

**Four Rivers Sanitation Authority
Rockford, Illinois**

Bidding Requirements and Contract Forms

for

Effluent Diffuser Improvements

Capital Project No. 1763

Four Rivers Sanitation Authority Rockford, Illinois

Bidding Requirements and Contract Forms and *General Provisions and Technical Specifications*

for

Effluent Diffuser Improvements

Capital Project No. 1763

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Section I
Bidding Requirements

Article 1 — Notice to Bidders

The Four Rivers Sanitation Authority (FRSA) will receive signed and sealed bids for the Effluent Diffuser Improvements, Capital Project No. 1763, at the Steve Graceffa Administration Building (Administration Building) at 3501 Kishwaukee Street, Rockford, Illinois until 10:00 a.m. on Thursday, November 4, 2021, at which time and place responsive / responsible bids will be publicly opened and read aloud. Due to ongoing COVID-19 concerns, those in attendance must wear a face mask or covering.

The Effluent Diffuser Improvements, Capital Project No. 1763, project consists of installation of twelve (12) diffuser pipe fittings on currently blind flanged closed ports on the existing FRSA multi-port diffuser system (Outfall #1) and installing additional hardware to existing diffuser ports on the outfall. Materials for diffuser ports (fittings, gaskets, and hardware) are to be provided by FRSA. The Work also includes fabrication, supply, and installation of a debris gate within the outfall piping as detailed herein. Work includes removal and disposal of material from the Rock River channel bottom to facilitate the installation of the diffuser fittings, and restoration of the site and affected work areas, and all other appurtenances as indicated on the plans and in the specifications. All Work to be in accordance with the requirements and specifications herein, including Attachments.

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 demolition, construction, installation, and associated Project work, less lawn restoration, shall be completed within 30 workable days from Notice to Proceed. Liquidated damages shall be \$300.00 per workable day.

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

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

All construction shall be done in accordance with specifications on file with FRSA.


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 Mandatory Pre-Bid Meeting for this project will be held on Thursday, October 28, 2021 at 10:30 a.m. at the FRSA's Board Room, 3501 Kishwaukee Street, Rockford, Illinois. All contractors that intend to bid on this project must attend the pre-bid meeting.

The successful bidder will be required to furnish a satisfactory Performance Bond in the full amount of the Bid or Proposal. No Bid shall be withdrawn without FRSA's consent for a period of sixty (60) days after the scheduled closing time for receipt of bids.

FRSA reserves the right to reject any or all bids, or any part thereof, or to accept any bid or any part thereof, or to waive any formalities in any bids, deemed to be in the best interest of FRSA.

Dated this 19th day of OCT., 2021.


BY: Timothy S. Hanson, Executive Director

Article 2 — Instructions to Bidders

1 General

1.1 Scope and Intent

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

1.2 Contradictions

If in the case of apparent contradiction between or among the Contract Documents, the Contract Documents shall be consulted in the following order: Addenda, Agreement, Project Requirements and Attachments, Supplementary Drawings, Instructions to Bidders, Detailed Specifications, Plans, and 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 Mandatory Pre-Bid Meeting

A Mandatory Pre-Bid Meeting for this project will be held on Thursday, October 28, 2021 at 10:30 a.m. in the Four Rivers Sanitation Authority's (FRSA) Board Room at 3501 Kishwaukee Street, Rockford, Illinois. All Contractors intending to bid on this project must attend the pre-bid meeting. Due to ongoing COVID concerns, those in attendance must wear a face mask or covering.

2 Legal Requirements

2.1 Illinois Regulations

1. Public Act 100-1177 requires the Bidder to comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on 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.
2. Public Act 83-1030 entitled "Steel Products Procurement Act" requires that steel products used or supplied in performance of this Contract or subcontract shall be manufactured or produced in the United States with three exceptions.

The provisions of this Section shall not apply:

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

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

3. Public Act 101-0221 requires that any party to a contract adopt and promulgate written sexual harassment policies that include, as a minimum, the following information:
 - a. the illegality of sexual harassment
 - b. the definition of sexual harassment under Illinois State law
 - c. a description of sexual harassment, utilizing examples
 - d. my (our) organization's internal complaint process including penalties
 - e. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission
 - f. directions on how to contact the Department and the Commission
 - g. protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act

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

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

2.2 Americans with Disabilities Act

The Contractor for this project will comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify Four Rivers Sanitation Authority (FRSA) and their representatives from all:

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

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

3 General Instructions

3.1 Bidder's Responsibility

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

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

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

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

3.2 Addenda and Interpretations

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

3.3 Laws and Regulations

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.

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

3.6 Bid Security

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

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

3.7 Affidavit of Compliance

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

3.8 Statement of Qualifications

Each Proposal must be accompanied by a Statement of Qualifications certifying that the bidder is registered to do business in the State of Illinois, 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 item contracts will be compared on the basis of a total computed price arrived at by taking the sum of the estimated quantities of each item, multiplied by the corresponding unit prices and including any lump sum bids on individual items, in accordance with the estimate of quantities set forth in the Proposal form. Bids on lump sum contracts will be considered upon the basis of the lowest sum bid.

3.10 Acceptance of Bids and Basis of Award

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

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

The bidder whose Proposal is accepted shall enter into a written Contract for the performance of the work and furnish the required bonds and insurance certificate within ten (10) days after written notice by 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) sanitary sewer system repair contracts within the past five (5) years of equal or greater value to the bid being submitted.

3.11 The Rejection of Bids

FRSA reserves the right to reject any bid if the evidence submitted in the statement of the bidder's qualifications, or if investigation of such bidder fails to satisfy FRSA that such bidder is properly

qualified to carry out the obligations and to complete the work contemplated therein. Any or all proposals will be rejected if there is reason to believe that collusion exists among the bidders. Conditional bids will not be accepted. FRSA reserves the right to reject any and all bids and to accept the bid which they deem most favorable to the interest of FRSA after all Proposals have been examined and canvassed.

3.12 Insurance and Bonding

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

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

3.12.1 General

The Contractor shall ensure that:

1. All insurance policies shall be specific to the project.
2. The insurance certificate shall state: This certifies that the insurance coverage meets or exceeds that required for Effluent Diffuser Modifications, Capital Project No. 1763.
3. FRSA and Black & Veatch shall be named as Additional Insureds in all policies; this shall include the Owners' Contractors' Protective Policy option.
4. All completed operations coverages and bonds shall remain in force for a period of two (2) years following acceptance of the Project and completed operations shall stay in force for two (2) years following completion of the Project.

3.12.2 Insurance

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

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

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

- a. Unless otherwise provided in paragraph "c" of this section, 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.

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

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

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

3.12.4 Performance Bond and Labor & Materials Payment Bond Form

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

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

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

3.12.5 Correction of Contractor's Insurance or Bond Deficiencies

If FRSA determines that the Contractor's insurance or bond documentation does not conform to these specifications, FRSA shall 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

Section II

Contract Forms

Proposal

Project: Effluent Diffuser Improvements, Capital Project No. 1763

Location: 3333 Kishwaukee Street, Rockford, IL 61109

Substantial Completion: 30 workable days from Notice to Proceed

Liquidated Damages: \$300/calendar day

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

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

(Address of Individual, Partnership or Corporation)

Gentlemen:

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

1. That I (we), have, examined and am (are) familiar with all the related contract documents and found that they are accurate and complete and are approved by the undersigned.
2. That I (we), have carefully examined the site of the work, and that, from my (our) investigation, has satisfied myself (ourselves) as to the nature and location of the work, the character, quality, and quantity of materials and the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all difficulties to be encountered, and all other items which may, in any way, effect the work or its performance.
3. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same purposes, and is in all respects fair and without collusion or fraud; and that I (we) are not barred from bidding as a result of a bid-rigging or bid-rotating conviction.
4. That accompanying the Proposal is a Bidder's Bond in the amount specified in Article 1, Notice to Bidders, payable to the Board of Trustees of 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 Four Rivers Sanitation Authority, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to Four Rivers Sanitation Authority.
7. No officer or employee or person whose salary is payable in whole or in part by FRSA is, shall be or become interested, directly or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the work to which it is relates, or in any portion of the profits thereof.
8. The Bidder which I represent complies with all applicable requirements of the Americans with Disabilities Act (ADA) and the Occupational Safety and Health Act (OSHA) and that if said bidder is awarded a contract, it will complete all OSHA-required or ADA-required employee and customer training, will make available all required information, and will hold harmless and indemnify FRSA and FRSA's representatives.

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

9. The undersigned, as Bidder, declares that he has adopted and promulgated written sexual harassment policies in accordance with Public Act 99-093 and will make this information available upon request.
10. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including Four Rivers Sanitation Authority) to submit certified payroll reports via the State's Certified Transcript of Payroll Portal found at: www.2.illinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx.
11. The undersigned, as Bidder, declares he will comply with the Federal Drug Free Workplace Act.
12. The undersigned, as Bidder, declares he will comply with Public Act 83-1030 entitled "Steel Products Procurement Act".
13. The undersigned, as Bidder, declares he will comply with Public Act 96-929 (30 ILCS 570) regarding Illinois residents' employment.
14. The undersigned, as Bidder, declares he will comply with non-discrimination in employment in accordance with the Illinois Fair Employment Practices Commissions Rules & Regulations.
15. The undersigned, as Bidder, declares that he currently participates in an apprenticeship or training program that is registered with the United States Department of Labor's Bureau of Apprenticeship and Training or other acceptable State of Illinois Department of Labor monitored program.

In submitting this bid, it is understood that the right is reserved by 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

Lump Sum Bid Amount

Total Amount of Lump Sum Bid, expressed in figures, for providing all materials, equipment, warranty, and labor to complete this project in conformity with all specifications in this Invitation to Bid, as outlined below.

Lump Sum Bid, exclusive of specified weather delay
and Allowance item:

\$ _____

Allowance for Hazardous Riverbed Material Handling/Disposal:

Quantity

Unit

Total Amount

1

Lump Sum

\$ 42,000.00

Total Amount of Lump Sum Bid (summation of above):

\$ _____

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

Date: _____

Bidder: _____
(Printed Name of Firm)

By: _____
(Authorized Rep's Signature)

(Printed Street Address)

By: _____
(Printed Authorized Rep's Name)

(Printed City, State, Zip)

By: _____
(Printed Authorized Rep's Title)

(Area Code and Phone Number)

By: _____
(Fax Number)

(Authorized Rep's Email Address)

Fair Employment Practices Affidavit of Compliance

Project: Effluent Diffuser Improvements, Capital Project No. 1763

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

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

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

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

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

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

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

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

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

Signature

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

Notary Public

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we:

_____ (hereinafter called the Principal) and

_____ (hereinafter called the Surety)

a Corporation chartered and existing under the laws of the State of _____ with its principal offices in the City of _____ and authorized to do business in the State of Illinois are held and firmly bound unto 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 constructing Sanitary Sewers and Appurtenances.

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

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

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

Principal

(Seal)

By _____

Name: _____

Title: _____

Date: _____

Attest:

Secretary

Surety

(Seal)

By _____

Name: _____

Title: _____

Date: _____

Agreement

1. General

THIS AGREEMENT, made and concluded this ____ day of _____, 2021, 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 (\$ _____).

The Contract Price includes the following components, subject to application per the Project Requirements:

Allowance for Hazardous Riverbed Material Handling/Disposal:

<u>Quantity</u>	<u>Unit</u>	<u>Total Amount</u>
1	Lump Sum	\$ 42,000.00

The Adjustment Unit Price shall apply in the event that the stated amount included in the Contract Price differs from actual, final quantities.

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

4. Bond

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

5. Maintenance and Guarantee

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

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

6. Contract Execution

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

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

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

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

7. Payments to Contractor

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

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

8. Subcontracts

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

9. Contractor's Responsibility

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

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

The Contractor shall pay not less than the prevailing wage rate as determined by the Department of Labor, to all laborers, workmen and mechanics performing work under this Contract. Contractor shall comply with current revisions of the wage standards; as required by law. The Contractor shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. The State of Illinois requires contractors and subcontractors on FRSA projects to submit certified payroll reports via the State's Certified Transcript of Payroll Portal currently found at: <https://www2.illinois.gov/idol/Laws-Rules/CONMED/Pages/certifiedtranscriptofpayroll.aspx>. The Contractor is responsible for verifying current website.

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

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

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

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

Contractor shall also comply with Public Act 101-0221, which requires any party to a contract to adopt and enforce a written policy regarding sexual harassment that includes, as a minimum, the following information:

- (a) the illegality of sexual harassment

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

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

The Contractor shall comply with Public Act 96-929 (30 ILCS 570) which provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and further, that Illinois workers are available and capable of performing the particular type work involved.

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

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

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

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

10. Time

Work under this Agreement shall be commenced upon written Notice to Proceed. The completion date for this project shall be based upon 30 workable days of issuance of the Notice to Proceed. A workable day is defined by suitable plant flows, river elevation, and weather conditions for the required tasks.

11. Liquidated Damages

The amount of liquidated damages shall be \$300.00 per calendar day following the passage of the allowable number of workable 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 document sent by facsimile or electronic mail, (b) are aware that the other party will rely on such signatures, and (c) hereby waive any defenses to the enforcement of the terms of this Agreement based on the foregoing forms of signature.

13. Seals

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

(Seal)

Four Rivers Sanitation Authority
Winnebago County, Illinois

By _____
President, Board of Trustees

ATTEST: _____
Clerk of the Board

Contractor

(Corporate Seal)

By _____
Contractor's Officer

Name: _____
Title: _____
Date: _____

ATTEST: _____

Labor & Material Payment Bond

TO: _____ Contractor Name

Contractor City, State

KNOW ALL MEN BY THESE PRESENTS

That _____ (Contractor)

as Principal, and _____

a corporation of the State of _____ as Surety, are held and firmly bound unto the Four Rivers Sanitation Authority, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of

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

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

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

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

for the 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: _____
Signature

Printed Name

Title

By: _____
Attorney-in-Fact Signature

Printed Name

Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

Performance Bond

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

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

NOW, THEREFORE, we the Principal and _____ as Surety, are firmly bound unto the Four Rivers Sanitation Authority in the penal sum of _____ Dollars

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

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

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

CONTRACTOR

SURETY

Contractor Firm Name

By: _____
Signature

Printed Name

Title

By: _____
Attorney-in-Fact Signature

Printed Name

Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

Not to be used for bidding purposes

Section III

Project Requirements and Attachments

PROJECT REQUIREMENTS
for the Four Rivers Sanitation Authority (FRSA)
Effluent Diffuser Improvements Project

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Article

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Attachments

- Attachment A: Record Drawings and Overall Site Layouts
Attachment B: Collins Engineers, Inc. Investigation Report for Effluent Diffuser Outfall
Attachment C: Debris Screen
Attachment D: Turf and Grasses
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Attachment F: Submittals Procedures Forms



1. DESCRIPTION OF WORK. The Work to be performed under these Contract Documents is generally described as follows:

The Effluent Diffuser Improvements project consists of installing twelve diffuser pipe fittings on currently blind flanged closed ports on the existing Four Rivers Sanitation Authority multi-port diffuser system (Outfall #1) and installing additional missing hardware to existing diffuser ports on the outfall. Materials for diffuser ports (fittings, gaskets, and hardware) are to be provided by Four Rivers Sanitation Authority (FRSA). The Work also includes fabrication, supply, and installation of a debris screen within the outfall piping as detailed herein. Work includes removal and disposal of material from the Rock River channel bottom to facilitate the installation of the diffuser fittings, and restoration of the site and affected work areas. All Work to be in accordance with the requirements and specifications herein, including Attachments.

2. APPLICABLE CODES AND REFERENCE STANDARDS. All construction activities shall adhere to the applicable Federal, State, and Local codes.

Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, or laws or regulations in effect at the time of opening of Bids (or on the effective date of the Contract or Agreement if there were no Bids), except as may be otherwise specifically stated herein. However, no provision of any referenced standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of FRSA, Contractor, or any of their subcontractors, consultants, agents, or employees from those set forth herein, nor shall any such provision or instruction be effective to assign to FRSA, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions outlined herein.

3. EXISTING FACILITIES AND CONDITIONS.

3.01. Operation of Existing Facilities. Outfall #1 is used for the control of the disinfection system (chlorination and dechlorination) as well as for effluent sampling. Any work on the existing diffuser system shall be conducted during the non-disinfection season which is typically November through April. Outfall #1 must be kept in continuous operation up until the point of shutdown for the construction activities. Outfall #1 shall be out of service for no longer than 8 hours at a time, during specified working hours. The shutdown/lockout of Outfall #1 will be completed by FRSA. Contractor shall be responsible for coordinating the shutdown of Outfall #1 each morning and notifying FRSA when Outfall #1 can be reinstated each afternoon. Contractor shall provide a minimum of 72 hours notification to FRSA prior to commencing any work on Site. All shutdown coordination shall be coordinated through Mike Christensen, (815) 262-5858.

During the shutdown/lockout of Outfall #1, flow will be diverted to Outfall #2. Contractor shall familiarize itself with the arrangement, elevations, and profile of the outfall piping in the planning of the work. Although the outfall pipe will be isolated at the upstream end by FRSA, leakage may exist from that gate, and water levels in the pipe are subject to river level. Should Contractor contemplate any additional temporary isolation of the piping related to the Work, such temporary isolation and any dewatering of the existing pipe to facilitate the Work is the responsibility of the Contractor, subject to FRSA review and acceptance of any temporary plans.

3.02. Land for Construction Activities. Contractor will be permitted to use available land belonging to FRSA, on the Site, for construction purposes and for storage of materials and equipment. Contractor shall reference Article 15 for additional requirements for use of the site related to Temporary Facilities.

The locations and extent of the areas to be used shall be as shown on Figure 4 in Attachment A.

Contractor shall immediately move stored materials or equipment if any occasion arises, as determined by FRSA, requiring access to the storage area.

No trees shall be removed as part of the construction activities. If located near any construction activities, trees shall be adequately protected against damage from construction operations.

Contractor shall protect all existing structures and property from damage and shall protect, shore, brace, support, and maintain any overhead or underground utilities uncovered or otherwise affected by construction operations. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with all sod and shrubs in yards, parkways, and medians, shall be restored to their original condition. All replacements shall be made with new materials.

Contractor will be held responsible for any damage to existing structures, Work, materials, or equipment because of his operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to FRSA.

Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials, or workers to or from the Work or any part or site thereof, whether by Contractor or its Subcontractors. Contractor shall make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, the damaged property concerning its repair or replacement, or payment of costs incurred in connection with the damage.

3.03. Connections to Existing Facilities. Unless otherwise specified or indicated, Contractor shall make all necessary connections to existing facilities. Contractor shall protect facilities against deleterious substances and damage.

Connections to existing facilities which are in service shall be thoroughly planned in advance, and all required equipment, materials, and labor shall be on hand at the time of undertaking the connections. Work shall proceed continuously (around the clock) if necessary, to complete connections in the minimum time. Operation of valves or other appurtenances on existing utilities, when required, shall be by or under the direct supervision of the utility owner.

3.04. Unfavorable Construction Conditions. During unfavorable weather, wet ground, or other unsuitable construction conditions, Contractor shall confine its operations to work which will not be affected adversely by such conditions. No portion of the Work shall be constructed under conditions which would affect adversely the quality or efficiency thereof, unless special means or precautions are taken by Contractor to perform the Work in a proper and satisfactory manner.

Should the progress of the Work be delayed at FRSA's direction due to unfavorable weather or treatment plant flow conditions after the Contractor has mobilized to start the work, Contractor shall be paid for cost of such delay as provided for in the Adjustment Unit Price described in Article 12.03. Should the start of the Work be delayed for any reason, no payment shall be due to Contractor for delay to the start of the Work.

3.05. Hazardous Environmental Conditions at Site. No Hazardous Environmental Conditions at the Site in areas that will be affected by the Work are known to FRSA.

FRSA has not completed any testing of the river bed materials.. Refer to Article 15.13 for additional requirements for handling and disposal of materials to be removed from the riverbed.

3.06. Coordination with Other Projects. The Primary Filtration Phase 1 construction is anticipated to start in February of 2022. During this time, if the Effluent Diffuser Improvements Contractor enters the Site at Gate 9, the Contractor shall turn at the Service Building (Building #11) and travel on the roadway between the Rock River and the Final Settling Tanks to the Storage Building (Building #34) to avoid this construction Work. Contractor shall coordinate with FRSA with any changes to these construction activities or other plant work as necessary. Building Locations are shown on Figure 4 in Attachment A.

4. NOTICE TO OWNERS AND AUTHORITIES. Contractor shall notify owners of adjacent property and utilities when execution of the Work may affect them.

When it is necessary to temporarily deny access to property, or when any utility service connection must be interrupted, Contractor shall give notices sufficiently in advance to enable the affected persons to provide for their needs. Notices shall conform to any applicable local ordinance and, whether delivered orally or in writing, shall include appropriate information concerning the interruption and instructions on how to limit inconvenience caused thereby.

Utilities and other concerned agencies shall be notified at least 24 hours prior to cutting or closing streets or other traffic areas or excavating near underground utilities or pole lines.

Contractor is responsible for locating any/all existing utilities in the Rock River.

5. MATERIALS TO BE FURNISHED BY FRSA. Materials shall be furnished by FRSA for installation by Contractor as follows.

5.01. Specials. FRSA will procure under a separate contract, the twelve diffuser bells and hardware to be installed by the Contractor under this contract, including gaskets, and missing additional hardware for the existing diffuser ports.

6. RESPONSIBILITY FOR MATERIALS.

6.01. Items Furnished by FRSA. Contractor's responsibility for materials furnished by FRSA shall begin at the point of acceptance by Contractor. Contractor shall carefully examine each shipment prior to acceptance and shall reject all defective items. FRSA reserves the right, however, to accept items rejected by Contractor and to authorize their installation in the Work. After inspection of the materials by the Contractor, the form(s) in Attachment E shall be completed by FRSA and Contractor as evidence of Contractor's acceptance of the materials provided by FRSA.

Defective materials and equipment discovered after installation and prior to final acceptance of the Work, where the defect is of a nature not detectable by visual examination and other appropriate field inspection methods, shall be replaced by FRSA, together with such additional materials and supplies as may be necessary for their replacement. Contractor shall furnish all necessary tools, equipment, and appliances, and perform all necessary labor, for the removal and replacement of such defective items in a manner acceptable to FRSA.

All materials furnished by FRSA which disappear or are damaged after their acceptance by Contractor shall be replaced by and at the expense of Contractor. Replacements shall conform to the original procurement specifications.

6.02. Items Furnished by Contractor. Contractor shall be fully responsible for all materials and equipment which it has furnished.

6.03. Delivery and Handling of Items Furnished by FRSA. FRSA supplied diffuser bells, hardware, and gaskets will be available to the Contractor on or about December 3, 2021. FRSA plans to store the materials in the Storage Building (Building #34). The procured materials shall remain in Building #34 until Contractor is ready to install the specific materials. The location of Building #34 is shown on Figure 4 in Attachment A.

Contractor will be allowed to continue to utilize the Storage Building (Building #34) for storage of FRSA supplied materials until incorporation into the Work.

All charges for demurrage due to negligence or delay by Contractor shall be paid by Contractor. Materials shall be handled by methods which will prevent damage.

Care shall be taken when removing the materials for use to ensure that it is handled in a manner that does not damage the materials.

6.04. Storage of Materials. Upon delivery, all materials shall immediately be stored and protected until installed/used in the Work.

Stacked items shall be suitably protected from damage by spacers or load distributing supports that are safely arranged. No metalwork (miscellaneous steel shapes and reinforcing steel) shall be stored directly on the ground. Fittings may be stored out of doors but must be placed on wooden blocking.

Materials shall not show any pitting, rust, decay, or other deleterious effects of storage when installed in the Work.

7. PREPARATION FOR SHIPMENT. All materials provided by Contractor shall be suitably packaged to facilitate handling and protect against damage during transit and storage. All materials shall be boxed, crated, or otherwise completely enclosed and protected during shipment, handling, and storage. All materials shall be protected from exposure to the elements and shall be kept dry at all times. Painted surfaces shall be protected against impact, abrasion, discoloration, and other damage. All painted surfaces which are damaged prior to acceptance of equipment shall be repainted to the satisfaction of FRSA.

Each item, package, or bundle of material shall be tagged or marked as identified in the delivery schedule or on the Shop Drawings. Complete packing lists and bills of material shall be included with each shipment.

8. SALVAGE OF MATERIALS. All blind flanges and hardware removed as part of the Work by the Contractor shall become property of FRSA.

Contractor shall carefully remove, in a manner to prevent damage, and clean blind flanges and hardware to remain the property of FRSA. Contractor shall store and protect salvaged items and deliver to the FRSA at a time and location convenient with the FRSA.

Any items specified or indicated to be salvaged which are damaged in removal, storage, or handling through carelessness or improper procedures shall be replaced by Contractor in kind or with new items.

9. SUBMITTALS PROCEDURES. Shop Drawings and engineering data (submittals) covering all materials and all fabricated components which will become a permanent part of the Work under this Contract shall be submitted to FRSA for review, as required. Submittals shall verify compliance with the requirements outlined herein, and shall include drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and the operation of component materials; the external connections, anchorages, and supports required; the performance characteristics; and dimensions needed for installation and correlation with other materials.

All submittals, regardless of origin, shall be approved by Contractor and clearly identified with the name and number of this Contract, Contractor's name, and references to applicable requirements section. Each copy of all submittals, regardless of origin, shall be stamped or affixed with an approval statement of Contractor. When catalog pages are submitted, applicable items shall be clearly identified, and inapplicable data crossed out. The current revision, issue number, and date shall be indicated on all drawings and other descriptive data.

Contractor shall be solely responsible for the completeness of each submittal. Contractor's stamp or affixed approval statement of a submittal, per Submittals Procedures – F1 in Attachment F, is a representation to FRSA that the Contractor accepts sole responsibility for determining and verifying all field measurements, quantities, dimensions, installation requirements, materials, catalog numbers, and similar information with respect thereto, and that Contractor has reviewed and coordinated each submittal with other Shop Drawings and with the requirements outlined herein.

All deviations from the requirements outlined herein shall be identified as deviations on each submittal and shall be tabulated in Contractor's letter of transmittal using Submittals Procedures – F2 in Attachment F. Such submittals shall, as pertinent to the deviation, indicate essential details of all changes proposed by Contractor (including modifications to other facilities that may be a result of the deviation).

Shop drawings and the necessary data shall be submitted electronically via email to FRSA as specified below. Submittal documents shall be in color to facilitate use of red line markups. All electronic files shall be in Portable Document

Format (PDF) as generated by Adobe Acrobat Professional Version 7.0 or higher. PDF images must be at a readable resolution.

PDF document properties shall include the submittal number for the document title and Contractor's name for the author.

Electronic submittal file sizes shall be limited to 10 MB.

Submittals will not be accepted from anyone but Contractor. Submittals shall be consecutively numbered in direct sequence of submittal and without division by subcontracts or trades.

9.01. FRSA's Review of Submittals. FRSA's review of submittals covers only general conformity to the Project Requirements, external connections, and dimensions that affect the layout; it does not indicate thorough review of all dimensions, quantities, and details of the material, item covered. FRSA's review shall not relieve Contractor of sole responsibility for errors, omissions, or deviations in the drawings and data, nor of Contractor's sole responsibility for compliance with these Project Requirements.

FRSA's submittal review period shall be 14 consecutive calendar days and shall commence on the first calendar day following receipt of the submittal or resubmittal.

When the drawings and data are returned with review status "NOT ACCEPTABLE" or "RETURNED FOR CORRECTION", the corrections shall be made as instructed by FRSA. The corrected drawings and data shall be resubmitted via email. Resubmittals by facsimile will not be accepted. When the drawings and data are returned with review status "EXCEPTIONS NOTED", "NO EXCEPTIONS NOTED", or "RECORD COPY", no additional copies need be furnished unless specifically requested by FRSA.

9.02. Resubmittal of Shop Drawings and Data. Contractor shall accept full responsibility for the completeness of each resubmittal. Contractor shall verify that all corrected data and additional information previously requested by FRSA are provided on the resubmittal. Resubmittals shall be in an organized and consistent format.

When corrected copies are resubmitted, Contractor shall direct specific attention to all revisions in writing and shall list separately any revisions made other than those called for by FRSA on previous submittals. Requirements specified for initial submittals shall also apply to resubmittals. Resubmittals shall bear the number of the first submittal followed by a letter (A, B, etc.) or a unique identification that indicates the initial submittal and correct sequence of each resubmittal.

Resubmittals shall be made within 14 days of the date of the letter returning the material to be modified or corrected, unless within 7 days Contractor submits an acceptable request for an extension of the stipulated time period, listing the reasons the resubmittal cannot be completed within that time.

Any delay in obtaining FRSA's review of submittals, will not entitle Contractor to extension of the Contract Times unless delay of the Work is the direct result of a change in the Work authorized by a Change Order or failure of FRSA to review and return any submittal to Contractor within the specified review period.

10. MEETINGS.

10.01. Preconstruction Conference. Prior to the commencement of Work at the Site, a preconstruction conference will be held at a mutually agreed time and place. The conference shall be attended by:

Contractor and its superintendent.

Principal Subcontractors, as appropriate.

Representatives of principal suppliers and manufacturers, as appropriate.

Representatives of FRSA.

Government representatives, as appropriate.

Others as requested by Contractor or FRSA.

Unless previously submitted to FRSA, Contractor shall bring to the conference a preliminary schedule for each of the following:

Progress Schedule including any shop drawings and other submittals.

The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The agenda will include:

Contractor's preliminary schedule.

Transmittal, review, and distribution of Contractor's submittals.

Processing Applications for Payment.

Maintaining record documents.

Critical Work sequencing.

Field decisions and Change Orders.

Use of premises, storage areas, security, housekeeping, and FRSA's needs.

Equipment and material deliveries.

Contractor's assignments for safety and first aid.

FRSA will preside at the conference and will arrange for keeping the minutes and distributing the minutes to all persons in attendance.

10.02. Progress Meetings. It is not anticipated that regular progress meetings will be necessary.

10.03. Close-Out Meeting. It is not anticipated that a close-out meeting will be necessary.

11. SITE ADMINISTRATION. Contractor shall be responsible for all areas of the Site used by it and by all Subcontractors in the performance of the Work. Contractor shall exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to FRSA or others. Contractor shall have the right to exclude from the Site all persons who have no purpose related to the Work or its inspection, and may require all persons on the Site (except FRSA's employees) to observe the same regulations as Contractor requires of its employees.

