Rock River Water Reclamation District Rockford, Illinois

Bidding Requirements and Contract Forms

for

West State Street Sanitary Sewer

Capital Project No. 2014

Rock River Water Reclamation District Rockford, Illinois

Bidding Requirements and Contract Forms

General Provisions and Technical Specifications West State Street Sanitary Sewer

President Richard Pollack John Sweeney Vice President Ben Bernsten Clerk/Treasurer **Donald Massier** Trustee Elmer Jones

Officials

Timothy S. Hanson Executive Director Christopher T. Baer, PE Director of Engineering

Table of Contents

I. **Bidding Requirements**

Article 1 **Notice to Bidders**

Instructions to Bidders Article 2

- 1 General
- 2 Legal Requirements
- **General Instructions**

Article 3

Detailed Specifications

- General
- **Permit Requirements**
- Notification, Access, and Special Considerations
- Dewatering
- **Bypass Pumping Sanitary Sewers**
- Sanitary Sewer
- Sanitary Sewer Service, Complete
- Sanitary Manholes
- 9 Sanitary Manhole Removal
- 10 Abandon and Fill Sanitary Manhole
- 11 Abandon and Fill Sanitary Sewer
- 12 Rock Excavation
- 13 Pavement Removal
- 14 Pavement Patching
- 15 Remove and Replace PCC Curb and Gutter
- Remove and KCF

 PCC Sidewalk Removal a...

 Aggregate Base Course, Type B

 Pavement Marking

 Tree Removal

 Erosion and Sediment Control

 Restoration and Seeding

 Construction Layout

 Traffic Control and Protection, Local Street

 Quality Control Tests and Certification

II. **Contract Forms**

Proposal

Affidavit of Compliance

Bid Bond

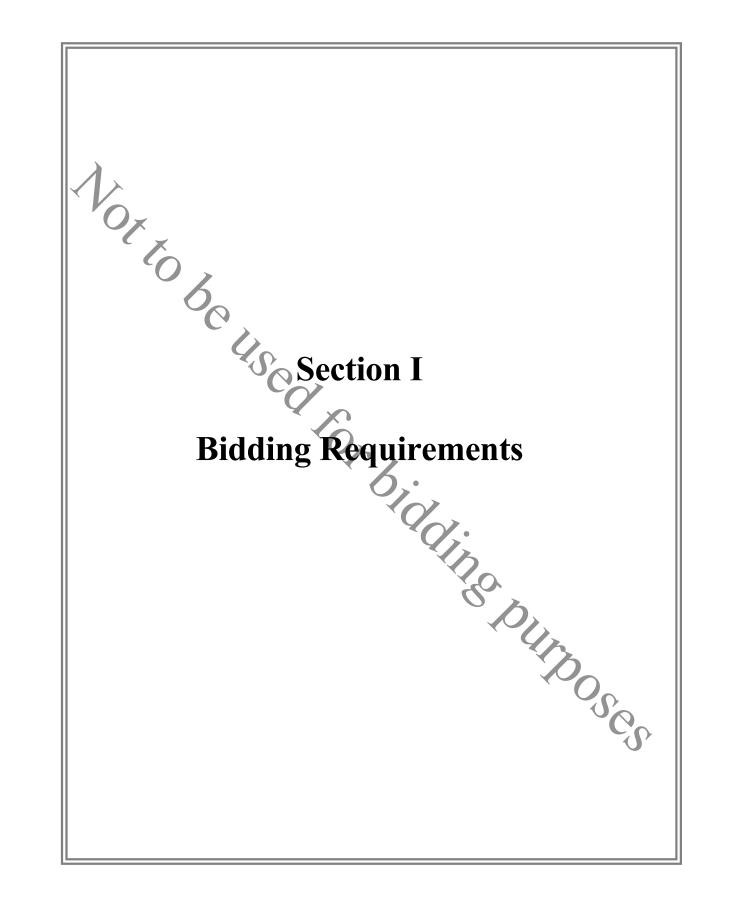
Agreement

Labor & Material Payment Bond

Performance Bond

General Provisions and Technical Specifications for Sanitary Sewer III. **Construction** (separate document incorporated by reference)

Bid Doc. No. 21-407



Article 1 — Notice to Bidders

The Rock River Water Reclamation District (District) will receive signed and sealed bids for the West State Street Sanitary Sewer, Capital Project No. 2014, at the Steve Graceffa Administration Building (Administration Building) at 3501 Kishwaukee Street, Rockford, Illinois until 10:00 a.m. on Tuesday, June 22, 2021 at which time and place responsive / responsible bids will be publicly opened and read aloud. Due to ongoing COVID-19 concerns, the Administration Building remains closed to the general public. However, bids may be delivered in-person by depositing packets in the blue bid box in the main entrance foyer of the Administration Building up to the bid due date and time. Signage will be in place directing bidders and/or their representatives to the south entrance of the Administration Building where the bid opening will be held. Those in attendance must wear a face mask or covering.

The West State Street Sanitary Sewer project consists of installation of approximately 2,400 LF of new sanitary sewer to facilitate abandonment of existing sanitary sewers within the West State Street right-of-way and all other appurtenances in advance of a separate roadway reconstruction project 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's office at 3501 Kishwaukee Street in Rockford, Illinois.

All demolition, construction, installation and associated Project work shall be completed by October 31, 2021. Liquidated damages shall be \$300.00 per calendar day.

Bid documents may be obtained at a cost of \$50.00 per set (non-refundable) by contacting the District Engineering Department at 815-387-7660.

Plans and specifications may also be viewed at the offices of the Northern Illinois Building Contractors Association at 1111 S. Alpine Rd, Rockford, Illinois. For more information, visit the District website at www.rrwrd.dst.il.us.

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

Each Proposal must be accompanied by the District Bid Bond form with an acceptable Bid Security attached, in the amount of five percent (5%) of the total bid price. This amount is a guarantee that, if the Proposal is accepted, a Contract will be entered into and its performance properly secured.

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 District's consent for a period of sixty (60) days after the scheduled closing time for receipt of bids.

The 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 District.

Dated this \

day of

2021

BY: Timothy S. Hanson, Executive Director

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. Public Act 100-1177 requires the Bidder to comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on District projects to submit certified payroll reports via the State's Certified Transcript of Payroll Portal currently found at: https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx. The Bidder is responsible for verifying current information at the State's website.
- 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.
- 2. 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.
- 3. Public Act 101-0221 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.

- 4. 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.
- 5. The Contractor for this project shall comply with the Occupational Safety and Health Act.
- 6. The Contractor for this project shall comply with the Federal Drug-Free Workplace Act.
- 7. 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.

Bidders may opt to contact the District's Engineering Department at 815.387.7660 to obtain an electronic Proposal form. If used, 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 Oualifications

Each Proposal must be accompanied by a Statement of Qualifications certifying that the bidder is registered to do business in the State of Illinois, <u>has a permanent business office within forty (40) miles of the District office at 3501 Kishwaukee Street in Rockford, IL</u>, 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 work 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

Bid Doc. No. 21-407

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 repair contracts within the past five (5) years of equal or greater value to the bid being submitted.

3.11 The Rejection of Bids

Bid Doc. No. 21-407

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 West State Street Sanitary Sewer, Capital Project No. 2014.
- 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

Bid Doc. No. 21-407

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

- 1. <u>General Liability</u>: \$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. <u>Automobile Liability</u>: \$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. <u>Workers' Compensation and Employers Liability</u>: Workers' Compensation limits as required by statute and Employers Liability limits of \$500,000 per accident and \$500,000 per disease.
- 4. <u>Umbrella</u>: \$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. <u>Errors and Omissions</u>: 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. <u>Alphabetical Rating</u>: 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. <u>Financial Size Rating</u>: Provided an insurer's alphabetical rating is satisfactory, the District will examine said insurer's financial size rating.
 - a. If <u>Best</u> classifies the insurer XII or larger, said insurer shall be acceptable to the District.
 - b. If <u>Best</u> 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

This article contains detailed specifications related 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: Standard Specifications for Water and Sewer Main Construction in Illinois, current edition, Rock River Water Reclamation District General Provisions and Technical Specifications for Sanitary Sewer Construction, and the Illinois Department of Transportation's (IDOT's) Standard Specifications for Road and Bridge Construction, current edition.

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

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

Utility locations shown on the plans are based on the information obtained during design and are not guaranteed. The orientation and location (horizontal and vertical) of all existing underground utilities, such as gas mains, water mains, electric lines, field tiles, irrigation pipes, etc., shall be ascertained by the Contractor. The Contractor shall assume full responsibility for the location of all utilities.

The general location of the proposed sewer is governed by existing field conditions. Minor variations in alignment may be made to facilitate construction operations with prior District approval.

Any construction not supervised by a Rock River Water Reclamation District (District) Inspector will not be accepted.

No work shall be permitted on Sundays or District Holidays without prior approval by the District Director of Engineering.

Suppliers shall implicitly warrant that their products and product components are suitable and appropriate for the intended use and that they are free from all material, design, or workmanship defects. Said warranty shall inure to the benefit of the District. The foregoing shall apply to all products and product components, whether constructed as directed by the Contract documents or produced by an outside source.

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 by the Contractor to comply with all applicable laws and regulations in performance of the specified work. The District will not be responsible for the Contractor's failure to perform or furnish the work in accordance with the Contract documents

2 Permit Requirements

2.1 General

All work within public right–of–ways shall be subject to the regulations and requirements of the jurisdictional agencies. Should conflicts or contradictions arise between the plans, specifications and right-of-way permits, the permits shall govern.

The Contractor shall comply with the requirements of any and all permits obtained and required for the construction of this project, including but not limited to, those from all jurisdictional roadway authorities. The following contacts are provided for the roadway agencies impacted by this project:

Roadway Authority	Contact	Phone	Email
City of Rockford	Jordan Masemoore	779-348-7634	Jordan.masemoore@rockfordil.gov
IDOT	Dan Long	815-284-5471	dan.long@illinois.gov

Unless otherwise noted, the Contractor shall be responsible for securing all necessary permits and for all bonds, insurance, etc., and all fees required by any and all permits. The District will procure a Utility Permit from IDOT. The District has also issued an IEPA permit for sanitary sewer construction. Copies of all Contractor secured permits shall be provided to the District prior to the start of construction.

2.2 Materials – Not used.

2.3 Required Submittals

1. Copies of signed permits, as applicable.

2.4 Payment

No payment shall be made for costs associated with permit procurement or compliance.

3 Notification, Access, and Special Considerations

3.1 General

The Contractor shall notify all utility companies prior to beginning any work. All underground utilities shall be located by the utility owner and special care shall be taken when excavating near underground utilities to avoid damage. Contractor shall call J.U.L.I.E. at 1-800-892-0123 for utility locations in the project area, forty-eight (48) hours, minimum, prior to construction. If permits specify more advanced notification requirements, permits shall govern.

The Contractor shall notify the District, all affected property and business owners and all applicable roadway authorities forty-eight (48) hours, minimum, prior to beginning any work.

The Contractor shall be responsible for the temporary maintenance of all roadways and drives for the duration of this project and shall maintain access to residences and businesses at all times during construction (i.e. drives, roadways, ramps, etc., must remain open or temporary access must be provided). All materials, equipment, labor, etc., necessary to ensure this shall be incidental to the contract.

It shall be the Contractor's responsibility to secure any temporary or permanent access, storage or construction easements from property owner(s) deemed necessary to perform the work as shown on the plans or defined in the specifications.

The Contractor shall clean up areas from which spoil has been removed at the end of each day by sweeping, washing or other approved methods. When the work is halted by rain, the Contractor shall clean up work areas before leaving the site.

3.2 Special Considerations

No work shall be performed within IDOT Right-of-Ways until the detour routing specified in the Contract Documents is established. Through collaboration with IDOT, the District has arranged for the detour of West State Street to be provided under separate contract. The detour will be established on or about August 15, and remain in place for sixty (60) calendar days to allow for all utility work, including the proposed sanitary sewer work to be completed. Any additional traffic control required for staging, as determined by the Contractor, shall be his or her responsibility at no additional cost to the District. Traffic Control for local streets required outside of the sixty calendar days being provided shall be paid at the Contract Lump Sum unit price for Traffic Control and Protection, Local Streets, as specified elsewhere herein. Should the Contractor require more than sixty (60) calendar days for work within IDOT Right-of-Way, it shall be the Contractor's responsibility to permit, establish and maintain traffic control within IDOT Right-of-Way at no additional cost to the District.

Contractor shall coordinate with any other concurrent utility work being performed throughout the project site. Contractor shall submit a detailed construction staging plan that will be used to OI. facilitate coordination with other utilities.

3.3 Materials – Not used.

3.4 Required Submittals

1. Construction Staging Plan.

3.5 Measurement and Payment

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

4 **Dewatering**

4.1 General

Contractor shall use all means at his/her disposal to maintain a dry trench to the satisfaction of the District.

Groundwater will not be allowed to be discharged into existing sanitary sewers or pumped onto existing ground surfaces or pavements where it may cause a traffic nuisance. All discharge points shall be acceptable to the District, with all erosion control requirements and specifications taken into account.

Dewatering well points require permits issued by the Winnebago County Department of Public Health (Health Department). The installation, operation and removal of well points shall conform

to the Health Department requirements. The Health Department shall be notified prior to installing dewatering wells and prior to abandonment of well points so that they may be present if they desire: contact 815-720-4000.

Any permits required to perform dewatering work on this project shall be secured by the Contractor; it shall be his/her responsibility to provide any bonds, insurance, guarantees, etc., as required by said permit(s). Abandonment of dewatering facilities shall be performed in accordance with pertinent State and County requirements.

If generators are required to run on a twenty-four (24) hour basis, equipment shall be restricted to operate at noise levels of ninety decibels (90 dB) or less.

