

**Four Rivers Sanitation Authority
Rockford, Illinois**

Bidding Requirements and Contract Forms

for

2023 Service Lateral Lining

Capital Project No. 2433

Four Rivers Sanitation Authority Rockford, Illinois

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

for

2023 Service Lateral Lining

Capital Project No. 2433

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Section I
Bidding Requirements

Not to be used for bidding purposes

Article 1 — Notice to Bidders

The Four Rivers Sanitation Authority (FRSA) will receive signed and sealed bids for the 2023 Service Lateral Lining, Capital Project No. 2433, at the Steve Graceffa Administration Building (Administration Building) at 3501 Kishwaukee Street, Rockford, Illinois until 10:00 a.m. on Tuesday, August 22, 2023, at which time and place responsive / responsible bids will be publicly opened and read aloud.

The 2023 Service Lateral Lining, Capital Project No. 2433 project consists of the rehabilitation of 175 clay sanitary sewer services by lining with cured-in-place pipe (CIPP). Work also includes traffic control, restoration, and all other ancillary items as outlined in the specifications.

Bidder's attention is called to Article 2 – Instructions to Bidders 3.8 requirements for Statement of Qualifications.

All Project work shall be completed by March 31, 2024. 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 FRSA 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 FRSA website at fourrivers.illinois.gov.

All construction shall be done in accordance with specifications on file with FRSA, including the *General Provisions and Technical Specifications for Sanitary Sewer Construction, Four Rivers Sanitation Authority* (Current Edition).

Each Proposal must be accompanied by the FRSA 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 FRSA's consent for a period of sixty (60) days after the scheduled closing time for receipt of bids.

FRSA 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 FRSA.

Dated this 28th day of July, 2023.



BY: Timothy S. Hanson, Executive Director

Article 2 — Instructions to Bidders

1 General

1.1 Scope and Intent

This section of the Contract Documents provides 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 contradictions 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, Four Rivers Sanitation Authority (FRSA) 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

- A. Public Act 100-1177 (820 ILCS 130/) entitled the "Prevailing Wage Act" 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 FRSA 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.
- B. Public Act 83-1030 (30 ILCS 565/) entitled the "Steel Products Procurement Act" requires that steel products used or supplied in performance of this Contract or subcontract must be manufactured or produced in the United States with three exceptions.

The provisions of this Section shall not apply:

1. Where the Contract involves an expenditure of less than \$500.
 2. Where the executive head of the public agency certifies in writing that
 - a) the specified products are not manufactured or produced in the United States in sufficient quantities to meet the agency's requirements, or
 - b) obtaining the specified products, manufactured or produced in the United States would increase the cost of the Contract by more than 10%.
 3. When its application is not in the public interest.
- C. Public Act 96-929 (30 ILCS 570/) entitled the "Illinois Workers on Public Works Act" 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.

D. Public Act 101-0221 entitled the “Workplace Transparency Act” requires that any party to a contract adopt and promulgate written sexual harassment policies that include, as a minimum, the following information:

1. the illegality of sexual harassment
2. the definition of sexual harassment under Illinois State law
3. a description of sexual harassment, utilizing examples
4. my (our) organization's internal complaint process including penalties
5. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission
6. directions on how to contact the Department and the Commission
7. protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act

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

E. 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.

F. The Contractor for this project must comply with the Occupational Safety and Health Act.

G. The Contractor for this project must comply with the Federal Drug-Free Workplace Act.

H. 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 must comply with Public Act 96-1416 and be responsible for the certifications and any fees associated with the disposal at a CCDD fill site.

1. In the event that contaminated soil is uncovered on the project, the Contractor must notify FRSA immediately. Any extra costs resulting from the presence of contaminated soil must be evaluated in accordance with FRSA 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 Four Rivers Sanitation Authority (FRSA) 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

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.

2.3 Bidder Prequalification

Prospective bidders who fail to submit pre-qualification information for approval prior to the bid opening will be rejected as unqualified. Pre-qualification submittals shall be presented to FRSA's Director of Engineering on or before **3:00 p.m. on Wednesday, August 16, 2023**; **FRSA will review these submittals and will advise each applicant whether they are determined pre-qualified on or before Friday, August 18, 2023.**

Only bids from pre-qualified manufacturers and installers using pre-qualified products and methods will be opened and read. Bids submitted on products or from manufacturers/installers that have not been pre-qualified will be returned unopened. Bid Proposals shall be clearly labeled on the bid envelope with Contractor's name and CIPP manufacturer.

Bidders that have previously pre-qualified or have satisfactorily completed lateral lining work for FRSA are considered pre-qualified provided methods and materials as previously employed are the same as the proposed methods and materials specified herein.

The following Contractors are pre-qualified to bid this project:

Contractor	CIPP Product
BLD Services, LLC	BLD Service Connection Seal & Lateral
Performance Pipelining, Inc.	LMK T-Liner
MBI Pipelining Services	LMK T-Liner
LMK Technologies	LMK T-Liner
National Watermain Cleaning Company	Trelleborg EPROS

In order to be considered pre-qualified to bid on this project, the product, manufacturer and contractor must each demonstrate, to FRSA's satisfaction, that they meet the following requirements:

- A. The bidder shall document a minimum of two (2) years of experience installing CIPP laterals of similar length and configuration as this project and shall have successfully installed a minimum of 5,000 CIPP laterals in wastewater collection systems. The manufacturer's system shall have a minimum of five (5) years of installation with a minimum of 10,000 CIPP laterals successfully installed.**
- B. Submittal of FRSA-approved Third Party test data supporting the following product performance requirements. Product samples used for testing shall be similar to those proposed for installation. Test samples shall be prepared so as to simulate installation methods and service conditions of the product.**

- Chemical resistance – Test shall be conducted in accordance with ASTM F 1216, and meet the minimum guidelines listed therein.
- Long-term properties – Tests to confirm 50-year design values shall be conducted in accordance with ASTM D2990. As an alternative, third party testing of a 10,000-hour external loading test, conducted in a wet environment to simulate field conditions, can be used to verify long-term design values.
- External hydrostatic pressure testing – Testing of external hydrostatic loading capacity of at least ten (10) restrained pipe samples to verify design techniques.
- Contractor / Manufacturer shall demonstrate structural properties meet or exceed the requirements listed below by providing test results from an independent laboratory from three (3) recent lining projects. A minimum of twelve (12) test results must be submitted.

STRUCTURAL PROPERTIES

Property	Minimum Value	ASTM Test Method
Flexural Strength	4,500 PSI	D790
Flexural Modulus	250,000 PSI	D790

- C. The Contractor shall provide a list of personnel working on this project, including previous project experience of the Foreman / Job Superintendent.
- D. The manufacturer and/or contractor shall submit a copy of the license or certificate verifying the manufacturer's or licensor's approval of the installer.

The final decision to accept or reject the product/manufacturer/installer lies solely with FRSA.

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 Engineering Director of the Four Rivers Sanitation Authority, 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

Prospective bidders are forewarned that they must comply with all laws of the United States Government, State of Illinois, all ordinances and regulations of FRSA 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 work items 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 more or less 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 items 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 performed, prospective bidders are referred to the Contract Documents, which may be examined or obtained at the office of FRSA.

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 FRSA'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 Four Rivers Sanitation Authority, 3501 Kishwaukee Street, Rockford, Illinois, 61109 and be sent preferably by certified mail. FRSA will not accept facsimile generated bids.

3.6 Bid Security

Each Proposal must be accompanied by the FRSA 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 FRSA's Bid Bond Form included in the bid packet must be used. No other Bid Bond form may be substituted.

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

3.7 Affidavit of Compliance

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

3.8 Statement of Qualifications

Each Proposal must be accompanied by a Statement of Qualifications certifying that the bidder is registered to do business in the State of Illinois 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 a minimum of two (2) years of experience installing CIPP laterals of similar length and configuration as this project and shall have successfully installed a minimum of 5,000 CIPP laterals in wastewater collection systems. The manufacturer's system shall have a minimum of five (5) years of installation with a minimum of 10,000 CIPP laterals successfully installed.** FRSA reserves the right to request additional information, as needed, to evaluate bids prior to making an award.

3.9 Comparison of Proposals

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

3.10 Acceptance of Bids and Basis of Award

The contract will be award, if at all, to the lowest responsive, responsible bidder. No bidder may withdraw his bid after the scheduled closing time for receipt of bids, for at least sixty (60) days. Four Rivers Sanitation Authority also reserves the right to reject any of all bids.

The bidder whose proposal is accepted will be issued a Notice of Award by the FRSA Executive Director. Within ten (10) days of issuance of a Notice of Award by the FRSA Executive Director, the successful bidder shall enter into a written contract for the performance of the Proposal work and shall furnish all required bonds and insurance certificates upon being served such Notice, personally, by mailing, or via email.

If the bidder does not comply with the Notice of Award, the FRSA will issue a Deficiency Notice. 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 Deficiency Notice, the amount of his deposit shall be forfeited and shall be retained by FRSA 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 FRSA 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 meet with the scheduled completion date for the project;
- C. Have a satisfactory record of integrity, judgment, and performance, including, in particular, any prior performance on contracts from FRSA;
- 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

FRSA 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 FRSA 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. FRSA reserves the right to reject any and all bids and to accept the bid which they deem most favorable to the interest of FRSA 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 FRSA's issuance of an award letter, the Contractor shall provide documentation to prove that he has obtained all required insurance and bonds. FRSA shall be the sole judge as to the acceptability of any such proof.

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

3.12.1 General

The Contractor shall ensure that:

- A. All insurance policies shall be specific to the project.
- B. The insurance certificate shall state: This certifies that the insurance coverage meets or exceeds that required for the 2023 Service Lateral Lining, Capital Project 2433.
- C. FRSA shall be named as Additional Insured in all policies; this shall include the Owners' Contractors' Protective Policy option.
- D. All completed operations coverages and bonds shall remain in force for a period of two (2) years following acceptance of the Project and completed operations shall stay in force for two (2) years following completion of the Project.

3.12.2 Insurance

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

- A. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit. The Contractor shall provide "XCU" coverage.
- B. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage including coverages for owned, hired or non--owned vehicles, as applicable.
- C. Workers' Compensation and Employers Liability: Workers' Compensation limits as required by statute and Employers Liability limits of \$500,000 per accident and \$500,000 per disease.

- D. Umbrella: \$2,000,000 per occurrence/aggregate for contracts valued at \$500,000 or over, or \$1,000,000 for contracts below \$500,000. \$10,000 is maximum allowable self-retained limit.
- E. Errors and Omissions: If the Contractor performs professional services, he shall maintain errors and omissions insurance with a limit no lower than \$1,000,000 for the duration of the Contract.

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

1. Unless otherwise provided in paragraph "c" of this section, FRSA, 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 FRSA, its officers, officials, employees, volunteers, or agents.
2. Unless otherwise provided in paragraph "c" of this section, the Contractor's insurance coverage shall be primary insurance as respects FRSA, its officers, officials, employees, volunteers, and agents. Any insurance or self-insurance maintained by FRSA, its officers, officials, employees, volunteers, or agents shall be excess of the Contractor's insurance and shall not contribute with it.
3. 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.
4. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to FRSA, its officers, officials, employees, volunteers, or agents.
5. 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.
6. 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 FRSA.

3.12.3 Best's Ratings

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

- A. Alphabetical Rating: For purposes of this Request for Bids, "insurer" shall mean any surety, insurance carrier, or other organization which proposes to provide an insurance policy or bond for the Contractor. No insurer or surety rated lower than "A-, Excellent" in the current *Best's Key Rating Guide* shall be acceptable to FRSA.
- B. Financial Size Rating: Provided an insurer's alphabetical rating is satisfactory, FRSA will examine said insurer's financial size rating.
 1. If Best classifies the insurer XII or larger, said insurer shall be acceptable to FRSA.

2. If Best classifies the insurer as smaller than XII, but larger than VI, said insurer shall be submitted to FRSA's Director of Management Services and/or FRSA'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 FRSA. 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 FRSA determines that the Contractor's insurance or bond documentation does not conform to these specifications, FRSA shall notify said Contractor of the non-conformity. If said Contractor fails to provide conforming insurance or bond documentation within five (5) calendar days of FRSA's notice, they shall be in default.

3.12.6 Indemnification Clause

Contractor shall protect, indemnify, hold and save harmless and defend FRSA, 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 FRSA, 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 FRSA 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 FRSA.

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 FRSA, its employees, or agents shall be deemed a waiver by FRSA 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

FRSA 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. FRSA's tax exemption number is E9992-3696-06. The bidder shall include all other applicable taxes in his bid price.

Article 3 — Detailed Specifications

1 General

This article contains detailed specifications relating to Proposal items. The work to be done under each item is discussed along with units and measurement for payment. However, the descriptions do not necessarily outline all the work to be done under any given item. The materials and workmanship provided for this project shall meet or exceed these Detailed Specifications, the Four Rivers Sanitation Authority's (FRSA) *General Provisions and Technical Specifications for Sanitary Sewer Construction* and current National Association of Sewer Service Companies (NASSCO) recommendations. In the case of contradictions between this article and the *General Provisions and Technical Specifications*, this article shall govern. Further, the materials and workmanship provided for this project shall conform to current editions of the following:

- A. Standard Specifications for Water and Sewer Main Construction in Illinois as published by the Associated General Contractors of Illinois, the Illinois Municipal League, the Illinois Society of Professional Engineers and the Underground Contractors Association.
- B. Standard Specifications for Road and Bridge Construction, Illinois Department of Transportation.
- C. American Society for Testing and Materials (ASTM):
 1. ASTM D 543 Test Method for Resistance of Plastics to Chemical Reagents
 2. ASTM D 638 Test Method for Tensile Properties of Plastics
 3. ASTM D 790 Test Method for Tensile Properties of Non-reinforced and Reinforced Plastics and Electrical Insulating Materials
 4. ASTM F 1216 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube
 5. ASTM F 1743 Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pulled-in-place Installation of Cured-in-place Resin Pipe
 6. ASTM F 2561 Standard Practice for Rehabilitation for a sewer service lateral and its connections to the main using a one piece main and lateral cured-in-place liner.

The Contractor shall provide the FRSA with a construction schedule prior to performing any work. Any work that is performed by the Contractor without the FRSA's permission or without a FRSA inspector present may be rejected at the FRSA's sole discretion.

Excavated or other materials shall not be stored or cast upon pavement. At the end of each day and prior to leaving the site, the Contractor shall clean-up work areas by sweeping, washing or other approved methods and shall transport all materials collected from the work site to an approved dumping area.

The Contractor shall perform all operations in strict accordance with OSHA and CIPP liner manufacturer's safety requirements. The FRSA shall not be responsible for the enforcement of safety standards and will not supervise, direct, control, or have authority over the Contractor's construction means, methods, techniques, sequences, procedures, or safety

precautions and programs incident thereto, or for any failure of the Contractor to fully comply with all applicable laws and regulations related to the performance and completion of the specified work.

The Contractor shall be responsible for the final installation and all tests of materials required by the FRSA. All deficiencies noted by the inspectors shall be promptly corrected by the Contractor without cost to the FRSA and prior to final payment. The FRSA will not be responsible for the Contractor's failure to perform or complete work in accordance with these Contract documents.

1.2 Required Submittals

- A. Applicable ASTM specifications.
- B. Construction schedule.

1.3 Payment – Not used.

2 Permit Requirements

2.1 General

All work in streets, highways, railroads or flood plains shall be subject to the regulations and requirements of the jurisdictional agency. The Contractor shall be responsible for securing all necessary permits, bonds, insurance, paying all fees and meeting all conditions required by all permits at no cost to the FRSA. Copies of Contractor-secured permits shall be provided to the FRSA prior to the start of construction. If conflicts or contradictions exist between Contract documents and required permit(s), the permit terms and conditions shall govern.

2.2 Local Permit Authorities

- A. The City of Rockford will require a Right-of-Way permit. The application is available online at <https://rockfordil.gov/DocumentCenter/View/1055/Right-of-Way-Permit-Application-PDF>. The following City of Rockford employees may be contacted with any questions:
 - a. Jordan Masemoore: Jordan.masemore@rockfordil.gov, (779) 348-7634
 - b. Jacob Hennelly: Jacob.hennelly@rockfordil.gov, (779) 348-7670
- B. The City of Loves Park will require a Right-of-Way, Sidewalk & Street Cut Permit. Forms are available online at <https://cityoflovespark.com/wp-content/uploads/2020/08/R.O.W.-Permit-Application.pdf>. Contact Shannon Messinger, shannonmessinger@loves-park.il.us, (815) 654-5040.
- C. The Village of Machesney Park will require a Public Works Construction Permit. The application may be submitted online at <https://www.machesneypark.org/citizenserve.php>. Contact Mitch Hilden, mitchh@machesneypark.org, (815) 877-5432.