12. PAYMENT AND CASH ALLOWANCE / ADJUSTMENT UNIT PRICE WORK.

12.01. Lump Sum Bid. The Lump Sum Bid shall cover all Work required as described herein. All costs in connection with the proper and successful completion of the Work, including furnishing all materials other than those specified to be provided by FRSA, equipment, supplies, and appurtenances; providing all construction equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the Lump Sum Bid. All close-out documents shall be required prior to final payment.

12.02. Cash Allowance(s). Contractor shall be responsible for removal and disposal of dredged riverbed material, which is assumed to be contaminated, but non-hazardous. The Lump Sum Bid shall include characterization/testing for landfill disposal, submittal to FRSA of dewatering plan and all tests results, dewatering (as required), hauling, permitting, and disposal fees of the contaminated riverbed material, and any contaminated dewatering decant. If waste characterization indicates that additional sampling/testing is required or

that the material is required to be managed as hazardous waste, associated costs shall be paid for as a Cash Allowance. Payment under the Cash Allowance will include applicable costs of Contractor's general conditions, overhead, and profit for the Work under the Cash Allowance.

12.03. Adjustment Unit Price(s). FRSA reserves the right to delay the progress of the Work for weather-related causes for the number of calendar days stated in the Proposal Form at no additional cost. This cost for this delay shall be included in the Lump Sum Bid. Should delays differ from the duration stated in the Proposal Form, the Contract Price shall be adjusted via Change Order per the Adjustment Unit Price. The cost of the Work as provided for in the Adjustment Unit Price shall include Contractor's general conditions, overhead, and profit associated with such Work.

13. PROGRESS SCHEDULE. The construction start date will be predicated on the approval of the necessary permits needed for the project. Article 18 describes the permits associated with the Work. No work shall begin until the necessary permits have been approved and obtained from the associated agency.

A Progress Schedule shall be used to control the Work and to provide a definitive basis for determining project progress. The Progress Schedule shall be prepared, maintained and updated by Contractor. Contractor shall submit a preliminary Progress Schedule and a Progress Schedule for acceptance by FRSA. These schedules shall be Contractor's working schedules and shall be used to plan, organize and execute the Work, record and report actual performance and progress.

The Progress Schedule comprises all the construction-related activities for the Work and shall show the order in which Contractor proposes to carry out the work. Contractor shall include milestones, coordination necessitated by limited access and available work areas, and the availability and use of manpower, material and equipment. Contractor shall use the Progress Schedule to plan, schedule and coordinate the Work.

The Progress Schedule shall be to the level of detail acceptable to FRSA, and shall include the following:

- a. Organization and structural breakdown of the Project;
- b. Milestones and completion dates;
- c. Type of work to be performed and the labor trades involved;
- d. Purchase, manufacture and delivery activities for major materials;

- e. Preparation, submittal, and acceptance of shop drawings;
- f. Deliveries of FRSA-furnished equipment and/or materials;
- g. Acceptances required by regulatory agencies and/or other third parties;
- h. Assignment of responsibility for each activity;
- i. Access requirements to work areas;
- j. Planning for phased or total acceptance by FRSA;
- m. Identification of any manpower, material and equipment restrictions.
- n. Sequence of construction;
- o. Planned outages.

The activities included in the Progress Schedule shall be defined in work days. Durations shall be based on the labor (crafts), and materials required to perform each activity on a normal workday basis. Activity durations shall be 20 working days or less except in the case of non-construction activities such as procurement of materials, delivery of equipment, and concrete curing. All durations shall be the result of definitive manpower and resource planning by Contractor to perform the Work, in consideration of contractually defined on-site work conditions and Contractor's planned means and methods.

Duration of construction will be dependent on weather and treatment plant flow conditions. Contractor's initial progress schedule shall assume no delay after initial mobilization.

When the Progress Schedule is accepted by FRSA, FRSA will save a copy of the Progress Schedule as the baseline schedule and will use it for analysis of Contractor's progress.

Allowable work hours/days are 6:00 AM to 4:00 PM Monday through Friday. Any work outside these hours, on weekends, or FRSA holidays requires pre-approval by FRSA.

The holidays observed by FRSA are as follows, and no Work shall be planned on these days:

New Year's Day
President's Day
Good Friday

Memorial Day
Independence Day
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Day after Thanksgiving
Christmas Eve Day
Christmas Day

14. PHOTOGRAPHIC/VIDEO DOCUMENTATION. Contractor shall be responsible to produce construction photographs and video documentation for documentation of conditions prior to the Work and following completion of the Work. The following video/photo records are required:

- Video documentation of the effluent diffuser ports (post completion only).
- Photos of debris screen – 10 each pre- and post-construction.
- Photos on shore-based work areas – 20 each pre-and post-construction.

A preconstruction video of the diffuser system is not required. A video was taken in August 2021 by Collins Engineers, Inc. as part of the outfall inspection conducted at that time and will serve as the basis for documentation of pre-construction conditions. The video can be viewed by the Contractor, upon request. Should the Contractor decide to conduct a preconstruction video of the diffuser system, the Contractor will be responsible for the cost of such video.

The same photos shall be taken post construction as were taken prior to construction.

Contractor shall submit the photographs/videos electronically via a USB flash drive and provided with a descriptive index of the documents submitted.

15. TEMPORARY FACILITIES.

15.01. Water. If needed, any non-potable water required for and in connection with the Work to be performed will be furnished by FRSA via two red plant water hydrants east of the Storage Building (Building #34). Any hoses or other connections shall be furnished by the Contractor and disconnected when not in use to avoid freezing. Contractor shall not waste water or conduct activities that include needless use of water. Location of Building #34 is shown on Figure 4 in Attachment A. Contractor shall be responsible for any additional water source that might be needed.

15.02. Power. Contractor shall be responsible for providing all power and electrical needs for its needs for completion of the Work. FRSA facilities shall not be utilized by the Contractor.

15.03. Sanitary Facilities. Contractor shall furnish temporary sanitary facilities at the Site, for the needs of all construction workers and others performing work or furnishing services on the Project.

Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 persons. Contractor shall enforce the use of such sanitary facilities by all personnel at the Site.

15.04. Shelter. A Contractor trailer is not required by FRSA for this work however if inclement weather is present, Contractor can use the Old Main Pump Building (Building #3) for temporary shelter. Location of the Old Main Pump Building (Building #3) is shown on Figure 4 in Attachment A.

15.05. Maintenance of Traffic. Contractor shall conduct its work to interfere as little as possible with public travel, whether vehicular, pedestrian, or boating. Whenever it is necessary to cross or obstruct roads, driveways, and walks, whether public or private, Contractor shall provide and maintain suitable and safe pathways, flagging, personnel or other temporary expedients for the accommodation of public and private travel, and shall give reasonable notice to owners of private drives before interfering with them. Temporary surfacing shall be provided, as necessary.

15.06. Fences. All existing fences affected by the Work shall be maintained by Contractor until completion of the Work. Fences shall not be relocated or dismantled unless written permission is obtained from the owner of the fence, and the period the fence may be left relocated or dismantled has been agreed upon. On completion of the Work, Contractor shall restore all fences to their original or to a better condition and to their original locations.

15.07. Security. Contractor shall be responsible for protection of the Site, and all Work, materials, equipment, and existing facilities thereon, against vandals and other unauthorized persons.

No claim shall be made against FRSA by reason of any act of an employee or trespasser, and Contractor shall make good all damage to FRSA's property resulting from Contractor's failure to provide security measures as specified.

Security measures shall be at least equal to those usually provided by FRSA to protect FRSA's existing facilities during normal operation, but shall also include such additional security fencing, barricades, lighting, watchman services, or other measures as required to protect the Site.

Contractor is responsible for security of their own materials and equipment. FRSA security access gates shall be locked at all times when Contractor is not at the Site.

15.08. Access Roads and Parking. Contractor will be provided with two gate fobs for site access for the duration of the Work. The fobs shall be returned to FRSA at completion of the Work. Contractor shall utilize paved roadways wherever possible. Contractor shall access the Site from Gate 9 off of Kishwaukee Street and/or Gate 16 off of Brooke Road. Contractor shall refer to Article 3.6 for coordination with the Primary Filtration Phase 1 Improvements. These access points and gates are shown in Figure 4 in Attachment A.

Should temporary access roads be needed, Contractor shall maintain temporary access roads as required to complete the Work. Such roads shall be available for the use of all workers and others working or visiting the Site in connection with the Work.

Contractor shall utilize the paved areas west and south of the Storage Building (Building #34) for staging, storage of materials, and Contractor parking. Storage of materials, staging or Contractor parking may not interfere with public traffic, FRSA's operations, or construction activities. Location of Building #34 is shown in Figure 4 in Attachment A.

Contractor may use FRSA's existing boat launch for access to the Rock River, if suitable for Contractor's equipment.

Any damage caused by the Contractor to FRSA lawn/grassed area, roadways (paved or unpaved), fences, and other facilities shall be repaired to the condition comparable to that present at the start of the Work.

15.09. Noise Control. Contractor shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound-muffling devices and operated in a manner to cause the least noise consistent with efficient performance of the Work.

15.10. Dust Control. Contractor shall take reasonable measures to prevent unnecessary dust. Earth surfaces subject to dusting shall be kept moist with water or by application of a chemical dust suppressant. When practicable, dusty materials in piles or in transit shall be covered to prevent blowing dust.

Buildings or operating facilities which may be affected adversely by dust shall be adequately protected from dust. Existing or new machinery, motors, instrument panels, or similar equipment shall be protected by suitable dust screens. Proper ventilation shall be included with dust screens.

15.11. Temporary Drainage Provisions. Contractor shall provide for the drainage of storm water and such water as may be applied or discharged on the Site in performance of the Work. Drainage facilities shall be adequate to prevent damage to the Work, the Site, and adjacent property.

Existing drainage channels and conduits shall be cleaned, enlarged, or supplemented as necessary to carry all increased runoff attributable to Contractor's operations. Dikes shall be constructed as necessary to divert increased runoff from entering adjacent property (except in natural channels) to protect FRSA's facilities and the Work, and to direct water to drainage channels or conduits. Ponding shall be provided as necessary to prevent downstream flooding.

15.12. Erosion Control. Contractor shall prevent erosion of soil on the Site and adjacent property resulting from its construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operation that will disturb the natural protection. All disturbed areas shall incorporate best management practices in accordance with local standards and requirements.

Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation shall be preserved to the greatest extent practicable. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

For work in the Rock River, Contractor shall provide a floating silt curtain in accordance with the Illinois Urban Manual to be installed and utilized where and when necessary to protect river water quality.

Contractor shall refer to Article 18.01 for additional requirements for erosion control related to permit conditions.

15.13. Storage/Disposal of Dredged Material. Means and methods of Contractor's removal of dredged material from the Rock River channel bottom for installation of the new diffuser bells is solely the Contractor's responsibility. The Contractor shall be responsible for disposal of the dredged riverbed material, including the liquid portion resulting from the dewatering operations, and preparation for off-site disposal which includes applicable sampling and analysis. Contractor shall submit to FRSA, a material removal, dewatering, and disposal plan for review, comment, and acceptance prior to commencing any work. After the Contractor's dredging plan has been accepted by FRSA, FRSA will provide a location on site for staging operations. The location is dependent on means and methods of dewatering and dredging methods. At no point shall

dewatering/decanting water, sand, gravel, or other solids enter the sewer system or any other sewer which leads to the plant. Location of dewatering/decanting water disposal or discharge shall be the responsibility of the Contractor.

15.14. Pollution Control. Contractor shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes shall be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substance shall be permitted to enter sanitary sewers, and reasonable measures shall be taken to prevent such materials from entering any drain or watercourse.

16. CLEANING UP. Contractor shall keep the premises free at all times from accumulations of waste materials and rubbish. Contractor shall provide adequate trash receptacles about the Site and shall promptly empty the containers when filled.

Construction materials shall be neatly stacked by Contractor when not in use. Contractor shall promptly remove oil, corrosive liquids, cleaning solutions, etc. from surfaces to prevent marring or other damage.

Volatile wastes shall be properly stored in covered metal containers and removed daily.

Wastes shall not be buried or burned on the Site or disposed of into storm drains, sanitary sewers, streams, or waterways. All wastes shall be removed from the Site and disposed of in a manner complying with local ordinances and antipollution laws.

Adequate cleanup will be a condition for recommendation of progress payment applications.

17. RESTORATION.

17.01. Cutting and Patching. Contractor shall perform all cutting and patching required for the Work and as may be necessary in connection with uncovering Work for inspection or for the correction of defective Work.

Contractor shall perform all cutting and patching required for and in connection with the Work, including but not limited to the following:

Removal of improperly timed Work.

Alteration of existing facilities.

Installation of new Work in existing facilities.

Contractor shall provide all shoring, bracing, supports, and protective devices necessary to safeguard all Work and existing facilities during cutting and patching operations. Contractor shall not undertake any cutting or demolition which may affect the structural stability of the Work or existing facilities without FRSA's concurrence.

Materials shall be cut and removed to the extent required to complete the Work. Materials shall be removed in a careful manner, with no damage to adjacent facilities or materials. Materials which are not salvageable shall be removed from the site by Contractor.

All Work and existing facilities affected by cutting operations shall be restored with new materials, or with salvaged materials acceptable to FRSA, to obtain a finished installation with the strength, appearance, and functional capacity required. If necessary, entire surfaces shall be patched and refinished.

17.02. Seeding. All areas disturbed by construction operations shall be seeded as required by Attachment D.

All lawn, ditch, and street shoulder areas damaged during the Work shall be restored, after completion of construction, to the complete satisfaction of FRSA. Contractor shall guarantee a uniform stand of seeding, free of weeds to the extent practical, and acceptable to FRSA.

Seeding shall not be started until all construction activities have been substantially completed. The topsoil shall be spread, and finish grading shall be completed before the Work is started. Finish grading shall result in a surface contours to match existing.

Seeding operations will be seasonally dependent. Contractor shall protect all disturbed areas during winter months utilizing best management practices and adhering to local regulations and requirements, until seeding can be accomplished in appropriate spring conditions. .

18. PERMITS. No work shall begin until the necessary permits have been approved and obtained from the associated agency, and all required notices to Authorities Having Jurisdiction have been made.

18.01. Permits to be obtained by FRSA. The following permits will be obtained by FRSA:

- IEPA WPC-PS-1 Application for Permit or Construction Approval
- US Army Corps of Engineers (USACE) Joint Application Form For Illinois

Contractor shall comply with the following anticipated permit conditions associated with the above permits:

- Following issuance of applicable permits resulting from the USACE Joint Application, it is expected the USACE will require 45 days preconstruction notice prior to the commencement of the Work. Contractor shall plan for this accordingly in the schedule for the Work.
- The Contractor shall not cause:
 - Violation of applicable provisions of the Illinois Environmental Protection Act;
 - Water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - Violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - Interference with water use practices near public recreation areas or water supply intakes.
- Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
- Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- The Contractor shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- All on shore areas affected by construction shall be mulched and seeded as soon after construction as possible. The Contractor shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during low flow conditions.
- The Contractor shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2016).
- Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- Should Contractor utilize any temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in the Rock River, the Contractor shall maintain flow in the river by utilizing dam and pumping, fluming, culverts or other such techniques.

18.02. Contractor Responsibility. The Contractor will be responsible for all other permits needed for construction of the Work.

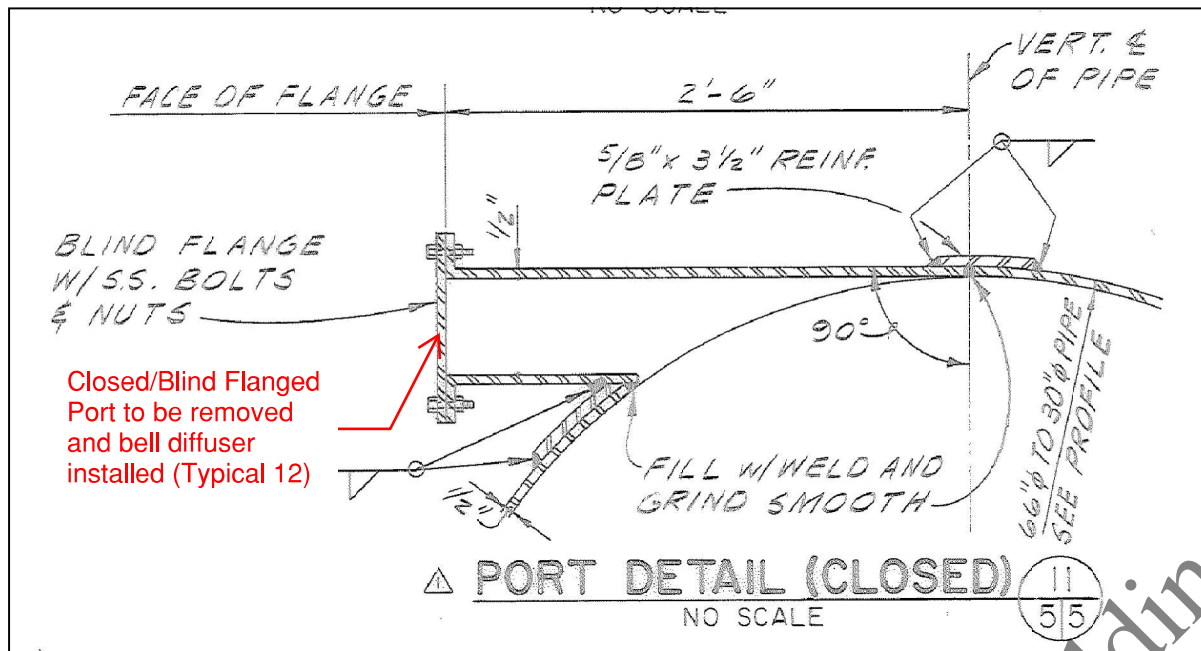
19. POST-CONSTRUCTION SURVEY. To document completion of the riverbed material removal associated with the Work, Contractor shall complete a grid-based depth survey to create a riverbed map. Depth to river bed measurements shall be taken within an area approximately 10 feet upstream of the effluent diffuser piping to at least 40 feet downstream of same, and extending approximately five feet beyond the end of the effluent diffuser on the outboard end, and five feet beyond port 20 on the inboard end. The depth measurements shall be taken on a 10 foot by 10 foot grid. The resulting riverbed map shall be provided to FRSA in accordance with Article 9 Submittals Procedures and shall be of acceptable detail and clarity.

End of Section

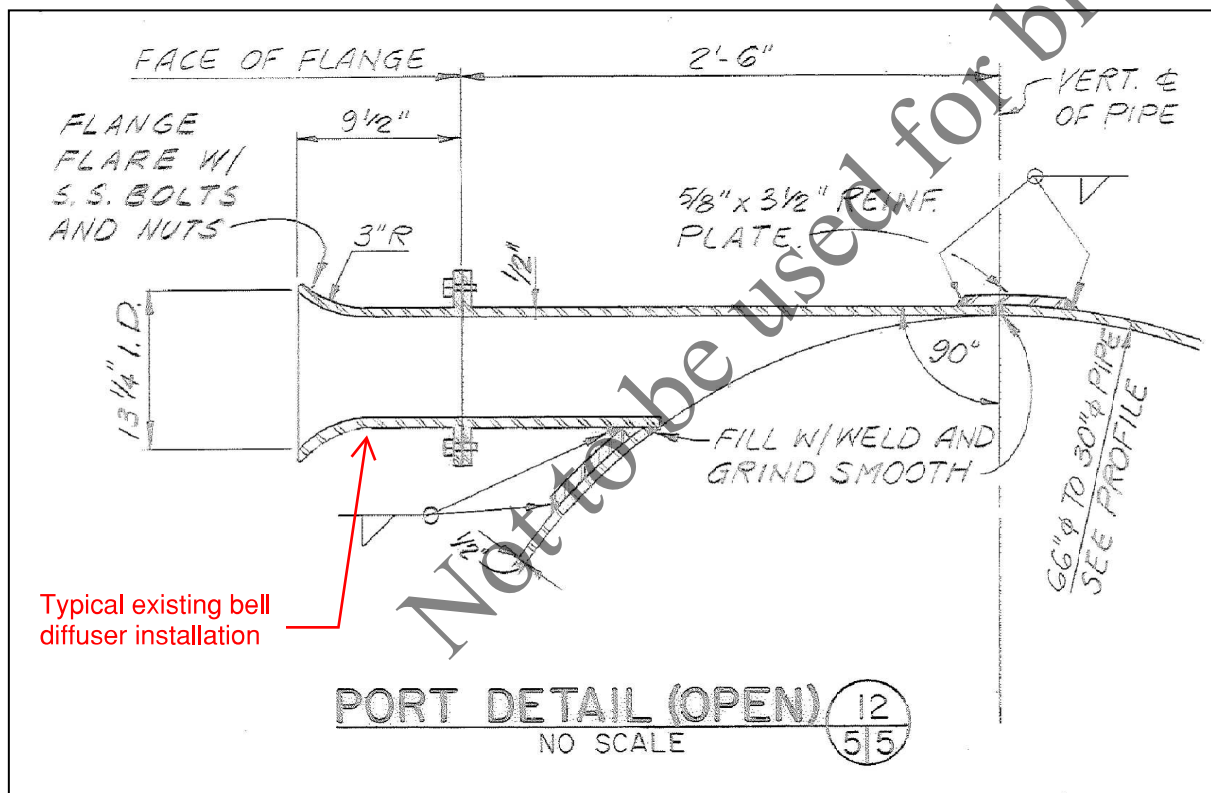
Not to be used for bidding purposes

Attachment A: Record Drawings and Overall Site Layouts

Not to be used for bidding purposes



CLOSED PORT DETAIL (TYPICAL)



OPEN PORT DETAIL (TYPICAL)

NOTES:

1. These details are from the bid drawings of the original installation, and subject to confirmation by Contractor in conjunction with the execution of the Work.
2. It is estimated that each new diffuser fitting is approximately 95 lbs.
3. Contractor shall remove river bottom material to facilitate the installation of the diffuser bell fittings. It is estimated that approximately 100 cyd of material (in situ) will have to be removed to conduct this work. This quantity is based on the following excavation/removal requirements:
 - Excavation/removal extending to 12 inches below the flanges of the diffuser ports.
 - Excavation/removal distance downstream is approx 30' from the edge of the diffuser system with the bottom of the excavation being extended on a horizontal plane downstream until daylight.
 - Excavation/removal to the crown of the effluent pipe, as applicable, and extending upstream on a 1:1 slope until daylight.
 - Eastern limit of excavation extending 12 inches east of Port 20.



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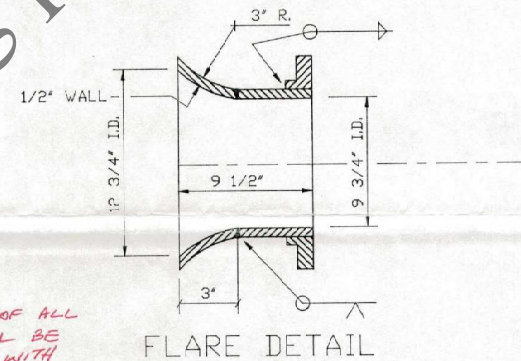
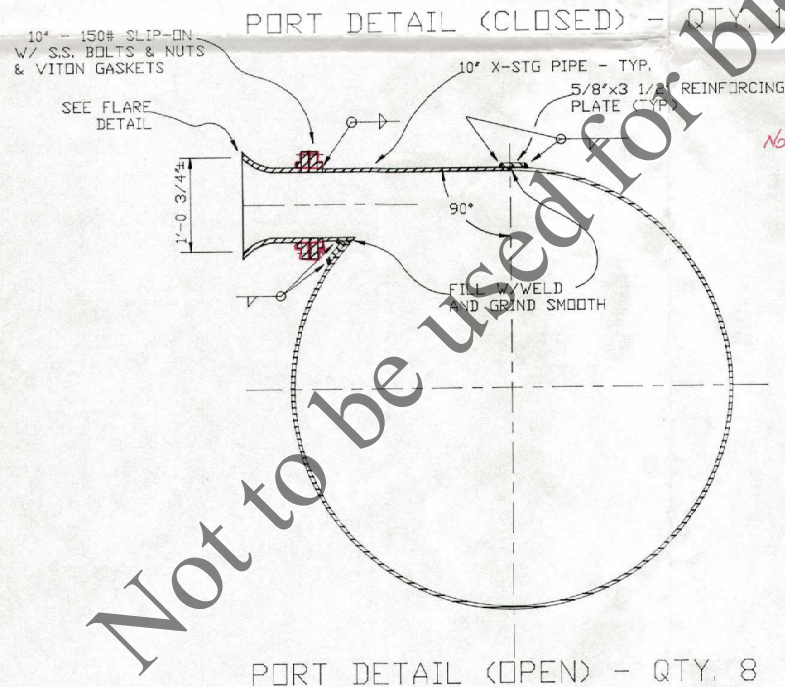
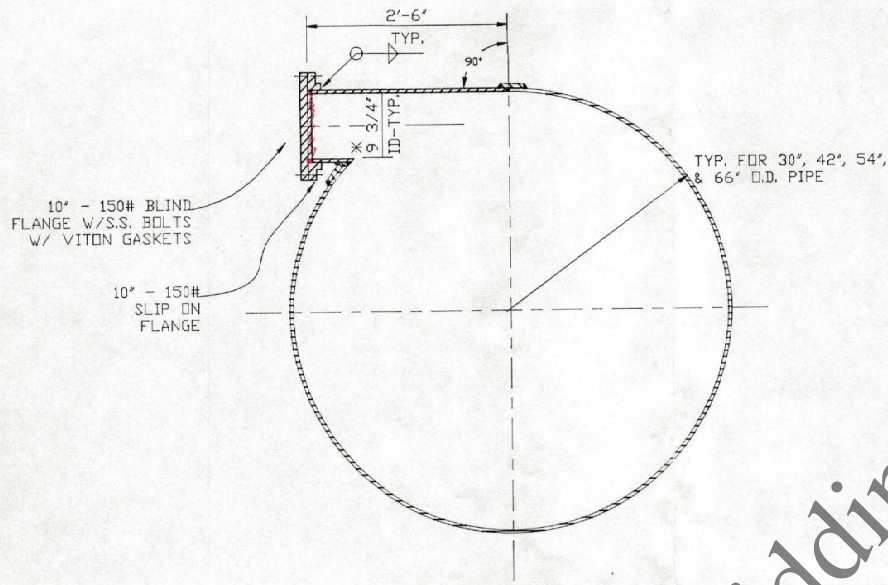


Four Rivers
Sanitation Authority

Attachment A:
Figure 2

NOTES:

1. This drawing is the shop drawing from the original installation, and subject to confirmation by Contractor in conjunction with the execution of the Work.



FLARE DETAIL
NOTE: 3" FLARE SECTION TO BE MACHINED FROM SOLID STEEL

REVIEW IS FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DIMENSIONS, QUANTITIES OR DETAILS.

