

**City of Racine**  
**Official Notice #7-2025**  
**Request for Bid (RFB)**  
**Maintenance of Laurel Clark Memorial Fountain**



03/xx/2025	Published in Newspaper   Published Online
03/xx/2025	Published in Newspaper
03/xx/2025 by 2 pm	Questions due via email
03/xx/2025	Addendums Posted if any
<b>03/xx/2025 10:00 am CST</b>	<b>DUE DATE</b> Bid proposals received after this time will not be considered
Method of submittal	City of Racine Purchasing – DemandStar <b>ONLY</b> <a href="https://network.demandstar.com/agencies/wisconsin/city-of-racine-purchasing/procurement-opportunities/01dc3f5c-ed8d-466f-9fa8-3f31a8e08705/">https://network.demandstar.com/agencies/wisconsin/city-of-racine-purchasing/procurement-opportunities/01dc3f5c-ed8d-466f-9fa8-3f31a8e08705/</a>
Contact information:	City of Racine Purchasing 730 Washington Ave. Room 102 Racine, WI 53403 Email: <a href="mailto:Purchasing@cityofracine.org">Purchasing@cityofracine.org</a> Website: <a href="http://www.cityofracine.org/purchasing">http://www.cityofracine.org/purchasing</a>

The undersigned hereby proposes to furnish all labor, tools, equipment and all materials, except as definitely specified to be furnished by others, ready for use, all in accordance with these specifications, all as attached hereto and all of which the undersigned has examined, the following work for the compensation indicated.

Firm: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

## 1. General Information

The City of Racine is accepting formal bids for the **Maintenance of Laurel Clark Memorial Fountain**.

The City of Racine is the sole judge of the suitability of all bidders and reserves the right to reject all parts of the proposal that is not in the best interest of the City of Racine. The City of Racine, in its sole discretion and without cause, may terminate this Request, Purchase Order or Contract, in whole or in part, at any time without incurring liability to the bidder for lost profits, or any other costs of damages.

Bidders are reminded to carefully examine the bid and specifications upon receipt. If necessary, bidders should make a written request by the due date to the Purchasing Agent for interpretation or corrections of any ambiguity, inconsistency or error discovered.

Bidders are cautioned not to change any of the terms or conditions in the bid and/or specifications without the written approval of the Purchasing Agent. Any unauthorized changes will constitute a counteroffer and will subject the bid to rejection.

All financial and contractual commitments by the City are subject to the availability of funds as approved in the budget and by the Common Council.

DBE/MBE/VBE/WBE are encouraged to bid.

## 2. General Questions

Have you performed any work for the City of Racine in the past?	YES	NO
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Are you able to perform work for the State of Wisconsin?	YES	NO
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## 3. Racine Works Program (RWP)

The "Racine Works Program (RWP)" is a preferential hiring program used by the City of Racine to help residents of the City gain access to employment opportunities on City construction or City funded projects. The Racine Works Program is designed to promote employment of City residents as part of a contractor's workforce on some City construction projects.

The City of Racine RWP procurement policy promotes the utilization of local workers and maximization of the economic impact of annual operating and capital project spending. Bidders and contractors shall satisfy the [City of Racine Ordinance Section 46-41](#) if applicable.

#### 4. References

As a part of properly completing the bid, provide the names, addresses, phone numbers and contact persons for a minimum of two companies or municipalities for which the bidder has satisfactorily performed related work within the past five (5) years.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

## 5. Specifications

### A. SCOPE OF WORK

These specifications are intended to provide the minimum standards necessary for the maintenance of the City of Racine's water feature by State of Wisconsin Licensed Plumbing Contractor. The Contractor shall furnish all material, tools, equipment and labor required to perform the water attraction maintenance as described in these specifications.

All services shall be delivered in a thorough and professional manner in conformance with the accepted "*Best Industry Practices and Methods*" and in strict conformance with all applicable state and local codes, laws, ordinances, etc. as if such legal requirements were herein set forth in length.

Scope includes the following:

1. Spring start-up of fountain (May; prior to the Friday of Memorial Day Weekend)
2. Spring opening of restrooms (Mid - May)
3. Start -up of Park Place Irrigation system - Metering & BFP Only. (Mid-May)
4. Daily fountain maintenance - includes weekends and holidays
5. All emergency services and repairs
6. Fall shut down and winterizing of fountain (Mid-September)
7. Fall shut down and winterizing of restrooms (Mid-September)
8. Fall shut down and winterizing of Park Place Irrigation system - (Metering & BFP Only)
  - Mid-September
9. Daily recording of chemical readings must be turned in each month

### B. BIDS

Bids shall be submitted on the bid proposal form as provided by the City in the manner indicated thereon.

### C. LOCATION

The site where said services are to be performed is Park Place Park, 30 - 6<sup>th</sup> Street.

### D. INSPECTION OF SITE

All bidders shall visit the site to determine the exact conditions that exist in relation to the services called for under these specifications. Call Racine Parks, Recreation & Cultural Services at 262-636-9131 for an appointment with Chris Boscher

### E. TERMS

The contract will be for an initial term of May 2025 through October 2026 and may be extended for three (3) additional one (1) year terms providing both parties to the contract agree to the extension under the condition that the price may be renegotiated, that all other terms, conditions, and specifications remain the same. Notification to the City of the desire to extend, including any price change request shall be given by the Contractor at least ninety (90) days before the start of the next term.

### F. DAMAGE TO THE PROPERTY

The contractor shall accept full responsibility for repair or replacement costs and other incidental costs for any and all damage to property incurred through accident, negligence, error in judgment or misuse of equipment including, but not limited to, buildings and structures. Repair or compensation by the Contractor will be to the satisfaction of the City. The Contractor shall notify the City of the damaged property immediately.

G. PERSONNEL

The Contractor shall have available sufficient manpower for scheduling who are licensed, trained, competent and reliable to perform satisfactorily all the work as outlined. The City reserves the right to reject any of the Contractor's employees subject to compliance with Wis. Stat. sec. 111.31, *et seq.* Subcontracting will only be permitted with the City's approval.

H. TOOLS AND EQUIPMENT

The contractor shall provide and maintain at its expense, all necessary tools and equipment and replacements required to fulfill the requirements of this contract. The contractor must maintain a 24 hour telephone where they may be contacted in case of an emergency.

I. PRE-WORK MEETING

Before work begins there will be a meeting with the Contractor, the Contractor's Supervisor and the City to discuss the standards and procedures applicable to this contract.

J. PUBLIC RELATIONS

Anyone asking a question or making a complaint that the Contractor cannot answer shall be referred to the City. The Contractor shall make no statements or comments questioning the judgment of the City, and no statements about City activities, policies and procedures.

K. TRAFFIC CONTROL

The Contractor is responsible for maintaining vehicle and pedestrian traffic control and maintaining safe conditions near the work zone. The city has available on site, a pedestrian barricade for the vault hatch when it is open for maintenance.

L. SAFETY

Unsafe practices, people, equipment or vehicles are not allowed and will not be tolerated during the performance of this contract. The City will require removal of unsafe persons or equipment from City's property.

The Contractor's employees shall comply with OSHA requirements and the Contractor shall ensure that such compliance is made.

M. WORK SCHEDULE

The fountain shall be in operation on Friday of Memorial Day Weekend **and shall be shut down September 30.** Unless it is determined that the falling tree leaves or inclement weather are affecting the proper operation of the water attraction; if so, the water attraction will be shut down earlier. The normal hours of operation will be 10:00 am to 8:00 pm every day for the season – approximately 24 consecutive weeks of operation. Start-up & Shutdown may add one (1) week at the beginning and end of the season.

**NOTE: Daily Water attraction service must be completed before 10:00 am start-up daily.**

A. CONTRACT MONTHLY HOURS & ADDITIONAL CHARGEABLE HOURS

The current design of the water feature and supporting mechanical systems are intended to be safely maintained by one person. For those circumstances when more than one person is required for maintenance, repairs or safety purposes, additional people may be dispatched and charged to this agreement, per the rates listed on the Bidder's Proposal.

1. Estimated billable hours per 26-week season – (includes start-up & shut down),

312±, per season or about 12 hours per week.

2. Monthly service fees, from the Bidder's Proposal, shall include all normal maintenance services listed within this specification. Any additional services, maintenance, emergency calls, additional labor and materials will be billed according to the Additional Charges on the Bidder's Proposal.
3. Fees required by the State of Wisconsin or the City of Racine to recertify Backflow Preventers (BFP) shall be listed separately on the invoice. Copies of the recertification documents shall be turned over to the Owner representative.
4. Additional Charges must be authorized by the Director of Parks, Recreation & Cultural Services.
5. Labor charges during normal workdays and scheduled weekend days shall begin upon arrival of the work site.
6. Labor charges for emergencies can begin at dispatch, with one (1) hour limit on travel charges per worker.

**B. WATER ATTRACTION START UP & BUILDING OPENING**

1. Pull brick cover off wet well / reservoir and clean debris as necessary (if a water supply truck and / or suction truck is required the City will pay for this as an extra)
2. Have Water Department turn on curb stop – if required.
3. Re-install water meter for the water attraction and the Park Place irrigation system.
4. Re-install and test back flow preventers for the water attraction and the Park Place irrigation system.
5. Install Perlite® filter media in Defender Filter Cleaner A1C per manufacturer's recommendations, test air compressor and cycle filter.
6. Re-install chemical feeders and sensing probes
7. Remove tape on grate heads.
8. Re-install all valves, fittings, caps, pipe connections, strainer baskets or other fitting removed for winterization.
9. Lubricate all motor & pump bearings and other equipment per manufacturer's recommendations.
10. Verify watertight integrity.
11. Check through maintenance schedule for startup procedures.
12. Fill system and reservoir.
13. Start & operate water attraction and check for leaks.
14. Check water attraction lighting – Repair as needed.
15. Coordinate with chemical provider and Racine City Health Department to verify proper water chemistry.
16. Fill domestic water system.
17. Vent air and verify operation of all fixtures in the public restrooms
18. Start and test water heater and circulation pump.
19. Flush all piping and drains.
20. Unplug heat tape on outside sidewalk drain trap.
21. Fill/pressurize irrigation system in building only.
22. Remove all winter vent closers – store in mechanical room on top of Unistrut framing.
23. Test sump pump in vault
24. Test ventilation and exhaust fans in vault.
25. Re-install drinking fountain and shower components – verify operation.

C. DAILY WATER ATTRACTION MAINTENANCE

At certain times of the year, daily maintenance may be required, this will not include Saturdays, Sundays or holidays. Example, in the spring when the flowers are falling off the surrounding trees the strainers need cleaning daily for proper operation.