- D. The Rockford Township will require 48 HR advanced notification only. Contacts:
- a. Barry Palm, barrypalm@rockfordtownshipil.gov, (815) 222-6951.
 - b. Craig Dhuse, craigdhuse@rockfordtownshipil.gov
- E. The Village of Cherry Valley will require a Right-of Way, Sidewalk & Street Cut Permit. Forms are available online at http://www.cherryvalley.org/images/ROW_Permit_Letterhead.pdf. Contact Andrew Wesseln, Public Works Supervisor, at (815) 580-8874.

2.3 Required Submittals

- A. Copies of all permits obtained.

2.4 Payment

No separate payment will be made for permit procurement and compliance. Costs shall be incidental to the CIPP Lateral Reconstruction pay items.

3 Notification and Access

3.1 General

The Contractor shall notify the FRSA forty-eight (48) hours, minimum, prior to beginning any work on a normal work day and twenty-four (24) hours prior to working on a weekend or a FRSA holiday. The Contractor will not be permitted to work on the following FRSA holidays: Thanksgiving Day, Christmas Day, New Year's Day, President's Day, Good Friday, Memorial Day, Independence Day, or Labor Day.

The Contractor shall contact JULIE at 800-892-0123 forty-eight (48) hours, minimum, prior to the start of construction to have the on-site utilities located. All underground utilities shall be located by the utility owner and special care shall be taken when excavating to avoid any damage to utilities. The Contractor shall notify the local roadway authority seventy-two (72) hours, minimum, in advance of performing any pavement removal or restoration work. All pavement removal and restoration shall be inspected and approved by the governing roadway authority.

The Contractor shall be responsible for the temporary maintenance of all roadways, drives and drainage facilities for the duration of the project and shall maintain access at all times to all affected businesses and residences. Work areas shall be restored to pre-construction conditions or to the satisfaction of the governing agency.

It shall be the Contractor's responsibility to secure any temporary or permanent access, storage or construction easements from property owners deemed necessary to perform the work as described in these specifications. All easement acquisition costs shall be incidental to the Contract pay items.

The Contractor shall continuously maintain the current level of sanitary sewer service for the duration of the project. Property owners shall not be without sewer service for more than eight (8) hours.

3.2 Public Notification Program

A public notification program must be implemented. At a minimum, the Contractor shall contact each home or business scheduled for lining to inform them of the work to be conducted and when the sewer will be out of service. Adjustment to the lining schedule shall be made to accommodate property owners and/or residents, as necessary. At a minimum, the following shall be provided:

- A. Forty-eight (48) hour, minimum, advanced written notice to be delivered to each home or business describing the work to be performed, the work schedule, how it affects them, and a toll free or local telephone number of the Contractor contact they can call to discuss the project or any problems that arise. Notice shall also include contact information for the FRSA's Survey and Field Operations Manager, Ben Christiansen, (815) 209-7952. Notice may be in the form of a letter and/or door-hanger.
- B. Personal contact or written notice the day prior to the beginning of work being conducted on the section impacting the residents.
- C. Personal contact with any home or business that cannot be reconnected within the time stated in the written notice.

3.3 Required Submittals

- A. Notification letter and/or door hanger notification.
- B. Agreements for temporary access and/or storage, as requested.

3.4 Payment

No separate payment will be made for notification and access work. Costs shall be incidental to the CIPP Lateral Reconstruction pay items.

4 Sewer Cleaning

4.1 General

The Contractor shall be responsible for cleaning and removing foreign materials from the sewer lines to permit proper installation of the pipe liner. The sewer line cleaning shall be accomplished by using a hydraulically propelled, high-velocity jet nozzle, or mechanically powered equipment. Selection of the equipment shall be the responsibility of the Contractor and shall be approved by the FRSA prior to starting any of the work.

The cleaning procedure shall conform to current NASSCO recommendations for the removal of all dirt, grease, rocks, roots, sand, and any other material or obstructions from the pipe that would adversely affect liner installation. Contractor shall notify the FRSA of any sewer service segment that cannot be properly cleaned because of a broken pipe or other major blockage. If

the FRSA cannot make the necessary modifications to the sewer service to facilitate lining, lining of the service will be removed from the Contract.

The Contractor shall take all necessary precautions in the use of cleaning equipment to prevent flooding or damage to any sewer lines, services, manholes and public or private property. To ensure safe operation, all machines shall be fully enclosed and shall be equipped with an automatic overload clutch or relief valve.

When hydraulically propelled or other cleaning tools are used, precautions shall be taken to ensure that the water pressure created does not damage the existing pipe or cause flooding of public or private property being served by the sewer.

4.2 Water and Electricity

- A. Electricity: Any electricity required shall be the responsibility of the Contractor.
- B. Water: The Contractor shall be responsible for coordinating with the appropriate water authority to obtain public water for this project. If public water is not directly available at specific sites, the Contractor is responsible for delivery of water to the site and for any fees charged for water usage. A calibrated meter shall be obtained from the jurisdictional water department to gauge water usage, as required.
 - a. A hydrant meter may be obtained from the City of Rockford. The application is available online at <https://rockfordil.gov/295/About-the-Water-Division>, by following the “Hydrant Meter Request” link to the google docs form.

4.3 Solids Disposal

All foreign materials cleaned from the sewers shall be removed at the downstream manhole of the section of sewer being cleaned. The Contractor shall not pass foreign materials into other pipe sections. All materials shall be removed from the project site and properly disposed of by the Contractor at the end of each workday. No debris shall be accumulated on the work site except in totally enclosed containers or as approved by the FRSA.

4.4 Acceptance of Sewer Line Cleaning

The Contractor shall televise all sewer services after they are cleaned to verify that the service is prepared for lining. If television inspection shows the cleaning to be unsatisfactory, the Contractor shall re-clean and re-televise the sewer line until it is acceptable to the FRSA. No additional compensation will be awarded for re-cleaning or re-televising of sewers.

4.5 Equipment Recovery

If any equipment becomes stuck in the sewer line and excavation is required for removal, the Contractor shall be responsible for the cost of extraction work necessary, including but not limited to, excavation, backfill, pavement and turf restoration, pipe repair and repairs to property damaged due to sewer back-ups.

4.6 Required Submittals

- A. Proposed cleaning equipment specifications.

4.7 Payment

Payment for sewer cleaning shall be included in the Contract unit price per Each (EA) for Clean and Televisive Service Lateral.

5 Sewer Flow Control

5.1 General

The Contractor shall be responsible for controlling the flow in the sewer main to ensure proper liner installation. If required, the Contractor will be allowed to reduce or eliminate the amount of flow by plugging the upstream line. The Contractor shall monitor flow and bypass pump into another sanitary sewer manhole as required to maintain service upstream of the work area. All plugs must be restrained to ensure that they cannot be washed downstream. All bypass pumping routes shall be approved by the FRSA.

The service lateral must be inactive during the time of service liner installation and inspection. This shall be accomplished by plugging the upstream end of the service at the tee fitting and requesting that the homeowner refrain from using water during the installation period.

5.2 Temporary Plugging

The Contractor shall insert an acceptable sewer line plug into the piping upstream of the section being worked on. The plug must be designed such that all or any portion of the sewage can be quickly released. The Contractor shall monitor the service during work and shall remove the plug well in advance of any back-up. After the work has been completed, flow shall be restored to normal.

5.3 Bypass Pumping

When bypass pumping is required, the Contractor shall supply the pumps, conduits, and other equipment to bypass sewage around the sewer section in which work is to be performed. The bypass system shall be of sufficient capacity to accommodate peak flows. The Contractor shall furnish the necessary labor and supervision to set up, operate and maintain the bypass pumping system.

Bypassed flow shall only be discharged into manholes approved by the FRSA. The Contractor must ensure that surcharging and backups do not occur on public or private property while pumping or plugging operations are being conducted. If bypass pumping is required on a twenty-four (24) hour basis, the equipment shall be equipped with mufflers to restrict noise levels to 90 decibels or less. Hoses, pipes or other equipment shall not be placed upon private property without written permission from the property owner.

5.4 Flooding Precautions

When flow in a sewer line is plugged, blocked, or bypassed, the Contractor shall take sufficient precautions to protect the sewer lines from damage that might result from surcharging, and to ensure that flow control operations do not cause flooding or damage to the public or private property being served by the sewer involved.

The Contractor will be liable for any damage caused by sewer back-ups.

5.5 Required Submittals

- A. Proposed bypass pumping route(s), as applicable.

5.6 Payment

No separate payment will be made for sewer flow control. Costs shall be incidental to the CIPP Lateral Reconstruction pay items.

6 Cured-in-Place Pipe (CIPP) Lateral Reconstruction

6.1 General

It is the intent of this specification to provide for the reconstruction of sanitary service lateral pipes from the sewer main to the property line without excavation by the installation of a resin impregnated flexible tube. The cured-in-place pipe (CIPP) shall be installed in the existing service lateral, in accordance with ASTM F-1216, ASTM F-1743, and/or ASTM F-2561 from the mainline pipe to an existing service cleanout located at the property line. The resin and tube shall be held in place using internal pressure and cured into a hard impermeable pipe. When cured, the pipe shall be a continuous, tight-fitting pipe-within-a-pipe. Rehabilitation shall also include a watertight connection at the mainline pipe and full diameter mainline wrap unless specified otherwise.

6.2 Cured-in-place Pipe (CIPP)

The tube shall be fabricated to a size that when installed provides a CIPP that will precisely conform to the internal circumference of the existing service pipe. **Location Maps provided in Section III show each service to be reconstructed. However, the Contractor shall be responsible for verifying the length, diameter and condition of all existing services.**

- A. Cured-in-place Pipe (CIPP) Material Specifications

1. Chemical resistance: The CIPP shall be fabricated from materials which when cured will be chemically resistant to withstand internal exposure to domestic sewage and meet the chemical corrosion resistance requirements of ASTM F-1216 and D-5813. All materials shall be suitable for service in the intended environment.
2. Tube: The tube material shall meet the requirements of ASTM F 1216, Section 5.1.
 - a) Absorbent Fabric Tube: The tube shall consist of one or more layers of absorbent fabric capable of carrying resin, and capable of withstanding installation pressures and curing temperatures. The tube shall be compatible with the resin system used. The tube material shall be capable of stretching to fit irregular pipe sections and bends.
 - b) Allowance should be made for circumferential stretch during inversion. For the pull-in methods of lining, the resin-soaked tube shall have an outer plastic lining that effectively prevents the scrape-off or wash-off of resin.

- c) Thickness: The liner shall be designed in accordance with ASTM F-1216. The finished tube shall have a uniform thickness and shall not vary from the nominal minimum tube thickness by more than 5%. The minimum liner thickness for this project shall be 3.0 mm unless design calculations per the CIPP structural requirements provided in this specification demonstrate a thinner liner would be acceptable.
 - d) Color: The tube shall be a light reflective color so that a clear, detailed examination with closed circuit television equipment may be made.
 - e) Delamination: The bond between all CIPP layers shall be strong and uniform. Once cured, all layers must form a homogeneous structural pipe wall with no part of the tube left unsaturated by resin. It shall not be possible to separate any layers with a probe or point of a knife blade so that the layers separate cleanly, or the probe or knife blade moves freely between layers; nor shall separation of layers occur during testing performed under the requirements specified elsewhere herein.
3. Resin: The resin system shall be thermoset polyester, vinylester (or FRSA approved alternate) resin meeting the requirements of ASTM F-1216, Section 5.2.
- a) The manufacturer shall certify that the proposed resin system and cure schedule are appropriate for the proposed application and have been tested under laboratory and field conditions. The resin shall produce CIPP, which will comply with the structural and chemical resistance requirements specified.
 - b) The resin used shall be compatible with the tube and be able to cure in the presence of water. Thixotropic agents that enable the resin system to possess pseudo-plastic fluid flow properties, and that do not interfere with visual inspection, shall be added for viscosity control and to minimize resin washout.
 - c) Resins may contain pigments that do not interfere with visual inspection of, or the physical testing of the CIPP material. Filler materials of a proprietary nature may be added as long as the final pipe product meets or exceeds the minimum standards set forth in this specification.
4. Deviations: The Contractor shall submit his price proposal for the appropriate length, size and thickness designated or required. No changes in prices will be entertained by the FRSA as a result of the Contractor modifying the properties of the liner due to unexpected parent pipe conditions.

B. Cured-in-place Pipe (CIPP) Structural Design Requirements

1. The CIPP pipe shall be designed in accordance with the requirements of ASTM F 1216, Appendix XI, with the following design parameters:
 - a) Design safety factor: 2.0

- b) Reduction factor for long-term effects: 0.50 (applied to flexural modulus).
- c) Ovality: 2% min.
- d) Enhancement factor (K): 7
- e) Groundwater depth: To grade
- f) Soil Depth: To grade
- g) Soil Modulus: 1000 psi
- h) Soil density: 120 pcf
- i) Live load: 0
- j) Design condition: Fully deteriorated

2. Design calculations shall be submitted to the FRSA for approval prior to lining.

C. Structural Performance

1. The structural performance of the finished pipe must be able to accommodate all anticipated loads throughout the design life of the CIPP. No CIPP reconstruction technology will be allowed that requires bonding to the existing pipe for any part of its structural strength. If reinforcing is used (fiberglass, etc.), those materials must be of a corrosion-resistant grade and be fully encapsulated within the resin to assure that the reinforcement is not compromised when exposed to raw sewage. The cured-in-place pipe shall conform to the minimum structural standards as listed below:

<u>Property</u>	<u>ASTM Standard</u>	<u>Minimum</u>
Flexural Strength	ASTM D-790	4,500 PSI
Flexural Modulus of Elasticity	ASTM D-790	250,000 PSI

2. Structural Testing: To verify past performance, the manufacturer shall submit independent laboratory test results from the same liner materials proposed for the actual installation. These test results must verify that the structural properties specified above have been achieved in previous field applications. Samples shall be prepared and tested in accordance with ASTM F-1216. Copies of certified test reports by an approved independent testing laboratory shall be provided to the FRSA. The flexural modulus of elasticity and flexural strength shall be measured for gravity pipe applications in accordance with Test Method D-790, Test Method #1 - Procedure A.

D. Preparation of Liner

1. Liner material must be inspected to verify conformance with manufacturer's standards prior to impregnation.
2. Wet Out: The tube shall be impregnated with resin under controlled conditions. The volume of resin used should be sufficient to fill all voids in the tube material at nominal thickness and diameter. A roller system shall be

used to uniformly distribute the resin throughout the tube. All air in the tube shall be removed by vacuum, allowing the resin to thoroughly impregnate the tube. Should any unsaturated section of the tube be noticed before inversion, the unsaturated area of the tube shall be re-impregnated with the resin using methods developed by the Contractor and approved by the FRSA.

E. Lateral Lining Installation

1. Installation of the lateral lining system shall take place by one or both of the following installation methods:
 - a) Install service liner through sanitary sewer main: A pressure apparatus, attached to a robotic device, shall be hand-winch through the mainline pipe to the service connection. The robotic device and a television camera shall be used to position the pressure apparatus installation hardware at the service connection opening. Air pressure shall be used to install the tube into the lateral pipe.
 - b) Install service liner through existing cleanout: A pressure apparatus shall be pulled into place through the cleanout. Air pressure shall be used to install the wet-out tube into the lateral pipe.
2. Non-toxic lubricant may be used to reduce friction. The inversion / installation process shall be conducted at a maximum controlled speed of two feet per second (2 fps).
3. Pressure: Tube installation forces or pressures shall be limited so as not to stretch the tube longitudinally by more than 5% of the original length. Prior to installation, the tube manufacturer shall determine the minimum pressure required to hold the tube tight against the host pipe and the maximum allowable pressure to avoid over-stretching or damaging tube. Once the installation has started, the pressure shall be maintained between the minimum and the maximum pressures until the installation is complete.
4. The Contractor shall be responsible for coordinating with the appropriate water authority for the availability of public water for this project. If public water is not directly available at specific sites, the Contractor shall be responsible for delivery of water to the site. The Contractor shall be responsible for any fees charged for water usage. If required, the Contractor shall obtain a calibrated water meter from the appropriate water department to gauge usage of water.
5. Curing: Curing shall take place per the manufacturer's recommendations. The Contractor shall provide submittals on all lining materials and resins, and shall furnish manufacturer certification that the liner materials are in compliance with the specifications, codes, and standards referenced herein. The submittals shall include details of all construction material components, including complete manufacturers recommendations for storage procedures and temperature control (step curing temperature/hours at each and final stage for each section, thickness and length), handling, inserting the liner, and curing details.

