REQUEST FOR PROPOSALS for EMERGENCY AND MINOR CONSTRUCTION SERVICES



FOR THE CITY OF LONG BEACH

MARCH 2022



OVERSTREET & ASSOCIATES, PLLC

161 LAMEUSE STREET, SUITE 203 BILOXI, MS 39530

633 DELMAS AVE., SUITE B PASCAGOULA, MS 39567

OA Project No. 1203

SET NO. _____

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ADVERTISEMENT FOR BIDS

City of Long Beach, Mississippi

The City of Long Beach, Mississippi, is Requesting Proposals to provide Emergency and Minor Construction Services to repair, replace, and/or install water, sewer and drainage systems, roads and other associated facilities. The City of Long Beach will receive proposals for:

EMERGENCY AND MINOR CONSTRUCTION SERVICES

at the Office of City Clerk located at City Hall, 201 Jeff Davis Avenue, (P.O. Box 929) Long Beach, Mississippi, 39560, during normal office hours at any time prior to 10:00 A.M., Tuesday, March 22, 2022. Proposals may be submitted either by mail or hand delivered or via the Central Bidding process (see below). The envelopes containing the proposals must be sealed and addressed or delivered to City Clerk, City of Long Beach, at City Hall, 201 Jeff Davis Avenue, (P.O. Box 929), Long Beach, Mississippi, and designated as "Proposal for Emergency and Minor Construction Services."

Contract Documents are on file at the Office of City Clerk, at City Hall, Long Beach, Mississippi. Official bid documents can also be downloaded from Central Bidding at www.centralbidding.com. Electronic bids can be submitted at www.centralbidding.com. For any questions relating to the electronic Central Bidding process, please call Central Bidding at 225-810-4814. Bid Documents can also be obtained from www.overstreetengplans.com. For any questions related to the electronic www.overstreetengplans.com process, please contact the Plan House at 228-248-0181.

All Contractors much comply with all Federal, State, and City laws and regulations. All proposals shall comply with specification and RFP documents provided or be considered non-responsive. The City of Long Beach, Mississippi, reserves the right to reject any or all proposals or to waive any informalities in the RFP process. The City of Long Beach, Mississippi, reserves the right to amend the requirements and documents as may be necessary and agrees to notify all registered contractors. Only proposals and RFP documents from electronically registered plan holders will be considered.

Proposals may be held by the City of Long Beach, Mississippi, for a period not to exceed ninety (90) days from the submittal date of the proposal.

Done by order of the Mayor and Board of Aldermen, February 15, 2022.

City of Long Beach, Mississippi		
Ву	S/STACEY DAHL	
Title	CITY CLERK	

Publish: February 18, 2022 and February 25, 2022

INFORMATION FOR BIDDERS

1. PURPOSE

- 1.1. The City of Long Beach (herein called the "Owner"), requires construction services to perform emergency construction to repair and return to service existing water, sewer and drainage systems, roads, and other associated facilities in an expedited manner.
- 1.2. In addition, the Owner requires construction services to perform minor construction work to repair, replace, or install water, sewer and drainage systems, roads, and other associated facilities.
- 1.3. The selected Contractor shall provide all labor, equipment, tools, vehicles, fuel and materials necessary to accomplish assigned construction projects. This is a time and materials based contract for construction services.

2. BID INFORMATION

- 2.1. The Owner will receive proposals to provide construction services no later than 10:00 A.M. local time, on March 22, 2022. The proposals will be received by the Owner at the Office of City Clerk located at City Hall, 201 Jeff Davis Avenue, (P.O. Box 929) Long Beach, Mississippi, 39560, during normal office hours at any time prior to above designated date.
- 2.2. The envelopes containing the proposals are to be addressed to City Clerk, City of Long Beach, at City Hall, 201 Jeff Davis Avenue, (P.O. Box 929) Long Beach, Mississippi, and shall be designated as "Proposal for Emergency and Minor Construction Services."
- 2.3. The Owner will consider NULL AND VOID any proposal not prepared and submitted in accordance with the provisions hereof and such proposal will be rejected. Any proposal may be withdrawn prior to the above scheduled time for the receiving of proposals or authorized postponement thereof. Any proposal received after the time and date specified shall not be considered. No Contractor submitting a proposal may withdraw a proposal within 90 days after the actual date for receiving of proposals.

3. CONTRACT TERMS

- 3.1. Term The term for this service shall be for two (2) years beginning April 1, 2022 (or the effective date of the executed contract) with one (1) year extensions by mutual agreement of both parties.
- 3.2. The contract shall automatically terminate at midnight two (2) years from the date of the effective date of the contract, unless extended by mutual agreement.
- 3.3. The Owner at its sole discretion may accept/approve or reject the extensions provided in this contract.
- 3.4. Emergency Construction Response Time The Contractor shall respond within two (2) hours, 24 hours/day, 7 days/week throughout the year upon being notified of an emergency.
- 3.5. Minor Construction Response Time The Contractor shall respond withing forty-eight (48) hours upon being notified of minor construction project.

4. SECURITY/BOND

4.1. The surety furnishing the bonds shall have a sound financial standing and a record of service satisfactory to the Owner, and shall be authorized to do business in the State of Mississippi. The Contractor must furnish a surety bond or bonds as security for faithful performance of this contract and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with his contract, as

- specified in the General Conditions included herein. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner. Cash bonds will not be accepted.
- 4.2. All surety bond or bonds as security for faithful performance of the contract and payment for all persons supplying labor and materials for the construction of the work, and to cover all guarantees against defective workmanship or materials shall be for a period of one (1) year after the date of the completion of the Work Order.
- 4.3. Bid Bond Since there is no specific project for which to develop a price, the Owner will require a \$100,000 bid bond be provided with the proposal.
- 4.4. Each proposal must be accompanied by a bid security prepared on the form of bid bond attached hereto, duly executed by the Contractor as principal and having as surety hereon a surety company approved by the Owner, in the amounts listed below. Such bid securities will be returned promptly after the Owner and the Contractor with the accepted proposal have executed the contract, or, if no award has been made within 90 days after the actual date for receiving of proposals, upon demand of the Contractor at any time thereafter, so long as he has not been notified of the acceptance of his proposal. Cash will not be accepted as bid security.
- 4.5. Security for Faithful Performance Simultaneously with the delivery of the executed contract, the Contractor shall furnish a surety bond or bonds in the amount of \$10,000 as security for faithful performance of this contract, and for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. When the total amount of all Work Orders exceeds \$10,000, Contractor shall provide updated performance and payment bonds in the amount of the total of all Work Orders issued to date.