**NOTE: Daily Water attraction service must be completed before 10:00 am start-up daily.**

1. Clean strainers/exchange strainer baskets for pumps FP1, DP1, DP2, DP3, DP4 and SPUV disinfection unit as needed.
2. Check Biocide (Chlorine) & Inhibitor (Acid) supply barrels and change as needed.
3. Check for pumps in alarm.
4. Check chemical feeders.
5. Perform miscellaneous maintenance as needed.
6. Check the fountain nozzles.
7. Document all maintenance performed on forms provided daily. Maintenance records shall be maintained and stored in the mechanical space.

D. MONTHLY VAULT MAINTENANCE

1. Check the ventilation and exhaust fan for operation only, then turn it off.
2. Check sump pump for operation – return to standby.

E. SHUT DOWN

Shut down of fountain operations will be September 30 unless it is determined that the falling tree leaves or inclement weather are affecting the proper operation of the fountain; if so, the fountain will be shut down earlier.

1. Have Water Department turn off curb stop.
2. Check the maintenance schedule for shut down procedures.
3. Drain system and reservoir.
4. Drain, remove filter media and clean Defender filter cleaner A1C per manufacturer's recommendations.
5. Remove water meters and back flow preventers.
6. Open all drain valves for distribution piping, pumps, valve and other wet systems.
7. Remove and clean all strainer baskets.
8. Remove chemical feeders and sensors. Place sensors in a clean water solution for storage.
9. Air blow or vacuum out the all-fountain mechanical systems.
10. Drain domestic water systems for both restrooms and external shower.
11. Remove shower and drinking fountain components – winterize drains.
12. Plug-in and verify the operation of heat tape on exterior shower trap.
13. Shut down and drain the water heater and circulation pump.
14. Add environmentally safe antifreeze to floor drains, sink drains and toilets.
15. Add environmentally safe antifreeze to outside sanitary drains, sink drains & toilets.
16. Tape up grate heads.
17. Test electric heat in vault, set thermostat to lowest possible heating setting.
18. Verify operation of all building heating systems.
19. Close all vent opening in building with winterizing devices.

F. MISCELLANEOUS MAINTENANCE

1. The plumbing contractor shall coordinate and act as the general contractor for any and all electrical and HVAC maintenance work related to this fountain.
2. The plumbing contractor shall work with the chemical supply contractor who will:

- A. Supply all needed chemicals to the plumbing contractor for water attraction use.
  - B. Take weekly water analyses to assist the plumbing contractor make any needed adjustment to the water chemistry.
  - C. Will supply filter media for Defender water filter.
3. As necessary, meet with the City of Racine Health Department to address any water chemistry or water attraction mechanical concerns.

N. PAYMENTS AND BILLINGS

- 1. Payments will only be made by contractor invoices.
- 2. Payments may be requested twice per month.
- 3. All invoices must include monthly service fee separately.
- 4. Invoices with additional charges must include date, trade rate charged, unit price, labor hours, equipment and material rates. \_
- 5. No other fees will be paid without prior authorization.
- 6. Invoices shall be submitted directly to the Parks, Recreation & Cultural Services Department, 800 Center Street, Room 127, Racine, WI 53403 or emailed to [chris.boscher@cityofracine.org](mailto:chris.boscher@cityofracine.org).

O. TERMINATION

Should the City deem the work being performed under this contract unsatisfactory, the City shall give the Contractor written notice to cure such unsatisfactory work. If such work continues in an unsatisfactory manner, then the City may, on ten (10) days' written notice, terminate the contract.

**END OF DETAILED SPECIFICATIONS**

**BID PROPOSAL FORM**  
OFFICIAL NOTICE #7-2025  
MAINTENANCE OF LAUREL CLARK MEMORIAL FOUNTAIN

Bid amount for normal routine service as listed in the bid specifications

\$\_\_\_\_\_per month

Bid amount for additional mechanical and plumbing services:

a. Labor Cost for a Licensed Plumber, normal working hours

\$\_\_\_\_\_per hour

b. Labor Cost for a Licensed Plumber, Saturdays

\$\_\_\_\_\_per hour

c. Labor Cost for a Licensed Plumber, Sundays & Holidays

\$\_\_\_\_\_per hour

d. Labor Cost for a Laborer

\$\_\_\_\_\_per hour

e. Material Cost plus % markup over actual invoice cost \_\_\_\_\_%

## **6. Indemnification and Insurance Requirements:**

### Indemnification

To the fullest extent allowable by law, Contractor hereby indemnifies and shall defend and hold harmless the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers and each of them from and against any and all suits, actions, legal or administrative proceedings, claims, demands, damages, liabilities, interest, attorneys' fees, costs, and expenses of whatsoever kind or nature whether arising before, during, or after completion of the work hereunder and in any manner directly or indirectly caused, occasioned, or contributed to in whole or in part or claimed to be caused, occasioned, or contributed to in whole or in part, by reason of any act, omission, fault, or negligence, whether active or passive, of Contractor or of anyone acting under its direction or control or on its behalf in connection with or incident to the performance of this Agreement regardless if liability without fault is sought to be imposed on the City of Racine, Contractor's aforesaid indemnity and hold harmless agreement shall not be applicable to any liability caused by the sole fault, sole negligence, or willful misconduct of the City of Racine, or its elected and appointed officials, officers, employees or authorized representatives or volunteers. This indemnity provision shall survive the termination or expiration of this Agreement.

In any and all claims against the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers by an employee of Contractor, any subcontractor, or anyone for whose acts any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any subcontractor under Worker's Compensation Acts, Disability Benefit Acts, or other employee benefit acts.

No provision of this Indemnification clause shall give rise to any duties not otherwise provided for by this Agreement or by operation of law. No provision of this Indemnity clause shall be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity that would otherwise exist as to the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers under this or any other contract. This clause is to be read in conjunction with all other indemnity provisions contained in this Agreement. Any conflict or ambiguity arising between any indemnity provisions in this Agreement shall be construed in favor of indemnified parties except when such interpretation would violate the laws of the state in which the job site is located. Contractor shall reimburse the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers.

### Insurance Requirements

The Contractor shall not commence work under a contract until he has obtained all insurance required under this paragraph and has filed certificates thereof with the Owner, nor shall the Contractor allow a Subcontractor to commence work until all similar insurance required has been so obtained and filed with the Contractor. Unless otherwise specified in this Agreement, the Contractor shall, at its sole expense, maintain in effect at all times during the performance of the Work, insurance coverage with limits not less than those set forth below with insurers and under forms of policies set forth below.

**Worker's Compensation and Employers Liability Insurance** - The Contractor shall cover or insure under the applicable labor laws relating to worker's compensation insurance, all of their employees in accordance with the law in the State of Wisconsin. The Contractor shall provide statutory coverage for work related injuries and employer's liability insurance with limits of \$1,000,000 each accident, \$1,000,000 disease policy limit, and \$1,000,000 disease each employee.

**Commercial General Liability and Automobile Liability Insurance** - The Contractor shall provide and maintain the following commercial general liability and automobile liability insurance:

**Coverage** – Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:

- a) Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG0001)
- b) Insurance Services Office (ISO) Business Auto Coverage (Form CA0001), covering Symbol 1 (any vehicle)

**Limits** -The Contractor shall maintain limits no less than the following:

- a) General Liability - One million dollars (\$1,000,000) per occurrence (\$2,000,000 general aggregate if applicable) for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided to the City of Racine) or the general aggregate including product-completed operations aggregate limit shall be twice the required occurrence limit.
- b) Automobile Liability- One million dollars (\$1,000,000) for bodily injury and property damage per occurrence limit covering all vehicles to be used in relationship to the Agreement.
- c) Umbrella Liability- One Million dollars (\$1,000,000) for bodily injury, personal injury and property damage per occurrence in excess of coverage carried for Employers' Liability, Commercial General Liability and Automobile Liability as described above.

Required Provisions - The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

- a) The City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers are to be given additional insured status as respects liability arising out of activities performed by or on behalf of the Contractor; on products and completed operations of the Contractor; for premises occupied or used by the Contractor; and on any vehicles owned, leased, hired or borrowed by the Contractor.
- b) The coverage shall contain no special limitations on the scope of protection afforded to the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers.
- c) For any claims related to this project, the Contractor's insurance shall be primary insurance as respects the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers. Any insurance, self-insurance, or other coverage maintained by the City of Racine, its elected and appointed officials, officers, employees, or authorized representatives or volunteers shall not contribute to it.
- d) Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers.
- e) The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- f) Each insurance policy required by this agreement shall state, or be endorsed to state, that coverage shall not be canceled by the insurance carrier or the Contractor, except after sixty (60) days (or 10 days for non-payment of premium) prior written notice by U.S. mail has been given to the City of Racine.
- g) Such liability insurance shall indemnify the City of Racine, its elected and appointed officials, officers, employees or authorized representatives or volunteers against loss from liability imposed by law upon, or assumed under contract by, the Contractor for damages on account of such bodily injury (including death), property damage, personal injury, completed operations, and products liability.
- h) The general liability policy shall cover bodily injury and property damage liability, owned and nonowned equipment, blanket contractual liability, completed operations liability with a minimum of a 24 month policy extension, explosion, collapse, underground excavation, and removal of lateral support, and shall not contain an exclusion for what is commonly referred to by the insurers as the "XCU" hazards. The automobile liability policy shall cover all owned, non-owned, and hired vehicles. All of the insurance shall be provided on policy forms and through companies satisfactory to the City of Racine, and

shall have a minimum A.M. Best's rating of A-VII.

Deductibles and Self-Insured Retentions - Any deductible or self-insured retention must be declared to and approved by the City of Racine. At the option of the City of Racine, the insurer shall either reduce or eliminate such deductibles or self-insured retentions.

Evidences of Insurance - Prior to execution of the agreement, the Contractor shall file with the City of Racine a certificate of insurance (Acord Form 25-S or equivalent) signed by the insurer's representative evidencing the coverage required by this agreement. Such evidence shall include an additional insured endorsement signed by the insurer's representative. Such evidence shall also include confirmation that coverage includes or has been modified to include all required provisions 1-8.

Responsibility for Work - Until the completion and final acceptance by the City of Racine of all the work under and implied by this agreement, the work shall be under the Contractor's responsibility care and control. The Contractor shall rebuild, repair, restore and make good all injuries, damages, re-erections, and repairs occasioned or rendered necessary by causes of any nature whatsoever.