- F. Finish: The finished CIPP shall be free of dry spots, lifts, wrinkles or delamination. The CIPP shall not inhibit the closed-circuit television post-video inspection of the mainline or service lateral pipes. The service lateral pipe opening at the connection to lined mainline has been reinstated in a manner that is consistent with *ASTM F-1743, Section 6.9*. The method of connection of the service liner pipe to the main must be approved by the FRSA. If the service reinstatement in the existing CIPP has rough or jagged edges or is not fully open, the Contractor shall modify the service connection at the main as specified elsewhere herein. The connection of the service to the mainline sewer must be made watertight by means of a hydrophilic seal or other FRSA-approved method.
- G. Final Acceptance:
1. Upon completion, the Contractor shall televise the lined lateral and provide the inspection video to the FRSA.
 2. Upon completion of service lining, FRSA crews will televise the sewer main to verify acceptance of the sewer service connection at the main. The Contractor shall coordinate main line connection inspection schedule with the FRSA Inspector.

6.3 Required Submittals

- A. Chemical resistance test data from CIPP from previous construction contracts.
- B. Tube material specification.
- C. Resin system material specification.
- D. Liner thickness design calculations.
- E. Structural property testing results from previously completed projects.
- F. Curing details.

6.4 Payment

Payment for Cured-in-place Pipe Lateral Reconstruction shall be made based on the Contract unit price per Each (EA) of the size and type indicated. Contract Pay Items are as follows (all tees indicated = Main I.D. x Service I.D.):

- A. CIPP Lateral Reconstruction, 8" x 6" Tee
- B. CIPP Lateral Reconstruction, 9" x 6" Tee
- C. CIPP Lateral Reconstruction, 10" x 6" Tee
- D. CIPP Lateral Reconstruction, 12" x 6" Tee
- E. CIPP Lateral Reconstruction, 15" x 6" Tee

7 Cured-in-Place Pipe (CIPP) Main Line Short Liner

7.1 General

CIPP short liners shall consist of installing a specified length (1'-8') of cured-in-place pipe in existing lined sanitary sewers. The purpose of the short liner CIPP short liner is to seal off sanitary sewer service connections at the main which are no longer required, or another defect as determined by FRSA. The short liner shall be designed per ASTM F1216 and take into consideration the condition of the pipe. The minimum short liner thickness shall be 3.0 mm. There shall be a smooth transition from the short liner to the host pipe. Sewer flow control shall be provided as specified elsewhere herein. Flow-through bladder plugs will be allowed if flow permits.

The tube shall consist of one (1) or more layers of flexible needled felt sewn to the prescribed circumference and length. The tube should be compatible with the resin system used. The tube shall be fabricated to a size that, when installed, will conform tightly to the internal circumference of the original pipe. Allowance should be made for circumferential stretching during installation.

7.2 Structural Requirements

PROPERTY	ASTM STANDARD	RESULTS
Flexural Strength	ASTM D-790	4,500 PSI
Flexural Modulus of Elasticity	ASTM D-790	250,000 PSI

The tube shall be constructed to withstand installation temperatures and pressures, have sufficient strength to bridge missing pipe, and stretch to fit irregular pipe sections. The wet-out tube shall have a relatively uniform thickness that when compressed at installation pressers will equal or exceed the calculated minimum design thickness.

Design calculations, resin and liner material submittals shall be submitted to the FRSA for review and approval.

7.3 Preparation and Installation

Prior to rehabilitation using the short liner, the sewer segment will be flushed using a hydraulically propelled high velocity jet sprayer. The pipe must be clean and free from debris and encrustations. The tube shall be thoroughly wet out with a catalyzed resin using a vacuum impregnation process.

The tube shall be properly oriented and loaded into the carrier train or plug assembly and subsequently winched to the area to be lined. Closed circuit TV camera shall be utilized to guide installation. The installation shall follow by inflating the bladder or plug to the recommended psi required to fully expand the CIPP against the existing host pipe.

Some variation from true line and grade may be unavoidable due to the conditions of the original piping. The finished CIPP should be continuous over the length of the repair area plus one foot extending into structurally sound pipe.

7.4 Resin Impregnation (Wet-Out)

The quantity of resin used for tube resin impregnation shall be sufficient enough to fill the volume of air voids in the tube with additional allowances for polymerization shrinkage and

the loss of resin through cracks and irregularities in the original pipe wall. A vacuum impregnation process shall be used. To ensure thorough resin saturation through the entire length of the felt tube, the point of vacuum shall be no further than 10 feet from the point of initial resin introduction. After vacuum in the tube is established, a vacuum point shall be no further than ten feet from the leading edge of the resin. A roller system shall be used to uniformly distribute the resin throughout the tube.

7.5 Required Submittals:

- Design calculations.
- Resin and liner material submittals.

7.6 Payment

Payment for Cured-in-place Pipe (CIPP) Main Line Short Liner shall be made based on the Contract unit price per Each (EA) of the diameter and length indicated.

8 Service Reinstatement Modification

8.1 General

Prior to installing the service liner, the Contractor shall locate the sewer lateral openings in the lined sewer main by televising. The Contractor shall inspect service openings in the existing liner pipe.

If required, the Contractor shall modify / re-cut or brush existing service connections to achieve one hundred percent (100%) of the original opening. Service modification shall be done without excavation from the interior of the pipe by means of a television camera and a remotely controlled cutting device or brush. The edges of the service cut-ins shall be smooth and even. There shall be no rough or jagged edges. The entire circumference (360°) of the sewer service reinstatement shall be televised and recorded on the post-lining videotape.

The service opening shall be reviewed by the FRSA prior to modification and shall meet FRSA approval prior to lining.

Any pieces of the liner that were cut from the service connections shall be captured at the downstream manhole and disposed of by the Contractor.

8.2 Required Submittals – Not Used.

8.3 Payment

Payment for modification of the sewer service connection at the main will be made at the Contract unit price per Each (EA) for Service Reinstatement Modification.

9 Television Inspection

9.1 General

The Contractor shall televise and document all service line conditions after cleaning the service but prior to installing the service liner and also after the liner is installed. The FRSA will review the recordings for final acceptance. All televising shall be performed by experienced technicians.

All sewer televising shall be done in accordance with recommended specifications as published by the National Association of Sewer Service Companies (NASSCO).

The Contractor shall also provide equipment to play back the recordings in the field as requested by the FRSA. The equipment shall play back at the same speed that it was recorded, and shall have a slow-motion or stop-action feature.

Prior to installing the liner, the interior of the service line shall be carefully inspected to verify the inside diameter and to determine the locations of any conditions that would prevent the proper installation of the sewer liner.

9.2 Televising Equipment

All televising equipment utilized for inspection of service lateral pipes shall conform to the minimum standards established herein.

- A. Televising equipment shall include a push rod wide angle service camera, television monitor, cables, power source, lights, skids, and other required equipment. The television camera shall be specifically designed and constructed for operation in connection with sewer inspection.
- B. Camera Specifications: The camera, television monitor, and other components of the video system shall be capable of producing a minimum 600-line resolution color video picture. The camera shall be operative in one hundred percent (100%) humidity conditions. Lighting for the camera shall be supplied by a lamp on the camera that will minimize reflective glare. Lighting and camera quality shall be suitable to provide a clear, in-focus picture of the entire inside periphery of the sewer pipe for all conditions encountered during the work. Picture quality and definition shall be to the satisfaction of the FRSA. The camera used for televising the sewer service shall be a push service camera. Markings shall be made on the push camera cable to measure distance and the distances shall be verified above ground with a tape.
- C. Recording Requirements: All sewer televising shall be documented on digital media. The recording shall include information that accurately reproduces the original picture of the video inspection. The recording shall be free of electrical interference and shall produce a clear and stable image.

The pipeline inspection shall consist of identifying a location both within the pipe segment (physical location) and within the recording (video frame location) for each observation. This will allow the recording and inspection data to be cross-referenced for instant access to any point of interest within the recording.

Continuous measurements along service lines shall be electronically or manually recorded for purposes of referencing locations of pipe defects. The date and service address or Item number from the Lateral Reconstruction Schedule shall be continuously displayed on the recording header.

9.3 TV Inspection and Data Collection Practices

All inspection and recording practices shall conform to the minimum standards specified herein.

- A. Color: All recordings shall be in color with the ability to achieve proper balance of tint and brightness. The loss of color or severe redness due to equipment malfunction and black and white pictures irrespective of quality may be cause for rejection.
- B. Focus: All recordings shall be in focus, properly illuminated with good contrast and without interference.
- C. Cleaning: Prior to televising, all lines shall be cleaned by the Contractor in accordance with applicable specifications or as directed by the FRSA. All obstructions that restrict flow, prevent cleaning, or televising should be reported to the FRSA immediately.
- D. Maximum Flow Depth: If possible, televising shall be performed while the line segments are in service without plugging or flow diversion.
- E. Camera Movement: The camera shall move through the line at a uniform rate, stopping when necessary to ensure proper documentation of the sewer's condition but in no case shall the television camera be pulled at a speed greater than 30 feet per minute.
- F. Lens Cleaning: The camera lens must be kept clean and clear. Any fogging due to wastewater content or debris that obscures the lens shall be cleaned off before proceeding with the recording operations.
- G. Sewer Length Accuracy: Measurements shall be accurate to +/- 1.0 feet over the length of the section being inspected. Distance marks shall be made on the push camera and all measurements verified above ground with a walking meter, roll-a-tape, or other suitable device.
- H. Digital Recording Review: The Contractor shall provide the FRSA with digital recordings (1 copy) of all sewer services before and after rehabilitation with visual records of all services and problem areas provided in a format that is compatible with the FRSA's equipment. Electronic files shall be organized by Contract Item Numbers from the *CIPP Lateral Reconstruction List* provided in *Section III*. File labels shall clearly describe post-lining and pre-lining for each service. During construction, the Contractor may submit video inspections for review and approval to expedite any corrective work, but the final video submittal must contain all video inspections on a single SSD hard drive. All recordings submitted by the Contractor to the FRSA shall be subject to review for acceptability of quality

conforming to the minimum standards established herein. The cost of providing the hard drive shall be incidental to the sewer lining.

- I. Unacceptable Inspection: If the recording of any portion of a line is unacceptable, the entire segment will be deemed unacceptable and must be re-televised from the property line to the main.
- J. Complete Service Line Segments: All services must be televised complete from the sewer main to property line on the same recording in a continuous run. Partial recordings on separate files will not be accepted.

9.4 Required Submittals – Not Used.

9.5 Payment

Payment for the television inspection of the lined service shall be included in the Contract unit price bid per Each (EA) for CIPP Lateral Reconstruction.

10 Restoration Work

10.1 General

Restoration work shall include the following provisions:

- A. All soil, brush and debris removed as a result of sewer cleaning shall be disposed of in a satisfactory manner. Ground surfaces, all fences and other structures on the premises or adjacent areas affected or in any manner altered by lining operations, shall be restored to pre-construction conditions.
- B. Ground surfaces including public rights-of-way and easements that were grassed areas prior to construction, shall be seeded in accordance with Sections 250, and 251 of the IDOT *Standard Specifications for Road and Bridges Construction*, current edition, and as directed by the FRSA. The Contractor shall make certain that all disturbed areas have the same depth (4" minimum) and quality of approved topsoil as existed prior to construction.
 - 1. The seeding mixture used shall be compatible with the existing ground cover and shall be acceptable to the FRSA. Maintainable lawn areas shall be seeded with IDOT Class I seeding mixture. Existing non-maintained turf areas shall be seeded with IDOT Class 3-slope mixture.
- C. On private property, the Contractor shall remove and replace (or replant) all bushes, shrubs and plants damaged or destroyed with species of similar type, size and quantity. These plantings shall be guaranteed for a period of one (1) year after final completion.

10.2 Excavation

In the unlikely case excavation is required beyond the scope of exposing existing cleanouts, all restoration of private and public property, including sidewalks, driveways, all other slab work, concrete and asphalt, drainage channels, storm sewers and dry wells, etc., disturbed or damaged as a result of construction shall be promptly completed, in accordance with roadway authority standards within public right-of-way or to pre-construction conditions on private

property as directed by the FRSA and guaranteed by the Contractor for a period of two (2) years following satisfactory completion and final acceptance of the total Contract.

All excavated areas shall be guaranteed against subsidence and settlement for a period of two (2) years after final completion of the Contract. Any restoration work damaged as a result of subsidence shall be restored again at no cost to the FRSA.

All structures and conduits shall be repaired, cleaned and re-laid or replaced to original alignments and grades. Pipes, which in the FRSA's judgement have been significantly damaged by the Contractor, shall be replaced with new pipe of the same diameter, length and type, at the Contractor's sole expense; any necessary couplings and fittings shall also be furnished and installed as necessary. All work shall be to the satisfaction of the FRSA. When necessary, temporary restoration of roads, drives, fences, etc., will be required.

10.3 Required Submittals

- A. Seed mixture certification(s).
- B. Pavement mix designs (when applicable).

10.4 Payment

No separate payment will be made for restoration work. Costs shall be incidental to the CIPP Lateral Reconstruction pay items.

11 Traffic Control & Protection

11.1 General

The work to be performed under this Contract includes work within sanitary sewers, an environment deemed hazardous by State and Federal authorities. The Contractor shall employ all safety measures appropriate for such work and shall be solely responsible for the safety of all operations and compliance with all state, local and OSHA regulations. The Contractor shall meet the requirements of all permits secured for this project.

11.2 Safety Program

The Contractor shall develop and maintain a safety program that effectively incorporates and implements all safety provisions as determined by OSHA 29 CFR for the duration of this Contract.

11.3 Traffic Control

The Contractor shall comply with all rules and regulations of the State, County, and Local authorities regarding closing or restricting the use of public streets or highways. No public or private road shall be closed, except by express permission of the FRSA. The work shall be implemented and maintained so as to minimize obstructions to traffic and disruptions to normal business activities. Contractor shall protect all obstructions within traveled roadways with approved signs, barricades, and lights where necessary for the safety of the public. The Contractor shall notify the appropriate roadway authority a minimum of seventy-two (72) hours prior to beginning any work for approval of traffic control on affected streets, as well as required detour routes, signing and permits.

The Contractor shall maintain continuous access to the residences and/or businesses, schools, etc., at all times (i.e., drives, roadways, ramps must remain open or temporary access must be provided) for the duration of this Contract.

The Contractor shall furnish flagmen, guards and all other traffic control devices when required by regulation or deemed necessary for safety.

11.4 Required Submittals – Not Used.

11.5 Payment

Payment for Traffic Control and Protection will be made based on the Contract Lump Sum (LS) price.

12 Quality Assurance

12.1 General

The television inspection described in previous sections shall be used by the FRSA to perform final inspection on the lined pipe. The finished pipe liner shall be continuous from the sewer main to the property line and shall be free from all visual defects such as foreign inclusions, dry spots, pinholes, pilot holes, wrinkles, or delamination. The lining shall be impervious and free of any leakage between the pipe and the surrounding ground, as well as any leakage at the connection to the sewer main.

Upon completion of service lateral lining, the FRSA will televise the sewer main to verify the acceptance of the sewer service connection at the main.

The Contractor shall repair any defects in the liner that will affect the integrity or strength of the pipe and any visual or functional defects such as wrinkles, drill holes, folds, pillows, etc., at his own expense. All repairs shall be performed in a manner that is mutually agreed upon by the FRSA and the Contractor. If a liner fails and is determined to be unacceptable by the FRSA the entire length of lined pipe from the main to the property line shall be removed and replaced per FRSA requirements at no additional cost to the FRSA.

12.2 Wrinkles and Folds

Any wrinkles or folds in the finished liner pipe that are larger than five percent (5%) of the pipe diameter and are located in the bottom half of the service shall be unacceptable and shall be removed and repaired by the Contractor at his sole expense. The method of removal/repair shall be approved by the FRSA.

12.3 Structural Property Testing

For every twenty (20) laterals lined, one (1) flat plate sample shall be tested by a third-party laboratory for confirmation of flexural strength and flexural modulus of elasticity in accordance with ASTM F-1216. Should any samples fail to meet minimum structural properties, the Contractor shall excavate, sample and re-test material to the satisfaction of the FRSA. The FRSA will determine the quantity and individual liner(s) subject to additional structural property testing in the case of failed flat plate sample tests.

12.4 Required Submittals

- A. The Contractor shall submit quality control procedures for the liner manufacture and installation, including detailed inspection, collection of field samples, retention of samples, and testing of physical properties of field samples.
- B. Contractor shall submit evidence of manufacturer-approved installer training, testing and / or certification of personnel employed being trained to install the product by the manufacturer for the product.

