

**Rock River Water Reclamation District  
Rockford, Illinois**

**Bidding Requirements and Contract Forms**

**for**

**Dewatering Building  
Basement Renovations**

**Capital Project No. 1850**

**Rock River Water Reclamation District  
Rockford, Illinois**

**Bidding Requirements and Contract Forms  
and  
*General Provisions and Technical Specifications*  
for  
*Sanitary Sewer Construction***

**for**

**Dewatering Building  
Basement Renovations**

**Capital Project No. 1850**

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*Not to be used for bidding purposes*

Not to be used for bidding purposes

**Section I**  
**Bidding Requirements**

## Article 1 — Notice to Bidders

The Rock River Water Reclamation District will receive sealed and signed bids for the Dewatering Building Basement Renovations, Capital Project No. 1850, sewerage improvements at the Rock River Water Reclamation District offices, 3501 Kishwaukee Street, Rockford, Illinois until 10:00 a.m. on March 23, 2018 at which time and place all bids will be publicly opened and read aloud.

The Dewatering Building Basement Renovations, Capital Project No. 1850 is a deconstruction and renovation project located in the basement of the Sludge Dewatering Building at the Rock River Water Reclamation District's main treatment plant that involves the removal of previously decommissioned equipment, ductwork, piping, storage tanks, material hoppers, and pumps, removal of concrete curbing, concrete equipment bases, and delaminated concrete, removal and replacement of floor drains, variable depth concrete patching, and all other appurtenances as indicated on the plans and in the specifications.

Bidder's attention is called to Article 2 – Instructions to Bidders 3.8 requirements for Statement of Qualifications. Bidder must have a permanent business office within forty (40) miles of the District office at 3501 Kishwaukee Street in Rockford, IL.

All work as outlined in the contract documents shall be completed by June 29, 2018. Liquidated damages shall be \$300 per calendar day.

Copies of the specifications may be obtained by depositing Fifty Dollars (\$50.00) with the Rock River Water Reclamation District. The amount of the deposit for each set of specifications will not be refunded.

All construction will be done in accordance with specifications on file with the Rock River Water Reclamation District, including the *General Provisions and Technical Specifications for Sanitary Sewer Construction* (Current Edition) by the Rock River Water Reclamation District of Rockford.

Each Proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount of ten percent (10%) of the total bid price. This sum is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured.

**A Mandatory Pre-Bid Meeting for this project will be held on March 12, 2018 at 10:00 a.m. at the RRWRD Board Room, 3501 Kishwaukee Street, Rockford, Illinois. All contractors that intend to bid on this project must attend the pre-bid meeting.**

Bid documents may be obtained by contacting the Engineering Department at the Rock River Water Reclamation District, (815) 387-7660, 3501 Kishwaukee St. For more information, visit the District web site at [www.rrwrddst.il.us](http://www.rrwrddst.il.us). Plans and specifications are also available for viewing through the Northern Illinois Building Contractors Association, whose office is located at 1111 S. Alpine Rd, Rockford, IL.

The successful bidder will be required to furnish a satisfactory performance bond in the full amount of the bid or proposal. No bid shall be withdrawn without the consent of the District for a period of 60 days after the scheduled time of receiving bids.

The Rock River Water Reclamation District, reserves the right to reject any or all bids, or any part thereof, or to accept any bid or any part thereof, or to waive any formalities in any bids, deemed to be in the best interest of the Rock River Water Reclamation District.

Dated this 1st day of March, 2018



BY: Timothy S. Hanson, District Director

Not to be used for bidding purposes

## Article 2 — Instructions to Bidders

### 1 General

#### 1.1 Scope and Intent

This section of the contract documents is concerned with furnishing detailed information and requirements for preparing bids to prospective bidders, bidders' responsibility, the preparation and the submission of bids, basis for awarding the contract and other general information concerned with bidding and executing the contract.

#### 1.2 Contradictions

If in the case of apparent contradiction between or among the Contract Documents, the Contract Documents shall be consulted in the following order: Addenda, Agreement, Supplementary Drawings, Instructions to Bidders, Detailed Specifications, Plans, District General Provisions and Technical Specifications for Sanitary Sewer Construction. The language in the first such document in which language regarding the conflict, error or discrepancy occurs shall control.

### 2 Legal Requirements

#### 2.1 Illinois Regulations

1. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including Rock River Water Reclamation District) to submit certified payroll records on a monthly basis, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing false records is a Class B Misdemeanor.

The certified payroll records must include the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending time of work each day, for every worker employed on the project. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B Misdemeanor. Certified payroll reports shall be submitted on standard IDOT forms.

2. Public Act 83-1030 entitled "Steel Products Procurement Act" requires that steel products used or supplied in performance of this contract or subcontract shall be manufactured or produced in the United States with three exceptions.

The provisions of this Section shall not apply:

- a. Where the contract involves an expenditure of less than \$500.
  - b. Where the executive head of the public agency certifies in writing that
    - i. the specified products are not manufactured or produced in the United States in sufficient quantities to meet the agency's requirements, or
    - ii. obtaining the specified products, manufactured or produced in the United States would increase the cost of the contract by more than 10%.
  - c. When its application is not in the public interest.
3. Public Act 96-929 (30 ILCS 570) provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State



of Illinois as defined in the Act; and, further, that Illinois workers are available and capable of performing the particular type work involved.

4. Public Act 99-0933 requires that any party to a contract adopt and promulgate written sexual harassment policies that include, as a minimum, the following information:
  - a. the illegality of sexual harassment
  - b. the definition of sexual harassment under Illinois State law
  - c. a description of sexual harassment, utilizing examples
  - d. my (our) organization's internal complaint process including penalties
  - e. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission
  - f. directions on how to contact the Department and the Commission
  - g. protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act

Upon request, this information shall be provided to the Illinois Department of Human Rights and the District.

5. With regard to nondiscrimination in employment, the Contractor for this project will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations.
6. The Contractor for this project shall comply with the Occupational Safety and Health Act.
7. The Contractor for this project shall comply with the Federal Drug-Free Workplace Act.
8. Public Act 96-1416 requires the Certification of Clean Construction and Demolition Debris (CCDD) and uncontaminated soil prior to disposal at a CCDD fill site. The Contractor for this project shall comply with Public Act 96-1416 and be responsible for the certifications and any fees associated with the disposal at a CCDD fill site.
  - a. In the event that contaminated soil is uncovered on the project, the Contractor shall notify the District immediately. Any extra costs resulting from the presence of contaminated soil shall be evaluated in accordance with District General Provisions & Technical Specs for Sanitary Sewer Construction; General Conditions: Article 5 – Time Provisions and Article 8 – Changes.

## **2.2 Americans with Disabilities Act**

The Contractor for this project will comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify Rock River Water Reclamation District (District) and their representatives from all:

1. suits, claims, or actions
2. costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement
3. damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

## **3 General Instructions**

### **3.1 Bidder's Responsibility**

Bidders are cautioned not to submit proposals until having carefully examined the entire site of the proposed work and adjacent premises and the various means of approach and access to the site, and having made all necessary investigations to inform themselves thoroughly as to the facilities for delivering, placing and handling the materials at the site, and having informed themselves thoroughly as to all difficulties involved in the completion of all the work under this Contract in accordance with its requirements.

Bidders must examine the Plans, Specifications and other Contract Documents and shall exercise their own judgment as to the nature and amount of the whole of the work to be done and for the bid prices must assume all risk of variance, by whomsoever made, in any computation or statement of amount or quantities necessary to complete fully the work in strict compliance with the Contract Documents. The Bidder must satisfy himself by making borings or test pits, or by such methods as he may prefer, as to the character and location of the materials to be encountered or work to be performed. No pleas of ignorance of conditions that exist or that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work under this Contract, as a result of failure to make the necessary examinations and investigations, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill, in every detail, all of the requirements of the Contract Documents, or will be accepted as a basis for any claims whatsoever for extra compensation or for an extension of time.

**The Contractor is responsible for verifying the location of all existing utilities in the project areas.**

The Bidder, therefore, shall satisfy himself by such means as he may deem proper as to the location of all structures that may be encountered in construction of the work.

### **3.2 Addenda and Interpretations**

No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any bidder orally. Every request for such interpretation must be in writing addressed to the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois. To be given consideration, such request must be received at least five (5) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by email, fax, or certified mail with acknowledgement of receipt requested, to all prospective bidders, at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addenda or interpretation shall not relieve said bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

### **3.3 Laws and Regulations**

The prospective bidder is warned that he must comply with all laws of the United States Government, State of Illinois, all ordinances and regulations of the District in the performance of the work under this contract. The Bidder's attention is specifically called to that provision of the General Conditions regarding the rate of wage to be paid on the work.

### **3.4 Quantities Estimated Only**

Bidders are warned that the estimate of quantities of the various items of work and materials, as set forth in the proposal form, is approximate only and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the contract work may be less or more than so estimated, and if awarded a contract for the work specified, the Contractor further agrees that he will not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes of work assumed for comparison of bids and quantities of work actually performed.

### **3.5 Form, Preparation, and Presentation of Proposals**

For particulars as to the quantity and quality of the supplies, materials and equipment to be furnished, and the nature and extent of the work or labor to be done, prospective bidders are referred to the Contract Documents, which may be examined or obtained at the office of the District.

Each bid will be submitted upon the prescribed proposal form. All blank spaces for bid prices must be filled in, in ink, with the unit or total sum or both for which the proposal is made. If the proposal contains any omissions, erasures, alterations, additions or items not called for in the itemized proposal, or contains irregularities of any kind, such may constitute sufficient cause for rejection of bid. In case of any discrepancy in the unit price or amount bid for any item in the proposal, the unit price as expressed in figures will govern. In no case is the agreement form to be filled out or signed by the bidder.

*Should the Contractor desire to have an electronic proposal form e-mailed to him, the Contractor should contact the District's Engineering Department at (815) 387-7660. This form must be attached to the hard copy proposal form and appropriately signed and executed with the bid.*

The bid must be verified and be presented on the prescribed form in a sealed envelope on or before the time and at the place stated in the Advertisement for Bids, endorsed with the name of the person, firm or corporation presenting it, the date of presentation, and the title of the work for which the bid is made. If forwarded by mail, the sealed envelope containing the proposal and marked as directed above, must be enclosed in another envelope addressed to Clerk of the Rock River Water Reclamation District, 3501 Kishwaukee Street, Rockford, Illinois, 61109 and be sent preferably by certified mail. The District will not accept facsimile generated bids.

### **3.6 Bid Security**

Each proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount specified in Article One, Notice to Bidders. This sum is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured. The District's Bid Bond Form included in the bid packet must be used. No other Bid Bond form may be substituted.

Within ten (10) days after the opening of bids, the deposits of all but the three lowest bidders will be returned. The deposits of the remaining two unsuccessful bidders will be returned within three (3) days after the execution of the contract, or, if no such contract has been executed, within sixty (60) days after the date of opening bids. The deposit of the successful bidder will be returned only after he has duly executed the contract and furnished the required bond and insurance.

### **3.7 Affidavit of Compliance**

**Each proposal must be accompanied by an executed Affidavit of Compliance.** A separate Affidavit of Compliance form is enclosed with the Proposal packet. Failure to submit an executed Affidavit of Compliance with the proposal may constitute sufficient cause for rejection of the bid.

### **3.8 Statement of Qualifications**

Each proposal must be accompanied by a Statement of Qualifications certifying that the bidder is registered to do business in the State of Illinois, has a permanent business office within forty (40) miles of the District office at 3501 Kishwaukee Street in Rockford, IL, and provides documentation that the bidder possesses the appropriate financial, material, equipment, facility and personnel resources and expertise necessary to meet all contractual obligations. The bidder shall document no less than three (3) contracts for sanitary sewer system within the past five (5) years having equal or greater value to the bid being submitted. The District reserves the right to request additional information as needed to evaluate bids prior to making an award.

### **3.9 Comparison of Proposals**

Bids on item contracts will be compared on the basis of a total computed price arrived at by taking the sum of the estimated quantities of each item, multiplied by the corresponding unit prices and including any lump sum bids on individual items, in accordance with the estimate of quantities set forth in the proposal form. Bids on lump sum contracts will be considered upon the basis of the lowest sum bid.

### **3.10 Acceptance of Bids and Basis of Award**

No bidder may withdraw his bid after the scheduled closing time for receipt of bids, for at least sixty (60) days.

The contract will be awarded, if at all, to the lowest responsive, responsible bidder. The Rock River Water Reclamation District also reserves the right to reject any or all bids.