5. EVALUATION

The proposals will be evaluated based on Qualifications, Experience, Equipment and the proposed rates and markup price, as follows:

- 5.1. Qualifications (20%)
 - a. Company Qualifications as presented in the Contractor's proposal will be compared to the qualifications identified in the General Requirements and up to 10% or 10 points of the score attributed accordingly.
 - b. Key Personnel Qualifications as presented in the Contractor's proposal will be compared to the qualifications identified in the General Requirements and up to 10% or 10 points of the score attributed accordingly.
- 5.2. Experience (20%)
 - a. Company Experience as presented in the Contractor's proposal will be compared to the experience identified in the General Requirements and up to 10% or 10 points of the score attributed accordingly.
 - b. Key Personnel Experience as presented in the Contractor's proposal will be compared to the qualifications identified in the General Requirements and up to 10% or 10 points of the score attributed accordingly.
- 5.3. Equipment (20%)
 - a. Heavy/Major Construction Equipment as listed in the Contractor's proposal will be compared to the equipment identified in the General Requirements and up to 10% or 10 points of the score attributed accordingly.
 - b. Small Construction Equipment as listed in the Contractor's proposal will be compared to the equipment identified in the General Requirements and up to 10% or 10 points of the score attributed accordingly.

5.4. Price (40%)

- a. Labor Rates as proposed in the Contractor's proposal will be applied to the example project to aide in evaluation of the Contractor's proposal and up to 10% or 10 points of the score attributed accordingly.
- b. Heavy Equipment Rates as proposed in the Contractor's proposal will be applied to the example project to aide in evaluation of the Contractor's proposal and up to 10% or 10 points of the score attributed accordingly.
- c. Support Equipment Rates as proposed in the Contractor's proposal will be applied to aide in evaluation of the Contractor's proposal and up to 10% or 10 points of the score attributed accordingly.
- d. Materials, other services or subcontractor markup as proposed in the Contractor's proposal will be applied to aide in evaluation of the Contractor's proposal and up to 10% or 10 points of the score attributed accordingly.

6. PROPOSAL

- 6.1. The Contractor's proposal should include the following:
 - a. Contractor's and key personnel's contact information.
 - b. Contractor's Certificate of Responsibility number.
 - c. The Contractor's proposed project manager.
 - d. A list of key personnel to be dedicated to this contract and future projects.
 - e. The Contractor's and key personnel's qualifications.
 - f. The Contractor's and key personnel's experience.
 - g. A list of large/heavy and small equipment to be dedicated to this contract and future projects.
 - A written statement of the Contractor's ability to respond within the stated time.
 - i. Contractor shall provide a written statement of warranty.
 - j. Unit price proposal on the attached form, which includes 1) labor rates and overtime rates for emergency construction services; 2) labor rates and overtime rates for minor construction services; 3) large/heavy equipment rates; 4) small equipment rates; 5) mobilization/demobilization rates; and 6) markup for materials, subcontractors and other services utilized on the future projects.
 - k. Bid Bond
 - I. Certificates of Insurance
 - m. Provide a current copy of MS contractor's license.
 - n. Two (2) original fully executed "CERTIFICATION REGARDING DEBARMENT, SUSPENSION, NON-COLLUSION AND OTHER RESPONSIBILITY MATTERS" forms
 - o. One original Proposal and eight (8) copies of the Proposal must be submitted.

7. PRICE PROPOSAL

- 7.1. The Contractor is required to submit the price proposal on the attached form or be considered non-responsive.
- 7.2. For Emergency Construction Services, the Mobilization/Demobilization charge will be limited to 5% of the total labor and equipment cost of the project with a maximum limit of \$5.000.
- 7.3. For Minor Construction Services, the Mobilization/Demobilization charge will be limited to 5% of the total labor and equipment cost of the project with a minimum limit of \$250 and a maximum limit of \$1,250.

8. CONTRACT AWARD

- 8.1. The lowest priced and most responsive proposal shall be recommended for award of the contract.
- 8.2. The Owner shall review and evaluate submitted proposals according to above criteria to determine the lowest price and most responsive proposal for award of the contract.
- 8.3. The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Contractor to perform his obligations under his contract and Contractor shall furnish such information and data for this purpose as may be requested. The right is reserved to reject any proposal where an investigation of the available evidence of information does not satisfy the Owner that the Contractor is qualified to carry out properly the terms of the contract.
- 8.4. Any contract resulting from the acceptance of the proposal shall be on forms supplied by the Owner and shall include all RFP documents, contractor's proposal and contract documents.
- 8.5. The Contractor shall not assign or transfer any interest in this contract without the prior written consent of the Owner.
- 8.6. If the selected contractor fails to enter into a contract for Emergency and Minor Construction Services, then the Owner will consider the proposal and contractor non-responsive and consider the next lowest and responsive proposal/contractor for services.
- 8.7. The Owner reserves the right to cancel the award of a contract any time prior to the execution by all parties without liability against the Owner.

9. TERMS AND CONDITIONS

- 9.1. The Owner reserves the right to award the contract to the Contractor whose proposal is determined to be lowest and most responsive to the Owner.
- 9.2. The Owner reserves the right to accept or reject any or all proposals or to waive any informalities in the proposal process at the Owner's sole discretion.
- 9.3. In so far as permitted by law, under any contract resulting from the acceptance of a contractor's proposal, the Contractor shall indemnify and save harmless the Owner and management and employees for and against all claims, suits, actions, causes of action, orders, judgments, or decrees entered by reason of or as a result of the performance of services under the contract.
- 9.4. All Contractors submitting a proposal must comply with all Federal, State, and City Equal Employment Opportunity laws and regulations which prohibit discrimination in employment regarding race, creed, color, sex, or natural origin.
- 9.5. The Owner reserves the right to negotiate all elements which comprise this RFP with the lowest and most responsive contractor prior to selection of and award of this contract.
- 9.6. All proposals shall comply with requirements and documents provided or be considered non-responsive.
- 9.7. The Owner reserves the right to amend the RFP requirements/documents as may be necessary and agrees to notify all registered plan holders/contractors.

