Four Rivers Sanitation Authority
Rockford, Illinois

Bidding Requirements and Contract Forms

for

Collection Systems Administration Building Site Improvements

Capital Project No. 2206

Not to be used for bidding purposes

Bid Doc. No. 22-416

Four Rivers Sanitation Authority
Rockford, Illinois

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

for

Collection Systems Administration Building Site Improvements

Capital Project No. 2206

Not to be used for bidding purposes

Board of Trustees

Richard Pollack ..... President
Ben Bernsten ..... Vice President
Ginger Haas ..... Clerk/Treasurer
Donald Massier ..... Trustee
Elmer Jones ..... Trustee

Officials

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

Table of Contents

I. Bidding Requirements

Article 1 Notice to Bidders

Article 2 Instructions to Bidders
1 General
2 Legal Requirements
3 General Instructions

Article 3 Detailed Specifications
1 General
2 Notification, Access, and Special Considerations
3 Erosion and Sediment Control
4 Sidewalk Removal
5 Aggregate Base Course, Type B
6 Portland Cement Concrete Sidewalk, 6”
7 Concrete Curb and Gutter, Type B
8 Segmental Concrete Block Wall
9 Pedestrian Bridge, Complete
10 Snow Melt System, Complete
11 Temporary Erosion Control Seeding
12 Temporary Pavement
13 Topsoil Furnish and Place, 6”
Seeding, Class 1 with Fertilizer
14 Erosion Control Blanket
15 Construction Layout
16 Reinforced Concrete Ductbank Removal
17 Reinforced Concrete Ductbank, 2-2”, 1x2
Reinforced Concrete Ductbank, 4-2”, 2x2
18 Handhole
19 Cleanup

II. Contract Forms
Proposal
Fair Employment Practices Affidavit of Compliance
Bid Bond
Agreement
Labor & Material Payment Bond
Performance Bond

III. IDOT Check Sheets

Not to be used for bidding purposes

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

Not to be used for bidding purposes

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 Collection Systems Administration Building Site Improvements, Capital Project No. 2206, at the Steve Graceffa Administration Building (Administration Building) at 3501 Kishwaukee Street, Rockford, Illinois until 2:00 p.m. on Monday, September 19, 2022 at which time and place responsive / responsible bids will be publicly opened and read aloud.

The Collection Systems Administration Building Site Improvements Project Base Bid consists of the construction of sidewalk, a segmental concrete block wall, and a pedestrian bridge; Bid Alternate 1 consists of the construction of reinforced concrete ductbank and handholes. The Project is located within the FRSA's Treatment Plant grounds, adjacent to the Collection Systems Administration Building, at 3333 Kishwaukee Street, Rockford, IL.

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

All work shall be completed within forty-five (45) working days as outlined in Article 3, Section 1. Beyond forty-five (45) working days liquidated damages in the amount of $300 per working day shall be assessed.

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 ten percent (10%) 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.

A non-mandatory Pre-Bid Meeting for this project will be held on Thursday, September 8, 2022 at 2:00 p.m. at the FRSA Engineering Department (3501 Kishwaukee Street, Rockford, IL). Bidders do not need to attend the Pre-Bid Meeting to submit a bid on this project.

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.

Not to be used for bidding purposes

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 31st day of August, 2022.

BY: Timothy S. Hanson, Executive Director

Not to be used for bidding purposes

Article 2 — Instructions to Bidders

1 General

1.1 Scope and Intent

This section of the Contract Documents 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.

1.3 Pre-Bid Meeting

A non-mandatory Pre-Bid Meeting for this project will be held on Thursday, September 8, 2022 at 2:00 p.m. at the FRSA Engineering Department (3501 Kishwaukee Street, Rockford, IL). Bidders do not need to attend the Pre-Bid Meeting to submit a bid on this project.

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%.

Not to be used for bidding purposes

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.

Not to be used for bidding purposes

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.

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 Four Rivers Sanitation Authority, 3501 Kishwaukee Street, Rockford, Illinois.

Not to be used for bidding purposes

To be given consideration, such request must be received at least five (5) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by email, fax, or certified mail with acknowledgement of receipt requested, to all prospective bidders, at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addenda or interpretation shall not relieve said bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

3.3 Laws and Regulations

The prospective bidder is warned that he must comply with all laws of the United States Government, State of Illinois, all ordinances and regulations of 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 items of work and materials, as set forth in the Proposal form, is approximate only and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the Contract work may be less or more than so estimated, and if awarded a contract for the work specified, the Contractor further agrees that he will not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes of work assumed for comparison of bids and quantities of work actually performed.

3.5 Form, Preparation, and Presentation of Proposals

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

Not to be used for bidding purposes

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, has a permanent business office within forty (40) miles of the FRSA office at 3501 Kishwaukee Street in Rockford, IL, and provides documentation that the bidder possesses the appropriate financial, material, equipment, facility and personnel resources and expertise necessary to meet all contractual obligations. The bidder shall document no less than three (3) contracts for sanitary sewer system work within the past five (5) years having equal or greater value to the bid being submitted. 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 pay 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. Comparison will be based on the Base Bid plus Bid Alternate 1. FRSA reserves the right to reject any and all bids.

3.10 Acceptance of Bids and Basis of Award

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

The Contract will be awarded, if at all, to the lowest responsive, responsible bidder. Four Rivers Sanitation Authority also reserves the right to reject any or all bids.

Not to be used for bidding purposes

The bidder whose Proposal is accepted shall enter into a written Contract for the performance of the work and furnish the required bonds and insurance certificate within ten (10) days after written notice by FRSA's Director of Engineering has been served on such bidder personally or by mailing a postpaid wrapper to such bidder at the address given in his proposal. If the bidder to whom the Contract is awarded refuses or neglects to execute it or fails to furnish the required bond and insurance within five (5) days after receipt by him of the notice, the amount of his deposit shall be forfeited and shall be retained by the 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 the 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 comply with the required completion schedule for the project;

C. Have a satisfactory record of integrity, judgment, and performance, including, in particular, any prior performance on contracts from 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) contracts within the past five (5) years of similar scope and 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.

Not to be used for bidding purposes

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.

Contractor shall provide and maintain all insurance and bonds as required by 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 Collection Systems Administration Building Site Improvements, Capital Project No. 2206.

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:

Not to be used for bidding purposes

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.

Not to be used for bidding purposes

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 inform 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 deficiency notice, he 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 applicable taxes in his bid price.

Not to be used for bidding purposes

Article 3 – Detailed Specifications

1 General

1.1 General

This article contains detailed specifications relating to proposal items. The work to be done under each item is discussed along with units for payment and measurement for payment. However, the descriptions given do not necessarily outline all the work to be done under any item. In addition, all work shall conform to the *Standard Specifications for Water and Sewer Main Construction in Illinois,* current edition, the *Four Rivers Sanitation Authority* (FRSA) *General Provisions and Technical Specifications for Sanitary Sewer Construction*, and the *Illinois Department of Transportation's Standard Specifications for Road and Bridge Construction*, current edition ("*IDOT Standard Specifications*"), as applicable.

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

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

Utility locations shown on the plans are based on record information and are not guaranteed. The location and/or elevation of existing underground utilities, such as sanitary sewers, gas mains, water mains, electric lines, treatment plant process pipes, etc., shall be determined by the Contractor. The Contractor shall assume full responsibility for the location of all utilities and shall contact FRSA Assistant Director of Plant Operations Mike Christensen at 815-262-5858 five (5) days minimum prior to beginning any work to arrange for FRSA utilities to be located on the Treatment Plant grounds. The Contractor shall exercise extreme care when excavating near underground utilities to avoid damage; any damage done to utilities and treatment plant process facilities shall be repaired or replaced at the Contractor's sole expense. The Contractor shall be solely responsible for the protection, restraint and support of all utilities.

This project involves the construction of sidewalk, a segmental concrete block wall, and a pedestrian bridge within the FRSA's Treatment Plant grounds, adjacent to the Collection Systems Administration Building, at 3333 Kishwaukee Street, Rockford, IL.

All removal limits shown on the plans shall be adhered to by the Contractor. Any damages to appurtenances outside of those limits, including but not limited to pavements, curbs, drainage pipes/structures, signs, landscaped/turf areas, and/or any treatment plant facilities, shall be restored and/or repaired to FRSA's satisfaction at no additional cost to the Contract.

Any construction not observed by FRSA may be considered ineligible for payment.

No work shall be permitted on Sundays or FRSA holidays without prior approval by the FRSA Engineering and Plant Operations Department.

Suppliers shall warrant their products and product components as suitable and fit for the intended purpose and that they are free from all defects in material, design and manufacture. Said warranty shall extend to the benefit of FRSA and shall apply to all

Not to be used for bidding purposes

products and product components whether supplied or cause to be fabricated by these Specifications.

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

The Contractor shall be responsible for all tests of materials and final installation required by FRSA. All deficiencies noted by FRSA shall be corrected by the Contractor without additional cost to the Contract and prior to final payment.

The Contractor shall provide traffic control personnel and/or equipment, as required, to clearly delineate traffic routing through the work zones for all treatment plant personnel.

The Contractor's workforce shall include a person competent in ensuring compliance with all pertinent OSHA regulations and requirements. This person must be present on-site at all times during construction and must be deputized to take any prompt preventative or corrective actions needed to avoid, prevent or mitigate existing and potential hazardous working conditions.

This is a working day Contract in accordance with Article 108 of the *IDOT Standard Specifications*. Upon issuance of the Notice to Proceed, the Contractor shall submit a progress schedule in accordance with Article 108.02 of the *IDOT Standard Specifications* for FRSA review and approval. The approved schedule shall be used to establish the controlling item of construction operations. The charging of working days will start when the Contractor begins construction work or ten (10) days after the executed Notice to Proceed is issued, whichever comes first. Thereafter, working days will be charged in accordance with Article 108.04 of the *IDOT Standard Specifications* with the exception that working days shall also apply after November 30.