The bidder whose proposal is accepted shall enter into a written contract for the performance of the work and furnish the required bonds and insurance certificate within ten (10) days after written notice by the Engineering Manager of the District has been served on such bidder personally or by mailing a postpaid wrapper to such bidder at the address given in his proposal. If the bidder to whom the contract is awarded refuses or neglects to execute it or fails to furnish the required bond and insurance within five (5) days after receipt by him of the notice, the amount of his deposit shall be forfeited and shall be retained by the District as liquidated damage and not as a penalty. It being now agreed that said sum is a fair estimate of the amount of damages that the District will sustain in case said bidder fails to enter into a contract and furnish the required bond and insurance. No plea of mistake in the bid shall be available to the bidder for the recovery of his deposit or as a defense to any action based upon the neglect or refusal to execute a contract.

### **3.10.1 Evaluation of Responsiveness**

The responsiveness of bidders will be judged on the basis of the completeness of the bid submitted. To be responsive, a Bid must be submitted on the forms provided as part of the Bid Documents and comply with all the requirements of the Instruction to Bidders.

### **3.10.2 Evaluation of Responsibility**

To be judged as responsible, the bidder shall:

- a. Have adequate financial resources for performance, the necessary experience, organization, technical qualifications, and facilities, or a firm commitment to obtain such by subcontracts;
- b. Be able to comply with the required completion schedule for the project;
- c. Have a satisfactory record of integrity, judgment, and performance, including, in particular, any prior performance on contracts from the District;
- d. Have an adequate financial management system and audit procedures, that provide efficient and effective accountability and control of all property, funds, and assets;
- e. Conform to the civil rights, equal employment opportunity and labor law requirements of the Bid Documents.
- f. Have satisfactorily completed no less than three (3) sanitary sewer system contracts within the past five (5) years of equal or greater value to the bid being submitted.

### **3.11 The Rejection of Bids**

The District reserves the right to reject any bid if the evidence submitted in the statement of the bidder's qualifications, or if investigation of such bidder fails to satisfy the District that such bidder is properly qualified to carry out the obligations and to complete the work contemplated therein. Any or all proposals will be rejected if there is reason to believe that collusion exists among the bidders. Conditional bids will not be accepted. The District reserves the right to reject any and all bids and to accept the bid which they deem most favorable to the interest of the District after all proposals have been examined and canvassed.

### **3.12 Insurance and Bonding**

Contractor shall provide all necessary insurance and bonds required to complete the project. No more than ten (10) calendar days subsequent to the District's issuance of an award letter, the Contractor shall provide documentation to prove that he has obtained all required insurance and bonds. The District shall be the sole judge as to the acceptability of any such proof.

Contractor shall provide and maintain all insurance and bonds as required by the District.

#### **3.12.1 General**

The Contractor shall ensure that:

1. All insurance policies shall be specific to the project.
2. The insurance certificate shall state: This certifies that the insurance coverage meets or exceeds that required for the Dewatering Building Basement Renovations, Capital Project No. 1850.

3. The District shall be named as Additional Insured in all policies; this shall include the Owners Contractors Protective Policy option.
4. All completed operations coverages and bonds shall remain in force for a period of two (2) years following acceptance of the project and completed operations shall stay in force for two (2) years following completion of the project.

### **3.12.2 Insurance**

The Contractor shall, for the duration of the contract and for two (2) years following project acceptance, maintain the following:

1. General Liability: \$1,000,000 combined single limit per occurrence 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 this project or the general aggregate limit shall be twice the required occurrence limit. The Contractor shall provide "XCU" coverage.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage including coverages for owned, hired or non-owned vehicles, as applicable.
3. Workers' Compensation and Employers Liability: Workers' Compensation limits as required by statute and Employers Liability limits of \$500,000 per accident and \$500,000 per disease.
4. Umbrella: \$2,000,000 per occurrence/aggregate for contracts valued at \$500,000 or over, or \$1,000,000 for contracts below \$500,000. \$10,000 is maximum allowable self-retained limit.
5. Errors and Omissions: If the Contractor performs professional services, he shall maintain errors and omissions insurance with a limit no lower than \$1,000,000 for the duration of the contract.

The policies shall contain, or be endorsed to contain, the following provisions in the General Liability and Automobile Liability Coverage's:

- a. Unless otherwise provided in paragraph "c" of this section, the District, its officers, officials, employees and volunteers shall be covered as additional insureds as respects liability arising out of activities performed by or on insured's general supervision of the Contractor, products and completed operations of the Contractor, premises owned, occupied or used by the Contractor, or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, its officers, officials, employees, volunteers, or agents.
- b. Unless otherwise provided in paragraph "c" of this section, the Contractor's insurance coverage shall be primary insurance as respects the District, its officers, officials, employees, volunteers, and agents. Any insurance or self-insurance maintained by the District, its officers, officials, employees, volunteers, or agents shall be excess of the Contractor's insurance and shall not contribute with it.

- c. As an acceptable alternative to provisions “a” and “b” of this section, the Contractor may provide owner's and contractor's protective liability insurance with coverage limits, named insureds, and in conformity with all applicable specifications of this section.
- d. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officers, officials, employees, volunteers, or agents.
- 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. All Coverages — Each insurance policy required by this clause shall not be suspended, voided, canceled by either party, reduced in coverage, or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the District.

### **3.12.3 Best's Ratings**

The District shall be the sole judge of whether or not said insurer's ratios are satisfactory. The District's decision shall be final and the District's bidding procedures contain no appeal provision.

1. **Alphabetical Rating:** For purposes of this Request for Bids, "insurer" shall mean any surety, insurance carrier, or other organization which proposes to provide an insurance policy or bond for the Contractor. No insurer or surety rated lower than "A-, Excellent" in the current *Best's Key Rating Guide* shall be acceptable to the District.
2. **Financial Size Rating:** Provided an insurer's alphabetical rating is satisfactory, the District will examine said insurer's financial size rating.
  - a. If Best classifies the insurer XII or larger, said insurer shall be acceptable to the District.
  - b. If Best classifies the insurer as smaller than XII, but larger than VI, said insurer shall be submitted to the District’s Business Manager and/or the District’s insurance consultant for review.

Financial Size ratings less than VII are not acceptable and will disqualify the Contractor.

### **3.12.4 Performance Bond and Labor & Materials Payment Bond Form**

The Contractor shall provide a Performance Bond and Labor & Materials Payment Bond form acceptable to the District. The performance bond shall be for either 100% of the contract price or for the Contractor’s unit price times the estimated number of units, as applicable.

This Request for Bids contains a Performance Bond and a Labor & Material Bond form for the Contractor’s use.

If the Contractor fails to provide acceptable bonds within the specified time, he shall be in default.

**3.12.5 Correction of Contractor's Insurance or Bond Deficiencies**

If the District determines that the Contractor's insurance or bond documentation does not conform to these specifications, the District shall inform said Contractor of the non-conformity. If said Contractor fails to provide conforming insurance or bond documentation within five (5) calendar days of the District's deficiency notice, he shall be in default.

**3.12.6 Indemnification Clause**

Contractor shall protect, indemnify, hold and save harmless and defend the District, its officers, officials, employees, volunteers, and agents against any and all claims, costs, causes, actions and expenses, including but not limited to attorney's fees incurred by reason of a lawsuit or claim for compensation arising in favor of any person, including the employees, officers, independent contractors, or subcontractors of the Contractor or District, on account of personal injuries or death, or damages to property occurring, growing out of, incident to, or resulting directly or indirectly from the performance by the Contractor or subcontractor, whether such loss, damage, injury or liability is contributed to by the negligence of the District or by premises themselves or any equipment thereon whether latent or patent, or from other causes whatsoever, except that the successful bidder shall have no liability for damages or the costs incident thereto caused by the sole negligence of the District.

The indemnification shall not be limited by a limitation on amount or type of damages payable by or for the Contractor or its subcontractor under any employee benefits act including, but not limited, to the Workers Compensation Act.

No inspection by the District, its employees, or agents shall be deemed a waiver by the District of full compliance with the requirements of the Contract. This indemnification shall not be limited by the required minimum insurance coverages in the Contract.

**3.13 Tax Exemption**

The District is exempt, by law, from paying bidder Federal Excise Tax and Illinois Retailers' Occupational Tax. Therefore, the bidder shall exclude those taxes from his bid. The District's tax exemption number is E9992-3696-06. The bidder shall include all applicable taxes in his bid price.



## Article 3 – Detailed Specifications

### 1 General Requirements

#### 1.1 General

This article contains detailed specifications relating to proposal items. The work to be done under each item is discussed along with units for payment and measurement for payment. However, the descriptions given do not necessarily outline all the work to be done under any item. In addition, work shall conform to the following Technical Specifications: *Standard Specifications for Water and Sewer Main Construction in Illinois*, current edition, and *Rock River Water Reclamation District General Provisions and Technical Specifications for Sanitary Sewer Construction*. The term “*IDOT Standard Specifications*” shall mean the Illinois Department of Transportation’s *Standard Specifications for Road and Bridge Construction*, current edition. When referenced in applicable sections, work shall conform to the *IDOT Standard Specifications*.

Throughout these specifications, the term “Owner” and “District” shall be synonymous.

In case of apparent contradictions between *Article 3 - Detailed Specifications* and the *General Provisions and Technical Specifications for Sanitary Sewer Construction*, these *Detailed Specifications* shall govern.

Utility locations shown on the plans are based on the best information available at the time of design and are not guaranteed. The location and/or elevation of existing underground utilities, such as gas mains, water mains, electric lines, field tiles, irrigation pipes, etc., shall be determined by the Contractor. The Contractor shall assume full responsibility for location of all utilities.

Any construction not supervised by a District Inspector shall not be accepted.

No work shall be permitted on Sundays without prior approval by District Engineering Manager.

Suppliers shall be deemed to impliedly warrant that their products and all component materials incorporated into them are suitable and fit for the intended use of such products and shall be free from defect in material, workmanship or design, such warranty to run to the benefit of the District. The foregoing applies whether the products or component materials are specified in the Contract Documents or are of supplier’s design.

The District will not supervise, direct, control, have authority over or be responsible for the Contractor’s means, methods, techniques, sequences, procedures of construction, safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the furnishing or performance of the Work. The District will not be responsible for Contractor’s failure to perform or furnish the Work in accordance with the Contract Documents.

After the award of the contract and prior to starting work, the Contractor shall submit to the Engineer a satisfactory progress schedule or critical path schedule which will show the proposed sequence of work, and how the Contractor proposes to complete the various items of work by the completion date specified in this contract.

### **1.2 Submittals**

The Contractor shall submit to the Engineer the items under 'Required Submittals' of each special provision prior to beginning any work. The Contractor shall perform the following:

1. Review each submittal.
2. Verify field dimensions.
3. Verify compliance with Contract documents.
4. Stamp submittals to certify the Contractor's review/approval.
5. Transmit reviewed submittals to the Engineer for approval.

The Contractor shall submit a list of all materials requiring the Engineer's color selection. The list shall include the manufacturers name and model number/name for each item. The Engineer may require additional color samples.

The Contractor shall allow two (2) weeks for the Engineer's review of most submittals. The Engineer reserves the right to withhold action on a submittal that requires coordination with other submittals, until all related submittals are submitted. No extension of time to perform the Contract will be authorized because of the Contractor's failure to make submissions to the Engineer in time for the Engineer to execute a thorough review.

The Engineer's approval of a submittal shall not be considered an order for additional, extra, or differing work, and shall not guarantee the accuracy of information or the effectiveness of the products provided in the submittal.

No work shall be fabricated by order of the Contractor, unless at the Contractor's risk, until review of submittals has been completed by the Engineer.

When the Contract Documents call for work to be performed in accordance with the manufactures' instructions, the manufacturers' instructions shall also be considered required submittals.

Should any material be installed in the Work for which a Material Safety Data Sheet (MSDS) is required to be retained by the District under State or Federal regulations, the installing subcontractor shall submit applicable MSDS forms to the Contractor for submission to the District upon completion of the project. Three (3) MSDS forms shall be submitted for each item. Only official OSHA MSDS forms shall be used; copies will not be accepted. The Contractor shall compile the MSDS forms and bind them into the Owners Manuals.