10. TERMINATION OF CONTRACT

10.1. The Owner reserves the right to terminate or suspend services of this contract at the Owner's sole discretion, but not limited to repeated and reoccurring poor performance based on the performance criteria in the General and Standard Requirements and Section 1 and 2 Requirements. 10.2. The contractor shall maintain required licenses, bonds, insurance, qualified and experienced labor and equipment as stipulated or be subject to termination at Owner's sole discretion.

11. SUBCONTRACTS

- 11.1. The Contractor may subcontract portions of the work subject to the approval of the Owner and Engineer, but not more than as required by MS State Law. All Subcontractors being assigned a portion of the Work in the amount of fifty-thousand dollars (\$50,000) or more must possess a current Mississippi Contractor's Certificate of Responsibility.
- 11.2. The Bidder's attention is directed to the fact that it shall be unlawful and illegal for a Primary Contractor, Contractor, Owner, Awarding Authority, Sub-Contractor, or any other person to contract, or sub-contract, all or any portion of a public or private construction project regulated by Chapter 527, General Laws of Mississippi 1988 (Sections 31-3-1 through 31-3-23, Miss. Code Ann. (1972, as amended)), exceeding fifty thousand dollars (\$50,000.00) with respect to public projects unless the Contractor, or Subcontractor was duly licensed by the Mississippi State Board of Contractors as of the date fixed for the submission of bids on the work from the Primary Contractor, to the Owner, or Awarding Authority.

12. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

12.1. The successful Bidder, upon his failure or refusal to execute and deliver the contract and bonds required within 10 days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid. In the event of the failure of the successful Bidder to enter into the contract, the Owner has the right to rescind the award and award the contract to the next lowest, responsible, responsive bidder.

13. ADDENDA AND INTERPRETATIONS

- 13.1. No interpretation of the meaning of the RFP documents, specifications or other pre-bid documents will be made to any Contractor orally.
- 13.2. Every request for such interpretation should be in writing addressed to Overstreet & Associates, PLLC, at 161 Lameuse Street, Biloxi, MS 39530, (herein called the "Engineer") and to be given consideration must be received at least five days prior to the date fixed for receiving of proposals. Any and all such interpretations and any supplemental instructions will be transmitted to all registered plan holders by facsimile transmission with return receipt requested, not later than three days prior to the date fixed for the submission of proposals. Failure of any Contractor to receive any such addendum or interpretation shall not relieve such Contractor from any obligation under this proposal as submitted. All addenda so issued shall become part of the Contract Documents.

14. POWER OF ATTORNEY

14.1. Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified (notarized) and effectively dated copy of their power of attorney from the Surety, together with a copy of their license from the State of Mississippi to sign surety bonds for work in the State of Mississippi as evidence of his/her authority to bind the surety on the date of execution of the bond(s).

15. LAWS AND REGULATIONS

- 15.1. The Contractor's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.
- 15.2. The Contractor shall be required to implement appropriate best management practices to reduce erosion and control sediment discharge to adjacent streams and wetlands as outlined in "Planning and Design Manual for Control of Erosion, Sediment, and Stormwater" (MDEQ, MSWCC, and USDA SCS 1994) and "Field Manual for Erosion and Sediment Control on Construction Sites in Mississippi" (MDEQ, 2002). Noncompliance with this may be cause for delaying or withholding payment applications.
- 15.3. Each Contractor shall inform himself of, and the contractor awarded the Contract shall comply with, federal, state and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning minimum wage rates, nondiscrimination in the employment of labor, protection of public and employee safety and health, environmental protection (i.e., Clean Air Act, Clean Water Act, etc.), the protection of natural resources, fire protection, burning and non-burning requirements, permit fees and specifically all of the requirements of 44CFR13.36. Noncompliance with this may be cause for delaying or withholding payment applications.

16. CERTIFICATE OF RESPONSIBILITY

- 16.1. Attention of all Contractors is called to the provision of the State Law requiring a Certificate of Responsibility for all Contractors contracting for public work in excess of \$50,000.00. Since there is no specific project for which to develop a contract price, the Owner will require that all contractors submitting a proposal have complied with the requirements of this law and shall state their certificate number on the face of the envelope containing their proposal and in the proposal package. No proposal shall be opened or considered unless such Contractor's current certificate number appears on the outside or exterior of said envelope or container.
- 16.2. Attention of Contractors is also called to the provision of the State Law requiring that the classification of the Contractor's Certificate of Responsibility be proper for the type of work. Acceptance of any proposal will be subject to review and concurrence by the Mississippi State Board of Contractors for the proper classification.

17. ASSIGNMENT OF CONTRACT

17.1. The Contractor to whom the contract is awarded will not be permitted to assign this contract or any portion thereof without the approval of the Owner in writing.

18. DEBARMENT

- 18.1. Any contractor or sub-contractor listed on the Federal Debarment List will be excluded from work on this project.
- 18.2. Two original fully completed and executed "CERTIFICATION REGARDING DEBARMENT, SUSPENSION, NON-COLLUSION AND OTHER RESPONSIBILITY MATTERS" forms shall be submitted by the prime contractor with the proposal.

GENERAL REQUIREMENTS

1. GENERAL SCOPE

- 1.1. Emergency Construction. These projects are emergency based because of the necessity for service or environmental hazard. The Owner usually declares an emergency and begins immediate actions to repair and return service. This is a time sensitive construction work effort. The response time to begin work and time executing construction work is very important. All labor, equipment, tools, vehicles, fuel and materials utilized in performing work will be tracked to prepare invoice for payment.
- 1.2. Minor Construction. These projects are considered minor because of the labor and equipment demanded to execute the project. Also, the monetary cost of the project is estimated to be under \$50,000. These projects will be discussed, planned and assigned. An appropriate time of project completion will also be a factor in the discussion, planning and assignment. All labor, equipment, tools, vehicles, fuel and materials utilized in performing work will be tracked to prepare invoice for payment.
- 1.3. The City shall solely have the power to determine when emergency services have been completed; which shall generally be upon "safing up" the work zone. Final repairs and work items may at the City's discretion, be completed under a "minor work" authorization.

