ten Mile Road, Novi, Michigan 48375-3024 prior to commencement of performance under this Contract and at least fifteen (15) days prior to the expiration dates of expiring policies. A current certificate of insurance must be on file with the City for the duration of the contract. Said coverage shall be PRIMARY COVERAGE rather than any policies and insurance self-insurance retention owned or maintained by the City. Policies shall be issued by insurers who endorse the policies to reflect that, in the event of payment of any loss or damages, subrogation rights under those contract documents will be waived by the insurer with respect to claims against the City
4. The Contractor shall be responsible for payment of all deductibles contained in any insurance required hereunder.

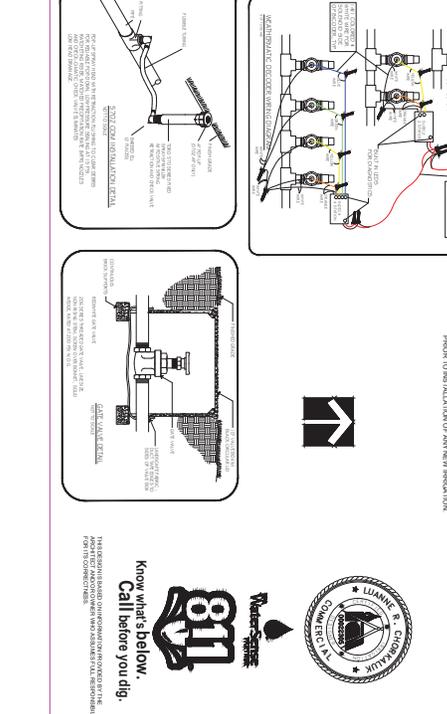
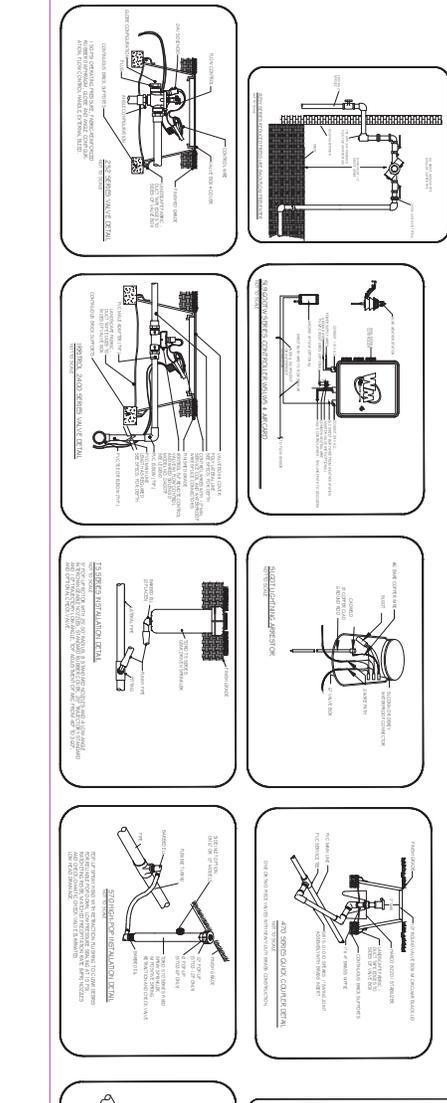
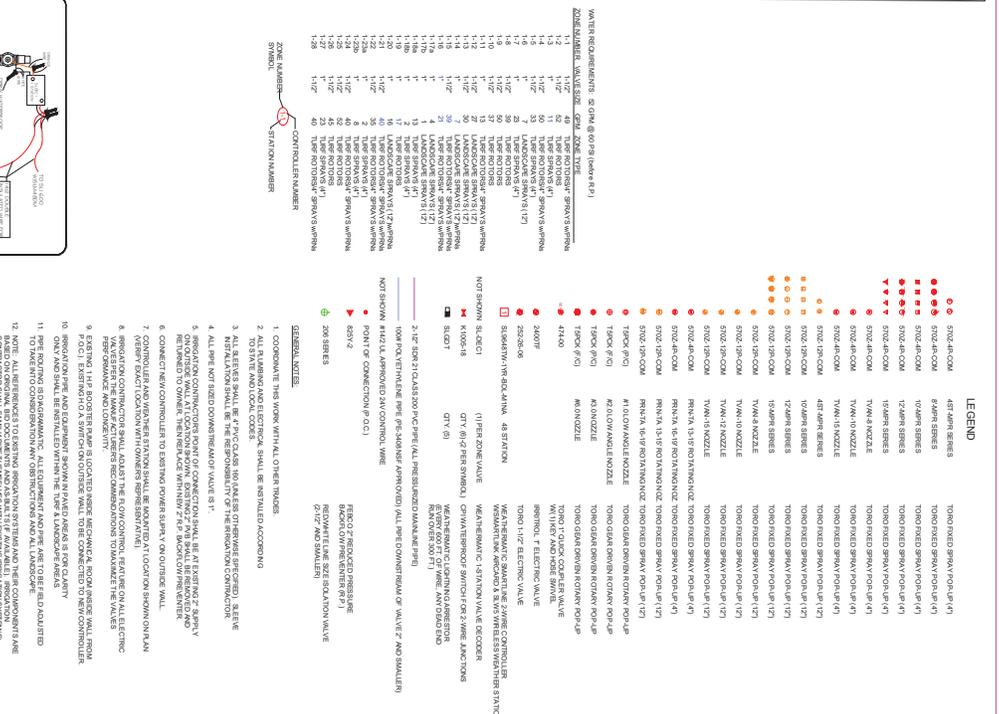
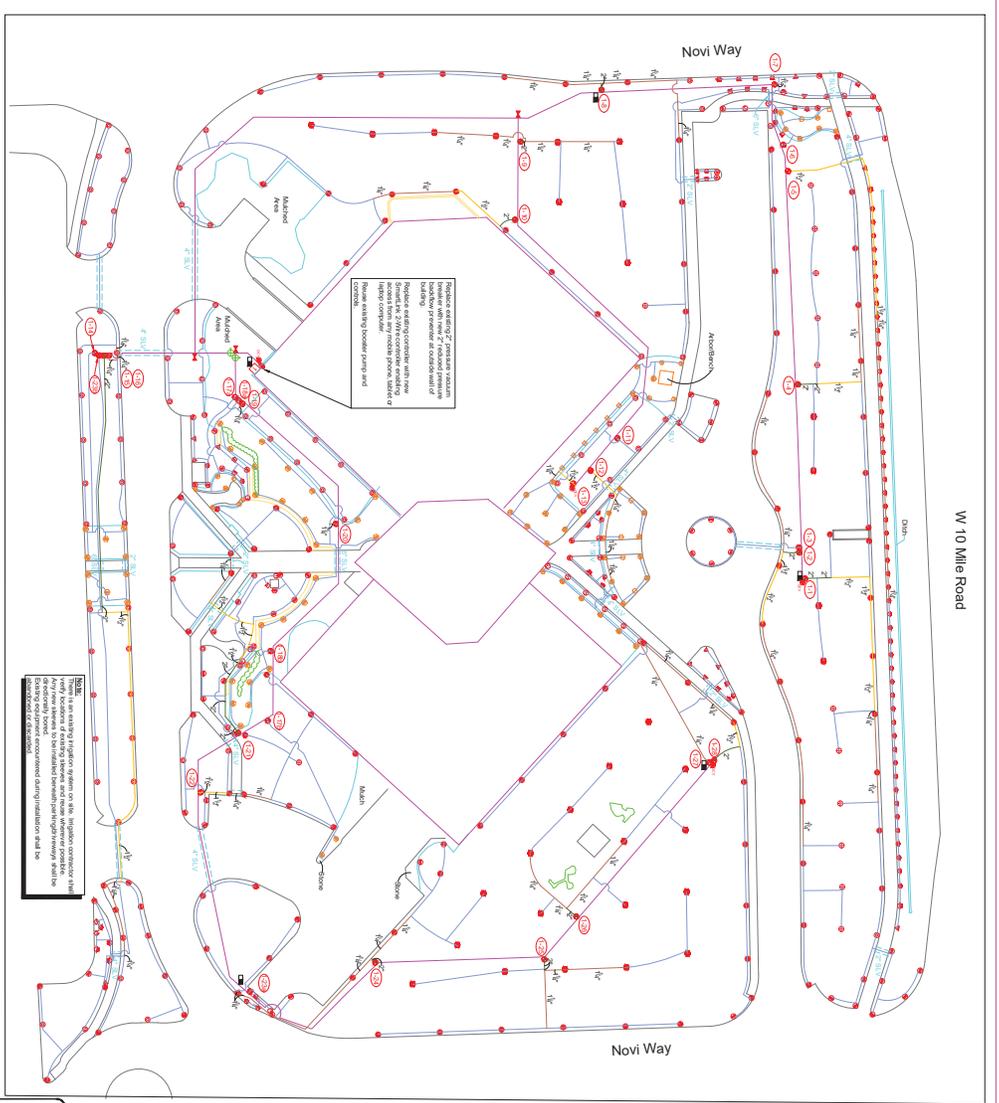
5. If, during the term of this Contract, changed conditions or other pertinent factors should in the reasonable judgment of the City render inadequate insurance limits, the Contractor will furnish on demand such additional coverage as may reasonably be required under the circumstances. All such insurance shall be effected at the Contractor's expense, under valid and enforceable policies, issued by the insurers of recognized responsibility which are well-rated by national rating organizations and are acceptable to the City.
6. If any work is sublet in connection with this Contract, the Contractor shall require each subcontractor to effect and maintain at least the same types and limits of insurance as fixed for the Contractor.
7. The provisions requiring the Contractor to carry said insurance shall not be construed in any manner as waiving or restricting the liability of the Contractor under this contract.
8. The City has the authority to vary from the specified limits as deemed necessary.