### **1.3 Pre-Bid Meeting (Mandatory)**

**A mandatory Pre-Bid Meeting will be held at the RRWRD Graceffa Administration Building, 3501 Kishwaukee St., Rockford IL 61109 in the Board Room on March 12, 2018 at 10:00 a.m. Bids will not be accepted from Contractors who are not in attendance.**

### **1.4 Required Submittals**

1. Project Schedule

## 2 Notification, Access, & Special Considerations

### 2.1 General

#### **Special Considerations:**

1. The Contractor shall notify Warren Adam, Plant Operations Supervisor, (815)-871-0787, a minimum of forty-eight (48) hours in advance of construction.
2. The Contractor shall protect all existing equipment from damage of any kind, including but not limited to, dust control and water damage. Any damage occurring as a result of the Contractor's actions or negligence shall be corrected at no additional cost to the District.
3. Access to the building as outlined on the plans shall be strictly adhered to. The garage door and hatch above the hopper room are the approved portals for transporting materials into or from the Dewatering Building basement. The wood planks covering the hatch opening shall be removed by the Contractor prior to work beginning. At completion of the work, the wood planks shall be replaced. If any are damaged during removal, they shall be replaced with new wood planks to match the existing at no additional cost to the District.
4. Contractor staging and temporary storage of equipment and materials shall be as shown on Plan Sheet 2, specifically in the area indicated to the west of the garage door and hatch, and the area indicated to the east of the Dewatering Building. The designated staging/storage areas shall be the only staging/storage areas utilized by the Contractor. An indoor, temperature controlled small storage area will be provided for the Contractor for storage of temperature sensitive materials; the Contractor shall coordinate with the District for this location. All chemicals and materials shall be properly stored and secured. The staging/storage area shall be fenced and secured, with the roadway remaining passable in two directions at all times. Traffic control cones or drums shall be provided to delineate the staging area from the roadway.
5. A method of dust control shall be submitted and approved and shall be implemented and maintained at all times during construction. The facility shall be protected from the migration of dust, including the ventilation system. The suggested method of ventilation shall consist of sealing the double doors on the east side of the basement, and opening the garage door above the hopper room.
6. The sump pit, floor drain system, and floor drains in the Dewatering Building basement shall be used for clean water only. At no time shall construction debris, concrete saw or milling slurry, dust, dirt, or any other foreign material be flushed into or allowed to enter the floor drain system.
7. There are five (5) pumps in use in the basement room in which construction is to take place. The Contractor shall protect these pumps from dust, water, or any other type of damage. Damage to these pumps either by the Contractor's actions or negligence shall be promptly corrected at no additional cost to the District.
8. Water supply is available via the hose bib near the sump pit. A meter will be installed and water used by the contractor from this hose bid will be billed at \$6.67/CCF and deducted from the final payment. Any additional water shall be provided by the Contractor at no additional cost to the District.
9. Limited electric supply is available as 120 volt immediately accessible in the Dewatering Building basement. Caution shall be taken to avoid overloading the circuit and continuously trip the circuit breaker. Any additional electric needs shall be provided by the Contractor at no additional cost to the District.
10. Deliveries to the work site shall be accepted by the Contractor at the East treatment plant entrance (Guard Shack west of Kishwaukee Street). The District will not coordinate or be responsible for any deliveries that are inadvertently delivered to the District inventory shop.

11. Salvaged materials: The Contractor shall salvage and deliver to the District the following materials (Coordinate the delivery with Warren Adam, 815-871-0787):
  - Orival self cleaning automatic water filter as shown on detail 10 of sheet 6 of the plans.
  - Float meter located near the automatic water filter.
  - Pressure valve located near the automatic water filter.
12. The Contractor's proposed sequence of work shall be submitted prior to beginning any work with the Project Schedule. The Contractor is responsible for developing the means, methods, and procedures for deconstruction and is responsible for compliance with all OSHA, EPA, and DOT regulatory requirements.
13. The Contractor is advised that some of the equipment, piping, and tanks to be removed have been in contact with Ferric Chloride. The chemical property requirements and a Material Safety Data Sheet concerning Ferric Chloride are included as "Article 4" in this contract for the Contractor's information and reference.
14. The Dewatering Building basement work zone currently requires hardhats to be worn at all times due to loose concrete in the ceiling.

### **2.2 Required Submittals**

1. Detailed Work Plan for dust & water control and protection of existing pumps, sump pit, ventilation system, and facility.
2. Detailed Interior Deconstruction Plan describing the proposed sequence, methods, and equipment for removal and disposal/recycling of the components and materials that are to be removed.
3. Site Safety Plan indicating all safety measures the Contractor will employ to comply with all pertinent OSHA and EPA requirements.

### **2.3 Measurement and Payment**

No payment will be made for costs associated with notification, access, and special considerations.

## **3 Remove PCC Curb**

### **3.1 General**

This work shall consist of the complete removal of the PCC curb that is approximately 6" by 6" in locations shown on the plans. This work shall include the proper disposal of all materials generated by the removal of the concrete curb. Rebar and all concrete shall be cut flush with the floor. The integrity of the floor shall not be compromised and shall be protected from all damage during the removal operation. This work shall also include leveling grout as needed to repair the floor to a consistent surface. Concrete shall be disposed of in accordance with Article 202.03 of the *IDOT Standard Specifications*.

### **3.2 Materials**

The material for leveling grout shall be nonshrink in accordance with Section 1024 of the *IDOT Standard Specifications*.

### **3.3 Required Submittals**

1. Material certification for nonshrink grout.

### **3.4 Measurement and Payment**

Payment for this work shall be based on the measured length of removal at the Contract unit price per Lineal Foot for **Remove PCC Curb**.

## **4 Remove Equipment / Pipe Support Pad**

### **4.1 General**

This work shall consist of the complete removal of the concrete equipment or pipe support pads at the locations shown on the plans. This work shall include the proper disposal of all materials generated by the removal of the concrete pads. Rebar and all concrete shall be cut flush with the floor. The integrity of the floor shall not be compromised and shall be protected from all damage during the removal operation. This work shall also include leveling grout as needed to repair the floor to a consistent surface. Concrete shall be disposed of in accordance with Article 202.03 of the *IDOT Standard Specifications*.

### **4.2 Materials**

The material for leveling grout shall be nonshrink in accordance with Section 1024 of the *IDOT Standard Specifications*.

### **4.3 Required Submittals**

1. Material certification for nonshrink grout.

### **4.4 Measurement and Payment**

Payment for this work shall be based on the measured volume of removal at the Contract unit price per Cubic Foot for **Remove Equipment / Pipe Support Pad**.

## **5 Remove Piping, Water Filter, & HVAC Ducts and Appurtenances**

### **5.1 General**

This work shall consist of the complete removal of various sizes of: piping, water filter, HVAC ducts and all related appurtenances as shown on the plans. The Contractor shall remove and properly dispose of all piping and related materials as indicated on the plans or as otherwise directed. This shall include the disassembly of items as needed for removal from the building.

Hoist anchors of any type will not be allowed to be installed on the Basement ceiling. Existing pipe supports shall be cut flush with the ceiling.

This work shall also include the installation of a Victaulic blind flange at the location of pipe severance as shown in the Northeast corner of the building on Plan Sheet 4.

### **5.2 Salvage Items**

The Contractor shall remove, salvage, and deliver the following to a location within the treatment plant facility:

- a. Orival self cleaning automatic water filter as shown on Detail 10 on Plan Sheet 7.
- b. Float meter located near the automatic water filter.
- c. Pressure valve located near the automatic water filter.

Coordinate the delivery of the salvaged materials with Warren Adam, (815)-871-0787.

### **5.3 Required Submittals**

1. Victaulic blind flange.
2. Detailed plan for the proposed method of removal of items.

#### **5.4 Measurement and Payment**

No measurement will be made for this item. This work will be paid for at the Contract Lump Sum unit price for **Remove Piping, Water Filter, & HVAC Ducts and Appurtenances.**

### **6 Remove Manhole Structure**

#### **6.1 General**

This work shall consist of the complete removal and proper disposal of the block partial manhole structure as shown on the plans. This work shall include the removal and disposal of the piping attached to the manhole structure and the sump pit. The integrity of the floor shall not be compromised and shall be protected from all damage during the removal operation. This work shall also include leveling grout as needed to repair the floor to a consistent surface. Concrete shall be disposed of in accordance with Article 202.03 of the *IDOT Standard Specifications*.

The existing water hose bib will be relocated prior to construction to a higher elevation.

#### **6.2 Materials**

The material for leveling grout shall be nonshrink in accordance with Section 1024 of the *IDOT Standard Specifications*.

#### **6.3 Required Submittals**

1. Material certification for nonshrink grout.

#### **6.4 Measurement and Payment**

No measurement will be made for this item. This work will be paid for at the Contract Lump Sum unit price for **Remove Manhole Structure.**

### **7 Remove Storage Tank**

#### **7.1 General**

This work shall consist of the complete removal and disposal of a fiberglass storage tank previously containing a ferric chloride solution. See Article 4 for ferric chloride vendor requirements and MSDS information. The ferric chloride solution will be removed from the storage tank by District personnel prior to construction. The tank to be removed is approximately 5 feet in diameter and has an approximate height of 7 feet. The tank is made of a fiberglass material. The tank filling pipe directly above the tank shall be cut and plugged at the ceiling level. This work shall also include the removal and disposal of the wooden stair units that are used with the storage tank.

#### **7.2 Required Submittals**

1. Detailed tank removal plan, including the location of the tank disposal site.

#### **7.3 Measurement and Payment**

No measurement will be made for this item. This work will be paid for at the Contract Lump Sum unit price for **Remove Storage Tank.**

## 8 Seal Wall Penetration

### 8.1 General

This work shall consist of sealing existing wall penetrations of masonry block walls at various elevations and locations. The existing penetrations shall be cut to a clean edge and sealed with concrete masonry unit block of like thickness as the existing wall. Upon installation of the concrete masonry unit block the remaining voids shall be filled with mortar flush with the wall surface. This work will not require painting but shall be finished appropriately to allow for future painting.

### 8.2 Materials

Concrete masonry block shall be precast, hollow load-bearing concrete masonry units in accordance with Article 1042.17(c) of the *IDOT Standard Specifications*. Mortar shall be in accordance with ASTM C270 and match the color of the concrete masonry units.

### 8.3 Required Submittals

1. Material certification for concrete masonry unit block.
2. Material certification for mortar.

### 8.4 Measurement and Payment

This work will be measured for payment on a per Each basis. This work will be paid for at the Contract unit price per Each for **Seal Wall Penetration**.

## 9 Plate Wall Penetration

### 9.1 General

This work shall consist of plating existing wall penetrations of masonry block walls at various elevations and locations. The existing penetrations shall be cut to a clean edge and shall be plated with paintable stainless steel plates that exceed the dimensions of the squared penetration by no less than 2 inches on all sides.

### 9.2 Materials

Plates shall be paintable, 1/8" thick stainless steel, and shall be cut to size for each location.

### 9.3 Required Submittals

1. Material certification for stainless steel plates.

### 9.4 Measurement and Payment

This work will be measured for payment on a per Each basis. This work will be paid for at the contract unit price per Each for **Plate Wall Penetration**.

## 10 Remove Material Hoppers

### 10.1 General

This work shall consist of the disassembly as required, removal, and disposal of two (2) steel material hoppers. The hoppers can be removed from the basement level to the first floor level via an access hatch directly above said hoppers. They can then be removed from the building by means of a garage door connected to the same room as the access hatch, as shown on Plan Sheet 2.

## **10.2 Required Submittals**

1. Detailed plan for removal of the material hoppers.

## **10.3 Measurement and Payment**

No measurement will be made for this item. This work will be paid for at the Contract Lump Sum unit price for **Remove Material Hoppers**.

# **11 Remove Water Tank, Pumps, & Appurtenances**

## **11.1 General**

This work shall consist of the disassembly as required, removal, and disposal of an approximately 4 foot diameter steel water tank, two pumps, piping, conduit, and all related appurtenances. The equipment can be removed from the basement level to the first floor level via an access hatch directly above the material hoppers. They can then be removed from the building by means of a garage door connected to the same room as the access hatch, as shown on Plan Sheet 2.

The electric supply will be disconnected by the District prior to construction.

## **11.2 Required Submittals**

1. Detailed plan for removal of the water tank.

## **11.3 Measurement and Payment**

No measurement will be made for this item. This work will be paid for at the Contract Lump Sum unit price for **Remove Water Tank, Pumps, and Appurtenances**.

# **12 Replace Column Base Plate Protection**

## **12.1 General**

This work shall consist of the removal and disposal of existing concrete column base plate protection and the installation of new concrete column base plate protection. The existing base plate protection shall be removed without damaging the floor, the column, or the column base plate bedding grout. Concrete shall be placed to form the base plate protection dimensions as shown on Plan Sheet 6.

## **12.2 Materials**

Concrete shall be Class SI mix per Article 1020.04 of the *IDOT Standard Specifications*.

## **12.3 Required Submittals**

1. Grout material certification.

## **12.4 Measurement and Payment**

This work will be measured for payment on a per Each basis. This work will be paid for at the Contract unit price per Each for **Replace Column Base Plate Protection**.