☐ NO EXCEPTIONS TAKEN

☒ MAKE CORRECTIONS NOTED

☐ AMEND & RESUBMIT

☐ REJECTED - SEE REMARKS

HORNER & SHIFFRIN, INC.
DESIGN ENGINEERS / ARCHITECTS

DATE: 5/19/92 BY: CES

APPROVED

BY: CIVIL CONSTRUCTORS


MAY 13 1992

☐ FOR SUBMITTAL

☐ FOR FILES & FIELD USE

☐ FOR RECORD PURPOSES

* - CHANGE FROM CONTRACT DRAWING

	FREEPORT, ILLINOIS 61032		
	(815) 235-1955		
DWG. TITLE: DIFFUSER DETAILS			
DWG. NO:	RRW-012	REF. DWG. NO:	XXXX
PROJECT MANAGER: TERRY W. VEIAND			
ENR. BY:	JVB	DATE:	5-6-92
CHECK BY:	TMW	P.L. NO.:	
SCALE:	1"=1'	SH-1	3/4" TAG
			REV. 1

ORIGINAL SHOP DRAWING

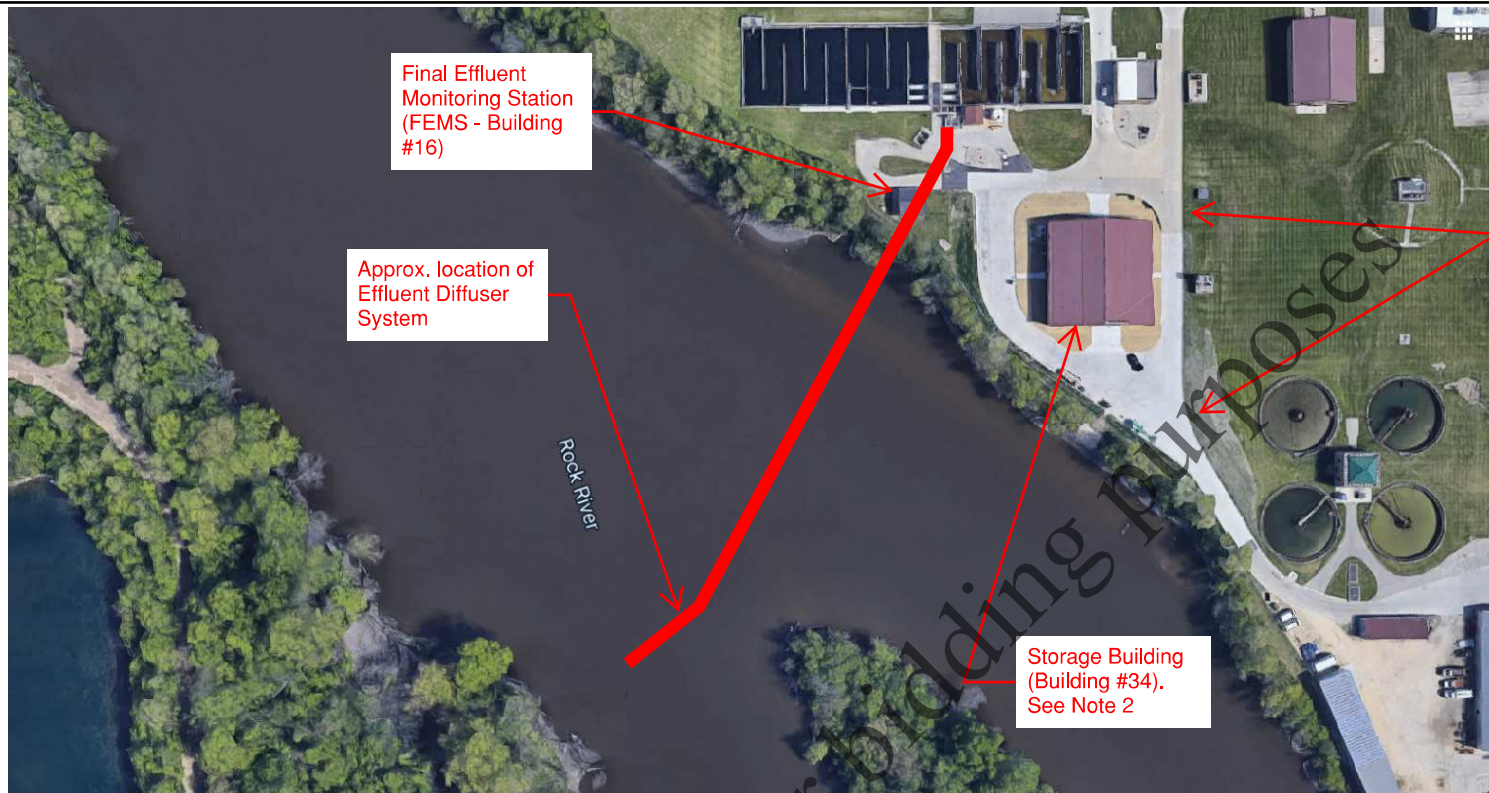


BLACK & VEATCH



Four Rivers
Sanitation Authority

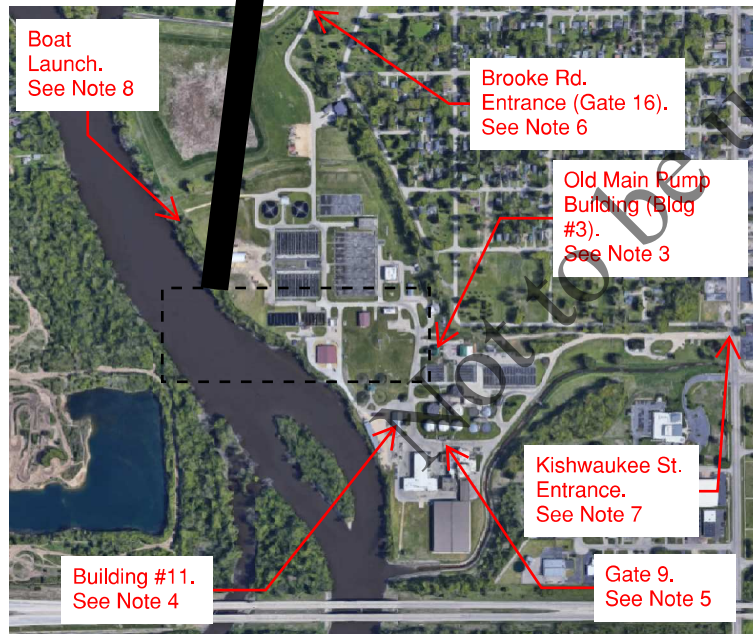
Attachment A:
Figure 3



ENLARGED SITE PLAN

NOTES:

1. These two red plant water hydrants shall be utilized if non-potable water is needed by the Contractor.
2. The Storage Building (Building #34) is the planned storage area for the procured diffuser bells, hardware, and gaskets to be supplied by FRSA. Contractor shall continue to use this location for storage of the materials following acceptance for use in the Work. The paved areas to the west and south of Building #34 can be used for Contractor storage, staging, and parking.
3. The Old Main Pump Building (Building #3) can be utilized by the Contractor to seek shelter if inclement weather conditions are present.
4. Primary Filtration Phase 1 Construction is planned to begin in February 2022. If construction is concurrent to the Effluent Diffuser Improvements project, Contractor shall utilize the access road between Building #11 and the Rock River to access the project site.
5. Gate 9 is one of two access points into the plant that the Contractor can utilize. Gate 9 is accessible off Kishwaukee Street.
6. Gate 16 is one of two access points into the plant that the Contractor can utilize. Gate 16 is accessible off of Brooke Road.
7. Access point to the plant from Kishwaukee Street.
8. The Contractor may utilize the FRSA Boat Launch as needed for access to the Rock River.
9. Location of staging of dredged riverbed material will be determined after a Dredging/Dewatering Plan is submitted and accepted by FRSA.



OVERALL LOCATION PLAN



BLACK & VEATCH

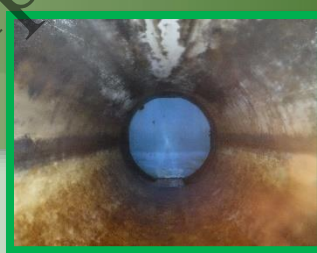


Four Rivers
Sanitation Authority

Attachment A:
Figure 4

Attachment B: Collins Engineers, Inc. Investigation Report for Effluent Diffuser
Outfall

Not to be used for bidding purposes



INVESTIGATION REPORT
FOR
Rock River Water Reclamation District
Effluent Diffuser Outfall

August 17 - 18, 2021

Prepared for:



Four Rivers
Sanitation Authority

Prepared by:

COLLINS
ENGINEERS INC.

550 W Jackson Blvd Ste. 1200
Chicago, IL 60661
312.704.9300 • www.collinsengr.com

INVESTIGATION REPORT

Rock River Water Reclamation District Effluent Diffuser Outfall
Rockford, IL • August 2021



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4.0	CONCLUSIONS AND RECOMMENDATIONS	5

APPENDIX A – FIGURES

APPENDIX B – PHOTOGRAPHS

EXECUTIVE SUMMARY

Project: Rock River Water Reclamation District Effluent Diffuser Outfall.

Inspection Date(s): August 17 and 18, 2021

Access location: Access Hatch and Rock River

Access Mode: Surface Supplied Air Diving/ Confined Space Entry

Inspection Team:

Dive Team Leader – Brian Dilworth, P.E. – Collins Engineers, Inc.

Site Safety Officer – Michael Kruepke – Collins Engineers, Inc.

Team Member – Roderick Breen, P.E. – Collins Engineers, Inc.

Team Member – Jacob Green – Collins Engineers, Inc.

Team Member – Gonzalo Couto-Lain, E.I.T. – Collins Engineers, Inc.

Team Member – Christopher Morrow, E.I.T. – Collins Engineers, Inc.

Summary of Findings:

- Interior Pipeline Assessment
 - Areas of painted coating loss measuring less than 1 foot in diameter, steel in good condition.
 - Debris consisting of rebar, trash, gravel, and stones measuring up to 6 inches in diameter.
 - Debris gate cut and removed from pipeline.
- Exterior Pipeline Assessment
 - Crown of pipeline and diffuser ports exposed from Port 1 to Port 17.
 - No noted deficiencies on exposed sections of pipeline.
- Diffuser Ports
 - 16 ports closed with blind flanges ports; 8 ports open with flared ports.
 - Approximately 50 percent of bolt holes utilized at flared (open) port connections, all bolts present at exposed blind flange (closed) ports.
 - Ports 18 through 24 were buried under 6 to 15 inches of channel bottom.

Summary of Recommendations:

- Remove channel bottom material in vicinity of blind flange (closed) ports in order to replace flanges with flared (open) ports.
- Consider replacing missing connection bolts on all flared (open) ports.
- Reinstall debris gate.

1.0 INTRODUCTION

1.1 Purpose and Scope

In accordance with the agreement dated May 21, 2021 Collins Engineers, Inc (Collins) conducted an examination of the interior and exterior portions of the effluent diffuser outfall (Outfall #1) located at the Rock River Water Reclamation District wastewater treatment plant in Rockford, Illinois. This report consists of the results of the confined space and underwater investigation of the exposed portions of the pipeline, effluent diffuser ports, as well as the surrounding channel condition. The purpose of the inspection was to gain a better understanding of the existing diffuser port conditions and nearby channel conditions so that future construction work may be performed to replace sixteen existing blind flange “closed ports” with flared “open ports”.

1.2 General Description of Structure

The outfall diffuser consists of a pipeline that extends from the wastewater treatment plant into the channel of the Rock River, spanning approximately 675 feet. The diameter of the pipe reduces over three sections from 66 inches to 54 inches, from 54 inches to 42 inches, and from 42 inches to 30 inches as it extends from the treatment plant into the river channel. Within the westernmost 100 foot section of pipeline there are twenty-four diffuser ports that are spaced approximately 3 foot 4 inches on center. According to design drawings, eight of the diffuser ports were open with flared diffuser bells installed that allow for treated water to be diffused into the Rock River. The remaining 16 diffuser ports were installed with closed with blind flanges. The diffuser ports were labeled 1 through 24 from west to east. Refer to Figure 1 in Appendix A for a site location map and Figure 2 in Appendix A an elevation view depicting the orientation of the pipeline and diffuser ports.

The access hatch was located approximately 100 feet from the east end of the pipeline and 575 feet from the west end of the pipeline. The elevation of the top of the pipe within the river channel was 79.0 feet according to design plans and was used to reference waterline elevation data. The west end of the pipeline was sealed and bolted with a blind flange. The east end of the pipe was sealed with a flange frame gate that was closed at the time of inspection. The interior section of the pipeline was dry from the east end of the pipeline to approximately 125 feet from the east end. The entire circumference of the pipeline was submerged beginning 125 feet from the east end of the pipe to the blind flange at the west end of the pipeline.

1.3 Method of Investigation

The interior and exterior inspection was completed by a six person team lead by a Professional-Engineer Diver. The inspection was completed using commercial surface-supplied diving equipment as well as confined space entry techniques. During the interior inspection, two divers entered the pipeline from the access hatch. The first diver entered the pipeline to complete the inspection. The second diver entered the pipeline and served as an in-water tender for the inspection. Both divers were equipped with 800 foot long umbilical air hoses.

During the exterior inspection, a diver entered the Rock River from a boat. The approximate location of the pipeline was known prior to the inspection. The diver traveled south at the channel bottom until the top of the pipeline was located. The diver was equipped with a 150 foot umbilical air hose.

2.0 PIPELINE ASSESSMENT

2.1 Interior Pipeline Assessment

Overall, the interior of the pipeline was in good condition with no defects of structural significance noted. Typically, the exposed steel surfaces and painted coating was in good condition with minor areas of bubbling and flaking typically measuring less than 1 foot in diameter. The exposed areas beneath the missing paint coating consisted of a polymer coating. No areas of corrosion were observed on the exposed steel. The welded seams between tunnel sections were typically in good condition with no deterioration observed. A debris gate designed to prevent large pieces of debris from accumulating within the pipeline had previously been removed. The rebar remaining from the gate was found within the pipeline and was removed from the pipe by inspectors. Minor accumulations of debris consisting of trash, gravel, and stones measuring up to 6 inches in diameter were observed throughout the interior of the pipeline. The trash debris was removed by the inspectors. The flange gate located at the east end of the pipeline was in good condition with minor coating loss and surface corrosion on the exposed steel. The gate was mostly dry but exhibited minor leakage from the bottom during the inspection. Refer to Figure 3 in Appendix A for the detailed inspection notes for the pipeline and refer to Photographs 1 through 5 in Appendix B for views of the interior of the pipeline.

2.2 Exterior Pipeline Assessment

Overall, the exterior of the pipeline, including the diffuser ports, was in good condition with no defects of structural significance noted. The crown of the pipe had a reference elevation of 79.0 feet based on design plans and was located 4.7 feet below the waterline. The steel painted coating was intact with no loss of coating or corrosion observed. The crown of the pipe was exposed from the west end of the pipeline to Port 17 and buried from Port 18 to the water treatment plant. Refer to Figure 3 in Appendix A for the detailed inspection notes for the pipeline and refer to Photographs 6 through 8 in Appendix B for views of the exterior of the pipeline.

3.0 DIFFUSER PORT ASSESMENT

Diffuser ports were inspected during the interior and exterior pipeline inspections. Objectives of the diffuser port inspection were to verify which ports were open and closed as well as to determine how many of the diffuser ports were buried in the channel bottom material. During the inspection it was confirmed that eight ports were open and sixteen were closed. Refer to Figure 2 in Appendix A for a pipeline elevation which identifies opened and closed ports.

Ports 1 through 17 were found to be in good condition with no corrosion or pack rust found at the bolts, nuts, or steel flanges. The “open” ports were typically fully exposed within the channel while the “closed” ports were typically partially covered within the channel bottom. The channel bottom around the entire length of the pipe typically consisted of sand, gravel, and stones with 2 to 4 inches of probe rod penetration that could easily be dug out to access all bolts of partially submerged flanges. Ports 18 through 24 were completely buried under channel bottom material. Ports 18 through 24 were inspected from the interior of the pipeline.

All closed ports were sealed with a blind flange. All of the closed ports encountered from the exterior were found to be partially buried. Meanwhile, all blind flanges observed utilized all twelve connection bolts. During the exterior inspection, connection bolts were randomly tested for their ability to be loosened. At all instances the bolts were able to be loosened and then tightened by the inspector. Refer to Figure 4 in Appendix A for diffuser port cross sections and a summary of the channel bottom material elevation in relation to the top of each diffuser port.

The flared ports were typically installed with approximately 50 percent of the connection bolt holes utilized. All flared ports were secure and were completely above the channel bottom. Refer to Figure 4 in Appendix A for the number of bolts utilized at each flared (open) port.

4.0 CONCLUSION AND RECOMMENDATIONS

Overall, the inspected portions of the interior and exterior of the pipeline were in generally good condition with minor defects observed. No repairs are recommended to be made to the interior or exterior portions of the diffuser pipeline.

The connection bolts securing the blind flanges do not exhibit corrosion or rust of any kind and can be easily removed. In order to remove and replace the blind flanges with flared ports, it will be necessary to complete minor dredging of the partially covered ports and the fully buried Ports 18-24 to expose all bolted connections. The location of all buried ports would need to be determined using available plans. Once the blind flanges are located and uncovered, installation of the flared port could be completed.

The missing connection bolts observed at the flared ports is not currently a concern. However, design specifications should be referenced to ensure the bolted capacity is adequate for the flared openings. If it is determined that the current capacity is not adequate, the missing bolts should be installed.

The majority of the debris accumulated within the pipeline would have been caught by the debris gate that was previously located immediately west of the access hatch. Although debris accumulations within the pipeline were relatively minor, larger debris accumulation could potentially clog the diffuser ports. Therefore, it is recommended that the debris cage that can be opened and closed, in order to provide access to the pipeline, be installed at a location west of the access hatch in order to prevent debris accumulations and provide for easy removal of debris from the cage.

Respectfully Submitted,
COLLINS ENGINEERS, INC.

Brian P. Dilworth, P.E.

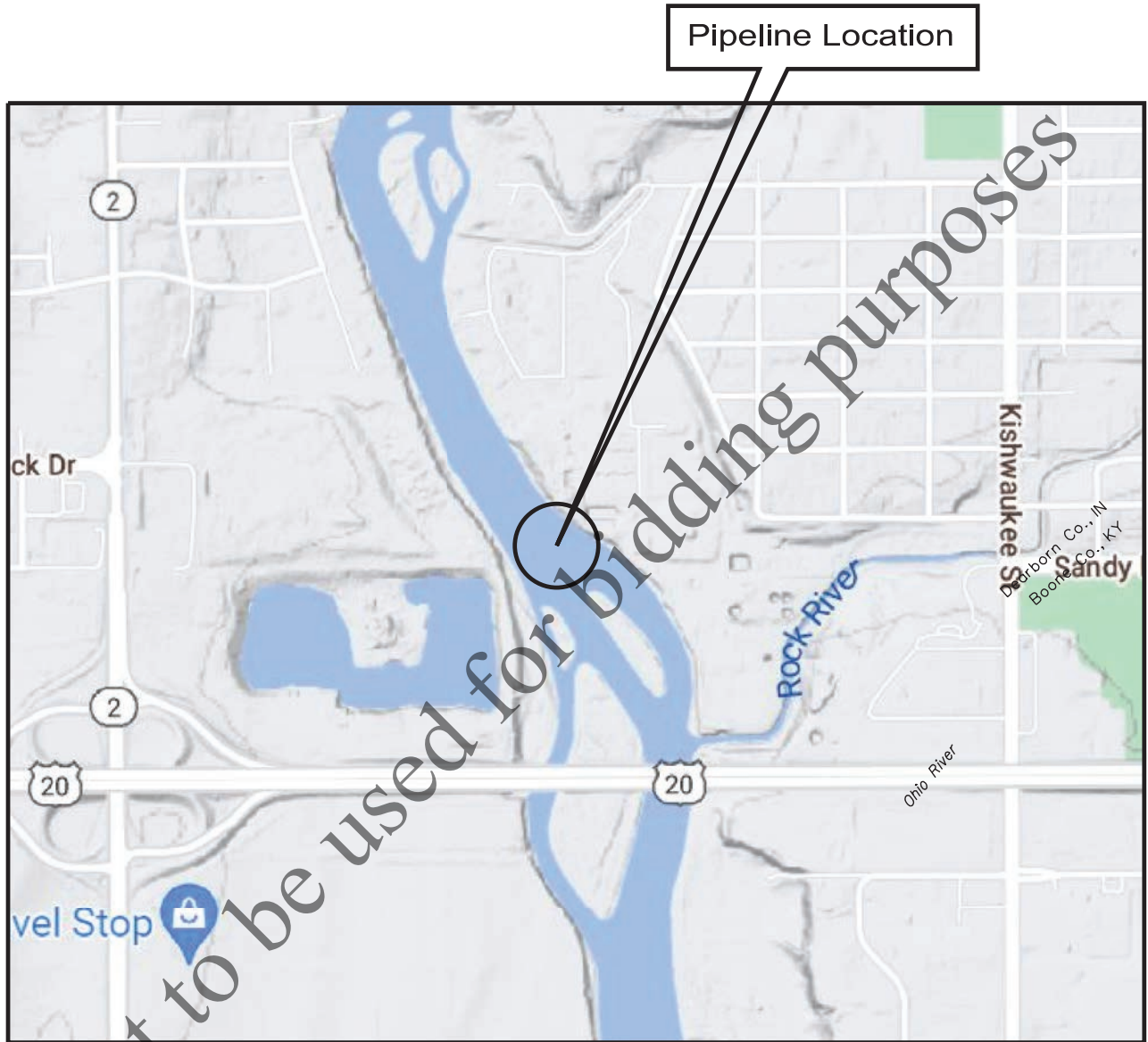
INVESTIGATION REPORT

Rock River Water Reclamation District Effluent Diffuser Outfall
Rockford, IL • August 2021



APPENDIX A – FIGURES

Not to be used for bidding purposes



**INDIANA
DEPARTMENT OF TRANSPORTATION
SEYMOUR DISTRICT**

OUTFALL SEWER EXTENSION AND
MULTI-PORT DIFFUSION SYSTEM

LOCATION MAP

Drawn By: BLV

Checked By: BPD

Code: 13191

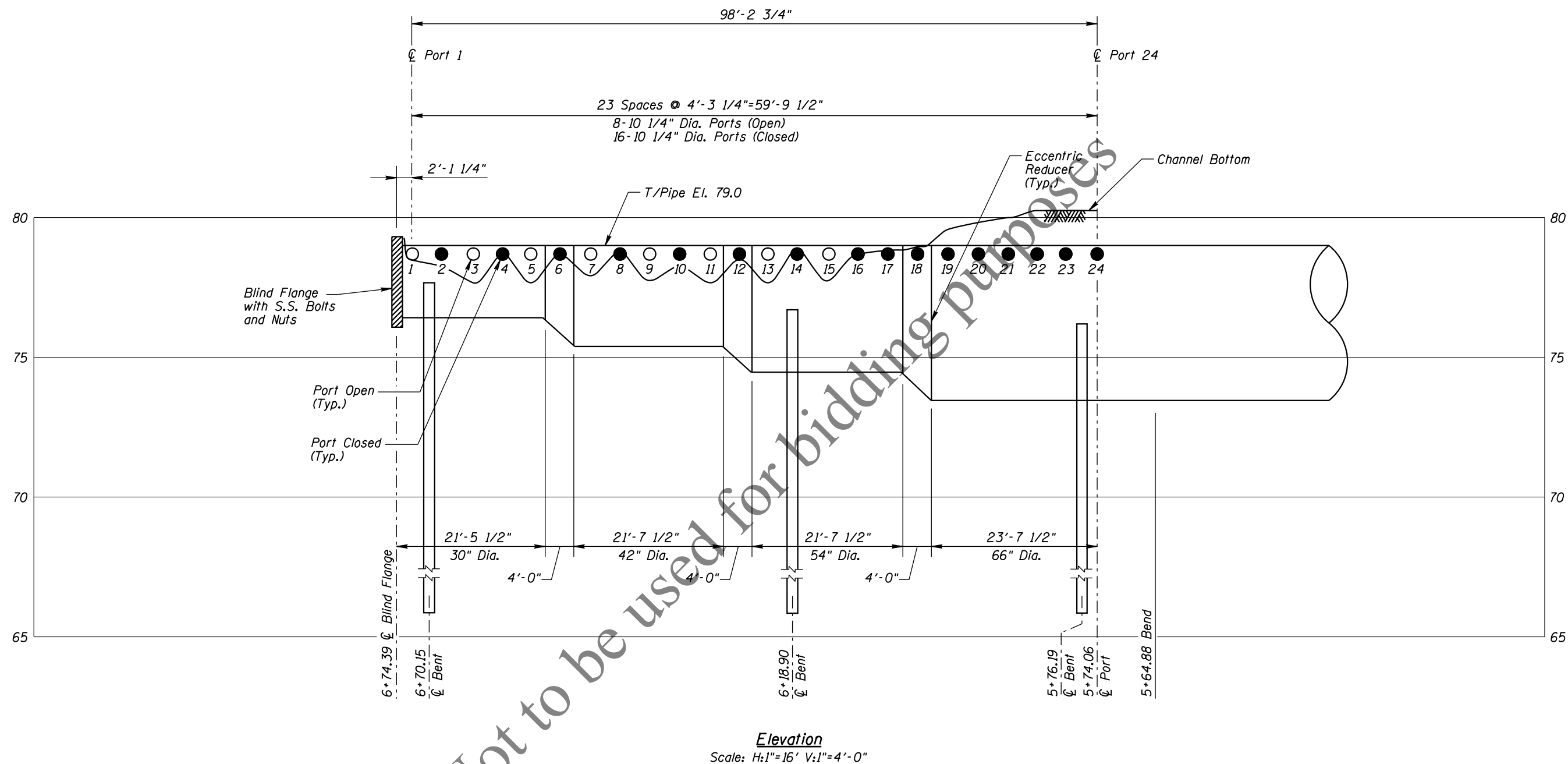
**COLLINS
ENGINEERS**

550 West Jackson Blvd
Suite 1200
Chicago, IL 60661
(312) 704-9300
www.collinsengr.com

Date: AUG.,2021

Scale: 1"=2000'

Figure No.: 1



GENERAL NOTES:

- At the time of inspection, on August 18, 2021, the waterline was located 4.7 feet above the crown of the pipe. This corresponds to a waterline elevation of 83.7 feet.
- These figures were developed from design plans dated 1990 and field measurements.

Legend

- Channel Bottom
- Open Port
- Closed Port

ROCK RIVER WATER RECLAMATION DISTRICT ROCKFORD, ILLINOIS

OUTFALL SEWER EXTENSION AND
MULTI-PORT DIFFUSION SYSTEM

Elevation

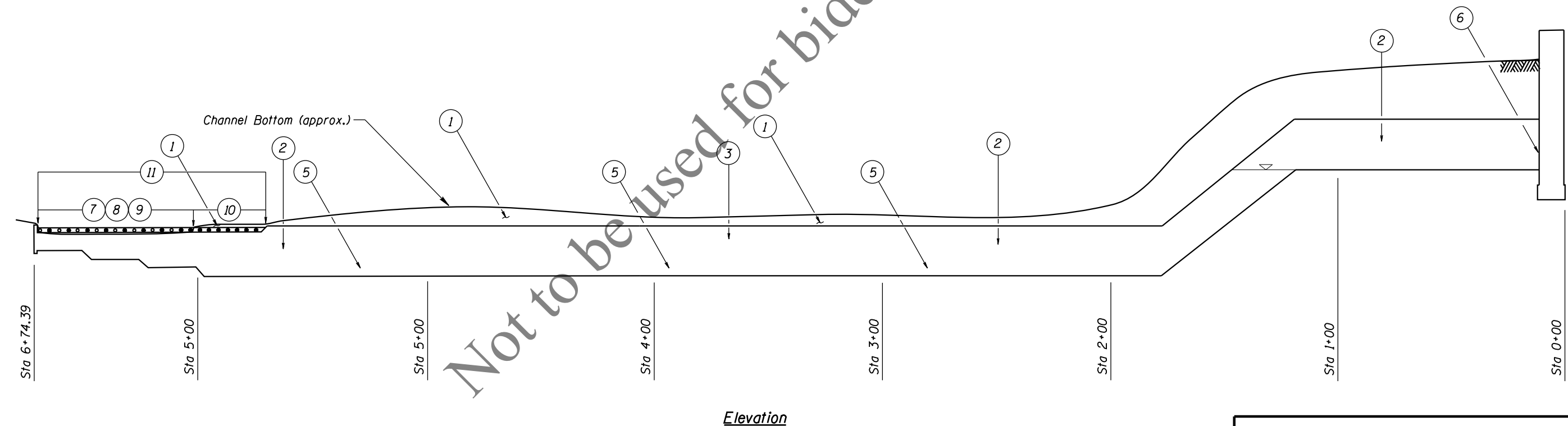
Drawn By: BLV
Checked By: MJS
Code: 13191

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Suite 1200
Chicago, IL 60661
(312) 704-9300
www.collinsengr.com

Date: AUG., 2021
Scale: AS NOTED
Figure No.: 2

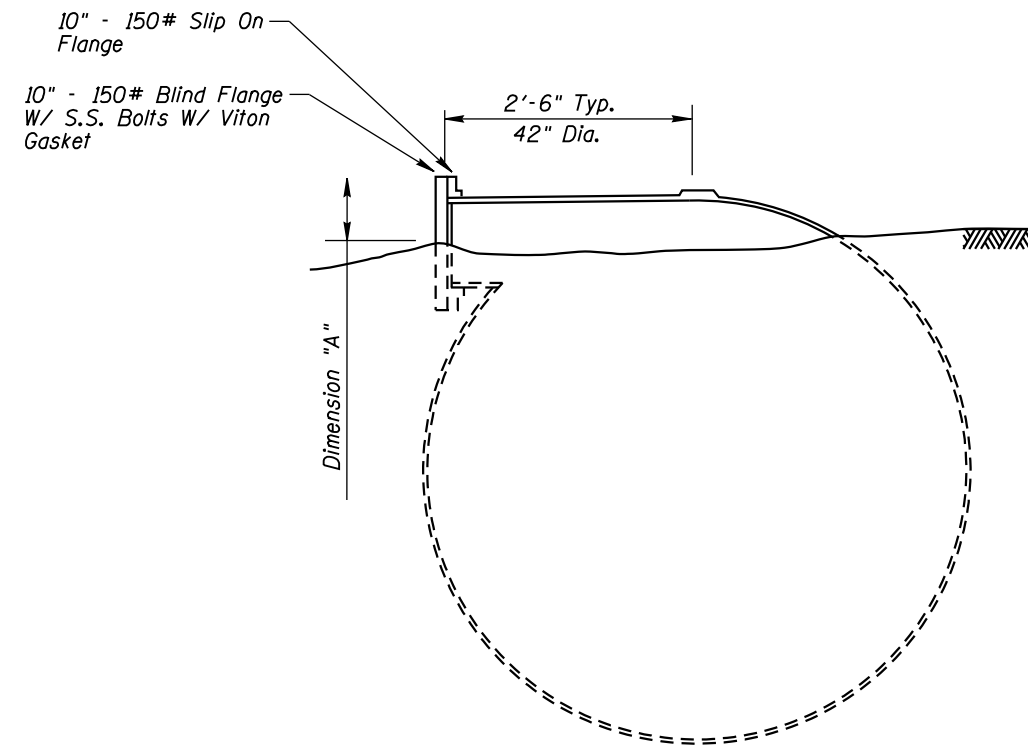
INSPECTION NOTES:

- 1 The channel bottom material in the vicinity of the pipeline consisted of sand, gravel, and stones with 2 to 4 inches of probe rod penetration.
- 2 The steel in the interior of the pipeline was typically in good condition. The painted coating exhibited minor areas of bubbling and flaking typically measuring less than 1 foot in diameter. The exposed areas beneath the missing paint coating consisted of a Polymer coating. No areas of corrosion were observed on the exposed steel.
- 3 The welded seams between tunnel sections were typically in good condition with no deterioration observed.
- 4 A debris gate, designed to prevent large debris accumulating within the pipeline had previously been removed. the rebar remaining from the gate was found within the pipeline and remove by the inspectors.
- 5 Minor accumulations of debris consisting of trash, gravel, and stones measuring up to 6 inches in diameter were observed throughout the interior of the pipeline. Trash debris was removed by the inspectors.
- 6 The flange gate located at the west end of the pipeline was in good condition with minor coating loss and surface corrosion on the exposed steel. The gate also exhibited minor leakage from the bottom of the gate.
- 7 The steel painted coating of the exterior of the pipeline as intact with no loss of coating or corrosion observed.
- 8 The crown of the pipeline was exposed from the west end of the pipeline to Port 17 and buried from Port 18 to the water treatment plant.
- 9 Ports 1 through 17 were in good condition with no corrosion or pack rust found at the bolts.
- 10 Ports 18 through 24 were completely buried under 6 to 15 inches of sand gravel, and stones with 2 to 4 inches of probe rod penetration.
- 11 The "open" ports were typically fully exposed within the channel while the "closed" ports were typically partially covered within the channel bottom.