2. MINIMUM QUALIFCATION/EXPERIENCE

- 2.1. The contractor shall have and maintain Mississippi State contractor's license appropriate for work (construction and/or repair of water and sewer utilities, drainage systems, roads, and other associated facilities) to be performed under this contract. The contractor will provide proof/copy of the license with their proposal.
- 2.2. Because of the potential demand for experienced and qualified construction ability within a timely fashion with each emergency project, the contractor should have completed multiple projects that exceed approximately \$500,000 in total cost and are appropriate for work to be performed under this contract. The contractor will provide a list of projects, successfully executed, for the past 5 years. The list of projects should describe the scope of the project and also detail the total cost and if completed on time.
- 2.3. Because of the potential demand for experienced and qualified construction ability within a timely fashion with each emergency project, the contractor's personnel, especially management and supervision personnel, should have completed multiple projects that exceed approximately \$500,000 in total cost and have at least 5 years of management supervision level experience. The contractor shall also list the number of employees and their relevant experience. The contractor should have at least 5 full time employees to dedicate to emergency construction projects at any given time. Also list the number of full-time employees employed during the last 5 years. The contractor shall provide a list of the key personnel and their function (project manager, supervisor, equipment operator, skilled and unskilled labor) to be dedicated to this contract and each project.
- 2.4. Because of the potential demand for construction equipment to prosecute the contract, the contractor shall at a minimum have and maintain the following

- equipment including the means for transportation: 1 large excavators, 1 medium excavator, 1 mini excavator, 1 rubber tire backhoe, 1 front-end loader, 1 tractor with a box blade, 1 skid steer, 1 dozer, compaction equipment, and 1 tandem axle dump truck. The contractor shall list all equipment that will be dedicated to this contract.
- 2.5. The contractor shall also, at a minimum, have and maintain the following support equipment such as traffic controls, dewatering equipment, bypass pumps, portable pumps, portable generator, air compressor, drills, saws, cutters, jack hammer, lights, trench boxes or shoring, mats, welding equipment, compaction equipment, etc. including the means for transportation. The contractor shall list all equipment that will be dedicated to this contract.

3. LABOR AND EQUIPMENT RATES

3.1. Labor Rates

- a. The contractor's price proposal shall include the hourly rate for regular working hours for each of the personnel according to classification listed.
- b. The overtime/holiday rate shall also be listed for each of the personnel according to classification listed in the proposal.
- c. This hourly rate should include all expenses associated with each of the employees such as administrative overhead, tools and vehicles. The Owner will not pay for transportation or tools separately.
- d. Mobilization and demobilization shall be paid as a per project charge that will include all other expenses for personnel on the project.
- e. These labor rates will be applied to the example projects to aide in evaluation of the contractor's proposal.

3.2. Equipment Rates

- a. The contractor's price proposal shall include the hourly rate for each piece of construction equipment.
- b. This hourly rate should include all expenses associated with that piece of equipment.
- c. Any equipment rented will require Owner approval prior to rental and use on the project.
- d. There will be no standby rate or expense assessed or paid for equipment left onsite overnight, the weekend or holiday. The Owner will not be obligated to pay for equipment standby expenses not approved prior to leaving equipment on-site.
- e. Equipment rates shall include the expense for fuel. The Owner will not pay for fuel separately.
- f. Equipment rates shall include the expense for maintenance. The Owner will not pay for equipment maintenance separately.
- g. The operator of heavy equipment will be paid for under the labor rates. The equipment shall not include operator expense.
- h. Mobilization and demobilization shall be paid as a per project charge that will include all expense for transporting any and all equipment, to and from and utilized on the project.
- i. These equipment rates will be applied to the example projects to aide in evaluation of the contractor's proposal.

3.3. Additional Requirements

a. Labor overtime will require prior approval by the Owner. The project manager will request approval for the use of labor in the hours designated as overtime prior to working the overtime. The Owner will not be

- obligated to pay for overtime expenses not approved prior to work being performed.
- b. There will be no Per Diem cost/expenses paid for personnel or equipment since all work will occur within the City of Long Beach.
- c. The Owner will not be obligated to pay for equipment standby expenses for equipment left on project site.
- d. All labor or equipment time charged to the repair project will be limited to time actually, physically worked on the project site. Time will be measured as that time beginning with arrival onsite to the time the work or task stopped or was completed. Any time for labor or equipment charged for associated project or task work offsite will require Owner approval prior to utilizing labor or equipment offsite. The Owner will not be obligated to pay for labor or equipment time offsite without prior approval.
- e. The project manager will manage the repair project to minimize cost to the Owner. This will be accomplished by minimizing the labor and equipment onsite. If labor or equipment are not actively being utilized in prosecution of the project then the project manager will remove the excess labor and equipment and not charge the Owner for this labor or equipment.
- f. The Owner and the contractor will track the time onsite for labor and equipment utilized in executing the repair and the Owner will track work tasks performed onsite within the project. The contractor and the Owner will reconcile project schedule/sequence to determine the invoice for labor and equipment on the project.
- g. Any labor or equipment not listed will require Owner approval of the rate or cost prior to utilization on a project. The Owner will not be obligated to pay for previously unlisted but utilized labor or equipment without prior approval.
- h. Any sub-contractor's services will require Owner approval prior to rental and use on the project. The Owner will not be obligated to pay for sub-contractor's services without prior approval.

4. MATERIAL AND OTHER EXPENSES

- 4.1. The contractor's price proposal shall include a cost plus percentage for materials used on the project.
- 4.2. This cost plus percentage should include all expenses associated with ordering, loading, transporting, unloading materials on the job.
- 4.3. The contractor's price proposal shall include a cost plus percentage for any rental equipment to be used on a project.
- 4.4. The contractor's price proposal shall include a cost plus percentage for use of any subcontractor's services in execution of the project.
- 4.5. The Owner shall not be obligated to purchase materials or subcontractor's service through the selected contractor and this contract. The Owner shall have the option to purchase materials and subcontractor's services used in a project, directly.
- 4.6. The cost plus percentages for materials, additional equipment, sub-contractors, and services provided in the bid proposal will be applied to the example projects contained in the Appendices to aid in evaluation of the contractor's proposal.

STANDARD REQUIREMENTS

1. PROJECT SEQUENCE

- 1.1. Emergency Construction:
 - a. Upon notification, the contractor shall meet with the Owner and other representatives to discuss the proposed plan of action for repairs. This plan of action should include work tasks to be performed, determine personnel requirements, determine equipment requirements, determine materials required and assign duties.
 - b. The Owner will issue Notice to Proceed with plan of action as discussed. Any changes or deviations from the proposed plan of action will require Owner approval.
 - c. The selected contractor shall execute/perform the work as planned. Any changes or deviations from the proposed plan of action will require Owner approval.
 - d. When the line or system or facility has been returned to service or service has been initiated, Substantial Completion will be issued.
 - e. The selected contractor shall regrade and restore all areas impacted by construction work to pre-construction condition, as nearly as possible.
 - f. Upon Substantial Completion, the Owner shall issue a retroactive Work Order to include all costs of the work performed.