## 13 Remove Door Frame

### 13.1 General

This work shall consist of the complete removal and proper disposal of the existing door frame as shown on the plans. This work shall also include leveling and finishing the masonry wall surface as a result of the door frame removal. The masonry shall be cut and finished flush to the outermost edge of the block units with mortar.

### 13.2 Required Submittals

1. Material certification for mortar.

### 13.3 Measurement and Payment

This work will be measured for payment on a per Each basis. This work will be paid for at the Contract unit price per Each for **Remove Door Frame**.

## 14 Remove and Replace Door and Door Frame

### 14.1 General

This work shall consist of removing and replacing steel door frames and doors as shown on the plans. This work shall consist of the complete removal and proper disposal of the existing door frame as shown on the plans. This work shall also include leveling and finishing the masonry wall surface as a result of the door frame removal. The masonry shall be cut and finished flush with the outermost edge of the block units with mortar.

This work shall be in accordance with the following:

1. ANSI/SDI-100 Recommended Specification for Standard Steel Doors and Frames.
2. DHI – The Installation of Commercial Steel Doors and Steel Frames.
3. Installed Door Assembly: NFPA 80.

### **Standard Steel Doors:**

Interior steel doors shall be SDI-100 Grade 111, heavy duty, 18 gauge cold rolled steel, 1 ¾ inches thick, full flush faces with honeycomb core and seamless edges, prime painted. Doors shall be factory prepared for hardware with holes drilled and internally reinforced. On all galvanized doors, close top and bottom edges with inverted steel channel closures and seal joints watertight.

### **Standard Steel Frames:**

Interior frames shall be 14 gauge formed sheet steel with corners mitered and welded, galvanized and prime painted. Frames shall be factory prepared for hardware with holes drilled and internally reinforced. All exposed welds shall be ground to a smooth and uniform surface and appearance. Frames shall be equipped with silencers and 3 anchors per jamb. Frames shall be shipped with temporary removable spreader bar fastened to the bottom of each frame.

### **Hardware:**

Hardware for hollow metal doors shall include but is not limited to thresholds, weather stripping, seals, hardware (including door handle and latch assembly), and items not specifically called for but required for a complete installation. The door shall have a locking assembly. Hardware items shall be ordered in a timely manner so as not to delay the project schedule. The amount of time required for the District's approval, manufacture, and delivery shall be taken into account. Hardware materials and systems shall be installed according to the manufacturer's instructions and approved submittals. Hardware materials and systems shall

be installed in proper relation to adjacent construction and with uniform appearance. Hardware shall be adjusted and cleaned after installation.

**Painting:**

Painting work includes, but is not limited to, the following: surface preparation of interior surfaces, field application of paints, coatings, and finishes, and compliance with VOC and environmental regulations. Caulk used for touch-up shall be acrylic-latex with 12 ½% elongation. Surfaces shall be prepared and minor defects corrected in accordance with the paint manufacturer's instructions. Hardware and accessories shall be masked off prior to the application of paint. Paint shall be applied with the proper consistency, rate of coverage, and preparation conditions as recommended by the manufacturer. Color shall be as approved by the District.

**14.2 Required Submittals**

1. Shop drawings for the door and door frame, including brand, finish, type, and color.
2. Shop drawings for the hardware, including handle and latch assembly (with lock mechanism).
3. Material certification for mortar.

**14.3 Measurement and Payment**

This work will be measured for payment on a per Each basis. This work will be paid for at the Contract unit price per Each for **Remove and Replace Door and Door Frame**.

## **15 Remove Floor / Equipment Drain**

**15.1 General**

This work shall consist of saw cutting and removal of floor or equipment drains at locations shown on the plans. All material removed shall be properly disposed of.

The pipe connected to the floor drain shall be cut and plugged with non-shrink hydraulic cement.

**15.2 Required Submittals**

1. Non-shrink grout data sheet.

**15.3 Measurement and Payment**

Removal of concrete and patching of the removed concrete will be measured and paid for according to the "Type 1 PCC Partial-Depth Patch & Type 2 PCC Partial-Depth Patch" pay item.

This work will be measured for payment on a per Each basis. This work will be paid for at the Contract unit price per Each for **Remove Floor / Equipment Drain**.

## **16 Remove and Replace Floor Drain**

**16.1 General**

This work shall consist of saw cutting and removal of concrete for the removal of floor or equipment drains, and installation of a Contractor-submitted replacement floor drain system at locations shown on the plans. All material removed shall be properly disposed of. The proposed floor drains shall consist of either a pre-fabricated unit, or a field-fabricated system which allow for the cleaning of the floor drain piping with high pressure water cleaning equipment. The minimum diameter of the floor drain opening shall be 8 inches. No P-trap assembly will be allowed. The Contractor shall be aware that the distance between the invert of the floor drain pipe and the top of the floor varies at each proposed floor drain location.

### **Pre-Fabricated Floor Drain Unit:**

The pipe connected to the floor drain shall be cut, cleaned, and re-attached to the newly installed floor drain. The proposed floor drain shall be no smaller than 8 inches in diameter or 8 inches square, and shall be a basin type with a side outlet to allow for the cleaning of the floor drain system with high pressure pipe cleaning equipment. The depth of the floor drain shall be as required to connect to the floor drain piping at each location while allowing for positive drainage to the drain from the surrounding floor. The grate shall be cast iron and be rated for industrial loading.

### **Field Fabricated Floor Drain System:**

The replacement floor drain shall consist of a cast iron frame manufactured to accommodate a 12" diameter grate cast-in-place into the Type 1 or Type 2 PCC Partial-Depth Patch. The frame and grate shall be rated for industrial loading. The concrete shall be core-drilled to create a 12" diameter opening to a depth of 2 inches below the bottom of the floor drain pipe. The bottom of the core shall be broken out to obtain a level surface before being leveled and smoothed with non-shrink hydraulic cement of a thickness of 1 inch. The finished surface shall be 1 inch below the bottom of the floor drain pipe to create a 1 inch sump. An 8" minimum diameter form shall be used for the placement of concrete. The frame and grate shall be set to an elevation which achieves positive drainage according to the contours shown on the plans. Alternately, a PVC reducing wye fitting may be used to facilitate the forming of the cast in place opening to create the floor drain piping access point.

### **16.3 Required Submittals**

1. Detailed shop drawings for the proposed floor drain system.
2. Material certifications for all materials used in the proposed floor drain system.

### **16.4 Measurement and Payment**

Removal of concrete and patching of the removed concrete will be measured and paid for according to the "Type 1 PCC Partial-Depth Patch & Type 2 PCC Partial-Depth Patch" pay item.

This work will be measured for payment on a per Each basis. This work will be paid for at the Contract unit price per Each for **Remove and Replace Floor Drain**.

## **17 Repair Floor Drain Piping**

### **17.1 General**

This work shall consist of repairing floor drain piping of various diameters at locations shown on the plans. The existing concrete around the piping shall be removed to facilitate the installation of a coupler, fitting or a PVC sleeve that shall be embedded in new concrete. Removal and replacement of concrete and reinforcement bars shall be completed in accordance with "Type 1 PCC Partial-Depth Patch & Type 2 PCC Partial-Depth Patch" pay item.

### **17.2 Required Submittals**

1. Material certifications for all materials used in the floor drain piping repair.

### **17.4 Measurement and Payment**

Removal of concrete and patching of the removed concrete will be measured and paid for according to the "Type 1 PCC Partial-Depth Patch & Type 2 PCC Partial-Depth Patch" pay item.

This work will be measured for payment on a per Each basis. This work will be paid for at the Contract unit price per Each for **Repair Floor Drain Piping**.

## 18 Type 1 PCC Partial-Depth Patch & Type 2 PCC Partial-Depth Patch

### 18.1 General

This work shall consist of partial-depth saw cutting, removal of concrete, and PCC patching at locations shown on the plans.

Patches will be classified as follows (refer to the patch schedule on Plan Sheet 5):

Type 1: Partial-depth patches having a depth range of 0 to 4 inches. Type 1 patches will not include reinforcement bar or mechanical reinforcement bar splicers.

Type 2: Partial-depth patches having a depth range of greater than 4 inches. Type 2 patches will include removal & replacement of reinforcement bars and include mechanical bar splicers.

Patches that are greater than 4 inches in depth will be classified as Type 1 for the area of 4 inch depth or less, and Type 2 for the area that is greater than 4 inches in depth. Refer to the patch schedule on Plan Sheet 5.

At no time shall a partial-depth patch be deeper than 10" from the top of the floor without prior approval from the Engineer.

### 18.2 Construction Requirements

#### **Concrete Removal & Surface Preparation:**

The size (area) of the patch and depth of the saw cut and removal of concrete shall be determined by the patch schedule and shall be adequate enough to fully remove any loose, unsound, or delaminated concrete around the drain, as directed by the Engineer. The Engineer will determine the limits of removal as the work progresses. Saw cuts shall be squared to a clean edge and shall be the full depth of the patch to provide for removal of the concrete. The removal of the concrete may be performed by chipping with power driven hand tools. Removed materials shall be properly disposed of in accordance with Article 202.03 of the *IDOT Standard Specifications*. The Contractor shall take care not to damage reinforcement bars or expansion joints which are to remain in place. All exposed reinforcing bars and newly exposed concrete shall be thoroughly blast cleaned. Where, in the judgment of the Engineer, the bond between existing concrete and reinforcing steel within the patch area has been destroyed, the concrete adjacent to the bar shall be removed to a depth that will permit new concrete to bond to the entire periphery of the exposed bar. A minimum of 1 inch clearance will be required. The Engineer may require enlarging a designated removal area should inspection indicate deterioration beyond the limits previously designated. In this event, a new saw cut shall be made around the extended area before additional removal is begun. The removal area shall not be enlarged solely to correct de-bonded reinforcement or to install mechanical bar splicers, and the Contractor shall use extreme caution to limit the amount of reinforcement bar removal.

#### **Reinforcement Treatment:**

Care shall be exercised during concrete removal to protect the reinforcement bars from damage. Any damage to the reinforcement bars to remain in place shall be repaired or replaced. All existing reinforcement bars shall remain in place except as herein provided for corroded bars. Tying of loose bars will be required. Reinforcing bars which have been cut or have lost 25 percent or more of their original cross sectional area shall be supplemented by new in kind reinforcement bars. An approved mechanical bar splicer capable of developing in tension at least 125 percent of the yield strength of the existing bar shall be used for all splices. No welding of bars will be permitted.

**Cleaning:**

Immediately after completion of the concrete removal and reinforcement repairs, the repair areas shall be cleaned of dust and debris. Once the initial cleaning is completed, the repair areas shall be thoroughly blast cleaned to a roughened appearance free from all foreign matter. Particular attention shall be given to the removal of concrete fines. Any method of cleaning which does not consistently produce satisfactory results shall be discontinued and replaced by an acceptable method. All debris, including water, resulting from the blast cleaning shall be confined and shall be immediately and thoroughly removed from all areas of accumulation. If the concrete placement does not follow immediately after the final cleaning, the area shall be carefully protected with well-anchored polyethylene sheeting. Exposed reinforcement bars shall be free of dirt, detrimental scale, paint, oil, or other foreign substances which may reduce bond with the concrete. A tight non-scaling coating of rust is not considered objectionable. Loose, scaling rust shall be removed by rubbing with burlap, wire brushing, blast cleaning or other methods approved by the Engineer.

**Bonding Method:**

The patch area shall be thoroughly cleaned to the satisfaction of the Engineer and shall be thoroughly wetted and maintained in a dampened condition with water for at least 12 hours before placement of the concrete. Any excess water shall be removed by compressed air or by vacuuming prior to the beginning of concrete placement. Water shall not be applied to the patch surface within 1 hour before or at any time during placement of the concrete.

**Concrete Placement:**

The concrete shall be placed and consolidated according to Article 503.07 of the *IDOT Standard Specifications*.

**Curing & Protection:**

Concrete patched shall be cured by the wetted burlap or wetted cotton mat method according to Article 1020.13 (a)(3) or Article 1020.13 (a)(5) of the *IDOT Standard Specifications*. No traffic, foot or otherwise, shall be allowed on a patch until after the concrete has been allowed to properly cure.

**18.3 Equipment**

The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

1. Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth, with a working water intake attachment for dust control.
2. Power-Driven Hand Tools. Power-driven hand tools will be permitted, including jackhammers lighter than the nominal 45 lb. class. Chipping hammers heavier than the normal 15 lb. class shall not be used for removing concrete from below any reinforcing bar, or for removal within 1 foot of existing columns. Jackhammers or chipping hammers shall not be operated at an angle in excess of 45 degrees measured from the surface of the slab.
3. Concrete Equipment. Equipment for proportioning and mixing the concrete shall be according to Article 1020.03 of the *IDOT Standard Specifications*.
4. Finishing Equipment. Finishing equipment shall be according to Article 1103.17 of the *IDOT Standard Specifications*. Adequate hand tools will be permitted for placing and consolidating concrete in the patch areas and for finishing small patches.