Sub-Contractors - In the event that the Contractor employs other contractors (subcontractors) as part of the work covered by this agreement, it shall be the Contractor's responsibility to require and confirm that each sub-contractor meets the minimum insurance requirements specified above.

## BIDDER'S CERTIFICATION

I hereby certify that all statements herein are made in behalf of:

\_\_\_\_\_  
Name of Corporation, Partnership or Person submitting bid

a corporation organized and existing under the laws of the State of: \_\_\_\_\_

a partnership consisting of: \_\_\_\_\_

an individual trading as: \_\_\_\_\_

of the City of \_\_\_\_\_ State of \_\_\_\_\_

that I have examined and carefully prepared this proposal from the

plans and specifications and have checked the same in detail before

submitting this proposal; that I have full authority to make such statements

and submit this proposal in its (their) behalf, and that said statements are true and correct

SIGNATURE: \_\_\_\_\_

TITLE: \_\_\_\_\_

Sworn and subscribed to before me

this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

\_\_\_\_\_  
(Notary or other officer authorized to administer oaths)

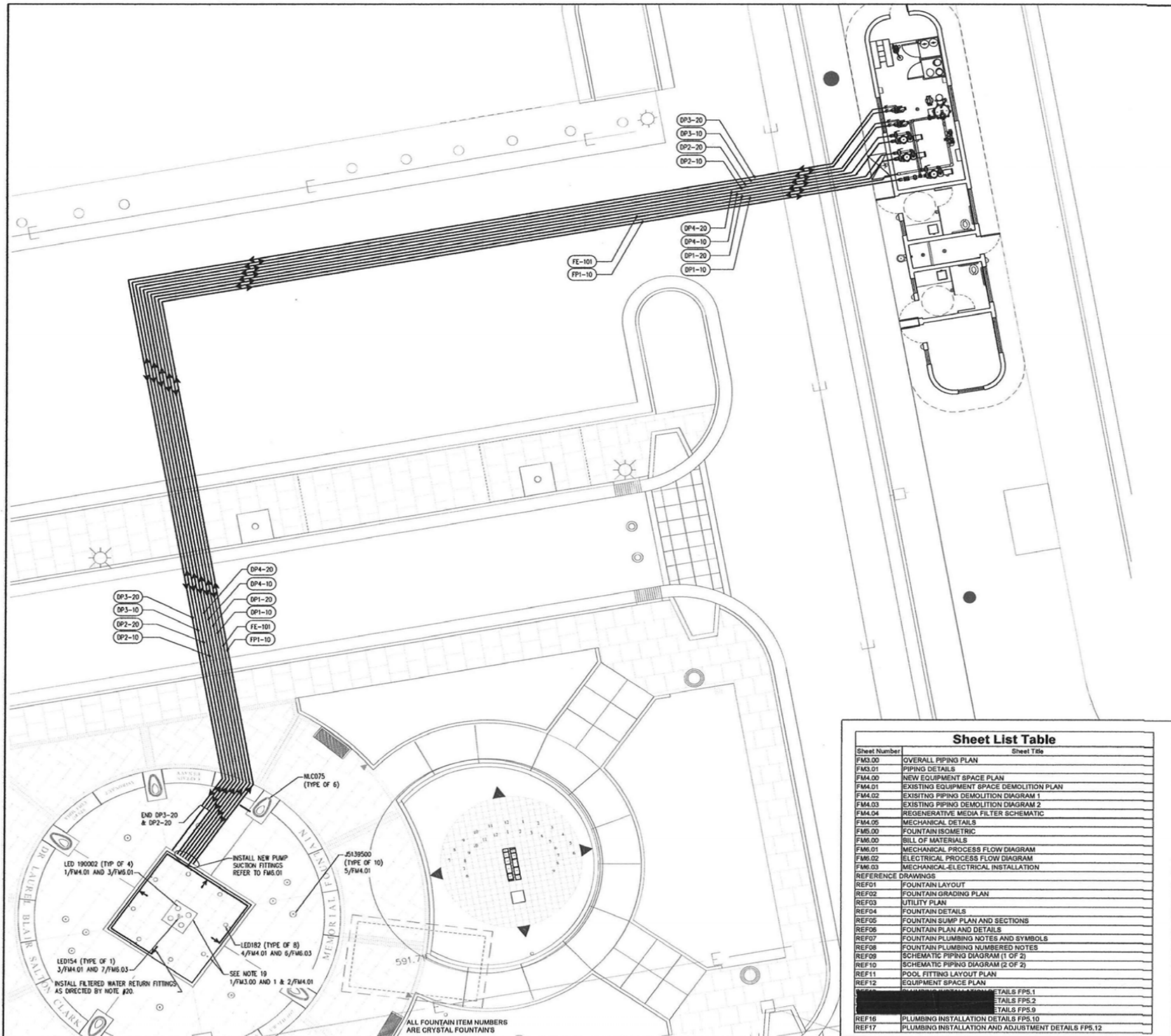
SEAL:

My commission expires \_\_\_\_\_

### Schedule of Drawings

C104	<i>Building Elevation and Plans</i>
FM 3.00	<i>Overall Piping Plan</i>
FM 4.00	<i>New Equipment Space Plan</i>
FM 4.04	<i>Regenerative Media Filter Schematic</i>
FM 4.05	<i>Mechanical Details</i>
FM 5.00	<i>Fountain Isometric</i>
FM 6.00	<i>Bill of Materials</i>
FM 6.01	<i>Mechanical Process Flow Diagram</i>
FM 6.02	<i>Electrical Process Flow Diagram</i>
FM 6.03	<i>Mechanical - Electrical Installation</i>
M1	<i>Floor Plan</i>
M2	<i>Below Floor Plan, Floor Plan &amp; Schedules</i>





OVERALL PIPING PLAN

Sheet List Table	
Sheet Number	Sheet Title
FM3.00	OVERALL PIPING PLAN
FM3.01	PIPING DETAILS
FM4.00	NEW EQUIPMENT SPACE PLAN
FM4.01	EXISTING EQUIPMENT SPACE DEMOLITION PLAN
FM4.02	EXISTING PIPING DEMOLITION DIAGRAM 1
FM4.03	EXISTING PIPING DEMOLITION DIAGRAM 2
FM4.04	REGENERATIVE MEDIA FILTER SCHEMATIC
FM4.05	MECHANICAL DETAILS
FM5.00	FOUNTAIN ISOMETRIC
FM6.00	BILL OF MATERIALS
FM6.01	MECHANICAL PROCESS FLOW DIAGRAM
FM6.02	ELECTRICAL PROCESS FLOW DIAGRAM
FM6.03	MECHANICAL-ELECTRICAL INSTALLATION
REFERENCE DRAWINGS	
REF01	FOUNTAIN LAYOUT
REF02	FOUNTAIN GRADING PLAN
REF03	UTILITY PLAN
REF04	FOUNTAIN DETAILS
REF05	FOUNTAIN SUMP PLAN AND SECTIONS
REF06	FOUNTAIN PLAN AND DETAILS
REF07	FOUNTAIN PLUMBING NOTES AND SYMBOLS
REF08	FOUNTAIN PLUMBING NUMBERED NOTES
REF09	SCHEMATIC PIPING DIAGRAM (1 OF 2)
REF10	SCHEMATIC PIPING DIAGRAM (2 OF 2)
REF11	POOL FITTING LAYOUT PLAN
REF12	EQUIPMENT SPACE PLAN
REF13	PLUMBING INSTALLATION DETAILS FPS.1
REF14	PLUMBING INSTALLATION DETAILS FPS.2
REF15	PLUMBING INSTALLATION DETAILS FPS.3
REF16	PLUMBING INSTALLATION DETAILS FPS.10
REF17	PLUMBING INSTALLATION AND ADJUSTMENT DETAILS FPS.12