1.2. Minor Construction:

- Upon notification, the contractor shall meet with Owner and other representatives to discuss the proposed scope for repairs or installation. This scope of work shall include construction work to be performed to achieve service objective.
- b. The Owner will issue a Work Order package (including the scope of work/plan of action as discussed, and a City-issued purchase order). Any changes or deviations from the proposed scope of work will require Owner approval; however, some change in rates of performance and flexibility in performance of the scope is allowable.
- c. The selected contractor shall execute/perform the work as planned. Any changes or deviations from the proposed scope of work will require Owner approval.
- d. When the line or system or facility has been returned to service or service has been initiated, Substantial Completion will be issued.
- e. The selected contractor shall regrade and restore all areas impacted by construction work to pre-construction condition, as nearly as possible.

2. PROJECT TRACKING

- 2.1. Emergency Construction:
 - The contractor shall track all labor, equipment and materials utilized on the project.
 - b. The contractor shall develop a Sequence of Events to track all labor, equipment and materials that will include not only the date and time of work commencement and work completion and the date, time and quantity of materials used on the project but also the arrival and departure and use of labor and equipment, work tasks, use of sub-contractors,

- Substantial Completion, etc. The Sequence of Events shall be used to report or record all significant project events.
- c. The Sequence of Events shall be submitted to the Owner for review and approval. Upon approval, the contractor shall submit a time and materials invoice/application for payment consistent with the Sequence of Events and the contractor's proposal.

2.2. Minor Construction:

- The contractor shall track all labor, equipment and materials utilized on the project.
- b. The contractor shall develop a Sequence of Events to track all labor, equipment and materials that will include not only the date and time of work commencement and work completion and the date, time and quantity of materials used on the project but also the arrival and departure and use of labor and equipment, work tasks, use of sub-contractors, Substantial Completion, etc. The Sequence of Events shall be used to report or record all significant project events.
- c. The Sequence of Events shall be submitted to the Owner for review and approval. Upon approval, the contractor shall submit a time and materials invoice/application for payment consistent with the Sequence of Events and the contractor's proposal.
- 2.3. All submitted project tracking information shall be subject to Owner's verification and approval.

3. CONSTRUCTION STANDARDS

- 3.1. All work and materials used in the prosecution of assigned repair or construction work shall conform with the City of Long Beach construction standards and specifications. Applicable standards and specifications will be supplied to the successful Contractor.
- 3.2. Any work performed on another entity's lines or systems or facilities in the execution of assigned work will also conform to their standards.
- 3.3. Any work performed on the Owner's lines or systems or facilities within the jurisdiction of another governmental or private entity will also conform to their standards.
- 3.4. The Owner shall reserve the right to dictate standards of work and materials in the absence of the Owner's or another entity's standards.

4. WARRANTY

- 4.1. The contractor shall warranty the work and materials for 1 year from the date of Substantial Completion.
- 4.2. The contractor shall perform any corrective work to a previous repair or installation at the contractor's expense.

5. PAYMENTS

- 5.1. Payment will be made on a per work order basis.
- 5.2. The contractor shall submit a time and materials invoice/application for payment consistent with the approved Sequence of Events and the contractor's proposal.
- 5.3. Contractor must supply an Affidavit of Payment of Debts and Claims and a release/waiver of liens with each application for payment.

SECTION 1: EMERGENCY CONSTRUCTION SERVICES

1. SCOPE

- 1.1. Owner requires construction services to perform emergency construction to repair and return to service existing water, sewer and drainage systems, roads and other associated facilities in an expedited manner.
- 1.2. The selected Contractor shall provide all labor, equipment, tools, vehicles, fuel and materials necessary to accomplish assigned construction projects. This is a time and materials based contract for construction services.

2. EMERGENCY CONSTRUCTION SERVICE

- 2.1. Work shall include but not be limited to performing all work associated with repairing and restoring to service existing water, sewer and drainage systems, roads and other associated facilities. This includes but is not limited to providing traffic controls, installing erosion controls, grading, excavation, dewatering, vacuuming, trenching, installing shoring, sawing/cutting/joining/welding, backfilling, compacting, disinfecting, transporting materials, regrading and restoring site.
- 2.2. The contractor's labor and equipment rates and materials markup will be applied to the example project to aid in evaluation.

3. RESPONSE & CONSTRUCTION TIME

- 3.1. Because of the need to restore service, prevent danger to the public, or minimize an environmental hazard, the response time after notification is within two (2) hours
- 3.2. Because of the need to restore service, prevent danger to the public, or minimize an environmental hazard, the contractor will be expected to expedite work and utilize resources in an efficient and timely manner to complete the project.

4. TYPICAL PROJECT SCOPE

- 4.1. Emergency sewer repair projects predominately include but are not limited to repairing an existing active sewer force main or an appurtenance of the sewer system. These are time sensitive projects to minimize the environmental hazard and restore active service and to restore the project area to pre-construction conditions. The projects will normally include containment, diversion and/or transportation of sewer to a suitable discharge point (sewer bypassing) besides the actual repair to the sewer force main or other sewer system. Many of the repair projects may be on sewer systems greater than 8 feet in depth.
- 4.2. Emergency water main repair projects predominately include but are not limited to repairing an existing active water main or appurtenance of the water system. These are time sensitive projects to restore active service and to restore the project area to pre-construction conditions. These projects will include notifying or facilitating notification to users of water service outage.
- 4.3. Emergency storm sewer repair projects predominately include but are not limited to repairing an existing storm sewer or appurtenance of the storm sewer system. These are time sensitive projects to repair the storm sewer system to service and to restore the project area to pre-construction conditions.
- 4.4. Emergency road repair projects predominantly include but are not limited to repairing an existing damaged section of road including restoration of asphalt

to the public and restore the road to service.

SECTION 2: MINOR CONSTRUCTION SERVICES

1. SCOPE

- 1.1. Owner requires construction services to perform minor construction work to repair, replace, or install water, sewer and drainage systems, roads and other associated facilities.
- 1.2. The selected Contractor shall provide all labor, equipment, tools, vehicles, fuel and materials necessary to accomplish assigned construction projects. This is a time and materials based contract for construction services.