**18.4 Materials**

1. Mechanical Bar Splicer: an approved mechanical bar splice capable of developing in tension at least 125 percent of the yield strength of the existing bar shall be used when it is not feasible to provide the minimum bar lap and shall be in accordance with Article 508.08(c) and Article 1006.10(a)(1)g. of

the *IDOT Standard Specifications*. The producer shall be included on the most recent IDOT “Qualified Product List of Reinforcing Bar Splicer Assemblies and Mechanical Splicers”.

2. Concrete: Class SI mix per Article 1020.04 of the *IDOT Standard Specifications*.
3. Reinforcement: Epoxy-coated deformed bars according to ASTM A 706 Grade 60 and Article 1006.10(a) of the *IDOT Standard Specifications*.

### **18.5 Required Submittals**

1. Shop drawings and material certification for the mechanical bar splicer.
2. Concrete mix design.
3. Material certification for the reinforcement bars.

### **18.6 Measurement & Payment**

This work will be measured for payment in place in Square Feet. When a floor drain is set in a patch, the area of the floor drain will NOT be deducted from the area of the patch.

This work will be paid for at the Contract unit price per Square Foot for **Type 1 PCC Partial-Depth Patch**, or **Type 2 PCC Partial-Depth Patch**.

Type 1 patches will not include reinforcement bars or mechanical reinforcement bar splicers. Type 2 patches will include removal and replacement of reinforcement bars and mechanical bar splicers, which cost shall be included in the unit price per Square Foot for **Type 2 PCC Partial-Depth Patch**.

No additional payment will be allowed for removal and replacement of reinforcement bars damaged by the Contractor in the performance of his/her work or for any increases in dimensions needed to provide splices for these replacement bars.

## **19 Removal of Delaminated Concrete**

### **19.1 General**

This work shall consist of the removal of areas of unsound and delaminated concrete in the Dewatering Building basement ceiling, and the removal of those areas of unsound concrete at the direction of the Engineer. The intent of this work is to remove all unsound concrete in order to mitigate the existing hazards from falling concrete, and does not include preparing the concrete for patching or performing any repairs.

This work shall not begin until all piping, ventilation, and all other removal items have been completed and approval has been given by the Engineer to proceed with this work.

### **19.2 Construction Requirements**

#### **Identification:**

The District will perform inspection and sounding of the basement ceiling in order to identify the areas of unsound and delaminated concrete once all piping, ventilation, and other items have been fully removed and all hangars cut off at the ceiling elevation. The District Inspector will then lay out the proposed areas of concrete removal. The Contractor shall provide ladders or other appropriate equipment for the Inspector to mark the removal areas. Upon completion of marking out the removal areas, the District Inspector and the Contractor shall jointly measure the areas and agree to the quantity prior to any removal work beginning.

#### **Concrete Removal:**

The concrete shall be removed at the locations directed and shall be disposed of. Care shall be taken to avoid damage to persons or equipment. Removal configurations will be kept simple, and squared corners will be preferred. The District Inspector may require enlarging a designated removal area should inspection indicate

deterioration beyond the limits previously designated. The Contractor shall only remove the amount of concrete that which is approved by the District Inspector. In the event that the Contractor finds the concrete to be deteriorated in an area larger than previously laid out, the Inspector shall be notified for approval prior to enlarging the patch.

Saw cuts will not be required unless conditions dictate that concrete removal be terminated at a specific location, as determined by the Inspector.

The Contractor shall take care not to damage reinforcement bars or expansion joints which are to remain in place.

### **19.3 Equipment**

The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

1. Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth, with a working water intake attachment for dust control.
2. Chipping Hammer. The chipping hammer for removing concrete shall be a light-duty pneumatic or electric tool with a **15 lb. maximum** class or less. Jackhammers or chipping hammers shall not be operated at an angle in excess of 45 degrees measured from the surface of the slab.

### **19.4 Materials**

Not used.

### **19.5 Required Submittals**

1. Detailed plan for means and methods to remove delaminated concrete.

### **19.6 Measurement & Payment**

This work will be measured for payment in place in Square Feet.

This work will be paid for at the Contract unit price per Square Foot for **Removal of Delaminated Concrete**. Quantity shall be agreed to between the Contractor and the District upon completion of marking out the removal areas and prior to removal work beginning.

No payment will be allowed for removal and replacement of reinforcement bars damaged by the Contractor in the performance of his/her work or for any increases in dimensions needed to provide splices for these replacement bars.

## **20 Sump Pit Concrete Repair**

### **20.1 General**

This work shall consist of the repair and patching of areas of unsound concrete in the Dewatering Building sump pit at the direction of the Engineer. This work shall also include the repair of the sump pit wall with concrete where the existing manhole structure piping was removed (see "*Remove Manhole Structure*" detailed specification).

This work shall not begin until all piping, ventilation, and all other removal items have been completed and approval has been given by the Engineer to proceed with this work.

**Identification:**

The District will perform inspection and sounding of the sump pit in order to identify the areas of unsound and delaminated concrete. The District Inspector will then lay out the proposed areas of concrete removal. The Contractor shall provide ladders or other appropriate equipment for the Inspector to mark the removal areas. Upon completion of marking out the removal areas, the District Inspector and the Contractor shall jointly measure the areas and agree to the quantity prior to any removal work beginning.

**Concrete Removal:**

The concrete shall be removed at the locations directed and shall be properly disposed of. Care shall be taken to avoid damage to persons or equipment. Repair configurations will be kept simple, and squared corners will be required. The Engineer may require enlarging a designated removal area should inspection indicate deterioration beyond the limits previously designated. The Contractor shall only remove the amount of concrete that is approved by the District Inspector. In the event that the Contractor finds the concrete to be deteriorated in an area larger than previously laid out, the Inspector shall be notified for approval prior to enlarging the patch.

The repair perimeter shall be saw cut a depth of 1/2 inch or less, as required to avoid cutting the reinforcement. Any cut reinforcement shall be repaired or replaced at the expense of the Contractor. If the concrete is broken or removed beyond the limits of the initial saw cut, the new repair perimeter shall be recut. The areas to be repaired shall have all loose, unsound concrete removed completely by the use of chipping hammers, hydro demolition equipment, or other methods approved by the Engineer.

The Contractor shall take care not to damage reinforcement bars or expansion joints which are to remain in place. The concrete removal shall extend along the reinforcement bar until the reinforcement is free of bond inhibiting corrosion. Reinforcement bar with 50 percent or more exposed shall be undercut to a depth of 3/4 inch or the diameter of the reinforcement bar, whichever is greater.

The repair depth shall be a minimum of 1 inch. The substrate profile shall be  $\pm 1/16$  inch. The perimeter of the repair area shall have a vertical face.

**Surface Preparation:**

Prior to placing concrete or shotcrete, the Contractor shall prepare the repair area and exposed reinforcement by blast cleaning. The blast cleaning shall provide a surface that is free of oil, dirt, and loose material.

The repair area and perimeter vertical face shall have a rough surface. Care shall be taken to ensure the saw cut face is roughened by blast cleaning. Just prior to concrete placement, saturate the repair area with water to a saturated surface-dry condition.

Concrete placement shall be done within 3 calendar days of the surface preparation or the repair area shall be prepared again.

**Reinforcement Treatment:**

Care shall be exercised during concrete removal to protect the reinforcement bars and structural steel from damage. Any damage to the reinforcement bars or structural steel to remain in place shall be repaired or replaced. All existing reinforcement bars shall remain in place except as herein provided for corroded bars. Tying of loose bars will be required. After cleaning, exposed reinforcing bars shall be carefully evaluated to determine if replacement or additional reinforcement bars are required. Reinforcing bars which have been cut or have lost 25 percent or more of their original cross sectional area shall be supplemented by new in kind reinforcement bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. An approved mechanical bar splice capable of developing in tension at least 125 percent of the yield strength of the existing



bar shall be used when it is not feasible to provide the minimum bar lap. No welding of bars will be permitted.

**Bonding Method:**

The patch area shall be thoroughly cleaned to the satisfaction of the Engineer and shall be thoroughly wetted and maintained in a dampened condition with water for at least 12 hours before placement of the concrete. Any excess water shall be removed by compressed air or by vacuuming prior to the beginning of concrete placement. Water shall not be applied to the patch surface within 1 hour before or at any time during placement of the concrete.

**Repair Methods:**

All repair areas shall be inspected and approved by the Engineer prior to placement of the concrete.

The repair method shall be formed concrete repair. The following rules shall apply:

- (a) Rule 1. For formed concrete repair, a subsequent patch to repair the placement point after initial concrete placement will not be allowed. As an example, this may occur in a vertical location located at the top of the repair.
- (b) Rule 2. Formed concrete repair shall not be used for overhead applications.
- (c) Rule 3. If formed concrete repair is used for locations that have reinforcement with less than 0.75 in. (19 mm) of concrete cover, the concrete mixture shall contain fly ash or ground granulated blast-furnace slag at the maximum cement replacement allowed.

**Method:**

Formed Concrete Repair. Falsework shall be according to Article 503.05 of the *IDOT Standard Specifications*. Forms shall be according to Article 503.06 of the *IDOT Standard Specifications*. Formwork shall provide a smooth and uniform concrete finish, and shall approximately match the existing concrete structure. Formwork shall be mortar tight and closely fitted where they adjoin the existing concrete surface to prevent leakage. Air vents may be provided to reduce voids and improve surface appearance. The Contractor may use exterior mechanical vibration, as approved by the Engineer, to release air pockets that may be entrapped.

The concrete for formed concrete repair shall be a Class SI Concrete, or a packaged R1 or R2 Concrete with coarse aggregate added, or a packaged Normal Weight Concrete at the Contractor's option. The concrete shall be placed and consolidated according to Article 503.07. The concrete shall not be placed when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 40 °F (4 °C). All repaired members shall be restored as close as practicable to their original dimensions.

Curing shall be done according to Article 1020.13 of the *IDOT Standard Specifications*.

If temperatures below 45 °F (7°C) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(d)(1), or Protection Method II according to Article 1020.13(d)(2) of the *IDOT Standard Specifications* shall be used during the curing period.

The surfaces of the completed repair shall be finished according to Article 503.15 of the *IDOT Standard Specifications*.

### **Inspection of Completed Work:**

The Contractor shall provide ladders or other appropriate equipment for the Engineer to inspect the repaired areas. After curing but no sooner than 28 days after placement of concrete, the repair shall be examined for conformance with original dimensions, cracks, voids, and delaminations. Sounding for delaminations will be done with a hammer or by other methods determined by the Engineer.

The acceptable tolerance for conformance of a repaired area shall be within 1/4 in. (6 mm) of the original dimensions. A repaired area not in dimensional conformance or with delaminations shall be removed and replaced.

A repaired area with cracks or voids shall be considered as nonconforming. Exceeding one or more of the following crack and void criteria shall be cause for removal and replacement of a repaired area.

1. The presence of a single surface crack greater than 0.01 in. (0.25 mm) in width and greater than 12 in. (300 mm) in length.
2. The presence of two or more surface cracks greater than 0.01 in. (0.25 mm) in width that total greater than 24 in. (600 mm) in length.
3. The presence of map cracking in one or more regions totaling 15 percent or more of the gross surface area of the repair.
4. The presence of two or more surface voids with least dimension 3/4 in. (19 mm) each.

A repaired area with cracks or voids that do not exceed any of the above criteria may remain in place, as determined by the Engineer.

If a nonconforming repair is allowed to remain in place, cracks greater than 0.007 in. (0.2 mm) in width shall be repaired with epoxy according to Section 590. For cracks less than or equal to 0.007 in. (0.2 mm) in width, the epoxy may be applied to the surface of the crack. Voids shall be repaired according to Article 503.15.

### **20.2 Equipment**

The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

3. **Sawing Equipment.** Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth, with a working water intake attachment for dust control.
4. **Chipping Hammer.** The chipping hammer for removing concrete shall be a light-duty pneumatic or electric tool with a **15 lb. maximum** class or less. Jackhammers or chipping hammers shall not be operated at an angle in excess of 45 degrees measured from the surface of the slab.
5. **Concrete Equipment.** Equipment for proportioning and mixing the concrete shall be according to Article 1020.03 of the *IDOT Standard Specifications*.
6. **Finishing Equipment.** Finishing equipment shall be according to Article 1103.17 of the *IDOT Standard Specifications*. Adequate hand tools will be permitted for placing and consolidating concrete in the patch areas and for finishing small patches.