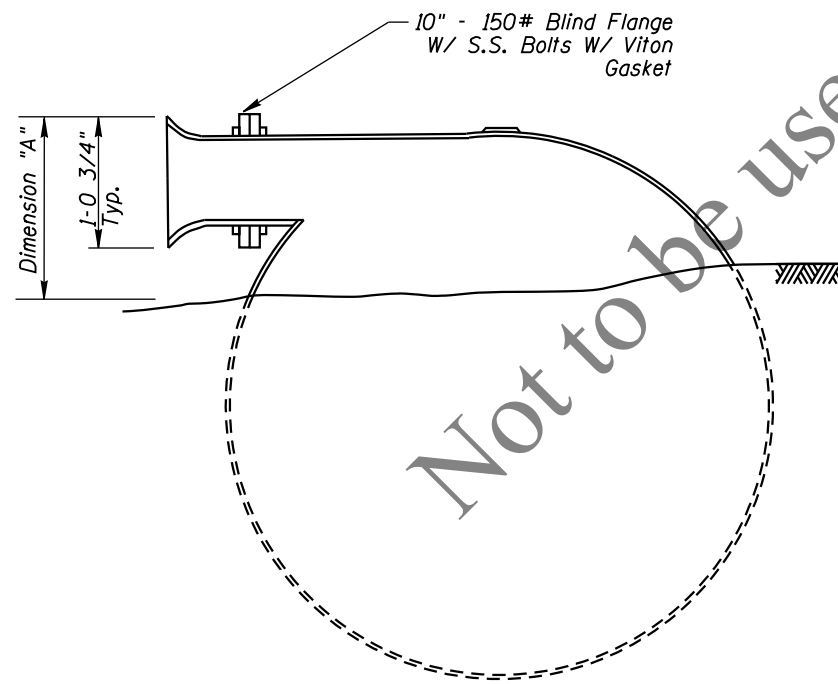


Legend	
	Channel Bottom
	Open Port
	Closed Port

ROCK RIVER WATER RECLAMATION DISTRICT ROCKFORD, ILLINOIS		
OUTFALL SEWER EXTENSION AND MULTI-PORT DIFFUSION SYSTEM		
INSPECTION NOTES		
Drawn By: BLV	COLLINS ENGINEERS 550 West Jackson Blvd Suite 1200 Chicago, IL 60661 (312) 704-9300 www.collinsengr.com	Date: AUG., 2021
Checked By: BPD		Scale: AS N.T.S.
Code: 13191		Figure No.: 3

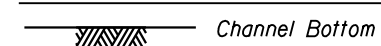


Port Cross Section (Closed)
(16 Ports)



Port Cross Section (Opened)
(8 Ports)

Legend



Diffuser Port Number	Open/Closed	Dimension "A"	Number of Bolts Present
1	Open	12"	6 of 12
2	Closed	9"	12 of 12
3	Open	16"	6 of 12
4	Closed	4"	12 of 12
5	Open	16"	6 of 12
6	Closed	4"	12 of 12
7	Open	13"	6 of 12
8	Closed	3"	12 of 12
9	Open	15"	5 of 12
10	Closed	9"	12 of 12
11	Open	16"	6 of 12
12	Closed	6"	12 of 12
13	Open	16"	7 of 12
14	Closed	2"	12 of 12
15	Open	15"	8 of 12
16	Closed	2"	12 of 12
17	Closed	0	12 of 12
18	Closed	Burried (-6")	N/A
19	Closed	Burried (-9")	N/A
20	Closed	Burried (-12")	N/A
21	Closed	Burried (-12")	N/A
22	Closed	Burried (-15")	N/A
23	Closed	Burried (-15")	N/A
24	Closed	Burried (-15")	N/A

**ROCK RIVER WATER RECLAMATION DISTRICT
ROCKFORD, ILLINOIS**

OUTFALL SEWER EXTENSION AND
MULTI-PORT DIFFUSION SYSTEM

DIFFUSER PORT CROSS SECTION

Drawn By: BLV

Checked By: BPD

Code: 13191

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www.collinsengr.com

Date: AUG., 2021

Scale: AS N.T.S.

Figure No.: 4

INVESTIGATION REPORT

Rock River Water Reclamation District Effluent Diffuser Outfall
Rockford, IL • August 2021

APPENDIX B – PHOTOGRAPHS

Not to be used for bidding purposes

INVESTIGATION REPORT

Rock River Water Reclamation District Effluent Diffuser Outfall
Rockford, IL • August 2021



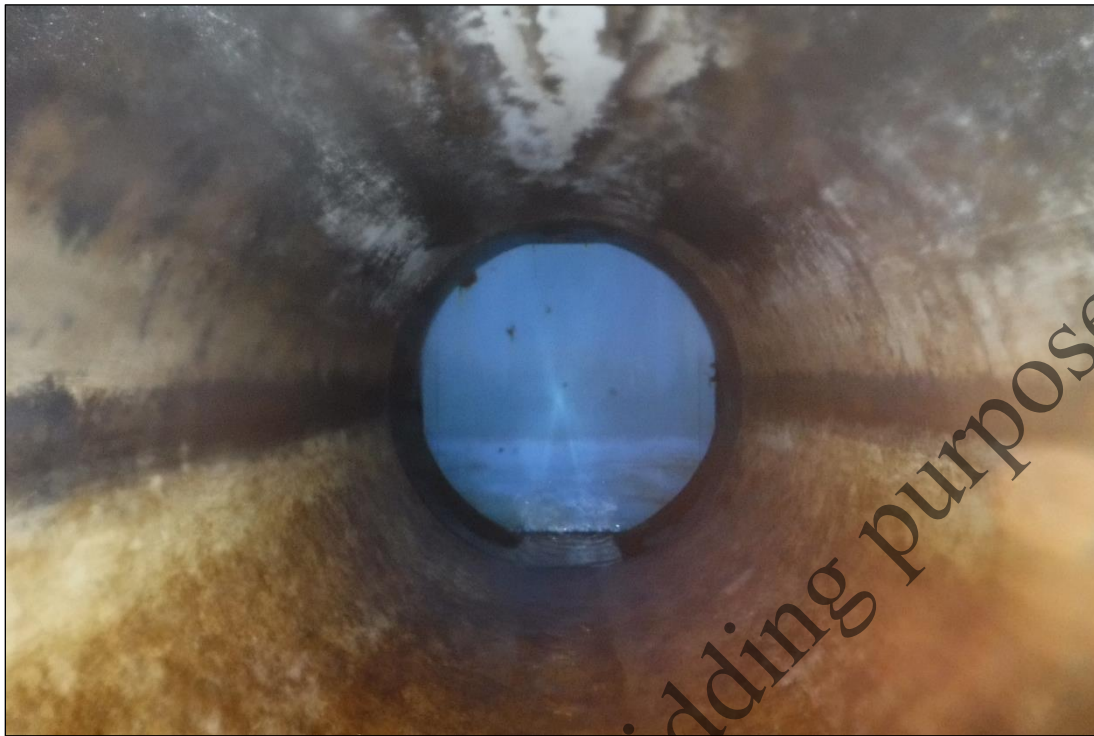
Photograph 1: View of Typical Submerged Interior Pipe Condition, Looking North.



Photograph 2: View of Typical Dry Interior Pipe Condition, Looking East.

INVESTIGATION REPORT

Rock River Water Reclamation District Effluent Diffuser Outfall
Rockford, IL • August 2021



Photograph 3: View of Flange Gate at East End of Pipeline, Looking East.



Photograph 4: View of Leakage at Bottom of Flange Gate at East End of Pipeline, Looking East.

INVESTIGATION REPORT

Rock River Water Reclamation District Effluent Diffuser Outfall
Rockford, IL • August 2021



Photograph 5: View of the Access Hatch, Looking Southeast.



Photograph 6: Typical View of the Rock River Channel Over the Submerged Pipeline, Looking Southwest.

INVESTIGATION REPORT

Rock River Water Reclamation District Effluent Diffuser Outfall
Rockford, IL • August 2021



Photograph 7: Typical View of the Rock River Channel Over the Submerged Pipeline, Looking Southeast.



Photograph 8: View of Typical Steel Condition at Exterior of Flared (Open) Port, Looking North.

INVESTIGATION REPORT

Rock River Water Reclamation District Effluent Diffuser Outfall
Rockford, IL • August 2021



Photograph 9: View of Typical Connection Bolt Condition at Exterior Blind Flange (Closed) Port, Looking North.

Not to be used for bidding purposes

Not to be used for bidding purposes

DEBRIS SCREEN

PART 1 – GENERAL

1-1. SCOPE. This section covers criteria for the fabrication, supply and installation of a debris screen in the 66" diameter effluent diffuser (Outfall #1) piping. The debris screen shall be installed immediately downstream of the Sampling Manhole at Station 1+00 as shown in Figure 1. All costs associated with the investigation, materials, equipment, labor, etc. for a complete installation shall be included in the Lump Sum Bid as provided for in the Proposal Form.

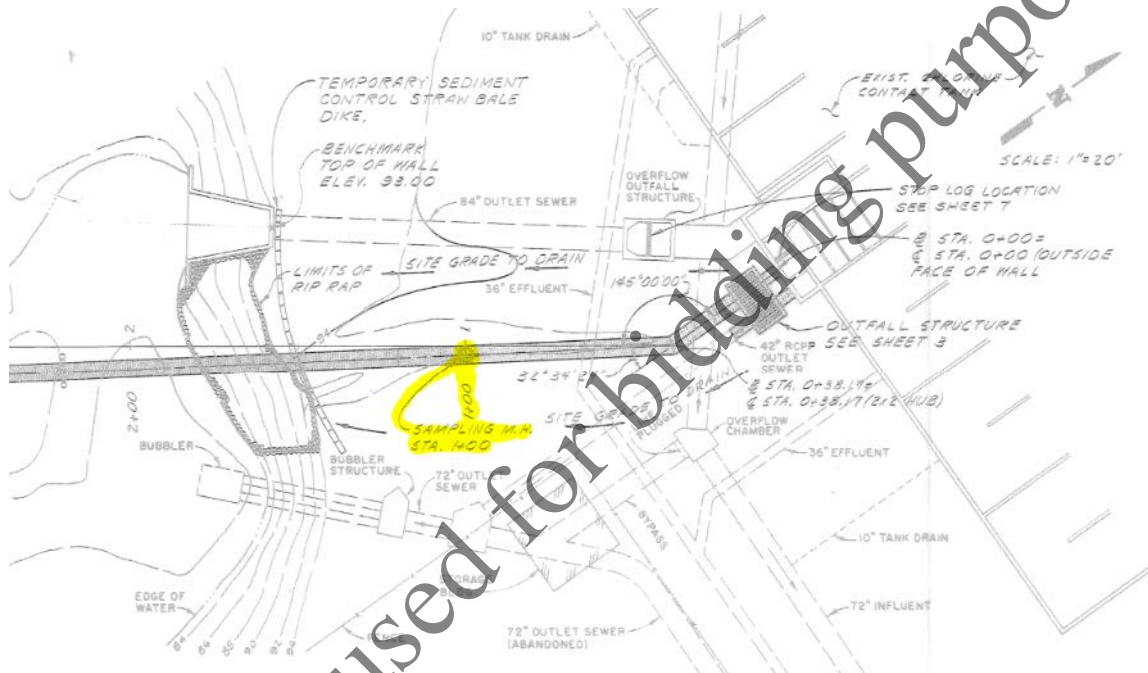


Figure 1: Debris Screen and Sampling Manhole Location

1-2. EXISTING CONDITIONS. Figure 2 and Figure 3 provide details of the original debris screen.

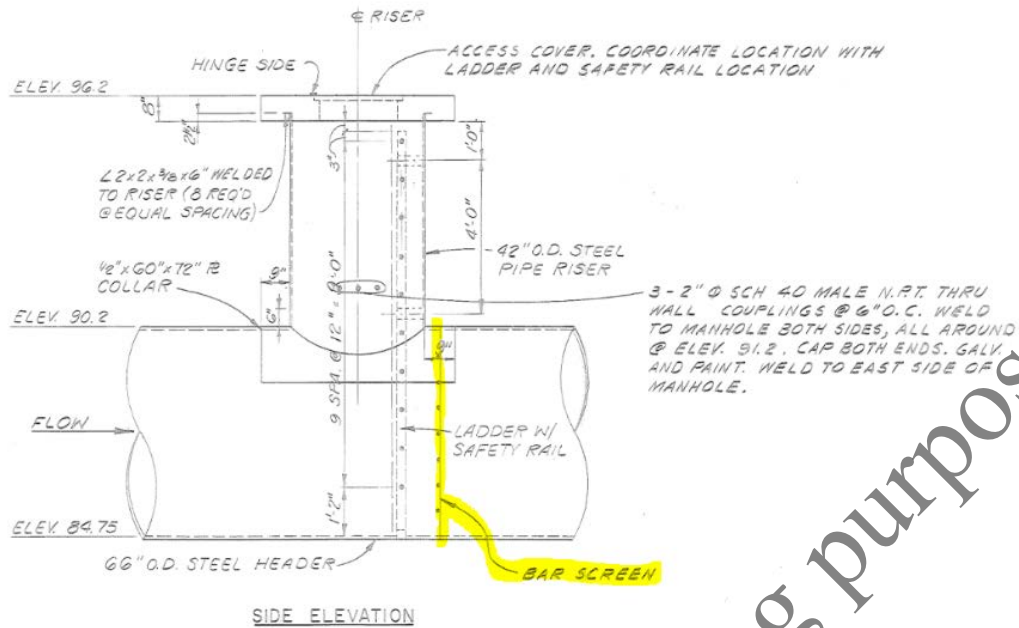


Figure 2: Section Location of Debris Screen

Figure 2 and Figure 3 are not indicative of actual installation conditions for the ladder; note that the ladder was installed in a position that is offset to one side of the pipe.

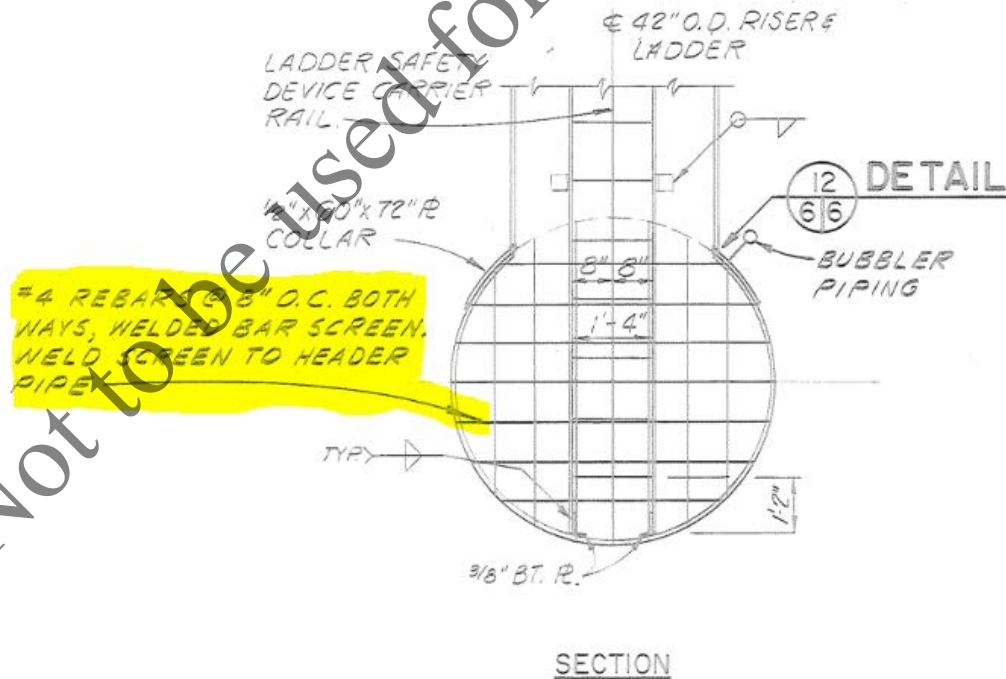


Figure 3: Debris Screen Detail

A portion of the existing debris screen that was installed as part of the original construction of Outfall #1 was removed during a previous internal inspection of the diffuser system and outfall pipe. Figure 4 depicts the condition of the pipe and remaining portions of the previously installed debris screen from a recent inspection. Existing materials, coatings and welds shall not be damaged during installation of the new debris screen. Any damage to existing components shall be repaired at the Contractor's expense.

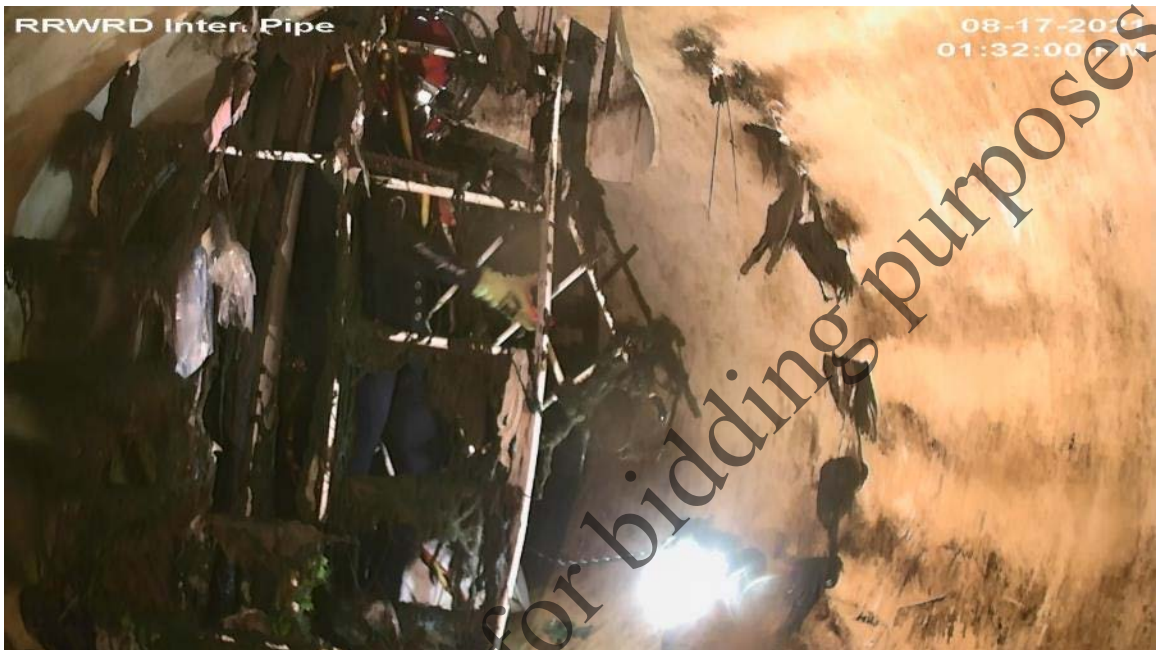


Figure 4: Internal View of Existing Conditions of Debris Screen Location

For reference, Figure 5 shows the pieces of the debris screen that were removed.



Figure 5: Removed Sections of Existing Debris Screen

Figure 6 shows the access hatch location (Sampling Manhole) the Contractor shall utilize for entry and access to the debris screen location. Dimensions of the clear opening are approximately 27.5" on the diagonal and 24.25" wide.



Figure 6: Existing Access Hatch

Contractor shall field verify conditions, dimensions and other aspects impacting the fabrication and installation details of the debris screen.

1-3. SUBMITTALS.

1-3.01. Drawings and Data. All submittals of drawings, material lists, placement drawings, catalog data sheets and other data shall be in accordance with Article 9 Submittals Procedures.

Contractor shall submit to FRSA a plan for fabricating and installing the debris screen as specified herein. The submittal shall include material lists, drawings for fabrication and arrangement of materials, and installation details. Drawings shall have sufficiently labeled plans, sections, and elevations to adequately depict the proposed fabrication and installation. This submittal shall be accepted by FRSA prior to the Contractor commencing work on the debris screen. The Contractor shall fully inspect and investigate the existing conditions of the debris

screen location prior to developing a plan for the new debris screen. Contractor shall reference Article 14 for required photographic documentation of the debris screen location prior to commencing work, and after completion.

PART 2 – PRODUCTS

2-1. MATERIALS.

Bars, Stainless Steel

ASTM A955/A955M, Grade 60, #4 bars, typical

Mechanical Connectors

Locking Type, Epoxy Coated

Dayton Superior “Bar-Lock Coupler System”, nVent “LENTON Connect System”, or Barsplice Products “Zap Screwlock Mechanical Connector” system.

2-2. BARS. Bars shall be accurately formed and shall be free from loose rust, scale, and contaminants which reduce bond. The details of fabrication shall conform to ACI SP-66 and ACI 318. Bars shall not be bent in the field without approval of FRSA.

2-2.01. Mechanical Connectors. Mechanical Connectors shall be epoxy coated with stainless steel tightening bolts. Mechanical Connectors shall have bolt heads that remain on the set screws after tightening. Bolt heads that become detached after appropriate torque is achieved shall not be used in order to facilitate future mechanical connector removal. Configuration of mechanical connectors shall be planned and installed with bolts facing downstream of the direction of flow. Specific model/catalog number shall be selected in accordance with the design of the debris screen assembly. Connectors shall be single and/or double barrel type as appropriate for the installation conditions.

2-2.02. Welding. Preheating and welding shall conform to AWS D1.4. Bars that have been welded improperly or without FRSA's concurrence shall be removed and replaced.

2-3. DEBRIS SCREEN. Due to access limitations to the installation location, it is expected that the debris screen will be fabricated in place or fabricated in pieces that are then installed and connected in place. The debris screen shall be fabricated in three separate pieces to facilitate installation through the access manhole (Sampling Manhole), and to allow for a removable section in the center area adequately sized to allow passage of a person with dive equipment to pass

through when that section is removed. The general layout of the debris screen shall match the pattern shown in Figure 3.

The anticipated configuration of the debris screen is described as follows; however, Contractor shall develop details based on required installation conditions, field measurements and performance requirements specified herein:

- New bars shall be arranged to replace those previously removed from the existing debris screen.
- Connections of the new debris screen bars shall be made to the remaining existing debris screen bars with mechanical connectors.
- Configuration of the new sections of the debris screen shall be made such that the sections can be removed through the existing access manhole.
- Crossing members of the new debris screen shall be tack welded to each other.

Contractor may propose an alternative configuration of the debris screen subject to compliance with the performance requirements provided herein and acceptance by FRSA as part of the submittal process.

PART 3 – EXECUTION

3-1. STORAGE AND HANDLING. All materials shall be carefully handled and shall be stored such that they are protected from exposure to the elements and prevented from touching the ground.

3-2. INSTALLATION.

3-2.01. Preparation for Installation. Prior to installing new components of the debris screen, existing components of the previously installed debris screen shall be fully cleaned as required for appropriate installation of new elements.

3-2.02. Debris Screen Bars. Bars shall be accurately positioned and attached accordingly to surrounding reinforcement and shall be secured in place with mechanical connectors. Tack welds shall be placed at all locations where rebar members cross.

3-2.03. Mechanical Connectors. Mechanical connectors shall be used to connect the components of the new debris screen to the existing debris screen bars, and as applicable for the accepted screen configuration, to connect sections of the new debris screen to each other. Bolts shall be positioned on the downstream side of the flow through the pipe.

End of Section

Not to be used for bidding purposes

Attachment D: Turf and Grasses

Not to be used for bidding purposes

TURF AND GRASSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Seeding.
 - 2. Erosion-control materials.

1.3 DEFINITIONS

- A. Finish Grade: Elevation of finished surface of planting soil.
- B. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- C. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- D. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- E. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.4 INFORMATIONAL SUBMITTALS

- A. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture, stating the botanical and common name, percentage by weight of

each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.

- B. Product Certificates: For fertilizers, from manufacturer.
- C. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Recommended procedures to be established by Owner for maintenance of turf during a calendar year. Submit before expiration of required maintenance periods.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful turf establishment.
 - 1. Experience: Five years' experience in turf installation in addition to requirements in Section 014000 "Quality Requirements."
 - 2. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - 3. Pesticide Applicator: State licensed, commercial.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.
- B. Bulk Materials:
 - 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 - 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 - 3. Accompany each delivery of bulk materials with appropriate certificates.

1.8 FIELD CONDITIONS

- A. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and

optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 SEED

- A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Rules for Testing Seeds" for purity and germination tolerances. Seed to be grown within 300 miles of the site.
- B. Seed Species:
 - 1. IDOT Class 1 seed or per the following.
 - 2. Quality, Non-State Certified: Seed of grass species as listed below for solar exposure, with not less than 85 percent germination, not less than 95 percent pure seed, and not more than 0.5 percent weed seed.
 - 3. Full Sun, Warm-Season Grass: Bermudagrass (*Cynodon dactylon*).
 - 4. Full Sun, Cool-Season Grass: Kentucky bluegrass (*Poa pratensis*), a minimum of three cultivars.
 - 5. Sun and Partial Shade, Cool-Season Grass: Proportioned by weight as follows:
 - a. 50 percent Kentucky bluegrass (*Poa pratensis*).
 - b. 30 percent chewings red fescue (*Festuca rubra* variety).
 - c. 10 percent perennial ryegrass (*Lolium perenne*).
 - d. 10 percent redtop (*Agrostis alba*).

2.2 FERTILIZERS

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition:
 - a. 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
 - b. Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.
- B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

1. Composition:

- a. 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.
- b. Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

2.3 MULCHES

- A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.
- B. Fiber Mulch: Biodegradable, dyed-wood, cellulose-fiber mulch, nontoxic and free of plant-growth or germination inhibitors; with a maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.
- C. Nonasphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application; nontoxic and free of plant-growth or germination inhibitors.

2.4 PESTICIDES

- A. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
- B. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.
- C. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

2.5 EROSION-CONTROL MATERIALS

- A. Erosion-Control Blankets: Biodegradable wood excelsior, straw, or coconut-fiber mat enclosed in a photodegradable plastic mesh. Include manufacturer's recommended steel wire staples, 6 inches long.
- B. Erosion-Control Fiber Mesh: Biodegradable burlap or spun-coir mesh, a minimum of 0.92 lb/sq. yd., with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches long.

- C. Erosion-Control Mats: Cellular, non-biodegradable slope-stabilization mats designed to isolate and contain small areas of soil over steeply sloped surface, of 3-inch nominal mat thickness. Include manufacturer's recommended anchorage system for slope conditions.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas to be planted for compliance with requirements and other conditions affecting installation and performance of the Work.
 - 1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
 - 2. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 - 3. Uniformly moisten excessively dry soil that is not workable or which is dusty.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Architect and replace with new planting soil.

3.2 PREPARATION

- A. Protect structures; utilities; sidewalks; pavements; and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 - 1. Protect adjacent and adjoining areas from hydro-seeding and hydro-mulching overspray.
 - 2. Protect grade stakes set by others until directed to remove them.
- B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 TURF AREA PREPARATION

- A. General: Prepare planting area for soil placement.
- B. Placing Planting Soil: Place and mix planting soil in place over exposed subgrade.
- C. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- D. Before planting, obtain Engineer's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.4 PREPARATION FOR EROSION-CONTROL MATERIALS

- A. Prepare area as specified in "Turf Area Preparation" Article.
- B. For erosion-control mats, install planting soil in two lifts, with second lift equal to thickness of erosion-control mats. Install erosion-control mat and fasten as recommended by material manufacturer.
- C. Fill cells of erosion-control mat with planting soil and compact before planting.
- D. For erosion-control blanket or mesh, install from top of slope, working downward, and as recommended by material manufacturer for site conditions. Fasten as recommended by material manufacturer.
- E. Moisten prepared area before planting if surface is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

3.5 SEEDING

- A. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph.
 - 1. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.
 - 2. Do not use wet seed or seed that is moldy or otherwise damaged.
 - 3. Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer.
- B. Sow seed at a total rate of 3 to 4 lb/1000 sq. ft.
- C. Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with fine spray.

- D. Protect seeded areas with slopes exceeding 1:4 with erosion-control blankets installed and stapled according to manufacturer's written instructions.
- E. Protect seeded areas with erosion-control mats where indicated on Drawings; install and anchor according to manufacturer's written instructions.
- F. Protect seeded areas with slopes not exceeding 1:4 by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre to form a continuous blanket 1-1/2 inches in loose thickness over seeded areas. Spread by hand, blower, or other suitable equipment.
 - 1. Anchor straw mulch by crimping into soil with suitable mechanical equipment.
 - 2. Bond straw mulch by spraying with asphalt emulsion at a rate of 10 to 13 gal./1000 sq. ft. Take precautions to prevent damage or staining of structures or other plantings adjacent to mulched areas. Immediately clean damaged or stained areas.

3.6 TURF RENOVATION

- A. Renovate existing turf where indicated.
- B. Renovate turf damaged by Contractor's operations, such as storage of materials or equipment and movement of vehicles.
 - 1. Reestablish turf where settlement or washouts occur or where minor regrading is required.
 - 2. Install new planting soil as required.
- C. Remove sod and vegetation from diseased or unsatisfactory turf areas; do not bury in soil.
- D. Remove topsoil containing foreign materials, such as oil drippings, fuel spills, stones, gravel, and other construction materials resulting from Contractor's operations, and replace with new planting soil.
- E. Mow, dethatch, core aerate, and rake existing turf.
- F. Remove weeds before seeding. Where weeds are extensive, apply selective herbicides as required. Do not use pre-emergence herbicides.
- G. Remove waste and foreign materials, including weeds, soil cores, grass, vegetation, and turf, and legally dispose of them off Owner's property.
- H. Till stripped, bare, and compacted areas thoroughly to a soil depth of 6 inches.

- I. Apply initial fertilizer required for establishing new turf and mix thoroughly into top 4 inches of existing soil. Install new planting soil to fill low spots and meet finish grades.
- J. Apply seed and protect with straw mulch as required for new turf.
- K. Water newly planted areas and keep moist until new turf is established.

3.7 TURF MAINTENANCE

- A. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
 - 1. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
 - 2. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.
 - 3. Apply treatments as required to keep turf and soil free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.
- B. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.
 - 1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 - 2. Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.

3.8 SATISFACTORY TURF

- A. Turf installations shall meet the following criteria as determined by Architect:
 - 1. Satisfactory Seeded Turf: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches.

- B. Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.

3.9 PESTICIDE APPLICATION

- A. Apply pesticides and other chemical products and biological control agents according to requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- B. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

3.10 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.
- C. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.
- D. Remove non-degradable erosion-control measures after grass establishment period.

3.11 MAINTENANCE SERVICE

- A. Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in "Turf Maintenance" Article. Begin maintenance immediately after each area is planted and continue until acceptable turf is established, but for not less than the following periods:

1. Seeded Turf: 60 days from date of planting completion.

- a. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.