2. MINOR CONSTRUCTION SERVICE

- 2.1. Work may include but is not limited to performing all work associated with repairing, replacing, or installing water, sewer or drainage systems, roads or other associated facilities. This may include but is not limited to providing traffic controls, installing erosion controls, grading, excavation, dewatering, vacuuming, trenching, installing shoring, sawing/cutting/joining/welding, backfilling, compacting, disinfecting, transporting materials, regrading and restoring site.
- 2.2. These projects are considered minor because of the labor and equipment demanded to execute the project. Also, the monetary cost of the project is under \$50,000. These projects will be discussed, planned and assigned. And appropriate time of project completion will also be a factor in the discussion, planning and assignment.
- 2.3. The contractor's labor and equipment rates and materials markup will be applied to the example project to aide in evaluation.

3. RESPONSE & CONSTRUCTION TIME

- 3.1. The response time after notification is within forty-eight (48) hours. The contractor will need to accept or arrange meeting with the Owner to discuss, plan and assign proposed project.
- 3.2. A Work Order package (including the scope of work/plan of action as discussed, and a City-issued purchase order) will then be issued to the Contractor to begin work on the project.
- 3.3. The contractor will be expected to complete the assigned project within the agreed construction time.

4. TYPICAL PROJECT SCOPE

- 4.1. Minor construction services for sewer system projects may include but are not limited to the following repair, replacement or installation work:
 - a. Repair or extension of sewer low pressure force main serving grinder pump systems.
 - b. Installation or extension of gravity sewer main with appurtenant sewer services and manholes.
 - c. Many of the projects may be on sewer systems greater than 8 feet in depth.
- 4.2. Minor construction services for water system projects may include but are not limited to the following repair, replacement or installation work:
 - a. Installation or repair of water service lines.
 - b. Installation or repair of water main fire hydrants.
 - Installation or extension of water main.

- 4.3. Minor construction services for grading and drainage projects may include but are not limited to the following repair or construction work:
 - a. Replace storm sewer pipe and/or catch basins/inlets.
 - b. Reestablish storm water/erosion controls on existing systems or City of Long Beach projects.
 - c. Construction or repair of driveway to an existing City of Long Beach facility.
 - d. Repair or construction of wood or chain-link fencing and gates at a City of Long Beach facility.
 - e. Installation and grading of limestone at an existing City of Long Beach facility.
 - f. Construction and grading to establish or reestablish drainage at an existing City of Long Beach facility.
 - g. Regrading and restoration of a site associated with an Emergency Construction project.
 - h. Facilitate or aide in Emergency and/or construction projects.
 - i. Pot-holing existing water or sewer mains in association with a locate request.
- 4.4. Minor construction services for road construction projects may include but are not limited to the following repair or construction work:
 - a. Repair limestone base and asphalt pavement on assigned sections of roads within the City of Long Beach.
 - b. Overlay with asphalt surface course assigned sections of roads within the City of Long Beach.

EXAMPLE CONSTRUCTION PROJECTS FOR EVALUATION

EMERGENCY CONSTRUCTION PROJECT

For the purpose of evaluation of proposals, the following project description is provided for an emergency repair project. A 12" PVC sewer force main is leaking in a roadside ditch. The pipe is 8' deep requiring shoring and dewatering with excavation. This is a 24-hour repair project from discovering on Friday through Saturday and recommencing grading work on Monday. For the purpose of evaluation, this will involve the following:

- 1) A crew of 5 men (1-supervisor/operator, 1-operator, 1-skilled laborer and 2-laborers). The labor time will be calculated as 8 hours on Friday, 8 hours of overtime on Saturday and 8 hours on Monday.
- 2) Large equipment (1-large excavator, 1-medium excavator, 1-front-end loader, 1-skid steer and 1-dump truck). The large equipment time will be calculated as 6 hours per day on Friday, Saturday and Monday.
- 3) Small equipment (1-traffic controls, 1-trench box, 1-portable pump and hoses, 1-dewatering equipment, 1-saw, and 1-compactor). The small equipment time will be calculated as 6 hours per day on Friday, Saturday and Monday.
- 4) A sub-contractor providing vacuum trucks to bypass force main from the pump station to an appropriate discharge point. He charged \$2,000 for 12 hours of bypassing. The markup for the sub-contractor's services will be applied to the charged price.
- 5) Materials include pipe and fittings, sand, grass seed, and HTH/Lime. For this example, the total of the listed materials was invoiced at \$2,000. The markup for materials will be applied to the invoiced price.

MINOR CONSTRUCTION PROJECT

For the purpose of evaluation of proposals, the following project description is provided for a minor construction project. An 8" PVC water main will be extended 100' along an existing street but not under the pavement. The pipe will be installed at 4' deep and will include one (1) 8" gate valve and one (1) fire hydrant assembly. This is a 3-day project at 8 hours per day for a total of 24 hours. For the purpose of evaluation, this will involve the following:

- 1) A crew of 3 men (1-supervisor/operator, 1-skilled laborer and 1-laborer). The labor time will be calculated as 8 hours per day for Monday, Tuesday and Wednesday.
- 2) Equipment (1-medium excavator, 1-front-end loader and 1-skid steer). The equipment time will be calculated as 8 hours per day for Monday, Tuesday and Wednesday.
- 3) Small equipment (1-traffic controls and 1-compactor). The small equipment time will be calculated as 8 hours per day for Monday, Tuesday and Wednesday.
- 4) Materials include pipe and fittings, sand, and grass seed. For this example, the total of the listed materials was invoiced at \$5,000. The markup for materials will be applied to the invoiced price.

EMERGENCY AND MINOR CONSTRUCTION SERVICES UNIT PRICE PROPOSAL

Contractor:	

Price & Service Provisions

- 1. Regular working hours are scheduled as 7 a.m. to 5 p.m., Monday thru Friday.
- 2. Any work performed after these hours or on weekends will be charged as overtime.
- 3. Any work performed on scheduled Holidays will be charged as overtime.
- 4. Equipment rates include fuel and maintenance expense.
- 5. Equipment rates do not include an operator.
- 6. The rate for equipment not listed but required, will be negotiated and approved prior to use.
- 7. Additional services and sub-contractors shall require prior approval.
- 8. Additional rented project equipment shall require prior approval.
- 9. Mobilization/Demobilization shall be limited to the amounts described in the Contract Documents.
- 10. Additional available personnel and equipment and their corresponding rates may be listed in the blank lines provided in the appropriate sections below, or on additional pages provided by Contractor.