ADDITIONAL REQUIREMENTS

HOLD HARMLESS/INDEMNITY

1. The Contractor agrees to fully defend, indemnify and hold harmless the City, its City Council, its officers, employees, agents, volunteers and contractors from any claims, demands, losses, obligations, costs, expenses, verdicts, and settlements (including but not limited to attorney fees and interest) resulting from:
 - a. Acts or omissions by the Contractor, its agents, employees, servants and contractors in furtherance of execution of this Agreement, unless resulting from the sole negligence and tort of the City, its officers, employees, agents and contractors.
 - b. Violations of state or federal law involving whether administrative or judicial, arising from the nature and extent of this Agreement.
 - c. The Contractor agrees to defend the City from and against any and all actions or causes of action, claims, demands or whatsoever kind or nature arising from the operations of the Contractor and due to the acts or omissions of the Contractor or its agents, including, but not limited to, acts of omissions alleged to be in the nature of gross negligence or willful misconduct. The Contractor agrees to reimburse the City for reasonable attorney fees and court costs incurred in the defense of any actions, suits, claims or demands arising from the operations of the Contractor under this Agreement due to the above-referenced acts or omissions.
2. The Contractor agrees that it is its responsibility and not the responsibility of the City of safeguard the property and materials used in performing this Contract. Further the Contractor agrees to hold the City harmless for any loss of such property and materials used in pursuant to the Contractor's performance under this Contract.

3. The Contractor shall not discriminate against any employee, or applicant for employment because of religion, race, color, national origin, age, sex, height, weight, handicap, ancestry, place of birth, sexual preference or marital status. The Contractor further covenants that it will comply with the Civil Rights Act of 1973, as amended; and the Michigan Civil Rights Act of 1976 (78. Stat. 252 and 1976 PA 453) and will require a similar covenant on the part of any consultant or subcontractor employed in the performance of this contract.



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Spartan Distributors

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1050 Oakleaf Road
Auburn Hills, MI 48328
Ph: 248.373.8810
Ph: 248.373.8819
800.832.2216

Project Name:

Novi Civic Center

Irrigation System Renovations

45175 W 10 Mile Rd, Novi, MI 48375

Scale: 1" = 30'