12.5 Payment

No separate payment will be made for quality assurance. Costs shall be incidental to the CIPP Lateral Reconstruction pay items.

13 Warranty

The Contractor shall unconditionally warrant their products for a period of two (2) years commencing on the date installation of the entire project is completed and accepted, in writing, by the FRSA. The Contractor shall repair, at his own expense, any defects in the liner that will affect the integrity or strength of the pipe. All repairs shall be performed in a manner that is mutually agreed upon by the FRSA and the Contractor. Any such repairs shall likewise be covered by the same warranty period from the date of subsequent installation and written approval by the FRSA.

Any repairs required after the service liner is installed and within the two-year warranty period will require testing in accordance with *T.S. 9 Acceptance Tests*, Pages 94 through 98 of the *General Provisions and Technical Specifications for Service Lateral Construction*. This testing shall be performed by the Contractor at no additional cost to the FRSA. Complete site restoration of any repairs shall also be the responsibility of the Contractor. All trenches and related restoration shall be guaranteed against settlement for a period of two (2) years from the date the project is completed.

During the warranty period, any defects which will affect the integrity or strength of the cured-in-place pipe shall be repaired at the Contractor's expense in a manner mutually agreed upon by the FRSA and the Contractor.

Section II

Contract Forms

Not to be used for bidding purposes

Proposal

Project: 2023 Service Lateral Lining
Capital Project No. Capital Project No. 2433

Location: Various locations within the public Right-of-Ways in the City of Rockford, City of Loves Park, Village of Machesney Park, Village of Cherry Valley, Village of Winnebago and Rockford Township, Winnebago County, Illinois.

Completion Date: March 31, 2024

Liquidated Damages: \$300/calendar day

To: Board of Trustees
Four Rivers Sanitation Authority
3501 Kishwaukee Street
Rockford, IL 61109

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

(Address of Individual, Partnership or Corporation)

Gentlemen:

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

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

3. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same purposes, and is in all respects fair and without collusion or fraud; and that I (we) are not barred from bidding as a result of a bid-rigging or bid-rotating conviction.
4. That accompanying the Proposal is a Bidder's Bond in the amount specified in Article 1, Notice to Bidders, payable to the Board of Trustees of the Four Rivers Sanitation Authority, which it is agreed, shall be retained as liquidated damages by said Four Rivers Sanitation Authority 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 Four Rivers Sanitation Authority, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the Four Rivers Sanitation Authority.
7. No officer or employee or person whose salary is payable in whole or in part by the Four Rivers Sanitation Authority is, shall be or become interested, directly or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the work to which it is relates, or in any portion of the profits thereof.
8. The Bidder which I represent complies with all applicable requirements of the Americans with Disabilities Act (ADA) and the Occupational Safety and Health Act (OSHA) and that if said bidder is awarded a contract, it will complete all OSHA-required or ADA-required employee and customer training, will make available all required information, and will hold harmless and indemnify the Four Rivers Sanitation Authority and the Four Rivers Sanitation Authority'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 Four Rivers Sanitation Authority) to submit certified payroll reports via the State's Certified Transcript of Payroll Portal found at www2.illinois.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.
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 Four Rivers Sanitation Authority 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.

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
1	175	EA	Clean & Televise Service Lateral			
2	149	EA	CIPP Lateral Reconstruction, 8"x6" Tee			
3	6	EA	CIPP Lateral Reconstruction, 9"x6" Tee			
4	13	EA	CIPP Lateral Reconstruction, 10"x6" Tee			
5	2	EA	CIPP Lateral Reconstruction, 12"x6" Tee			
6	5	EA	CIPP Lateral Reconstruction, 15"x6" Tee			
7	1	EA	CIPP Main Line Short Liner, (9" Dia. x 7' Long)			
8	5	EA	Service Reinstatement Modification			
9	1	LS	Traffic Control & Protection			
TOTAL BID PRICE:						
				(In Writing)		(In Figures)

The undersigned acknowledges receiving Addendum numbers _____, _____, _____, and realizes that all Addenda are considered part of the Contract.

By: _____

Name: _____ Title: _____ Date: _____

Fair Employment Practices Affidavit of Compliance

Project: 2023 Service Lateral Lining, Capital Project No. 2433

NOTE: THE BIDDER MUST EXECUTE THIS AFFIDAVIT AND SUBMIT IT WITH ITS SIGNED BID. THE FOUR RIVERS SANITATION AUTHORITY CANNOT ACCEPT ANY BID WHICH DOES NOT CONTAIN THIS AFFIDAVIT

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

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

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

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

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

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

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

IL Dept of Human Rights Registration No.: _____ Expiration Date: _____

Signature

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

Notary Public

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we:

_____ (hereinafter called the Principal)
and

_____ (hereinafter called the Surety)

a Corporation chartered and existing under the laws of the State of _____ with its principal offices in the City of _____ and authorized to do business in the State of Illinois are held and firmly bound onto the Four Rivers Sanitation Authority (FRSA) of Winnebago County, Illinois, 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 FRSA, 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 FRSA, a proposal for the 2023 Service Lateral Lining, Capital Project No. 2433 project consisting of the rehabilitation of 175 clay sanitary sewer services by lining with cured-in-place pipe (CIPP), including traffic control, restoration, and all other appurtenances as indicated in the specifications.

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

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

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

Principal

(Seal)

By _____
Name: _____
Title: _____
Date: _____

Attest:

Secretary

Surety

(Seal)

By _____
Name: _____
Title: _____
Date: _____

Not to be used for bidding purposes

Agreement

1. General

THIS AGREEMENT, made and concluded this _____ day of _____, 2023, between the Four Rivers Sanitation Authority (FRSA), Rockford, Illinois, acting by and through the Board of Trustees, and _____, his/their executors, administrators, successors or assigns:

2. Scope of Work

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

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

3. Contract Price

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

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

4. Bond

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

5. Maintenance and Guarantee

The Contractor shall promptly repair, replace, restore or rebuild any imperfections that may arise and shall maintain satisfactory to FRSA 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 FRSA, its officers and agents from any injury done to property or persons as a direct or alleged result of imperfections in the Contractors' work, and shall immediately assume and take charge of the defense of such

action or suits in like manner and to all intents and purposes as if said actions and suits had been brought directly against the Contractor.

If the Contractor shall fail to repair, replace, rebuild or restore such defective or damaged work promptly after receiving notice given by FRSA, the FRSA 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 FRSA 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 FRSA from all suits, claims, and actions brought against it, and all cost, and damages which FRSA 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 FRSA or its representative, or who shall be deemed by FRSA 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 FRSA.

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

FRSA 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 FRSA receives an acceptable invoice prior to the tenth day of the month and receives approval of the work by the FRSA's Director of Engineering, FRSA shall issue payment before the fifth day of the succeeding month. If FRSA receives an acceptable invoice on or after the tenth day of the month, FRSA shall issue payment before the fifth day of the second succeeding month.

FRSA 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 FRSA, 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 FRSA 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 FRSA 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 FRSA 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 FRSA award of a contract, FRSA will be provided this information described no more than ten working days after FRSA 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 March 31, 2024.

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)

Four Rivers Sanitation Authority
Winnebago County, Illinois

By _____
President, Board of Trustees

ATTEST: _____
Clerk of the Board

Contractor

(Corporate Seal)

By _____
Contractor's Officer

Name: _____
Title: _____
Date: _____

ATTEST: _____

Not to be used for bidding purposes

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 Four Rivers Sanitation Authority, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of

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

WHEREAS, Principal has by written agreement dated _____ 20__ Entered into a Contract with Obligee for _____ in accordance with contract documents prepared by the Four Rivers Sanitation Authority which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

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

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

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

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

Signed and Sealed this _____ day of _____, 20__.

CONTRACTOR

SURETY

Contractor Firm Name

Attorney-in-Fact Signature

By: _____
Signature

By: _____
Attorney-in-Fact Signature

Printed Name

Printed Name

Title

Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

Performance Bond

KNOW ALL MEN BY THESE PRESENTS, that WHEREAS, the Four Rivers Sanitation Authority has awarded to: _____ hereinafter designated as the “Principal”, a contract, dated, _____, for the Four Rivers Sanitation Authority.

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

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said Contract, including the provisions for liquidated damages in the said Contract, any changes, additions or alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Four Rivers Sanitation Authority, 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 Four Rivers Sanitation Authority shall be named as beneficiary on this Performance Bond.

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

CONTRACTOR

SURETY

Contractor Firm Name

By: _____
Signature

Printed Name

Title

By: _____
Attorney-in-Fact Signature

Printed Name

Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

Not to be used for bidding purposes

Section III

CIPP Lateral Reconstruction List, Details and Location Maps

Not to be used for bidding purposes

**2023 SERVICE LATERAL LINING
FOUR RIVERS SANITATION AUTHORITY CAPITAL PROJECT NO. 2433
LATERAL RECONSTRUCTION SCHEDULE**

Item No.	Address	Work Item	UPSTM MH	DNSTM MH	PIN	Service ID#	End Measurement	Depth (FT)	Service Dia. (INCH)	Service Material	Main Dia. (INCH)	Main Material	Roadway Authority	Est. Length (FT)	Map #
1	818 Barnum Rd	CIPP Lateral Reconstruction 8"X6" Tee	004057	004056	15-02-407-016	56399	10 WE	8.5	6	VCP	8	LINCIP	City of Rockford	25	1
2	820 Barnum Rd	CIPP Lateral Reconstruction 8"X6" Tee	004057	004056	15-02-407-017	56398	15 WE	8.5	6	VCP	8	LINCIP	City of Rockford	25	1
3	822 Barnum Rd	CIPP Lateral Reconstruction 8"X6" Tee	004057	004056	15-02-407-018	56397	14.5 WE	9	6	VCP	8	LINCIP	City of Rockford	25	1
4	824 Barnum Rd	CIPP Lateral Reconstruction 8"X6" Tee	004057	004056	15-02-407-019	56396	24 EW	9.5	6	VCP	8	LINCIP	City of Rockford	25	1
5	825 Barnum Rd	CIPP Lateral Reconstruction 8"X6" Tee	004057	004056	15-02-408-010	66211	18.5 EW	9.5	6	VCP	8	LINCIP	City of Rockford	27	1
6	826 Barnum Rd	CIPP Lateral Reconstruction 8"X6" Tee	004057	004056	15-02-407-020	56395	11.5 EW	10	6	VCP	8	LINCIP	City of Rockford	25	1
7	827 Barnum Rd	CIPP Lateral Reconstruction 8"X6" Tee	004057	004056	15-02-408-011	66210	12 EW	8.5	6	VCP	8	LINCIP	City of Rockford	28	1
8	3101 7th St	CIPP Lateral Reconstruction 8"X6" Tee	004074	004073	15-02-427-010	92412	74.5 NS	9	6	VCP	8	LINCIP	City of Rockford	30	2
9	3102 7th St	CIPP Lateral Reconstruction 8"X6" Tee	004074	004073	15-02-430-001	92411	9 NS	9.25	6	VCP	8	LINCIP	City of Rockford	33	2
10	3104 7th St	CIPP Lateral Reconstruction 8"X6" Tee	004074	004073	15-02-430-002	92503	27 SN	9	6	VCP	8	LINCIP	City of Rockford	32	2
11	3106 7th St	CIPP Lateral Reconstruction 8"X6" Tee	004074	004073	15-02-430-003	92501	28 SN	9	6	VCP	8	LINCIP	City of Rockford	29	2
12	3108 7th St	CIPP Lateral Reconstruction 8"X6" Tee	004074	004073	15-02-430-004	66249	19 NS	8.5	6	VCP	8	LINCIP	City of Rockford	31	2
13	2702 Lapey St	CIPP Lateral Reconstruction 8"X6" Tee	005052A	005049	15-01-108-001	63552	20 NS	9	6	VCP	8	LINCIP	City of Rockford	26	3
14	2610 Craig Hill Dr	CIPP Lateral Reconstruction 8"X6" Tee	007058	007057	16-06-227-002	63738	23 NS	11	6	VCP	8	LINCIP	City of Rockford	31	4
15	2316 9th St	CIPP Lateral Reconstruction 10"X6" Tee	010033	010032	11-36-307-004	69605	1 NS	6	6	VCP	10	LINCIP	City of Rockford	29	5
16	2220 9th St	CIPP Lateral Reconstruction 9"X6" Tee	010034	010033	11-36-304-005	69601	18 NS	7	6	VCP	9	LINCIP	City of Rockford	32	5
17	2218 25th St	CIPP Lateral Reconstruction 8"X6" Tee	011103	011102	12-31-327-007	51560	26 SN	10.5	6	VCP	8	LINCIP	City of Rockford	26	6
18	2203 Montana Ave	CIPP Lateral Reconstruction 8"X6" Tee	013063	013064	12-32-307-001	48431	37.5 SN	8	6	VCP	8	LINCIP	City of Rockford	32	7
19	1615 26th St	CIPP Lateral Reconstruction 8"X6" Tee	016079	016078	12-31-129-011	50424	48 NS	9.5	6	VCP	8	LINCIP	City of Rockford	27	8
20	3227 Carolina Ave	CIPP Lateral Reconstruction 8"X6" Tee	017011	017010	12-31-259-009	42788	22 EW	6.5	6	VCP	8	LINCIP	City of Rockford	24	9
21	2010 Nebraska Rd	CIPP Lateral Reconstruction 8"X6" Tee	017073	017072	12-31-281-003	73562	36.6 SN	7	6	VCP	8	LINCIP	City of Rockford	33	10
22	3114 Broadway	CIPP Lateral Reconstruction 8"X6" Tee	017119	017118	12-30-456-026	40714	58 NS	8	6	VCP	8	LINCIP	City of Rockford	32	11
23	3204 Broadway	CIPP Lateral Reconstruction 8"X6" Tee	017119	017118	12-30-457-019	40704	95 NS	8.5	6	VCP	8	LINCIP	City of Rockford	31	11
24	1819 Ridgeland Ave	CIPP Lateral Reconstruction 8"X6" Tee	021012	020011	12-32-176-012	40570	25 SN	8	6	VCP	8	LINCIP	City of Rockford	29	12
25	1515 Clover Ave	CIPP Lateral Reconstruction 8"X6" Tee	021074	021073	11-27-302-011	46455	24 SN	9	6	VCP	8	LINCIP	City of Rockford	27	13
26	732 Seminary St	CIPP Lateral Reconstruction 15"X6" Tee	022088	022021	11-26-178-023	32038	106 EW	6.5	6	VCP	15	LINCIP	City of Rockford	42	14
27	828 8th Ave	CIPP Lateral Reconstruction 9"X6" Tee	023027	023026	11-26-406-002	41940	Off S. 5th St.	8	6	VCP	9	LINCIP	City of Rockford	43	15
28	1207 14th St	CIPP Lateral Reconstruction 10"X6" Tee	026004B	026004D	11-25-451-011	41720	36 SN	7.5	6	VCP	10	LINCIP	City of Rockford	21	16
29	1119 14th St	CIPP Lateral Reconstruction 10"X6" Tee	026004D	026066	11-25-451-006	31982	17 SN	8.2	6	VCP	10	LINCIP	City of Rockford	22	16
30	1653 9th Ave	CIPP Lateral Reconstruction 9"X6" Tee	026023A	026023	11-25-333-023	41467	15 EW	5.5	6	VCP	9	LINCIP	City of Rockford	36	17
31	1717 2nd Ave	CIPP Lateral Reconstruction 9"X6" Tee	026051	026050	11-25-131-006	37618	16 WE	6.5	6	VCP	9	LINCIP	City of Rockford	31	18
32	3216 Harney Ct	CIPP Lateral Reconstruction 8"X6" Tee	028123	028121	12-30-253-022	37329	21 SN	10	6	VCP	8	LINCIP	City of Rockford	25	19
33	722 Hawthorne Ave	CIPP Lateral Reconstruction 8"X6" Tee	029039	029038	12-30-428-004	31233	29 SN	8	6	VCP	8	LINCIP	City of Rockford	30	20
34	1136 Benton St	CIPP Lateral Reconstruction 12"X6" Tee	037019	037017	11-23-430-023	32587	7 EW	6	6	VCP	12	LINCIP	City of Rockford	31	21
35	215 Kenilworth Dr	CIPP Lateral Reconstruction 8"X6" Tee	040140	040074	12-30-127-015	31419	33 SN	8.5	6	VCP	8	LINCIP	City of Rockford	35	22
36	619 Skylark Dr	CIPP Lateral Reconstruction 8"X6" Tee	052074	052073	12-19-426-024	15888	63 NS	9.5	6	VCP	8	LINCIP	City of Rockford	51	23
37	203 Irving Ave	CIPP Lateral Reconstruction 12"X6" Tee	054014	054010A	11-22-109-033	26997	45.5 WE	7	6	VCP	12	LINCIP	City of Rockford	32	24
38	2108 School St	CIPP Lateral Reconstruction 9"X6" Tee	054065	054064	11-21-204-004	69099	12.5 EW	6	6	VCP	9	LINCIP	City of Rockford	41	25
39	1919 Sherman Ave.	CIPP Lateral Reconstruction 8"X6" Tee	055004	005001	11-16-405-057	24819	29.0 WE	9.6	6	VCP	8	LINCIP	City of Rockford	28	26
40	2023 Sherman Ave.	CIPP Lateral Reconstruction 8"X6" Tee	055008	005004	11-16-405-051	24827	27.5 WE	10	6	VCP	8	LINCIP	City of Rockford	26	26
41	2011 Sherman Ave.	CIPP Lateral Reconstruction 8"X6" Tee	055008	005004	11-16-405-054	24822	29.5 WE	10	6	VCP	8	LINCIP	City of Rockford	26	26
42	527 N Independence Ave.	CIPP Lateral Reconstruction 8"X6" Tee	055029	055028	11-16-487-001	24433	WYE 42.5 U/S	12	6	VCP	8	LINCIP	City of Rockford	14	27
43	719 Soper Ave.	CIPP Lateral Reconstruction 8"X6" Tee	055071	055070	11-16-452-002	24965	19.0 NS	8.3	6	VCP	8	LINCIP	City of Rockford	36	28
44	1434 Post Ave	CIPP Lateral Reconstruction 9"X6" Tee	062021	062020	11-14-430-030	21464	0 WE	6.5	6	VCP	9	LINCIP	City of Rockford	37	29