1.2 Materials – Not used.

1.3 Submittals

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

1. Review each submittal.
2. Verify field dimensions.
3. Verify compliance with Contract documents.
4. Sign and stamp submittals to certify Contractor's review/approval.
5. Deliver reviewed submittals to FRSA for approval.

The Contractor shall allow one (1) week for FRSA to review submittals. FRSA reserves the right to delay review of interrelated submittals until all submittal components have been received. No Contract extension will be authorized due to the Contractor's failure to provide sufficient time for FRSA to perform a thorough review of submittals.

Not to be used for bidding purposes

FRSA's approval of a submittal shall not be considered an order for additional, extra, or differing work, nor a guarantee of the accuracy of the information or the effectiveness of the products outlined in the submittal.

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

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

1.4 Required Submittals

1. Project Schedule

1.5 Measurement and Payment – Not used.

2 Notification, Access, and Special Considerations

2.1 General

The Contractor shall notify FRSA forty-eight (48) hours minimum prior to beginning construction operations. A 5-day minimum notification (business days) is required for FRSA utility locates.

Any damage caused by the Contractor's operations to areas outside of the specified project limits, including but not limited to roadway pavements, driveway pavements, drainage structures, storm sewer, underground utilities, overhead utilities, turf areas, cultivated areas, and landscaped areas shall be repaired and/or replaced by the Contractor at no additional cost to the Contract.

FRSA desires that all construction access occurs to the site from the north (through FRSA-owned property adjacent to Martin Road and Lyle Street) and all construction staging and material storage occurs on this property (as shown on Plan Sheets 2 and 3). Due to an ongoing treatment plant construction project the grounds immediately west and south of the Collection Systems Administration Building will be unavailable for the Contractor's usage. FRSA will consider requests for minimal staging, storage, or access in this area on a case-by-case basis.

Deliveries to the work site shall be received by the Contractor at the East treatment plant entrance (Guard Shack at the Kishwaukee Street entrance) or at the staging area on Martin Road. FRSA will not coordinate or be responsible for any deliveries inadvertently made to the FRSA inventory shop.

The Contractor is responsible for any damages caused by his operations to existing structures above or below the ground as covered in G.C. 12:1 of FRSA's *General Provisions and Technical Specifications for Sanitary Sewer Construction*.

The Contractor's proposed sequence of work shall be outlined in the Project Schedule and submitted prior to beginning any work. The Contractor is responsible for developing the

Not to be used for bidding purposes

means, methods, and procedures for all work and is responsible for compliance with all OSHA, EPA, and DOT regulatory requirements.

The Contractor shall have a temporary concrete washout basin installed onsite at a location approved by FRSA. The facility shall comply with the Illinois Urban Manual Practice Standard Code 954.

All Quality Control material testing, subgrade compaction testing, subbase granular material compaction testing, and trench backfill compaction testing shall be performed by the Contractor. Costs associated with material testing by the Contractor will not be paid for separately but shall be included in the various pay items associated with the scope of work.

Standards (IDOT and FRSA) Included in this Contract:

1. IDOT Standard 280001-07: Temporary Erosion Control Systems
2. IDOT Standard 606001-08 Concrete Curb Type B
3. FRSA: Treatment Plant Segmental Concrete Block Wall Detail

2.2 Materials – Not used.

2.3 Required Submittals – Not used.

2.4 Measurement and Payment

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

3 Erosion and Sediment Control

3.1 General

The total disturbed area for this project is estimated to less than 1.0 acre. Accordingly, a Notice of Intent (NOI) will not be filed with the Illinois Environmental Protection Agency (IEPA). This does not relieve the Contractor of any responsibility to comply with the Temporary Erosion Control Plan and all requirements of the IEPA's *Illinois Urban Manual* and Section 280 of the *IDOT Standard Specification*.

All disturbed areas shall be restored to original or proposed contours in accordance with the "*Seeding, Class 1 with Fertilizer*" Section of these Detailed Specifications.

The erosion control devices, materials, and procedures specified in these contract documents are to be considered the minimum required. Additional devices or materials may be needed depending on existing site conditions, at the direction of FRSA. Any additional devices, materials, or procedures required by FRSA due to the Contractor's actions or negligence shall be provided at no additional cost to the Contract.

The Contractor shall take whatever measures FRSA deems necessary to eliminate excessive erosion or siltation, including but not limited to, inlet protection, seeding, sodding, erosion control blanket, silt fence, etc.

Not to be used for bidding purposes

The Contractor shall keep the pavement areas free from all dirt and construction debris at all times during construction. Mud and debris shall be removed daily from roadway surfaces at the end of each workday or as necessary.

The Contractor shall remove and dispose of all temporary erosion control devices within thirty (30) days of final site stabilization and approval by FRSA.

3.2 Materials

In accordance with the applicable pay items.

3.3 Required Submittals – Not used.

3.4 Payment

This work will be paid for as outlined below under the Contract pay items for **Erosion Control Blanket, Seeding, Class 1 with Fertilizer** and **Temporary Erosion Control Seeding** pay items. No separate payment shall be made for erosion control beyond these pay items.

4 Sidewalk Removal

4.1 General

This work shall be done in accordance with Section 440 of the *IDOT Standard Specifications* and shall involve the complete removal and disposal of existing Portland Cement Concrete sidewalks where indicated on the plans. Maximum pay limits for the removal are shown on the plans; the Contractor shall not remove any sidewalk outside of these limits without receiving prior approval from FRSA. Any damage done to sidewalks beyond these limits shall be replaced at no additional cost to the Contract.

The removal limits shall be sawcut full depth prior to sidewalk removal beginning. The remaining sidewalks shall be protected from all damage. All costs associated with sawcutting and existing sidewalk protection shall be included in this pay item.

All materials shall be removed from the site in accordance with all applicable State or Federal laws and regulations. Clean Construction or Demolition Debris regulations shall be adhered to by the Contractor in disposal of all sidewalk materials removed from the site.

4.2 Materials – Not used.

4.3 Required Submittals – Not used.

4.4 Payment

Payment shall be made at the contract unit price per Square Foot of **Sidewalk Removal.**

5 Aggregate Base Course, Type B

5.1 General

This work shall consist of placing compacted Aggregate Base Course, Type B to the depths indicated on the plans. This work shall include subgrade preparation, removal and disposal

Not to be used for bidding purposes

of excess material, furnishing, placing, installing and compacting course aggregate, and trimming and prepping aggregate base for subsequent sidewalk placement. This work shall be in conformance with Section 351 of the IDOT *Standard Specifications for Road and Bridge Construction*, Current Edition.

5.2 Materials

Course Aggregates shall be in accordance with Article 1004.04 of the IDOT *Standard Specifications for Road and Bridge Construction,* Current Edition. All Aggregate Base Course shall be Gradation CA-6. Crushed concrete materials approved by IDOT and in accordance with Article 1004.04 may be allowed in lieu of virgin materials, subject to the approvals of FRSA, for inclusion in the project.

5.3 Materials

1. Material gradation certifications for aggregates.

5.4 Measurement and Payment

This work will be paid for at the Contract unit price per Square Yard for **Aggregate Base Course, Type B**, complete, in place.

6 Portland Cement Concrete Sidewalk, 6”

6.1 General

This work shall conform to Section 424 of the *IDOT Standard Specifications*. The subgrade shall be prepared with 2” of compacted CA-6 aggregate; said aggregate shall be paid for separately under the **Aggregate Base Course, Type B** pay item.

Expansion joints shall be installed per Article 424.07 of the *IDOT Standard Specifications*.

6.2 Materials

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

Expansion Joint Fillers shall be in accordance with Section 1051 of the *IDOT Standard Specifications.*

6.3 Required Submittals

1. PCC Mix Designs.
2. Expansion Joint Fillers material certification.

6.4 Payment

Payment for this item shall be made at the contract unit price per Square Foot of **Portland Cement Concrete Sidewalk, 6”.**

Not to be used for bidding purposes

7 Concrete Curb and Gutter, Type B

7.1 General

This work shall conform to Section 606 of the *IDOT Standard Specifications* and consist of installation of concrete curb as shown on the plans. Where proposed curb is to be joined to existing curb two (2) one-inch (1") diameter smooth dowels 18" long shall be drilled and epoxy grouted into the existing curb and gutter at mid-depth.

7.2 Materials

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

7.3 Required Submittals

1. PCC mix designs.

7.4 Payment

Payment shall be made at the Contract unit price per Linear Foot of **Concrete Curb, Type B** installed, complete in place.

8 Segmental Concrete Block Wall

8.1 General

This work shall be done in accordance with Section 522 of the *IDOT Standard Specifications* and shall consist of furnishing and installing all labor, equipment, materials, and accessories required to install a retaining wall system at the location indicated on the plans. The work also includes the preparation of design computations and shop drawings prepared and sealed by an Illinois Licensed Structural Engineer for the retaining wall in accordance with Article 522.05 of the *IDOT Standard Specifications.* The wall shall be designed and constructed according to the lines, grades, and dimensions shown on the plans as well as the approved shop drawings. Design and installation shall be in accordance with Section 522.12 of the *IDOT Standard Specifications*.

All ancillary work and components of the retaining wall system that may be required to properly construct the walls, including (but not limited to) excavation, select fill, backfill, compacted crushed stone base, pipe underdrains, geogrid (or other soil reinforcement mechanisms), and construction adhesives, will not be measured for additional payment but shall be considered included in this pay item.

Shop drawings shall be prepared in accordance with Article 1042.03(b) of the *IDOT Standard Specifications* and shall be submitted to FRSA for review and approval prior to any work on the retaining walls commencing.

8.2 Materials

The segmental block retaining wall system shall be Keystone Compac Series III Straight Split (or approved equal). Color samples shall be submitted to FRSA for approval.

Not to be used for bidding purposes

8.3 Required Submittals

1. Design computations and shop drawings for the segmental concrete block retaining wall systems.

8.4 Measurement and Payment

This work will be paid for at the contract unit price per Square Foot for **Segmental Concrete Block Wall** installed, complete in place. Measurement for payment will be made on the wall face from the top of the block line to the theoretical top of the leveling pad for the length of the wall.