4.2 Materials – Not used.

4.3 Required Submittals

1. Copy of permits, as applicable.

4.4 Payment

Payment for dewatering shall be incidental to sanitary sewer construction. No separate payment will be made for dewatering.

Bypass Pumping Sanitary Sewers 5

5.1 General

The Contractor shall provide bypass pumping as required and shall be responsible for providing all piping, valves, pumps, power, fuel, plugs and other items to divert the flow of wastewater as required to complete proposed work.

All pumping systems shall have sufficient capacity to accommodate peak flows. The Contractor shall provide sufficient inspection personnel to ensure that surcharging and backups do not occur on public or private property. If pumping is required on a 24-hour basis, the equipment shall be restricted to operate at noise levels of ninety decibels (90 dB) or less.

The Contractor shall be responsible for providing the current level of service to all properties and shall liable for any damage caused by sewer back-ups resulting from this project. Doses

5.2 Materials – Not used.

5.3 Required Submittals

- 1. Temporary piping and valve specifications.
- 2. Pump specifications.
- 3. Temporary pipe and fitting specifications.
- 4. Details of temporary pipe alignment, including suction and discharge details.

5.4 Payment

Payment for bypass pumping sanitary sewers shall be incidental to sanitary sewer construction. No separate payment will be made for bypass pumping sanitary sewers.

6 Sanitary Sewer

6.1 General

The work under this item includes all labor, equipment, and materials for furnishing and installing sanitary sewer pipe on grade and in line according to the plans and specifications. This item shall also include all fittings, couplings, adapters, riser pipes and any other item necessary to satisfactorily install and test the new sanitary sewer pipe system.

Excavation, dewatering, bedding and backfilling shall be incidental to the sanitary sewer installation and shall conform to District *General Provisions and Technical Specifications*.

All sanitary sewer abandonment work not indicated in plans, but necessary to facilitate the proposed sanitary sewer installations shall be incidental to the new sewer construction. Pipes being abandoned in place shall be bulkheaded with concrete plugs at the limits of removal. All costs associated with bulkheading shall be incidental to the new sanitary sewer construction.

Sanitary sewer pipe that varies ± 0.02 feet from the proposed grade and/or ± 0.15 feet from the proposed line will not be accepted. More stringent tolerances may be required in the field if directed by the District. The Contractor shall be solely responsible for setting and maintaining proper elevations, lines and grades for all work. The District shall not be obliged to establish construction grade or alignment.

The Contractor shall provide at least one laser device for setting lines and grades of sub-grade and pipe inverts during all phases of construction. The device(s) shall be of acceptable design and maintained in good working condition for the duration of the project. The Contractor shall employ workers competent in the setup and operation of said device(s). Said device(s) shall be operated at no extra cost to the District.

The Contractor shall provide and have available on-site at all times, a calibrated level and level rod. District staff shall be allowed to use the level and rod as deemed necessary.

Sanitary sewer pipe and pipe-laying methods must conform to the requirements of the District's *General Provisions and Technical Specifications* and as stated elsewhere herein.

Connections to existing sanitary sewers, shall be made to structurally sound pipe using District-approved transition couplings.

6.2 Materials

8" through 15" diameter PVC pipe shall be SDR 35 PVC pipe meeting the requirements of ASTM D3034. Joints shall conform to ASTM D3212.

Clay-to-PVC and cast iron or ductile iron to PVC pipe transition couplings shall be Fernco 5000 or LDC series (as required by pipe diameter), Mission Flex-Seal ARC shear resistant or other District-approved repair couplings made of flexible PVC compound with 316 stainless steel clamps and stainless steel rings. Transition couplings shall conform to the applicable parts of ASTM D5926 and C1173.

6.3 Required Submittals

- 1. Pipe material specifications.
- 2. Fitting, coupling, and adapter specifications as applicable.

6.4 Measurement and Payment

Payment for Sanitary Sewers will be made at the Contract unit price per Linear Foot (LF) of the specified type and diameter, installed, complete in place.

Measurement for payment shall be horizontal along the centerline of the installed pipe from center-of-manhole to center-of-manhole to center-of-manhole to center-of-repair coupling, or center-of-repair coupling to center-of-repair coupling, as applicable.

7 Sanitary Sewer Service, Complete

7.1 General

This work shall consist of furnishing and installing new sanitary sewer service pipe (SDR26 WMQ PVC) between the proposed sanitary sewer main and the connection point (existing or proposed) at the limits of public Right-of-Ways or sanitary sewer easements. This item shall include all necessary earth excavation, materials, pipe, risers, fittings, labor, bedding, trench backfill and compaction, temporary plugs, temporary connections, equipment, supervision and all items and appurtenances necessary to complete this work. This work shall include locating the existing service, connecting the service to the new sanitary sewer main (at the direction of the District), and reconnecting to the private sanitary sewer service and installing a cleanout at the property line as shown on the plans. This work shall conform to the District standard details and the Illinois State Plumbing Code.

Sanitary sewer service reconnections shall be laid at a minimum 1.0% slope.

The Contractor shall be responsible for maintaining the current level of service to all users connected to the existing sanitary sewer. Bypass pumping shall be provided, as necessary, as specified elsewhere herein.

The Plumbing Contractor performing the reconnection work must be registered and bonded with the District. A District Connection Permit will be required for the new service reconnection but no permit fee will be charged.

Connection shall be made to a structurally sound pipe. Connection to the existing sewer service shall not be made until the District Inspector has verified the structural condition.

The locations of the existing sewer services are based upon televised inspection and record information, and the proposed service connections are based upon those locations. Should the service alignments, diameters or point of connections vary from that shown in the plans, no claims for additional compensation will be entertained.

A service riser cleanout as indicated on the District Standard Detail Sheet shall be installed at the property/right-of-way line as indicated on the plans or as otherwise directed.

7.2 Materials:

Sanitary sewer service replacement pipe shall be SDR 26 (WMQ) PVC meeting the requirements of ASTM D2241. Joints shall meet the requirements of ASTM D3139. The new service shall connect to the new sewer main using factory wye fittings.

Clay or Cast Iron Pipe to PVC pipe transitions shall be made by use of shear resistant flexible Clay or C.I.P.-to-PVC adapters (Fernco Model 5000, or approved equivalent). Transitions shall be made to structurally sound.

7.3 Measurement and Payment

Payment for Sanitary Sewer Services shall be made at the Contract unit price per Each (Each) installed of the diameter specified.

8 Sanitary Manholes

8.1 General

This work shall consist of furnishing all labor, equipment and materials required to install pre-cast concrete sanitary manholes as directed by the District in accordance with the District *Standard Detail Sheet* and Article 6:3 and 7 of the District's *General Provisions and Technical Specifications*. Work shall also include furnishing and placing a District-approved manhole frame and lid (Neenah R-1670 or EJ E-1117) adjusted to grade as shown on the plans.

Eccentric cone sections must be a component of all manholes. Unless otherwise noted on the plans, flat-top structures will not be allowed.

District-approved manhole steps shall be provided with a maximum spacing of 16". The top of the pre-cast cone section shall be set to an elevation that will allow the frame to be adjusted (12" maximum) without disturbing the cone section.

The Contractor shall field verify all proposed rim elevations and shall construct manholes in accordance with the District *Standard Detail Sheet*.

Manhole frames shall be set at finished grade in paved areas. Concrete adjusting rings shall be standard reinforced concrete pipe pattern. Minimum ring thickness shall be two inches (2"). Maximum ring thickness shall be twelve inches (12"). Adjustment rings shall conform to ASTM C478 and ASTM C139, latest revision. Concrete for adjusting rings shall be Class "A" as specified in T.S. 5:3(a) in the District's *General Provisions and Technical Specifications for Sanitary Sewer Construction*. Absorption shall comply with ACI Specification P-I-C and ASTM C139, latest revision.

All adjusting ring joints shall be sealed watertight by means of EZ Stik, Kent-Seal, or equal. Minimum adjusting ring placement height is four inches (4"). Maximum adjusting ring placement height is twelve inches (12"). No more than thirty inches (30") from the top of casting to the first step will be allowed. A maximum of one (1) 2" adjusting ring will be allowed. Joint between adjusting rings and casting shall be watertight by means of a butyl material seal (E-Z Stik, Kent-Seal, or equal).

No adjusting rings are required for manholes in turf areas or with roadways with curb and gutter.

In roadways only: metal or plastic shims will be required if the casting is located in a roadway and must be pitched to match the slope of roadway pavement. Shims must be equally spaced with no more than one-inch (1") of total adjustment. If frame is shimmed, no butyl sealant (E-Z Stik, Kent-Seal, or equal) will be required under the casting. The void area between the casting, and masonry shall be grouted from the outside to the inside face of the adjusting ring, filling the entire void. No trench compaction shall take place until the concrete has cured and hardened to the District's satisfaction. Final manhole adjustment shall meet any additional requirements of the governing roadway authority.

The Contractor shall install District-approved external casting seals on all proposed manholes and external seals on all manhole barrel section joints (Cretex, Mac Wrap or CANUSA Wrapid Seal), as indicated on the *Standard Detail Sheet*.

The Contractor shall field verify the materials, sizes and elevations of all existing pipes to be connected. Pipe connections to new manholes shall be made watertight by means of a flexible pipe-to-manhole connector meeting the requirements of ASTM C923 titled "Resilient Connectors between Reinforced Concrete Manhole Structures and Pipes." Integrally cast and expandable gaskets are acceptable. The design shall be in accordance with the manhole and pipe manufacturer requirements and shall receive prior District approval. All sanitary manholes twenty-two feet (22') or deeper shall use pipe-to-manhole gaskets rated at a minimum of 15 psi hydrostatic pressure (A-LOK model X-CEL or District-approved equivalent).

All connections between new manholes and existing sanitary sewers shall be made with minimum 3.0' lengths of new PVC Pipe. Connections shall be made to structurally sound pipe.

Where drop connections are required, Contractor shall furnish and install a complete drop bowl assembly, including drop pipe and fittings as detailed on the District *Standard Detail Sheet*. The drop bowl assembly shall be as manufactured by Reliner-Duran, Inc., or District-approved equal. All mounting brackets, anchors and hardware shall be of stainless steel construction.

All new manholes shall be vacuum tested per ASTM C1244 Standard Test Method for Concrete Sewer Manholes by the Negative Pressure (Vacuum) Test prior to placing into service.

8.2 Materials

Materials for manholes and components shall be as shown on the District Standard Detail Sheet.

8.3 Required Submittals

- 1. Shop drawings for each manhole showing the number and height of barrel sections, height of cone section, number and size of adjusting rings, location and spacing of steps and elevations of all pipes. A plan view shall be provided showing the orientation of pipe openings.
- 2. Frames and lids material specifications.
- 3. Chimney seals material specifications.
- 4. Barrel joint seals material specifications.
- 5. Manhole-to-pipe connection material specifications.
- 6. Manhole steps material specifications.

- 7. Exterior wall sealant material specifications.
- 8. Drop bowl assembly specifications.

8.4 Payment

Payment for Sanitary Manholes shall be made at the Contract unit price per Each (EA) installed of the diameter and type specified.

Sanitary Manhole Removal

9.1 General X

This work shall consist of the complete removal and disposal of existing sanitary sewer manholes. All work shall conform to Article 605.03 of current *IDOT Standard Specifications*.

This work shall include removal and disposal of complete manhole, regardless of actual diameter, depth, shape, size or material encountered in the field. Existing manholes are constructed of various materials including clay or concrete bricks, block and concrete. Shapes vary based on original service intended, including combined sanitary- storm sewer structures.

Existing pipes connected to the manholes shall be plugged with non-shrink grout at the limits of excavation. The contractor shall be responsible for determining if the service is active.

Pavement removal and patching be as specified elsewhere herein.

9.2 Payment

Payment for Sanitary Manhole Removal will be made at the contract unit price per Each (EA) ddino removed, irrespective of existing material or diameter.

10 **Abandon and Fill Sanitary Manhole**

10.1 General

This work shall include all labor, equipment and material needed to abandon existing sanitary manholes. Work shall include removal and disposal of the existing manhole cone section (3' minimum depth), frame and lid, plugging existing pipes in the manhole with a concrete bulkhead, filling the manhole void with approved compacted granular backfill.

Work shall conform to Articles 605.03-605.05 of IDOT Standard Specifications.

10.2 Payment

Payment for Abandon and Fill Sanitary Manhole shall be made at the Contract unit price per Each (EA) completed abandonment.

11 **Abandon and Fill Sanitary Sewer**

11.1 General

This work shall consist of abandoning various diameters of existing sanitary sewer mains and services by filling the pipes, as much as possible, with bentonite approved grout material. The contractor shall properly bulkhead sewers prior to filling with grout.

All sewers scheduled for abandonment are listed and shown on plans. Abandonment shall be staged with other contract work to ensure uninterrupted sanitary sewer service is provided to current users.

The contractor shall verify no active user connections remain on the system prior to performing this work.

11.2 Materials

The bentonite grout material shall have the following mix design:

- "Mix" 60%
- Mason Sand or Torpedo Sand 40%
- Bentonite Vul-Clay Powder 5 pounds per 25 pounds of "Mix" and Sand Water Add as required to facilitate pumping the material.

The "Mix" design is detailed below. All material in the "Mix" shall be pulverized, mixed and screened with 100% passing through a #4 sieve.

- Light Sandy Clay Mixture 80% (100% passing #4 Sieve)
- Limestone Powder 15% (100% passing #4 Sieve)
- Mason Sand 5%

The Bentonite Vul-Clay Powder shall have the following properties:

- Ph: 9-10

Ph: 9-10
Moisture: 9%
Grind % - 200 Mesh 88%

11.3 Required Submittals

Bentonite grout mix design.

11.4 Payment
Payment for Abandon and Fill Sanitary Sewer, Various Diameters, will be made at the Contract
Lyon (LS) price Lump Sum (LS) price.