End of Section

Attachment E: Assignment Forms

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Attachment E – Assignment Forms
EXHIBIT 1

CONSENT TO ASSIGNMENT AND ACCEPTANCE OF ASSIGNMENT

This assignment will be effective on ____.

The responsibility for FRSA (Owner) provided materials identified herein is hereby assigned, transferred, and set over to _____ (“Installation Contractor”). Installation Contractor shall be totally responsible for the assigned materials until accepted as part of the Work, under the terms of the Contract between Owner and Installation Contractor.

Assigned materials: (list, or attach bill of materials)

ASSIGNMENT

ACKNOWLEDGED AND ACCEPTED BY: Four Rivers Sanitation Authority
Owner

By: _____
(Signature) (Title)

ASSIGNMENT ACCEPTED BY:

Installation Contractor

By: _____
(Signature) (Title)

**Attachment E – Assignment Forms
EXHIBIT 2**

AGREEMENT TO ASSIGNMENT BY SELLER’S SURETY

Surety hereby acknowledges and agrees that the responsibility for FRSA materials provided for installation by the Installation Contractor may be assigned, transferred, and set over to _____ (“Installation Contractor”), in accordance with the Agreement between Owner and Installation Contractor.

(Corporate Seal)

Surety

Company: _____

By: _____

Signature and Title
(Attach Power of Attorney)

Address for giving notices

Attachment F: Submittals Procedures Forms

Not to be used for bidding purposes

(Contractor's Letterhead)

SUBMITTAL IDENTIFICATION & CONTRACTOR'S APPROVAL STATEMENT

DATE: _____ **COPIES** _____ **DRAWING SHEET NO.** _____

Description submittal contents: _____

Location: _____

Manufacturer _____

Subcontractor or Supplier (Optional) _____

REMARKS: _____

CONTRACTOR'S APPROVAL

(_____ Construction Company) has reviewed and coordinated the submitted documentation and verifies that the equipment and material meet the requirements of the Work and the Contract Documents. We accept sole responsibility for determining and verifying all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data contained in the submittal as required by the Contract Documents.

Deviations: ☐ None ☐ Yes (See attached Figure 2-01 33 00 for written description)

Approved By: _____ Date: _____

This approval does not release subcontractor / vendor from the contractual responsibilities.

(Contractor's Letterhead)

**SUBMITTAL IDENTIFICATION &
CONTRACTOR'S APPROVAL STATEMENT**

DATE: _____ **COPIES** _____ **DRAWING SHEET NO.** _____

Description submittal contents: _____

Location: _____

Manufacturer _____

Subcontractor or Supplier (Optional) _____

DEVIATIONS

Section IV

**EJCDC C-700 Standard General Conditions
of the Construction Contract
and
EJCDC C-800 Supplementary Conditions
of the Construction Contract**

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



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GUIDELINES FOR USE OF EJCDC® C-700, STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

EJCDC® C-700, Standard General Conditions of the Construction Contract (2018), is the foundation document for the EJCDC Construction Series. The General Conditions define the basic rights, responsibilities, risk allocations, and contractual relationship of the Owner and Contractor, and establish how the Contract is to be administered.

2.0 OTHER DOCUMENTS

EJCDC documents are intended to be used as a system and changes in one EJCDC document may require a corresponding change in other documents. Other EJCDC documents may also serve as a reference to provide insight or guidance for the preparation of this document.

These General Conditions have been prepared for use with either EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price), or EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus-Fee) (2018 Editions). The provisions of the General Conditions and the Agreement are interrelated, and a change in one may necessitate a change in the other.

To prepare supplementary conditions that are coordinated with the General Conditions, use EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018).

The full EJCDC Construction series of documents is discussed in the EJCDC® C-001, Commentary on the 2018 EJCDC Construction Documents (2018).

3.0 ORGANIZATION OF INFORMATION

All parties involved in a construction project benefit significantly from a standardized approach in the location of subject matter throughout the documents. Experience confirms the danger of addressing the same subject matter in more than one location; doing so frequently leads to confusion and unanticipated legal consequences. Careful attention should be given to the guidance provided in EJCDC® N-122/AIA® A521, Uniform Location of Subject Matter (2012 Edition) when preparing documents. EJCDC® N-122/AIA® A521 is available at no charge from the EJCDC website, www.ejcdc.org, and from the websites of EJCDC's sponsoring organizations.

If CSI MasterFormat™ is used for organizing the Project Manual, consult CSI MasterFormat™ for the appropriate document number (e.g., under 00 11 00, Advertisements and Invitations), and accordingly number the document and its pages.

4.0 EDITING THIS DOCUMENT

Remove these Guidelines for Use. Some users may also prefer to remove the two cover pages.

Although it is permissible to revise the Standard EJCDC Text of C-700 (the content beginning at page 1 and continuing to the end), it is common practice to leave the Standard EJCDC Text of C-700 intact and unaltered, with modifications and supplementation of C-700's provisions set forth in EJCDC® C-800, Supplementary Conditions of the Construction Contract (2018). If the Standard Text itself is revised, the

user must comply with the terms of the License Agreement, Paragraph 4.0, Document-Specific Provisions, concerning the tracking or highlighting of revisions. The following is a summary of the relevant License Agreement provisions:

1. The term “Standard EJCDC Text” for C-700 refers to all text prepared by EJCDC in the main body of the document. Document covers, logos, footers, instructions, or copyright notices are not Standard EJCDC Text for this purpose.
2. During the drafting or negotiating process for C-700, it is important that the two contracting parties are both aware of any changes that have been made to the Standard EJCDC Text. Thus, if a draft or version of C-700 purports to be or appears to be an EJCDC document, the user must plainly show all changes to the Standard EJCDC Text, using “Track Changes” (redline/strikeout), highlighting, or other means of clearly indicating additions and deletions.
3. If C-700 has been revised or altered and is subsequently presented to third parties (such as potential bidders, grant agencies, lenders, or sureties) as an EJCDC document, then the changes to the Standard EJCDC Text must be shown, or the third parties must receive access to a version that shows the changes.
4. Once the document is ready to be finalized (and if applicable executed by the contracting parties), it is no longer necessary to continue to show changes to the Standard EJCDC Text. The user may produce a final version of the document in a format in which all changes are accepted, and the document at that point does not need to include any “Track Changes,” redline/strikeout, highlighting, or other indication of additions and deletions to the Standard EJCDC Text.

5.0 LICENSE AGREEMENT

This document is subject to the terms and conditions of the **License Agreement, 2018 EJCDC® Construction Series Documents**. A copy of the License Agreement was furnished at the time of purchase of this document, and is available for review at www.ejcdc.org and the websites of EJCDC’s sponsoring organizations.

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.

- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
- a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers' instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion of such Work.

43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:* The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:* The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:* The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
1. does not conform to the Contract Documents;
 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

A. *Standards Specifications, Codes, Laws and Regulations*

- 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.
- Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.
- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.

- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment

and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
3. Technical Data contained in such reports and drawings.

- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.

- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.

- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in

Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
- a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions:* Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;

3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown

or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures

- of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special

conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or

Regulations, and must be issued and signed by a surety named in “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies” as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual’s authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner’s termination rights under Article 16.
- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by

Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.

- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner's option, may purchase and maintain Owner's own liability insurance. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.
- H. Contractor shall require:
 - 1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 - 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.

- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 *Contractor's Insurance*

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
 - 1. include at least the specific coverages required;
 - 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;
 - 3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 - 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 - 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds:* The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
 - 1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 - 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 - 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);

4. not seek contribution from insurance maintained by the additional insured; and
5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur:* Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities:* Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against

Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.

1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.
1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account, and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.

- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

- 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
- b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding, and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria:* Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
- a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

- E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding, and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.

- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency, or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
- 2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.

3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
 2. *Samples*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Engineer's Review of Shop Drawings and Samples*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will

document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.

5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.

- d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance, and resubmit an acceptable document.
- 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 - 1. Observations by Engineer;
 - 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. Use or occupancy of the Work or any part thereof by Owner;
 - 5. Any review and approval of a Shop Drawing or Sample submittal;
 - 6. The issuance of a notice of acceptability by Engineer;
 - 7. The end of the correction period established in Paragraph 15.08;
 - 8. Any inspection, test, or approval by others; or

9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 Delegation of Professional Design Services

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.

- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.

- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

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

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:

1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.
- B. *Change Proposal Procedures*
 - 1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
 - 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

- 3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
- 4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change

Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge

and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 - 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 - 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are

consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.

c. *Construction Equipment Rental*

- 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
- 2) Costs for equipment and machinery owned by Contractor or a Contractor-related entity will be paid at a rate shown for such equipment in the equipment rental rate book specified in the Supplementary Conditions. An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs.
- 3) With respect to Work that is the result of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
2. The cost of purchasing, renting, or furnishing small tools and hand tools.
3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
6. Expenses incurred in preparing and advancing Claims.
7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change

Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.

- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision

thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the quantity of the item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 Defective Work

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs,

losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work,

or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation

establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. Reductions in Payment by Owner

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

- b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time

submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without

significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:

1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

- d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.
- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim,

appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.

- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects,

- attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
 - G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The

provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



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GUIDELINES FOR USE OF EJCDC® C-800, SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

1.0 PURPOSE AND INTENDED USE OF THE DOCUMENT

1.1 General

The Engineers Joint Contract Documents Committee® (EJCDC®) has prepared and publishes standard contract forms for construction contracts, as well as bidding-related documents. The principal forms are listed in Table 1. EJCDC has also prepared other documents that may be useful in preparing construction contract documents. Some of the principal ones are listed in Table 2. For the most recent editions of these forms, guides, and other documents, please refer to EJCDC's website at www.ejcdc.org.

Table 1—Principal EJCDC Standard Forms for Construction Contracts

Name	Number	Short Title/Abbreviation
Instructions to Bidders for Construction Contract	C-200	Instructions/I
Bid Form for Construction Contract	C-410	Bid Form/BF
Agreement between Owner and Contractor for Construction Contract (Stipulated Price)	C-520	Stipulated Price Agreement/A
Agreement between Owner and Contractor for Construction Contract (Cost-Plus-Fee)	C-525	Cost-Plus Agreement/A
Standard General Conditions of the Construction Contract	C-700	General Conditions/GC
Supplementary Conditions of the Construction Contract	C-800	Supplementary Conditions/SC

Table 2—Principal EJCDC Documents Relating to Preparation of Construction Documents

Name	Number	Short Title
Commentary on the 2018 EJCDC Construction Documents	C-001	Commentary
Uniform Location of Subject Matter	N-122	Locator Guide
Bidding Procedures and Construction Contract Documents	C-050	Bidding Procedures
Engineer's Letter to Owner Requesting Instructions Concerning Bonds and Insurance	C-051	Engineer's Letter to Owner Concerning Bonds and Insurance
Owner's Instructions to Engineer Concerning Bonds and Insurance	C-052	Owner's Instructions Concerning Bonds and Insurance

1.2 Mandatory Supplementary Conditions

- A. Several provisions of the General Conditions expressly indicate that essential Project-specific information will be set out in a corresponding Supplementary Condition. For example, Paragraph 6.03.A of the General Conditions indicates that the specific requirements for insurance to be carried by Contractor will be stated in the Supplementary Conditions. Every EJCDC based construction contract should include, at a minimum, the following Supplementary Conditions, edited for the specific project:

1. Paragraph SC-5.03, concerning reports and drawings of conditions at the Site that contain Technical Data on whose accuracy the Contractor may rely;
 2. Paragraph SC-5.06, disclosing reports and drawings regarding Hazardous Environmental Conditions at the Site, and identifying any Technical Data in those reports and drawings on whose accuracy the Contractor may rely;
 3. Paragraph SC-6.03, identifying specific insurance coverage requirements; and
 4. One of the two alternatives presented in SC-10.03 (either the Engineer will provide Resident Project Representative services on the Project, with specific authority and responsibilities, or Engineer will not provide Resident Project Representative services).
- B. Other suggested Supplementary Conditions are mandatory under specific circumstances: for example, on projects in which the Contractor will be responsible for compliance with Owner's safety program, SC-7.13 would be mandatory.
- C. In describing a Supplementary Condition as "mandatory" EJCDC is indicating that it is essential to furnish the information that is the subject of the Supplementary Condition; however, the drafter is not restricted from modifying the wording and content of the proposed Supplementary Condition as needed.

1.3 *Relationship of Supplementary Conditions to Other Contract Documents*

Supplementary Conditions are modifications to the General Conditions—additions, deletions, changes. This is as the term is defined by EJCDC and the Construction Specification Institute (CSI). Other organizations use their supplementary conditions to modify a broader range of contract documents, such as agreement forms and standard specifications.

This Guide and the other Construction-related documents prepared and issued by EJCDC assume use of the CSI MasterFormat™ concept, which provides an organizational format for location of all documentary information for a construction project: Bidding Requirements, contract forms (Agreement, Bonds, and certificates), General Conditions, Supplementary Conditions, and Specifications. Under the CSI MasterFormat™, the last grouping, Specifications, is divided into 49 Divisions, the first of which, Division 01, is entitled "General Requirements."

The standard fundamental provisions affecting the rights and duties of the parties appear in the General Conditions. Language to modify the fundamental relationships between the parties, supplement the framework set forth in the General Conditions, or change the language of the General Conditions, should appear in the Supplementary Conditions. Examples of this are a change in Contractor's Site responsibilities, and a supplemental clause specifying the details of insurance coverages and limits for the Project.

Price terms, monetary terms such as liquidated damages clauses, and completion dates should all be set forth in the Agreement (C-520—Stipulated Sum, or C-525—Cost-Plus-Fee), and should not be included in the Supplementary Conditions.

1.4 *Arrangement of Subject Matter*

This Supplementary Conditions document is arranged in the same order as the 2018 edition of the General Conditions, and the proposed Supplementary Conditions Paragraphs bear comparable addresses to those of the General Conditions. A discussion of the purpose and function of these suggested Supplementary Conditions is included in EJCDC® C-001, Commentary on the 2018 EJCDC Construction Documents (2018).

1.5 *Use of this Document*

The text in this document is suggested contract language for some commonly used Supplementary Conditions. Most of the suggested Supplementary Conditions are accompanied by Guidance Notes that discuss the purpose or usage of the Supplementary Condition. These Guidance Notes are often just the first step in determining whether to use the Supplementary Condition, and if so whether revisions are needed to suit the specific project. The drafter should bear in mind that most contractual provisions have important legal consequences. Consultation with legal counsel before finalization of any amendment or supplement is recommended.

There may be notes, prompts, or “fill in the blanks” within the text of a suggested Supplementary Condition. These should be read and followed, then removed when the document is finalized. See Paragraph 4.0, Finalizing a Specific Project’s Supplementary Conditions, below.

Many sets of supplementary conditions examined by EJCDC contain typical or “boilerplate” provisions that have accumulated like moss over the years, appear to have no practical significance for the particular project, and may produce unintended and surprising legal consequences. Such provisions are usually there because someone saw similar terms in other contract documents and it “sounded good.” Selecting contract terms in that manner is not recommended. Provisions of the Supplementary Conditions should address a particular point in the General Conditions or cover a particular topic. The Supplementary Conditions should not be a repository for general language of vague meaning for which another location cannot be readily found.

This Supplementary Conditions document assumes a general familiarity with the other Construction Series (C-Series) documents prepared by EJCDC and, when drafting language, specific attention to them is encouraged. Standard documents or prescribed forms issued by governmental bodies and other owners may differ materially from the documents of EJCDC so that careful correlation of any amending or supplementing language is essential. The practice of stating that any provision in one document that is inconsistent with another is superseded, or that one document always takes precedence over another in the event of a conflict in language or requirements, is sometimes necessary, but generally discouraged. The resulting legal consequences of such provisions are frequently difficult to decipher and may be very different from what was anticipated.

The EJCDC General Conditions use carefully chosen language and set forth the basic responsibilities of the parties with respect to fundamental matters and legal consequences. Their provisions should be altered only where mandated by the specific requirements of a given project and the consequences of any modification are thoroughly understood.

Caution should be exercised when making any change in the standard documents. They have been carefully prepared, terms are used uniformly throughout and are consistent with the terms in other EJCDC documents. Their provisions have been carefully integrated, and are dependent on one another. A change in one document may necessitate a change in another, and a change in one paragraph may necessitate a change in other language of the same document. No change should be made until its full effect on the rest of the General Conditions and other Contract Documents has been considered.

Lastly, remember that an engineer is neither qualified nor licensed to give advice to others on the legal consequences of contracts. All of the Contract Documents have important legal consequences. Similarly, many portions of the documents involve insurance, bonding, and other

subjects that are outside the scope of an engineer's services. Owners are encouraged to seek the advice of an attorney (and risk managers, insurance consultants, and other specialists) before accepting any modification of the published forms, before the documents are sent out for bidding, and most assuredly before signing any agreement.

2.0 STANDARD PREFATORY LANGUAGE AND TRADITIONAL FORMAT FOR SUPPLEMENTARY CONDITIONS

Suggested format and wording conventions for Supplementary Conditions appear below.

2.1 *Table of Contents*

The inclusion of a table of contents will benefit the user of the Supplementary Conditions, especially if additional articles (beyond the 18 Articles of the General Conditions) are added.

2.2 *Pagination*

If CSI's MasterFormat™ is being used for the Contract Documents, consult MasterFormat™ for the appropriate section number and number the pages accordingly.

2.3 *Format for Complete Paragraph Change*

When completely superseding a paragraph of the General Conditions, the following example language may be used:

"SC-5.09 Delete Paragraph 5.09.B in its entirety and insert the following in its place:

[Text to be inserted]"

2.4 *Format for Change within a Paragraph*

When changing language within a paragraph of the General Conditions, the following example language may be used:

"SC-6.21 Amend the second sentence of Paragraph 6.21.A **[to read as follows] [by striking out the following words]:**

[Text to be modified]"

2.5 *Format for Additional Language*

When adding language to an existing paragraph of the General Conditions, the idea may be expressed as in the following example:

"SC-9.03 Add the following language at the end of the second sentence of Paragraph 9.03:

[Text to be added]"

2.6 *Format for Additional Paragraph*

If it is desired to add a new paragraph to the General Conditions, the thought may be expressed as in the following example:

"SC-8.06 Add the following new paragraph immediately after Paragraph 8.06.B:

C. [Paragraph text to be added]"

3.0 ALTERNATIVE FORMAT FOR SUPPLEMENTARY CONDITIONS

Electronic files are commonly used for transmittal and storage of the text of standard documents. In fact, EJCDC no longer publishes printed documents. Because it is easy to modify documents electronically, it is increasingly common for practitioners to integrate the text of desired Supplementary Conditions into the text of the General Conditions. Most word processing programs have line-out and underlining features that accurately show deletions, changes, and additions. Users of EJCDC's General Conditions are contractually obligated, through the terms of the purchase of the document, to clearly delineate all changes made to the standard text of the General Conditions to other parties in interest (for example, if Owner makes changes, Owner should show these changes to prospective bidders). It would be misleading to users (and a violation of the License Agreement) to imply or represent that the General Conditions are EJCDC's General Conditions if changes are not properly and clearly identified during the contract formation process.

4.0 FINALIZING A SPECIFIC PROJECT'S SUPPLEMENTARY CONDITIONS

4.1 *Key Steps*

- A. Review Paragraphs 1.0, 2.0, and 3.0 above, especially Paragraph 1.5, Use of this Document.
- B. Read the Guidance Notes that accompany the proposed Supplementary Conditions.
- C. Retain those Supplementary Conditions that are applicable to the specific Project; revise the standard wording as needed; supply required information such as insurance policy limits.
- D. Delete all proposed Supplementary Conditions that do not apply to the Project and delete Paragraphs 1.0 through 3.0 and all Guidance Notes.
- E. Add any additional Supplementary Conditions specific to the Project.
- F. Check cross-references back to the General Conditions.
- G. Delete this Paragraph 4.0 after confirming that Paragraphs 1.0, 2.0 and 3.0, all Guidance Notes, and all other notes have been removed.
- H. Remove the cover pages (title pages).
- I. Update or delete the Table of Contents.

4.2 *Editing the Supplementary Conditions Text*

- A. Type in required information as indicated by brackets ([]). Bracketed text will usually provide instructions for what is to be inserted in place of the brackets. Delete the brackets and change formatting to match surrounding text after the project specific text has been added, e.g. change "[Project Name]" to "Peach Street Renovation" (without brackets or bold, or quotation marks).
- B. Fill in blanks, if any (more commonly information to be inserted by user will be indicated by a prompt in brackets, as described in Paragraph A above, rather than by an underline-style blank).
- C. Some Notes to Users are interspersed in the text, usually within brackets. Delete all "Notes to User" after reviewing each note and taking appropriate action. Delete all associated numbering and brackets.

D. Fill in all tables.

5.0 ORGANIZATION OF INFORMATION

All parties involved in a construction project benefit significantly from a standardized approach in the location of subject matter throughout the documents. Experience confirms the danger of addressing the same subject matter in more than one location; doing so frequently leads to confusion and unanticipated legal consequences. Careful attention should be given to the guidance provided in EJCDC® N-122/AIA® A521, Uniform Location of Subject Matter (2012 Edition) when preparing documents. EJCDC® N-122/AIA® A521 is available at no charge from the EJCDC website, www.ejcdc.org, and from the websites of EJCDC's sponsoring organizations.

If CSI MasterFormat™ is used for organizing the Project Manual, consult CSI MasterFormat™ for the appropriate document number (e.g., under 00 11 00, Advertisements and Invitations), and accordingly number the document and its pages.

6.0 GUIDANCE NOTES AND NOTES TO USER

EJCDC Documents include Guidance Notes and Notes to User to provide assistance in the preparation of Project-specific documents. These notes are intended for use by the user in the preparation of the document and are not intended to be included in the completed document. Guidance Notes and Notes to User are lightly shaded to distinguish them from the proposed text of the Instructions themselves. As project-specific Instructions to Bidders are prepared and made ready for issuance to bidders, all shaded text (Guidance Notes and Notes to Users) should be deleted.

A Guidance Note provides information regarding the suggested Supplementary Condition that follows, including reasons for the suggested SC, discussions of best practices, and alternate approaches for different situations.

Notes to User provide specific information for editing the text of a suggested Supplementary Condition. When alternate wording is presented, explanations on how to select the most appropriate alternate will be provided, with direction to delete the wording not used.

7.0 LICENSE AGREEMENT

This document is subject to the terms and conditions of the **License Agreement, 2018 EJCDC® Construction Series Documents**. A copy of the License Agreement was furnished at the time of purchase of this document, and is available for review at www.ejcdc.org and the websites of EJCDC's sponsoring organizations.

SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

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SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

Guidance Note—Introductory Statement—The following is a suggestion for use at the beginning of the Supplementary Conditions for a specific project:

These Supplementary Conditions amend or supplement EJCDC® C-700, Standard General Conditions of the Construction Contract (2018). The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added—for example, "Paragraph SC-4.05."

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

No suggested Supplementary Conditions in this Article.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

Guidance Notes—Furnishing Copies of Insurance Policies— Paragraph 2.01.B of the General Conditions requires that Contractor furnish certificates of insurance and copies of endorsements. Paragraph 6.02.D states that upon request by Owner or other additional insureds, Contractor must provide evidence of insurance such as copies of required policies, and documentation of applicable self-insured retentions and deductibles, such as a copy of the portion of the insurance policy establishing the retention or deductible amount. Parallel provisions (GC-2.01.C; GC-6.02.E) apply to Owner and the insurance that Owner is required to provide. Rather than relying on this two-step process (delivery of certificates of insurance and endorsements at the outset; subsequent requests for additional evidence of insurance), some contract drafters may elect to require from the outset that copies of the insurance policies, rather than certificates of insurance, be delivered to the other party. If exchange of copies of insurance policies is required, the following should be used:

SC-2.01 Delete Paragraphs 2.01.B. and C. in their entirety and insert the following in their place:

- B. *Evidence of Contractor's Insurance:* When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner copies of the policies (including all endorsements, and identification of applicable self-insured retentions and deductibles) of insurance required to be provided by Contractor in this Contract. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- C. *Evidence of Owner's Insurance:* After receipt from Contractor of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor copies of the policies of insurance to be provided by Owner in this

Contract (if any). Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

2.02 *Copies of Documents*

Guidance Notes—Furnishing Contract Documents to Contractor—GC-2.02.A indicates that Owner will furnish four printed (hard) copies of the Contract Documents, and one PDF copy.

If Owner is not furnishing PDF or other electronic files of the Contract Documents, then (1) revise GC-2.02.A to indicate that Owner is not providing the PDF files, and (2) include a Supplementary Condition that deletes Paragraph 3.01.C in its entirety (see SC-3.01 below). SC-2.02 below is used to accomplish item (1), and may also be used to change the number of printed copies of the Contract Documents to be provided, if the number is not four.

SC-2.02 Amend the first sentence of Paragraph 2.02.A. to read as follows:

Owner shall furnish to Contractor **[number]** printed copies of the Contract Documents (including one fully signed counterpart of the Agreement), and **[one copy]** **[none]** in electronic portable document format (PDF).

Guidance Notes—Conformed Contract Documents—On some projects it may be useful to produce conformed Contract Documents, in which the content of Addenda and negotiated changes are merged into the appropriate Specifications, Drawings, General Conditions, and other Contract Documents. This may be especially true on private construction projects where the terms and scope are negotiated and modified significantly after the initial release of proposed Contract Documents. Conformed documents may be considerably more convenient to use during the performance of the Work and the administration of the Contract.

EJCDC advises that if conformed documents are to be prepared and made available to Contractor, sufficient time and budget must be allocated to ensure the quality and full coordination of the conformed documents, and Owner and Engineer must recognize that Contractor, Subcontractors, and Suppliers will likely rely on the conformed version of the Contract Documents rather than the source components. If conformed documents are prepared without the level of commitment necessary to allow them to be accorded the full status of "Contract Documents," and are merely for reference or convenience, they should be accompanied by clear disclaimers of their content and a warning to consult the actual source Contract Documents.

A Supplementary Condition regarding conformed documents is necessary only if the Owner intends to provide the Contractor with conformed documents that will serve as binding Contract Documents. The following may be used for that purpose:

SC-2.02 Delete Paragraph 2.02.A in its entirety and insert the following new paragraph in its place:

- A. Owner shall furnish to Contractor **[number]** printed copies of conformed Contract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies of the conformed Contract Documents will be furnished upon request at the cost of reproduction.

Guidance Notes—Electronic Documents Protocol (EDP)—GC-2.06.A authorizes the electronic transmittal of Electronic Documents (commencing with the 2018 edition of the C-Series, Electronic Documents is a defined term in the General Conditions), and GC-2.06.B indicates that if the Contract does not establish protocols for such transmittals, then Owner, Engineer, and Contractor will jointly develop such protocols. The following Supplementary Conditions may be used to contractually establish transmittal protocols, eliminating the need for joint development after the Contract is underway.

The Supplementary Conditions establishing the Electronic Documents Protocol (“EDP” or “Protocol”) define the relationships between the parties relative to responsibilities and limitations governing use of Electronic Documents on the Project. The drafter of the Protocol, with assistance of Owner and Engineer, will need to customize for Project-specific management, system, data, and technical needs.

Software and data formats for exchange of Electronic Documents will vary depending on the preferences of the Owner and the needs of the Project. A sample set of basic software and data formats, commonly seen for exchanging information on many horizontal construction projects, has been included in Exhibit A, Software Requirements for Electronic Document Exchange, as a starting point for Project information exchange standards. **[Exhibit A is located at the end of C-800, with other exhibits.]** No representation is made that these standards will be applicable to any particular project, and each user must review and modify Exhibit A as needed.

The Protocol addresses the limited data exchange functions intended by the basic software and data formats described in Exhibit A, but the Protocol does not directly address the exchange of “native” design files between the parties for more robust uses beyond such data exchange, nor does it address special issues associated with use of “native” design files, not the least of which is suitability for uses not necessarily intended or anticipated by the file author. While nothing precludes the exchange of “native” files under this Protocol, it is up to the Parties to define how such “native” files may be used and modify the Protocol for criteria of use and any limitations to such use.

Many entities have developed their own data organization standards for “native” files, including such criteria as data model element organization, drawing layer conventions, Building Information Modeling (BIM) and Civil Integrated Management Model protocols, Geographic Information System schema, and integrated and cross-referenced data sets. Additionally, several institutions and design/construction industry organizations have developed and published more comprehensive technical criteria, schemas and plans for use as guides to data organization standards.

Here again, where the data standards require a broader and, generally more collaborative, review and definition of the obligations of the parties, it is up to the parties to significantly modify this Protocol considering such matters as: 1) party responsible for managing models or system; 2) maintaining integrity of the models or system; 3) ownership of the model or system; 4) enhanced system infrastructure, software, access and security standards; 5) responsibility and liability of respective parties in the role of adding or using elements of common models; 6) additional protocols for quality control and quality assurance; and many other factors.

Some projects feature a Project Website as a part of the EDP. The EDP below includes a clause that may be used to set standards for such a website:

1. *Project Website Established by Owner:* If Owner, either directly or through the Engineer or a third party, elects to establish and operate a Project Website or other electronic information management system during the Project, with or without the project document archive described in SC-2.06.B.2.e,

then include and modify Paragraph SC-2.06.B.2.h as appropriate to set forth any standards applicable to use of the website.

2. *Project Website Established by Contractor:* Under the less common condition in which the operation of the Project Website is delegated by Owner to the Contractor, Paragraph SC-2.06.B.2.h will need to be modified significantly and include the method of compensation, if any, to be paid to Contractor for Project Website services.

To include an Electronic Documents Protocol (EDP), use the following Supplementary Condition:

SC-2.06 Delete Paragraphs 2.06.B and 2.06.C in their entirety and insert the following in their place:

- B. *Electronic Documents Protocol:* The parties shall conform to the following provisions in Paragraphs 2.06.B and 2.06.C, together referred to as the Electronic Documents Protocol (“EDP” or “Protocol”) for exchange of electronic transmittals.