Labor Rates for Emergency Construction Services

Labor Classification	Unit	Rate, \$ / hr	Overtime/Holiday Rate, \$ / hr
Project Manager	hr		
Superintendent/Foreman	hr		
Equipment Operator	hr		
Equipment Operator	hr		
Skilled Laborer	hr		
Pipe Layer	hr		
Laborer	hr		
Laborer	hr		
Laborer	hr		
Welder	hr		

Labor Rates for Minor Construction Services

Labor Classification	Unit	Rate, \$ / hr	Overtime/Holiday Rate, \$ / hr
Project Manager	hr		
Superintendent/Foreman	hr		
Equipment Operator	hr		
Equipment Operator	hr		
Skilled Laborer	hr		
Pipe Layer	hr		
Laborer	hr		
Laborer	hr		
Laborer	hr		
Welder	hr		

Large/Heavy Equipment Rates

Equipment Classification	Equipment Model (size, class)	Unit	Rate, \$ / hr
Large Excavator		hr	
Medium Excavator		hr	
Mini Excavator		hr	
Rubber Tire Backhoe		hr	
Front-end Loader		hr	
Skid Steer		hr	
Tractor		hr	
Tandem Axel Dump Truck		hr	
Dozer		hr	

Small Equipment Rates

Equipment Classification	Equipment Model (size, class)	Unit	Rate, \$ / hr
Traffic Controls		hr	
Lighting		hr	
Dewatering Equipment		hr	
Minor Equipment (Drills, Saws, Cutters, Jack Hammers, etc)		hr	
Bypass Pump		hr	
Portable Pump		hr	
Air Compressor		hr	
Portable Generator		hr	
Compaction Equipment		hr	
1.7			
Welding/Cutting Equipment		hr	
Mats		hr	
Trench Box		hr	
Trench Box		hr	

Mobilization/Demobilization Rates

Mobilization/Demobilization	Unit	Percentage of Total Labor or Equipment
Project	Lump Sum	n/a
Labor	Lump Sum	Per Contract
Small Equipment	Lump Sum	Per Contract
Large Equipment	Lump Sum	Per Contract

Materials & Additional Other Markup

Item	Cost+ (%)
Materials	
Additional Large Equipment	
Additional Small Equipment	
Sub-contractors	
Services	

The contractor agrees that this proposal shall be good and may not be withdrawn for a period of 90 calendar days after the scheduled closing time for receiving proposals.

Upon receipt of written notice of the acceptance of this proposal, contractor will execute the formal contract within 10 days and deliver a Surety Bond or Bonds as required in the General Requirements. The bid security attached in the sum of:

ONE HUNDRED THOUSAND DOLLARS AND NO CENTS (\$100,000.00)

is to become the property of the Owner in the event the contract and bond are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby. In the event of the failure of the successful Contractor to enter into the contract within the time period specified, the Owner has the right to rescind the award and award the contract to the next lowest, responsible, responsive proposal.

	Respectfully submitted:
	Name of Company:
(SEAL – if proposal is by corporation)	
	By:
	<u> </u>

Address:	
Street:	
P.O. Box:	
City:	
State:	
Telephone:	
Cert of Resp. No.	

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, NON-COLLUSION AND OTHER RESPONSIBILITY MATTERS

Under Executive Order 12549 individuals or organizations debarred from participation in Federal Assistance Programs may not receive an assistance award under a federal program or subagreement there under for \$25,000 or more. Accordingly each recipient of a Federally-Funded contract or subcontract exceeding \$25,000 must complete the following certification (see 40 CFR 32.510). The prime bidder shall attach the copies of this certification to his bid.

The prospective participant certifies to the best of their knowledge and belief that it and its principals:

- (a) Have not either directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its officials, partners, employees or principal owners.
- (b) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (c) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (d) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (e) Have not within a three year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 U.S.C. Subsection 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Title of Project or Subcontract	
Prime or Subcontractor's Name	Signature/Date

() I am unable to certify to the above statements. Attached is my explanation.

BID BOND

Any singular reference to Bidder, Surety, Owner, or other party shall be considered plural where applicable.

BIDDER (Name and Address):			
SURETY (Name and Address of Principal Place	ce of Business):		
OWNER (Name and Address):			
BID Bid Due Date: Project (Brief Description Including Location)):		
BOND Bond Number: Date (Not later than Bid due date): Penal sum			
(Wo Surety and Bidder, intending to be legally bour	ŕ	(Figures) ect to the terms printed on the reverse side hereof, d	lo each
cause this Bid Bond to be duly executed on its			
BIDDER		SURETY	
	(Seal		(Seal)
Bidder's Name and Corporate Seal	,	Surety's Name and Corporate Seal	 ,
By: Signature and Title		By: Signature and Title (Attach Power of Attorney)	
Attest: Signature and Title		Attest: Signature and Title	
Note: Above addresses are to be used for givin	ng required notion	ce.	

EJCDC NO. C-430 (2002 Edition)

00430-1

- 1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Surety's liability.
- 2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
- 3. This obligation shall be null and void if:
 - 3.1. Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2. All Bids are rejected by Owner, or
 - 3.3. Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
- 4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
- 5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
- 6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

- 7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
- 8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
- 9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
- 10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
- 11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

EJCDC SUGGESTED FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

THIS AGREEMENT is by and between
(Owner) and
(Contractor).
Owner and Contractor, in consideration of the mutual covenants set forth herein, agree as follows:
ARTICLE 1 - WORK
1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:
ARTICLE 2 - THE PROJECT
2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:
ARTICLE 3 - ENGINEER
3.01 The Project has been designed by
(Engineer), who is to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.
ARTICLE 4 - CONTRACT TIMES
4.01 Time of the Essence

A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated

in the Contract Documents are of the essence of the Contract.