12 **Rock Excavation**

12.1 General

This item shall consist of furnishing all labor, equipment, tools, transportation, materials and operations needed to excavate, remove and dispose of rock material during the construction of the proposed project.

The Contractor shall demonstrate to the District that the material encountered while excavating within the lines and grades shown on the plans within the designated limits of payment as described in T.S. 2:3 of the General Provisions and Technical Specifications for Sanitary Sewer Construction is not able to be removed employing conventional excavation methods and equipment. This demonstration shall be completed before the subsurface material is classified as rock. The following criteria will be used in the determination of whether or not the work will be considered rock excavation:

- 1. The guidelines and requirements of the General Provisions and Technical Specifications for Sanitary Sewer Construction.
- 2. A substantial reduction in production rate.
- 3. Visual evidence of large boulders, rock, granite, trap, quartzite, chert, limestone, hard sand stone, hard shale or slate, or other hard materials, in natural ledges or displaced masses which cannot be removed by a modern backhoe without resorting to the continuous use of pneumatic tools, blasting, barring or wedging for removal from their original beds.

Blasting will not be allowed on this project. Contractor shall monitor vibrations of rock removal efforts and shall assume full responsibility for any claims of damage to adjacent structures (within 100' of trench).

12.2 Materials – Not used.

12.3 Required Submittals – Not used.

12.4 Measurement and Payment

Payment for Rock Excavation shall be made at the Contract unit price per Cubic Yard (CY) removed.

The limits of what will qualify as rock excavation will be determined by the District in the field. The maximum payable trench width shall not exceed the nominal pipe size plus eighteen inches (18") for 8" to 24" diameter pipes or the nominal pipe size plus twenty-four inches (24") for pipe sizes greater than 24" diameter. The maximum payable radius used to calculate volume of rock removed for manhole installation shall be the inside radius of the manhole plus twenty-four inches (24"). No additional payment will be made for extra rock excavation desired for work area enhancement or for areas needed to facilitate manhole or vault installations.

13 Pavement Removal

13.1 General

This work shall conform to applicable portions of *Section 440* of *IDOT Standard Specifications* and consist of removing existing bituminous or concrete roadway pavement and driveway pavement as required to construct this project. Bituminous pavement shall be saw-cut full depth prior to removal at no additional cost to the District. PCC Pavement shall be saw-cut at full depth or removed at the nearest existing construction joint.

Care must be taken to protect bituminous and concrete vertical joint faces from any damage. In all cases where drop-offs exist temporary asphalt pavement transition wedges will be required. The cost of furnishing, installing, and removal of transition wedges shall be incidental to construction. No additional payment will be made for the removal of aggregate base or soil under the existing pavements.

13.2 Materials - Not used

13.3 Required Submittals – Not used.

13.4 Payment

Payment for Pavement Removal will be made at the Contract unit price per Square Yard (SY) removed, irrespective of the type or thickness.

14 Pavement Patching

14.1 General

This work shall be in accordance with Section 442 of IDOT Standard Specifications with the following alterations:

Minimum hot-mix asphalt (HMA) pavement thickness shall be 6.0" installed in two (2) compacted lifts. The first lift shall be 4.0" of HMA Binder Course. The final lift shall be 2.0" of HMA surface course.

Pavement removal shall

The work shall be performed to the satisfaction of the District and applicable roadway authority.

14.2 Materials

- 1. HMA Binder Course, IL-19.0, N50.
- 2. HMA Surface Course, Mix "D", N50

14.3 Required Submittals

- 1. Concrete Mix Design.
- 2. HMA Mix Design.

Sold

14.4 Measurement & Payment

Payment for Pavement Patching, Class D shall be made at the Contract unit price per Square Yard (SY) of the specified and installed thickness.

15 Remove and Replace PCC Curb and Gutter

15.1 General

This work shall consist of all labor, equipment and materials required to remove and replace existing PCC curb and gutter to the limits indicated on the plans. Existing curb and gutter shall be saw-cut (full-depth) at removal limits or removed at the nearest construction joint.

Removal and disposal of existing curb and gutter as well as subgrade and base installation/preparation shall be incidental to this bid item.

Curb and gutter type and dimensions shall match adjacent curb and gutter that is to remain in place or closest type as detailed on *IDOT Highway Standard B.L.R. 28*. Construction of new PCC curb and gutter shall be in accordance with *Section 606* of *IDOT Standard Specifications*.

15.2 Materials

Concrete shall be Class SI in accordance with Section 1020 of IDOT Standard Specifications.

15.3 Required Submittals

1. Concrete mix design.

15.4 Measurement and Payment

Payment for Remove and Replace PCC Curb and Gutter shall be made at the Contract unit price per Linear Foot (LF) replaced.

16 Remove and Replace PCC Driveway Pavement, 63

16.1 General

This work shall be in accordance with Section 423 of IDOT Standard Specifications.

Existing pavement to be removed and replaced shall be saw-cut full depth or removed at the nearest existing construction joint.

All work shall be performed to the satisfaction of the District and applicable roadway authority.

Finished PCC driveway thickness shall be 6" placed over 4" of CA-6 aggregate base course. Aggregate base course shall be incidental to the PCC driveway pavement pay item.

16.2 Materials

Concrete shall be class "PV" as defined in Section 1020 of IDOT Standard Specifications.

16.3 Required Submittals

1. Concrete mix design.

16.4 Measurement & Payment

Payment for PCC Driveway Pavement Removal and Replacement, 6" will be made at the Contract unit price per Square Yard (SY) replaced.

PCC Sidewalk Removal and Replacement 4" 17

17.1 General

This work shall include all equipment, labor and materials required to remove and replace existing Portland cement concrete (PCC) sidewalk and other PCC slabs to the limits shown on the plans.

Removal shall be done in accordance with Section 440 of the IDOT Standard Specifications. Sidewalk shall be saw-cut (full depth) at removal limits prior to removal unless an existing construction joint exists. Disposal of removed material is incidental.

New PCC sidewalk shall be installed in accordance with Article 424 of IDOT Standard Specifications and shall be performed to the District's satisfaction.

17.2 Materials

Portland cement concrete sidewalk shall be 4" thick, placed over 4" of compacted aggregate base course. Concrete shall be class "SI" as defined in Article 1020 of IDOT Standard Specifications. Aggregate base course shall be of CA-6 gradation in accordance with Article 1040.01 of IDOT Standard Specifications and shall be incidental to the PCC sidewalk pay item.

17.3 Required Submittals

1. Concrete mix design.

1. Payment

Payment for PCC Sidewalk Removal and Replacement, 4" shall be made at the Contract unit price 30 DILL per Square Foot (SF) replaced.

18 Aggregate Base Course, Type B

18.1 General

This work shall consist of placing compacted Aggregate Base Course, Type B, beneath the proposed pavement or as a final surface where indicated on the plans. This work shall include subgrade preparation, removal and disposal of excess material, furnishing, placing, installing and compacting course aggregate to thicknesses identified on plans, and trimming and prepping aggregate base for subsequent pavement placement. This work shall be in conformance with Section 351 of the IDOT Standard Specifications.

Existing base material may remain in place with the approval of the appropriate Roadway Authority. No additional payment will be made for grading, shaping, and compacting existing base materials.

The Contractor shall compact the aggregate base course and perform a sufficient number of compaction tests as determined by the District and Roadway Authority. Compaction tests must be

performed as work progresses. All compaction tests must meet 95% of Standard Proctor density and must be performed by an approved independent geotechnical company.

Prior to aggregate base course placement, the Contractor shall proof-roll the entire subgrade of the pavement replacement area in the presence of a District Inspector and the Roadway Authority. Proof-rolling shall consist of using a fully loaded tandem axle dump truck to identify structurally unsuitable locations of subgrade. Proof-rolling and aggregate base course placement shall be completed during dry weather. At the direction of the Inspector, the subgrade may be required to dry for a period of time as a means of correcting areas of structurally unsuitable subgrade before proceeding with road base improvements.

18.2 Materials

Finished aggregate base course thickness shall be as indicated on plans, placed in two compacted lifts of equal thickness. Aggregate shall be of CA-6 or CA-10 gradation. Course Aggregates shall be in accordance with Article 1004.04 of the IDOT Standard Specifications.

18.3 Required Submittals

1. Material gradation certifications for aggregates.

18.4 Measurement and Payment

Payment for Aggregate Base Course, Type B, shall be made at the Contract unit price per Square Yard (SY) of the specified and installed thickness.

19 **Pavement Marking**

19.1 General

This work shall include all labor, equipment and materials to install pavement markings in accordance with Section 780 of IDOT Standard Specifications. Contractor shall submit a layout and obtain approval by the appropriate roadway authority prior to installation.

19.2 Materials

Material shall be paint pavement marking conforming to Article 1095.02 of IDOT Standard 11300sc Specifications.

19.3 Required Submittals

1. Paint pavement marking material specifications and MSDS.

19.4 Measurement and Payment

Payment for Paint Pavement Marking shall be made at the Contract unit price per Linear Foot (LF) of the width and color specified and installed.

20 Tree Removal

20.1 General

Trees approved for removal for this project will not require replacement. The Contractor shall save and protect all trees not specifically approved by the District for removal.

The Contractor shall remove only those trees necessary to complete the specified work. Tree removal shall consist of cutting, grubbing, removing and off-site disposal of any trees, stumps and brush, as needed, to properly facilitate construction or as shown on the plans. Only trees approved by the District for removal shall be removed.

20.2 Materials – Not used.

20.3 Required Submittals – Not used.

20.4 Payment

Payment for Tree Removal shall be made at the Contract Lump Sum (LS) price.

21 Erosion and Sediment Control

21.1 General

The Contractor shall comply with all the requirements of the *IEPA Illinois Urban Manual*, current edition and Article 280 of the *IDOT Standard Specifications*. All disturbed areas shall be restored to near original contours as shown on plans.

The Contractor shall take whatever measures the District deems necessary to prevent or eliminate excessive erosion or siltation. Actual field conditions may require additional measures beyond those cited. This shall include, but is not limited to: straw baling of ditches, stabilizing slopes with an approved geo-fabric and/or mulch, seeding, sodding, silt fence installation, rip rap, etc. Sediment control shall be provided around the perimeter of all stockpile areas.

Provisions shall be made to minimize the transport of sediment by runoff or vehicle tracking onto roadways. Mud and debris shall be removed daily from roadway surfaces at the end of each workday or as necessary.

The Contractor shall remove and dispose of all temporary erosion control devices within 30 days of final site stabilization and District approval.

The Contractor shall maintain storm water flow in all ditches and storm water conveyance systems (storm inlets, pipes, culverts, etc.) disturbed as a result of construction. Ditches shall be rough graded at the end of each day and whenever rain in imminent.

Silt Fencing

Silt fencing shall conform to Standard 280001-07 of the IDOT Highway Manual. Silt fencing shall be Amoco 2127, or approved equivalent. Posts shall be 1.5" x 1.5" x 4' long, minimum, spaced 5' maximum on center. Silt fencing shall be installed prior to excavation or stockpiling of materials

Storm Inlet and Pipe Protection

This work shall consist of furnishing, installing, maintaining and retrieval of District-approved drainage inlet protection filters to retain storm water runoff sediment as required or as directed. Inlet protection shall be drop-in type installed in accordance with Illinois Urban Manual detail 561D. Filters shall be 9" or 12" diameter sediment logs, erosion eels or straw wattles as manufactured by North American Green (or District-approved equal).

The Contractor shall inspect the work site and review the plans to determine the sizes, types and numbers of inlet protection filters needed.

Erosion control devices shall remain in place until removal is directed by the District. All erosion control devices shall remain the property of the Contractor. Upon stabilization and approval, the Contractor shall promptly remove and dispose of all erosion control devices as well as all debris and sediment accumulations.

21.2 Materials

Temporary erosion control measures shall conform to IL Urban Manual and Article 1081 of *IDOT* Standard Specifications.

21.3 Required Submittals

Material specifications for erosion control products outlined below or as applicable:

- 1. Silt fence.
- 2. Inlet and pipe protection products.

21.4 Payment

Payment for Silt Fence shall be made at the Contract unit price per Linear Foot (LF).

Payment for Inlet and Pipe Protection installation will be made at the Contract unit price per Each (EA) installed.

Additional erosion and sediment control measures not explicitly mentioned shall be provided, as needed or directed – no separate payment will be made for additional erosion and sediment control measures. No separate payment will be made for maintenance and retrieval of erosion OSCS control devices during construction and upon completion of construction.

22 **Restoration and Seeding**

22.1 General

All restoration shall be completed in accordance with public agency requirements or, on private property, equal to or better than the pre-construction conditions, unless otherwise directed. All restoration of public or private property including, but not limited to, fences, sidewalks, driveways, all other slab work, (concrete and asphalt), drainage channels, riprap, fences, turf areas and dry wells, etc., disturbed or damaged as a result of construction shall be promptly completed, equal to or better than the pre-construction conditions, as directed by the District, and guaranteed by the Contractor for a period of one (1) year following satisfactory completion and final acceptance of the work. Topsoil shall be as specified in T.S. 4:2c.

All drainage devices shall be cleaned of debris. Pipes which in the estimation of the District have been significantly damaged by the Contractor, shall be replaced with new pipe or structures of the same diameter, length and/or type, at no added expense to the District. All work shall be to the satisfaction of the District. When necessary, temporary restoration of roads, drives, fences, etc., will be required, all costs incidental to the contract.

All work shall be guaranteed against trench subsidence for a period of one (1) year.

Suppliers shall be prepared to certify that laboratory and field testing of their product has been accomplished, based upon testing.

Guarantee: All seeded areas shall be maintained for at least thirty (30) days after application. Scattered bare spots no larger than two square feet will be allowed up to a maximum of five percent (5%) of any seeded area.