9 Pedestrian Bridge, Complete

9.1 General

This work shall include all labor, equipment, excavation, materials, and accessories required to construct the pedestrian bridge detailed on Plan Sheets A101, A102, and S001. All components of the bridge as shown in the Plans, with the exclusion of the precast concrete elements, including (and not limited to) structural concrete, steel reinforcement, guardrail system, and form liner shall be included in this pay item. All precast concrete elements will be manufactured by Mid-States Concrete Industries and furnished by FRSA. Per Mid-States, anticipated availability of the precast concrete elements is October 17, 2022. One-time delivery is included in FRSA's contract with Mid-States; the Contractor shall coordinate delivery of the precast concrete elements to the project site directly with Mid-States based upon their proposed installation schedule. All costs associated with coordinating delivery, onsite handling, and installation of the precast concrete elements in accordance with the Plans and Specifications shall be included in this bid item.

The snow melt system shall be paid separately under the **Snow Melt System, Complete** pay item.

All Quality Control and Quality Assurance testing shall follow the requirements of IDOT Check Sheet #23 *Recurring Special Provision for Quality Control/Quality Assurance of Concrete Mixtures*. All material testing and costs associated with the requirements of this Check Sheet shall be included in this pay item and will not be paid for separately.

9.2 Materials

All structural materials shall be in accordance with the Notes provided on Plan Sheet S001. Electrical snow melt system shall be in accordance with Plan Sheets E601 and E602. Guardrail system shall be aluminum Baluster Rail Tee as manufactured by Julius Blum (or approved equal).

9.3 Required Submittals

1. Shop drawings for all structural design elements.
2. Shop drawings for the guardrail system.
3. Shop drawings for form liner.
4. Material certifications for steel reinforcement.

Not to be used for bidding purposes

5. Concrete mix designs.

9.4 Measurement and Payment

This work will be paid for at the contract unit price per Lump Sum for **Pedestrian Bridge, Complete** installed, complete in place.

10 Snow Melt System, Complete

10.1 General

This work shall consist of furnishing and installing all labor, equipment, materials, and accessories required to install a snow melt system as indicated on the proposed pedestrian bridge plans. The snow melt system shall be an nVent Raychem MI system (or approved equal) that provides both a concrete sensor and an aerial sensor. A 10-year warranty shall be included with the system.

Included within this pay item shall be all work necessary to connect the snow melt system to the Collection Systems Administration Building electrical system. Electrical conduit has been previously installed within the first floor ceiling cavity from the panel to the north wall of the building. Contractor shall core-drill the building wall in locations necessary to connect to this conduit; all penetrations shall be properly sealed against moisture intrusion. Two (2) NEMA 4X junction boxes shall be mounted to the external building wall to house power conductors and control wiring.

10.2 Materials

All snow melt components and materials shall be according to manufacturer's recommendations. Shop drawings shall be prepared and submitted to FRSA for review and approval prior to any work beginning.

10.3 Required Submittals

1. Shop drawings for all snow melt system components.
2. Operation & Maintenance Manuals (in electronic and physical form).

10.4 Measurement and Payment

This work will be paid for at the contract unit price per Lump Sum for **Snow Melt System, Complete** installed, complete in place.

11 Temporary Erosion Control Seeding

11.1 General

This work shall include the installation of temporary erosion control seeding on erodible/bare areas to minimize the amount of exposed surface area at the direction of FRSA. Work shall be in accordance with Article 280.04(f) of the *IDOT Standard Specifications*.

Not to be used for bidding purposes

11.2 Materials

Temporary erosion control seed mixtures shall be in accordance with Article 1081.15(g) of the *IDOT Standard Specifications*.

11.3 Required Submittals

1. Material certifications for the temporary erosion control seeding.

11.4 Payment

Payment shall be made at the Contract unit price per Pound of **Temporary Erosion Control Seeding,** installed, complete in place.

12 Temporary Pavement

12.1 General

This work shall be in accordance with T.S. 4:3/Pavement Restoration of the *General Provisions and Technical Specifications for Sanitary Sewer Construction in the Sanitary District of Rockford*, and with Section 406 of the *IDOT Standard Specifications* and shall consist of placing temporary pavement at locations indicated on the plans.

Temporary pavement shall be Hot-Mix Asphalt Surface Course installed to a depth of 2" compacted thickness. Temporary pavement shall be placed over compacted and prepared aggregate base course; aggregate base course shall be paid for separately under the **Aggregate Base Course, Type B** pay item.

12.2 Materials

Temporary pavement shall be Hot-Mix Asphalt Surface Course, IL-9.5, Mix "C", N50 in accordance with Section 1030 of the *IDOT Standard Specifications.*

12.3 Required Submittals

1. HMA Mix Designs.

12.4 Payment

This work will be paid for at the contract unit price per Square Yard for **Temporary Pavement.**

13 Topsoil Furnish and Place, 6" Seeding, Class 1 with Fertilizer

13.1 General

This work shall include preparing areas to be seeded, furnishing and placing topsoil as required, removal and disposal of unsuitable materials, seeding, fertilizing, and maintenance until final acceptance.

All restoration shall be completed in accordance with FRSA requirements. All restoration including, but not limited to, fences, sidewalks, all other slab work, concrete and asphalt,

Not to be used for bidding purposes

drainage channels, riprap, fences, turf areas and dry wells, etc., disturbed or damaged as a result of construction shall be promptly completed, equal to or better than the pre-construction conditions, as directed by FRSA. All restoration shall be guaranteed by the Contractor for a period of one (1) year following satisfactory completion and final acceptance of the work. Topsoil shall be as specified in T.S. 4:2c of FRSA's *General Provisions and Technical Specifications for Sanitary Sewer Construction*.

Suppliers shall be prepared to certify that their product has been satisfactorily laboratory and field tested, and that it meets all of the foregoing requirements based upon such testing.

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

Seeding

This work shall be in accordance with Section 250 of the IDOT *Standard Specifications*. Ground surfaces including right–of–ways that were covered with grass prior to construction, shall be seeded in accordance with all applicable specifications and as directed by FRSA. The Contractor shall make certain that all disturbed areas have the same depth (6" minimum) and quality of approved topsoil at the surface as existed prior to construction.

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

The seeding mixture used shall be IDOT Class 1.

Reference is made to FRSA's *General Provisions and Technical Specifications for Sanitary Sewer Construction*, T.S. 4:2, for specifications on seeding and sodding and fertilizer, and to Sections 250 and 251 of the IDOT *Standard Specifications*.

Seeding shall be placed on six-inch (6"), minimum, topsoil bed. FRSA shall approve the locations from which the topsoil is to be obtained.

Seeding methods shall follow those mentioned in Article 250.06 of the IDOT *Standard Specifications*.

Fertilizing

Fertilizer work shall be done in accordance with Article 250.04 of the IDOT *Standard Specifications* and be applied at the rate of 400 lbs./acre.

Mulch

Straw mulch shall not be installed on seeded areas, instead all seeded areas shall be completed with erosion control blanket. Said erosion control blanket shall be paid for under the **Erosion Control Blanket** pay item.

13.2 Materials

Topsoil utilized from off-site sources shall be in accordance with Article 1081.05(a) of the IDOT *Standard Specifications*.

Not to be used for bidding purposes

The seeding mixture used shall be IDOT Class 1 in accordance with the IDOT *Standard Specifications* as shown on the Plans.

Fertilizer shall have 270 lbs. of nutrients per acre with an analysis of 10-10-10 and be in accordance with Article 1081.08 of the IDOT *Standard Specifications*.

13.3 Required Submittals

1. Topsoil certifications (if being delivered from off-site).
2. Seed mixtures.
3. Fertilizer specifications and certifications.

13.4 Payment

This work will be paid for at the Contract unit price per Square Yard for **Topsoil Furnish and Place, 6"** and **Seeding, Class 1 with Fertilizer** which cost shall include furnishing topsoil, placing topsoil, seedbed preparation, seeding, and fertilizer application.

14 Erosion Control Blanket

14.1 General

This work shall be in accordance with Article 251.04 of the *IDOT Standard Specifications*. Erosion control blanket shall be installed on seeded areas within twenty-four (24) hours of seed placement.

Erosion control blanket shall be installed on all seeded areas throughout the project limits.

14.2 Materials

All erosion control blanket shall be in accordance with Article 1081.10(a) and/or Article 1081.10(c) of the *IDOT Standard Specifications*.

14.3 Required Submittals

1. Material certifications for the erosion control blanket.

14.4 Payment

Payment shall be made at the Contract unit price per Square Yard of **Erosion Control Blanket,** complete, in place.

15 Construction Layout

15.1 General

This work shall be in accordance with IDOT *Recurring Special Provision #9: Construction Layout Stakes* as included in this Contract, and shall consist of the Contractor providing all layout for the construction of this project to the lines and grades as shown on the plans.

FRSA shall be afforded the opportunity to complete layout checks periodically and at their request.

Not to be used for bidding purposes

15.2 Materials – Not used.

15.3 Required Submittals – Not used.

15.4 Payment

Payment shall be made at the Contract unit price per Lump Sum for **Construction Layout.**

16 Reinforced Concrete Ductbank Removal

16.1 General

This item shall consist of completely removing and properly disposing of existing concrete ductbanks of various sizes and at various depths. All ductbanks to be removed as shown on the plans shall be removed flush with the associated connected structures. Saw-cutting may be required to leave a clean-cut flush removal.

The Contractor shall verify with the FRSA that the ductbanks to be removed are not carrying any live electrical or communications utilities. Removal and disposal of the internal electrical or communications wiring shall also be included in this item.

16.2 Materials – Not used.

16.3 Required Submittals – Not used.

16.4 Payment

Payment shall be made at the contract unit price per Linear Foot of **Reinforced Concrete Ductbank Removal.**

17 Reinforced Concrete Ductbank, 2-2", 1x2
Reinforced Concrete Ductbank, 4-2", 2x2

17.1 General

This work shall conform to FRSA requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to construct reinforced concrete ductbanks as shown on the plans.