3	1/8" = 1'-0"
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- NOTES:**
- AN APPROVED 24-UNIT FIRST AID KIT AND TWO DURABLE BLANKETS SHALL BE SUPPLIED BY THE OWNER.
  - A SIGN INDICATING THE FOUNTAIN CAPACITIES AND REGULATIONS, SHALL BE PROVIDED BY THE FOUNTAIN AND SHALL BE PROVIDED AND POSTED BY THE OWNER.
  - EVERY PUBLIC POOL SHALL BE UNDER THE SUPERVISION OF A RESPONSIBLE SUPERVISOR. ATTENDANTS SHALL WEAR CLOTHING THAT ARE CONSPICUOUSLY MARKED "ATTENDANT" OR OTHERWISE READILY IDENTIFIABLE. ATTENDANTS ASSIGNED TO THE SUPERVISION OF THE FOUNTAIN MAY NOT BE ASSIGNED DUTIES THAT DISTRACT THEIR ATTENTION FROM OBSERVATION OF PERSONS IN THE FOUNTAIN AREA OR PREVENT THEIR IMMEDIATE ASSISTANCE TO PERSONS IN DISTRESS. AT LEAST ONE ATTENDANT WHO HAS CURRENT CPR TRAINING IS REQUIRED PER HS 172.23.
  - FOUNTAIN CONFIGURATION SHALL MEET PUBLISHED STANDARDS OF WISCONSIN DEPARTMENT OF COMMERCE CHAPTER COMM 90, BUREAU OF SAFETY & BUILDINGS, PLUMBING DIVISION, WISCONSIN DEPARTMENT OF HEALTH SERVICES CHAPTER HS 172, BUREAU OF ENVIRONMENTAL HEALTH, ANSI/APSP ASME 112.19.8-2007, AND THE VIRGINIA GRAEME BAKER POOL & SPA SAFETY ACT, SECTION 1404, 2007.
  - A MANUAL OF INSTRUCTION SHALL BE PROVIDED TO THE OWNER WITH THE FILTER WHICH SHALL INCLUDE ALL DRAWINGS, ILLUSTRATIONS, OPERATING PROCEDURES, CHARTS, AND PARTS LISTS. DATA PLATES OF A PERMANENT NATURE, INSCRIBED AND LOCATED SO THAT THEY CAN BE EASILY READ AND UNDERSTOOD, SHALL BE SECURELY ATTACHED TO THE FILTER SHELL. THE PLATES SHALL PROVIDE THE FOLLOWING INFORMATION:  
A. MANUFACTURER'S NAME AND ADDRESS;  
B. FILTER MODEL NUMBER;  
C. FILTER SERIAL NUMBER;  
D. EFFECTIVE FILTER AREA IN SQUARE FEET;  
E. DESIGN FLOW RATE IN GALLONS PER MINUTE;  
F. MAXIMUM WORKING PRESSURE AND;  
G. DATE OF MANUFACTURE.
  - ONE EXTRA BASKET FOR HAIR AND LINT STRAINER(S) SHALL BE PROVIDED FOR EACH PUMP BY THE FOUNTAIN MECHANICAL CONTRACTOR.
  - OWNER TO BE PROVIDED WITH FOUNTAIN DRAINAGE INSTRUCTIONS, BY THE CONTRACTOR. INSTRUCTIONS SHALL INCLUDE DRAWINGS SHOWING PIPE AND VALVE LOCATIONS AS TAGGED BY THE CONTRACTOR, WHICH CLEARLY, DEFINE THE REQUIRED PROCEDURES.
  - ALL PIPING, FITTINGS, AND VALVES OF THE COMPLETE FOUNTAIN PIPING SYSTEM(S) SHALL BE BASED ON FLOW VELOCITIES OF 6 FEET OR LESS PER SECOND UNDER SUCTION AND 10 FEET OR LESS PER SECOND UNDER PRESSURE, AND 3 FEET OR LESS PER SECOND UNDER GRAVITY.
  - FILTRATION PUMP SUCTION PIPING SHALL BE DESIGNED TO CARRY 100% OF THE RECIRCULATION RATE AT A VELOCITY NOT GREATER THAN 6 FEET PER SECOND. THE PIPING SHALL CONTAIN A MANUAL CONTROL VALVE LOCATED SO THAT IT IS EASILY ACCESSIBLE.
  - ALL PIPING SHALL BE ANSIS/ASTM STANDARD #50 APPROVED FOR POTABLE WATER, SCHEDULE 80 PVC. DRAINAGE PLUGS WILL BE PROVIDED IN THE PIPING SYSTEM(S) TO ALLOW DRAINAGE OF THE FOUNTAIN TO THE MECHANICAL ROOM SUMP.
  - ALL SUCTION PIPING TO PITCH TOWARD PUMP(S) FOR PROPER DRAINAGE DURING FREEZING WEATHER IF POSSIBLE.
  - EACH VALVE SHALL HAVE A PERMANENT IDENTIFICATION LABEL OR TAG ATTACHED TO IT. THE SEQUENCE OF OPERATION, BRIEFLY STATED SHALL BE PROMINENTLY DISPLAYED.
  - ALL WIRING SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE ARTICLE 680 (2008), STATE, AND LOCAL ELECTRICAL CODES.
  - THE FOUNTAIN SHALL BE GROUNDED AND LIGHTS, INSTALLED ACCORDING TO THE MANUFACTURER'S PRINTED INSTRUCTIONS.
  - THE FOUNTAIN SHALL BE BONDED ACCORDING TO NATIONAL ELECTRICAL CODE ARTICLE 680-22 (2008 EDITION).
  - THE CHEMICAL CONTROLLER(S), SHALL BE ELECTRICALLY INTERLOCKED WITH THE CORRESPONDING FOUNTAIN FILTRATION PUMP(S).
  - OWNER TO KEEP DAILY RECORDS ON FOUNTAIN OPERATIONS AND MAINTENANCE TO BE SUBMITTED AS REQUIRED TO THE WISCONSIN DEPARTMENT OF HEALTH SERVICES WHILE THE FOUNTAIN ARE IN OPERATION. FOUNTAIN TO BE TESTED AT LEAST 4 TIMES EACH PER DAY FOR DISINFECTANT RESIDUAL AND pH REQUIRED PER HS 172.18.
  - AN APPROVED DPD TEST KIT CONTAINING ALL COLOR STANDARDS AND MEANS FOR DETERMINING TOTAL ALKALINITY, pH, AND CHLORINE OR BROMINE CONTENT PROVIDED BY THE FOUNTAIN CONTRACTOR.
  - REPLACE ALL EXISTING GRATE COVERS WITH ADA/COMM. 90 COMPLIANT COVERS AS MANUFACTURED BY URBAN ACCESSORIES (www.urbanaccessories.com). ALL MATERIALS ARE TO MATCH EXISTING. THE TRENCH GRATE SHALL BE REPLACED WITH TITLE WAVES MODEL. ALL OTHER GRATES TO MATCH EXISTING PATTERN AND MATERIALS USING ADA COMPLIANT COVERS.
  - INSTALL FOUR (4) STA-RITE VARIABLE ORIFICE ABS "EYEBALL" WALL INLET FITTINGS #9429-0000 ON THE FILTERED WATER RETURN LINE (FE-101). LOCATE ONE AT THE CENTER OF EACH OF THE FOUR FOUNTAIN SUMP WALLS AT SIX INCHES ABOVE THE FLOOR.

NOTES	1
	NONE

FOUNTAIN PIPE SCHEDULE					
PIPE ID	TYPE	NPS (in)	FLOW (gpm)	VELOCITY (fps)	DESCRIPTION
DP1-10	PVC SCH 80	3	112	5.6	SUCTION
DP1-20	PVC SCH 80	2.5	112	8.7	DISCHARGE
DP2-10	PVC SCH 80	4	140	4.0	SUCTION
DP2-20	PVC SCH 80	4	140	4.0	DISCHARGE
DP3-10	PVC SCH 80	3	96	4.8	SUCTION
DP3-20	PVC SCH 80	2.5	96	7.5	DISCHARGE
DP4-10	PVC SCH 80	3	96	4.8	SUCTION
DP4-20	PVC SCH 80	2.5	96	7.5	DISCHARGE
FP1-10	PVC SCH 80	4	169	4.8	SUCTION
FE-101	PVC SCH 80	3	169	8.4	FILTER EFFLUENT

OVERALL PIPE SCHEDULE	2
	NONE

## Sam Johnson Parkway Fountain Modification Project

Owner:  
City of Racine  
730 Washington Avenue  
Racine, Wisconsin 53403

**JJR**  
landscape architecture  
planning  
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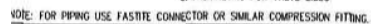
ISSUED FOR	REV	DATE
REVIEW & COMMENT		4/29/2011
COMM 90 REVIEW		5/8/2011
BD SET		5/26/2011

SEALS AND SIGNATURES

KEY PLAN  
PROJECT NORTH

## OVERALL PIPING PLAN

SCALE 50298.001  
CHECKED BY DGM  
DRAWN BY AB  
DATE 2011.03.25  
DRAWING NUMBER FM3.00

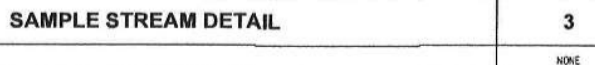
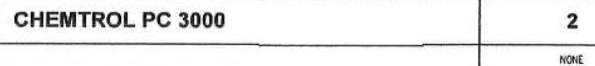