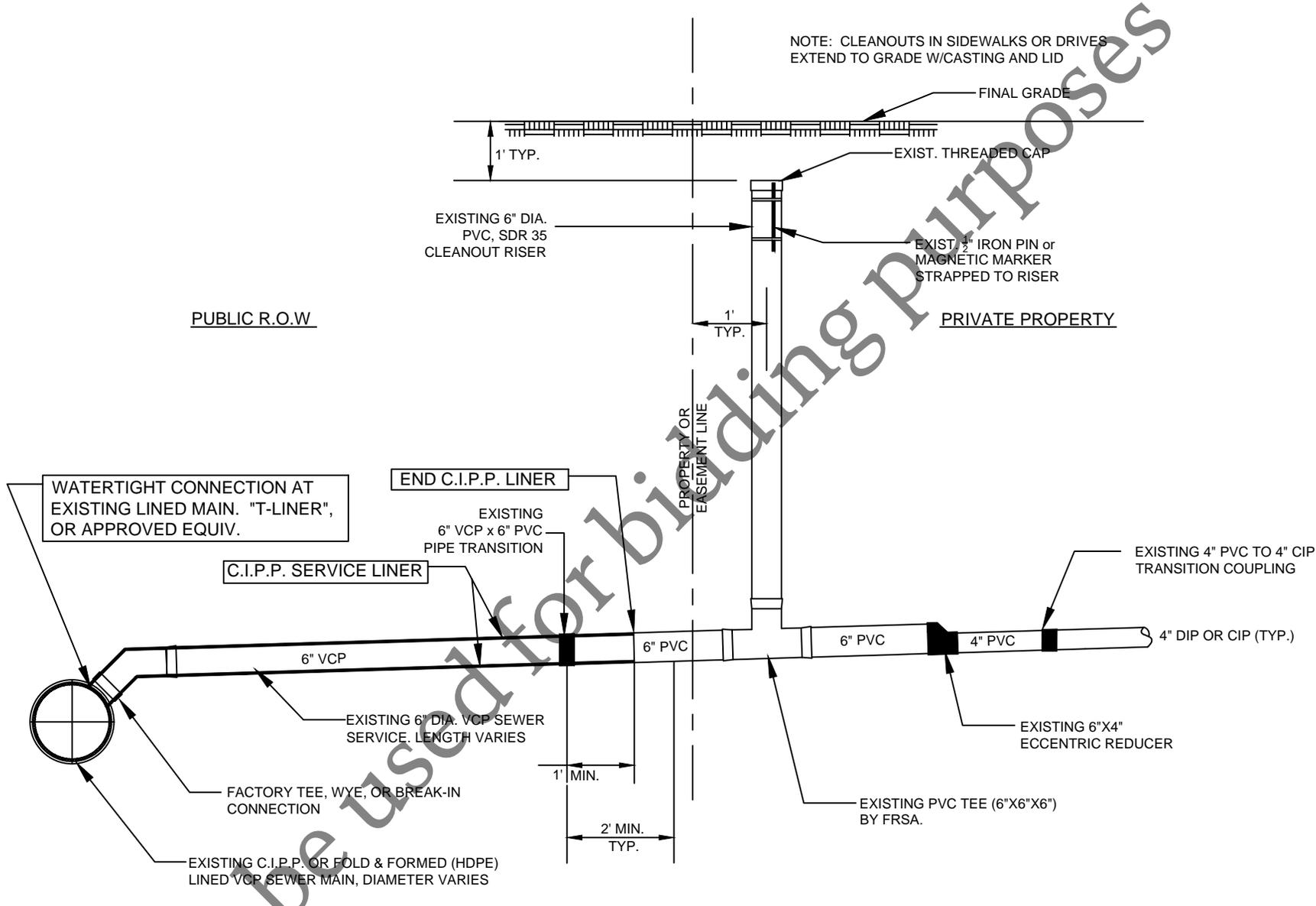
Item No.	Address	Work Item	UPSTM MH	DNSTM MH	PIN	Service ID#	End Measurement	Depth (FT)	Service Dia. (INCH)	Service Material	Main Dia. (INCH)	Main Material	Roadway Authority	Est. Length (FT)	Map #
45	3320 Blackstone Ave	CIPP Lateral Reconstruction 8"X6" Tee	068053	068052	11-15-135-005	14830	38.5WE	7	6	VCP	8	LINCIP	City of Rockford	27	30
46	706 King St	CIPP Lateral Reconstruction 8"X6" Tee	070005	070004	11-14-330-021	21422	27 WE	8	6	VCP	8	LINCIP	City of Rockford	34	31
47	1706 Tacoma Ave	CIPP Lateral Reconstruction 8"X6" Tee	070098	070096	11-14-154-010	20625	28 NS	7	6	VCP	8	LINCIP	City of Rockford	32	32
48	2124 Fremont St	CIPP Lateral Reconstruction 10"X6" Tee	071049	071048	11-14-227-014	20030	50 NS	5.5	6	VCP	10	LINCIP	City of Rockford	34	33
49	2216 Douglas St	CIPP Lateral Reconstruction 8"X6" Tee	072110	072109	11-12-381-010	11646	12 SN	8.5	6	VCP	8	LINCIP	City of Rockford	30	34
50	2206 Wallace St	CIPP Lateral Reconstruction 8"X6" Tee	072123	072122	11-12-356-010	11679	28.5 SN	7	6	VCP	8	LINCIP	City of Rockford	31	35
51	3006 Ridgeway Ave	CIPP Lateral Reconstruction 8"X6" Tee	077080	077079	11-15-211-010	22923	28 EW	8	6	VCP	8	LINCIP	City of Rockford	26	36
52	2107 Lawndale Ave	CIPP Lateral Reconstruction 8"X6" Tee	078045	078044	11-14-104-005	20071	26 EW	7	6	VCP	8	LINCIP	City of Rockford	30	37
53	2419 Midway Dr	CIPP Lateral Reconstruction 8"X6" Tee	079034	079033	11-11-153-014	12509	17 WE	9	6	VCP	8	LINCIP	City of Rockford	30	38
54	2715 Ellen Ave	CIPP Lateral Reconstruction 8"X6" Tee	079118	079117	11-10-428-008	2486	19 SN	9	6	VCP	8	LINCIP	City of Rockford	29	39
55	3003 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081016	081015	11-11-277-009	3136	23 NS	8.5	6	VCP	8	LINCIP	City of Rockford	25	40
56	3007 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081016	081015	11-11-277-008	3129	24 NS	8.5	6	VCP	8	LINCIP	City of Rockford	24	40
57	3011 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081016	081015	11-11-277-007	3123	15.5 NS	8	6	VCP	8	LINCIP	City of Rockford	26	40
58	3015 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081016	081015	11-11-277-006	3109	21 NS	8.5	6	VCP	8	LINCIP	City of Rockford	26	40
59	3019 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081016	081015	11-11-277-005	11993	16 NS	8.5	6	VCP	8	LINCIP	City of Rockford	28	40
60	3020 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081016	081015	11-11-276-017	12418	23 NS	9.5	6	VCP	8	LINCIP	City of Rockford	25	40
61	1306 Pierce Ave	CIPP Lateral Reconstruction 8"X6" Tee	081017	081016	11-11-276-013	12370	46.5 NS	10.5	6	VCP	8	LINCIP	City of Rockford	26	41
62	3036 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081017	081016	11-11-276-014	12384	8 NS	9	6	VCP	8	LINCIP	City of Rockford	24	40
63	1304 Deborah Ave	CIPP Lateral Reconstruction 8"X6" Tee	081021	081020	11-11-229-008	12068	58 NS	10	6	VCP	8	LINCIP	City of Rockford	25	42
64	3219 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081021	081020	11-11-230-003	12100	25 NS	10	6	VCP	8	LINCIP	City of Rockford	26	42
65	3223 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081021	081020	11-11-230-002	12084	28 NS	10	6	VCP	8	LINCIP	City of Rockford	27	42
66	3224 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081021	081020	11-11-229-009	12086	18 NS	10	6	VCP	8	LINCIP	City of Rockford	27	42
67	3237 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081021	081020	11-11-230-001	12062	19 NS	9.5	6	VCP	8	LINCIP	City of Rockford	29	42
68	3307 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081022	081021	11-11-227-007	11939	20 NS	10	6	VCP	8	LINCIP	City of Rockford	28	42
69	3308 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081022	081021	11-11-226-009	11938	24 NS	10.5	6	VCP	8	LINCIP	City of Rockford	25	42
70	3311 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081022	081021	11-11-227-006	11928	22.5 NS	10	6	VCP	8	LINCIP	City of Rockford	29	42
71	3312 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081022	081021	11-11-226-008	11927	25 NS	10	6	VCP	8	LINCIP	City of Rockford	27	42
72	3315 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081022	081021	11-11-227-005	11916	20.5 NS	10	6	VCP	8	LINCIP	City of Rockford	26	42
73	3316 Ruth St	CIPP Lateral Reconstruction 8"X6" Tee	081022	081021	11-11-226-007	11914	25 NS	10	6	VCP	8	LINCIP	City of Rockford	25	42
74	1215 Deborah Ave	CIPP Lateral Reconstruction 8"X6" Tee	081022	081021	11-11-227-008	11764	30 NS	9	6	VCP	8	LINCIP	City of Rockford	30	42
75	1303 Deborah Ave	CIPP Lateral Reconstruction 8"X6" Tee	081022	081021	11-11-226-010	11770	23 NS	9	6	VCP	8	LINCIP	City of Rockford	26	42
76	2927 Latham St	CIPP Lateral Reconstruction 10"X6" Tee	081027	081026	11-11-279-001	3157	36 EW	9	6	VCP	10	LINCIP	City of Rockford	29	40
77	3003 Latham St	CIPP Lateral Reconstruction 8"X6" Tee	081028	081027	11-11-276-012	3137	31 SN	9	6	VCP	8	LINCIP	City of Rockford	28	40
78	3312 Latham St	CIPP Lateral Reconstruction 8"X6" Tee	081034	081033	11-11-203-009	11930	28 SN	8.5	6	VCP	8	LINCIP	City of Rockford	29	42
79	3015 N Church St	CIPP Lateral Reconstruction 8"X6" Tee	081036	081035	11-11-254-007	3117	23 SN	9.5	6	VCP	8	LINCIP	City of Rockford	26	40
80	3221 N Church St	CIPP Lateral Reconstruction 8"X6" Tee	081041	081040	11-11-205-002	12076	3.5 SN	9.5	6	VCP	8	LINCIP	City of Rockford	25	42
81	1208 Jonathan Ave	CIPP Lateral Reconstruction 10"X6" Tee	081055	081052	11-11-233-007	12197	26.1 SN	8.5	6	VCP	10	LINCIP	City of Rockford	27	41
82	2507 Shady Ln	CIPP Lateral Reconstruction 8"X6" Tee	083039	083038	12-18-127-010	18976	2.5 SN	7	6	VCP	8	LINCIP	City of Rockford	32	43
83	3433 Elva Ln	CIPP Lateral Reconstruction 8"X6" Tee	086041	086040	11-03-478-010	8375	38.5 NS	9	6	VCP	8	LINCIP	City of Rockford	35	44
84	2716 Carmac Rd	CIPP Lateral Reconstruction 8"X6" Tee	086071	086069	11-03-429-005	8207	43.5 WE	9.5	6	VCP	8	LINCIP	City of Rockford	26	45
85	2109 N Alpine Rd	CIPP Lateral Reconstruction 8"X6" Tee	101018	101017	12-17-253-011	17905	37.5 SN	10	6	VCP	8	LINCIP	City of Rockford	7	46
86	4779 Colt Rd	CIPP Lateral Reconstruction 8"X6" Tee	103065A	103065	16-05-453-009	57797	45.5 EW	13.5	6	VCP	8	LINCIP	City of Rockford	31	47
87	5018 Fletcher Pl	CIPP Lateral Reconstruction 8"X6" Tee	108089	108090	12-28-328-021	37505	29.5 EW	8.5	6	VCP	8	LINCIP	City of Rockford	30	48
88	3419 Jamestown Dr	CIPP Lateral Reconstruction 10"X6" Tee	128016	128015	15-12-201-005	67075	27 SN	8	6	VCP	10	LINCIP	City of Rockford	31	49
89	2011 Rexford Dr	CIPP Lateral Reconstruction 8"X6" Tee	128048	128047	15-01-454-002	65819	25 WE	8	6	VCP	8	LINCIP	City of Rockford	34	50
90	2217 Rexford Dr	CIPP Lateral Reconstruction 8"X6" Tee	128060	128058	15-01-476-012	64564	34 WE	9	6	VCP	8	LINCIP	City of Rockford	31	50
91	1629 Scottswood Rd	CIPP Lateral Reconstruction 8"X6" Tee	135055	135054	12-18-477-012	19241	26 SN	8.5	6	VCP	8	LINCIP	City of Rockford	25	51
92	1921 Boscobel Ct	CIPP Lateral Reconstruction 8"X6" Tee	135083	135082	12-18-402-037	18648	30 NS	9.5	6	VCP	8	LINCIP	City of Rockford	22	52