This work shall be in accordance with the FRSA 'Treatment Plant Concrete Ductbank' detail and the FRSA 'Treatment Plant Tracer Wire And Access Points' detail.

This work shall consist of constructing reinforced concrete ductbanks where shown on the plans. This work shall include all labor, equipment, materials, dewatering, bracing, shoring, concrete forming, excavation, trench backfill, etc. to complete the reinforced concrete ductbanks as shown on the plans or as directed by the FRSA.

Ductbanks shall be installed a minimum of 24 inches below the finished grade, unless otherwise shown on the plans. Whenever possible, ducts shall be sloped toward the end structure(s) to avoid creating a sag condition.

Not to be used for bidding purposes

Cast-in-Place Concrete

Earthen concrete forming will not be permitted unless approved by the FRSA. Wood or manufactured forms shall be provided for the full length and width of the ductbank. The forms shall be braced and tied to provide the structural capacity required to produce finished concrete to the lines and grades shown on the plans.

Prior to reinforcement bar placement, forms shall be coated with form oil. When the concrete surfaces are not exposed to view, wood forms may be saturated with water immediately prior to the placement of concrete in lieu of form oil.

Reinforcement bars shall be arranged and installed so as not to form conductive or magnetic groups around ducts or duct groups. This will require alternating upper and lower reinforcement around the circumference of the ductbank.

No concrete shall be placed on ice, snow, or frozen foundation material. The method and manner of placing concrete shall be such as to avoid the segregation or separation of the aggregates or the displacement of reinforcement. The external surface of all concrete shall be thoroughly worked during the operations of placing in such a manner as to work the mortar against the forms to produce a smooth finish free of honeycomb and with a minimum of water and air pockets. Open troughs and chutes shall be extended as nearly as practical to the point of deposit. Dropping the concrete a distance of more than 5 feet will not be permitted. The concrete shall be consolidated by internal vibration. The Contractor shall provide and use a sufficient number of vibrators to ensure that consolidation can be started immediately after the concrete has been deposited in the forms. Concrete shall not be exposed to the action of water before setting, or be deposited in water, except with the approval of the Engineer.

Forms shall remain in place for a minimum of 24 hours or as directed by the Engineer. The method of form removal shall not result in damage to the concrete. If forms are removed prior to the completion of the required curing period, curing shall be resumed with an approved curing method for the remainder of the curing period. Backfilling shall not commence without approval from the Engineer, and without the new ductbank having been surveyed with GPS equipment by the FRSA.

Ancillary Items

Concrete shall have red dye broomed into the top of the uncured finished concrete.

Underground electrical excavation warning tape shall be provided and installed per the plan details. One warning tape shall be provided for ductbanks up to 24 inches wide. Two warning tapes shall be provided for ductbanks greater than 24 inches wide.

Tracer wire shall be provided and installed per the FRSA 'Treatment Plant Tracer Wire And Access Points' detail.

Conduits

Joints shall be solvent weld in ducts, fittings, and bends. Link seal fittings shall be used at all conduit/structure junctions. Pulling cord equaling 100 lb test nylon shall be installed in all ducts, including spares. Conduit separator/hangers shall be installed close enough to prevent sagging or misplacement of the conduits, and not less than 4 per 20 feet. Conduit

Not to be used for bidding purposes

shall be secured to separators/hangers to prevent floating during pouring of concrete. Entire assembly shall be tied together using non-metallic straps. A test mandrel of 80% inside diameter shall be pulled through ducts to test joints integrity and test for out-of-round conduits. If obstructions are found, they shall be corrected and re-tested. A leather washer type duct cleaner shall be pulled through the full length of conduits, followed by a rubber conduit swab for final cleaning and to assist in spreading lubrication throughout the conduits.

17.2 Materials

1. Concrete shall be IDOT Class DS according to Section 1020 of the *IDOT Standard Specifications.*
2. Reinforcement shall be #4 size and shall conform to Sections 508 and 1006.10 of the *IDOT Standard Specifications*.
3. Duct separators/hangers shall be factory fabricated PVC interlocking spacers sized for the type and sizes of ducts per the plans.
4. Tracer wire & Access points:
    a. Tracer wire shall be copper clad steel high strength 12 AWG as MFG by Copperhead Industries, or approved equal, and shall be color coded per APWA uniform color code.
    b. Access points in non-paved areas shall be Snakepit Lite Duty Adjustable Single Terminal Access Points, as MFG by Copperhead Industries. Access points in paved areas shall be Snakepit Roadway Single Terminal Cast Iron Lid access points as MFG by Copperhead Industries.
5. Underground electrical excavation warning tape shall be permanent, continuous printed, aluminum backed tape.
6. Conduits encased in concrete:
    a. Conduits shall be rigid PVC Schedule 40 in accordance with UL 651 and NEMA TC-2.
    b. Fittings (other than bends) shall be matching fittings by the same manufacturer as the conduits encased in concrete, complying with NEMA TC-9.
    c. Bends shall be either galvanized & PVC coated rigid steel conduit long sweep bends per UL 6 & ANSI C80.1, or fiberglass long sweep elbows per UL 2420 and Article 355 of the NEC, both with a minimum radius of 48 inches.
7. Conduits extending outside of concrete:
    a. Conduits shall be rigid PVC Schedule 80 in accordance with UL 651 and NEMA TC-2.
    b. Fittings (other than bends) shall be matching fittings by the same manufacturer as the conduits extending outside of concrete, complying with NEMA TC-9.

Not to be used for bidding purposes

8. Link seal fittings shall be a modular sealing system that creates a permanent hydrostatic seal. Hardware shall be 316 SS.

17.3 Required Submittals

1. Concrete mix designs.
2. Duct separator/hanger specifications.
3. Tracer wire, access point, and appurtenances specifications.
4. Underground electrical excavation warning tape specification.
5. Conduit, fitting, and bend specifications.
6. Link Seal fitting specifications.

17.4 Payment

Payment shall be made at the contract unit price per Linear Foot of **Reinforced Concrete Ductbank Removal.**

18 Handhole

18.1 General

This work shall be done in accordance with Section 814 of the *IDOT Standard Specifications* and shall consist of furnishing and installing all labor, equipment, materials, transportation, excavation, accessories, and trench backfill required to construct composite concrete handholes at the locations indicated on the plans.

18.2 Materials

Handholes shall be composite concrete in accordance with Article 1088.05 of the *IDOT Standard Specifications*.

18.3 Required Submittals

1. Material certification and shop drawings for the handholes.

18.4 Payment

Payment shall be made at the contract unit price per Each for **Handhole,** complete in place.

19 Cleanup

19.1 General

Upon completion of work, the Contractor shall clean up and remove all construction debris, materials, equipment, machines, temporary concrete washouts etc., from the entire project area. All excavations shall be backfilled neatly to original grade, and any excess materials shall be hauled away to a site acceptable to FRSA. All roadway surfaces shall be kept free and clear of all mud and construction debris.

Not to be used for bidding purposes

19.2 Payment

No separate payment will be made for Cleanup, complete. All costs associated with this work shall be included in construction.

Not to be used for bidding purposes

Section II

Contract Forms

Not to be used for bidding purposes

Proposal

Project: **Collection Systems Administration Building Site Improvements, Capital Project No. 2206**

Location: 3333 Kishwaukee Street, Rockford, Illinois

Completion Date: 45 Working Days (as outlined in Article 3, Section 1)

Liquidated Damages: $300/Working Day after 45 Working Days

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.

Not to be used for bidding purposes

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 of otherwise, in this Proposal, or in the performance of the Contract, or in the work to which it is relates, or in any portion of the profits thereof.

8. The Bidder which I represent complies with all applicable requirements of the Americans with Disabilities Act (ADA) and the Occupational Safety and Health Act (OSHA) and that if said bidder is awarded a contract, it will complete all OSHA-required or ADA-required employee and customer training, will make available all required information, and will hold harmless and indemnify the 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.

Not to be used for bidding purposes

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.

Not to be used for bidding purposes

Not to be used for bidding purposes

Base Bid

Item No.	Quan-tity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
1	21.0	SF	Sidewalk Removal			
2	102.0	SY	Aggregate Base Course, Type B			
3	273.0	SF	Portland Cement Concrete Sidewalk, 6"			
4	25.0	LF	Concrete Curb, Type B			
5	56.0	SF	Segmental Concrete Block Wall			
6	1.0	LS	Pedestrian Bridge, Complete			
7	1.0	LS	Snow Melt System, Complete			
8	15.0	LB	Temporary Erosion Control Seeding			
9	72.0	SY	Temporary Pavement - Base Bid			
10	65.0	SY	Topsoil Furnish and Place, 6"			
11	65.0	SY	Seeding, Class 1 and Fertilizing			
12	65.0	SY	Erosion Control Blanket			
13	1.0	LS	Construction Layout			
			BASE BID TOTAL:			
				(In Writing)		(In Figures)

Bid Alternate 1

Item No.	Quan-tity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
A-1	195.0	SY	Temporary Pavement - Bid Alternate 1			
A-2	316.0	LF	Reinforced Concrete Ductbank Removal			
A-3	127.0	LF	Reinforced Concrete Ductbank, 2-2", 1x2			
A-4	290.0	LF	Reinforced Concrete Ductbank, 4-2", 2x2			
A-5	2.0	EA	Handhole			
			BID ALTERNATE 1 TOTAL:			
				(In Writing)		(In Figures)

Total Bid Amount (Base Bid + Bid Alternate 1) in figures: _____

Total Bid Amount (Base Bid + Bid Alternate 1) in writing: _____

Note: This Project will be awarded, if at all, to a single bidder. Bids will be compared on the total price bid for the Base Bid plus Bid Alternate 1. Bid Alternate 1 may or may not be awarded depending on the availability of funds.