7

NONE

 $1/4'' = 1' = 0'$ 

NEW EQUIPMENT SPACE EQUIPMENT LIST	1
	NONE



CHECKED BY	DCM
DRAWN BY	AB
DATE	2011.07.25
DRAWING NUMBER	<b>FM4.00</b>

Sam Johnson  
Parkway Fountain  
Modification Project

Owner:  
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BD SET		5/26/2011

SEALS AND SIGNATURES

KEY PLAN

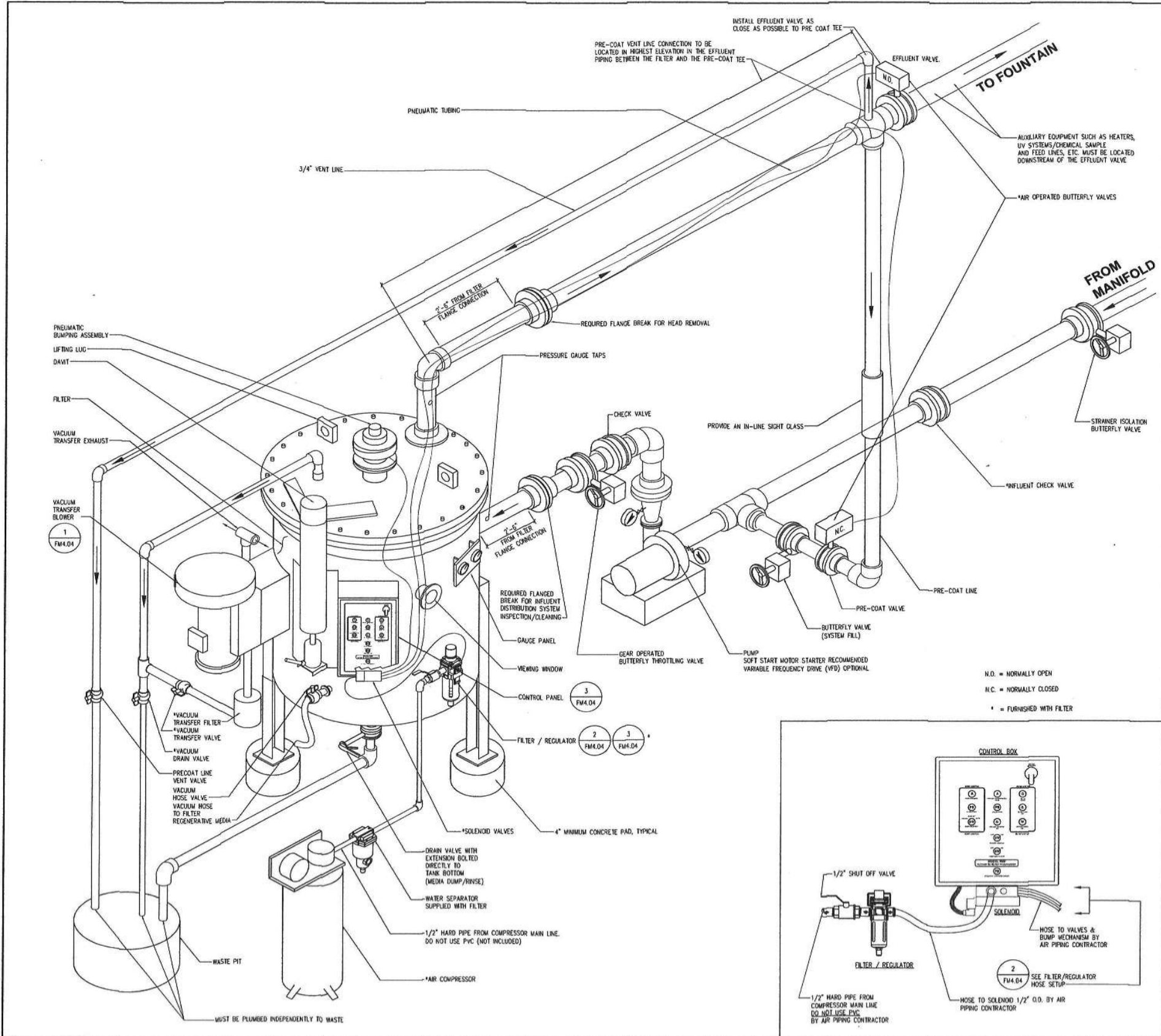
PROJECT NORTH

DRAWING TITLE

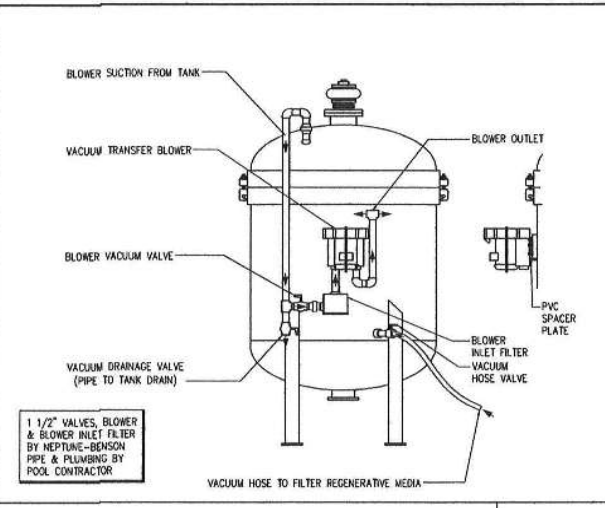
REGENERATIVE MEDIA  
FILTER SCHEMATIC

SCALE 50298.001

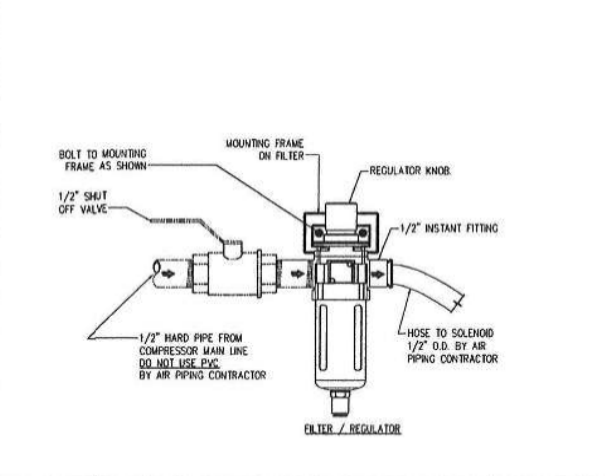
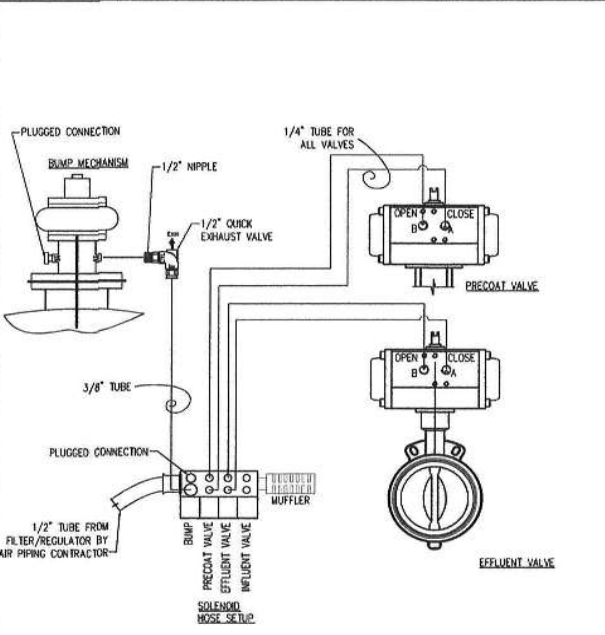
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DATE 2011.03.25  
DRAWING NUMBER **FM4.04**



<b>AUTOMATIC REGENERATIVE MEDIA SCHEMATIC</b>	<b>4</b>
SCALE: NONE	

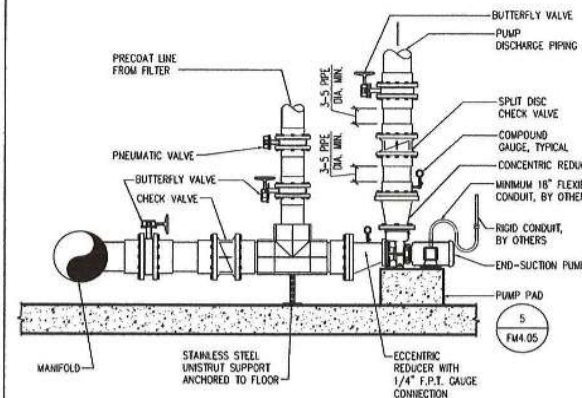
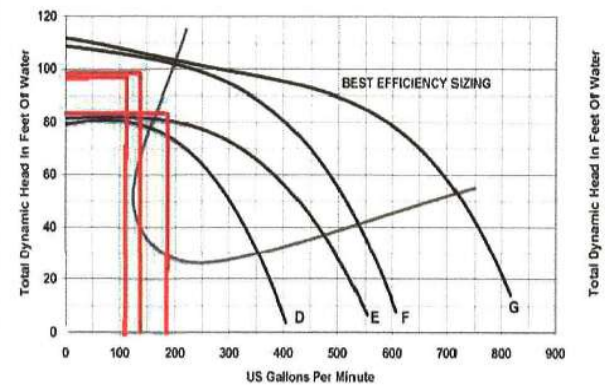
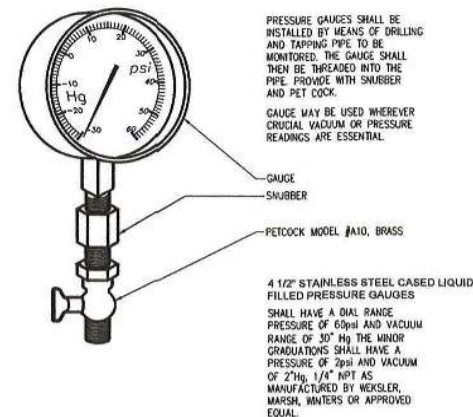


<b>VACUUM TRANSFER SYSTEM</b>	<b>1</b>
SCALE: NONE	



<b>PNEUMATIC VALVE DIAGRAM</b>	<b>2</b>
SCALE: NONE	

FOR REFERENCE ONLY - SEE MANUFACTURER'S DRAWINGS



Sam Johnson  
Parkway Fountain  
Modification Project

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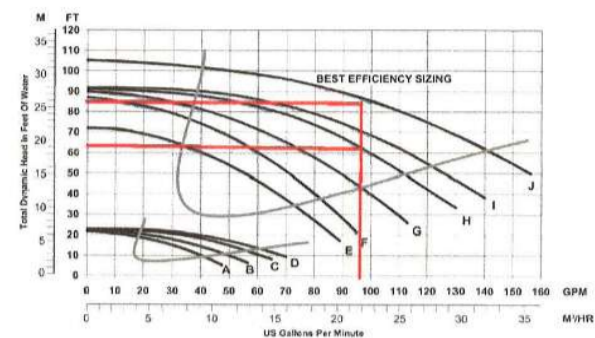
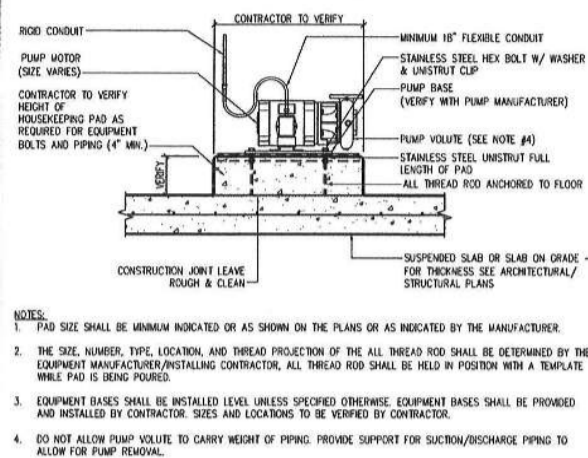
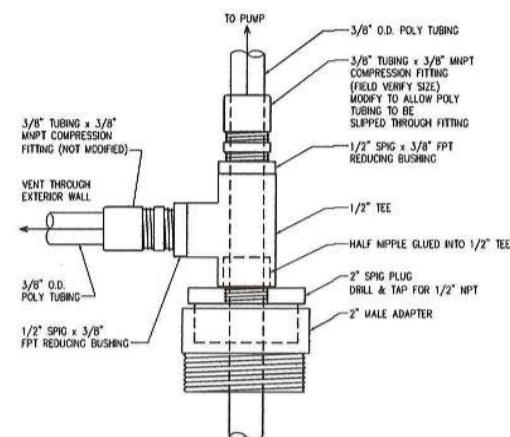
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SEALS AND SIGNATURES



**KEY PLAN**

## PROJECT NORTH

DRAWING TITLE

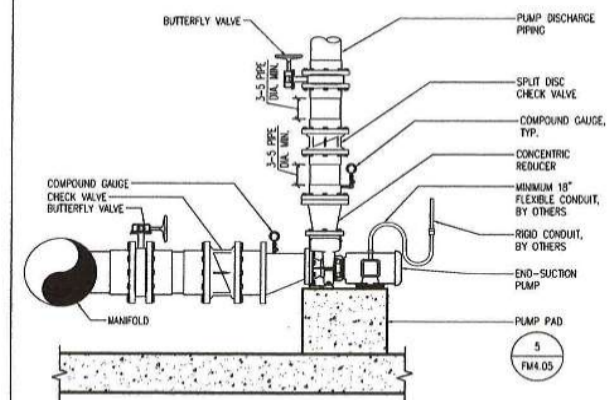
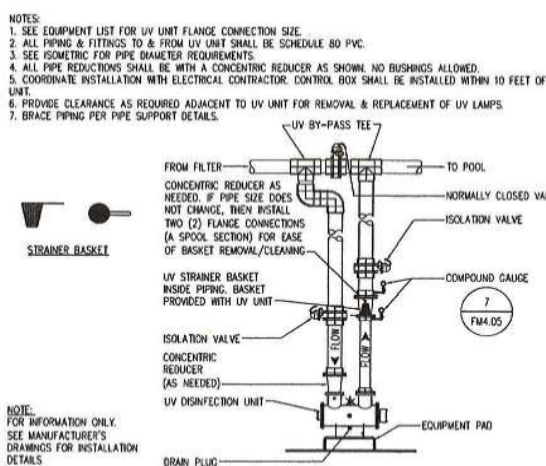
**MECHANICAL DETAILS**