### 20.3 Materials

1. Materials shall be according to the following:

Item	Article/Section of the <i>IDOT Standard Specifications.</i>
a. Portland Cement Concrete (Note 1) .....	1020
b. R1 or R2 Concrete (Note 2)	
c. Normal Weight Concrete (Notes 3 and 4)	
d. Reinforcement Bars.....	1006.10
e. Anchor Bolts.....	1006.09
f. Water .....	1002
g. Curing Compound.....	1022.01
h. Cotton Mats .....	1022.02
i. Protective Coat .....	1023.01
j. Epoxy (Note 5).....	1025
k. Mechanical Bar Splice. An approved mechanical bar splice capable of developing in tension at least 125 percent of the yield strength of the existing bar shall be used when it is not feasible to provide the minimum bar lap.....	508.06(c)

Note 1. The concrete shall be Class SI, except the cement factor shall be a minimum 6.65 cwt/cu yd (395 kg/cu m), the coarse aggregate shall be a CA 16, and the strength shall be a minimum 4000 psi (27,500 kPa) compressive or 675 psi (4650 kPa) flexural at 14 days. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump, but a cement factor reduction according to Article 1020.05(b)(8) is prohibited. A self-consolidating concrete mixture is also acceptable per Article 1020.04, except the mix design requirements of this note regarding the cement factor, coarse aggregate, strength, and cement factor reduction shall apply.

Note 2. The R1 or R2 concrete shall be from the Illinois Department of Transportation's approved list of Packaged, Dry, Rapid Hardening, Cementitious Materials for Concrete Repairs. The R1 or R2 concrete shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump, and a retarder may be required to allow time to perform the required field tests. The admixtures shall be per the manufacturer's recommendation, and the Illinois Department of Transportation's approved list of Concrete Admixtures shall not apply.

Note 3. The "high slump" packaged concrete mixture shall be from the Illinois Department of Transportation's approved list of Packaged, Dry, Formed, Concrete Repair Mixtures. The materials and preparation of aggregate shall be according to ASTM C 387. The cement factor shall be 6.65 cwt/cu yd (395 kg/cu m) minimum to 7.05 cwt/cu yd (418 kg/cum) maximum. Cement replacement with fly ash or ground granulated blast-furnace slag shall be according to Section 1020. The "high slump" packaged concrete mixture shall have a water soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the "high slump" packaged concrete mixture shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every two years, and the test results shall be provided to the

District. The coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). The packaged concrete mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump. The admixture shall be per the manufacturer's recommendation, and the Illinois Department of Transportation's approved list of Concrete Admixtures shall not apply. A maximum slump of 10 in. (250 mm) may be permitted if no segregation is observed by the Engineer in a laboratory or field evaluation.

Note 4. The "self-consolidating concrete" packaged concrete mixture shall be from the Illinois Department of Transportation's approved list of Packaged, Dry, Formed, Concrete Repair Mixtures. The materials and preparation of aggregate shall be according to ASTM C 387. The cement factor shall be 6.65 cwt/cu yd (395 kg/cu m) minimum to 7.05 cwt/cu yd (418 kg/cu m) maximum. Cement replacement with fly ash or ground granulated blast-furnace slag shall be according to Section 1020. The "self-consolidating concrete" packaged concrete mixture shall have a water soluble chloride ion content of less than 0.40 lb/cu yd (0.24 kg/cu m). The test shall be performed according to ASTM C 1218, and the "self-consolidating concrete" packaged concrete mixture shall have an age of 28 to 42 days at the time of test. The ASTM C 1218 test shall be performed by an independent lab a minimum of once every two years, and the test results shall be provided to the District. The concrete mixture should be uniformly graded, and the coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used. The packaged concrete mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. The admixtures used to produce self-consolidating concrete shall be per the manufacturer's recommendation, and the Illinois Department of Transportation's approved list of Concrete Admixtures shall not apply. The packaged concrete mixture shall meet the self-consolidating requirements of Article 1020.04.

Note 5. In addition ASTM C 881, Type IV, Grade 2 or 3, Class A, B, or C may be used.

#### **20.5 Required Submittals**

2. Detailed plan for means and methods for the structural concrete repairs.
3. Mechanical bar splice product data sheet.
4. Concrete mix design.

#### **20.6 Measurement & Payment**

This work will be measured for payment in place in Square Feet.

Removal and replacement of concrete for structural concrete repairs will be paid for at the Contract unit price per Square Foot for **Sump Pit Concrete Repair**. Quantity shall be agreed to between the Contractor and the District at the completion of identification and prior to removal work beginning.

No payment will be allowed for removal and replacement of reinforcement bars damaged by the Contractor in the performance of his/her work or for any increases in dimensions needed to provide splices for these replacement bars.

## **21 Cleaning**

### **21.1 General**

This work shall consist of removing all equipment, materials, dust, debris, and all other construction related matter from the construction site. The intent of this provision is to restore the construction site (Dewatering Building) to a pre-construction condition. All dust, concrete water stains, debris, and all other objects or material found as a result of construction shall be thoroughly removed from the construction site, whether found in the basement or upper levels. The Contractor staging area shall be free of all materials and equipment and shall be restored to a pre-construction condition.

### **21.2 Measurement and Payment**

No payment will be made for costs associated with cleaning.

## Article 4 - SAFETY DATA SHEET

### FERRIC CHLORIDE SOL'N DRINKING WATER GRADE

Product ID: MI060100

Revised: 02-05-2014

Replaces: 10-25-2012

#### 1. IDENTIFICATION

**Product Name:** FERRIC CHLORIDE SOL'N DRINKING WATER GRADE  
**Synonyms:** Iron (III) Chloride Solution  
**CAS Number:** MIXTURE  
**Recommended Use:** Flocculant, water and waste water treatment and odor removal.  
**Restrictions on Use:** No data available.

Hydrite Chemical Co.  
300 N. Patrick Blvd.  
Brookfield, WI 53008-0948  
(262) 792-1450

**EMERGENCY RESPONSE NUMBERS:**  
**24 Hour Emergency #:** (414) 277-1311  
**CHEMTREC Emergency #:** (800) 424-9300

#### 2. HAZARD(S) IDENTIFICATION



**Signal Word:** Danger

**GHS Classification:** Substance or mixture corrosive to metals Category 1  
Skin Corrosion/Irritation Category 1A  
Serious Eye Damage/Eye Irritation Category 1  
Respiratory Sensitisation Category 1  
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 2  
Specific Target Organ Systemic Toxicity (STOT) - Repeated Exposure Category 2  
Acute Toxicity - Oral Category 4

**Hazard Statements:** May be corrosive to metals.  
Harmful if swallowed.  
Causes severe skin burns and eye damage.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause damage to organs.  
May cause damage to organs through prolonged or repeated exposure.

**Precautionary Statements:**

**Prevention:** Keep only in original container.  
Do not breathe dust, fume, gas, mist, vapours or spray.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear gloves, eye and face protection and protective clothing.  
In case of inadequate ventilation wear respiratory protection.

**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
IF INHALED: Remove victim to fresh air and keep at rest in a position

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comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Specific treatment (see First Aid on SDS or on this label).

If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

**Storage:**

Store in a secure manner.

Store in corrosive resistant container with a resistant inner liner.

**Disposal:**

Dispose of in accordance with local, regional and international regulations.

**Hazards Not Otherwise Classified:** None known.**Percentage of Components with Unknown Acute Toxicity:****Dermal:** 45.0 %**Inhalation Vapor:** 45.0 %**Inhalation Dust/Mist:** 45.0 %**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Water	7732-18-5	55 - 63 %
Ferric Chloride	7705-08-0	37 - 45 %
Hydrogen Chloride	7647-01-0	<= 1.0 %

**4. FIRST-AID MEASURES****Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Do not attempt to neutralize with chemical agents.**Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash with soap and water. Do not apply oils or ointments unless ordered by the physician.**Inhalation:** Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.**Ingestion:** If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.**Note to Physicians:**

Effects of exposure (inhalation, ingestion, or skin contact) may be delayed.

**Most Important Symptoms/Effects:****Eye Contact:** CORROSIVE-Causes severe irritation and burns. May cause: tearing, tissue discoloration, blurred vision, severe eye damage, blindness.**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Mists may cause: severe irritation, burns. Symptoms may include: drying, discomfort, severe burns, tissue damage. Prolonged or repeated exposure with dilute solutions may cause: dermatitis (inflammation of the skin). Contact may cause: permanent skin damage, ulceration, discoloration.**Skin Absorption:** No absorption hazard expected under normal use.

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**Inhalation:** CORROSIVE-Causes severe irritation and burns. Vapors or mists may irritate or burn: nose, throat, respiratory tract. Symptoms may include: burning sensation, coughing, shortness of breath, lung inflammation, pulmonary edema, choking, difficulty breathing, headache, rapid heart beat. Prolonged or severe overexposure may cause: tissue destruction, death. Effects may be delayed.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May irritate or burn: mouth, throat, digestive tract. Symptoms may include: nausea, vomiting, abdominal pain, diarrhea, coma, death. Effects may be delayed. May cause: abnormal kidney function, abnormal liver function. Aspiration can result in severe lung damage or death.

### 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Not combustible. For fires in area use appropriate media. For example: Water spray, Water fog, Carbon dioxide, Dry chemical, Foam.

**Fire Fighting Methods:** Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. Move containers from fire area if possible without hazard. Run-off from fire control may cause pollution.

**Fire and Explosion Hazards:** Product may react with some metals (ex.: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Heat can cause evolution of gaseous Hydrogen Chloride. Container may rupture from gas generation in a fire situation.

**Hazardous Combustion Products:** Thermal decomposition may release: Hydrogen Chloride gas, Phosgene gas, Hydrogen gas.

### 6. ACCIDENTAL RELEASE MEASURES

**Spill Clean-Up Procedures:** CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Shut off source of leak if safe to do so. Contain spill, place into drums for proper disposal. Flush remaining area with water and neutralize with Soda Ash, Lime or Limestone and dispose of properly. Adequate ventilation is required if soda ash is used, because of the consequent release of carbon dioxide gas. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

### 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling.

**Storage:** CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Highly corrosive to most metals with evolution of hydrogen gas. Do not freeze. Protect containers against physical damage. See Section 10 for incompatible materials.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### OSHA Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Hydrogen Chloride	5 ppm Ceiling; 7 mg/m3 Ceiling

#### ACGIH Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Ferric Chloride	1 mg/m3 TWA (as Fe)
Hydrogen Chloride	2 ppm Ceiling

**Engineering Controls:** General room ventilation is required. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.



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**Eye/Face Protection:** Wear chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Impervious. Neoprene. Acid-proof. Gauntlet-type.

**Respiratory Protection:** Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH approved full facepiece respirator with: Acid gas cartridge. HEPA filter. NIOSH-Approved Supplied Air Respirator (SAR). NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

**Other Protective Equipment:** Eye-wash station. Safety shower. Rubber apron. Rubber boots. Protective clothing. Full-rubber acid suit.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid.

**Color:** Clear. Reddish brown.

**Odor:** Slight iron/acid odor.

**Odor Threshold:** N.D.

**pH:** < 2.00 (as is)

**Freezing Point (deg. F):** N.D.

**Melting Point (deg. F):** N.D.

**Initial Boiling Point or Boiling Range:** 223 - 230 °F

**Flash Point:** N.A.

**Flash Point Method:** N.A.

**Evaporation Rate (nBuAc = 1):** N.A.

**Flammability (solid, gas):** N.D.

**Lower Explosion Limit:** N.A.

**Upper Explosion Limit:** N.A.

**Vapor Pressure (mm Hg):** Negligible

**Vapor Density (air=1):** N.A.

**Specific Gravity or Relative Density:** 1.40 @ 25C

**Solubility in Water:** Complete

**Partition Coefficient (n-octanol/water):** N.D.

**Autoignition Temperature:** N.A.

**Decomposition Temperature:** N.D.

**Viscosity:** N.D.

**% Volatile (wt%):** N.D.

**VOC (wt%):** 0

**VOC (lbs/gal):** 0

**Fire Point:** N.D.

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions. May release hydrogen chloride gas at elevated temperatures. May react with certain metals to produce flammable hydrogen gas. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product. Hazardous gases are evolved on contact with chemicals such as cyanides, sulfides, carbides, etc. Contact with oxidizing agents may produce chlorine gas. May react violently with incompatible substances, releasing large amounts of heat.

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**Conditions to Avoid:** Avoid elevated temperatures. Avoid heat, sparks or open flames. Keep away from incompatibles.