Seeding and Fertilizing:

Ground surfaces including right-of-ways and easements that were covered with grass before construction shall be seeded as directed by the District. The Contractor shall make certain that all disturbed areas have the same depth (6" minimum) and quality of topsoil that existed prior to construction.

Unless otherwise noted on the plans, work shall conform to the *General Provisions and Technical Specifications for Sanitary Sewer Construction*, T.S. 4:2 and *Sections 250* and *251* of *IDOT Standard Specifications*.

Seedbed preparation shall be done according to Article 250.05 of *IDOT Standard Specifications*.

Seeding methods shall follow those mentioned in Article 250.06. Mowing to discourage weed growth will be completed by the Contractor until the project is accepted by the District.

Fertilizing shall be done in accordance with Article 250.04. Fertilizer shall have a 10-10-10 NPK component and be applied at the rate of 400 lbs./acre. No additional compensation will be made for the inclusion of fertilizer.

Straw mulch shall be per Method 2 and done in accordance with the applicable portions of *Section 251* of *IDOT Standard Specifications* with the following exceptions:

The rate of application for mulch will be 4,000 lbs./acre using Hydro Tack at a rate of 400 lbs./acre for stabilization. This specification describes mulch for use with the hydraulic application of grass seed which shall consist of specially prepared wood cellulose fiber. It shall be processed in such a manner that it will not contain any growth or germination-inhibiting factors, and shall be dyed in an appropriate color to facilitate metering of the material. It shall be manufactured in such a manner that after additions and agitations in slurry tanks with fertilizers, grass seeds, water and any other approved additives, the fibers in the material will become uniformly suspended to form a homogenous slurry, and that when hydraulically sprayed on the ground, the material will form a blotter-like cover impregnated uniformly with grass seed, and which after application will allow the absorption of moisture and percolation of rainfall or mechanical watering of the underlying soil.

The mulch material described above shall be supplied in packages having a gross weight not in excess of 55 pounds. The packages shall be adequately wrapped in paper, polyethylene or other suitable material to prevent loss or spillage during handling. Weight specifications of this material from suppliers, and for all applications, shall refer only to air dry weight of the fiber material. Absolute air dry weight is based on the normal weight standard of the Institute of the Pulp and Paper Industry for wood cellulose and is considered equivalent to ten percent (10%) moisture. Each package of the cellulose fiber shall be marked by the manufacturer to show the airdry weight content.

At the direction of the District or other governing agency, the Contractor shall provide steep slope protection over turf areas disturbed by construction in accordance with Articles 251.03 and 251.04 of IDOT Standard Specifications.

22.2 Materials

Seed mixture shall be Class I or Class 4 in accordance with Section 250 of IDOT Standard Fertilizer shall be in accordance with Section 250 of IDOT Standard Specifications. Mulch shall be in accordance with Section 251 of IDOT Standard Specifications.

22.3 Required Submittals

1. Seed mixtures, fertilizer and mulch specifications.

22.4 Payment

Payment for Restoration and Seeding shall be made at the Contract unit price per Acre (ACRE).

23 **Construction Layout**

23.1 General

This work shall be in accordance with IDOT Recurring Special Provision #10: Construction Layout Stakes and the Contractor shall provide all construction layout for this project to the lines and grades shown on the plans.

Reference points for the survey centerline and benchmarks are shown on the plans. The District will assist in periodic layout checks, particularly before pavement is placed. Tooses

23.2 Materials – Not used.

23.3 Required Submittals – Not used.

23.4 Payment

Payment for Construction Layout will be made at the Contract Lump Sum (LS) price.

24 Traffic Control and Protection, Local Street

24.1 General

This work shall consist of furnishing, installing, maintaining, relocating, and removing work zone traffic control and protection in accordance with Section 701 of IDOT Standard Specifications and the standard details shown in the plans. Contractor shall be solely responsible for the safety of all operations and shall comply with all State, local and OSHA regulations.

All work shall be in conformance with the current edition of IDOT's Manual on Uniform Traffic Control Devices for Street and Highways.

Add the following to Section 701 of IDOT Standard Specifications:

The Contractor will be required to furnish all traffic control devices necessary for the convenience and protection of vehicular and pedestrian traffic. Whenever Contractor operations endanger or interfere with vehicular traffic or pedestrians, as determined by the District or roadway authority, the Contractor shall furnish additional traffic control devices necessary to direct and protect his workmen at no extra cost.

The Contractor will be required to furnish flaggers as specified in the plans or as required by the District on a continuous basis whenever construction operations are in progress.

Traffic control devices may not be delivered to the site more than five (5) days prior to installation of the devices and must be removed from the site within five (5) days after the required work is complete.

The Contractor is responsible for the proper location, installation, and arrangement of all traffic control devices furnished. Whenever operations indicate that relocation of a proposed or existing traffic control device is advisable, as determined by the District, the Contractor shall remove, relocate, and reinstall the device in question at no additional cost.

All advance warning signs for lane closure, intermediate information signs, and standard signs shall be installed in accordance with *IDOT Highway Standards*. Cones will not be allowed as a traffic control device.

"WORKERS" (W21-1a (0) - 48) signs shall be replaced with symbol "Right or Left Lane Closed Ahead" (W4-2R or L (0) - 48) signs.

Daily or periodic lane closures shall be erected no earlier than 9:00 AM and shall be removed no later than 3:30 PM regardless of the day of the week. In the event that a lane closure will remain for more than one calendar day, the Contractor shall notify the City of Rockford at least six (6) hours in advance.

Emergency lane closures shall be erected and removed at the explicit direction of the roadway authority.

All advance warning signs and traffic control devices shall be removed or covered by the Contractor when such signs and devices are not needed or at the direction of the District or roadway authority.

The basic layout for traffic control devices will be in accordance with the plans and specifications.

The Contractor is responsible for the maintenance of all traffic control devices installed and shall provide surveillance of all barricades, barrels, warning signs, and lights which he has installed on a twenty-four (24) hour a day basis for each day of this Contract. In the event of severe weather conditions, the Contractor shall be required to furnish any additional personnel required to maintain all traffic control devices as required by the District. Surveillance shall mean checking control devices periodically, but not less than once every twelve (12) hours.

The Contractor shall provide the District and City of Rockford with the name, address, and telephone number of two (2) persons who will be responsible for maintaining the traffic control devices and who will be available to the City on an immediate basis twenty-four (24) hours a day. In the event one or both of the persons become unavailable, the Contractor shall furnish the contact information for other individuals who will be responsible.

The Contractor will be required to remove all traffic control devices which were furnished, installed, or maintained by him under this Contract and such devices shall remain the property of the Contractor upon said removal. All traffic control devices shall remain in place until specific authorization for removal is received from the District or roadway authority.

Contractor acknowledges that the nature of this project requires varying scopes of work at many locations throughout a large area. As such, no additional payment will be made for Traffic Control and Protection for any location additions, deletions or changes in scope of work at any particular location.

24.2 Special Considerations; Work within IL Dept. of Transportation Right of Way

No work shall be performed within IDOT Right-of-Way until the detour detailed in the Contract Documents is established. Through collaboration with IDOT, the District has arranged for the detour of West State Street to be established under separate contract. The detour will be established on or about August 15, and remain in place for sixty (60) calendar days to allow for utility work, including this sanitary sewer contract. Any additional traffic control required for staging, as determined by the Contractor, shall be his or her responsibility at no additional cost to the District. Traffic Control for local streets required outside of the sixty calendar days being provided shall be paid at the Contract Lump Sum unit price for Traffic Control and Protection, Local Streets, as specified elsewhere herein. Should the Contractor require more than sixty (60) calendar days for work within IDOT Right-of-Way, it shall be the Contractor's responsibility to permit, establish and maintain traffic control within IDOT Right-of-Way at no additional cost to the District.

24.3 Materials

This item shall include all signs, signals, temporary pavement markings, other required traffic control markings, barricades, warning lights, and other devices which are to be used to regulate, warn or guide traffic during construction of this improvement in addition to *Article 701.03* of *IDOT Standard Specifications*.

24.4 Required Submittals

1. Copies of approved traffic control plans, including detour routing and road closures as required by the roadway authority.

24.5 Payment

Payment for Traffic Control and Protection, Local Streets shall be made at the Contract Lump Sum (LS) price, complete.

25 Quality Control Tests and Certification

25.1 General

All costs of testing, installing, re-installing, backfilling, compaction, and re-testing of sanitary sewers and services shall be borne by the Contractor. All pipe shall be tested in accordance with ASTM and manufacturer's standards. The manufacturer shall furnish certified test reports with each shipment of pipe, run or unit of pipe extrusion.

Final, satisfactory low-pressure air tests, deflection tests and manhole vacuum tests shall be performed no later than sixty (60) days after the installation of each sewer main section (manhole-to-manhole). The 60-day period starts with the completion of the sewer main. The District reserves the right to suspend any or all work until the Contractor fully complies with this requirement.

After the final installation, backfilling and compaction have been completed and prior to starting the roadway replacement, low-pressure air tests and deflection tests shall pass on all sewer pipe throughout the project.

Low Pressure Air Test - Gravity Sewers:

Low-pressure air testing of sanitary sewers shall use an allowable timed pressure drop of 0.5 psig. The allowable air loss rate shall be 0.0015 cu.ft./min. All test times shall be calculated using Ramseier's equation T = 0.85 DK/Q, where:

- T = Shortest time, in seconds, allowed for the pressure to drop 0.5 psig
- K = 0.000419 DL, but not less than 1.0
- Q = 0.0015 cu.ft./minute/sq.ft. of internal surface
- D = Nominal pipe diameter, in inches
- L = Length of pipe being tested, in feet

This modifies T.S. 9.4 of the General Provisions and Technical Specifications for Sanitary Sewer Construction

Pipe Deflection Test:

After sewer installation, backfilling and compaction, all flexible sewer pipe shall be thoroughly cleaned and flushed with water and then, if not previously tested as elsewhere specified herein, the installed pipe shall be deflection tested by the Contractor at his own expense. Deflection testing shall be performed at least thirty (30) days after the trench has been backfilled.

If the vertical deflection exceeds five percent (5%) of the diameter, the Contractor shall replace the pipe. In the event that this pipe is used for replacement, it will be subject to the same vertical deflection test.

The District reserves the right to make a vertical deflection test within a year following construction.

If deflection exceeds five percent (5%), the Contractor is responsible for replacing the pipe, as per G.C. 7:4 of the General Provisions and Technical Specifications for Sanitary Sewer Construction.

In addition to the above and T.S. 8:2(c) of the General Provisions and Technical Specifications for Sanitary Sewer Construction, use the following deflection test:

Testing of all lines shall be done with a Pin-Type Go/No-Go Gauge, pulled through all lines except the house leads. The diameter of the gauge shall be set at ninety-five percent (95%) of the undeflected inside diameter of the flexible pipe. The Pin-Type Go/No-Go Gauge will stop at any area in a flexible underground pipeline having vertical ring deflection greater than five percent (5%). **/**

All pipe exceeding this deflection shall be considered to have reached the limit of serviceability and shall be re-laid or replaced by the Contractor at no additional cost to the owner, (WPCF Manual of Practice No. 9, page 222).

If possible and practical, the testing shall initiate at the downstream lines and proceed towards the upstream lines. Where deflection is found to be in excess of five percent (5%) of the original pipe diameter, the Contractor shall excavate to the point of excess deflection and carefully compact around the point where excess deflection was found. The line shall then be retested for deflection. However, after the initial testing, should the deflected pipe fail to return to the original site (inside diameter) the line shall be replaced.

Vacuum Testing – Manholes:

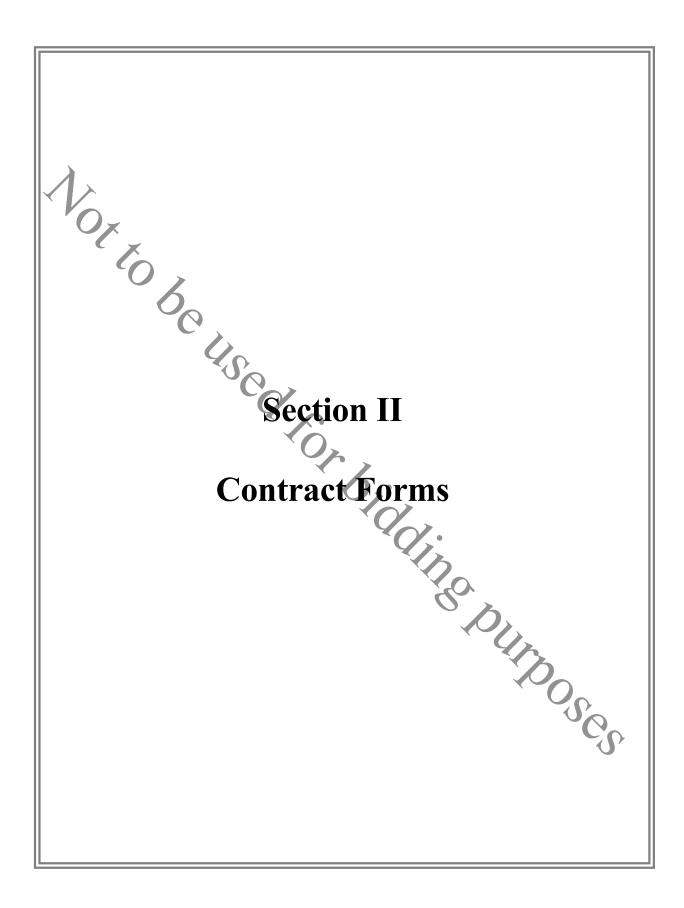
All sanitary sewer manholes shall be vacuum tested per ASTM C-1244 Standard Test Method for Concrete Sewer Manholes by the Negative Pressure (Vacuum) Test prior to placing into service.