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

_____
(Name of Contractor)

By: _____
(Signature)

Name: _____ Title: _____ Date: _____

Not to be used for bidding purposes

Fair Employment Practices Affidavit of Compliance

Project: Collection Systems Administration Building Site Improvements, Capital Project No. 2206

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 Departments 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 contacts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

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

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

_____
Signature

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

_____
Notary Public

Not to be used for bidding purposes

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: **TEN PERCENT (10%) 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 construction of sidewalk, a segmental concrete block wall, and a pedestrian bridge within the FRSA's Treatment Plant grounds, adjacent to the Collection Systems Administration Building as indicated in the Plans and 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.

Not to be used for bidding purposes

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 _____ _____, 2022, 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

Not to be used for bidding purposes

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.

Not to be used for bidding purposes

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:

Not to be used for bidding purposes

(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

This is a Working Day Contract. All work shall be completed within forty-five (45) Working Days as outlined in Article 3, Section 1.

11. Liquidated Damages

The amount of liquidated damages shall be $300.00 per Working Day beyond forty-five (45) Working Days.

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

Not to be used for bidding purposes

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.

Four Rivers Sanitation Authority
Winnebago County, Illinois

(Seal)

By _____
President, Board of Trustees

ATTEST: _____
Clerk of the Board

Contractor

By _____
Contractor's Officer

(Corporate Seal)

Name: _____
Title: _____
Date: _____

ATTEST: _____

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

Not to be used for bidding purposes

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

3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between Obligee and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Obligee of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.

4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.

5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.

6. The Principal and Surety shall be liable for any attorneys' fees, engineering costs, or court costs incurred by the Obligee relative to claims made against this Bond.

Signed and Sealed this _____day of _____, 20___.

CONTRACTOR	SURETY
_____	
Contractor Firm Name	
By: _____	By: _____
Signature	Attorney-in-Fact Signature
_____	_____
Printed Name	Printed Name
_____	_____
Title	Resident Agent

ATTEST:

_____

Corporate Secretary (Corporations only)

Not to be used for bidding purposes

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.

Not to be used for bidding purposes

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

CONTRACTOR

_____
Contractor Firm Name

By: _____
Signature

_____
Printed Name

_____
Title

ATTEST:

_____
Corporate Secretary (Corporations only)

SURETY

By: _____
Attorney-in-Fact Signature

_____
Printed Name

_____
Resident Agent

Not to be used for bidding purposes

Section III

IDOT Check Sheets

Not to be used for bidding purposes

Illinois Department of Transportation

Check Sheet for Recurring Special Provisions

Local Public Agency	County	Section Number

☐ **Check this box for lettings prior to 01/01/2022.**

The Following Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Recurring Special Provisions

Check Sheet #			Reference Page No.
1	☐	Additional State Requirements for Federal-Aid Construction Contracts	1
2	☐	Subletting of Contracts (Federal-Aid Contracts)	4
3	☐	EEO	5
4	☐	Specific EEO Responsibilities Non Federal-Aid Contracts	15
5	☐	Required Provisions - State Contracts	20
6	☐	Asbestos Bearing Pad Removal	26
7	☐	Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	27
8	☐	Temporary Stream Crossings and In-Stream Work Pads	28
9	☒	Construction Layout Stakes	29
10	☐	Use of Geotextile Fabric for Railroad Crossing	32
11	☐	Subsealing of Concrete Pavements	34
12	☐	Hot-Mix Asphalt Surface Correction	38
13	☐	Pavement and Shoulder Resurfacing	40
14	☐	Patching with Hot-Mix Asphalt Overlay Removal	41
15	☐	Polymer Concrete	43
16	☐	PVC Pipeliner	45
17	☐	Bicycle Racks	46
18	☐	Temporary Portable Bridge Traffic Signals	48
19	☐	Nighttime Inspection of Roadway Lighting	50
20	☐	English Substitution of Metric Bolts	51
21	☐	Calcium Chloride Accelerator for Portland Cement Concrete	52
22	☐	Quality Control of Concrete Mixtures at the Plant	53
23	☒	Quality Control/Quality Assurance of Concrete Mixtures	61
24	☐	Digital Terrain Modeling for Earthwork Calculations	77
25	☐	Preventive Maintenance - Bituminous Surface Treatment (A-1)	79
26	☐	Temporary Raised Pavement Markers	85
27	☐	Restoring Bridge Approach Pavements Using High-Density Foam	86
28	☐	Portland Cement Concrete Inlay or Overlay	89
29	☐	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	93
30	☐	Longitudinal Joint and Crack Patching	96
31	☐	Concrete Mix Design - Department Provided	98
32	☐	Station Numbers in Pavements or Overlays	99

Not to be used for bidding purposes

Local Public Agency	County	Section Number

The Following Local Roads And Streets Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Local Roads And Streets Recurring Special Provisions

Check Sheet #			Page No.
LRS 1		**Reserved**	101
LRS 2	☐	Furnished Excavation	102
LRS 3	☐	Work Zone Traffic Control Surveillance	103
LRS 4	☐	Flaggers in Work Zones	104
LRS 5	☐	Contract Claims	105
LRS 6	☐	Bidding Requirements and Conditions for Contract Proposals	106
LRS 7	☐	Bidding Requirements and Conditions for Material Proposals	112
LRS 8		**Reserved**	118
LRS 9	☐	Bituminous Surface Treatments	119
LRS 10		**Reserved**	123
LRS 11	☐	Employment Practices	124
LRS 12	☐	Wages of Employees on Public Works	126
LRS 13	☐	Selection of Labor	128
LRS 14	☐	Paving Brick and Concrete Paver Pavements and Sidewalks	129
LRS 15	☐	Partial Payments	132
LRS 16	☐	Protests on Local Lettings	133
LRS 17	☐	Substance Abuse Prevention Program	134
LRS 18	☐	Multigrade Cold Mix Asphalt	135
LRS 19	☐	Reflective Crack Control Treatment	136

Not to be used for bidding purposes

State of Illinois
Department of Transportation

SPECIAL PROVISION
FOR
CONSTRUCTION LAYOUT STAKES

Effective: May 1, 1993
Revised: January 1, 2022

Not to be used for bidding purposes

Description. The Contractor shall furnish and place construction layout stakes and perform layout work necessary to construct the work to the lines and grades shown on the plans. The Department will provide adequate reference points to the centerline of survey or other control points as applicable and bench marks as shown in the plans and listed herein. Any additional control points set by the Department will be identified in the field to the Contractor and all field notes will be kept in the office of the Resident Engineer.

The Contractor shall provide field forces, equipment, and material to perform the entire layout for the work, set additional stakes, which are needed to establish offset stakes, reference points, and any other horizontal or vertical controls, including supplementary bench marks, necessary to secure a correct layout of the work. Stakes for line and grade of pavement and/or curb shall be set at sufficient station intervals to ensure conformance to plan line and grade. The Contractor will not be required to set additional stakes to locate a utility line which is not included as a pay item in the contract nor to determine property lines between private properties.

The Contractor shall be responsible for having the finished work conform to the lines, grades, elevations, and dimensions called for in the plans. Any inspection or checking of the Contractor's layout by the Engineer and the acceptance of all or any part of it shall not relieve the Contractor of his/her responsibility to secure the proper dimensions, grades and elevations of the several parts of the work. The Contractor shall exercise care in the preservation of stakes and bench marks and shall have them reset when any are damaged, lost, displaced, removed, or otherwise obliterated.

Responsibility of the Department.

(a) The Department will locate and reference the control points established for the layout of the work. This may include the centerline of roads and streets, except interchange ramps. The centerline of private entrances and short street intersection returns may not be located or referenced by the Department.

Locating and referencing the centerline of survey will consist of establishing and referencing the control points of the centerline of surveys such as PC's, PT's and as many POT's as are necessary to provide a line of sight.

(b) For construction of roadways on new alignments, reconstruction of roadways, and construction or reconstruction of structures, bench marks will

be established along the project outside of construction lines not exceeding 1000 ft (300 m) intervals horizontally and 20 ft (6 m) vertically.

(c) Stakes set for (a) and (b) above will be identified in the field to the Contractor.

(d) The Department will make random checks of the Contractor's staking to determine if the work is in conformance with the plans. Where the Contractor's work will tie into work that is being or will be done by others, checks will be made to determine if the work is in conformance with the proposed overall grade and horizontal alignment.

(e) The Department will set stakes for utility adjustments.

(f) The Department will make measurements and take cross sections from which the various pay items will be measured.

(g) Where the Contractor, in setting construction stakes, discovers discrepancies, the Department will check to determine their nature and make whatever revisions are necessary in the plans, including the recross sectioning of the area involved. Any additional restaking required by the Engineer will be the responsibility of the Contractor. The additional restaking done by the Contractor will be paid for according to Article 109.04 of the Standard Specifications.

(h) The Department will accept responsibility for the accuracy of the initial control points as provided herein.

(i) It is not the responsibility of the Department, except as provided herein, to check the correctness of the Contractor's stakes; any errors apparent will be immediately called to the Contractor's attention and he/she shall make the necessary correction before the stakes are used for construction purposes.

<u>Responsibility of the Contractor</u>.

(a) The Contractor shall establish from the given survey points and bench marks the control points necessary to construct the individual project elements. S(he) shall provide the Engineer adequate control in close proximity to each individual element to allow adequate checking of construction operations. This includes, but is not limited to, line and grade stakes, line and grade nails in form work, and/or filed or etched marks in substantially completed construction work or other locations. It is the Contractor's responsibility to tie in centerline control points in order to preserve them during construction operations.

(b) At the completion of the grading operations, the Contractor shall set stakes at 100 ft (25 m) station intervals along each profile grade line. These stakes will be used for final cross sectioning by the Department.

(c) The Contractor shall locate the existing right-of-way points for the installation of right-of-way markers.

Not to be used for bidding purposes

(d) Work shall be according to normally accepted self-checking surveying practices. Field notes shall be kept in standard survey field notebooks and those books shall become the property of the Department at the completion of the project. Notes shall be neat, orderly, and in accepted form.

(e) The Contractor shall use diligent care and appropriate accuracy for placement of construction stakes in order to construct to the lines and grades shown in the plans. Points shall be positioned to allow reuse throughout the construction process.