**Incompatible Materials:** Metals. Bases. Strong reducing agents. Oxidizing agents. Alcohols. Sulfides. Monomers (e.g. Styrene).

**Hazardous Decomposition Products:** Hydrogen chloride gas. Hydrogen gas. Chlorine.

### 11. TOXICOLOGICAL INFORMATION

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Ferric Chloride	Rat: 450 mg/kg	No Data	No Data
Hydrogen Chloride	Rat: 700 mg/kg	Rabbit: > 5010 mg/kg	1H Rat: 3,124.0 ppm

#### **Acute Toxicity Estimate (ATE):**

**Oral:** 986 mg/kg

**Routes of Exposure:** Eyes. Ingestion. Inhalation. Skin.

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. May cause: tearing. tissue discoloration. blurred vision. severe eye damage. blindness.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Mists may cause: severe irritation. burns. Symptoms may include: drying. discomfort. severe burns. tissue damage. Prolonged or repeated exposure with dilute solutions may cause: dermatitis (inflammation of the skin). Contact may cause: permanent skin damage. ulceration. discoloration.

**Skin Absorption:** No absorption hazard expected under normal use.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Vapors or mists may irritate or burn: nose. throat. respiratory tract. Symptoms may include: burning sensation. coughing. shortness of breath. lung inflammation. pulmonary edema. choking. difficulty breathing. headache. rapid heart beat. Prolonged or severe overexposure may cause: tissue destruction. death. Effects may be delayed.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May irritate or burn: mouth. throat. digestive tract. Symptoms may include: nausea. vomiting. abdominal pain. diarrhea. coma. death. Effects may be delayed. May cause: abnormal kidney function. abnormal liver function. Aspiration can result in severe lung damage or death.

**Medical Conditions Aggravated by Exposure to Product:** Eye disorders. Respiratory system disorders. Skin disorders.

**Other:** Chronic or prolonged exposure may be associated with changes in pulmonary function, laryngitis, glottal edema, chronic bronchitis, dermatitis, erosion of tooth enamel, conjunctivitis and upper respiratory tract irritation.

#### **Cancer Information:**

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicological Information:** Fat Head Minnows: LC50 > 1000 ppm; Daphnia Magna: LC50 > 1000 ppm

**Chemical Fate Information:** This product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.

### 13. DISPOSAL CONSIDERATIONS

**Hazardous Waste Number:** D002

**Disposal Method:** Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or

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other sources of ignition. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

**14. TRANSPORT INFORMATION****DOT (Department of Transportation):**

**Identification Number:** UN2582  
**Proper Shipping Name:** Ferric Chloride, Solution  
**Hazard Class:** 8  
**Packing Group:** III  
**Label Required:** CORROSIVE  
**Reportable Quantity (RQ):** 1000# (Ferric Chloride); 5000# (Hydrogen Chloride)

**15. REGULATORY INFORMATION**

**TSCA Inventory Status:** All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

**SARA Title III Section 311/312 Category Hazards:**

**Immediate (Acute)**    **Delayed (Chronic)**    **Fire Hazard**    **Pressure Release**    **Reactive**  
 Yes                      Yes                      No                      No                      No

<b>Regulated Components:</b>	<b>CAS</b>	<b>CERCLA</b>	<b>SARA</b>	<b>SARA</b>	<b>U.S.</b>	<b>WI</b>	<b>Prop</b>
<b>Component</b>	<b>Number</b>	<b>RQ</b>	<b>EHS</b>	<b>313</b>	<b>HAP</b>	<b>HAP</b>	<b>65</b>
Ferric Chloride	7705-08-0	Yes	No	No	No	Yes	No
Hydrogen Chloride	7647-01-0	Yes	Yes	Yes	Yes	Yes	No

**Note:** RQ, TPQ, Section 313 reporting requirements are dependent upon individual ingredients. Hydrogen Chloride (gas and aerosol forms only) is on the Extremely Hazardous Substance List. In liquid form, Hydrogen Chloride (Hydrochloric Acid) is not required to be reported as an Extremely Hazardous Substance, but is subject to SARA 311 and 312 reporting requirements. Hydrochloric Acid also appears on the Section 313 list; however, the listing only applies to the gas and aerosol forms of Hydrochloric Acid.

**16. OTHER INFORMATION****Hazard Rating System**

**Health:** 3\*  
**Flammability:** 0  
**Reactivity:** 0  
 \* = Chronic Health Hazard

**NFPA Rating System**

**Health:** 3  
**Flammability:** 0  
**Reactivity:** 0  
**Special Hazard:** None

**MSDS Abbreviations**

**N.A. = Not Applicable**  
**N.D. = Not Determined**  
**HAP = Hazardous Air Pollutant**  
**VOC = Volatile Organic Compound**  
**C = Ceiling Limit**  
**N.E./Not Estab. = Not Established**

**MSDS Prepared by:** JAK**Reason for Revision:** New format. Changes made throughout the MSDS.

**FERRIC CHLORIDE SOL'N DRINKING WATER GRADE**

**Product ID: MI060100**

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Revised: 02-05-2014

Replaces: 10-25-2012

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The data in this Material Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.

*Not to be used for bidding purposes*

Not to be used for bidding purposes

**Section II**  
**Contract Forms**

## Proposal

**Project:** Dewatering Building Basement Renovations, Capital Project No. 1850

**Location:** RRWRD Treatment Plant, 3333 Kishwaukee Street, Rockford, Illinois

**Completion Date:** June 29, 2018

**Liquidated Damages:** \$300/calendar day per each completion date deadline

To: Board of Trustees  
Rock River Water Reclamation District  
3501 Kishwaukee Street  
Rockford, IL 61109

From: \_\_\_\_\_  
(Individual, Partnership or Corporation, as case may be)

\_\_\_\_\_  
(Address of Individual, Partnership or Corporation)

Gentlemen:

I (We), the undersigned, hereby propose to furnish all materials, equipment, tools, services, labor, and whatever else may be required to construct and place in service the above subject Sanitary Sewer for the Rock River Water Reclamation District all in accordance with the plans and specifications, provided by the Rock River Water Reclamation District. The undersigned also affirms and declares:

1. That I (we), have, examined and am (are) familiar with all the related contract documents and found that they are accurate and complete and are approved by the undersigned.
2. That I (we), have carefully examined the site of the work, and that, from my (our) investigation, has satisfied myself (ourselves) as to the nature and location of the work, the character, quality, and quantity of materials and the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all

difficulties to be encountered, and all other items which may, in any way, effect the work or its performance.

3. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same purposes, and is in all respects fair and without collusion or fraud; and that I (we) are not barred from bidding as a result of a bid-rigging or bid-rotating conviction.
4. That accompanying the Proposal is a Bidder's Bond in the amount specified in Article 1, Notice to Bidders, payable to the Board of Trustees of the Rock River Water Reclamation District, which it is agreed, shall be retained as liquidated damages by said Rock River Water Reclamation District if the undersigned fails to execute the Contract in conformity with the contract documents incorporated in the contract documents and furnish bond as specified, within ten (10) days after notification of the award of the contract to the undersigned.
5. The Bidder is of lawful age and that no other person, firm or corporation has any interest in this Proposal or in the Contract proposed to be entered into.
6. The Bidder is not in arrears to the Rock River Water Reclamation District, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the Rock River Water Reclamation District.
7. No officer or employee or person whose salary is payable in whole or in part by the District is, shall be or become interested, directly or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the work to which it is relates, or in any portion of the profits thereof.
8. The Bidder which I represent complies with all applicable requirements of the Americans with Disabilities Act (ADA) and the Occupational Safety and Health Act (OSHA) and that if said bidder is awarded a contract, it will complete all OSHA-required or ADA-required employee and customer training, will make available all required information, and will hold harmless and indemnify the District and the District's representatives.

In regard to participation in an approved Apprenticeship program, upon request, Contractor will be required to provide written proof of participation.

9. The undersigned, as Bidder, declares that he has adopted and promulgated written sexual harassment policies in accordance with Public Act 99-093 and will make this information available upon request.

10. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including the Rock River Water Reclamation District) to submit certified payroll records on a monthly basis, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing false records is a Class B Misdemeanor. The successful Bidder shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. [Prevailing wage rates may be found on the Illinois Department of Labor website at http://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx](http://www.illinois.gov/idol/Laws-Rules/CONMED/Pages/Rates.aspx).

The certified payroll records must include the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, the number of hours worked each day, and the starting and ending time of work each day, for every worker employed on the project. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B Misdemeanor. Certified payroll reports shall be submitted on industry standard forms such as IDOT Statement of Compliance (SBE 348) or other approved equal.

11. The undersigned, as Bidder, declares he will comply with the Federal Drug Free Workplace Act.

12. The undersigned, as Bidder, declares he will comply with Public Act 83-1030 entitled "Steel Products Procurement Act".

13. The undersigned, as Bidder, declares he will comply with Public Act 96-929 (30 ILCS 570) regarding Illinois residents employment.

14. The undersigned, as Bidder, declares he will comply with non-discrimination in employment in accordance with the Illinois Fair Employment Practices Commissions Rules & Regulations.



15. The undersigned, as Bidder, declares that he currently participates in an apprenticeship or training program that is registered with the United States Department of Labor's Bureau of Apprenticeship and Training or other acceptable State of Illinois Department of Labor monitored program.

In submitting this bid, it is understood that the right is reserved by the Rock River Water Reclamation District to reject any and all bids. It is agreed that this bid may not be withdrawn for a period of sixty (60) days from the opening thereof.

The undersigned further declares that he (they) has (have) carefully examined the following items of work and that the cost of all the work to complete this project is given in this Proposal.

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Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
1	141	LF	Remove PCC Curb			
2	71	CU FT	Remove Equipment / Pipe Support Pad			
3	1	LS	Remove Piping, Water Filter, & HVAC Ducts and Appurtenances			
4	1	LS	Remove Manhole Structure			
5	1	LS	Remove Storage Tank			
6	5	EA	Seal Wall Penetration			
7	2	EA	Plate Wall Penetration			
8	1	LS	Remove Material Hoppers			
9	1	LS	Remove Water Tank, Pumps, & Appurtenances			
10	10	EA	Replace Column Base Plate Protection			
11	1	EA	Remove Door Frame			
12	1	EA	Remove & Replace Door & Door Frame			
13	9	EA	Remove Floor / Equipment Drain			
14	16	EA	Remove & Replace Floor Drain			
15	1	EA	Repair Floor Drain Piping			
16	201	SQ FT	Type 1 PCC Partial-Depth Patch			
17	58	SQ FT	Type 2 PCC Partial-Depth Patch			
18	600	SQ FT	Removal of Delaminated Concrete			
19	40	SQ FT	Sump Pit Concrete Repair			
<b>TOTAL BID PRICE:</b>						
				(In Writing)		(In Figures)

The undersigned acknowledges receiving Addendum numbers \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and realizes that all Addenda are considered part of the contract.

\_\_\_\_\_  
By: \_\_\_\_\_

Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

*Not to be used for bidding purposes*

# Fair Employment Practices Affidavit of Compliance

PROJECT: Dewatering Building Basement Renovations, Capital Project No. 1850

NOTE: THE BIDDER MUST EXECUTE THIS AFFIDAVIT AND SUBMIT IT WITH ITS SIGNED BID. THE ROCK RIVER WATER RECLAMATION DISTRICT CANNOT ACCEPT ANY BID WHICH DOES NOT CONTAIN THIS AFFIDAVIT

\_\_\_\_\_, being first duly sworn, deposes and says that:  
(Name of person making affidavit)

They are: \_\_\_\_\_ of \_\_\_\_\_  
(Officer's Title) (Company Name)

that said company is and "Equal Opportunity Employer" as defined by Section 2000(e) of Chapter 21, Title 42 of the United States Code annotated and Federal Executive Orders #11375 which are incorporated herein by reference;

and that said company will comply with any and all requirements of Title 44 Admin. Code 750. APPENDIX A – Equal Opportunity Clause, Rules and Regulations, Illinois Department of Human Rights, which read as follows:

"In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance to this contract, the contractor agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizen status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if he or she hires additional employees in order to perform this contract or any portion of this contract, he or she will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the areas from which he or she may reasonably recruit and he or she will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by him or her or on his or her behalf, he or she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizenship status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service.
4. That he or she will send to each labor organization or representative of workers with which he or she has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.
5. That he or she will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
6. That he or she will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
7. That he or she will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

(Source: Amended at 32 I11. Reg. 16484, effective September 23, 2008)"

IL Dept of Human Rights Registration No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Notary Public

# Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we:

\_\_\_\_\_ (hereinafter called the Principal) and

\_\_\_\_\_ (hereinafter called the Surety)

a Corporation chartered and existing under the laws of the State of \_\_\_\_\_ with its principal offices in the City of \_\_\_\_\_ and authorized to do business in the State of Illinois are held and firmly bound onto the Rock River Water Reclamation District of Winnebago County, Illinois (District), in the full and just sum of: **TEN PERCENT (10%) OF THE TOTAL BID PRICE** good lawful money of the United States of America, to be paid upon demand of the District, to which payment will and truly to be made we bind ourselves, our heirs, executors, administrators, and assigns, jointly and severally and firmly by these presents.