Item No.	Address	Work Item	UPSTM MH	DNSTM MH	PIN	Service ID#	End Measurement	Depth (FT)	Service Dia. (INCH)	Service Material	Main Dia. (INCH)	Main Material	Roadway Authority	Est. Length (FT)	Map #
93	4019 Crestview Dr	CIPP Lateral Reconstruction 8"X6" Tee	066047	075139	12-17-354-008	18208	19 WE	5.5	6	VCP	8	LINCIP	Rockford Township	32	53
94	2420 Devonshire Dr	CIPP Lateral Reconstruction 8"X6" Tee	115031	115030	12-17-202-022	16929	35 NS	9.5	6	VCP	8	LINCIP	Rockford Township	30	54
95	4114 Florence Ave	CIPP Lateral Reconstruction 8"X6" Tee	126034	126033	11-20-130-007	35678	33.6 EW	7	6	VCP	8	LINCIP	Rockford Township	27	55
96	1606 Mars Ave.	CIPP Lateral Reconstruction 10"X6" Tee	099073	099072	08-32-151-005	43766	34.0 WE	9.7	6	VCP	10	LINCIP	Loves Park	34	56
97	1618 Mars Ave.	CIPP Lateral Reconstruction 10"X6" Tee	099073	099072	08-32-151-008	43763	34.0 EW	10	6	VCP	10	LINCIP	Loves Park	31	56
98	1613 Mars Ave.	CIPP Lateral Reconstruction 8"X6" Tee	099074	099073	08-32-153-008	43777	29.0 SN	9.5	6	VCP	8	LINCIP	Loves Park	34	56
99	7414 Jupiter Ct.	CIPP Lateral Reconstruction 8"X6" Tee	099074	099073	08-32-153-009	56633	19.4 SN	8.5	6	VCP	8	LINCIP	Loves Park	34	56
100	7413 Jupiter Ct.	CIPP Lateral Reconstruction 8"X6" Tee	099074	099073	08-32-154-002	56631	57.0 NS	8.5	6	VCP	8	LINCIP	Loves Park	30	56
101	1705 Mars Ave.	CIPP Lateral Reconstruction 8"X6" Tee	099074	099073	08-32-154-001	43778	37.0 SN	9.5	6	VCP	8	LINCIP	Loves Park	30	56
102	1704 Mars Ave.	CIPP Lateral Reconstruction 10"X6" Tee	099075	099073	08-32-151-010	44618	29.0 EW	10	6	VCP	10	LINCIP	Loves Park	28	56
103	1617 Evans Ave.	CIPP Lateral Reconstruction 15"X6" Tee	099283	099070	08-32-301-008	61310	32.0 WE	7.5	6	VCP	15	LINCIP	Loves Park	30	56
104	1616 Evans Ave.	CIPP Lateral Reconstruction 15"X6" Tee	099283	099070	08-32-153-016	61290	24.0 EW	7.5	6	VCP	15	LINCIP	Loves Park	33	56
105	1620 Evans Ave.	CIPP Lateral Reconstruction 15"X6" Tee	099283	099070	08-32-154-012	61289	28.0 EW	7.5	6	VCP	15	LINCIP	Loves Park	33	56
106	7513 Buffalo Grove Rd	CIPP Lateral Reconstruction 8"X6" Tee	100068	100067	08-32-278-020	43775	26.5 NS	10	6	VCP	8	LINCIP	Loves Park	33	57
107	7517 Buffalo Grove Rd	CIPP Lateral Reconstruction 8"X6" Tee	100068	100067	08-32-278-063	43772	2 NS	9	6	VCP	8	LINCIP	Loves Park	42	57
108	906 Kingsley Dr	CIPP Lateral Reconstruction 10"X6" Tee	098056	098055	08-31-327-012	61943	28 WE	6.5	6	VCP	10	LINCIP	Machesney Park	26	58
109	7800 Scott Ln.	CIPP Lateral Reconstruction 8"X6" Tee	099263	099262	08-31-226-030	61198	40.0 SN	6	6	VCP	8	LINCIP	Machesney Park	26	59
110	132 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124004	124003	07-36-229-008	134088	25.4 EW	10	6	VCP	8	LINCIP	Machesney Park	27	60
111	202 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124004	124003	07-36-229-009	134104	25.0 WE	8.5	6	VCP	8	LINCIP	Machesney Park	27	60
112	226 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124004	124003	07-36-229-012	133780	27.6 EW	8	6	VCP	8	LINCIP	Machesney Park	26	60
113	139 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124004	124003	07-36-276-007	133783	14.5 EW	8	6	VCP	8	LINCIP	Machesney Park	25	60
114	240 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124005	124004	07-36-229-014	62703	30.5 WE	8.5	6	VCP	8	LINCIP	Machesney Park	26	60
115	227 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124005	124004	07-36-276-010	134107	12.5 EW	8	6	VCP	8	LINCIP	Machesney Park	27	60
116	229 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124005	124004	07-36-276-011	62720	20.6 WE	8	6	VCP	8	LINCIP	Machesney Park	23	60
117	233 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124005	124004	07-36-276-012	62719	24 EW	8.5	6	VCP	8	LINCIP	Machesney Park	23	60
118	235 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124005	124004	07-36-276-013	62717	24 EW	8.5	6	VCP	8	LINCIP	Machesney Park	23	60
119	261 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124005	124004	08-31-152-001	61634	7.8 EW	9.5	6	VCP	8	LINCIP	Machesney Park	25	60
120	313 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124006	124005	08-31-152-005	61626	7.8 EW	8.7	6	VCP	8	LINCIP	Machesney Park	25	60
121	317 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124006	124005	08-31-152-007	61624	30.6 EW	8	6	VCP	8	LINCIP	Machesney Park	25	60
122	132 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124014	124013A	07-36-227-025	62666	11.0 EW	9.5	6	VCP	8	LINCIP	Machesney Park	52	61
123	205 Huron Rd	CIPP Lateral Reconstruction 8"X6" Tee	124015	124014	07-36-220-007	62674	24 WE	7.5	6	VCP	8	LINCIP	Machesney Park	35	61
124	136 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124015	124014	07-36-227-026	62659	12.0 WE	8	6	VCP	8	LINCIP	Machesney Park	31	61
125	226 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124016	124015	07-36-227-032	62653	23.0 WE	8	6	VCP	8	LINCIP	Machesney Park	31	61
126	217 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124016	124015	07-36-228-009	62672	24.6 EW	6	6	VCP	8	LINCIP	Machesney Park	33	61
127	221 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124016	124015	07-36-228-010	62671	8.0 EW	7.5	6	VCP	8	LINCIP	Machesney Park	33	61
128	227 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124016	124015	07-36-228-011	62670	18.0 EW	8	6	VCP	8	LINCIP	Machesney Park	33	61
129	233 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124016	124015	07-36-228-012	62669	35.0 EW	7.5	6	VCP	8	LINCIP	Machesney Park	33	61
130	301 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124016	124015	07-36-228-013	62668	51.0 EW	8.5	6	VCP	8	LINCIP	Machesney Park	33	61
131	518 Huron Rd	CIPP Lateral Reconstruction 8"X6" Tee	124019	124018	08-31-102-023	61131	24 WE	10	6	VCP	8	LINCIP	Machesney Park	32	62
132	502 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124019	124018	08-31-102-021	61135	50.0 EW	8	6	VCP	8	LINCIP	Machesney Park	32	62
133	522 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124019	124018	08-31-102-024	61130	17.0 EW	9	6	VCP	8	LINCIP	Machesney Park	31	62
134	526 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124019	124018	08-31-102-025	61128	1.0 EW	9	6	VCP	8	LINCIP	Machesney Park	31	62
135	433 Huron Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124019	124018	08-31-103-006	61160	34.0 EW	7.5	6	VCP	8	LINCIP	Machesney Park	34	62
136	104 Superior Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124023	124022	07-36-226-016	62621	37.0 WE	7	6	VCP	8	LINCIP	Machesney Park	42	63
137	106 Superior Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124023	124022	07-36-226-017	62619	15.0 EW	7	6	VCP	8	LINCIP	Machesney Park	42	63
138	100 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124033	124032	07-25-479-005	64795	60.0 WE	6	6	VCP	8	LINCIP	Machesney Park	51	63
139	102 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124033	124032	07-25-479-032	64794	27.8 EW	8	6	VCP	8	LINCIP	Machesney Park	49	63
140	104 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124033	124032	07-25-479-033	64793	40.0 EW	7	6	VCP	8	LINCIP	Machesney Park	56	63

Item No.	Address	Work Item	UPSTM MH	DNSTM MH	PIN	Service ID#	End Measurement	Depth (FT)	Service Dia. (INCH)	Service Material	Main Dia. (INCH)	Main Material	Roadway Authority	Est. Length (FT)	Map #
141	106 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124033	124032	07-25-479-034	64792	62.0 WE	6.5	6	VCP	8	LINCIP	Machesney Park	49	63
142	112 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124033	124032	07-25-479-036	64790	34.0 EW	8	6	VCP	8	LINCIP	Machesney Park	46	63
143	116 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124034	124033	07-25-479-038	64789	23.0 WE	7.5	6	VCP	8	LINCIP	Machesney Park	46	63
144	118 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124034	124033	07-25-479-039	64788	29.0 EW	6.5	6	VCP	8	LINCIP	Machesney Park	45	63
145	124 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124034	124033	07-25-479-040	64787	41.0 WE	8.5	6	VCP	8	LINCIP	Machesney Park	43	63
146	132 Harlem Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124035	124034	07-25-479-042	64785	26.0 EW	8	6	VCP	8	LINCIP	Machesney Park	42	63
147	120 E Wilson Ave	CIPP Lateral Reconstruction 10"X6" Tee	124046	124045	07-25-451-020	44257	34.5 EW	5.5	6	VCP	10	LINCIP	Machesney Park	41	64
148	54 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124052	124051	07-25-403-029	59669	34.5 WE	6	6	VCP	8	LINCIP	Machesney Park	32	65
149	56 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124052	124051	07-25-403-030	59668	35.5 WE	6	6	VCP	8	LINCIP	Machesney Park	32	65
150	49 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124052	124051	07-25-404-008	59720	37.0 WE	5.5	6	VCP	8	LINCIP	Machesney Park	34	65
151	156 Gilbert Ter	CIPP Lateral Reconstruction 15"X6" Tee	124057	124056	07-25-404-036	59284	30 EW	8	6	VCP	15	LINCIP	Machesney Park	35	66
152	8318 Waterview Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124058	124057	07-25-451-036	59859	38.0 NS	8	6	VCP	8	LINCIP	Machesney Park	33	66
153	8308 Waterview Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124058	124057	07-25-451-038	59870	39.0 NS	8	6	VCP	8	LINCIP	Machesney Park	33	66
154	8315 Waterview Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124058	124057	07-25-476-002	59865	32.0 NS	8	6	VCP	8	LINCIP	Machesney Park	33	66
155	8309 Waterview Rd.	CIPP Lateral Reconstruction 8"X6" Tee	124058	124057	07-25-476-003	59871	33.0 NS	8	6	VCP	8	LINCIP	Machesney Park	32	66
156	204 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124069	124068A	07-25-428-022	59699	35.0 EW	8	6	VCP	8	LINCIP	Machesney Park	33	67
157	208 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124069	124068A	07-25-428-023	59696	30.0 EW	8	6	VCP	8	LINCIP	Machesney Park	33	67
158	205 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124069	124068A	07-25-428-033	59735	29.0 EW	9	6	VCP	8	LINCIP	Machesney Park	33	67
159	212 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-024	59693	30.0 EW	9	6	VCP	8	LINCIP	Machesney Park	33	67
160	216 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-025	59689	29.0 EW	10	6	VCP	8	LINCIP	Machesney Park	33	67
161	220 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-026	59686	30.0 EW	10	6	VCP	8	LINCIP	Machesney Park	33	67
162	224 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-027	59682	30.0 EW	9	6	VCP	8	LINCIP	Machesney Park	33	67
163	228 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-028	59679	30.0 EW	9	6	VCP	8	LINCIP	Machesney Park	33	67
164	217 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-036	59729	31.0 EW	9	6	VCP	8	LINCIP	Machesney Park	34	67
165	221 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-037	59726	29.5 EW	9	6	VCP	8	LINCIP	Machesney Park	33	67
166	225 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-038	59724	31.0 EW	9	6	VCP	8	LINCIP	Machesney Park	34	67
167	229 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-039	59721	30.0 EW	9	6	VCP	8	LINCIP	Machesney Park	33	67
168	233 Wilshire Blvd.	CIPP Lateral Reconstruction 8"X6" Tee	124070	124069	07-25-428-040	59746	18.0 WE	7.5	6	VCP	8	LINCIP	Machesney Park	61	67
169	129 Sycamore Ln	CIPP Lateral Reconstruction 8"X6" Tee	124100	124099	07-36-277-004	62756	41 WE	9	6	VCP	8	LINCIP	Machesney Park	26	60
170	112 Sycamore Ln.	CIPP Lateral Reconstruction 8"X6" Tee	124100	124099	07-36-276-020	62755	23.5 EW	8	6	VCP	8	LINCIP	Machesney Park	24	60
171	338 Sycamore Ln.	CIPP Lateral Reconstruction 8"X6" Tee	124102	124101	08-31-152-022	56010	2.3 EW	7.7	6	VCP	8	LINCIP	Machesney Park	25	60
172	332 Wallace Ave.	CIPP Lateral Reconstruction 8"X6" Tee	124006A	124006	08-31-151-007	61608	20.5 EW	8.7	6	VCP	8	LINCIP	Machesney Park	25	60
173	8615 Waterview Rd.	CIPP Lateral Reconstruction 10"X6" Tee	124071A	124071	07-25-426-006	59528	29.0 SN	6.5	6	VCP	10	LINCIP	Machesney Park	34	68
174	126 S Cherry St	CIPP Lateral Reconstruction 8"X6" Tee	157035	157034	16-01-177-014	68295	26 SN	8	6	VCP	8	LINCIP	Village of Cherry Valley	16	69
175	207 W Winnebago St	CIPP Lateral Reconstruction 8"X6" Tee	700068	700067	14-08-477-007	342454	64 NS	5.5	6	VCP	8	LINCIP	Village of Winnebago	13	70
176	820 10th Ave	CIPP Short Liner, 9" Dia. X 7' Long	023018	023017	N/A	N/A	N/A	9.1	N/A	VCP	N/A	VCP	City of Rockford	7	71

Notes

Highlighted cells indicate cleanouts scheduled for installation by others no later than October 31, 2023.

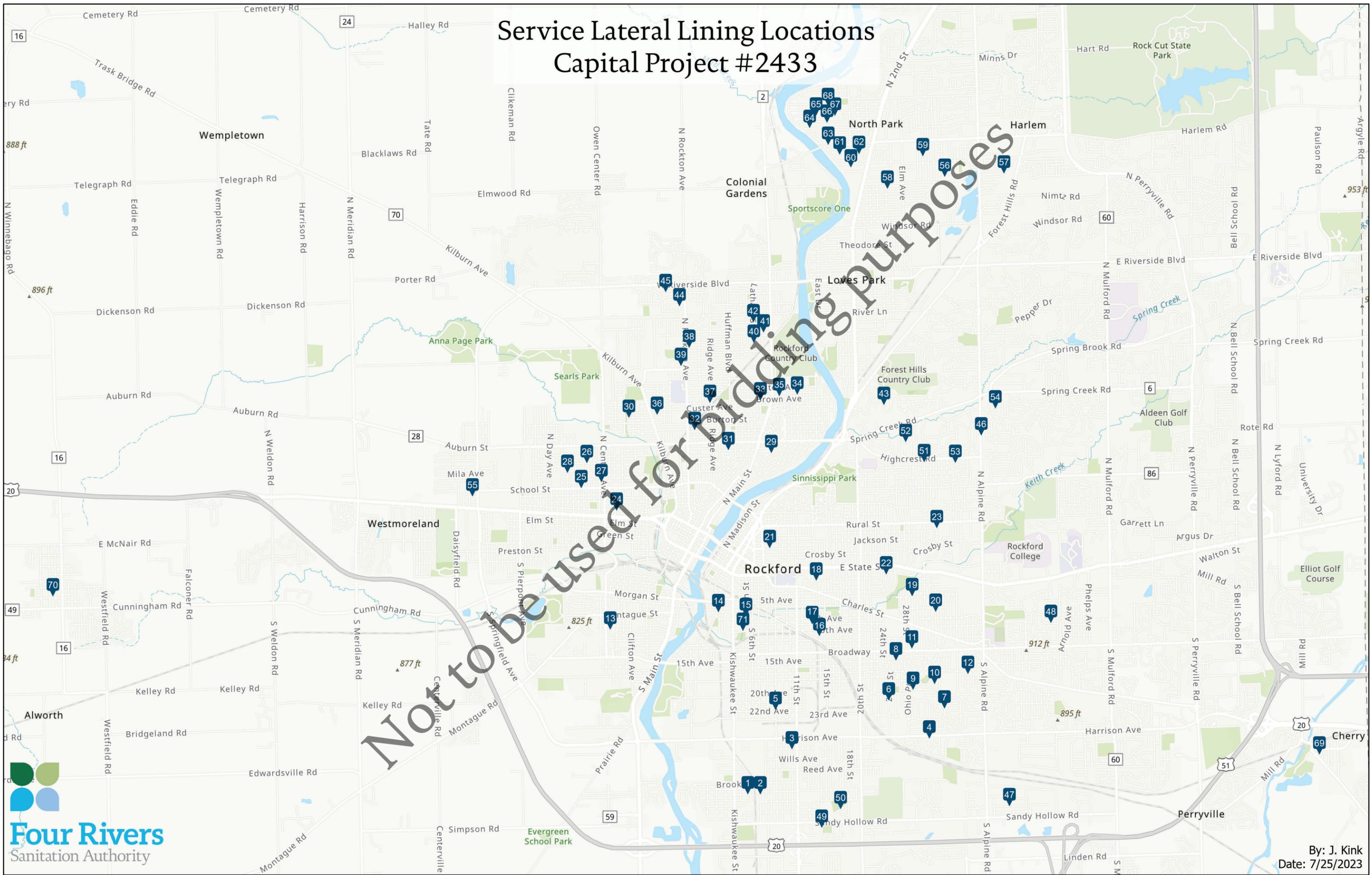


THE CONTRACTOR SHALL LINE THE ENTIRE LENGTH OF EXISTING 6" CLAY SERVICE PIPE TO A POINT 1' UPSTREAM OF THE 6" CLAY TO 6" PVC PIPE TRANSITION WITH CURED IN PLACE PIPE (C.I.P.P.) PER ASTM F-1216, ASTM F-1743 OR ASTM F-2561.