1. *Basic Requirements*

- a. To the fullest extent practical, the parties agree to and will transmit and accept Electronic Documents in an electronic or digital format using the procedures described in this Protocol. Use of the Electronic Documents and any information contained therein is subject to the requirements of this Protocol and other provisions of the Contract.
- b. The contents of the information in any Electronic Document will be the responsibility of the transmitting party.
- c. Electronic Documents as exchanged by this Protocol may be used in the same manner as the printed versions of the same documents that are exchanged using non-electronic format and methods, subject to the same governing requirements, limitations, and restrictions, set forth in the Contract Documents.
- d. Except as otherwise explicitly stated herein, the terms of this Protocol will be incorporated into any other agreement or subcontract between a party and any third party for any portion of the Work on the Project, or any Project-related services, where that third party is, either directly or indirectly, required to exchange Electronic Documents with a party or with Engineer. Nothing herein will modify the requirements of the Contract regarding communications between and among the parties and their subcontractors and consultants.
- e. When transmitting Electronic Documents, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the receiving party’s use of software application packages, operating systems, or computer hardware differing from those established in this Protocol.
- f. Nothing herein negates any obligation 1) in the Contract to create, provide, or maintain an original printed record version of Drawings and Specifications, signed and sealed according to applicable Laws and Regulations; 2) to comply with any applicable Law or Regulation governing the signing and sealing of design documents or the signing and electronic transmission of any other documents; or 3) to comply with the notice requirements of Paragraph 18.01 of the General Conditions.

2. *System Infrastructure for Electronic Document Exchange*

- a. Each party will provide hardware, operating system(s) software, internet, e-mail, and large file transfer functions ("System Infrastructure") at its own cost and sufficient for complying with the EDP requirements. With the exception of minimum standards set forth in this EDP, and any explicit system requirements specified by attachment to this EDP, it is the obligation of each party to determine, for itself, its own System Infrastructure.
 - 1) The maximum size of an email attachment for exchange of Electronic Documents under this EDP is [number] MB. Attachments larger than that may be exchanged using large file transfer functions or physical media.
 - 2) Each Party assumes full and complete responsibility for any and all of its own costs, delays, deficiencies, and errors associated with converting, translating, updating, verifying, licensing, or otherwise enabling its System Infrastructure, including operating systems and software, for use with respect to this EDP.
- b. Each party is responsible for its own system operations, security, back-up, archiving, audits, printing resources, and other Information Technology ("IT") for maintaining operations of its System Infrastructure during the Project, including coordination with the party's individual(s) or entity responsible for managing its System Infrastructure and capable of addressing routine communications and other IT issues affecting the exchange of Electronic Documents.
- c. Each party will operate and maintain industry-standard, industry-accepted, ISO-standard, commercial-grade security software and systems that are intended to protect the other party from: software viruses and other malicious software like worms, trojans, adware; data breaches; loss of confidentiality; and other threats in the transmission to or storage of information from the other parties, including transmission of Electronic Documents by physical media such as CD/DVD/flash drive/hard drive. To the extent that a party maintains and operates such security software and systems, it shall not be liable to the other party for any breach of system security.
- d. In the case of disputes, conflicts, or modifications to the EDP required to address issues affecting System Infrastructure, the parties shall cooperatively resolve the issues; but, failing resolution, the Owner is authorized to make and require reasonable and necessary changes to the EDP to effectuate its original intent. If the changes cause additional cost or time to Contractor, not reasonably anticipated under the original EDP, Contractor may seek an adjustment in price or time under the appropriate process in the Contract.
- e. Each party is responsible for its own back-up and archive of documents sent and received during the term of the contract under this EDP, unless this EDP establishes a Project document archive, either as part of a mandatory Project website or other communications protocol, upon which the parties may rely for document archiving during the specified term of operation of such Project document archive. Further, each party remains solely responsible for its own post-Project back-up and archive of Project documents after the term of the Contract, or after termination of the

Project document archive, if one is established, for as long as required by the Contract and as each party deems necessary for its own purposes.

- f. If a receiving party receives an obviously corrupted, damaged, or unreadable Electronic Document, the receiving party will advise the sending party of the incomplete transmission.
- g. The parties will bring any non-conforming Electronic Documents into compliance with the EDP. The parties will attempt to complete a successful transmission of the Electronic Document or use an alternative delivery method to complete the communication.
- h. The Owner will operate a Project information management system (also referred to in this EDP as "Project Website") for use of Owner, Engineer and Contractor during the Project for exchange and storage of Project-related communications and information. Except as otherwise provided in this EDP or the General Conditions, use of the Project Website by the parties as described in this Paragraph will be mandatory for exchange of Project documents, communications, submittals, and other Project-related information. The following conditions and standards will govern use of the Project Website:
 - 1) Describe the period of time during which the Project Website will be operated and be available for reliance by the parties;
 - 2) Provide any minimum system, infrastructure, software licensing and security standards for access to and use of the Project Website;
 - 3) Describe the types and extent of services to be provided at the Project Website (such as large file transfer, email, communication and document archives, etc.); and
 - 4) Include any other Project Website attributes that may be pertinent to Contractor's use of the facility and pricing of such use.

C. Software Requirements for Electronic Document Exchange; Limitations

- 1. Each party will acquire the software and software licenses necessary to create and transmit Electronic Documents and to read and to use any Electronic Documents received from the other party (and if relevant from third parties), using the software formats required in this section of the EDP.
 - a. Prior to using any updated version of the software required in this section for sending Electronic Documents to the other party, the originating party will first notify and receive concurrence from the other party for use of the updated version or adjust its transmission to comply with this EDP.
- 2. The parties agree not to intentionally edit, reverse engineer, decrypt, remove security or encryption features, or convert to another format for modification purposes any Electronic Document or information contained therein that was transmitted in a software data format, including Portable Document Format (PDF), intended by sender not to be modified, unless the receiving party obtains the permission of the sending party or is citing or quoting excerpts of the Electronic Document for Project purposes.

3. Software and data formats for exchange of Electronic Documents will conform to the requirements set forth in Exhibit A to this EDP, including software versions, if listed.

Guidance Notes—Requests by Contractor for Electronic Documents in Other Formats: SC-2.06.B and SC-2.06.C above constitute an Electronics Document Protocol for transmittal of Electronic Documents. When the Owner desires to retain the option to allow certain documents to be made available to Contractor in formats other than those described in SC-2.06.C of the Protocol, the Owner should add the following Supplementary Condition and release language:

SC-2.06 Supplement Paragraph 2.06 of the General Conditions by adding the following paragraph:

D. Requests by Contractor for Electronic Documents in Other Formats

1. Release of any Electronic Document versions of the Project documents in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be at the sole discretion of the Owner.
2. To extent determined by Owner, in its sole discretion, to be prudent and necessary, release of Electronic Documents versions of Project documents and other Project information requested by Contractor ("Request") in formats other than those identified in the Electronic Documents Protocol (if any) or elsewhere in the Contract will be subject to the provisions of the Owner's response to the Request, and to the following conditions to which Contractor agrees:
 - a. The content included in the Electronic Documents created by Engineer and covered by the Request was prepared by Engineer as an internal working document for Engineer's purposes solely, and is being provided to Contractor on an "AS IS" basis without any warranties of any kind, including, but not limited to any implied warranties of fitness for any purpose. As such, Contractor is advised and acknowledges that the content may not be suitable for Contractor's application, or may require substantial modification and independent verification by Contractor. The content may include limited resolution of models, not-to-scale schematic representations and symbols, use of notes to convey design concepts in lieu of accurate graphics, approximations, graphical simplifications, undocumented intermediate revisions, and other devices that may affect subsequent reuse.
 - b. Electronic Documents containing text, graphics, metadata, or other types of data that are provided by Engineer to Contractor under the request are only for convenience of Contractor. Any conclusion or information obtained or derived from such data will be at the Contractor's sole risk and the Contractor waives any claims against Engineer or Owner arising from use of data in Electronic Documents covered by the Request.
 - c. Contractor shall indemnify and hold harmless Owner and Engineer and their subconsultants from all claims, damages, losses, and expenses, including attorneys' fees and defense costs arising out of or resulting from Contractor's use, adaptation, or distribution of any Electronic Documents provided under the Request.
 - d. Contractor agrees not to sell, copy, transfer, forward, give away or otherwise distribute this information (in source or modified file format) to any third party without the direct written authorization of Engineer, unless such distribution is

specifically identified in the Request and is limited to Contractor's subcontractors. Contractor warrants that subsequent use by Contractor's subcontractors complies with all terms of the Contract Documents and Owner's response to Request.

3. In the event that Owner elects to provide or directs the Engineer to provide to Contractor any Contractor-requested Electronic Document versions of Project information that is not explicitly identified in the Contract Documents as being available to Contractor, the Owner shall be reimbursed by Contractor on an hourly basis (at \$[number] per hour) for any engineering costs necessary to create or otherwise prepare the data in a manner deemed appropriate by Engineer.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

Guidance Notes—Furnishing Contract Documents to Contractor—GC-2.02.A indicates that Owner will furnish four printed (hard) copies of the Contract Documents, and one PDF copy. (See Guidance Note for Paragraph 2.02.) GC-3.01.C states that if there is a discrepancy between the electronic version of the Contract Documents and the printed (hard copy) version, then the printed version controls. If Owner is not furnishing PDF or other electronic files of the Contract Documents, then GC-3.01.C becomes superfluous, and the following may be used:

SC-3.01 Delete Paragraph 3.01.C in its entirety.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.05 *Delays in Contractor's Progress*

Guidance Notes—Defining Weather-related Delays—GC-4.05 is arguably one of the most important provisions in the General Conditions because it allocates the risk of delays in the Work. Delays may be costly to the Contractor and Owner, and detrimental to the success of the Project. Delays beyond the Contract Times have the potential to result in the imposition of liquidated and special damages included in the Contract. When there is any change in the allocation of risks for delays from what is included in GC-4.05, a corresponding SC-4.05 is required.

Particular attention should be paid to the provisions of GC-4.05.C, which is the Contract's force majeure clause governing allocation of risks for delays that are beyond the control of both the Contractor and the Owner. Because weather-related delays are so common, the drafter of the Supplementary Conditions may want to consider including a more specific provision regarding weather-related delays, particularly in cases where adherence to the Contract Times is extremely important and where the Work will be of such a nature as to be susceptible to weather-related delays. Sample contract language is presented below as SC-4.05.C. As the following commentary indicates, other approaches are possible and should be considered.

The General Conditions indicate at GC-4.05.C.2 that the Contractor will be entitled to an equitable adjustment in Contract Times if the Work is delayed by "abnormal weather conditions." This standard will be sufficient in most situations, and is applicable to the full range of possible bad weather events. However, the drafter of the specific Contract may wish to define "abnormal weather" by reference to

objective, measurable weather factors. To draft a supplemental weather-delay provision that defines abnormal weather, the drafter must consider the threshold level of severity of weather that may affect the progress of the Work—the Contractor must anticipate and cope with the weather up to the defined threshold, and if the threshold is reached or exceeded, the Contractor will be entitled to additional time to complete the Work. One such threshold level of severity could be specified to apply to the entire construction (this is the approach taken in the sample SC-4.05.C), or separate levels could be specified for different elements of the Work. As an example of the second alternative, and while it is acknowledged that the parties may not know specific construction activities at the time the initial Contract Documents are prepared, presumed weather severities could be tailored to the materials or type of construction involved. For example, if the Work involves reinforced concrete, the weather conditions that could delay concrete pouring might not reasonably delay erection of formwork or placement of reinforcing steel. The possibility of lingering effects should be considered when drafting such provisions.

In some localities there may be well established and widely accepted procedures for monitoring and evaluating the weather impacts on a construction project, such as the procedures set forth in municipal or state department of transportation standard specifications. The drafter of the Contract Documents may wish to adopt such procedures if relevant to the specific project, as an alternative to the sample procedures set out in the optional SC-4.05.C.

SC-4.05.C, if adopted, ties the definition of “abnormal weather” to two factors, precipitation and temperature. The drafter must establish a threshold amount of daily precipitation that is tolerable in the specific location—any day that incurs an amount at or above the threshold is a bad weather day. Similarly, the drafter must define acceptable temperature thresholds—dropping below the minimum or rising above the maximum will result in categorization as a bad weather day. Finally, the drafter must define how many bad weather days in each category (precipitation, excessively cold weather, excessively hot weather) are foreseeable (essentially “normal” or tolerable) in each month. In most locations, the normal expectation for bad weather in a month will vary with the seasons.

Even if the parties anticipate a short project duration, the table (Exhibit B—Foreseeable Bad Weather Days) that is incorporated in SC-4.05.C should encompass the entire calendar year to ensure that, regardless of postponements, suspensions, or delays, the Work as actually performed is contractually covered by SC-4.05.C. **[SC-4.05.C includes and incorporates the table identified as Exhibit B—Foreseeable Bad Weather Days (located with other exhibits at the end of C-800)].**

An important step in drafting a supplemental clause regarding weather delays is establishing the source for actual weather records and site conditions (for lingering effects) and the required content of such records. A variety of sources may be viable options for weather records, but in general it is better when the weather monitoring site is relatively close to the Site. Sources may include the National Weather Service, media outlets that maintain weather-monitoring networks, certain schools and universities, and possibly wastewater conveyance utilities. Before specifying the source of data, verify that the data is available, and the type of data collected.

The text of SC-4.05.C, defining “abnormal weather” based on precipitation and temperature extremes, is indicated below. If the drafter elects to use this optional Supplementary Condition, edit the example language to suit the Project, and provide the weather thresholds required in the text and in the Exhibit B table.

A few specific Guidance points for SC-4.05.C:

1. Edit Paragraphs SC-4.05.C.5.b “(1).i)” and “(1).ii)”, to suit the Project; the times specified in Paragraph “(1).i)” are presumed times for wet weather to render the Site inoperable for the following workday.
2. Based on recorded weather data available from the weather station indicated in Paragraph SC-4.05.C.5.b “(2)”, insert in SC-4.05.C.5.b “(1).i)” and “(1).ii)” the threshold one-day precipitation quantity and the threshold temperatures (minimum and maximum).
3. Insert in the appropriate blanks in Paragraph SC-4.05.C.5.b “(2)” below the entity operating and maintaining the weather station, and the location of the weather station; for example, “National Weather Service weather monitoring station at the Buffalo-Niagara International Airport.” For the selected entity and site, verify the data types and frequency available for the particular weather monitoring station.
4. Based on data from the weather monitoring station indicated in Paragraph SC-4.05.C.5.b “(2)”, fill in all the cells in the table identified as Exhibit B—Foreseeable Bad Weather Days. Optimally, data indicated should be averaged over a period of not less than five years although other durations may be appropriate. Edit the sample language when other foreseeable weather factors can affect the construction, such as high winds or other factors.

SC-4.05 Amend Paragraph 4.05.C by adding the following subparagraphs:

5. *Weather-Related Delays*

- a. If “abnormal weather conditions” as set forth in Paragraph 4.05.C.2 of the General Conditions are the basis for a request for an equitable adjustment in the Contract Times, such request must be documented by data substantiating each of the following: 1) that weather conditions were abnormal for the period of time in which the delay occurred, 2) that such weather conditions could not have been reasonably anticipated, and 3) that such weather conditions had an adverse effect on the Work as scheduled.
- b. The existence of abnormal weather conditions will be determined on a month-by-month basis in accordance with the following:
 - 1) Every workday on which one or more of the following conditions exist will be considered a “bad weather day”:
 - i) Total precipitation (as rain equivalent) occurring between 7:00 p.m. on the preceding day (regardless of whether such preceding day is a workday) through 7:00 p.m. on the workday in question equals or exceeds **[threshold precipitation quantity]** of precipitation (as rain equivalent, based on the snow/rain conversion indicated in the table entitled Foreseeable Bad Weather Days; such table is hereby incorporated in this SC-4.05.C by reference.
 - ii) Ambient outdoor air temperature at 11:00 a.m. is equal to or less than the following low temperature threshold: **[temperature]** degrees Fahrenheit; or, at 3:00 p.m. the ambient outdoor temperature is equal to or greater than the following high temperature threshold: **[temperature]** degrees Fahrenheit.

- 2) Determination of actual bad weather days during performance of the Work will be based on the weather records measured and recorded by **[name of the entity operating the weather station]** weather monitoring station at **[location of the weather monitoring station]**.
- 3) Contractor shall anticipate the number of foreseeable bad weather days per month indicated in the table in Exhibit **[exhibit number]**—Foreseeable Bad Weather Days.
- 4) In each month, every bad weather day exceeding the number of foreseeable bad weather days established in the table in Exhibit **[exhibit number]**—Foreseeable Bad Weather Days will be considered as “abnormal weather conditions.” The existence of abnormal weather conditions will not relieve Contractor of the obligation to demonstrate and document that delays caused by abnormal weather are specific to the planned work activities or that such activities thus delayed were on Contractor’s then-current Progress Schedule’s critical path for the Project.

ARTICLE 5—SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.03 *Subsurface and Physical Conditions*

Guidance Notes—Reports and Drawings Containing Technical Data (Subsurface; Physical Conditions)

1. This is a mandatory Supplementary Condition. Paragraph 5.03, Subsurface and Physical Conditions, of the General Conditions requires the identification of reports and drawings that contain Technical Data regarding subsurface and physical conditions at or adjacent to the Site. See GC-5.03.A.1 and 2. This will typically include current and recent geotechnical reports, drawings of existing subsurface and surface conditions (including structures such as buildings and foundations), and any other documents that Owner or Engineer has determined to contain reliable Site information. GC-5.03.A.3 requires the identification of the specific Technical Data in the reports and drawings. This is an important task because only the Technical Data is entitled to reliance by Contractor—the remainder of the contents of the reports and drawings does not receive this elevated status.
2. Typical examples of the contents of Site-related reports and drawings that might be categorized by Owner or Engineer as Technical Data for contractual purposes are:
 - a. boring logs;
 - b. recorded measurements of subsurface water levels;
 - c. assessments of the condition of subsurface facilities;
 - d. laboratory test results; and
 - e. mapping based on remote sensing.
3. Use SC-5.03, presented immediately below, for the purpose of identifying the Site condition documents that contain Technical Data, and the specific Technical Data contained in each report and drawing.

4. In a change from the two previous editions of the EJCDC Construction Series documents (2013 and 2007), the user should not list all archival and other documents concerning the Site here in the Supplementary Conditions—as of 2018, for GC/SC-5.03 list in the Supplementary Conditions only those documents determined by Owner or Engineer to contain Technical Data.
5. *Filling in the tables:* SC-5.03.E contains a table for listing reports that contain Technical Data, and identifying that data; and SC-5.03.F contains a table for listing drawings that contain Technical Data. Examples of a completed row from each table follow, for illustrative purposes only:

- E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely:

Report Title	Date of Report	Technical Data
Results of Investigation of Subsoil Conditions and Geotechnical Recommendations—Riverside Wastewater Treatment Plant	August 8, 2018	Boring Log, Test Site 1, at page 32 of Report.

- F. The following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely:

Drawings Title	Date of Drawings	Technical Data
Record Drawings: Route 24 Overpass Abutment Project	November 30, 2012	All information in drawings, with the exception of the contents of Drawings 001 and 005.

6. In addition to requiring the identification of Technical Data in SC-5.03, EJCDC also requires that Owner identify and disclose to Bidders archival and other Site-related documents known to Owner (but that do not contain Technical Data and therefore are not listed here in the Supplementary Conditions), in a list distributed with the Instructions to Bidders. See Instructions to Bidders, Article 5. The Bidders may then review documents of interest, and perhaps glean information useful to them in fashioning a bid and planning the Work. There is no requirement, however, that Bidders or the Contractor review the documents disclosed in the Instructions to Bidders, nor are they held accountable for any data or information in such documents; similarly, Owner has not verified the data or information in these documents, and is not responsible for their accuracy. The requirement that Contractor review and take responsibility for Site information is limited to information in (1) the Contract Documents and (2) the Technical Data.
7. If the Supplementary Conditions neglect to expressly identify the Technical Data entitled to reliance, then certain data in documents such as a geotechnical report, environmental report, or similar investigative report prepared for the current Project are, by default definition, Technical Data upon whose accuracy Contractor may rely. See the default definition of Technical Data, GC-1.01.A.46.b.
8. Paragraph GC-5.03.B clarifies that Underground Facilities are shown or indicated in the Drawings. Requirements with respect to Underground Facilities are set forth in Paragraph GC-5.05.
9. Paragraph GC-5.06 requires disclosure of documents relating to Hazardous Environmental Conditions at the Site. Note that these requirements differ from the requirements regarding disclosure of documents relating to subsurface and physical conditions in GC-5.03, and here in SC-5.03.

10. If Owner elects to furnish a Geotechnical Baseline Report (GBR), use the alternate SC/GBR-5.03 and SC/GBR-5.04 presented in Exhibit C to this document, rather than the SC-5.03 version immediately following. **[Exhibit C is located at the end of C-800.]**

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

- E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely: **[If there are no such reports, so indicate in the table.]**

Report Title	Date of Report	Technical Data
		[Identify Technical Data]

- F. The following table lists the drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely: **[If there are no such drawings, so indicate in the table.]**

Drawings Title	Date of Drawings	Technical Data
		[Identify Technical Data]

- G. Contractor may examine copies of reports and drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Bidding Documents at **[location]** during regular business hours, or may request copies from Engineer.

5.06 *Hazardous Environmental Conditions*

Guidance Notes—Reports and Drawings Regarding Hazardous Environmental Conditions—This is a mandatory Supplementary Condition. Paragraph 5.06 of the General Conditions contemplates that Owner will identify all known documents regarding Hazardous Environmental Conditions (HEC) that have been identified at or adjacent to the Site. It also requires the identification of Technical Data (upon whose accuracy Contractor may rely) contained in such documents. Use SC-5.06, presented immediately below, to identify the known HEC documents. Refer to Guidance Note 5 preceding SC-5.03 for examples of completed rows of tables similar to the tables in SC-5.06. Also note that if either a geotechnical report or environmental report has been prepared for the Project, and the Supplementary Conditions neglect to expressly identify reports or drawings or reports' or drawings' Technical Data upon whose accuracy Contractor may rely, then the default definition of Technical Data in Paragraph GC-1.01.A.46.b of the General Conditions will apply.

SC-5.06 Add the following new paragraphs immediately after Paragraph 5.06.A.3:

4. The following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data (if any) upon which Contractor may rely: **[If there are no such reports, so indicate in the table]**

Report Title	Date of Report	Technical Data
		[Identify Technical Data]

5. The following table lists the drawings known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and Technical Data (if any) contained in such Drawings upon which Contractor may rely: **[If there are no such drawings, so indicate in the table]**

Drawings Title	Date of Drawings	Technical Data
		[Identify Technical Data]

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

Guidance Notes—Performance and Payment Bonds

1. *Deletion of Performance/Payment Bond Requirement:* Paragraph 6.01.A of the General Conditions requires that Contractor furnish a performance bond and a payment bond. If performance and payment bonds are not required for a specific Contract, include a Supplementary Condition that deletes the GC-6.01.A requirement.
2. *Performance/Payment Bond Forms:* Paragraph 6.01.C requires that all bonds be “in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract....” Some Owners may have in-house bond forms that must be used, or in some instances state or local law may mandate a specific bond form. In all other cases, EJCDC recommends that its standard performance and payment bond forms, EJCDC® C-610, Performance Bond (2018), and EJCDC® C-615, Payment Bond (2018), be included or specified. These bond forms were developed in collaboration by EJCDC with other principal design, construction, and surety organizations, and as a result contain industry-standard wording, organization, and terminology. (The 2010, 2013, and 2018 editions of these two bonds are essentially identical, and interchangeable.) Most sureties and bond producers have templates of the EJCDC bonds and can issue them readily.
3. If the EJCDC performance and payment bonds are required, EJCDC recommends that prospective Bidders or contractors be given sample copies of the two bond forms (typically as a part of the Bidding Documents), and buttress the requirement with an express Supplementary Condition specifying the use of the standard EJCDC bonds. The Supplementary Condition for that purpose follows.

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.A:

1. *Required Performance Bond Form:* The performance bond that Contractor furnishes will be in the form of EJCDC® C-610, Performance Bond (2010, 2013, or 2018 edition).
2. *Required Payment Bond Form:* The payment bond that Contractor furnishes will be in the form of EJCDC® C-615, Payment Bond (2010, 2013, or 2018 edition).

Guidance Notes—“Other Bonds,” Warranty Bond

1. Other Bonds

Paragraph 6.01.B states that if Contractor is required to provide a bond other than a performance or payment bond, the requirement will be set forth in the Supplementary Conditions. This statement is not relevant or related to a requirement that a Bidder must furnish a Bid Bond: such a requirement (if any) is part of the bidding process that occurs before entry into the construction contract, and the bid bond requirement would be included in the Instructions to Bidders. See Instructions to Bidders, Article 8. Rather, the reference is to any special purpose bond that is required.

2. Warranty Bond

Perhaps the most common “other” or special purpose bond that might be required is the warranty bond (also called a maintenance bond). A warranty bond provides assurance that Contractor (or if necessary the surety) will meet the contractual correction period obligations during a specified period of time after construction has been completed.

SC-6.01.B.1 presents model wording for requiring that Contractor furnish a warranty bond. EJCDC’s standard form for such a bond is EJCDC® C-612, Warranty Bond (2018); if SC-6.01.B.1 is used, the Warranty Bond form should be provided to bidders or prospective contractors with the Supplementary Conditions (typically as a part of the Bidding Documents).

The C-612 Warranty Bond is intended to be used to provide bonding for a period of time greater than one year after Substantial Completion. EJCDC® C-610, Performance Bond (2018) already obligates the surety with respect to the correction of defective Work (C-610, Paragraph 7.1), and has a duration sufficient to allow bond claims based on defects discovered during the standard one-year correction period (GC-6.01.A; C-610, Paragraph 11), and the purchase price charged for the performance bond is based on that bond remaining in effect during the one-year correction period. Thus, a warranty bond is not needed if the correction period remains the standard one year, and indeed would be redundant with the performance bond if used solely to cover that one-year correction period.

To avoid possible conflicts regarding responsibilities between the surety that issues the performance bond and the surety that issues the warranty bond, EJCDC recommends a requirement that the two bonds be issued by the same surety. See SC-6.01.B.3.

Although in theory a warranty bond could be furnished for a very lengthy duration (four or more years beyond Substantial Completion), such a lengthy bond would probably be commercially difficult to obtain and very expensive. EJCDC recommends an endpoint for the warranty bond of either two years after Substantial Completion (essentially extending the bonded coverage by one additional year) or three years after Substantial Completion (extending the bonded coverage by two additional years). These two recommended options are embedded in the C-612 Warranty Bond form.

By its terms the EJCDC warranty bond applies to the contractual correction obligation at GC-15.08. SC-6.01.B.2 extends that contractual correction period beyond its standard one-year duration—the

contractual extension should match the Warranty Bond duration. For the sake of clarity, EJCDC recommends a cross-reference to Supplementary Condition SC-15.08.A—see Article 15 below.

Because correction period work is, in total, likely to cost only a modest fraction of the Contract Price, warranty bonds typically have a bond amount that is 10 or 15 percent of the Contract Price. The precise percentage required should be clearly indicated in the Supplementary Condition.

The suggested wording to extend the correction period and require that Contractor furnish a warranty bond follows:

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.B:

1. The correction period specified as one year after the date of Substantial Completion in Paragraph 15.08.A of the General Conditions is hereby revised to be **[number—either 2, 3, or other]** years after Substantial Completion.
2. After Substantial Completion, Contractor shall furnish a warranty bond issued in the form of EJCDC® C-612, Warranty Bond (2018). The warranty bond must be in a bond amount of **[number—either 10, 15, or other]** percent of the final Contract Price. The warranty bond period will extend to a date **[number—either 2, 3, or other]** years after Substantial Completion of the Work. Contractor shall deliver the fully executed warranty bond to Owner prior to or with the final application for payment, and in any event no later than 11 months after Substantial Completion.
3. The warranty bond must be issued by the same surety that issues the performance bond required under Paragraph 6.01.A of the General Conditions.

6.02 *Insurance—General Provisions*

Guidance Notes—Modifying Insurance Company Ratings Requirements—Paragraph 6.02.B of the General Conditions requires that all companies that provide insurance policies required under this Contract must have an A.M. Best rating of A-VII or better, unless a different standard is indicated in the Supplementary Conditions. The A.M. Best ratings are based on the financial strength and size of the insurance company, with A-VII representing a commonly used standard. SC-6.02 is the location for noting any different standard, whether narrower or broader.

In some states, not all worker's compensation insurers obtain A.M. Best ratings. The Owner may wish to include the following optional exception (modified to meet applicable provisions in the state) to the requirement in Paragraph 6.02.B:

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.B:

1. Contractor may obtain worker's compensation insurance from an insurance company that has not been rated by A.M. Best, provided that such company (a) is domiciled in the state in which the Project is located, (b) is certified or authorized as a worker's compensation insurance provider by the appropriate state agency, and (c) has been accepted to provide worker's compensation insurance for similar projects by the state within the last 12 months.

Guidance Notes—Specifying Insurance to be carried by Subcontractors and Suppliers—GC-6.02.H indicates that Contractor must require its Subcontractors and Suppliers to purchase and maintain

insurance that is appropriate for their participation in the Project. This provision intentionally gives Contractor considerable latitude in risk management with respect to its Subcontractors and Suppliers. In most cases the Contractor will have more familiarity than Owner with the risks associated with particular types of subcontracted work, with the Subcontractors and Suppliers selected, and with the insurance coverage requirements that should be imposed. Occasionally, however, the Owner will choose to establish insurance requirements that apply to some or all Subcontractors or Suppliers. SC-6.02.H.3 may be used for that purpose.

SC-6.02 Add the following paragraph immediately after Paragraph 6.02.H.2 of the General Conditions:

3. For the following Subcontractors, Suppliers, or categories of Subcontractor or Supplier, Contractor shall require the following specified insurance, with policy limits as stated:
[Identify Subcontractors, Suppliers, or categories of same, and insert specific insurance requirements and policy limits]

6.03 Contractor's Insurance

Guidance Notes—Specifying Contractor's Insurance, Including Coverage Limits—This is a mandatory Supplementary Condition, because it is the location for specifying the insurance policies, coverages, and endorsements to be maintained by Contractor (other than builder's risk and other property insurance, which are addressed in SC-6.04), and the minimum coverage limits. However, not all components of SC-6.03 will be used for the specific Contract that is being drafted, and many parts may need to be modified or revised to meet specific insurance requirement objectives. Consultation with risk managers, insurance specialists, and legal counsel is a necessity.