25.2 Materials – Not used.

25.3 Required Submittals – Not used.

25.4 Measurement and Payment

No separate measurement or payment will be made for this work. All costs shall be incidental to SA DUIDOSCS sanitary sewer, sanitary manhole, and force main installation.



Proposal

Projec	et:	West State Street Sanitary Sewer, Capital Project No. 2014	
Locati	on:	West State Street from South Day Avenue to North Sunset Avenue, Rockford, Illinois	
Comp	letion Date:	October 31, 2021	
Liquid	lated Damages:	\$300/calendar day	
To:	Board of Trustees Rock River Water Reclamation District 3501 Kishwaukee Street Rockford, IL 61109		
From:		nership or Corporation, as case may be)	

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 bidrigging or bid-rotating conviction.

Bid Doc. No. 21-407 Proposal / Page 1 of 5

- 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 of 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 101-0221 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 Rock River Water Reclamation District) to submit certified payroll reports via the State's Certified Transcript of Payroll Portal found at www.lillinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx.
- 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.

Bid Doc. No. 21-407 Proposal / Page 2 of 5

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.

al, a pertuge undersigness of work and

Bid Doc. No. 21-407 Proposal / Page 3 of 5

Item No.	Quan- tity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
1	2,387	LF	Sanitary Sewer, SDR 35 PVC, 8" Dia.			
2	10	EA	Sanitary Manhole, 4' Dia.			
3	2	EA	Sanitary Manhole, 5' Dia.			
4	1	EA	Sanitary Manhole, 5' Dia. Inside Drop			
5	7	EA	Sanitary Sewer Service, Complete, 4" Dia.			
6	6	EA	Sanitary Sewer Service, Complete, 6" Dia.			
7	9	EA	Sanitary Manhole Removal			
8	10	EA	Abandon and Fill Sanitary Manhole			
9	1	LS	Abandon and Fill Sanitary Sewer, Various Dia.			
10	725	CY	Rock Excavation, Sanitary Sewer			
11	2,692	SY	Pavement Removal	U _h		
12	2,692	SY	Pavement Patching, Class D, 6"	* Z		
13	298	LF	PCC Curb and Gutter Removal and Replacement	101		
14	38	SY	PCC Driveway Removal and Replacement, 6"	9/2		
15	1,662	SF	PCC Sidewalk, Removal and Replacement, 4"	60	>	
16	2,692	SY	Aggregate Base Course, Type B, 12"		(O)	
17	180	LF	Paint Pavement Marking, Line 4, White		92	
18	840	LF	Paint Pavement Marking, Line 4, Yellow			
19	60	LF	Paint Pavement Marking, Line 24, White			
20	1	LS	Tree Removal			
21	100	LF	Temporary Construction Fence		C	

Item No.	Quan- tity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
22	1,133	LF	Perimeter Silt Fence			
23	29	EA	Inlet Protection			
24	0.7	ACRE	Turf Restoration, 6" Topsoil, Class 1 Seeding, Fertilizer			
25	1	LS	Construction Layout			
26	1	LS	Traffic Control and Protection (Local Streets)			
TOTAL BID PRICE:						
			C ,	(In Writ	ting)	(In Figures)
The und	dersigned	l acknow	ledges receiving Addendum numbers	,, and realize	es that all Addenda are c	considered part of the contr

The undersigned acknowledges	receiving Addendum numbers, _	, and realizes that all A	ddenda are considered part o
By:		0	
Name:	Title:	Date:	
		10%	
		6	
			5
			Op
			~N

Bid Doc. No. 21-407 Proposal / Page 5 of 5

Fair Employment Practices Affidavit of Compliance

PROJECT:	West State Street San	itary Sewer, Capita	al Project No. 2014	
			MIT IT WITH ITS SIGNED BID. THE ROCK RIVER W S NOT CONTAIN THIS AFFIDAVIT	'ATER
(Nar	ne of person making affidavit)	, being firs	st duly sworn, deposes and says that:	
They are:		of		
	(Officer's Title)		(Company Name)	
	ny is and "Equal Opportunity Employecutive Orders #11375 which are inco		a 2000(e) of Chapter 21, Title 42 of the United States Code and nace;	notated
	mpany will comply with any and all strength of Human Right Right (1997).		Admin. Code 750. APPENDIX A – Equal Opportunity Clause :	, Rules
or the Rules an contracts or sub or voided in wh	d Regulations of the Illinois Departs contracts with the State of Illinois or	ment of Human Rights (' any of its political subdivious or penalties may be	qual Employment Opportunity Clause, the Illinois Human Rigi 'Department'), the contractor may be declared ineligible for visions or municipal corporations, and the contract may be can imposed or remedies invoked as provided by statute or regu	future ncelled
1.	orientation, marital status, national orientation, military status of an unf to determine if minority persons of	origin or ancestry, citizen avorable discharge from n	icant for employment because of race, color, religion, sex, a status, age, physical or mental handicap unrelated to ability, military service; and further that it will examine all job classified and will take appropriate affirmative action to rectify an	sexual cations
2.	the availability (in accordance with	the Department's Rules as he or she will hire for ea	m this contract or any portion of this contract, he or she will det nd Regulations) of minorities and women in the areas from wh ach job classification for which employees are hired in a way	hich he
3.	That, in all solicitations or advertise applicants will be afforded equal opportunity	ements for employees place portunity without discrimicitizenship status, age, p	ced by him or her or on his or her behalf, he or she will state nation because of race, color, religion, sex, sexual orientation, hysical or mental handicap unrelated to ability, sexual orien-	marital
4.	That he or she will send to each labor bargaining or other agreement or urobligations under the Illinois Humrepresentative fails or refuses to c	or organization or represent inderstanding, a notice addition Rights Act and the Dopperate with the contraction competition of the period of the contraction of the Department	tative of workers with which he or she has or is bound by a coll lyising such labor organization or representative of the control pepartment's Rules and Regulations. If any labor organiza- ctor in his or her efforts to comply with such Act and Rulartment and the contracting agency and will recruit employee	ractor's tion or les and
5.	That he or she will submit reports as	s required by the Departm he Department or the con	nent's Rules and Regulations, furnish all relevant information attracting agency, and in all respects comply with the Illinois l	as may Human
6.	That he or she will permit access to	all relevant books, recor	rds, accounts and work sites by personnel of the contracting a compliance with the Illinois Human Rights Act and the Depart	
7.	That he or she will include verbating portion of the contract obligations at the same manner as with other provious of this clause by such subcontractor any subcontractor fails or refuses to	are undertaken or assume risions of this contract, the rs; and further it will pror o comply with the provis the Commission to be inel	visions of this clause in every subcontract awarded under whid, so that the provisions will be binding upon the subcontract e contractor will be liable for compliance with applicable promptly notify the contracting agency and the Department in the sions. In addition, the contractor will not utilize any subcontigible for contacts or subcontracts with the State of Illinois or	tor. In visions e event ntractor
(Source: Amend	ded at 32 I11. Reg. 16484, effective S	September 23, 2008)"		>
IL Dept of Hum	nan Rights Registration No.:		Expiration Date:	
		Signature		
Subscribed and	sworn to before me this	day of	, 20	
			Notary Public	

Bid Doc. No. 21-407

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: FIVE PERCENT (5%) 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 se
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%) or
the Contract price (including alternates) in form and with security satisfactory to said District, ther
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
good and lawful money of the officed states of America, not as a penalty, out as inquidated damages

Bid Doc. No. 21-407 Bid Bond / Page 1 of 2

IN TESTIMONY T and sealed this	HEREOF, the Pri	ncipal and Surety have caused these presents to be duly signed
Principal		
(Seal)	60450	Dec
6		By
	7	Name:
	0	Title:
		Date:
Attest:	30	
Secretary		
		TO TO THE OF THE PARTY OF THE P
		<u> </u>
~		
Surety		
(Sool)		0
(Seal)		Ву
		Name:
		Title:
		Date:

Bid Doc. No. 21-407 Bid Bond / Page 2 of 2

Agreement

1.	General
	THIS AGREEMENT, made and concluded this day of, 2021,
betwe	een the Rock River Water Reclamation District, Rockford, Illinois (District), acting by and
throu	gh the Board of Trustees, and, his/their executors,
admi	nistrators, successors or assigns:
/	
2.	Scope of Work
	WITNESSETH: That for and in consideration of the payments and agreements made in the
Propo	osal attached hereto, to be made and performed by the District and according to the terms
	essed in the Bond referring to these presents, the Contractor agrees with the District at his/their
-	proper cost and expense to do all the work, furnish all equipment, materials and all labor
	sary to complete the work in accordance with the plans and specifications hereinafter described,
and in	n full compliance with all of the terms of this agreement and the requirements of the District and
its rep	presentative.
ficati contr	And it is also understood and agreed that the Bidding Requirements, Detailed ifications, Contract Forms, General Conditions, General Requirements, Technical Specions, Plans, Addenda, and provisions required by law are all essential documents of the act, and are a part hereof, as if herein set out verbatim or as if attached, except for titles, tles, headings, table of contents and portions specifically excluded.
3.	Contract Price
the po	The District shall pay to the Contractor, and the Contractor shall accept, in full payment for erformance of this Contract, subject to any additions or deductions provided for hereby, in current s, the Total Contract Price of and
00/10	00 (\$).
of Se	Payments are to be made to the Contractor in accordance with and subject to the provisions ction 7 of this Agreement, which is a part of this Contract. Bond
4.	
	The Contractor has entered into and herewith tenders a bond of even date herewith, in the

5. Maintenance and Guarantee

hereby made a part of this Contract by reference.

sum of

penal

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

_) to insure the faithful performance of this Contract, which said bond is

and 00/100

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. The State of Illinois requires contractors and subcontractors on District projects to submit certified payroll reports via the State's Certified Transcript of Payroll Portal currently found at: https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx. The Contractor is responsible for verifying current website.

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 101-0221, 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 Public Act 96-929 (30 ILCS 570) 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 October 31, 2021.

11. Liquidated Damages

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

12. Counterparts

This Agreement may be executed and recorded in counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument. The Parties hereby acknowledge and agree that facsimile signatures or signatures transmitted by electronic mail in so-called "pdf" format shall be legal and binding and shall have the same full force and effect as if an original of this Agreement had been delivered. Each of the parties (a) intend to be bound by the signatures on any document sent by facsimile or electronic mail, (b) are aware that the other party will rely on such signatures, and (c) hereby waive any defenses to the enforcement of the terms of this Agreement based on the foregoing forms of signature.

13. 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.

(Seal)	Rock River Water Reclamation District Winnebago County, Illinois
ATTEST:Clerk of the Board	ByPresident, Board of Trustees
	Contractor
(Corporate Seal)	By Contractor's Officer
	Name: Title: Date:
ATTEST:	Durboses

Bid Doc. No. 21-407 Agreement - Page 5 of 5

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 O hereinafter defined in the amount of	bligee, for the use and benefit of claimants as
	Dollars (\$), for the payment
where of Principal and Surety bind themselves, their assigns, jointly and severally, firmly by these present	
WHEREAS, Principal has by written agreem with Obligee for documents prepared by the Rock River Water Recl made a part hereof, and is hereinafter referred to as	

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 Obligee, 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 Obligee 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 Obligee 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 Obligee relative to claims made against this Bond.

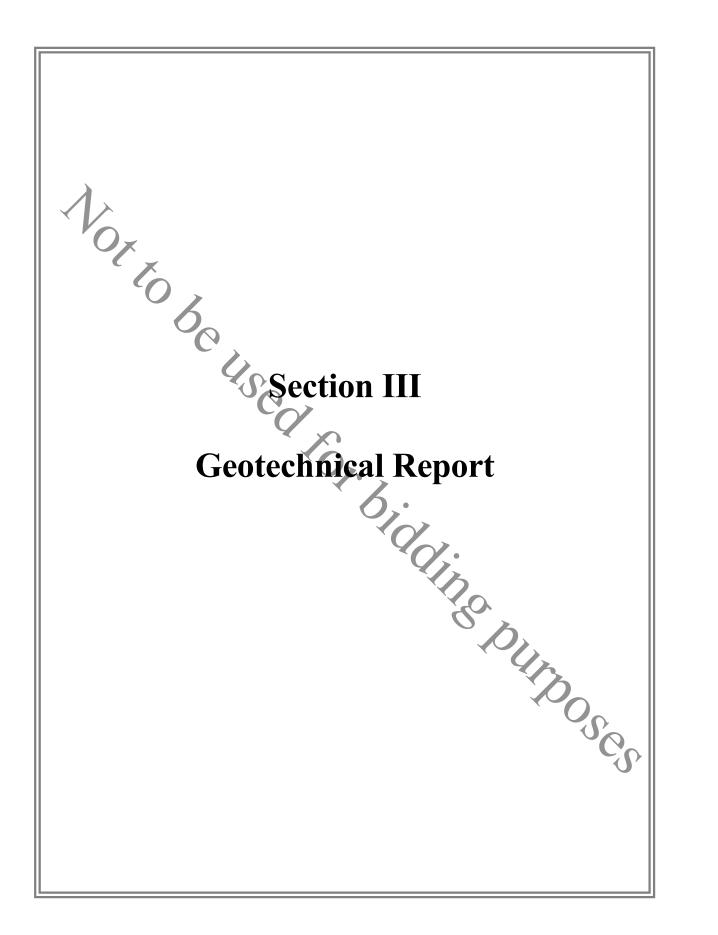
Signed and Sealed this	day of	, 20
CONTRACTOR		SURETY
Contractor Firm Name		
By:		By:
Signature		Attorney-in-Fact Signature
Printed Name		Printed Name
Title		Resident Agent
ATTEST:		
Corporate Secretary (Corporation	ne only)	

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 ODLICATION IS SHOULD that if the above bounder Drivainal its

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.