SCALE 50298.001

CHECKED BY DCM

DRAWN BY AB  
DATE 2011.03.25

DRAWING NUMBER **FM4.05**





VALVE SCHEDULE			
NO	VALVE TYPE	VALVE OPERATOR	VALVE DESCRIPTION
03	BUTTERFLY	GEAR	FILTRATION PUMP SUCTION
04	CHECK	****	FILTRATION PUMP SUCTION
05	T.U.B.V.	****	FILTER PRECOAT
06	BUTTERFLY	PNEUMATIC	FILTER PRECOAT
07	BUTTERFLY	PNEUMATIC	FILTER PRECOAT
08	CHECK	****	FILTRATION PUMP DISCHARGE
09	BUTTERFLY	GEAR	FILTRATION PUMP THROTTLING
10	T.U.B.C.	****	CHEMICAL SAMPLING
11	T.U.B.V.	****	CHEMICAL SAMPLING
12	BUTTERFLY	GEAR	UV INFLUENT
13	BUTTERFLY	GEAR	UV BYPASS
14	BUTTERFLY	GEAR	UV EFFLUENT
15	T.U.B.V.	****	CHLORINE INJECTION
16	BUTTERFLY	****	CHLORINE INJECTION
17	T.U.B.V.	****	CHLORINE INJECTION
18	T.U.B.C.	****	ACID PUMP DISCHARGE
19	T.U.B.V.	****	ACID PUMP THROTTLING
20	T.U.B.V.	****	ACID INJECTION
21	T.U.B.V.	****	ACID INJECTION
22	BUTTERFLY	GEAR	PUMP SUCTION
23	CHECK	****	PUMP SUCTION
24	CHECK	****	PUMP DISCHARGE
25	BUTTERFLY	GEAR	PUMP DISCHARGE
26	BUTTERFLY	GEAR	PUMP SUCTION
27	CHECK	****	PUMP SUCTION
28	CHECK	****	PUMP DISCHARGE
29	BUTTERFLY	GEAR	PUMP DISCHARGE
30	BUTTERFLY	GEAR	PUMP SUCTION
31	CHECK	****	PUMP SUCTION
32	CHECK	****	PUMP DISCHARGE
33	BUTTERFLY	GEAR	PUMP DISCHARGE
34	BUTTERFLY	GEAR	PUMP SUCTION
35	CHECK	****	PUMP SUCTION
36	CHECK	****	PUMP DISCHARGE
37	BUTTERFLY	GEAR	PUMP DISCHARGE

VALVE SCHEDULE NOTES	
*	FURNISHED WITH FILTER
T.U.B.V.	TRUE UNION BALL VALVE
T.U.B.C.	TRUE UNION BALL CHECK
S.S.E.G.	SUBMERGED SERVICE EXTENDED GEAR
NOTES:	
1	SEE FMA-00 FOR EQUIPMENT LOCATIONS.
2	SUPPORT PIPES PER DETAILS FMSD-01 THRU 7.
3	REFER TO VALVE SCHEDULE FOR VALVE NUMBERS, LOCATION, AND QUANTITIES.
4	ARROWS DENOTE DIRECTION OF FLOW.
5	NOTE: THE INTENT OF THIS SCHEDULE IS NOT TO INCLUDE OF ALL VALVES REQUIRED FOR THIS PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ALL VALVES REQUIRED.
6	THIS DRAWING IS FOR SCHEMATIC USE ONLY.

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SEALS AND SIGNATURES

### KEY PLAN

PROJECT NORTH

DRAWING TITLE

## FOUNTAIN ISOMETRIC

SCALE 50298.001

CHECKED BY \_\_\_\_\_ OGI

DRAWN BY AB

DATE 2011.03.25

FM5.00



**Crystal Fountains**  
International Water Feature Specialists

**FM6.00**

# Sam Johnson Parkway Fountain Modification Project

Owner:  
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730 Washington Avenue  
Racine, Wisconsin 53403

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CDM 30 REVIEW	—	5/8/2011
BD SET	—	5/26/2011
REDO SET	—	7/25/2011

SEALS AND SIGNATURES

KEY PLAN  
PROJECT HDR

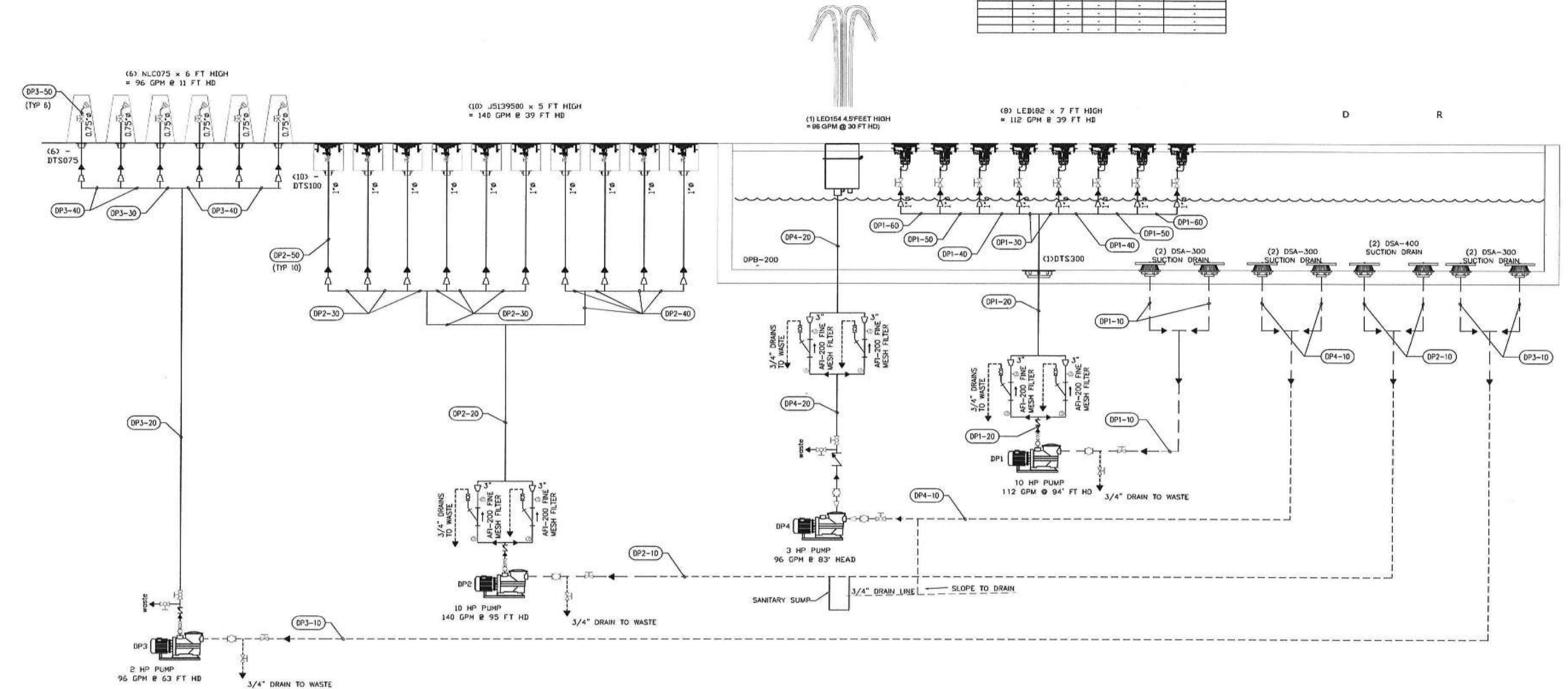
DRAWING TITLE  
**MECHANICAL  
PROCESS FLOW  
DIAGRAM**

SCALE  
50298.00  
CHECKED BY  
DGM  
DRAWN BY  
AB  
DATE  
2011.03.25  
DRAWING NUMBER  
**FM6.01**

PIPE ID	TYPE	NPS	FLOW	VELOCITY	DESCRIPTION
(in)	(gpm)	(ft/s)			
DP1-10	PVC SCH 80	3	112	5.6	SUCTION
DP1-20	PVC SCH 80	2.5	112	6.7	DISCHARGE
DP1-30	PVC SCH 80	2	86	6.3	FEATURE SUPPLY
DP1-40	PVC SCH 80	1.5	42	7.8	FEATURE SUPPLY
DP1-50	PVC SCH 80	1.25	28	7.3	FEATURE SUPPLY
DP1-60	PVC SCH 80	1	14	6.5	FEATURE SUPPLY
DP2-10	PVC SCH 80	4	140	4.9	SUCTION
DP2-20	PVC SCH 80	4	140	4.9	DISCHARGE
DP2-30	PVC SCH 80	4	84	2.4	FEATURE SUPPLY
DP2-40	PVC SCH 80	4	56	1.6	FEATURE SUPPLY
DP2-50	PVC SCH 80	1	14	6.5	FEATURE SUPPLY
DP3-10	PVC SCH 80	3	86	4.8	SUCTION
DP3-20	PVC SCH 80	2.5	86	7.5	DISCHARGE
DP3-30	PVC SCH 80	3	48	2.4	FEATURE SUPPLY
DP3-40	PVC SCH 80	2	16	1.8	FEATURE SUPPLY
DP3-50	PVC SCH 80	1	16	7.5	FEATURE SUPPLY
DP4-10	PVC SCH 80	3	86	4.8	SUCTION
DP4-20	PVC SCH 80	2.5	86	7.5	DISCHARGE



LEGEND		PIPING LEGEND	
(M25)	PART SUPPLIED BY CRYSTAL FOUNTAINS		GATE VALVE
	LEVER OPERATED BUTTERFLY VALVE		UNION
	GEAR OPERATED BUTTERFLY VALVE		BALL VALVE
	CHECK VALVE		FLEXIBLE COUPLING
	REDUCER		PRESSURE GAUGE
	PRESSURE SWITCH		3 WAY VALVE
	SUCTION LINE		DRAIN LINE
	SUPPLY LINE		