(f) Prior to beginning any bridge construction, structure centerlines and pier lines shall be established by the Contractor and checked by the Engineer. The Contractor shall provide a detailed structure layout drawing showing span dimensions, staking lines, and offset distances.

Measurement and Payment. This work will be paid for at the contract lump sum price for CONSTRUCTION LAYOUT.

Not to be used for bidding purposes

State of Illinois
Department of Transportation

SPECIAL PROVISION
FOR
QUALITY CONTROL/QUALITY ASSURANCE OF CONCRETE MIXTURES

Effective: April 1, 1992
Revised: January 1, 2022

Add the following to Section 1020 of the Standard Specifications:

"**1020.16 Quality Control/Quality Assurance of Concrete Mixtures**. This Article specifies the quality control responsibilities of the Contractor for concrete mixtures (except Class PC and PS concrete), cement aggregate mixture II, and controlled low-strength material incorporated in the project, and defines the quality assurance and acceptance responsibilities of the Engineer.

A list of quality control/quality assurance (QC/QA) documents is provided in Article 1020.16(g), Schedule D.

A Level I Portland Cement Concrete (PCC) Technician shall be defined as an individual who has successfully completed the Department's training for concrete testing.

A Level II Portland Cement Concrete (PCC) Technician shall be defined as an individual who has successfully completed the Department's training for concrete proportioning.

A Level III Portland Cement Concrete (PCC) Technician shall be defined as an individual who has successfully completed the Department's training for concrete mix design.

A Concrete Tester shall be defined as an individual who has successfully completed the Department's training to assist with concrete testing and is monitored on a daily basis.

Aggregate Technician shall be defined as an individual who has successfully completed the Department's training for gradation testing involving aggregate production and mixtures.

Mixture Aggregate Technician shall be defined as an individual who has successfully completed the Department's training for gradation testing involving mixtures.

Gradation Technician shall be defined as an individual who has successfully completed the Department's training to assist with gradation testing and is monitored on a daily basis.

(a) Equipment/Laboratory. The Contractor shall provide a laboratory and test equipment to perform their quality control testing.

Not to be used for bidding purposes

The laboratory shall be of sufficient size and be furnished with the necessary equipment, supplies, and current published test methods for adequately and safely performing all required tests. The laboratory will be approved by the Engineer according to the Bureau of Materials Policy Memorandum "Minimum Private Laboratory Requirements for Construction Materials Testing or Mix Design". Production of a mixture shall not begin until the Engineer provides written approval of the laboratory. The Contractor shall refer to the Department's "Required Sampling and Testing Equipment for Concrete" for equipment requirements.

Test equipment shall be maintained and calibrated as required by the appropriate test method, and when required by the Engineer. This information shall be documented on the Department's "Calibration of Concrete Testing Equipment" forms BMPR PCCQ01 through BMPR PCCQ09.

Test equipment used to determine compressive or flexural strength shall be calibrated each 12 month period by an independent agency, using calibration equipment traceable to the National Institute of Standards and Technology (NIST). The Contractor shall have the calibration documentation available at the test equipment location.

The Engineer will have unrestricted access to the plant and laboratory at any time to inspect measuring and testing equipment, and will notify the Contractor of any deficiencies. Defective equipment shall be immediately repaired or replaced by the Contractor.

(b) Quality Control Plan. The Contractor shall submit, in writing, a proposed Quality Control (QC) Plan to the Engineer. The QC Plan shall be submitted a minimum of 45 calendar days prior to the production of a mixture. The QC Plan shall address the quality control of the concrete, cement aggregate mixture II, and controlled low-strength material incorporated in the project. The Contractor shall refer to the Department's "Model Quality Control Plan for Concrete Production" to prepare a QC Plan. The Engineer will respond in writing to the Contractor's proposed QC Plan within 15 calendar days of receipt.

Production of a mixture shall not begin until the Engineer provides written approval of the QC Plan. The approved QC Plan shall become a part of the contract between the Department and the Contractor, but shall not be construed as acceptance of any mixture produced.

The QC Plan may be amended during the progress of the work, by either party, subject to mutual agreement. The Engineer will respond in writing to a Contractor's proposed QC Plan amendment within 15 calendar days of receipt. The response will indicate the approval or denial of the Contractor's proposed QC Plan amendment.

(c) Quality Control by Contractor. The Contractor shall perform quality control inspection, sampling, testing, and documentation to meet contract requirements. Quality control includes the recognition of obvious defects

Not to be used for bidding purposes

and their immediate correction. Quality control also includes appropriate action when passing test results are near specification limits, or to resolve test result differences with the Engineer. Quality control may require increased testing, communication of test results to the plant or the jobsite, modification of operations, suspension of mixture production, rejection of material, or other actions as appropriate. The Engineer shall be immediately notified of any failing tests and subsequent remedial action. Passing tests shall be reported no later than the start of the next work day.

When a mixture does not comply with specifications, the Contractor shall reject the material, unless the Engineer accepts the material for incorporation in the work, according to Article 105.03.

(1) Personnel Requirements. The Contractor shall provide a Quality Control (QC) Manager who will have overall responsibility and authority for quality control. The jobsite and plant personnel shall be able to contact the QC Manager by cellular phone, two-way radio, or other methods approved by the Engineer.

The QC Manager shall visit the jobsite a minimum of once a week. A visit shall be performed the day of a bridge deck pour, the day a non-routine mixture is placed as determined by the Engineer, or the day a plant is anticipated to produce more than 1000 cu yd (765 cu m). Any of the three required visits may be used to meet the once per week minimum requirement.

The Contractor shall provide personnel to perform the required inspections, sampling, testing, and documentation in a timely manner. The Contractor shall refer to the Department's "Qualifications and Duties of Concrete Quality Control Personnel" document.

A Level I PCC Technician shall be provided at the jobsite during mixture production and placement, and may supervise concurrent pours on the project. For concurrent pours, a minimum of one Concrete Tester shall be required at each pour location. If the Level I PCC Technician is at one of the pour locations, a Concrete Tester is still required at the same location. Each Concrete Tester shall be able to contact the Level I PCC Technician by cellular phone, two-way radio, or other methods approved by the Engineer. A single Level I PCC Technician shall not supervise concurrent pours for multiple contracts.

A Level II PCC Technician shall be provided at the plant, or shall be available, during mixture production and placement. A Level II PCC Technician may supervise a maximum of three plants. Whenever the Level II PCC Technician is not at the plant during mixture production and placement, a Concrete Tester or Level I PCC Technician shall be present at the plant to perform any necessary concrete tests. The Concrete Tester, Level I PCC Technician, or other individual shall also be trained to perform any necessary aggregate moisture tests, if the Level II PCC Technician is not at the plant during mixture production and placement. The Concrete Tester, Level I PCC Technician, plant personnel, and jobsite personnel shall have the ability to contact the

Not to be used for bidding purposes

Level II PCC Technician by cellular phone, two-way radio, or other methods approved by the Engineer.

For a mixture which is produced and placed with a mobile portland cement concrete plant as defined in Article 1103.04, a Level II PCC Technician shall be provided. The Level II PCC Technician shall be present at all times during mixture production and placement. However, the Level II PCC Technician may request to be available if operations are satisfactory. Approval shall be obtained from the Engineer, and jobsite personnel shall have the ability to contact the Level II PCC Technician by cellular phone, two-way radio, or other methods approved by the Engineer.

A Concrete Tester, Mixture Aggregate Technician, and Aggregate Technician may provide assistance with sampling and testing. A Gradation Technician may provide assistance with testing. A Concrete Tester shall be supervised by a Level I or Level II PCC Technician. A Gradation Technician shall be supervised by a Level II PCC Technician, Mixture Aggregate Technician, or Aggregate Technician.

(2) Required Plant Tests. Sampling and testing shall be performed at the plant, or at a location approved by the Engineer, to control the production of a mixture. The required minimum Contractor plant sampling and testing is indicated in Article 1020.16(g) Schedule A.

(3) Required Field Tests. Sampling and testing shall be performed at the jobsite to control the production of a mixture, and to comply with specifications for placement. For standard curing, after initial curing, and for strength testing, the location shall be approved by the Engineer. The required minimum Contractor jobsite sampling and testing is indicated in Article 1020.16(g), Schedule B.

(d) Quality Assurance by Engineer. The Engineer will perform quality assurance tests on independent samples and split samples. An independent sample is a field sample obtained and tested by only one party. A split sample is one of two equal portions of a field sample, where two parties each receive one portion for testing. The Engineer may request the Contractor to obtain a split sample. Aggregate split samples and any failing strength specimen shall be retained until permission is given by the Engineer for disposal. The results of all quality assurance tests by the Engineer will be made available to the Contractor. However, Contractor split sample test results shall be provided to the Engineer before Department test results are revealed. The Engineer's quality assurance independent sample and split sample testing are indicated in Article 1020.16(g), Schedule C.

(1) Strength Testing. For strength testing, Article 1020.09 shall apply, except the Contractor and Engineer strength specimens may be placed in the same field curing box for initial curing and may be cured in the same water storage tank for final curing.

Not to be used for bidding purposes

(2) Comparing Test Results. Differences between the Engineer's and the Contractor's split sample test results will be considered reasonable if within the following limits:

Test Parameter	Acceptable Limits of Precision
Slump	0.75 in. (20 mm)
Air Content	0.9%
Compressive Strength	900 psi (6200 kPa)
Flexural Strength	90 psi (620 kPa)
Slump Flow (Self-Consolidating Concrete (SCC))	1.5 in. (40 mm)
Visual Stability Index (SCC)	Not Applicable
J-Ring (SCC)	1.5 in. (40 mm)
L-Box (SCC)	10 %
Hardened Visual Stability Index (SCC)	Not Applicable
Dynamic Segregation Index (SCC)	1.0 %
Flow (Controlled Low-Strength Material (CLSM))	1.5 in. (40 mm)
Strength (CLSM)	40 psi (275 kPa)
Aggregate Gradation	See "Guideline for Sample Comparison" in Appendix "A" of the Manual of Test Procedures for Materials.

When acceptable limits of precision have been met, but only one party is within specification limits, the failing test shall be resolved before the material may be considered for acceptance.