CURED IN PLACE SEWER SERVICE LINING DETAIL

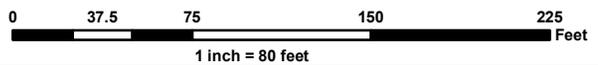
NOT TO SCALE

Service Lateral Lining Locations Capital Project #2433





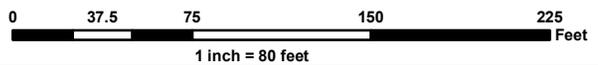
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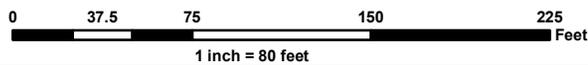
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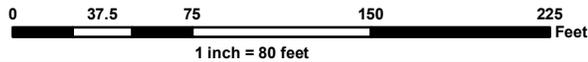
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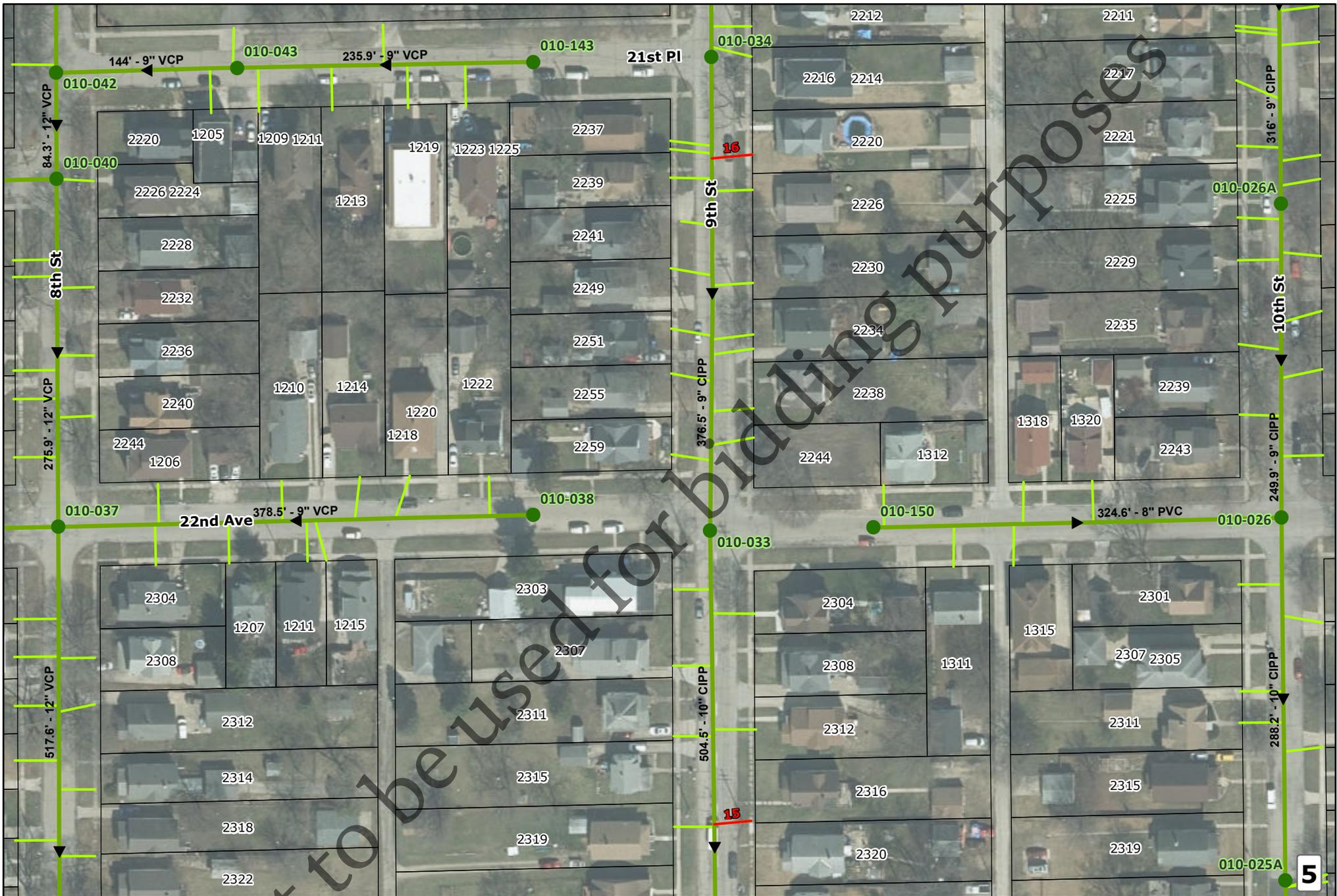




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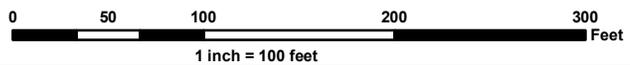




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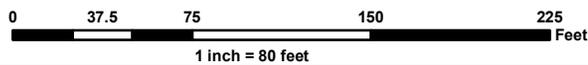




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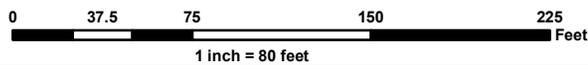
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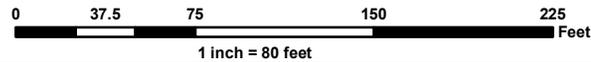
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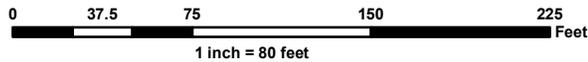




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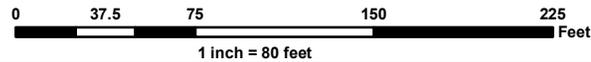


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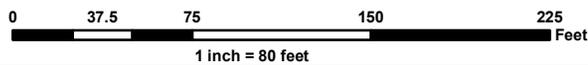
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2023 Service Lateral Lining Capital Project #2433

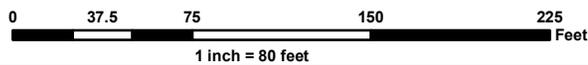




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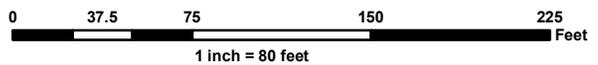


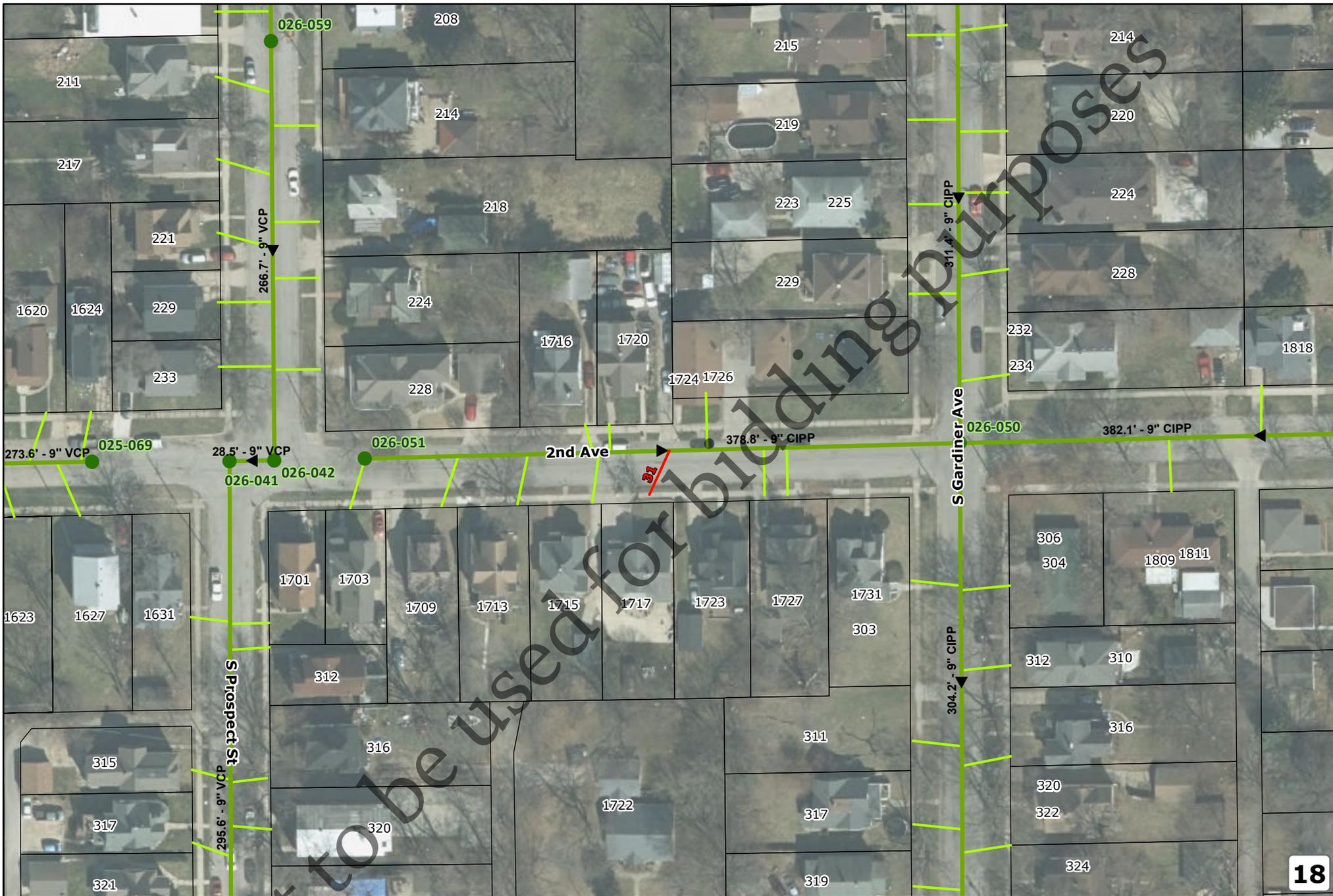
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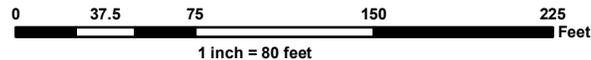
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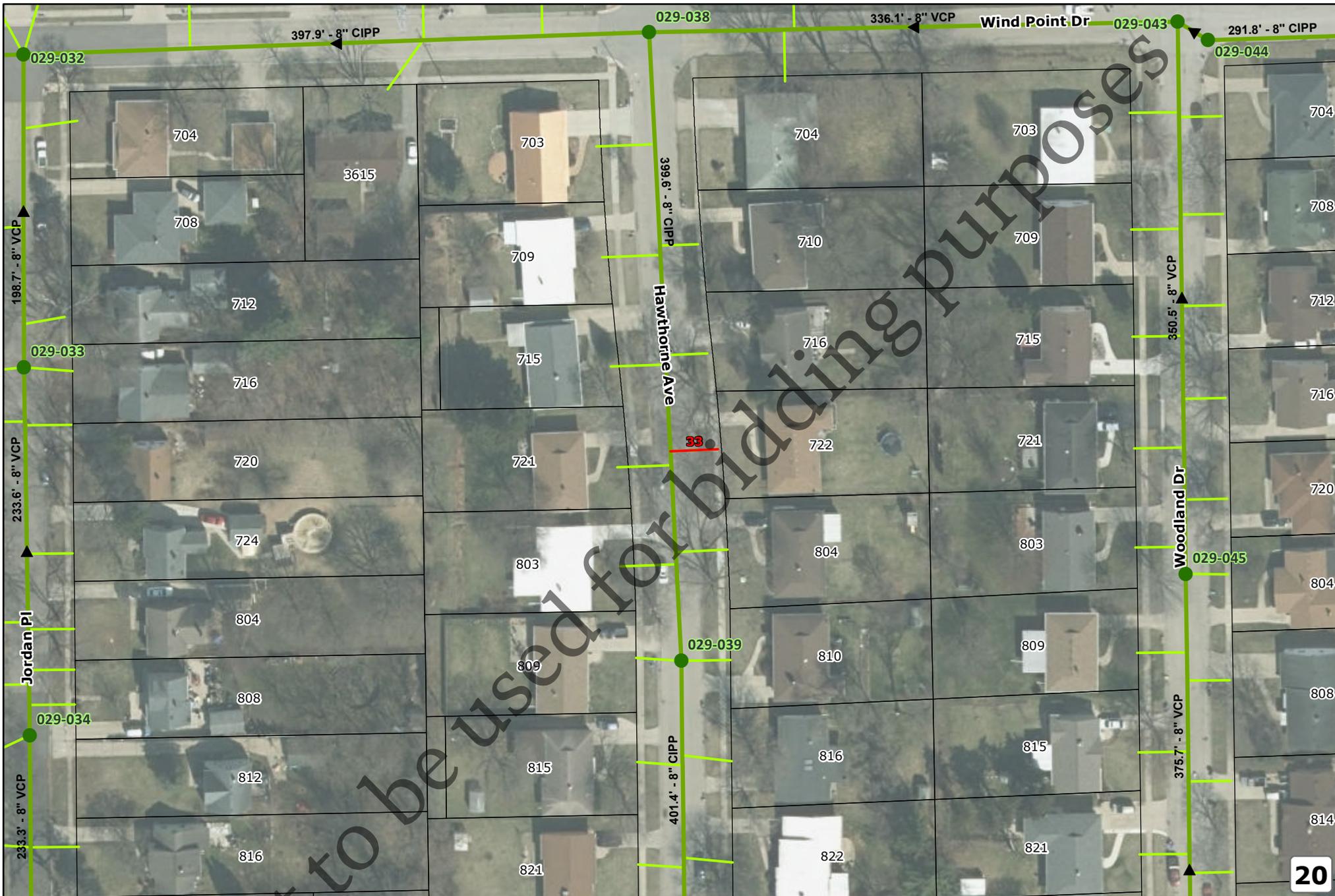
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2023 Service Lateral Lining Capital Project #2433





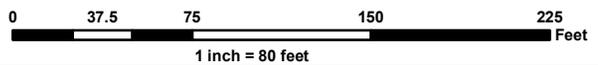
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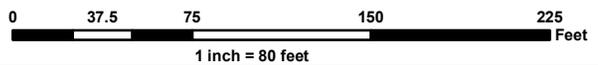
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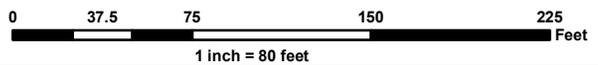
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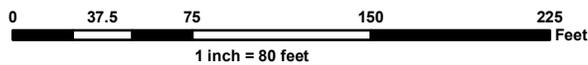
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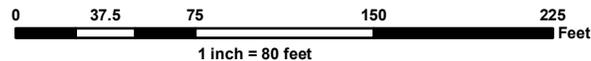
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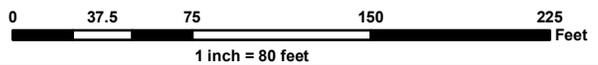