	en parties have executed this instrument under their
corporate party being hereto affixed and these p	, 20, the name and corporate seal of each presents duly signed by its undersigned representative,
pursuant to authority of its governing body.	
CONTRACTOR	SURETY
Contractor Firm Name	
Contractor Firm Name	
By:	By:
Signature	By:Attorney-in-Fact Signature
Printed Name	Printed Name
Title	Resident Agent
ATTEST:	6
Corporate Secretary (Corporations only)	Resident Agent
	SO DUIDOSCS
	3)





Corporate Office

360 S. Main Place, Carol Stream, IL 60188-2404 630.462.2600 • Fax 630.653.2988

Local Offices:

457 E. Gundersen Drive, Carol Stream, IL 60188-2492 630.653.3920 • Fax 630.653.2726

650 N. Peace Road, Suite D, DeKalb, IL 60115-8401 815.748.2100 • Fax 815.748.2110

1350 TriState Parkway, Unit 122, Gurnee, IL 60031-9135 847.249.6040 • Fax 844.767.4721

2235 23RD Avenue, Rockford, IL 61104-7334 815.394.2562 • Fax 815.394.2566

203 Earl Road, Suite A, Shorewood, IL 60404-9446 815.744.1510 • Fax 815.744.1728 Report of Soils Exploration

Proposed West State Street Sanitary Sewer Capital Project No. 2014

West State Street between Royal and Day Avenues Rockford, Illinois

Geotechnical & Environmental Engineering

Construction Materials Engineering & Testing

Laboratory Testing of Soils, Concrete & Asphalt

Geo-Environmental Drilling & Sampling

ing Prepared For:

Rock River Water
Reclamation District
3501 Kishwaukee Street,
P.O. Box 7480
Rockford, Illinois 61126-7480

GEOTECHNICAL GROUP

REPORT OF SUBSURFACE EXPLORATION
PROPOSED WEST STATE STREET SANITARY SEWER PROJECT
CAPITAL PROJECT NO. 2014
ROCK RIVER WATER RECLAMATION DISTRICT
ROCKFORD, ILLINOIS

ROCK RIVER WATER RECLAMATION DISTRICT 3501 KISHWAUKEE STREET, P.O. BOX 7480 ROCKFORD, ILLINOIS 61126-7480

So Dillooses PREPARED BY: **TESTING SERVICE CORPORATION** 2235 23RD AVENUE ROCKFORD, ILLINOIS 61104-7334 815.394.2562

TABLE OF CONTENTS

Section	Page
I. TEX	Px
1.0	Introduction
2.0	Site Description
3.0	Field Exploration and Laboratory Testing
4.0	Discussion of Test Data 5
5.0	Analysis and Recommendations
6.0	Closure
II. APP	ENDIX Closure 12 ENDIX

REPORT OF SUBSURFACE EXPLORATION

PROPOSED WEST STATE STREET SANITARY SEWER PROJECT

CAPITAL PROJECT NO. 2014

ROCKFORD, ILLINOIS

1.0 INTRODUCTION

This report presents results of the subsurface exploration performed in connection with the proposed West State Street Sanitary Sewer Project in Rockford, Illinois. These geotechnical services are being provided in general accordance with Testing Service Corporation (TSC) Proposal Number (P.N.) 65,783 dated October 13, 2020, the attached TSC General Conditions incorporated herein by reference and Rock River Water Reclamation District's (RRWRD) Purchase Order Number 81773.

It is understood that the proposed sewer extension(s) will extend along West State Street between Royal and Day Avenues. According to information provided by Mr. Matt. Campbell, P.E., of RRWRD, the bottoms of the proposed sanitary sewer pipes are anticipated to generally range from approximately 11 to 15 feet below existing grade at the test locations. It is further understood that the sanitary sewer pipes will be 8 or 12 inches in diameter. Other details regarding the design and construction of the proposed sewer project were not available/provided to us as yet.

The results of field and laboratory testing and recommendations based upon these data are included in this report. It should be noted that specific means and methods recommendations are not included in the scope of our work.



2.0 SITE DESCRIPTION

The proposed sewer(s) will extend along portions of the north and south sides of West State Street, between Royal and Day Avenues in Rockford, Illinois. The project site is located in a residential area on the west side of the City of Rockford, Illinois. Total relief at the test boring locations is on the order of 30 feet.

3.0 FIELD EXPLORATION AND LABORATORY TESTING

A total of seven (7) soil borings were performed as part of this exploration at the approximate locations determined by RRWRD. The borings were numbered B-1 through B-7. They were drilled at or very near the locations marked in the field by RRWRD personnel. Reference is made to the Boring Location Plan in the Appendix for the boring locations. The elevations, as well as the coordinates (Northing and Easting), at the borings were provided by RRWRD. The ground surface elevation for each boring is shown on the boring logs, as well as in parentheses on the Boring Location Plan, in the Appendix of this report. The table below shows the boring number, a description of the approximate boring location, the boring coordinates and the ground surface elevation for each boring.

Boring	Approx. Boring Location	Coordinates		Ground Surface
No.		Northing	<u>Easting</u>	Elevation
B-1	Johnston Avenue, South of W. State Street	2044883.34	2578276.63	794.1
B-2	Johnston Avenue, North of W. State Street	2045203.20	2578265.27	801



Boring	Approx. Boring Location	Coord	<u>Coordinates</u>	
No.		<u>Northing</u>	<u>Easting</u>	<u>Elevation</u>
B-3	NW of Johnston Avenue			
	and W. State Street	2045212.27	2578101.96	807.8
B-4	NE of Day Avenue and W.			
	State Street	2045242.47	2577625.96	812.6
	0			
B-5	Howard Avenue, South of	2044774.62	2579183.97	782.2
	W. State Street			
B-6	NW of Miriam Avenue and	2045051.88	2579194.94	788.3
	W. State Street	~		
B-7	NW of Royal Avenue and	2045112.99	2579560.24	794.1
	W. State Street	YO.		

The borings were each extended to depths varying between 13 and 15 feet below existing grade. Borings 2 and 3 were drilled to split spoon sampler refusal at a depth of 14.7 feet below existing grade, just prior to reaching the planned termination depth of 16 feet. Borings 5 and 7 were each extended to a depth of 13.7 feet where split spoon sampler refusal was encountered prior to reaching the planned end of boring depth of 15 feet. Borings 1, 4 and 6 were drilled to their planned termination depths.

The borings were drilled and samples tested according to currently recommended American Society for Testing and Materials specifications. Soil sampling was generally performed at 5 foot depth intervals in conjunction with the Standard Penetration Test (SPT), for which driving resistance to a 2" split-spoon sampler ("N" value in blows per foot) provides an indication of the relative density of granular materials and consistency of cohesive soils. Water level readings were taken during and following completion of drilling operations.

Soil samples were examined in the laboratory to verify field descriptions and to classify them in accordance with the Unified Soil Classification System. Laboratory testing included moisture content determinations for all cohesive and intermediate (silt or loamy) soil types. An estimate of unconfined compressive strength



was obtained for all inorganic native clay soils using a calibrated pocket penetrometer, with actual measurements of unconfined compressive strength performed on representative cohesive sample(s).

A portion of each split spoon soil sample from the borings was collected and placed in a separate sealed jar for headspace analysis only. A total of eighteen (18) samples for headspace analyses were collected from the seven (7) soil borings made for this project. Headspace analysis on these samples was performed at the TSC office following completion of the borings. The headspace analysis was conducted using a Mini-RAE photo-ionization detector (PID) equipped with a 10.6 eV probe, similar to the instrument utilized to screen each load of soil for final acceptance at a Clean Construction Demolition Debris (CCDD) facility. The PID was used to check for the presence of volatile organic vapors such as those present in petroleum products and solvents. The headspace analysis was performed by removing the screw lid from each sample jar and inserting the tip of the probe into the jar. The vapors that accumulated in the headspace of the jar were drawn into the probe and ionized by an ultraviolet light source. The concentration of these vapors in parts per million (ppm), relative to a Benzene-equivalent calibration standard, was displayed on the instrument display. The background level (or a 0.0 value noted on the logs) refers to the reading associated with the ambient air located at the test location, which in this case is the TSC office. The PID readings for each soil sample are noted on the attached boring logs in the column labeled "PID"; the readings are in units of parts per million (ppm).

Reference is made to the boring logs in the Appendix which indicate subsurface stratigraphy and soil descriptions, results of field and laboratory tests, as well as water level observations. Definitions of descriptive terminology are also included. While strata changes are shown as a definite line on the boring logs, the actual transition between material layers will probably be more gradual. It should be noted that in the absence of foreign substances it is often nearly impossible to distinguish disturbed samples of native soil from fill materials.

4.0 DISCUSSION OF TEST DATA

The following is a generalized description of the pavement materials and soil conditions found in the borings. The reader should refer to the individual boring logs in the Appendix of this report for more specific details.



Pavement materials were found at the surface of Borings 1, 2 and 5. The pavement materials at Borings 1 and 5 consisted of bituminous concrete binder and/or surface course(s) overlying granular base course material. At Boring 2, the pavement consisted of bituminous concrete underlain by Portland Cement (P.C.) Concrete and granular base course materials. The total thicknesses of the bituminous concrete layer(s) were estimated to vary from approximately 4 to 5 inches at the boring locations. The P.C. Concrete pavement layer in B-2, found below the surficial bituminous concrete, was approximately 5 inches in thickness. The bituminous concrete and/or P.C. Concrete pavement materials were underlain by a crushed stone granular base course layer, which was found to be approximately 3 to 7 inches in thickness. The above pavement thicknesses should be considered approximate as they were estimated from the disturbed sides of the augered boring holes at the test locations. Pavement core(s) should be taken if more exact measurements or detailed pavement material descriptions are required.

Man-made fill materials were found below the pavement materials in Boring 2. The fill materials were found extending to a depth of 8.0 feet below existing grade. The man-made fill materials found in B-2 consisted of silty clay soil with trace amounts of sand, gravel, brick fragments and bituminous concrete fragments. The unconfined compressive strengths of the clay fill were 0.75 and 0.82 tons per square foot (tsf) at a moisture content of 20 percent. The SPT "N" value of the fill was 5 blows per foot (bpf).

Native soils were encountered below the existing pavement materials, man-made fill or ground surface in the borings made at this site. These native soils generally consisted of layers of surficial topsoil, silty or clayey ("loamy") sands, silty or very silty clays and/or probable weathered rock. Topsoil was found at the surface of Borings 3, 4, 6 and 7. The thickness of the topsoil varied from 4 to 13 inches. The "loamy" sands were encountered in Borings 1, 5 and 6, extending to depths of 2.5 to 7.0 feet below existing grade. The "N" values of these silty or clayey sands varied from 2 to 7 bpf, characterizing them as very loose to loose.

The silty or very silty clays were found below the aforementioned materials in Borings 1, 3, 4 and 7, extending to depths of 8 to 12 feet below existing grade. Unconfined compressive strengths of these clays varied from 0.65 to 4.5 tsf, characterizing them as medium stiff to hard, at moisture contents of between 7 and 26 percent. The hard very silty clay with varying amounts of sand and gravel and occasional cobbles, found in the depth interval of 7.0 to 12.0 feet in Boring 7, is believed to be glacial till soil.



Probable weathered rock materials, as evidenced by high "N" values, light yellowish brown or tan coloration and/or abundant rock fragments found in the split spoon sampler, were encountered in all of the borings made for this project. The rock materials were found in the borings at and below depths varying from 2.5 to 12.0 feet below existing grade, extending to the boring termination depths in each boring. Split spoon sampler refusal, probably due to the presence of relatively sound bedrock, occurred in very dense rock materials at depths of 14.7 feet in B-2 and B-3 and 13.7 feet in B-5 and B-7. The rock in most of the borings was described as silty, sandy dolomite. The probable weathered rock in B-6 was described as a silty sand with some dolomite fragments and trace amounts of clay. The probable weathered rock materials found in the borings had "N" values varying from 7 bpf to 100 blows per 2 inches, characterizing them as loose to very dense. Please note that it is often difficult to determine whether the samples obtained from the boring process, or the observation of rock fragments in the sampler or high "N" values, indicate the presence of bedrock, boulders or soil deposits with rock fragments.

No free water was encountered in the borings to the depths drilled during drilling operations. These borings remained "dry" upon completion of drilling. Groundwater level observations may be found on the attached boring logs in the Appendix of this report.

As previously noted in this report, headspace analysis was performed on each soil sample obtained from the borings using a Mini-RAE photo-ionization detector (PID). The vapors that accumulated in the headspace of each sample jar were measured with the PID probe. The concentration of these vapors in parts per million (ppm), relative to a Benzene-equivalent calibration standard, was displayed on the instrument display; the results are shown on the attached boring logs in the column headed PID. Three (3) samples from Borings 1 and 5 of the total eighteen (18) samples tested exhibited PID readings above the background concentration of 0.0 ppm. Concentrations above the background level varied from 0.4 to 0.8 ppm. All other/remaining samples tested were analyzed to be at or below the background level. The background level (or a 0.0 value noted on the boring logs) refers to the reading associated with the ambient air located at the test location, which in this case is the TSC office.



5.0 ANALYSIS AND RECOMMENDATIONS

Summarized by boring location in the following table are the existing ground surface elevations, the proposed bottoms of sewer pipe elevations and depths in feet below existing grade (provided by RRWRD), the elevations/depths to the top of probable weathered rock materials and descriptions of the materials found at or near the proposed bottoms of the sewer pipes.