(3) Test Results and Specification Limits.

a. Split Sample Testing. If either the Engineer's or the Contractor's split sample test result is not within specification limits and the other party is within specification limits, immediate retests on a split sample shall be performed for slump, air content, slump flow, visual stability index, J-Ring, L-Box, dynamic segregation index, flow (CLSM), or aggregate gradation. A passing retest result by each party will require no further action. If either the Engineer's or Contractor's slump, air content, slump flow, visual stability index, J-Ring, L-Box, dynamic segregation index, flow (CLSM), or aggregate gradation split sample retest result is a failure; or if either the Engineer's or Contractor's strength or hardened visual stability index test result is a failure and the other party is within specification limits; the following actions shall be initiated to investigate the test failure:

1. The Engineer and the Contractor shall investigate the sampling method, test procedure, equipment condition, equipment calibration, and other factors.

Not to be used for bidding purposes

2. The Engineer or the Contractor shall replace test equipment, as determined by the Engineer.

3. The Engineer and the Contractor shall perform additional testing on split samples, as determined by the Engineer.

For aggregate gradation, jobsite slump, jobsite air content, jobsite slump flow, jobsite visual stability index, jobsite J-Ring, jobsite L-Box, jobsite dynamic segregation index, and jobsite flow (CLSM), if the failing split sample test result is not resolved according to 1., 2., or 3., and the mixture has not been placed, the Contractor shall reject the material; unless the Engineer accepts the material for incorporation in the work, according to Article 105.03. If the mixture has already been placed, or if a failing strength or hardened visual stability index test result is not resolved according to 1., 2., or 3., the material will be considered unacceptable.

If a continued trend of difference exists between the Engineer's and the Contractor's split sample test results, or if split sample test results exceed the acceptable limits of precision, the Engineer and the Contractor shall investigate according to items 1., 2., and 3.

b. Independent Sample Testing. For aggregate gradation, jobsite slump, jobsite air content, jobsite slump flow, jobsite visual stability index, jobsite J-Ring, jobsite L-Box, jobsite dynamic segregation index, jobsite flow (CLSM), if the result of a quality assurance test on a sample independently obtained by the Engineer is not within specification limits, and the mixture has not been placed, the Contractor shall reject the material; unless the Engineer accepts the material for incorporation in the work, according to Article 105.03. If the mixture has already been placed or the Engineer obtains a failing strength or hardened visual stability index test result, the material will be considered unacceptable.

(e) Acceptance by the Engineer. Final acceptance will be based on the Standard Specifications and the following:

(1) The Contractor's compliance with all contract documents for quality control.

(2) Validation of Contractor quality control test results by comparison with the Engineer's quality assurance test results using split samples. Any quality control or quality assurance test determined to be flawed may be declared invalid only when reviewed and approved by the Engineer. The Engineer will declare a test result invalid only if it is proven that improper sampling or testing occurred. The test result is to be recorded and the reason for declaring the test invalid will be provided by the Engineer.

Not to be used for bidding purposes

(3) Comparison of the Engineer's quality assurance test results with specification limits using samples independently obtained by the Engineer.

The Engineer may suspend mixture production, reject materials, or take other appropriate action if the Contractor does not control the quality of concrete, cement aggregate mixture II, or controlled low-strength material for acceptance. The decision will be determined according to (1), (2), or (3).

(f) Documentation.

(1) Records. The Contractor shall be responsible for documenting all observations, inspections, adjustments to the mix design, test results, retest results, and corrective actions in a bound hardback field book, bound hardback diary, or appropriate Department form, which shall become the property of the Department. The documentation shall include a method to compare the Engineer's test results with the Contractor's results. The Contractor shall be responsible for the maintenance of all permanent records whether obtained by the Contractor, the consultants, the subcontractors, or the producer of the mixture. The Contractor shall provide the Engineer full access to all documentation throughout the progress of the work.

The Department's form BMPR MI504, form BMPR MI654, and form BMPR MI655 shall be completed by the Contractor, and shall be submitted to the Engineer weekly or as required by the Engineer. A correctly completed form BMPR MI504, form BMPR MI654, and form BMPR MI655 are required to authorize payment by the Engineer for applicable pay items.

(2) Delivery Truck Ticket. The following information shall be recorded on each delivery ticket or in a bound hardback field book: initial revolution counter reading (final reading optional) at the jobsite, if the mixture is truck-mixed; time discharged at the jobsite; total amount of each admixture added at the jobsite; and total amount of water added at the jobsite.

(g) Basis of Payment and Schedules. Quality Control/Quality Assurance of portland cement concrete mixtures will not be paid for separately, but shall be considered as included in the cost of the various concrete contract items.

Not to be used for bidding purposes

CHECK SHEET #23

SCHEDULE A

CONTRACTOR PLANT SAMPLING AND TESTING			
Item	Test	Frequency	Illinois Modified AASHTO, Illinois Modified ASTM, or Illinois Test Procedure [1/]
Aggregates (Arriving at Plant)	Gradation [2/]	As needed to check source for each gradation number	ITP 2, Illinois Modified AASHTO T 11, Illinois Modified AASHTO T 27, and ITP 248
Aggregates (Stored at Plant in Stockpiles or Bins)	Gradation [2/]	2500 cu yd (1900 cu m) for each gradation number [3/]	ITP 2, Illinois Modified AASHTO T 11, Illinois Modified AASHTO T 27, and ITP 248
Aggregates (Stored at Plant in Stockpiles or Bins)	Moisture [4/]: Fine Aggregate	Once per week for moisture sensor, otherwise daily for each gradation number	Flask, Dunagan, Pychnometer Jar, or Illinois Modified AASHTO T 255
	Moisture [4/]: Coarse Aggregate	As needed to control production for each gradation number	Dunagan, Pychnometer Jar, or Illinois Modified AASHTO T 255
Mixture [5/]	Slump Air Content Unit Weight / Yield Slump Flow (SCC) Visual Stability Index (SCC) J-Ring (SCC) [6/] L-Box (SCC) [6/] Temperature	As needed to control production	R 60 and T 119 R 60 and T 152 or T 196 R 60 and T 121 ITP SCC-1 and ITP SCC-2 ITP SCC-1 and ITP SCC-2 ITP SCC-1 and ITP SCC-3 ITP SCC-1 and ITP SCC-4 R 60 and ASTM C 1064
Mixture (CLSM) [7/]	Flow Air Content Temperature	As needed to control production	ITP 307

1/ Refer to the Department's "Manual of Test Procedures for Materials".

2/ All gradation tests shall be washed. Testing shall be completed no later than 24 hours after the aggregate has been sampled.

3/ One per week (Sunday through Saturday) minimum, unless the stockpile has not received additional aggregate material since the previous test.

One per day minimum for a bridge deck pour, unless the stockpile has not received additional aggregate material since the previous test. The sample shall be taken and testing completed prior to the pour. The bridge deck aggregate sample may be taken the day before the pour or as approved by the Engineer.

4/ If the moisture test and moisture sensor disagree by more than 0.5 percent, retest. If the difference remains, adjust the moisture sensor to an average of two or more moisture tests. The Department's "Water/Cement Ratio Worksheet" form (BMPR PCCW01) shall be completed, when applicable.

Not to be used for bidding purposes

5/ The Contractor may also perform strength testing according to Illinois Modified AASHTO R 60, T 23, and T 22 or T 177; or water content testing according to Illinois Modified AASHTO T 318.

The Contractor may also perform other available self-consolidating concrete (SCC) tests at the plant to control mixture production.

6/ The Contractor shall select the J-Ring or L-Box test for plant sampling and testing.

7/ The Contractor may also perform strength testing according to ITP 307.

Not to be used for bidding purposes

CHECK SHEET #23

SCHEDULE B

CONTRACTOR JOBSITE SAMPLING & TESTING [1/]			
Item	Measured Property	Random Sample Testing Frequency per Mix Design and per Plant [2/]	Illinois Modified AASHTO, Illinois Modified ASTM, or Illinois Test Procedure
Pavement, Shoulder, Base Course, Base Course Widening, Driveway Pavement, Railroad Crossing, Cement Aggregate Mixture II	Slump [3/ 4/]	1 per 500 cu yd (400 cu m) or minimum 1/day	R 60 and T 119
	Air Content [3/ 5/ 6/]	1 per 100 cu yd (80 cu m) or minimum 1/day	R 60 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	1 per 1250 cu yd (1000 cu m) or minimum 1/day	R 60, T 22 and T 23 or R 60, T 177 and T 23
Bridge Approach Slab [9/], Bridge Deck [9/], Bridge Deck Overlay [9/], Superstructure [9/], Substructure, Culvert, Miscellaneous Drainage Structures, Retaining Wall, Building Wall, Drilled Shaft Pile & Encasement Footing, Foundation, Pavement Patching, Structural Repairs	Slump [3/ 4/]	1 per 50 cu yd (40 cu m) or minimum 1/day	R 60 and T 119
	Air Content [3/ 5/ 6/]	1 per 50 cu yd (40 cu m) or minimum 1/day	R 60 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	1 per 250 cu yd (200 cu m) or minimum 1/day	R 60, T 22 and T 23 or R 60, T 177 and T 23
Seal Coat	Slump [3/]	1 per 250 cu yd (200 cu m) or minimum 1/day	R 60 and T 119
	Air Content [3/ 5/ 6/]	1 per 250 cu yd (200 cu m) or minimum 1/day when air is entrained	R 60 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	1 per 250 cu yd (200 cu m) or minimum 1/day	R 60, T 22 and T 23 or R 60, T 177 and T 23