The information set forth in this Supplementary Condition (and in all other contractual provisions regarding bonds and insurance) is typically provided by Owner, either directly or through written instructions given to Engineer (see EJCDC® C-051, Engineer's Letter to Owner Requesting Instructions Concerning Bonds and Insurance (2018), and EJCDC® C-052, Owner's Instructions to Engineer Concerning Bonds and Insurance (2018)).

The user should refer to the following Guidance points with respect to specific features of SC-6.03, including categories of insurance with unique features (such as Umbrella or Excess Liability insurance, SC-6.03.K), or that are required only under specific circumstances (such as Railroad Protective Liability insurance, SC-6.03.O):

1. *Deciding Whether to Require Umbrella/Excess Insurance:* SC-6.03.K, Umbrella or Excess Liability, is a standard insurance provision that requires Contractor to carry an Umbrella or Excess Liability policy. Some Owners do not require that Contractor carry Umbrella/Excess insurance, perhaps viewing the decision to obtain and maintain Umbrella/Excess, and the specific amount of Umbrella/Excess coverage, as risk management choices best left to the Contractor; and presumably in such cases the Owner accepts that the primary policies (most importantly Commercial General Liability), as specified, provide adequate protection.

If Owner revises the standard terms by deleting the requirement that Contractor provide Excess or Umbrella liability insurance, then Owner may wish to consider requiring (in SC-6.03.G, Commercial General Liability—Form and Content) that "The general aggregate limits under SC-6.03.I (Commercial General Liability—Minimum Policy Limits) be maintained fully available for this Contract by obtaining

and maintaining a Designated Construction Project General Aggregate Limit endorsement, or equivalent.”

2. *Allowing the Umbrella/Excess Insurance to Satisfy Underlying Coverage Requirements*

- a. The optional Supplementary Condition SC-6.03.L, Using Umbrella or Excess Liability to Meet CGL and Other Policy Limit Requirements, is used to contractually authorize the common practice in which an Owner allows Contractor to meet the required minimum policy limits for commercial general liability and other primary liability policies by attributing a portion of Umbrella/Excess coverage to the underlying policy or policies. For example, if the Contract requires \$5 million in CGL coverage; SC-6.03.L specifies (in the brackets in the last sentence) that a minimum of \$3 million of the Umbrella must remain unattributed to any underlying policy; and Contractor has a CGL policy of \$3 million and a \$10 million Umbrella policy, then \$2 million of the Umbrella could be attributed to the CGL, to meet the \$5 million CGL minimum. Under that example, such attribution would still leave a “balance” of \$8 million under the Umbrella, thus satisfying the requirement that a minimum of \$3 million of the Umbrella remain unattributed to any underlying policy.
- b. In those cases in which SC-6.03.L, Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements, is used, it is important fill in the brackets in the last sentence, specifying the unattributed balance that is the appropriate amount for the specific Contract.
- c. Not all Owners will choose to allow an Umbrella/Excess policy to provide partial satisfaction of a primary liability policy coverage requirement, preferring the simpler approach of Contractor providing an underlying policy (most notably, CGL) in the full amount required. When this is the preference, do not include SC-6.03.L, Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements.

3. *Combining Contractor’s Pollution and Professional Liability Policies:* Contractor’s Pollution Liability Insurance (SC-6.03.M) and Contractor’s Professional Liability Insurance (SC-6.03.N) are presented as two distinct required policies. However, Contractor’s Pollution Liability and Contractor’s Professional Liability policies are sometimes sold as a hybrid or combined policy. After consulting with its risk managers, Owner may wish to supplement the two provisions with a statement indicating that Contractor may provide such a combination policy, as an acceptable alternative to providing two separate policies, at a stated policy limit for the combination policy.

4. *Railroad Protective Liability Policy:* If any portion of the Work will take place within 50 feet of railroad-owned or controlled property, the railroad company will likely require that the Contractor obtain a railroad protective liability policy. Use Paragraph SC-6.03.O below if such a policy is required.

A railroad protective liability policy is for the benefit of the railroad company (not the Contractor or Owner), providing the railroad with protection from both liability and property damage it incurs because of the Contractor’s construction activities. The railroad protective policy is site-specific, and applies only when work is in progress—it does not include completed operations coverage.

The standard coverage includes bodily injury or property damage that arises out of the acts or omissions of railroad employees, to the extent the acts or omissions are related to or in connection with the Contractor’s activities. The coverage of physical damage to property should apply to real and personal property that is owned or leased by the railroad, including rolling stock, tracks, trestles, buildings, and structures.

The railroad will usually have specific requirements for the railroad protective policy, including per-claim and aggregate policy limits, coverages, and the formal names of the railroad and other related

insureds. In most cases the railroad will require an indemnification from Contractor, in addition to the insurance policy. The Owner or other drafter should include all known railroad requirements here or elsewhere in the Contract, if the requirements are known at the time the Contract is drafted.

5. *Unmanned Aerial Vehicle Liability Insurance:* The use of aerial drones on construction projects is increasingly common. If there is a possibility that Contractor will use drones on the specific Project, Owner may wish to include SC-6.03.P, Unmanned Aerial Vehicle Liability Insurance.
6. *Other Required Insurance:* If Owner or its insurance advisors or risk managers have identified other insurance policies that Contractor should obtain and maintain, based on the Owner's or Project's specific needs, identify the required policies and minimum policy limits at SC-6.03.Q. Note that Builder's Risk insurance is separately addressed in GC/SC-6.04.

SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:

- D. *Other Additional Insureds:* As a supplement to the provisions of Paragraph 6.03.C of the General Conditions, the commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies must include as additional insureds (in addition to Owner and Engineer) the following: **[Here list by legal name (not category, role, or classification) other persons or entities to be included as additional insureds. See GC-6.03.C.]**
- E. *Workers' Compensation and Employer's Liability:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance, including, as applicable, United States Longshoreman and Harbor Workers' Compensation Act, Jones Act, stop-gap employer's liability coverage for monopolistic states, and foreign voluntary workers' compensation (from available sources, notwithstanding the jurisdictional requirement of Paragraph 6.02.B of the General Conditions).

Workers' Compensation and Related Policies	Policy limits of not less than:
Workers' Compensation	
State	Statutory
Applicable Federal (e.g., Longshoreman's)	Statutory
Foreign voluntary workers' compensation (employer's responsibility coverage), if applicable	Statutory
Jones Act (if applicable)	
Bodily injury by accident—each accident	\$
Bodily injury by disease—aggregate	\$
Employer's Liability	
Each accident	\$
Each employee	\$
Policy limit	\$
Stop-gap Liability Coverage	
For work performed in monopolistic states, stop-gap liability coverage must be endorsed to either the worker's compensation or commercial general liability policy with a minimum limit of:	\$

- F. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,
 2. damages insured by reasonably available personal injury liability coverage, and
 3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- G. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage.
 - a. Such insurance must be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.
 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 4. Underground, explosion, and collapse coverage.
 5. Personal injury coverage.
 6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
 7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- H. *Commercial General Liability—Excluded Content:* The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
1. Any modification of the standard definition of "insured contract" (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).
 2. Any exclusion for water intrusion or water damage.
 3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.
 4. Any exclusion of coverage relating to earth subsidence or movement.

5. Any exclusion for the insured's vicarious liability, strict liability, or statutory liability (other than worker's compensation).
6. Any limitation or exclusion based on the nature of Contractor's work.
7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.

I. *Commercial General Liability—Minimum Policy Limits*

Commercial General Liability	Policy limits of not less than:
General Aggregate	\$
Products—Completed Operations Aggregate	\$
Personal and Advertising Injury	\$
Bodily Injury and Property Damage—Each Occurrence	\$

- J. *Automobile Liability:* Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.

Automobile Liability	Policy limits of not less than:
Bodily Injury	
Each Person	\$
Each Accident	\$
Property Damage	
Each Accident	\$
[or]	
Combined Single Limit	
Combined Single Limit (Bodily Injury and Property Damage)	\$

- K. *Umbrella or Excess Liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.

Excess or Umbrella Liability	Policy limits of not less than:
Each Occurrence	\$
General Aggregate	\$

- L. *Using Umbrella or Excess Liability Insurance to Meet CGL and Other Policy Limit Requirements:* Contractor may meet the policy limits specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policy's policy limits and partial attribution of the policy limits of an umbrella or excess liability policy that is at least as broad in coverage as that of the underlying policy, as specified herein. If such umbrella or excess liability policy

was required under this Contract, at a specified minimum policy limit, such umbrella or excess policy must retain a minimum limit of \$[specify amount] after accounting for partial attribution of its limits to underlying policies, as allowed above.

- M. *Contractor's Pollution Liability Insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage, including cleanup costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance must be maintained for no less than three years after final completion.

Contractor's Pollution Liability	Policy limits of not less than:
Each Occurrence/Claim	\$
General Aggregate	\$

- N. *Contractor's Professional Liability Insurance:* If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance must cover negligent acts, errors, or omissions in the performance of professional design or related services by the insured or others for whom the insured is legally liable. The insurance must be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. The retroactive date on the policy must pre-date the commencement of furnishing services on the Project.

Contractor's Professional Liability	Policy limits of not less than:
Each Claim	\$
Annual Aggregate	\$

- O. *Railroad Protective Liability Insurance:* Prior to commencing any Work within 50 feet of railroad-owned and controlled property, Contractor shall (1) endorse its commercial general liability policy with ISO CG 24 17, removing the contractual liability exclusion for work within 50 feet of a railroad, (2) purchase and maintain railroad protective liability insurance meeting the following requirements, (3) furnish a copy of the endorsement to Owner, and (4) submit a copy of the railroad protective policy and other railroad-required documentation to the railroad, and notify Owner of such submittal.

[Insert additional specific requirements, commonly set by the railroad, here.]

Railroad Protective Liability Insurance	Policy limits of not less than:
Each Claim	\$
Aggregate	\$

- P. *Unmanned Aerial Vehicle Liability Insurance:* If Contractor uses unmanned aerial vehicles (UAV—commonly referred to as drones) at the Site or in support of any aspect of the Work, Contractor shall obtain UAV liability insurance in the amounts stated; name Owner, Engineer, and all individuals and entities identified in the Supplementary Conditions as additional

insureds; and provide a certificate to Owner confirming Contractor's compliance with this requirement. Such insurance will provide coverage for property damage, bodily injury or death, and invasion of privacy.

Unmanned Aerial Vehicle Liability Insurance	Policy limits of not less than:
Each Claim	\$
General Aggregate	\$

- Q. *Other Required Insurance:* **[Here list additional types and amounts of insurance that Contractor is required to carry.]**

6.04 *Builder's Risk and Other Property Insurance*

Guidance Notes—Owner Purchase of Builder's Risk Insurance—The General Conditions require the Contractor to purchase and maintain builder's risk insurance. GC-6.04.A. The detailed requirements for the builder's risk insurance are set forth here in the Supplementary Conditions, in provisions such as SC-6.04.F, G, and H. (The option of requiring the Contractor to purchase an installation floater, as an alternative to builder's risk insurance, is presented in the alternate SC-6.04.A that follows the more commonly used builder's risk clauses.)

In the event that the builder's risk purchase requirement will be flipped, such that the Owner, rather than the Contractor, will purchase the builder's risk insurance, use the following SC-6.04.A:

SC-6.04 Delete Paragraph 6.04.A and insert the following in its place:

- A. Owner shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.

Guidance Notes—Builder's Risk Insurance Requirements—The standard builder's risk requirements in this Supplementary Condition may include some items that are not applicable to the specific Project. The user should revise the requirements based on knowledge of the Project, risk management analysis, and consultation with Owner's insurance advisors and legal counsel. The requirements are intended to be used regardless of whether the Contractor purchases the builder's risk insurance (the default assumption, as stated in GC-6.04.A), or the purchase responsibility is flipped to the Owner (see SC-6.04.A immediately above).

Some coverages, such as coverage of property in temporary storage, or coverage of property in transit, are commonly subject to sublimits—specific monetary caps on the amount of coverage. Although a sublimit may be appropriate (or at least tolerable) for some risk categories, the drafter should consult with an insurance advisor and specify a minimum for each sublimit, to avoid underinsuring the risk of a loss in such a coverage category. The provisions of SC-6.04.F indicate when a coverage category is likely to be subject to a sublimit, and provide a place for specifying an acceptable minimum. See SC-6.04.F.4, 5, and 12. SC-6.04.F.13 provides a location for specifying other sublimits.

SC-6.04.F.5 requires coverage of construction materials “in transit.” Specific policies may define this as being limited to domestic, overland transit, such as rail or truck transit. Because the risk of loss in transit will ultimately be borne by Contractor, a risk that is not within the scope of the specific builder’s risk insurance policy (a loss during shipment from overseas, for example) could be managed separately by Contractor in its purchase agreement with the vendor.

SC-6.04 Supplement Paragraph 6.04 of the General Conditions with the following provisions:

F. *Builder’s Risk Requirements:* The builder’s risk insurance must:

1. be written on a builder’s risk “all risk” policy form that at a minimum includes insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment stored and in transit, and must not exclude the coverage of the following risks: fire; windstorm; hail; flood; earthquake, volcanic activity, and other earth movement; lightning; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; and water damage (other than that caused by flood).
 - a. Such policy will include an exception that results in coverage for ensuing losses from physical damage or loss with respect to any defective workmanship, methods, design, or materials exclusions.
 - b. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake, volcanic activity, and other earth movement; or flood, are not commercially available under builder’s risk policies, by endorsement or otherwise, such insurance will be provided through other insurance policies acceptable to Owner and Contractor.
2. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
3. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of contractors, engineers, and architects).
4. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier). If this coverage is subject to a sublimit, such sublimit will be a minimum of \$[amount].
5. extend to cover damage or loss to insured property while in transit. If this coverage is subject to a sublimit, such sublimit will be a minimum of \$[amount].

6. allow for the waiver of the insurer's subrogation rights, as set forth in this Contract.
7. allow for partial occupancy or use by Owner by endorsement, and without cancellation or lapse of coverage.
8. include performance/hot testing and start-up, if applicable.
9. be maintained in effect until the Work is complete, as set forth in Paragraph 15.06.D of the General Conditions, or until written confirmation of Owner's procurement of property insurance following Substantial Completion, whichever occurs first.
10. include as named insureds the Owner, Contractor, Subcontractors (of every tier), and any other individuals or entities required by this Contract to be insured under such builder's risk policy. For purposes of Paragraphs 6.04, 6.05, and 6.06 of the General Conditions, and this and all other corresponding Supplementary Conditions, the parties required to be insured will be referred to collectively as "insureds." In addition to Owner, Contractor, and Subcontractors of every tier, include as insureds the following:
 - a. **[Here list by legal name (not category, role, or classification) other persons or entities to be included on the builder's risk policy as named insureds. It is generally recommended to list the insured's full legal/contractual name, address, contact person, telephone, and e-mail address. Include only persons or entities that have property at the Site that is to be insured by the builder's risk insurance. If applicable, separately identify any mortgagee or lender required to be named as a loss payee.]**
11. include, in addition to the Contract Price amount, the value of the following equipment and materials to be installed by the Contractor but furnished by the Owner or third parties:
 - a. **[Here list or provide cross-reference to specific items of Owner-furnished (or third-party furnished) equipment, and purchase value; do not list items whose value is already included in the Contract Price.]**
12. If debris removal in connection with repair or replacement of insured property is subject to a coverage sublimit, such sublimit will be a minimum of \$[amount].
13. In addition to the coverage sublimits stated above, the following coverages are also subject to sublimits, as follows:
 - a. **[Here list a specific coverage, or cause of loss, that has been determined to be likely to be subject to a sublimit. If not applicable, then delete Paragraph SC-6.04.F.13 in its entirety.]** If this coverage is subject to a sublimit, such sublimit will be a minimum of \$[amount].

Guidance Notes—Loss of Revenue and "Soft Cost" Coverage—The basic coverage of a builder's risk policy provides compensation for direct physical loss or damage to the Work. Such loss or damage often has secondary impacts associated with delays in completion of the Work. One significant secondary impact is loss of revenue. Another broad category of secondary impacts is often referred to as "soft costs"—extended financing costs, management and engineering expenses, tax and permit costs, and insurance.

It is usually possible to expand the basic builder's risk coverage to insure against loss of revenue and soft cost losses. SC-6.04.G provides a starting point for doing so. This clause should be reviewed carefully and

supplemented as needed to obtain the coverage needed for the specific Project. Substantial input from Owner, working in conjunction with an insurance broker or consultant, is necessary to identify specific soft cost exposures, and to quantify the scope of possible losses. Without such input, it would be impossible for the builder's risk underwriters to assess risks and develop an appropriate premium.

For example, if soft cost coverage will extend to loss of revenue of a processing facility if it is completed late (as the result of physical damage from a covered risk, such as a fire), then it will be essential for the builder's risk insurers or brokers who price out the insurance to have a reasonable estimate of anticipated daily revenue and other financial factors. In a competitive bidding setting, and assuming that the Contractor will procure the builder's risk insurance (and include or account for the premium in the bid price), this means that such information will need to be furnished to bidders, who can then communicate it to brokers, who will furnish quotes for premiums.

As an alternative, Owner may prefer to solicit bids based on a generic requirement (such as that stated in SC-6.04.G), and then work with the selected Contractor and its insurer to refine the scope of loss of revenue and soft cost coverage and the related premiums, and issue a Change Order to document the precise coverage and any resulting change in Contract Price.

SC-6.04 Supplement Paragraph 6.04 of the General Conditions with the following provision:

- G. *Coverage for Completion Delays:* The builder's risk policy will include, for the benefit of Owner, loss of revenue and soft cost coverage for losses arising from delays in completion that result from covered physical losses or damage. Such coverage will include, without limitation, fixed expenses and debt service for a minimum of 12 months with a maximum deductible of 30 days, compensation for loss of net revenues, rental costs, and attorneys' fees and engineering or other consultants' fees, if not otherwise covered.

Guidance Notes—Builder's Risk Deductibles—Paragraph 6.04.A of the General Conditions requires builder's risk insurance on a completed value basis, subject to such deductible amounts as are provided by the Supplementary Conditions. SC-6.04.H provides a means of identifying a primary deductible; other specific deductibles may also be added. It is common for builder's risk policies to feature several different deductibles, typically including a primary deductible and specific deductibles applicable to specific types of loss, such as flood and earth movement.

In some cases, the Owner (as the party directing or specifying the content of the insurance-related Supplementary Conditions) will choose not to specify any deductibles, leaving establishment of the deductible amounts to the discretion of the purchasing party, which is responsible for payment of the deductibles. Even when a deductible is stipulated, it is typically a maximum amount; the purchaser may choose to purchase a policy with a lower deductible.

The builder's risk policies available for projects in coastal and other high-risk areas may have special deductible provisions for wind and flood damage (hurricanes), earthquakes, and other specific risks. Such deductibles are determined based on a percentage of the property value at the time of loss, rather than being stated as a specific dollar amount. SC-6.04.H should be revised to reflect coastal or other local conditions that change the approach to deductibles.

SC-6.04 Supplement Paragraph 6.04 of the General Conditions with the following provisions:

- H. *Builder's Risk and Other Property Insurance Deductibles:* The purchaser of any required builder's risk, installation floater, or other property insurance will be responsible for costs not covered because of the application of a policy deductible.
 - 1. The builder's risk policy (or if applicable the installation floater) will be subject to a deductible amount of no more than \$[number] for direct physical loss in any one occurrence.

Guidance Notes—Installation Floater—An installation floater is insurance carried by a specific contractor, covering only the materials and equipment to be incorporated in the contractor's work. It typically does not insure against losses that occur after installation. In most cases, builder's risk insurance offers broader coverage, covers the Owner, Contractor, and Subcontractors, and is the preferred risk management instrument. On some projects, an installation floater may be an acceptable alternative to a builder's risk policy. For example, on a pipeline project it may be sufficient from a risk management standpoint to insure against loss or damage to the piping until installation, at which time there is little further risk from standard insurable perils such as fire or windstorm. Because the Owner will typically not be an insured, the use of an installation floater also assumes a risk management decision that protecting the Contractor's interest in the materials and equipment is sufficient to assure the best interests of the project. See EJCDC® C-001, Commentary on the 2018 EJCDC Construction Documents (2018).

If, after consultation with its risk managers, Owner elects to allow purchase of an installation floater rather than a builder's risk policy, the following SC-6.04.A should be included as a Supplementary Condition; GC-6.04.B, GC-6.04.C, GC-6.04.D, and GC-6.04.E should be retained; SC-6.04.F, Builder's Risk Requirements, should not be included; and SC-6.04.H, Builder's Risk and other Property Insurance Deductibles, should be included. Owner should determine whether soft cost and related coverage is available and warranted, and if so modify the contents of SC-6.04.G, Coverage for Completion Delays, for the installation floater requirement.

SC-6.04 Delete Paragraph 6.04.A of the General Conditions and substitute the following in its place:

- A. *Installation Floater*
 - 1. Contractor shall provide and maintain installation floater insurance on a broad form or "all risk" policy providing coverage for materials, supplies, machinery, fixtures, and equipment that will be incorporated into the Work ("Covered Property"). Coverage under the Contractor's installation floater will include loss from covered "all risk" causes (perils) to Covered Property:
 - a. of the Contractor, and Covered Property of others that is in Contractor's care, custody, and control;
 - b. while in transit to the Site, including while at temporary storage sites;
 - c. while at the Site awaiting and during installation, erection, and testing;
 - d. continuing at least until the installation or erection of the Covered Property is completed, and the Work into which it is incorporated is accepted by Owner.
 - 2. The installation floater coverage cannot be contingent on an external cause or risk, or limited to property for which the Contractor is legally liable.

3. The installation floater coverage will be in an amount sufficient to protect Contractor's interest in the Covered Property. The Contractor will be solely responsible for any deductible carried under this coverage.
4. This policy will include a waiver of subrogation applicable to Owner, Contractor, Engineer, all Subcontractors, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.03 Labor; Working Hours

Guidance Notes—Defining “Regular Hours” and “Legal Holidays”—Paragraph 7.03.C of the General Conditions restricts Contractor to working during “regular hours” Monday through Friday, and no work is permitted on “legal holidays.” To provide details regarding the meaning of the terms “regular hours” and “legal holidays,” consider specifically defining them by adding the following:

SC-7.03 Add the following new subparagraphs immediately after Paragraph 7.03.C:

1. Regular working hours will be **[Here insert schedule of regular working hours]**.
2. Owner's legal holidays are **[Here insert list of legal holidays]**.

Guidance Notes—Days of the Week That May be Worked—To modify the days of the week that Contractor may work, use the following:

SC-7.03 Amend the first and second sentences of Paragraph 7.03.C to state “...all Work at the Site must be performed during regular working hours, **[day of the week]** through **[day of the week]**. Contractor will not perform Work on a **[day of the week]**, **[day of the week]**, or any legal holiday.”

Guidance Notes—Unlimited Work Schedule—If the Owner has no objections to the Contractor working multiple shifts, weekends, and legal holidays, use the following:

SC-7.03 Delete Paragraph 7.03.C in its entirety, and insert the following:

- C. In the absence of any Laws or Regulations to the contrary, Contractor may perform the Work on holidays, during any or all hours of the day, and on any or all days of the week, at Contractor's sole discretion.

Guidance Notes—Responsibility for Overtime Costs—If Contractor is permitted to Work outside regular hours and on weekends and holidays, whether by a contractual provision or by Owner's consent during the course of the Project, then it is good practice to address the issue of whether Owner may charge Contractor for engineering expenses associated with the non-regular schedule. Some Owners may prefer to absorb these costs to incentivize (or at least facilitate) an aggressive schedule and timely completion; and in many cases the net additional expense may be modest. Other Owners may prefer to establish and

collect a charge for the engineering services. Add the following as SC-7.03.D, making a policy choice regarding responsibility in the beginning of the sentence:

SC-7.03 Add the following new paragraph immediately after Paragraph 7.03.C:

- D. **[Contractor] [Owner] [choose one and delete the other]** shall be responsible for the cost of any overtime pay or other expense incurred by the Owner for Engineer's services (including those of the Resident Project Representative, if any), Owner's representative, and construction observation services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular work day. If Contractor is responsible but does not pay, or if the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

Guidance Notes—Defining Overtime Costs—If responsibility for costs in SC-7.03.D will be allocated to Contractor, Owner may wish to provide some specificity regarding the potential costs, through the addition of the following:

SC-7.03 Add the following new subparagraph immediately after Paragraph SC-7.03.D:

1. For purposes of administering the foregoing requirement, additional overtime costs are defined as **[Here insert parameters for compensated overtime hours]**.

7.10 Taxes

Guidance Notes—Sales and Use Tax Exemptions—If Owner qualifies for a state or local sales or use tax exemption in the purchase of certain materials and equipment, add the following Supplementary Condition, with any revisions necessary to meet the specific applicable exemption rules.

If instructions to bidders or proposers are used, confirm that the provisions here are consistent with the corresponding provisions in such instructions. See EJCDC® C-200, Instructions to Bidders for Construction Contracts (2018), Article 21.

SC-7.10 Add a new paragraph immediately after Paragraph 7.10.A:

- A. Owner is exempt from payment of sales and compensating use taxes of the State of **[name of state where Project is located]** and of cities and counties thereof on all materials to be incorporated into the Work.
1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the Work.
 2. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the Work.

7.13 Safety and Protection

Guidance Notes—Owner's Safety Programs—Some Owners have written safety programs with which construction contractors must comply. If such is the case, Paragraph 7.13.G of the General Conditions

states that the safety program will be identified or included in the Supplementary Conditions or Specifications (and Paragraph 9.12.B requires Owner to provide a copy of such programs to Contractor).

If the identification of the Owner's safety programs will occur in the Supplementary Conditions, use the following SC-7.13. If there is a Specification section (typically in Division 01) that addresses the Owner's safety programs, then SC-7.13 is unnecessary, though it could be retained as a means of providing a cross-reference to the specific location in the Specifications.

SC-7.13 Insert the following after the second sentence of Paragraph 7.13.G:

The following Owner safety programs are applicable to the Work: **[Here expressly identify by title and/or date, any such Owner safety programs. If Owner's safety programs are included in or addressed in the Specifications, SC-7.13 may be used to provide a cross-reference to the Specification section].**

ARTICLE 8—OTHER WORK AT THE SITE

8.02 Coordination

Guidance Notes—Coordinating Other Work at Site—Paragraph 8.02 of the General Conditions requires that if in addition to retaining Contractor, Owner will arrange to have others perform work at the Site, Owner must provide to Contractor specified information regarding coordination of construction activities. (Note that Owner should provide specific information about the other work—nature of the work, scope, schedule, exact location—elsewhere in the Contract Documents or in other documentation.) When applicable, add the following to provide such information:

SC-8.02 Add the following new Paragraph 8.02.C immediately after Paragraph 8.02.B:

- C. Owner intends to contract with others for the performance of other work at or adjacent to the Site.
 - 1. **[Here identify individual or entirety]** shall have authority and responsibility for coordination of the various contractors and work forces at the Site;
 - 2. The following specific matters are to be covered by such authority and responsibility: **[Here itemize such matters];**
 - 3. The extent of such authority and responsibilities is: **[Here provide the extent].**

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.13 Owner's Site Representative

Guidance Notes—Owner's Site Representative—The EJCDC Construction series documents assume that the Engineer will be Owner's representative during construction. See EJCDC® C-520, Agreement Between Owner and Contractor for Construction Contract (Stipulated Price) (2018), Paragraph 3.01, and GC-10.01. On many projects the Engineer will carry out duties at the Site through a Resident Project Representative (RPR), as addressed in GC-10.03. When that is the case, SC-10.03.C and SC-10.03.D should be included, as modified for the specific Project.

Paragraph 10.03.B of the General Conditions indicates that the Owner may designate a representative or agent who is not Engineer's consultant, agent, or employee, to represent Owner at the Site ("Owner's Site Representative"). In such case the Owner typically would not have the Engineer furnish a Resident Project Representative, and hence SC-10.03.B below would be used to indicate there is no Engineer's Resident Project Representative; and typically SC-9.13 would be used for the identification of the Owner's Site Representative.

Note that the following SC-9.13, if used, must be supplemented by customized text that explains the responsibilities of the Owner's Site Representative, so far as such are relevant to Contractor. The content of Paragraphs SC-10.03.C below may be a helpful starting point in drafting such supplemental text. In addition, if Owner's retention of an Owner's Site Representative will affect other aspects of Engineer's status during construction, other portions of Article 10 and many other parts of the General Conditions will need to be revised. In such cases it is typical for (and Laws and Regulations may require) the design engineer (as engineer of record) to at least retain a role with respect to design intent reviews of submittals and similar aspects of the Work.

SC-9.13 Add the following new paragraph immediately after Paragraph 9.12 of the General Conditions:

9.13 *Owner's Site Representative*

- A. Owner will furnish an "Owner's Site Representative" to represent Owner at the Site and assist Owner in observing the progress and quality of the Work. The Owner's Site Representative is not Engineer's consultant, agent, or employee. Owner's Site Representative will be **[here identify individual or entity]**. The authority and responsibilities of Owner's Site Representative follow: **[Here describe the duties and activities of the Owner's Site Representative.]**

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.03 *Resident Project Representative*

Guidance Notes—Engineer's Resident Project Representative (RPR)—As indicated in Paragraph 10.03 of the General Conditions, in those cases in which the Engineer will provide a Resident Project Representative (RPR) during construction, the authority and responsibilities of the RPR with respect to the Contractor must be specified in the Supplementary Conditions. SC-10.03.C and SC-10.03.D, below, provide a mechanism for doing so.

In the alternative, in some cases Engineer will not provide RPR services, either because there will not be an RPR, or because a party other than Engineer will provide the site services. When such is the case, SC-10.03.A.1 below should be used.

As indicated in Paragraph 10.03 of the General Conditions, the Owner may designate a representative or agent who is not Engineer's consultant, agent, or employee, to represent Owner at the Site. In such case, in addition to using SC-10.03.A.1, below, refer to the Guidance Note in Article 9 and use SC-9.13 above.

SC-10.03 Add the following new subparagraph immediately after Paragraph 10.03.A:

1. On this Project, by agreement with the Owner, the Engineer will not furnish a Resident Project Representative to represent Engineer at the Site or assist Engineer in observing the progress and quality of the Work.