1 MECHANICAL PFD  
SCALE: N.T.S.  
5139 RACINE LAKEFRONT FTN (SYSTEM1)  
MPFD MECHANICAL PROCESS FLOW DIAGRAM

Sam Johnson  
Parkway Fountain  
Modification Project

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BID SET	5/26/2011	

SEALS AND SIGNATURES

KEY PLAN

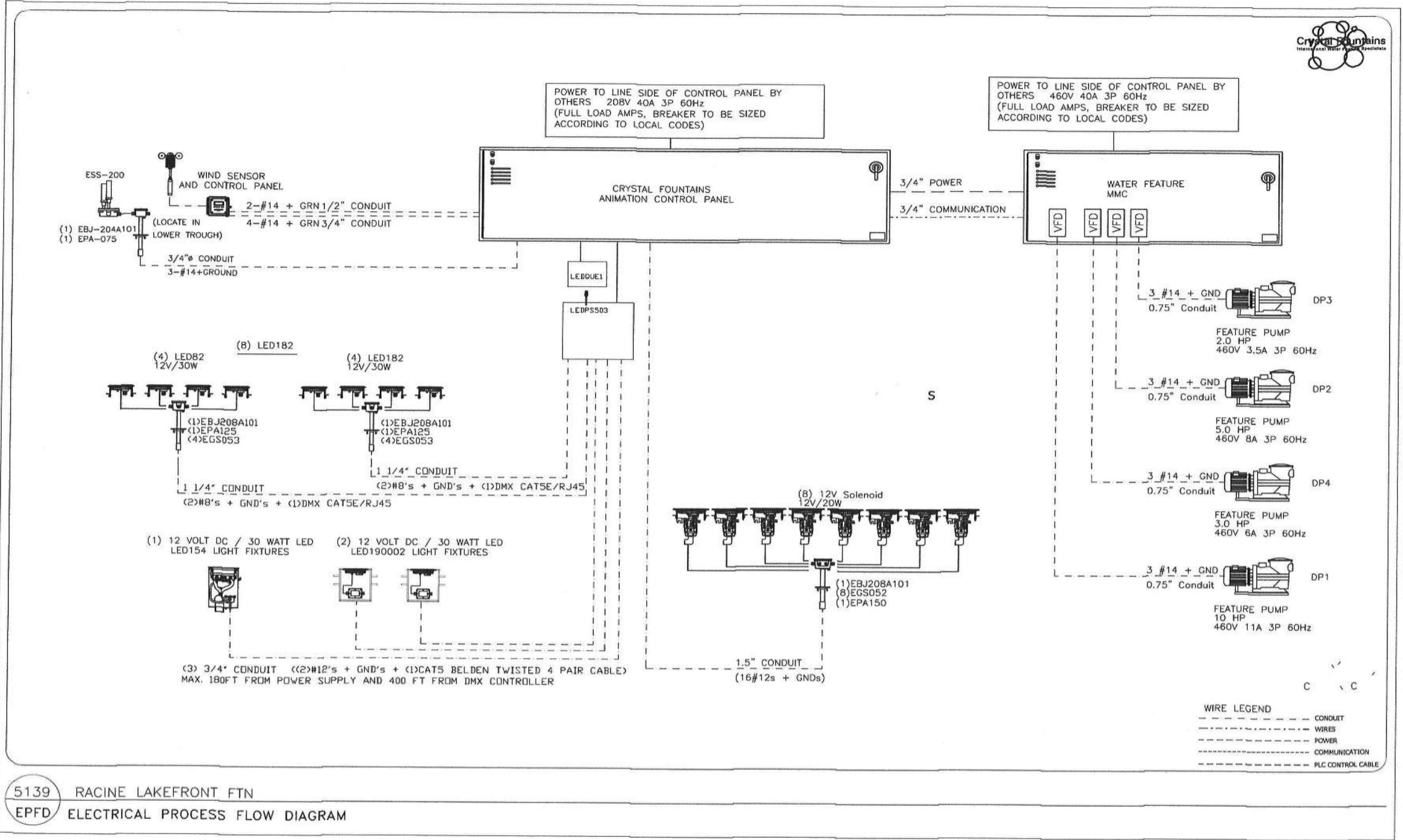
PROJECT NORTH

DRAWING TITLE

ELECTRICAL PROCES:  
FLOW DIAGRAM

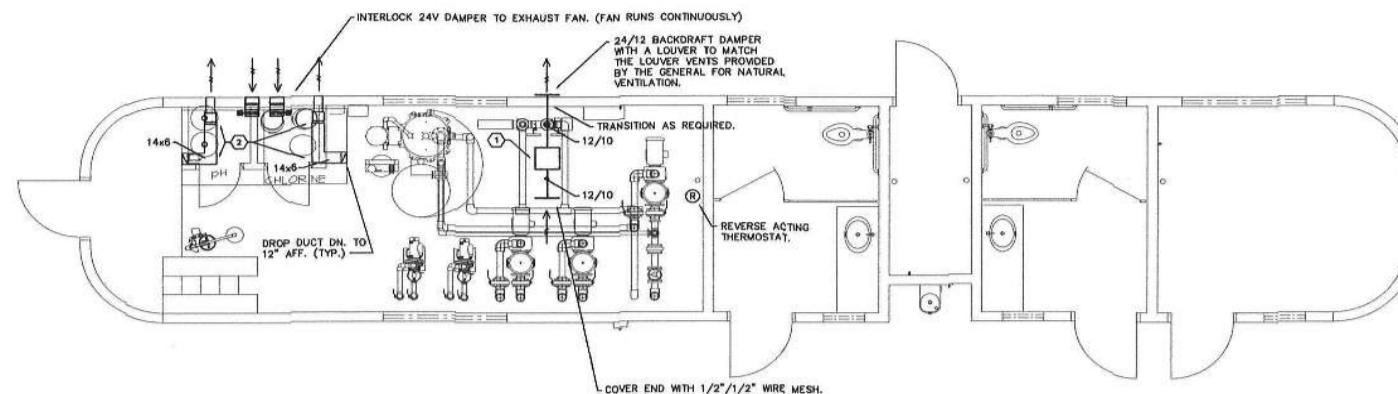
SCALE 50298.001

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DRAWN BY AB  
DATE 2011.03.25  
DRAWING NUMBER FM6.02



CHECKED BY	DCM
DRAWN BY	AB
DATE	2011.03.25
DRAWING NUMBER	<b>FM6.03</b>

- EXISTING PROJECT CONDITIONS: INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS PRESENT LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, AND DUCTS, AND ROUGH-IN'S AND MISCELLANEOUS CONSTRUCTION, APPEARS ON THE DRAWINGS. WHILE SUCH INFORMATION HAS BEEN BASED ON AVAILABLE RECORDS AND CHECKED WITH REASONABLE CARE, THE ENGINEER DOES NOT MAKE ANY EXPRESSED OR IMPLIED GUARANTEE THAT CONDITIONS SO INDICATED ARE SHOWN ENTIRELY COMPLETE, CORRECT AND REPRESENTATIVE OF THOSE ACTUALLY EXISTING. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ALL EXISTING JOB CONDITIONS PRIOR TO BIDDING, AND VERIFY ALL DIMENSIONS AT THE SITE.
- BACKGROUND FLOOR PLAN FOR REFERENCE ONLY, REFER TO ARCHITECTS DRAWINGS FOR FINAL PLAN LAYOUT.
- HVAC CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL EQUIPMENT, DUCTWORK, AND PIPING IN ALL ROOMS WITH THE GENERAL CONTRACTOR PRIOR TO PERFORMING WORK.
- COORDINATE LOCATION OF ALL GRILLES AND/OR DIFFUSERS, EXPOSED DUCTWORK WITH E.C. AND G.C. PRIOR TO INSTALLATION.
- PROVIDE ALL MATERIALS, EQUIPMENT, AND LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE MECHANICAL SYSTEMS AS INDICATED ON THE DRAWINGS, AS REQUIRED BY CODE.
- INSTALL ALL MECHANICAL EQUIPMENT, AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, CONTRACT DOCUMENTS, AND ALL CITY CODES AND REGULATIONS.
- COORDINATE ALL EQUIPMENT CONNECTIONS WITH MANUFACTURERS' CERTIFIED DRAWINGS, COORDINATE AND PROVIDE PIPING TRANSITIONS REQUIRED FOR FINAL EQUIPMENT CONNECTIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSIONS BEFORE FABRICATION.
- ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAIL. ALL EQUIPMENT AND PIPING SHALL BE FIELD FABRICATED (NOTE) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR, PER SMACNA.
- CONTRACTOR TO REFER TO OWNERS EQUIPMENT MANUAL FOR HVAC INSTALLATION DETAILS. MANUALS AVAILABLE WITH G.C.
- HVAC CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH E.C. PRIOR TO INSTALLATION, DISCUSS ALL DISCREPANCIES WITH OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.



### KEYED NOTES:

1. INLINE EXHAUST FAN, USE GREENECHWIK, MN, SP-A780 WITH GRANTY BACK DRAFT DAMPER. OR EQUIV. 1/4-15/81" HP, 15 CFM=700. INTERLOCK WITH REVERSE ACTING THERMOSTAT SO FAN COMES ON AT 90° INSTEAD OF 100° INSTEAD OF ABOVE FINISHED FLOOR. COORDINATE FINAL LOCATION AND HEIGHT WITH O.C. INTAKE AIR SHALL COME FROM WALL RELIEF. SIDE WALL RELIEF OPENINGS BY ARCHITECT. VERIFY PRIOR TO BIDDING.
2. THIS CONTRACTOR SHALL PROVIDE DEDUCT PRICE TO NOT PROVIDE AND INSTALL. THE BACKDRAFT DAMPER BUTDWORK AND FAN AT THIS TIME. OPERATIONS TO BE ROUGHED IN AND BLANK OFF WEATHER TIGHT FOR FUTURE. ELECTRICAL CONDUIT FOR REVERSE ACTING THERMOSTAT AND POWER TO FAN SHALL BE ROUGH IN.
3. INLINE EXHAUST FAN SHALL OPERATE CONTINUOUSLY. (2) 1/4-15/81" HP, 15 CFM=700. USE HEE HPC1800 OR EQUAL. (CONTACT JOHN LONDEAN AT VYRON FOR FURTHER INFO.) FAN SHALL EXHAUST OUTSIDE AT 375'± 15/81" G.P., BELT TYPE. PROVIDE AND INSTALL 18"1/4" BACKDRAFT DAMPER (GREENECHWIK, MN, E30-375) WITH FREE AREA OF NO LESS THEN 50% AND A FACE VELOCITY OF AROUND 700. FAN BUTDWORK SHALL BE CONSTRUCTED OF P.V.C MATERIAL OR MATERIAL APPROVED FOR THE SAME. SHALL BE USED TO MAKE ALL TRANSITALL ALL SQUARE TO ROUND TRANSITIONS AS REQUIRED.