Not to be used for bidding purposes

CONTRACTOR JOBSITE SAMPLING & TESTING [1/]			
Curb, Gutter, Median, Barrier, Sidewalk, Slope Wall, Paved Ditch, Fabric Formed Concrete Revetment Mat [10/], Miscellaneous Items, Incidental Items	Slump [3/ 4/]	1 per 100 cu yd (80 cu m) or minimum 1/day	R 60 and T 119
	Air Content [3/ 5/ 6/]	1 per 50 cu yd (40 cu m) or minimum 1/day	R 60 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	1 per 400 cu yd (300 cu m) or minimum 1/day	R 60, T 22 and T 23 or R 60, T 177 and T 23
Items Using Self-Consolidating Concrete	Slump Flow [3/] VSI [3/] J-Ring [3/ 11/] L-Box [3/ 11/]	Perform at same frequency that is specified for the Item's slump	ITP SCC-1 & ITP SCC-2 ITP SCC-1 & ITP SCC-2 ITP SCC-1 & ITP SCC-3 ITP SCC-1 & ITP SCC-4
	HVSI [12/]	Minimum 1/day at start of production for that day	ITP SCC-1 and ITP SCC-6
	Dynamic Segregation Index (DSI)	Minimum 1/week at start of production for that week	ITP SCC-1 and ITP SCC-8 (Option C)
	Air Content [3/ 5/ 6/]	Perform at same frequency that is specified for the Item's air content	ITP SCC-1 and T 152 or T 196
	Compressive Strength [7/ 8/] or Flexural Strength [7/ 8/]	Perform at same frequency that is specified for the Item's strength	ITP SCC-1, T 22 and T 23 or ITP SCC-1, T 177 and T 23
All	Temperature [3/]	As needed to control production	R 60 and ASTM C 1064
Controlled Low-Strength Material (CLSM)	Flow, Air Content, Compressive Strength (28-day) [13/], and Temperature	First truck load delivered and as needed to control production thereafter	ITP 307

1/ Sampling and testing of small quantities of curb, gutter, median, barrier, sidewalk, slope wall, paved ditch, miscellaneous items, and incidental items may be waived by the Engineer, if requested by the Contractor. However, quality control personnel are still required according to Article 1020.16(c)(1). The Contractor shall also provide recent evidence that similar material has been found to be satisfactory under normal sampling and testing

Not to be used for bidding purposes

procedures. The total quantity that may be waived for testing shall not exceed 100 cu yd (76 cu m) per contract.

If the Contractor's or Engineer's test result for any jobsite mixture test is not within the specification limits, all subsequent truck loads delivered shall be tested by the Contractor until the problem is corrected.

2/ If one mix design is being used for several construction items during a day's production, one testing frequency may be selected to include all items. The construction items shall have the same slump, air content, and water/cement ratio specifications. For self-consolidating concrete, the construction items shall have the same slump flow, visual stability index, J-Ring, L-Box, air content, and water/cement ratio specifications. The frequency selected shall equal or exceed the testing required for the construction item.

One sufficiently sized sample shall be taken to perform the required test(s). Random numbers shall be determined according to the Department's "Method for Obtaining Random Samples for Concrete". The Engineer will provide random sample locations.

3/ The temperature, slump, and air content tests shall be performed on the first truck load delivered, for each pour. For self-consolidating concrete, the temperature, slump flow, visual stability index, J-Ring or L-Box, and air content tests shall be performed on the first truck load delivered, for each pour. Unless a random sample is required for the first truck load, testing the first truck load does not satisfy random sampling requirements.

4/ The slump random sample testing frequency shall be a minimum 1/day for a construction item which is slipformed.

5/ If a pump or conveyor is used for placement, a correction factor shall be established to allow for a loss of air content during transport. The first three truck loads delivered shall be tested, before and after transport by the pump or conveyor, to establish the correction factor. Once the correction is determined, it shall be re-checked after an additional 50 cu yd (38 cu m) is pumped, or an additional 100 cu yd (76 cu m) is transported by conveyor. This shall continue throughout the pour. If the re-check indicates the correction factor has changed, a minimum of two truckloads is required to re-establish the correction factor. The correction factor shall also be re-established when significant changes in temperature, distance, pump or conveyor arrangement, and other factors have occurred. If the correction factor is greater than 3.0 percent, the Contractor shall take corrective action to reduce the loss of air content during transport by the pump or conveyor. The Contractor shall record all air content test results, correction factors, and corrected air contents. The corrected air content shall be reported on form BMPR MI654.

6/ If the Contractor's or Engineer's air content test result is within the specification limits, and 0.2 percent or closer to either limit, the next truck load delivered shall be tested by the Contractor. For example, if the specified air content range is 5.0 to 8.0 percent and the test result is 5.0, 5.1, 5.2, 7.8, 7.9, or 8.0 percent, the next truck shall be tested by the Contractor.

Not to be used for bidding purposes

7/ The test of record for strength shall be the day indicated in Article 1020.04. For cement aggregate mixture II, a strength requirement is not specified and testing is not required. Additional strength testing to determine early falsework and form removal, early pavement or bridge opening to traffic, or to monitor strengths is at the discretion of the Contractor. Strength shall be defined as the average of two 6 x 12 in. (150 x 300 mm) cylinder breaks, three 4 x 8 in. (100 x 200 mm) cylinder breaks, or two beam breaks for field tests. Per Illinois Modified AASHTO T 23, cylinders shall be 6 x 12 in. (150 x 300 mm) when the nominal maximum size of the coarse aggregate exceeds 1 in. (25 mm). Nominal maximum size is defined as the largest sieve which retains any of the aggregate sample particles.

8/ In addition to the strength test, a slump test, air content test, and temperature test shall be performed on the same sample. For self-consolidating concrete, a slump flow test, visual stability index test, J-Ring or L-Box test, air content test, and temperature test shall be performed on the same sample as the strength test. For mixtures pumped or conveyored, the Contractor shall sample according to Illinois Modified AASHTO R 60.

9/ The air content test will be required for each delivered truck load.

10/ For fabric formed concrete revetment mat, the slump test is not required and the flexural strength test is not applicable.

11/ The Contractor shall select the J-Ring or L-Box test for jobsite sampling and testing.

12/ In addition to the hardened visual stability index (HVSI) test, a slump flow test, visual stability index (VSI) test, J-Ring or L-Box test, air content test, and temperature test shall be performed on the same sample. The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

13/ The test of record for strength shall be the day indicated in Article 1019.04. In addition to the strength test, a flow test, air content test, and temperature test shall be performed on the same sample. The strength test may be waived by the Engineer if future removal of the material is not a concern.

Not to be used for bidding purposes

SCHEDULE C

ENGINEER QUALITY ASSURANCE INDEPENDENT SAMPLE TESTING		
Location	Measured Property	Testing Frequency [1/]
Plant	Gradation of aggregates stored in stockpiles or bins, Slump and Air Content	As determined by the Engineer.
Jobsite	Slump, Air Content, Slump Flow, Visual Stability Index, J-Ring, L-Box, Hardened Visual Stability Index, Dynamic Segregation Index, and Strength	As determined by the Engineer.
	Flow, Air Content, Strength (28-day), and Dynamic Cone Penetration for Controlled Low-Strength Material (CLSM)	As determined by the Engineer

ENGINEER QUALITY ASSURANCE SPLIT SAMPLE TESTING [2/]		
Location	Measured Property	Testing Frequency [1/]
Plant	Gradation of aggregates stored in stockpiles or bins	At the beginning of the project, the first test performed by the Contractor. Thereafter, a minimum of 10% of total tests required of the Contractor will be performed per aggregate gradation number and per plant.
	Slump, Air Content, Slump Flow (SCC), Visual Stability Index (SCC), J-Ring (SCC), and L-Box (SCC)	As determined by the Engineer.
Jobsite	Slump, Air Content [3/], Slump Flow, Visual Stability Index, J-Ring and L-Box	At the beginning of the project, the first three tests performed by the Contractor. Thereafter, a minimum of 20% of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design.
	Hardened Visual Stability Index	As determined by the Engineer.
	Dynamic Segregation Index	As determined by the Engineer.
	Strength	At the beginning of the project, the first test performed by the Contractor. Thereafter, a minimum of 20% of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design.
	Flow, Air Content, and Strength (28-day) for Controlled Low-Strength Material (CLSM)	As determined by the Engineer.

Not to be used for binding purposes

1/ The Engineer will perform the testing throughout the period of quality control testing by the Contractor.

2/ The Engineer will witness and take immediate possession of or otherwise secure the Department's split sample obtained by the Contractor.

3/ Before transport by pump or conveyor, a minimum of 20 percent of total tests required of the Contractor will be performed per mix design and per plant. After transport by pump or conveyor, a minimum of 20 percent of total tests required of the Contractor will be performed per mix design and per plant.

Not to be used for bidding purposes

CHECK SHEET #23

SCHEDULE D

CONCRETE QUALITY CONTROL AND QUALITY ASSURANCE DOCUMENTS

(a) Model Quality Control Plan for Concrete Production (*)

(b) Qualifications and Duties of Concrete Quality Control Personnel (*)

(c) Development of Gradation Bands on Incoming Aggregate at Mix Plants (*)

(d) Required Sampling and Testing Equipment for Concrete (*)

(e) Method for Obtaining Random Samples for Concrete (*)

(f) Calibration of Concrete Testing Equipment (BMPR PCCQ01 through BMPR PCCQ09) (*)

(g) Water/Cement Ratio Worksheet (BMPR PCCW01) (*)

(h) Field/Lab Gradations (BMPR MI504) (*)

(i) Concrete Air, Slump and Quantity (BMPR MI654) (*)

(j) P.C. Concrete Strengths (BMPR MI655) (*)

(k) Aggregate Technician Course or Mixture Aggregate Technician Course (*)

(l) Portland Cement Concrete Tester Course (*)

(m) Portland Cement Concrete Level I Technician Course - Manual of Instructions for Concrete Testing (*)

(n) Portland Cement Concrete Level II Technician Course - Manual of Instructions for Concrete Proportioning (*)

(o) Portland Cement Concrete Level III Technician Course - Manual of Instructions for Design of Concrete Mixtures (*)

(p) Manual of Test Procedures for Materials

* Refer to Appendix C of the Department's "Manual of Test Procedures for Materials" for more information.

Not to be used for bidding purposes

Section IV

General Provisions & Technical Specifications for Sanitary Sewer Construction

(Separate document incorporated by reference)

Not to be used for bidding purposes