Guidance Notes—RPR Services—As discussed, the most typical case is that the site representative is Engineer's consultant, agent, or employee, in which case SC-10.03.C and SC-10.03.D are mandatory. SC-10.03.C and SC-10.03.D focus on the role of the Resident Project Representative with respect to the Contractor. The RPR's scope of services and obligations to Owner are typically more extensive than the provisions here in the construction contract; they are spelled out in detail in Exhibit D to EJCDC® E-500, Agreement Between Owner and Engineer for Professional Services. The following should be edited to indicate the specific RPR authority and responsibilities that apply to this Contract.

SC-10.03 Add the following new paragraphs immediately after Paragraph 10.03.B:

- C. The Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. The RPR will:
 1. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
 2. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
 3. *Liaison*
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for Contractor's proper execution of the Work.
 4. *Review of Work; Defective Work*
 - a. Conduct on-Site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02, if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Observe whether any Work in place appears to be defective.
 - c. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection or approval.
 5. *Inspections and Tests*

- a. Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to those performed by public or other agencies having jurisdiction over the Work.
 - b. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.
- 6. *Payment Requests:* Review Applications for Payment with Contractor.
- 7. *Completion*
 - a. Participate in Engineer's visits regarding Substantial Completion.
 - b. Assist in the preparation of a punch list of items to be completed or corrected.
 - c. Participate in Engineer's visit to the Site in the company of Owner and Contractor regarding completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.
 - d. Observe whether items on the final punch list have been completed or corrected.
- D. The RPR will not:
 - 1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
 - 2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
 - 3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
 - 4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction.
 - 5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
 - 6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
 - 7. Authorize Owner to occupy the Project in whole or in part.

ARTICLE 11—CHANGES TO THE CONTRACT

No suggested Supplementary Conditions in this Article.

ARTICLE 12—CLAIMS

No suggested Supplementary Conditions in this Article.

ARTICLE 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK

13.01 *Cost of the Work*

Guidance Notes—Equipment Rental Costs—When Contractor’s compensation is determined in whole or in part on the basis of Cost of the Work, equipment rental charges, particularly with respect to Contractor-owned equipment, can sometimes lead to disagreements. GC-13.01.B.5.c.(2) addresses Contractor owned equipment rental costs, indicating that such costs will be governed by a rental rate book specified in the Supplementary Conditions. The following Supplementary Condition is the location to specify the governing rental rate book. As of 2018, commonly used rental rate books include the Rental Rate Blue Book for Construction Equipment, and the AED Green Book: Rental Rates & Specifications for Construction Equipment.

SC-13.01 Supplement Paragraph 13.01.B.5.c.(2) by adding the following sentence:

The equipment rental rate book that governs the included costs for the rental of machinery and equipment owned by Contractor (or a related entity) under the Cost of the Work provisions of this Contract is the most current edition of **[name of equipment rental rate book]**.

Guidance Notes—Defining “Small Tools and Hand Tools”—GC-13.01.C.2 excludes the cost of “small tools and hand tools” from Cost of the Work. Providing more definition of what that term means in a Supplementary Condition may eliminate or reduce arguments about this aspect of Cost of the Work. One common approach is to define small tools and hand tools based on a price threshold, as follows:

SC-13.01 Supplement Paragraph 13.01.C.2 by adding the following definition of small tools and hand tools:

- a. For purposes of this paragraph, “small tools and hand tools” means any tool or equipment whose current price if it were purchased new at retail would be less than \$500. **[or insert other threshold price.]**

13.03 Unit Price Work

Guidance Notes—Variations from Estimated Quantities, Unit Price Work—GC-13.03.E is a “variation in estimated quantities (VEQ)” clause that applies when the actual quantity of a unit price item varies “materially and significantly” from the estimated quantity. The following Supplementary Condition is a more specific and detailed VEQ clause. By providing a specific threshold for eligible categories of unit prices, and specifically defining the degree by which an actual quantity must vary from the estimated quantity, the Supplementary Condition is intended to simplify and facilitate the administrative resolution of situations where actual quantities of unit price items differ materially and significantly from estimated quantities. When such a VEQ clause is used, a common number for the first blank is 5 percent of the Contract Price (based on estimated quantities), and a common number for the second blank is typically 15, 20, or 25 percent; however, other numbers may be appropriate in both locations.

SC-13.03 Delete Paragraph 13.03.E in its entirety and insert the following in its place:

E. *Adjustments in Unit Price*

1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:

- a. the extended price of a particular item of Unit Price Work amounts to **[number]** percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than **[number]** percent from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
 3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

No suggested Supplementary Conditions in this Article.

ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

15.01 Progress Payments

Guidance Notes—Coordinating Payments with Actual Progress of the Work—Paragraph GC-15.01.A states that progress payments for “cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.” This contractual provision generally will be sufficient to result in a fair and orderly payment process on cost-plus contracts. However, on some projects the cost-based progress payments may outpace the actual progress of the Work, or may become substantially out of step with respect to the ultimate limits created by a Guaranteed Maximum Price. The following clause may be added to Paragraph 15.01 to allow Owner to require Contractor to adjust its progress payment requests to bring the payment flow back into balance.

SC-15.01 Add the following new Paragraph 15.01.F:

- F. For contracts in which the Contract Price is based on the Cost of Work, if Owner determines that progress payments made to date substantially exceed the actual progress of the Work (as measured by reference to the Schedule of Values), or present a potential conflict with the Guaranteed Maximum Price, then Owner may require that Contractor prepare and submit a plan for the remaining anticipated Applications for Payment that will bring payments and progress into closer alignment and take into account the Guaranteed Maximum Price (if any), through reductions in billings, increases in retainage, or other equitable measures. Owner will review the plan, discuss any necessary modifications, and implement the plan as modified for all remaining Applications for Payment.

Guidance Notes—Modifying the Standard Time in Which Owner Must Make Payments—Paragraph GC-15.01.D states that Owner will pay Contractor within 10 days after receipt of Engineer’s recommendation of payment of a progress payment; GC-15.06.E requires Owner to make the final payment within 30 days of the final Application for Payment. The user should confirm that these payment deadlines are acceptable to Owner. See EJCDC® C-050, Bidding Procedures and Construction Contract Documents (2018), Paragraph 5.06. If changes are appropriate, prepare Supplementary Conditions here in Article SC-15 to modify the number of days in which payments are due.

15.03 *Substantial Completion*

Guidance Notes—Owner Recovery of Re-inspection Costs—Paragraph 15.03.A of the General Conditions requires Contractor to give notice that the Work is substantially complete; Paragraph 15.03.B requires an inspection of the Work to determine whether Engineer agrees that the Work is substantially complete. If the Work is not substantially complete, and must be inspected again at a later point, then the following Supplementary Condition, if included in the Contract, would allow Owner to recover the cost of the re-inspection.

SC-15.03 Add the following new subparagraph to Paragraph 15.03.B:

1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, will be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under this Article 15.

15.08 *Correction Period*

Guidance Notes—Lengthening the Correction Period—Paragraph 15.08.A of the General Conditions refers to a one-year correction period following Substantial Completion. During that one-year time period, Contractor is obligated to return to the Site to correct defective Work. If a longer correction period is to be imposed, use SC-15.08.G. Note that often the lengthening of the correction period will be tied to the use of a warranty bond. See SC-6.01.B. The extension of the correction period set forth in SC-6.01.B is confirmed in the following Supplementary Condition by reference. In that case the sentence may be terminated after “...years set forth in SC-6.01.B.1.”

If the extension of the correction period is independent of a warranty bond or similar provision, then the user should accomplish the extension by filling in the number where indicated at the end SC-15.08.G.

If SC-15.08.G is not used, the correction period will retain the standard one year duration.

SC-15.08 Add the following new Paragraph 15.08.G:

- G. The correction period specified as one year after the date of Substantial Completion in Paragraph 15.08.A of the General Conditions is hereby revised to be the number of years set forth in SC-6.01.B.1; or if no such revision has been made in SC-6.01.B, then the correction period is hereby specified to be **[number]** years after Substantial Completion.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

No suggested Supplementary Conditions in this Article.

ARTICLE 17—FINAL RESOLUTIONS OF DISPUTES

17.02 *Arbitration*

Guidance Notes—Alternatives to Litigation as Final Dispute Resolution Method; Arbitration— Paragraph 17.01.B of the General Conditions provides that for any dispute subject to final resolution under Article 17, Owner or Contractor may invoke the dispute resolution procedure called for in the Supplementary Conditions. Paragraph SC-17.02 is the location to identify any such primary dispute resolution procedure. If no procedure is identified here in the Supplementary Conditions, and the parties do not agree to a specific procedure, then the default resolution procedure will be litigation—the pursuit of rights in a court of competent jurisdiction. Note that before reaching the point of final resolution of disputes, in most cases the Owner and Contractor will already have engaged in the Claim process described in Article 12 of the General Conditions. That process allows for mediation of the dispute.

As an alternative to litigation, there are many other possible dispute resolution procedures, or combinations of procedures. One of the most common procedures for resolving construction disputes is arbitration; wording for an arbitration clause follows. A discussion of the pros and cons of the arbitration process (and there are many advocates on both sides) is beyond the scope of this Guide. Owner should consult with its legal counsel when considering the inclusion of an arbitration clause, or of any other dispute resolution procedure or combination of procedures.

The EJCDC arbitration clause is drafted to use the rules and administration of the American Arbitration Association. The user is free to substitute the rules and services of other dispute resolution organizations, and to customize the arbitration process to suit the needs of the specific Contract.

The arbitration option is as follows:

SC-17.02 Add the following new paragraph immediately after Paragraph 17.01.

17.02 *Arbitration*

- A. All matters subject to final resolution under this Article will be settled by arbitration administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules (subject to the conditions and limitations of this Paragraph SC-17.02). Any controversy or claim in the amount of \$100,000 or less will be settled in accordance with the American Arbitration Association's supplemental rules for Fixed Time and Cost Construction Arbitration. This agreement to arbitrate will be specifically enforceable under the prevailing law of any court having jurisdiction.
- B. The demand for arbitration will be filed in writing with the other party to the Contract and with the selected arbitration administrator, and a copy will be sent to Engineer for information. The demand for arbitration will be made within the specific time required in Article 17, or if no specified time is applicable within a reasonable time after the matter in question has arisen, and in no event will any such demand be made after the date when institution of legal or equitable proceedings based on such matter in question would be barred by the applicable statute of limitations.

- C. The arbitrator(s) must be licensed engineers, contractors, attorneys, or construction managers. Hearings will take place pursuant to the standard procedures of the Construction Arbitration Rules that contemplate in-person hearings. The arbitrators will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute or the Contract. Any award in an arbitration initiated under this clause will be limited to monetary damages and include no injunction or direction to any party other than the direction to pay a monetary amount.
- D. The Arbitrators will have the authority to allocate the costs of the arbitration process among the parties, but will only have the authority to allocate attorneys' fees if a specific Law or Regulation or this Contract permits them to do so.
- E. The award of the arbitrators must be accompanied by a reasoned written opinion and a concise breakdown of the award. The written opinion will cite the Contract provisions deemed applicable and relied on in making the award.
- F. The parties agree that failure or refusal of a party to pay its required share of the deposits for arbitrator compensation or administrative charges will constitute a waiver by that party to present evidence or cross-examine witness. In such event, the other party shall be required to present evidence and legal argument as the arbitrator(s) may require for the making of an award. Such waiver will not allow for a default judgment against the non-paying party in the absence of evidence presented as provided for above.
- G. No arbitration arising out of or relating to the Contract will include by consolidation, joinder, or in any other manner any other individual or entity (including Engineer, and Engineer's consultants and the officers, directors, partners, agents, employees or consultants of any of them) who is not a party to this Contract unless:
1. the inclusion of such other individual or entity will allow complete relief to be afforded among those who are already parties to the arbitration;
 2. such other individual or entity is substantially involved in a question of law or fact which is common to those who are already parties to the arbitration, and which will arise in such proceedings;
 3. such other individual or entity is subject to arbitration under a contract with either Owner or Contractor, or consents to being joined in the arbitration; and
 4. the consolidation or joinder is in compliance with the arbitration administrator's procedural rules.
- H. The award will be final. Judgment may be entered upon it in any court having jurisdiction thereof, and it will not be subject to modification or appeal, subject to provisions of the Laws and Regulations relating to vacating or modifying an arbitral award.
- I. Except as may be required by Laws or Regulations, neither party nor an arbitrator may disclose the existence, content, or results of any arbitration hereunder without the prior written consent of both parties, with the exception of any disclosure required by Laws and Regulations or the Contract. To the extent any disclosure is allowed pursuant to the exception, the disclosure must be strictly and narrowly limited to maintain confidentiality to the extent possible.

17.03 Attorneys' Fees

Guidance Notes—Prevailing Party Attorneys' Fees Clause—In most jurisdictions in the United States, as a general matter each party to a dispute is responsible for its own attorneys' fees, unless an express agreement provides to the contrary. Some legal authorities believe that this general rule encourages claims and disputes, because under the general rule claimants have little concern that they will be forced to pay for the opposing party's fees if the claim fails. Other authorities take the opposite view—that if a prevailing-party attorneys' fee rule is used instead of the general rule, then the enticing prospect of not only prevailing but also of having one's own fees paid by the opponent would encourage overly aggressive pursuit of claims (or overzealous defense against valid claims).

If an exception to the general United States rule is preferred for disputes subject to final resolution under Article 17, then add the following express agreement:

SC-17.03 Add the following new paragraph immediately after Paragraph 17.02, [Note: If there is no Paragraph 17.02, because neither arbitration nor any other dispute resolution process has been specified here in the Supplementary Conditions, then revise this to state "Add the following new Paragraph immediately after Paragraph 17.01" and revise the numbering accordingly].

17.03 Attorneys' Fees

- A. For any matter subject to final resolution under this Article, the prevailing party shall be entitled to an award of its attorneys' fees incurred in the final resolution proceedings, in an equitable amount to be determined in the discretion of the court, arbitrator, arbitration panel, or other arbiter of the matter subject to final resolution, taking into account the parties' initial demand or defense positions in comparison with the final result.

ARTICLE 18—MISCELLANEOUS

18.08 Assignment of Contract

Guidance Notes—Assignment—GC-18.08 restricts the assignment of the Contract by both Owner and Contractor. From the Contractor's perspective, it has elected to work for a specific project Owner, based on an evaluation of the Owner's ability to meet its obligations (especially payment of Contractor), and on Owner's reputation for how it administers construction contracts. From Owner's perspective, it has awarded the Contract to a specific Contractor based in part on that Contractor's eligibility to perform the work with requisite competence, safety, and schedule compliance. GC-18.08 places some limitations on the ability of either party to transfer its duties without the consent of the other party.

If the parties anticipate during the drafting process that an assignment will occur (for example, a local sewer district that knows it soon will be transferring its infrastructure projects to a metropolitan authority), then a Supplementary Condition should be drafted to confirm the anticipated assignment and establish the parties' advance consent to the assignment, thereby avoiding possible disputes about granting consent.

Another possibility is an assignment of a contract or purchase order to the Contractor. This typically happens in the context of Owner's procurement of engineered equipment; if the procurement is in progress when the Contractor is selected, it may make sense to assign the procurement contract to the

Contractor. SC-18.08.B may be used to implement such an assignment, and to establish the assignment's basic terms. SC-18.08.B is intended to be coordinated with the EJCDC Procurement Series (P-Series) documents.

The form to be attached as an exhibit to the Contract (meaning the construction contract of which these Supplementary Conditions are a part), as referred to in SC-18.08.B, is the Assignment of Contract; Consent to Assignment; and Acceptance of Assignment form that is attached to EJCDC® P-520, Agreement Between Buyer and Seller (2018).

SC-18.08 Add the following new paragraph immediately after Paragraph 18.08.A:

- B. The contract dated **[date]** between Owner as “buyer” and **[identify seller]** as “seller” for procurement of goods and special services (“procurement contract”) **[is hereby] [will be]** assigned to Contractor by Owner, and Contractor **[accepts] [will accept]** such assignment. A form documenting the assignment is attached as an exhibit to this Contract.
1. This assignment will occur on the **[Effective Date of the Contract]**, and will relieve the Owner as “buyer” from all further obligations and liabilities under the procurement contract.
 2. Upon assignment, the “seller” will be a Subcontractor or Supplier of the Contractor, and Contractor will be responsible for seller’s performance, acts, and omissions, as set forth in Paragraph 7.07 of the General Conditions just as Contractor is responsible for all other Subcontractors and Suppliers.
 3. Notwithstanding this assignment, all performance guarantees and warranties required by the procurement contract will continue to run for the benefit of the Owner and, in addition, for the benefit of the Contractor.
 4. Except as noted in the procurement contract, all rights, duties and obligations of Engineer to “buyer” and “seller” under the procurement contract will cease **[upon the assignment to Contractor]**.

Not to be used for bidding purposes

EXHIBIT A—SOFTWARE REQUIREMENTS FOR ELECTRONIC DOCUMENT EXCHANGE

Guidance Notes—Exhibit A—This exhibit is used with the Electronic Documents Protocol (EDP) presented in SC-2.06. If the Project-specific Supplementary Conditions do not include SC-2.06, then do not include Exhibit A. If Exhibit A is included, modify it to conform to Project-specific requirements.

Item	Electronic Documents	Transmittal Means	Data Format	Note (1)
a.1	General communications, transmittal covers, meeting notices and responses to general information requests for which there is no specific prescribed form.	Email	Email	
a.2	Meeting agendas, meeting minutes, RFI's and responses to RFI's, and Contract forms.	Email w/ Attachment	PDF	(2)
a.3	Contractors Submittals (Shop Drawings, "or equal" requests, substitution requests, documentation accompanying Sample submittals and other submittals) to Owner and Engineer, and Owner's and Engineer's responses to Contractor's Submittals, Shop Drawings, correspondence, and Applications for Payment.	Email w/ Attachment	PDF	
a.4	Correspondence; milestone and final version Submittals of reports, layouts, Drawings, maps, calculations and spreadsheets, Specifications, Drawings and other Submittals from Contractor to Owner or Engineer and for responses from Engineer and Owner to Contractor regarding Submittals.	Email w/ Attachment or LFE	PDF	
a.5	Layouts and drawings to be submitted to Owner for future use and modification.	Email w/ Attachment or LFE	DWG	
a.6	Correspondence, reports and Specifications to be submitted to Owner for future word processing use and modification.	Email w/ Attachment or LFE	DOC	
a.7	Spreadsheets and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	EXC	
a.8	Database files and data to be submitted to Owner for future data processing use and modification.	Email w/ Attachment or LFE	DB	
Notes				
(1)	All exchanges and uses of transmitted data are subject to the appropriate provisions of Contract Documents.			
(2)	Transmittal of written notices is governed by Paragraph 18.01 of the General Conditions.			
Key				
Email	Standard Email formats (.htm, .rtf, or .txt). Do not use stationery formatting or other features that impair legibility of content on screen or in printed copies			
LFE	Agreed upon Large File Exchange method (FTP, CD, DVD, hard drive)			
PDF	Portable Document Format readable by Adobe® Acrobat Reader Version [number] or later			
DWG	Autodesk® AutoCAD .dwg format Version [number]			
DOC	Microsoft® Word .docx format Version [number]			
EXC	Microsoft® Excel .xls or .xml format Version [number]			
DB	Microsoft® Access .mdb format Version [number]			

EXHIBIT B—FORESEEABLE BAD WEATHER DAYS

Guidance Notes—Exhibit B—This exhibit is used with SC-4.05.C, which provides a definition of those “abnormal weather conditions” that result from excessive precipitation or extreme temperatures. If the Project-specific Supplementary Conditions do not include SC-4.05.C, then do not include Exhibit B. If Exhibit B is included, fill in the information in the table to establish the Project-specific number of foreseeable Bad Weather Days with respect to precipitation and temperature.

Month	Number of Foreseeable Bad Weather Days in Month Based on Precipitation as Rain Equivalent (inches) (1)	Ambient Outdoor Air Temperature (degrees F)	
		Number of Foreseeable Bad Weather Days in Month Based on Low Temperature (at 11:00 a.m.)	Number of Foreseeable Bad Weather Days in Month Based on High Temperature (at 3:00 p.m.)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
Notes:			
1. Two inches of sleet equal one inch of rain. Five inches of wet, heavy snow equal one inch of rain. Fifteen inches of “dry” powder snow equals one inch of rain.			

Not to be used for bidding purposes

EXHIBIT C—GEOTECHNICAL BASELINE REPORT SUPPLEMENT TO THE SUPPLEMENTARY CONDITIONS

Guidance Notes—Geotechnical Baseline Reports—This supplement presents optional Supplementary Conditions that are used if Owner elects to issue a Geotechnical Baseline Report (GBR) for a specific Project. Do not include this supplement with a project’s Supplementary Conditions unless the GBR system is used.

Some project owners use a Geotechnical Baseline Report (GBR) for projects (or portions of a project) in which the subsurface conditions will play a significant role. Providing a GBR may result in bids with lower contingencies for subsurface conditions, and simplify the application of the differing site conditions provisions in Article 5 of the General Conditions. Commentary on Geotechnical Baseline Reports is presented in C-001. See also *Geotechnical Baseline Reports for Construction—Suggested Guidelines*, by Randall J. Essex, P.E., ASCE 2007. In many cases it may be advantageous for Owner, Engineer, or the geotechnical engineer to engage a consultant with GBR experience to assist in preparation of the GBR and related documents.

On projects in which a Geotechnical Baseline Report is used, it is typical to also assemble and provide a Geotechnical Data Report (GDR), as a separate, single source of factual geotechnical information regarding the Site. The content of the GDR is in essence what the EJCDC documents define as “Technical Data”—reliable factual information, such as boring logs and laboratory test results. (See the definition of Technical Data in Article 1 of the General Conditions, and the definition of a GDR in Article 1 of these Supplementary Conditions). Some Owners may elect to issue a GBR without compiling a GDR, but regardless of the format it is essential to identify and make all geotechnical data available. Note that a typical general-purpose geotechnical report, usually prepared primarily to assist in the design of the project, often contains not only factual data but also opinions, interpretations, and even speculation regarding the Site’s subsurface conditions. Such a geotechnical report is not suitable to be adopted or identified as a GDR.

Although it is preferable that a GBR be comprehensive with respect to subsurface conditions, in some cases a GBR will establish baselines for a portion of a project, but will not address all subsurface issues. For example, the GBR may establish baseline subsurface conditions along the route of a pipeline, but be silent with respect to conditions underlying an associated pump building. Also, in some cases a project will involve both subsurface construction as well as building modifications or other tasks unrelated to geotechnical investigations, analysis, or interpretations. The SC/GBR provisions that follow retain certain differing site condition provisions of the General Conditions, in part because these may be needed for situations that are outside the scope of the GBR. As noted previously, these SC/GBR provisions contain locations for (1) identifying known reports and drawings regarding the subsurface conditions (a mandatory obligation), and (2) identifying Technical Data upon whose accuracy Contractor may rely (necessary in some but not all GBR projects, depending on the scope of the GBR and GDR documents).

If a GBR is used, it remains important to disclose known reports and tests regarding subsurface conditions; a place for doing so is provided in SC/GBR 5.03. If some Site conditions are outside the scope of the Geotechnical Baseline Report it will continue to be necessary to identify reliable Technical Data contained in such reports and drawings; however, if the Geotechnical Baseline Report or a related Geotechnical Data Report already establish the data that is worthy of reliance, it will not be necessary to make a redundant identification in SC/GBR 5.03.

If a GBR is used, then include the following GBR Supplementary Conditions, and do not use the Paragraph SC-5.03 in the main body of C-800:

Exhibit C—Geotechnical Baseline Report Supplement to the Supplementary Conditions.

EJCDC® C-800, Supplementary Conditions of the Construction Contract.

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1.01 Definitions

SC-1.01 Add to the list of definitions in Paragraph 1.01.A by inserting the following as numbered items in their proper alphabetical positions:

1. *Geotechnical Baseline Report (GBR)*—The interpretive report prepared by or for Owner regarding subsurface conditions at the Site, and containing specific baseline geotechnical conditions that may be anticipated or relied upon for bidding and contract administration purposes, subject to the controlling provisions of the Contract, including the GBR's own terms. The GBR is a Contract Document.
2. *Geotechnical Data Report (GDR)*—The factual report that collects and presents data regarding actual subsurface conditions at or adjacent to the Site, including Technical Data and other geotechnical data, prepared by or for Owner in support of the Geotechnical Baseline Report. The GDR's content may include logs of borings, trenches, and other site investigations, recorded measurements of subsurface water levels, the results of field and laboratory testing, and descriptions of the investigative and testing programs. The GDR does not include an interpretation of the data. If opinions, or interpretive or speculative non-factual comments or statements appear in a document that is labeled a GDR, such opinions, comments, or statements are not operative parts of the GDR and do not have contractual standing. Subject to that exception, the GDR is a Contract Document.

5.03 Subsurface and Physical Conditions

SC-5.03 Delete Paragraph 5.03 in its entirety and replace with the following:

5.03 Subsurface and Physical Conditions

A. *Reports and Drawings:* The Supplementary Conditions hereby identify:

1. those reports of explorations and tests of subsurface conditions at or adjacent to the Site (other than any Geotechnical Data Report or Geotechnical Baseline Report) that contain Technical Data. Such reports are as follows:
 - a. *Report Title:* **[Exact title of the document]**
 - b. *Date of Report:* **[Date report was issued]**
 - c. *Technical Data in report upon which Contractor may rely:* **[Identify Technical Data (for example, "Boring Log, Test Site 3") and specify page number or other reference where Technical Data is located within the report. List multiple Technical Data line items per entry when appropriate.]**
2. those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data. Such drawings are as follows:
 - a. *Drawings Title:* **[Exact title of the drawings]**
 - b. *Date of Drawings:* **[Date drawings were issued]**
 - c. *Technical Data in drawings upon which Contractor may rely:* **[Identify Technical Data (for example, "Plan View of Rock Outcroppings") in drawings, or state "All**

information in drawing” if entire content is Technical Data entitled to reliance; and specify drawing number, page number, or other reference where the Technical Data is located. List multiple Technical Data line items per entry when appropriate.]

3. Contractor may examine copies of reports and drawings identified immediately above that were not included with the Bidding Documents at **[location]** during regular business hours, or may request copies from Engineer, at the cost of reproduction.
- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph SC-5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
- C. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.
- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
 1. the completeness of such reports and drawings for Contractor’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner’s archival documents concerning the Site; or
 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.
- E. *Geotechnical Baseline Report*
 1. This Contract contains a Geotechnical Baseline Report (“GBR”), identified as follows: **[Example: Geotechnical Baseline Report for Northwest Interceptor, dated February 12, 2013, prepared by ABC Geotechnical Engineers, Inc., Sacramento, California]**. This Contract also contains a Geotechnical Data Report (GDR), identified as follows: **[Example: Geotechnical Data Report for Northwest Interceptor, dated June 15, 2012, prepared by ABC Geotechnical Engineers, Inc., Sacramento, California]**.
 2. The GBR and GDR are incorporated as Contract Documents. The GBR and GDR are to be used in conjunction with other Contract Documents, including the Drawings and Specifications. If there is a conflict between the terms of the GBR and the GDR, the GBR’s terms prevail.

3. The GBR describes certain select subsurface conditions that are anticipated to be encountered by Contractor during construction in specified locations (referred to here in the Supplementary Conditions as “Baseline Conditions”). These may include ground, geological, groundwater, and other subsurface geotechnical conditions, and baselines of anticipated Underground Facilities or subsurface structures.
4. The Baseline Conditions will be used to assist in the administration of the Contract’s differing site conditions clause at locations where subsurface conditions have been baselined. If a condition is baselined in the GBR, then only the pertinent Baseline Conditions will be used to determine whether there is a differing site condition; and no other indication of that condition in the Contract Documents or Technical Data, or of a condition that describes, quantifies, or measures a similar characteristic of the subsurface, will be used for the differing site condition determination.
5. The Baseline Conditions will not be used to make differing site conditions determinations at locations that have not been baselined in the GBR, or at any location with respect to subsurface conditions that the Baseline Conditions do not address. If Underground Facilities or Hazardous Environmental Conditions are expressly addressed in the Baseline Conditions, then comparison to such Baseline Conditions will be the primary means of determining (a) whether an Underground Facility was shown or indicated with reasonable accuracy, as provided in Paragraph 5.05 of the General Conditions, or (b) whether a Hazardous Environmental Condition was shown or indicated in the Contract Documents as indicated in Paragraph 5.06.H of the General Conditions. As indicated in Paragraph SC-5.04 below, the GDR will be the primary resource for differing site conditions determinations in cases in which the GBR is inapplicable.
6. The descriptions of subsurface conditions provided in the GBR are based on geotechnical investigations, laboratory tests, interpretation, interpolation, extrapolation, and analyses. Neither Owner, Engineer, nor any geotechnical or other consultant warrants or guarantees that actual subsurface conditions will be as described in the GBR, nor is the GBR intended to warrant or guarantee the use of specific means or methods of construction.
7. The behavior of the ground during construction depends substantially upon the Contractor’s selected means, methods, techniques, sequences, and procedures of construction. If ground behavior conditions are baselined in the GBR, they are based on stated assumptions regarding construction means and methods.
8. The GBR will not reduce or relieve Contractor of its responsibility for the planning, selection, and implementation of safety precautions and programs incident to Contractor’s means, methods, techniques, sequences, and procedures of construction, or to the Work.

5.04 *Differing Subsurface or Physical Conditions*

SC-5.04 Delete Paragraph 5.04 in its entirety and replace with the following:

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice:* If Contractor believes that any subsurface condition that is uncovered or revealed at the Site:
1. differs materially from conditions shown or indicated in the GBR; or
 2. differs materially from conditions shown or indicated in the GDR, to the extent the GBR is inapplicable; or
 3. differs materially from conditions shown or indicated in Contract Documents other than the GBR or GDR, to the extent the GBR and GDR are inapplicable; or
 4. to the extent the GBR and GDR are inapplicable, is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
 5. to the extent the GBR and GDR are inapplicable, is of such a nature as to require a change in the Drawings or Specifications; or
 6. to the extent the GBR and GDR are inapplicable, is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph SC-5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption or continuation of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption or continuation of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must fall within any one or more of the categories described in Paragraph SC-5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03 of the General Conditions; and
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph SC-5.04.A.
 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment must be set forth in a Change Order.
 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions:* Paragraph 5.05 of the General Conditions governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 of the General Conditions governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of

Paragraphs SC-5.03 and SC-5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

Not to be used for bidding purposes