Boring Number	Existing Ground Surface	Approximate Bottom of Proposed Sanitary Sewer Pipe		Elevation/Depth to Top of Probable Weathered Bedrock Material		Material at or near Bottom of Sanitary Sewer Pipe
	Elevation	Elevation	Depth in Feet below existing grade	Elevation	Depth in Feet below existing grade	
B-1	794.1	781.8	12.3	782.1	12.0	Stiff silty CLAY, very moist over very dense probable weathered Bedrock, moist
B-2	801.7	787.1	14.6	793.7	8.0	Very dense probable weathered Bedrock, moist
B-3	807.8	792.6*	15.2*	799.8	8.0	*Very dense probable Bedrock
B-4	812.6	801.6	11.0	801.6	11.0	Medium stiff silty CLAY, very moist over very dense probable weathered Bedrock, moist
B-5	782.2	770.6	11.6	779.7	2.5	Medium dense to very dense probable weathered Bedrock, moist



Boring Number	Existing Ground Surface	A March 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Elevation/Depth to Top of Probable Weathered Bedrock Material		Material at or near Bottom of Sanitary Sewer Pipe
1	Elevation	Elevation	Depth in Feet below existing grade	Elevation	Depth in Feet below existing grade	
B-6	788.3	776.2	12.1	781.3	7.0	Medium dense to loose silty SAND with some dolomite fragments, trace clay - probable weathered Bedrock, moist to very moist
B-7	794.1	780.7	13.4	782.1	12.0	Very dense probable weathered Bedrock, moist

* - Depth/Elevation below boring termination depth/elevation - this table assumes similar materials are present at bottom of pipe depth/elevation, as boring did not extend to planned/expected depth/elevation.

Based on information provided by RRWRD, it is understood that, generally, the bottoms of the sewers will vary between approximately 11 and 16 feet below existing grade at the locations of the borings. Depending on final grades for the sewers, it is anticipated that the excavations for the sewer pipes will encounter layers of surficial pavement materials or topsoil underlain by mostly medium stiff clay fill, very loose to loose "loamy" sands and/or medium to hard native clay soils overlying loose to very dense probable weathered rock materials.

Medium stiff silty clay soil, exhibiting marginal stability characteristics, was found at or near bottom of sewer pipe depth/elevation in Boring 4. Marginal clays typically exhibit low unconfined compressive strengths (Qu/Qp <1.0 tsf). These low strength clays may need to be undercut 6 to 24 inches, as determined in the field, and replaced with additional crushed stone bedding. This should provide adequate bearing capacity as well as a stable platform for pipe installation.



Stiff silty clay was encountered at or near anticipated bottom of sewer level in Boring 1. This stiff clay soil appears to be suitable for support of the sanitary sewer pipes.

This geotechnical exploration indicated the presence of probable weathered bedrock in the borings, beginning at depths varying from 2.5 to 12 feet below existing grade. Loose to very dense probable weathered rock materials were encountered in all seven (7) borings for this project at and near the bottoms of the sewer pipes. While the probable rock materials are considered suitable for pipe support, the presence of the bedrock may cause difficulties during excavations for the sewers or for other deep excavations. The bottom of the sewer pipe is anticipated to be at, or very near, the surface of the probable weathered rock at Boring 4. The bottoms of the sewer pipes at Borings 1 - 3 and 5 - 7 are expected to be approximately 0.5 to 9 feet below the surface/top of the probable bedrock at these locations. Some difficult rock excavation may be expected in some areas of the project site. It should be noted that our ability or lack thereof to penetrate the probable weathered rock with our drill rig and augers may have little relationship to the ease of excavation or ripability experienced by excavation or other difficult soil/rock removal equipment. Where appropriate or practical/possible, it may be beneficial to perform test pits to evaluate the rock and soil conditions for excavating purposes.

Hard very silty clay glacial till soil, containing sand, gravel and occasional cobbles, was encountered in the depth interval of 7.0 to 12.0 feet in Boring 7. The hardness and presence of cobbles in the hard/very dense glacial till deposit my cause some difficulties with excavations extending into this soil.

Although groundwater was not encountered in the borings to the depths drilled, accumulations of run-off water and varying amounts of groundwater seepage into and at the base of excavations should be expected to occur during sanitary sewer construction and site work. The contractor should be prepared to remove these accumulations of groundwater by appropriate methods for the soil conditions present.

To the extent that laborers will work in the excavations, protection against cave-ins must be provided. It should be noted that "loamy" sand deposits were found at varying depths in several of the borings. These materials are prone to sloughing and caving into excavations. Protective



measures for worker safety and loss-of-ground in surrounding properties should include the use of safety trench boxes, sheeting and bracing, or other appropriate methods. In this regard, the contractor must be responsible for their construction means and methods and for meeting OSHA requirements, local regulations and/or project specifications with respect to the safety of his work force.

The clay and "loamy" sand soils observed in the borings do not appear to be well-suited for use as backfill material. The inorganic, moist to very moist silty or very silty clays found in the borings may become unstable under vibratory compaction. Clay backfill is not recommended below settlement sensitive structures, pavements or other features. Also, "loamy" sands containing a significant amount of clay and/or silt may also become unstable under vibratory compaction, particularly if they are or become significantly wet of the optimum moisture content for compaction. The weathered rock materials encountered in the borings may be used as backfill, so long as a dense and stable state can be achieved. If weathered rock materials are used as backfill in the sewer trenches, it is recommended that large pieces of rock (or clay clumps) be removed from the backfill material prior to placement or sufficiently broken up into pieces no greater than approximately 6 inches in diameter.

Lateral earth pressures for permanent underground structures will be dependent on the type of backfill used and groundwater levels. Equivalent fluid pressures are given for cohesive and granular backfills, assuming at-rest (Ko) earth pressures. The values shown represent the increase in lateral pressure over a 1.0 foot distance measured in pounds per square foot (psf/ft).

EQUI	EQUIVALENT FLUID PRESSURE (PSF/FT)			
BACKFILL	ABOVE	BELOW		
TYPE	WATER	WATER		
	TABLE	TABLE		
Granular	50	90		
Cohesive	65	100		



6.0 CLOSURE

This report includes information regarding subsurface conditions and general recommendations and considerations for the proposed sewer system. It should be noted that means and methods of construction are the responsibility of the contractor. It is recommended that testing and observation services be provided by Testing Service Corporation personnel during construction.

The analysis and recommendations submitted in this report are based upon the data obtained from the seven (7) soil borings performed at the locations indicated on the Boring Location Plan. This report does not reflect any variations which may occur between or beyond these borings, the nature and extent of which may not become evident until during the course of construction. If variations are then identified, recommendations contained in this report should be re-evaluated after performing on-site observations.

We are available to review this report with you at your convenience.

Prepared by:

062-04762

REGISTERED PROFESSIONAL ENGINEER

Steven R. Koester, P.E.

Houl Loest

Vice President

Jeffrey L. Martin Registered Professional Engineer

Illinois No. 062-047621

JLM/rb



GENERAL CONDITIONS

Geotechnical and Construction Services

TESTING SERVICE CORPORATION

- 1. PARTIES AND SCOPE OF WORK: If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client. TSC shall have no duty or obligation other than those duties and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party. Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.
- 2. SCHEDULING OF SERVICES: The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.
- 3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.
- 4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this Agreement. Unless otherwise agreed in writing, TSC's responsibility with respect to underground utility locations is to contact the Illinois Joint Utility Locating Information for Excavators for the location of public, but not private, utilities.
- 5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C.§ 6901, et, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.
- 6. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to

perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

- 7. DOCUMENTS AND SAMPLES: Client is granted an exclusive license to use findings and reports prepared and issued by TSC and any sub-consultants pursuant to this Agreement for the purpose set forth in TSC's proposal provided that TSC has received payment in full for its services. TSC and, if applicable, its sub-consultant, retain all copyright and ownership interests in the reports, boring logs, maps, field data, field notes, laboratory test data and similar documents, and the ownership and freedom to use all data generated by it for any purpose. Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.
- 8. TERMINATION: TSC's obligation to provide services may be terminated by either party upon (7) seven days prior written notice. In the event of termination of TSC's services, TSC shall be compensated by Client for all services performed up to and including the termination date, including relmbursable expenses. The terms and conditions of these General Conditions shall survive the termination of TSC's obligation to provide services.
- 9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.
- 10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of SC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

- 11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.
- 12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.
- 13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services conditions 150's right to receive payment on its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the necessary to the properties between the parties. the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services. Glient shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

APPENDIX

UNIFIED CLASSIFICATION CHART
LEGEND FOR BORING LOGS

Testing Service Corporation Unified Classification Chart



	CF	RITERIA FOR ASSIGNING GROUP S	YMBOLS AND	so	DIL CLASSIFICATION
	GROUP NAMES USING LABORATORY TEST °		Group Symbol	GROUP NAME ^b	
	GRAVELS	CLEAN GRAVELS	^C _u ≥ 4 and 1 ≤ ^C _C ≤ 3 ^e	GW	Well-graded gravel ^f
200	More than 50% of	less than 5% fines ^c	^c _u < 4 and/or 1 > ^c _c > 3 °	GP	Poorly-graded gravel ^f
SOIL ON No	coarse fraction retained on No. 4	GRAVELS WITH FINES	Fines classify as ML or MH	GM	Silty gravel f, g, h
AINEC ained /e	sieve	more than 12% fines ^c	Fines classify as CL or CH	GC	Clayey gravel f, g, h
- GR % ret sie	SANDS	CLEAN SANDS less than 5% fines d	c _u ≥6 and 1 ≤ c _c ≤3 °	sw	Well-graded sand ¹
an 50	. 50% or more of coarse	The same of the sa	c _u < 6 and/or 1 > c _c > 3 °	SP	Poorly-graded sand I
More than 50% of coarse fraction retained on No. 4 sieve SANDS SANDS SANDS SANDS 50% or more of coarse fraction passes No. 4 sieve	SANDS WITH FINES more than 12% fines ^d	Fines classify as ML or MH	SM	Silty sand ^{g, h, f}	
		Fines classify as CL or CH	sc	Clayey sand ^{g, h, f}	
थ SILTS & CLAYS		PI > 7 or plots on or above "A" line j	CL	Lean clay k, i, m	
oo sie	Liquid limit less than	Inorganic	PI < 4 or plots below "A" line j	ML	Silt k, l, m
No. 2	50%	Organic	Liquid limit – oven dried < 0.75	OL	Organic clay ^{k, l, m, n} Organic sill ^{k, l, m, o}
d the			Liquid limit – not dried		Organic sit
SILTS & CLAYS Liquid limit less than 50% SILTS & CLAYS Liquid limit 50% or more		PI plots on or above "A" line	СН	Fat clay ^{k, l, m}	
	Inorganic	PI plots below "A" line	МН	Elastic silt k, l, m	
	Organic	Liquid limit – oven dried < 0.75	ОН	Organic clay ^{k, l, m, p} Organic silt ^{k, l, m, q}	
Hia	hly organic soils	Primarily organic m	natter, dark in color, and organic odor	PT	Peat

Based on the material passing the 3-inch (75-mm) sieve.
 If field sample contained cobbles and/or boulders, add "with cobbles and/or boulders" to group name

c. Gravels with 5 to 12% fines required dual symbols

GW-GM well graded gravel with silt GW-GC well graded gravel with clay GP-GM poorly graded gravel with silt

GP-GC poorly graded gravel with clay d. Sands with 5 to 12% fines require dual symbols SW-SM well graded sand with silt SW-SC well graded sand with clay

SP-SM poorly graded sand with silt SP-SC poorly graded sand with clay e. $^{\text{C}}_{\text{u}} = D_{\text{eo}}/D_{10} \,\,^{\text{C}}_{\text{c}} = \frac{(\mathcal{O}_{30})^2}{|\mathcal{O}_{10} \times \mathcal{O}_{60}|}$

f. If soils contains ≥ 15% sand, add "with sand" to group name.

f. If soils contains ≥ 15% sand, add with sand to group hame.
g. If fines classify as CL-ML, use dual symbol GC-GM, SC-SM
h. If fines are organic, add "with organic fines" to group name
i. If soils contains ≥ 15% gravel, add "with gravel" to group name
j. If Atterberg Limits plot in hatched area, soil is a CL – ML, silty clay

k, If soils contains 15 to 29% plus No. 200, add "with sand" or "with gravel"

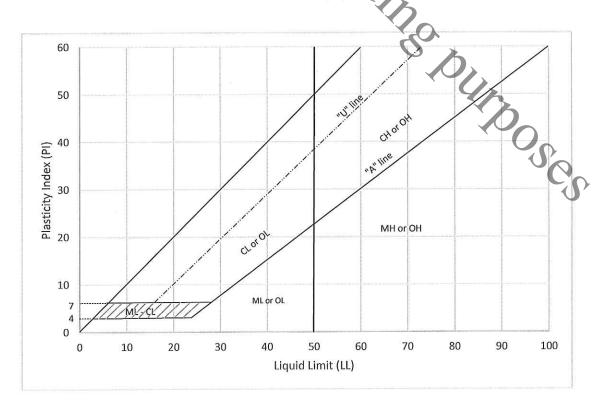
k_s If soils contains 15 to 29% plus No. 200, add "with sand" or "with gravel" whichever is predominant
1. If soil contains ≥ 30% plus No. 200, predominantly sand, add "sandy" to group name.

m. If soils contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name

n. Pl ≥ 4 and plots on or above "A" line

o. Pl ≥ 4 and plots below "A" line

p. Pl plots on or above "A" line
q. Pl plots below "A" line



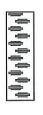


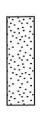
TESTING SERVICE CORPORATION

LEGEND FOR BORING LOGS



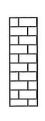












FILL

TOPSOIL

PEAT

GRAVEL

SAND

SILT

CLAY

DOLOMITE

SAMPLE TYPE

SS = Split Spoon ST = Thin-Walled Tube

A = Auger

MC = Macro-Core (Geo Probe)

WATER LEVELS:

While Drilling✓ End of Boring✓ 24 Hours

FIELD AND LABORATORY TEST DATA

N = Standard Penetration Resistance in Blows per Foot

WC = In-Situ Water Content

Qu = Unconfined Compressive Strength in Tons per Square Foot

* Pocket Penetrometer Measurement: Maximum Reading = 4.5 tsf

 γ_{DRY} = Dry Unit Weight in Pounds per Cubic Foot

SOIL DESCRIPTION

MATERIAL
BOULDER
COBBLE
Coarse GRAVEL
Small GRAVEL
Coarse SAND
Medium SAND
Fine SAND
SILT and CLAY