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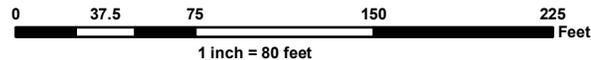
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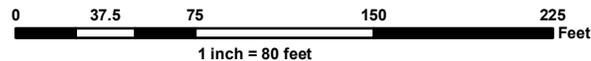
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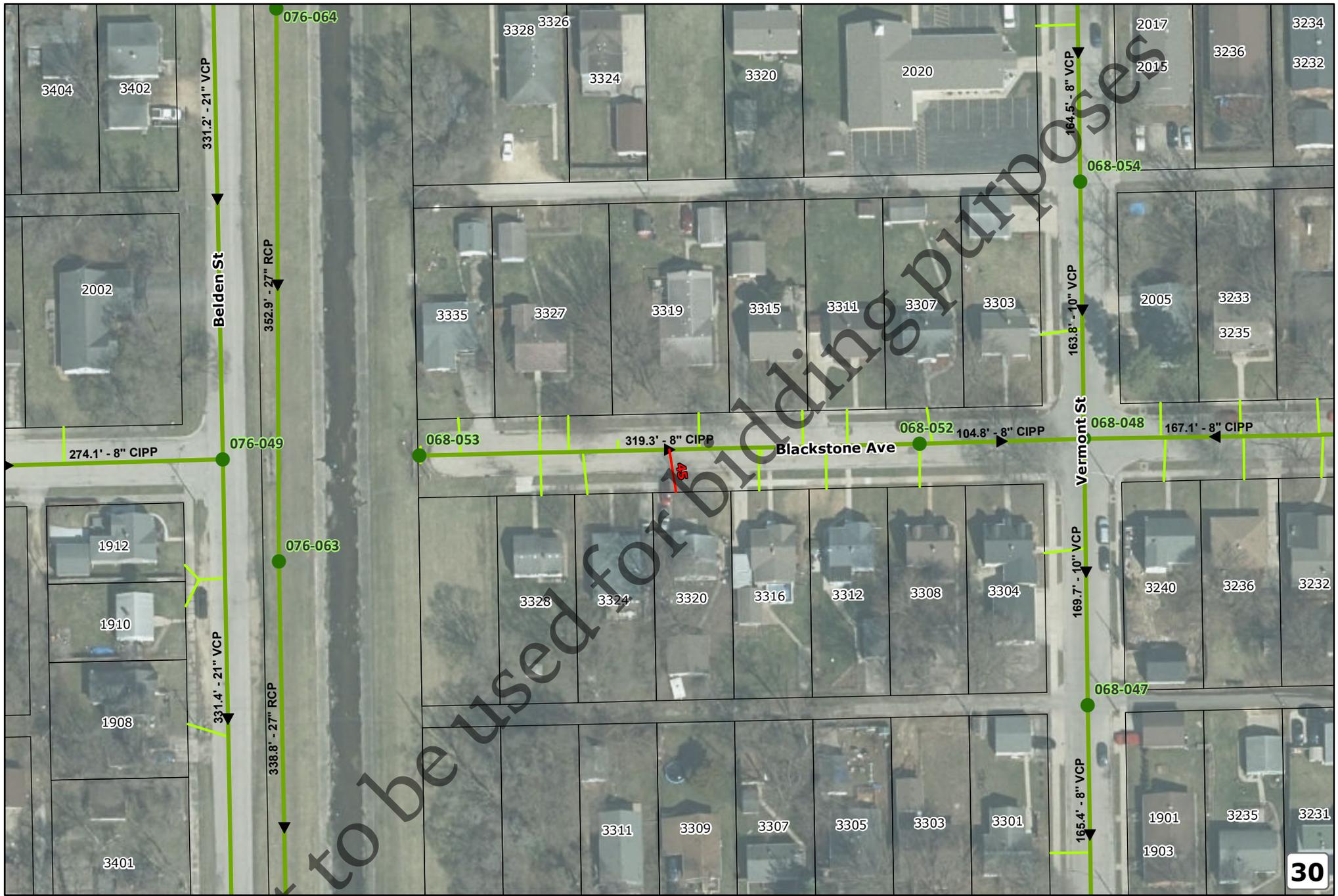
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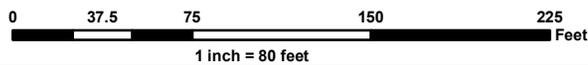


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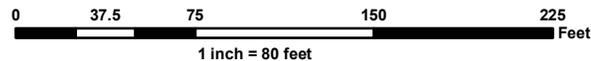
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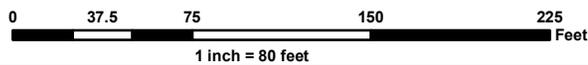




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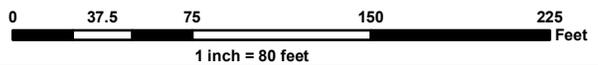


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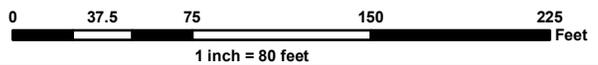


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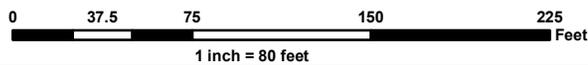


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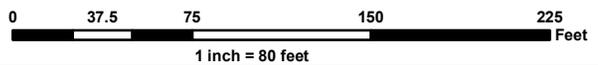


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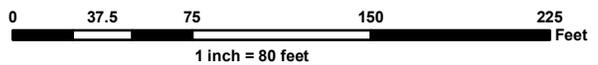


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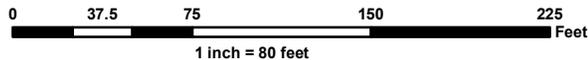


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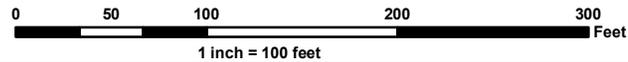
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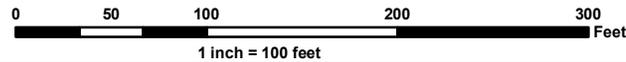
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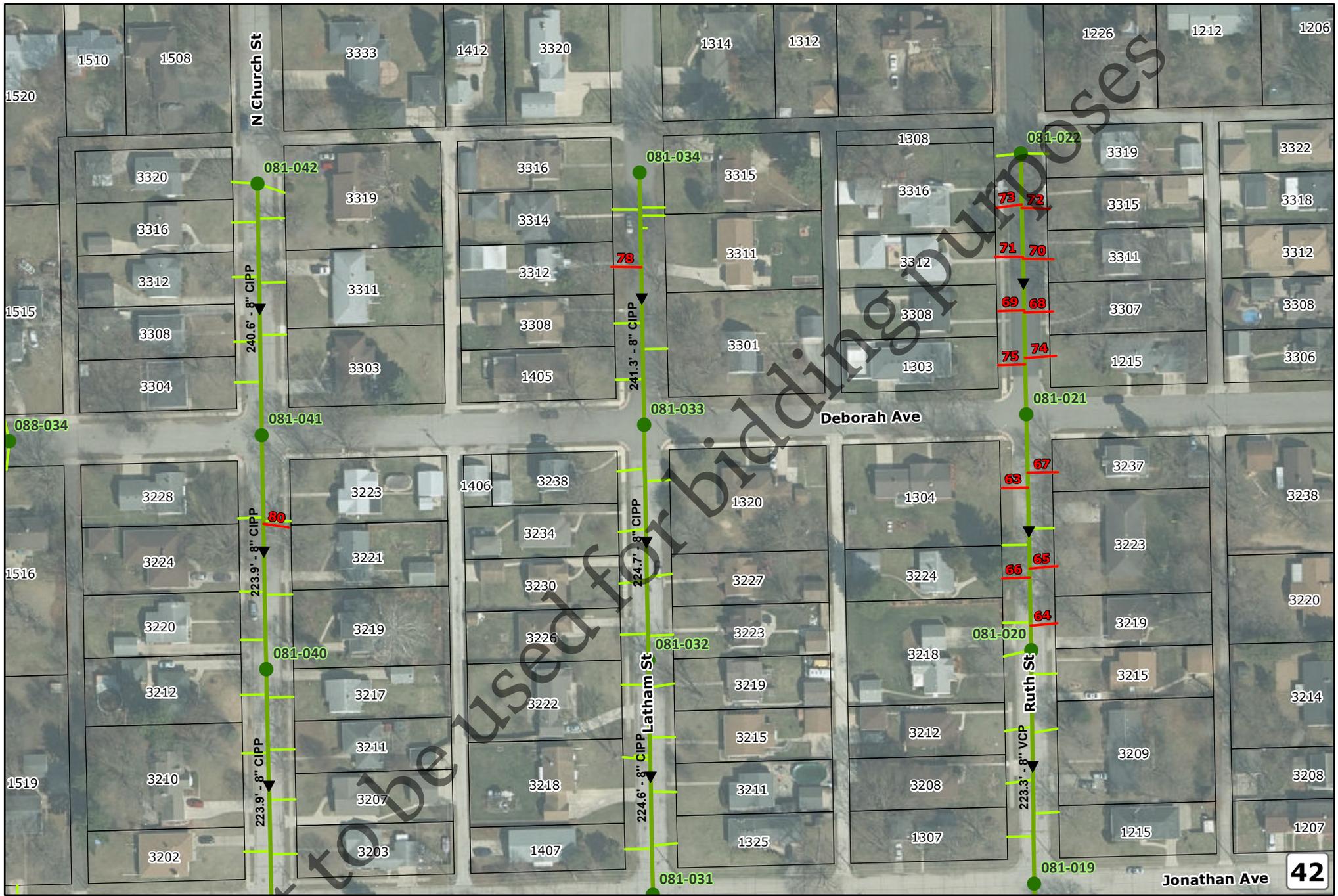




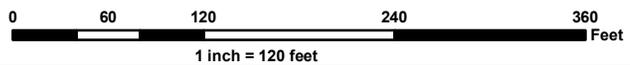
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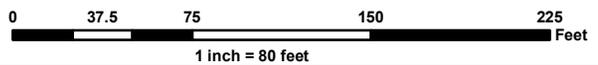


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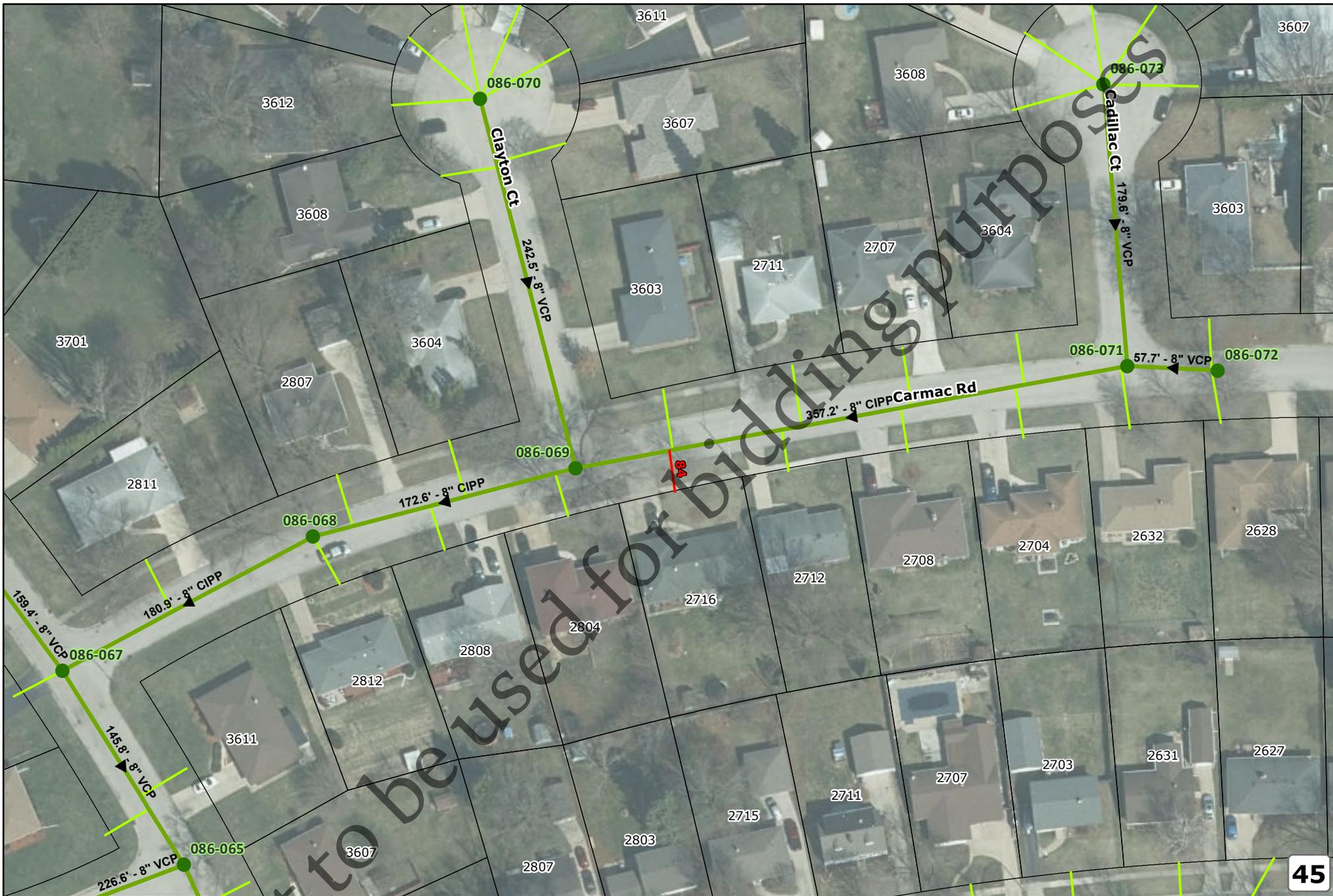
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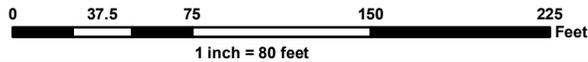
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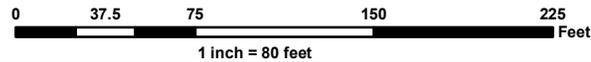


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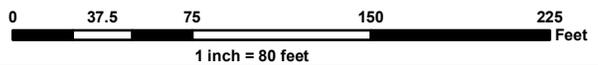


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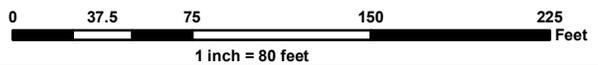


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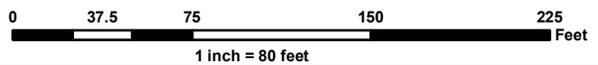
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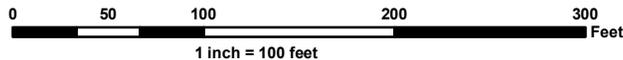
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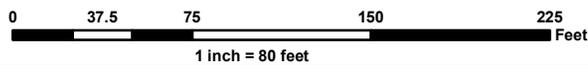


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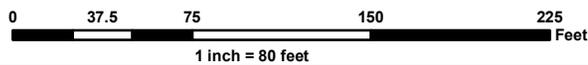




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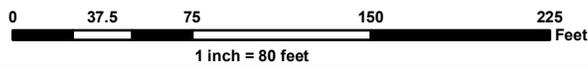


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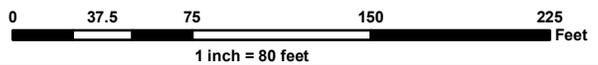


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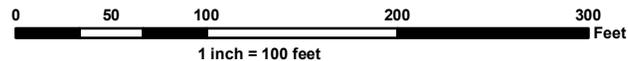


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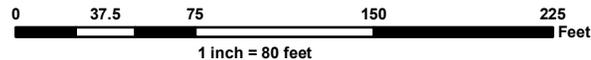


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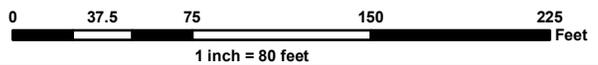


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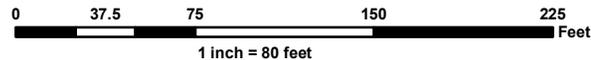
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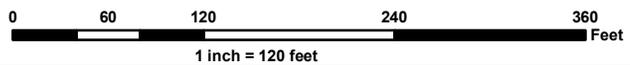




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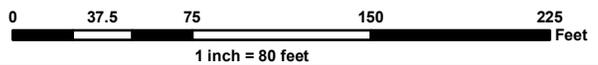
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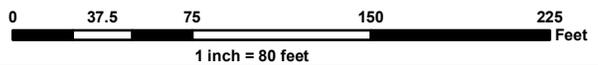


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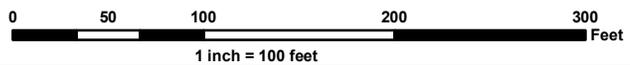
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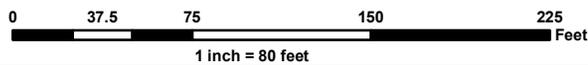
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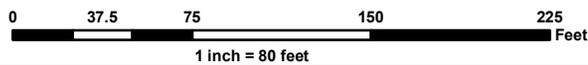


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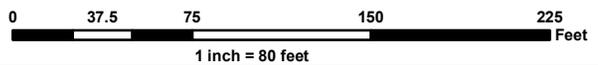
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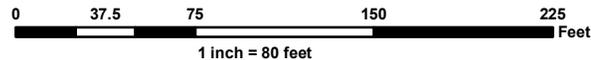
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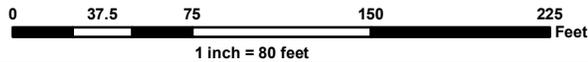
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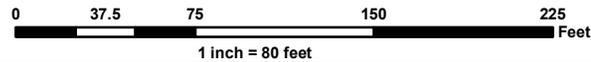
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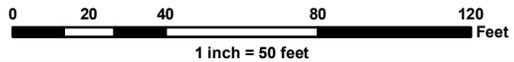
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Section IV

General Provisions & Technical Specifications for Sanitary Sewer Construction

(Separate document incorporated by reference)