**FLOOR PLAN - HVAC**

SCOPE DESIGN GUIDELINES

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Modification Project

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[illegible]

SEALS AND SIGNATURES

### KEY PLAN

DRAWING TITLE

## FLOOR PLAN

SCALE 50298 001

PROJECT NUMBER

DRAWING NUMBER

M1

TYPE	MATERIAL			OPTIONS	MFG.	SERIES NO.
	BODY	PLUG	TOP			
YCO	C.J.	BRASS	— —	— — —	SCHIER	FIG. NO. 101B
CO	C.I./PVC.	BRASS	— —	— — —	— — —	— — —
FCO	C.I.	BRASS	N.B.	— —	SCHIER	FIG. NO. N-203
WCO	— —	BRASS	S.S.	— —	SCHIER	FIG. NO. SS-1016—HD

TYPE	MATERIAL			OPTIONS	MFG.	SERIES NO.
	BODY	PLUG	TOP			
YCO	C.J.	BRASS	— —	— — —	SCHIER	FIG. NO. 101B
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FCO	C.I.	BRASS	N.B.	— —	SCHIER	FIG. NO. N-203
WCO	— —	BRASS	S.S.	— —	SCHIER	FIG. NO. SS-1016—HD

TYPE	SIZE	MATERIAL		STRAINER DIAMETER	FLASHING CLAMP	MFG.	SERIES NO.
		BODY	TOP				
FD-1	3"	PVC	N.B.	6½" DIA.	NO	SIoux CHIEF	FIG. NO. 833-PNR
FD-2	3"	PVC	N.B.	6½" DIA.	NO	SIoux CHIEF	FIG. NO. 833-PNR

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LABEL	DESCRIPTION
WB-1	SINK, FAUCET & STRAINER PER BUILDING SPECIFICATIONS. PLUMBING CONTRACTOR SHALL PROVIDE ALL P.V.C. WASTE, PIPING, STAINLESS TAILPIPE & TRAP, STOPS AND SUPPLIES.
DF-1	DRINKING FOUNTAIN PER BUILDING SPECIFICATIONS. PLUMBING CONTRACTOR SHALL PROVIDE ALL P.V.C. WASTE, PIPING, STAINLESS TAILPIPE & TRAP, STOPS AND SUPPLIES.
C-1	SINK, FAUCET & STRAINER PER BUILDING SPECIFICATIONS. PLUMBING CONTRACTOR SHALL PROVIDE ALL P.V.C. WASTE, PIPING, STAINLESS TAILPIPE & TRAP, STOPS AND SUPPLIES.
WC-1	STAINLESS STEEL FLOOR MOUNTED WATER CLOSET PER BUILDING SPECIFICATIONS. P.C. SHALL PROVIDE ALL P.V.C. WASTE, PIPING, STAINLESS TAILPIPE & TRAP, STOPS AND SUPPLIES.
WC-2	STAINLESS STEEL FLOOR MOUNTED WATER CLOSET PER BUILDING SPECIFICATIONS. P.C. SHALL PROVIDE ALL P.V.C. WASTE, PIPING, STAINLESS TAILPIPE & TRAP, STOPS AND SUPPLIES.
WH-1	WATER HEATER PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR SHALL PROVIDE ALL PIPING, VALVES AND CIRCULATING PUMPS.
HB-1	HOB BID WITH KEY TYPE VALVE PER BUILDING SPECIFICATIONS. PLUMBING CONTRACTOR SHALL PROVIDE ALL PIPING & VALVES.
HB-2	HOB BID WITH KEY TYPE VALVE AND LOCKABLE COVER PER BUILDING SPECIFICATIONS. PLUMBING CONTRACTOR SHALL PROVIDE ALL PIPING & VALVES.
EWE-1	EMERGENCY EYE WASH SHOWER PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR SHALL PROVIDE ALL PIPING & VALVES.
SP-1	SANITARY SUMP AS REQUIRED PER CODE. PROVIDE A MINIMUM OF 50 GPM AND A 24"x48" SUMP, PROVIDE 120V/1" / 2" P.H. WITH 10 FT. HEAD PRESSURE OR AS REQUIRED PER FINAL DESIGN. THIS PLUMBING CONTRACTOR SHALL PROVIDE ALL PIPING, VALVES, PUMP AND SUPPLIES.

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SYMBOL	ABBR.	DESCRIPTION
	SAN. ST.	SANITARY BUILDING DRAIN
	ST.	STORM BUILDING DRAIN
	U	UPDROCK
	W	WASTE
AW	AW	AIR WASTE
CLW	CLW	CLEAR WATER WASTE
CLV	CLV	CLEAR WATER VENT
CV	CV	CHECK VALVE
COND.	COND.	CONDENSATE
DI	DI	DRAINAGE
	GW	GROUND WATER
	CW	COLD WATER
	HW	HOT WATER
	HWR	HOT WATER RETURN
	QW	QUICK WATER
	TW	TEMPERED WATER
	A	AIR PIPING
	AV	AIR VALVE
	GV	GATE VALVE
	CV	CHECK VALVE
	B.V.	BACK VALVE
	P	PIPE
	S	SIGHT GLASS
	S.D.	SHUT DOWN
	R.D.	REPAIR DRAIN
	W	WATER
	V.R.	VENTILATE ROOF
	W.C.	WATER CLOSET
	F.C.	FLOOR CLEANOUT
	W.C.	WATER CLEANOUT
	W.C.P.	WATER CLOSET PIPING
	M.H.	MANHOLE

SYMBOL	ABBR.	DESCRIPTION
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CLW	CLW	CLEAR WATER WASTE
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CV	CV	CHECK VALVE
COND.	COND.	CONDENSATE
DI	DI	DRAINAGE
	GW	GAL WATER
	HWR	HOT WATER RETURN
	HW	HOT WATER
	TEMP.	TEMPERED WATER
	A	AIR PIPING
	GA	GALV. VALVE
	GA	GALV. VALVE
	C.V.	CHECK VALVE
	B.V.	BACK VALVE
	P	PIPE
	S	SIGHT GLASS
	S	SIGHT GLASS
	R.D.	RADIANT DRAIN
	R.D.	RADIANT DRAIN
	V	VENT
	V.R.	VENTILATION ROOF
	W.C.	WATER CLEANSING
	W.C.	WATER CLEANSING
	W.C.	WATER CLEANSING
	W.C.	WATER CLEANSING
	M.H.	MANHOLE

[illegible]

**GENERAL NOTES:**  
SUPPORT PIPE AND FITTINGS PER COMM 82.60.  
PROVIDE FIRESTOPPING OF PIPE PENETRATIONS PER BUILDING CODE.  
TERMINATE VENT STACK PER COMM 82.31 (16).  
KEEP ALL OVERHEAD PIPING WITHIN TRUSS.

- ALL DRAIN, WASTE AND VENT PIPING SHALL BE SCHEDULE 40 P.V.C. PIPE & FITTINGS
- ALL WATER PIPING SHALL BE TYPE "L" PIPE & FITTINGS UNLESS NOTED OTHERWISE.
- CALL THE CITY OF RACINE FOR INSPECTIONS.
- SANITARY BUILDING DRAIN 4" AT 1/4" PITCH
- CLEANOUTS EVERY 75' UNLESS NOTED OTHERWISE.
- GRANULAR BACKFILL ALL TRENCHES, EXCESS SPOILS REMOVED FROM SITE.
- NIBCO FULL PORT TWO PIECE BALL VALVES
- VERIFY WATER ROUTING WITH OTHER TRADES BEFORE INSTALLATION.
- INSULATE & COVER ALL HOT WATER PIPING WITH 1" , COLD WATER PIPING WITH 1/2" .
- PROVIDE STOPS AT ALL FIXTURES PER COMM 82.40 (4) (c).
- ALL PIPING INSTALLED IN PLENUM SHALL BE INSTALLED PER LOCAL AND STATE CODES.
- ALL STORM & SANITARY PIPING SHALL BE INSTALLED & INSULATED PER LOCAL AND STATE CODES.
- THIS PLUMBING CONTRACTOR SHALL CONFIRM ALL SIZES OF EQUIPMENT AND PIPING TO MAKE SURE THEY MEET ALL LOCAL AND STATE CODES. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK.

Owner:  
City of Racine  
730 Washington Avenue  
Racine, Wisconsin 53403

**JJR** landscape architecture  
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civil engineering  
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[illegible]

SEALS AND SIGNATURES

### KEY PLAN

DRAWING TITLE  
BELOW FLOOR PLAN,  
FLOOR PLAN, &  
SCHEDULES

SCALE 50298.001

PROJECT NUMBER \_\_\_\_\_

DRAWING NUMBER **M2**

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## SCOPE DESIGN GUIDELINES

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**GENERAL NOTE:**  
THIS CONTRACTOR SHALL PROVIDE AND  
INSTALL A 2" COMPOUND WATER  
METER TO BE CONNECTED TO THE  
IRRIGATION SYSTEM. THIS METER TO BE  
USED AS A DEDUCT METER.  
METER TO BE INSTALLED IN THE EXISTING  
MECHANICAL PIT.  
VERIFY PRIOR TO DOING WORK.

EXTEND NEW 2" CW. TO EXISTING 2" CW  
PIPING MAIN TO EXISTING POOL PIT.  
WITHIN EXISTING PIT EXTEND 2" CW.  
TO THE EXISTING IRRIGATION PUMP.  
THIS PLUMBING CONTRACTOR  
SHALL PROVIDE AN R.P.B.P. FOR  
IRRIGATION SYSTEM AND AN AIR GAP  
FOR POOL FILL WITHIN EXISTING  
POOL EQUIPMENT PIT.  
PROVIDE A 1 1/2" WATER METER FOR  
USE AS A DEDUCT METER.  
(FIELD VERIFY PRIOR TO BIDDING.)

SANITARY SUMP.  
PLUMBING CONTRACTOR  
SHALL COORDINATE FINAL  
LOCATION WITH POOL  
CONTRACTOR PRIOR TO  
INSTALLING. PLUMBING  
CONTRACTOR SHALL CONFIRM  
SIZE AND INSTALLATION PRIOR  
TO SENDING DRAWINGS INTO  
STATE FOR PLAN REVIEW  
IF REQUIRED PER CODE.  
ANCHOR TO FLOOR IF  
REQUIRED.  
(VERIFY SOIL CONDITIONS  
PRIOR TO DOING WORK.)

 **BELOW FLOOR PLAN - PLUMBING**  
1/4" = 1'-0"

2" WATER METER & 2" SEALED BY-PASS IN CONFORMANCE W/ CITY OF RACINE WATER UTILITY DEPARTMENT STANDARDS. \_\_\_\_\_

 **FLOOR PLAN - PLUMBING**  
1/8" = 1'-0"

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