PARTICLE SIZE RANGE

Over 12 inches
12 inches to 3 inches
3 inches to 3¼ inch
3¼ inch to No. 4 Sieve
No. 4 Sieve to No. 10 Sieve
No. 10 Sieve to No. 40 Sieve
No. 40 Sieve to No. 200 Sieve
Passing No. 200 Sieve

COHESIVE SOILS

CONSISTENCY	Qu (tsf)
Very Soft	Less than 0.25
Soft	0.25 to 0.5
Medium Stiff	0.5 to 1.0
Stiff	1.0 to 2.0
Very Stiff	2.0 to 4.0
Hard	4.0 and over

COHESIONLESS SOILS

COLLEGIOIATE	JOUILO
RELATIVE DENSITY	N (bpf)
Very Loose	0-3
Loose	4 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 and over
17	

MODIFYING TERM

Ī	Trace	
Ì	Little	
	Some	

PERCENT BY WEIGHT

~		٠,	
	1	-	10
	10	-	20
	20) -	35

PROJECT West State Street San. Sewer, Capital Project No. 2014, Rockford, IL. Rock River Water Reclamation District, Rockford, Illinois CLIENT 11-4-20 11-4-20 **BORING** DATE STARTED DATE COMPLETED WATER LEVEL OBSERVATIONS **ELEVATIONS GROUND SURFACE** 794.1 ▼ WHILE DRILLING Dry Dry 780.1 AT END OF BORING **END OF BORING** 24 HOURS SAMPLE DEPTH SOIL DESCRIPTIONS WC Qu PID ELEV. NO. TYPE 5" Bituminous Concrete Pavement 0.4 793.7 7" CRUSHED STONE Base Course 1.0 793.1 Loose orangish-brown silty fine to medium SAND, trace clay, moist (SM) SS 0.0 FEET 787.1 ZI SURFACE 8.0 Stiff pinkish-brown to brown silty CLAY, trace sand and small gravel, very moist (CL/CH) SS 9 24.4 1.25* DISTANCE BELOW 12.0 782.1 Very dense light yellowish-brown to tan silty, sandy DOLOMITE, moist (probable weathered rock) 0.0 SS 62 6.0 Approximate unconfined compressive 15 strength based on measurements with a calibrated pocket penetrometer. TSC_EOB 91836.GPJ TSC_ALL.GDT 11/16/20 20 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. End of Boring at 14.0' DRILL RIG NO. 334

		PROJECT	West S	tate St	treet S	San. Se	ewer,	Capita	l Projec	ct No. 2014, Rockford, IL.	FEA
		CLIENT	Rock F	River W	later l	Reclan	nation	Distri	ct, Roc	kford, Illinois	
ļt.		BORING	2		DAT	E STAR	TED _	11-4-	20	DATE COMPLETED 11-4-20	JOB L-91,836
					ATION	S					EVEL OBSERVATIONS
		GROUND:			1.7 7.0					▼ WHILE DRILLING✓ AT END OF BORING	Dry Dry
		END OF B	ORING		7.0					▼ 24 HOURS	Diy
		H ERY								V 2-11100NC	¥
		LENGTH	SAMPLE NO. TYP	_ N	WC	Qu	PID	DEPTH	ELEV.	SOIL DESCRIPTI	ONS
	0-							0.3	801.4	4" Bituminous Concrete Pay	
	~							0.8		5" P. C. Concrete Pavement 3" CRUSHED STONE Base	
IN FEET	5-		1 55	50	20.0	0.82 0.75*	0.0	0		FILL - Brown and dark brow trace sand, gravel, brick frag bituminous fragments, very	
DISTANCE BELOW SURFACE	10-		2 88	123/11			0.0	8.0	793.7	Very dense light yellowish-b sandy DOLOMITE, moist (probable weathered rock) * Approximate unconfined strength based on measu calibrated pocket penetro	compressive
SC_EOB 91836,GPJ TSC_ALL.GDT 11/16/20	20-	RIG NO. 3	334		approxi	mate bour	ndaries b	posits repr	oil types;	calibrated pocket penetro Split-spoon refusal at a dept	

×

	PROJEC	T West Stat	e Street S	an. Sew	er, C	Capital	Projec	et No. 2014, Rockford, IL
	CLIENT	Rock Rive	er Water R	Reclamat	ion	Distric	t, Roc	kford, Illinois
21.1	BORING	3	DATE	STARTE)	11-4-2	20	DATE COMPLETED 11-4-20 JOB L-91,836
	CDOLINI	SURFACE	ELEVATIONS 807.8	3				WATER LEVEL OBSERVATIONS ▼ WHILE DRILLING Dry
	END OF		793.1					✓ AT END OF BORING ✓ Dry
	H .							▼ 24 HOURS
	F-1:	SAMPLE NO. TYPE	N WC	Qu P	PID [DEPTH	ELEV.	SOIL DESCRIPTIONS
	0	11011112				0.5	807.3	Dark brown clayey TOPSOIL, very moist
IN FEET	5	1 ss	6 25,9	2.13 2.0*	0.0	0.5	799.8	Stiff to very stiff brown silty CLAY, moist (CL)
DISTANCE BELOW SURFACE	10-1-		00/2" 4.8		0.0			Very dense light brown to tan silty, sandy DOLOMITE, moist (probable weathered rock)
TSC_EOB 91836.GPJ TSC_ALLGDT 11/16/20	15— — — — —							* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Split-spoon refusal at a depth of 14.7 feet.
C_EOB	20	224	Division I approxim	ines betweer ate boundar	n depo ies be	osits repre tween soi	sent I types;	End of Boring at 14.7
TS(DRILL RIG NO.	334		e transition r				

	11100201	VVCS	ot ota	ite or	reet	oan. oc	we,	Capital	Frojec	ct No. 2014, Rockford, IL
	CLIENT	Roc	k Riv	er W	ater l	Reclam	ation	Distric	t, Roc	kford, Illinois
**	BORING	4			DAT	E START	ED _	11-4-2	20	DATE COMPLETED 11-4-20 JOB L-91,836
	ODOLING.	01155			ATION	S				WATER LEVEL OBSERVATIONS ▼ WHILE DRILLING
	GROUND :		-	812 799						✓ AT END OF BORING Dry
	ZX	Oranic	_	700	010				E 3)	▼ 24 HOURS
	LENGTH	SAMI		N	WC	Qu	PID	DEPTH	ELEV.	SOIL DESCRIPTIONS
0-										Black clayey TOPSOIL, very moist (OL)
5-		1	ss	G	17.9	2.06 2.5*	0.0	0.7	811.9	Very stiff brown silty CLAY, trace fine sand and roots, moist (CL)
DISTANCE BELOW SURFACE IN FEET 0 1		2	SS	4 50	21.0	0.65 0.75*	0.0	11.0	805.6	Medium stiff reddish-brown silty CLAY, trace sand, very moist (CL/CH) Very dense light yellowish-brown to tan silty, sandy DOLOMITE, moist (probable weathered rock)
15 — 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.					Division	lines betw	/een dep	osits repre	esent	* Approximate uncomfined compressive strength based on measurements with a calibrated pocket penetrometer.

		PROJECT	We	st Sta	ite St	reet S	San. Se	ewer,	Capital	Projec	ct No. 2014, Rockford, IL	1
		CLIENT	Roo	ck Riv	er W	ater I	Reclam	ation	Distri	ct, Roc	kford, Illinois	
		BORING	5	_		DAT	E START	red _	11-4-	20	DATE COMPLETED 11-4-20 JOB L-91,836	
						ATION	S				WATER LEVEL OBSERVATIONS	
		GROUND			78						WHILE DRILLING Dry✓ AT END OF BORING Dry	
		END OF B	ORIN	G _	76	6.5	_				▼ 24 HOURS	_
		H ZERS									V 2411001.0	
¥	0	LENGT	SAM NO.	MPLE TYPE	N	wc	Qu	PID .	DEPTH	ELEV.	SOIL DESCRIPTIONS	
	0-								0.4	781.8	5" Bituminous Concrete Pavement 5" CRUSHED STONE Base Course	
	-		×						0.8	781.4	Light brown silty SAND (SM)	
	_								2.5	779.7		
	5—		1	SS	.20	6.4	C	0.8				
IN FEET	-							7	2	>	Medium dense to very dense light yellowish-brown to tan silty, sandy DOLOMITE, moist to slightly moist (probable weathered rock)	
BELOW SURFACE	10—		2	SS	79	5.1		0.4		0/0	(probable weathered rock)	
DISTANCE BE	-										SO DUIZO	
	-										4/2	
			3	SS	100/2"	1.3					70	
	15—									(6)	Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.	
-	_										Split-spoon refusal at a depth of 13.7 feet.	
1/16/ZL												
ALL.GD1 11/16/24	-										··· · · · · · · · · · · · · · · · · ·	
ALL.G												
))	-											
	19-14											
Joe 675.655 B 20.												
	20 —	RIG NO. 3	34			approxir	nate boun	daries b	oosits repre etween so	il types;	End of Boring at 13.7'	_

BORING 6 DATE STARTED 11-4-20 DATE COMPLETED 11-4-20 JOB L-91,836 STARTED STARTED			-								ct No. 2014, Rockford, IL
GROUND SURFACE 788.3 789.3 773.3 V WHILE DRILLING Dry AT END OF BORING SAMPLE N WC Qu PID DEPTH ELEV. SOIL DESCRIPTIONS Black clayey TOPSOIL, very moist (OL) Very loose brown clayey SAND, trace silt with sandy clay seams, very moist (SC/CL) Very loose brown clayey SAND, trace silt with sandy clay seams, very moist (SC/CL) 7.0 781.3 Water Level Observations Dry V 4 HOURS Water Level Observations Dry V 24 HOURS Black clayey TOPSOIL, very moist (OL) Wedfum dense to loose light yellowish-brown to tay silt SAND, some dolomite fragments, trace day, moist to very moist (SM) (probable weathered rock) Approximate unconfined compressive		CLIENT		CK KI	ver v				98 N. SA SE		
Solid Descriptions Sample N WC Qu PID DEPTH ELEV. Solid Descriptions		GROUND S	SURF	-	78	ATION 8.3			119-	20	WATER LEVEL OBSERVATION ▼ WHILE DRILLING
Black clayey TOPSOIL, very moist (OL) 1.1 787.2 Very loose brown clayey SAND, trace silt with sandy clay seams, very moist (SC/CL) 7.0 781.3 Medium dense to loose light yellowish-brown to tan silty SAND, some dolonite fragments, trace elay, moist to very moist (SM) (probable weathered rock) * Approximate unconfined compressive		NGTH		77-7-7-7	N	WC	Qu	PID	DEPTH	ELEV.	SOIL DESCRIPTIONS
Very loose brown clayey SAND, trace silt with sandy clay seams, very moist (SC/CL) 7.0 781.3 2 SS 17 7.7 0.0 Medium dense to loose light yellowish-brown to fan silty SAND, some dolomite fragments, trace day, moist to very moist (SM) (probable weathered rock) * Approximate unconfined compressive	0-		110.								Black clayey TOPSOIL, very moist (OL)
2 SS 17 7.7 0.0 Medium dense to loose light yellowish-brown to tan silty SAND, some dolomite fragments, trace clay, moist to very moist (SM) (probable weathered rock) 3 SS 7 10.9 0.0 * Approximate unconfined compressive	5—		1	ss	Ç	19.3	Co	0.0			Very loose brown clayey SAND, trace silt with sandy clay seams, very moist (SC/CL)
I I I I I I I I I I I I I I I I I I I	10-		2	SS	17	7.7		0.0	*	5	trace clay mojet to very mojet (SM)
I I I I I I I I I I I I I I I I I I I	-		3	SS	7	10.9		0.0			
	15— - - -	- S:3:4 V									* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.
Division lines between deposits represent approximate boundaries between soil types; End of Boring at 15.0'	20-										End of Boring at 15 0'

											ct No. 2014, Rockford, IL
(6)		CLIENT		ck Ri	ver W				21 10 10 10		kford, Illinois
		BORING	<u>7</u>		ELEV/	_ DAT 'ATION	E STAR IS	TED —	11-4-	20	DATE COMPLETED 11-4-20 JOB L-91,836 WATER LEVEL OBSERVATIONS
		GROUND	SURI	FACE _		4.1					₩ WHILE DRILLING Dry
		END OF B	ORIN	IG _	78	0.4					AT END OF BORING Dry
		TH VERY									▼ 24 HOURS
		LENGTH		TYPE	N	WC	Qu	PID	DEPTH	ELEV.	SOIL DESCRIPTIONS
	0-		110.						0.3	793.8	Dark brown clayey TOPSOIL, very moist
	5—		1	ss		21.8	1.09	0.0			Medium stiff to stiff light brown and brown silty CLAY, trace sand, very moist (CL)
DISTANCE BELOW SURFACE IN FEET	10		2	SS	50/3" 100/2"	7.3 5.4	4.5*	0.0	7.0	787.1	Hard pinkish-brown very silty CLAY, some sand, little to some gravel, occasional Cobbles with silty sand seams, moist (CL-ML/SM) Very dense light yellowish-brown to tan silty, sandy DOLOMITE, moist (probable weathered rock)
ECB 91838,GFJ 15C_ALL.GD1 11/16/20	15—						lines helv	yeen der	osits repre	esent	* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. Split-spoon refusal at a depth of 13.7 feet.
ו מ		RIG NO. 3	34	_	- 5	approxir	nate boun	daries b	osits repre etween soi oe gradual.	I types;	End of Boring at 13.7'