WHEREAS, the Principal is about to submit, or has submitted to the District, a proposal for constructing Sanitary Sewers and Appurtenances.

WHEREAS, the Principal desires to file this bond, in accordance with law, to accompany this Proposal.

NOW THEREFORE, The conditions of this obligation are such that if the Proposal be accepted, the Principal shall, within ten days after the date of receipt of a written notice of award of Contract, execute a Contract in accordance with the Proposal and upon the terms, conditions, and prices set forth therein, in the form and manner required by the District, and execute a sufficient and satisfactory Contract Performance Bond payable to said District in an amount of one hundred percent (100%) of the Contract price (including alternates) in form and with security satisfactory to said District, then this obligation to be void, otherwise to be and remain in full force and virtue in law; and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid District, upon demand, the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly signed and sealed this \_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
**Principal**

(Seal)

By \_\_\_\_\_

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

Title: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
**Surety**

(Seal)

By \_\_\_\_\_

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

Title: \_\_\_\_\_

Date: \_\_\_\_\_

*Not to be used for bidding purposes*

# Agreement

## 1. General

THIS AGREEMENT, made and concluded this \_\_\_\_\_ day of \_\_\_\_\_, 2018, between the Rock River Water Reclamation District, Rockford, Illinois (District), acting by and through the Board of Trustees, and \_\_\_\_\_, his/their executors, administrators, successors or assigns:

## 2. Scope of Work

WITNESSETH: That for and in consideration of the payments and agreements made in the Proposal attached hereto, to be made and performed by the District and according to the terms expressed in the Bond referring to these presents, the Contractor agrees with the District at his/their own proper cost and expense to do all the work, furnish all equipment, materials and all labor necessary to complete the work in accordance with the plans and specifications hereinafter described, and in full compliance with all of the terms of this agreement and the requirements of the District and its representative.

And it is also understood and agreed that the Bidding Requirements, Detailed Specifications, Contract Forms, General Conditions, General Requirements, Technical Specifications, Plans, Addenda, and provisions required by law are all essential documents of the contract, and are a part hereof, as if herein set out verbatim or as if attached, except for titles, subtitles, headings, table of contents and portions specifically excluded.

## 3. Contract Price

The District shall pay to the Contractor, and the Contractor shall accept, in full payment for the performance of this Contract, subject to any additions or deductions provided for hereby, in current funds, the Total Contract Price of \_\_\_\_\_ and \_\_\_\_\_ 00/100 (\$\_\_\_\_\_).

Payments are to be made to the Contractor in accordance with and subject to the provisions of Section 7 of this Agreement, which is a part of this Contract.

## 4. Bond

The Contractor has entered into and herewith tenders a bond of even date herewith, in the penal sum of \_\_\_\_\_ and \_\_\_\_\_ 00/100 (\$\_\_\_\_\_ ) to insure the faithful performance of this Contract, which said bond is hereby made a part of this Contract by reference.

## **5. Maintenance and Guarantee**

The Contractor shall promptly repair, replace, restore or rebuild any imperfections that may arise and shall maintain satisfactory to the District all work for a period three years from the date of final acceptance of the Contract for trench settlement and for a period of two years all other work, except where periods of maintenance and guarantee are provided for. The Contractor shall, for this period, indemnify and save harmless the District, its officers and agents from any injury done to property or persons as a direct or alleged result of imperfections in the Contractors' work, and shall immediately assume and take charge of the defense of such action or suits in like manner and to all intents and purposes as if said actions and suits had been brought directly against the Contractor.

If the Contractor shall fail to repair, replace, rebuild or restore such defective or damaged work promptly after receiving notice given by the District, the District shall have the right to have the work done by others and to call on the Contractor and his bondsman to pay the costs thereof.

## **6. Contract Execution**

IT IS EXPRESSLY UNDERSTOOD AND AGREED that the entire improvement shall be done in a thorough and workmanlike manner, under the direction and to the satisfaction of the District and in full compliance with all the requirements of its representative under them. All loss or damage arising out of the nature of the work to be done, or from any detention of unforeseen obstruction or difficulty which may be encountered in the prosecution of the work, or from the action of the elements, shall be sustained by the Contractor.

The Contractor will be held responsible for all accidents, and hereby agrees to indemnify and protect the District from all suits, claims, and actions brought against it, and all cost, and damages which the District may be put to by reason of an injury or alleged injury, to the person or property of another in the execution of this contract, or the performance of the work, or in guarding the same, or for any material used in its prosecution or in its construction.

Any person employed on the work who shall refuse or neglect to obey the directions of the District or its representative, or who shall be deemed by the District to be incompetent, or who shall be guilty of any disorderly conduct, or who shall commit any trespass on any public or private property in the vicinity of the work, shall at once be removed from the work by the Contractor when so requested by the District.

Any request to extend the contract completion date must be considered by the Board at the Board meeting prior to the then-existing contract termination date. Any deviation from this action will result in the liquidated damage clause in the contract to be exercised.



## **7. Payments to Contractor**

The District hereby covenants and agrees, in consideration of the covenants and agreements in this Contract, specified to be kept and performed by the Contractor and subject to the conditions herein contained, and if the District receives an acceptable invoice prior to the tenth day of the month and receives approval of the work by the District Engineering Manager, the District shall issue payment before the fifth day of the succeeding month. If the District receives an acceptable invoice on or after the tenth day of the month, the District shall issue payment before the fifth day of the second succeeding month.

The District reserves the right at all times to refuse to issue payment in case the Contractor has neglected or failed to pay any subcontractors, workmen or employee on the work.

## **8. Subcontracts**

No part of the work herein provided for shall be sublet or subcontracted without the express consent of the District, to be entered in the records, and in no case shall consent relieve the Contractor from the obligation herein entered into, or change the terms of this Agreement.

## **9. Contractor's Responsibility**

This Contract shall extend to and be binding upon the successors and assigns, and upon the heirs, administrators, executors, and legal representatives of the Contractor.

In consideration of and to induce the award of this Contract to him, the Contractor represents and warrants: that he is not in arrears to the District upon debt of the Contract and that he is not a defaulter, as surety, contractor or otherwise; that he is financially solvent and sufficiently experienced and competent to perform the work; that the work can be performed as called for by the Contract; that the facts stated in his proposal and the information given by him is true and correct in all respects, and that he is fully informed regarding all the conditions affecting the work to be done and labor and materials to be furnished for the completion of this Contract and that his information was secured by personal investigation and research.

The Contractor shall pay not less than the prevailing wage rate as determined by the Department of Labor, to all laborers, workmen and mechanics performing work under this Contract. Contractor shall comply with current revisions of the wage standards; as required by law. The Contractor shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. Certified payroll reports shall be submitted on industry standard forms such as IDOT Statement of Compliance (Form SBE 348).

In regard to nondiscrimination in employment, Contractor will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations as provided herein.

The Contractor shall comply with the American Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify the District and their representatives from all:

- (a) suits, claims, or actions;
- (b) costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement, and;
- (c) damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

Contractor shall also comply with Public Act 99-0933, which requires any party to a contract to adopt and enforce a written policy regarding sexual harassment that includes, as a minimum, the following information:

- (a) the illegality of sexual harassment
- (b) the definition of sexual harassment under Illinois State law;
- (c) a description of sexual harassment, utilizing examples;
- (d) my (our) organization's internal complaint process including penalties;
- (e) through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
- (f) directions on how to contact the Department and the Commission; and
- (g) protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act.

Upon request this information will be provided to the Illinois Department of Human Rights. Upon District award of a contract, the District will be provided this information described no more than ten working days after the District issues its award notification.

The Contractor shall comply with Article 2 of Public Act 83-1472 which provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and further, that Illinois workers are available and capable of performing the particular type work involved.

The Contractor shall comply with all rules and regulations of OSHA during the execution of this Contract.

The Contractor shall comply with the Federal Drug Free Workplace Act.

The Steel Products Procurement Act, Illinois Public Act 83-1030, requires that steel products used or supplied in performance of this Contract or subcontract shall be manufactured or produced in the United States with three exceptions, as explained in the Instructions to Bidders.

The Contractor shall comply with Public Act 96-1416 regarding the disposal of CCDD and uncontaminated soil at CCDD fill sites as explained in the Instructions to Bidders.

**10. Time**

Work under this Agreement shall be commenced upon written Notice to Proceed. The completion date for this project shall be June 29, 2018.

**11. Liquidated Damages**

The amount of liquidated damages shall be \$300.00 per calendar day.

**12. Seals**

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals, and such of them as are corporations have caused these presents to be signed by their duly authorized officers.

**Rock River Water Reclamation District  
Winnebago County, Illinois**

(Seal)

By \_\_\_\_\_  
President, Board of Trustees

ATTEST: \_\_\_\_\_  
Clerk of the Board

**Contractor**

By \_\_\_\_\_  
Contractor's Officer

(Corporate Seal)

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

Title: \_\_\_\_\_

Date: \_\_\_\_\_

ATTEST: \_\_\_\_\_

## Performance Bond

**KNOW ALL MEN BY THESE PRESENTS**, that WHEREAS, the Rock River Water Reclamation District has awarded to: \_\_\_\_\_ hereinafter designated as the “Principal”, a contract, dated, \_\_\_\_\_, for the Rock River Water Reclamation District.

**WHEREAS**, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract (the “Bond”);

**NOW, THEREFORE**, we the Principal and \_\_\_\_\_, as Surety, are firmly bound unto the Rock River Water Reclamation District in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_ ) lawful money of the United States for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents for a performance bond. The conditions of this obligation is such that if the said Principal does well and faithfully performs all the conditions and covenants of said Contract, according to the true intent and meaning thereof, upon its part to be kept and performed, then the above obligation is to be null and void, otherwise to remain in full force and effect.

**THE CONDITION OF THIS OBLIGATION IS SUCH**, that if the above bounden Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said Contract, including the provisions for liquidated damages in the said Contract, any changes, additions or alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Rock River Water Reclamation District, its officers and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect. And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same and no inadvertent overpayment of progress payments shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications or of any inadvertent overpayment of progress payments. The Rock River Water Reclamation District shall be named as beneficiary on this Performance Bond.

**IN WITNESS WHEREOF**, the above-bounden parties have executed this instrument under their seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

**CONTRACTOR**

Contractor Firm Name: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
Title

**SURETY**

By: \_\_\_\_\_ Signature

Attorney-in-Fact

\_\_\_\_\_  
Resident Agent

ATTEST:

\_\_\_\_\_  
Corporate Secretary (Corporations only)

## Labor & Material Payment Bond

TO: \_\_\_\_\_ Contractor Name

\_\_\_\_\_ Contractor City, State

KNOW ALL MEN BY THESE PRESENTS

That \_\_\_\_\_ (Contractor)

as Principal, and \_\_\_\_\_

a corporation of the State of \_\_\_\_\_ as Surety, are held and firmly bound unto the Rock River Water Reclamation District, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_), for the payment where of Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated \_\_\_\_\_ 20\_\_\_\_ Entered into a Contract with Obligee for \_\_\_\_\_ in accordance with contract documents prepared by the Rock River Water Reclamation District which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION** is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 280 ILCS 130 / 1-12 et.seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is deemed as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.
2. Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, material man or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of

business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor for the Oblige, the name of the person, firm or corporation by whom the claimant was employed or to whom such claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same.

3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between Oblige and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Oblige of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.
4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.
5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.
6. The Principal and Surety shall be liable for any attorneys fees, engineering costs, or court costs incurred by the Oblige relative to claims made against this Bond.

Signed and Sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

**CONTRACTOR      SURETY**  
*Contractor Firm Name*

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Attorney-in-Fact

\_\_\_\_\_  
Title                  Resident Agent

ATTEST:

\_\_\_\_\_  
Corporate Secretary (Corporations only)

**Section III**

**Record Drawings for the  
Existing Building**

**TPI C 1966 Record Drawings  
TPI J, K, L 1978 Record Drawings  
TPI T 1978 Record Drawings**

**(CD available upon request)**



**Section IV**

**General Provisions & Technical  
Specifications for Sanitary Sewer  
Construction**

(Separate document incorporated by reference)