4.02 Dates for Substantial Completion and Final Payment
A. The Work will be substantially completed on or before, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before,
[or]
4.02 Days to Achieve Substantial Completion and Final Payment
A. The Work will be substantially completed within days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within days after the date when the Contract Times commence to run.
4.03 Liquidated Damages
A. Contractor and Owner recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$ for each day that expires after the time specified in Paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$ for each day that expires after the time specified in Paragraph 4.02 for completion and readiness for final payment until the Work is completed and ready for final payment.
NOTES TO USER 1. Where failure to reach a Milestone on time is of such consequence that the assessment of liquidated damages for failure to reach one or more Milestones on time is to be provided, appropriate amending or supplementing language should be inserted here.
ARTICLE 5 - CONTRACT PRICE
5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 5.01.A, 5.01.B, and 5.01.C below:
A. For all Work other than Unit Price Work, a Lump Sum of:
(\$)
(words) (numerals
All specific cash allowances are included in the above price and have been computed in accordance with paragraph 11.02 of the General Conditions.
B. For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in this paragraph 5.01.B:

As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of the General Conditions. Unit prices have been computed as provided in Paragraph 11.03 of the General Conditions.

		UNIT PRIC	CE WORK	T (1		
<u>Iter</u> <u>No</u>			<u>Unit</u>	Estimated Quantity	<u>Unit Price</u>	<u>Estimated</u>
	TOTAL OF ALL ESTIMATED	PRICES				\$
				(words)		(numerals)
C.	For all Work, at the prices stated in Cor	ntractor's Bid, attac	hed hereto as	s an exhibit.		
	1. If adjustment prices for variation appropriate provisions. See BF-4.			quantities hav	e been agreed	to, insert
	2. Depending upon the particular Bi 5.01.B alone, or A-5.01.C alone, do Contractor's Bid is attached as an	eleting those not us	ed and renun			•
ARTI	CLE 6 - PAYMENT PROCEDURES					
6.01	Submittal and Processing of Payments					
	Contractor shall submit Applications for syment will be processed by Engineer as				General Condition	ons. Applications
6.02	Progress Payments; Retainage					
Paymo 6.02. A the Go	Owner shall make progress payments of ent on or about the day of each maked. A.2 below. All such payments will be me eneral Conditions (and in the case of Unnedule of values, as provided in the Gene	nonth during perfor asured by the sched it Price Work based	mance of the dule of values d on the num	e Work as prov s established as	vided in Paragra s provided in Par	phs 6.02.A.1 and ragraph 2.07.A of
or C	1. Prior to Substantial Completion, pow but, in each case, less the aggregate of Dwner may withhold, including but not limitations:	f payments previou	ısly made and	d less such am	ounts as Engine	er may determine
	a percent of Work comp completed as determined by Engineer, and Engineer, Owner, on recommendate Work remain satisfactory to them, there	and if the character ion of Engineer, ma	r and progres ay determine	ss of the Work that as long as	have been satis	factory to Owner
	b percent of cost of mat retainage).	erials and equipme	ent not inco	rporated in the	e Work (with the	he balance being
	2. Upon Substantial Completion, Ownercent of the Work completed, less su					

of the General Conditions and less percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.
6.03 Final Payment
A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 14.07.
ARTICLE 7 - INTEREST
7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the rate of percent per annum.
ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS
8.01 In order to induce Owner to enter into this Agreement Contractor makes the following representations:
A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in Paragraph 4.02 of the General Conditions and (2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which has been identified in the Supplementary Conditions as provided in Paragraph 4.06 of the General Conditions.
NOTES TO USER 1. If the reports and/or drawings referred to in A-8.01.D do not exist, either modify A-8.01.D or delete A-8.01.D and renumber accordingly.
EJCDC C-520 Suggested Form of Agreement Between Owner and Contractor for Construction Contract (Stipulated Price)

E. Contractor has obtained and carefully studied (or assumes responsibility for doing so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto.

NOTES TO USER

- 1. If the reports and/or drawings referred to in A-8.01.D do not exist, delete the phrase "additional or supplementary" in the first sentence of A-8.01.E.
- F. Contractor does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has correlated the information known to Contractor, information and observations obtained from visits to the Site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Contract Documents.
- I. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 9 - CONTRACT DOCUMENTS

A.	The Contract Documents consist of the following:		
	1.	This Agreement (pages 1 to, inclusive).	
	2.	Performance bond (pages to, inclusive).	
	3.	Payment bond (pages to, inclusive).	
	4.	Other bonds (pages to, inclusive).	
		a (pages to, inclusive).	
		b (pages to, inclusive).	
		c (pages to, inclusive).	
	5.	General Conditions (pages to, inclusive).	
	6.	Supplementary Conditions (pages to, inclusive).	
	7.	Specifications as listed in the table of contents of the Project Manual.	

8. Drawings consisting of sheets with each sheet bearing the following general title: [or] the Drawing listed on attached sheet index.
9. Addenda (numbers to, inclusive).
10. Exhibits to this Agreement (enumerated as follows):
a. Contractor's Bid (pages to, inclusive).
b. Documentation submitted by Contractor prior to Notice of Award (pages to, inclusive).
c
11. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
a. Notice to Proceed (pages to, inclusive).
b. Work Change Directives.
c. Change Order(s).
B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above)
C. There are no Contract Documents other than those listed above in this Article 9.
D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.
ARTICLE 10 - MISCELLANEOUS
10.01 Terms
A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.
10.02 Assignment of Contract
A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are 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 Documents.
10.03 Successors and Assigns
A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligation contained in the Contract Documents.
10.04 Severability
A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall b

deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall 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.

NOTES TO USER

- 1. If Owner intends to assign a procurement contract (for goods and services) to the Contractor, see Notes to User at Article 23 of Suggested Instructions to Bidders for Procurement Contracts (EJCDC No. P-200, 2000 Edition) for provisions to be inserted in this Article.
- 2. Insert other provisions here if applicable.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement in duplicate. One counterpart each has been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf.

NOTES TO USER

1. See I-21 and correlate procedures for format and signing between the two documents.

This Agreement will be effective on, (which is the	Effective Date of the Agreement).
OWNER:	CONTRACTOR:
Ву:	By:
Title:	Title:
[CORPORATE SEAL]	[CORPORATE SEAL]
Attest:	Attest:
Title:	Title:
Address for giving notices:	Address for giving notices:
	License No.:
(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other	License No.: (Where applicable)
documents authorizing execution of Owner-Contractor Agreement.)	Agent for service or process:
	(If Contractor is a corporation or a partnership, attach evidence of authority to sign.)

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

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly by









AMERICAN SOCIETY OF CIVIL ENGINEERS

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE

A Practice Division of the

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Endorsed by



CONSTRUCTION SPECIFICATIONS INSTITUTE

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor (EJCDC C-520 or C-525, 2007 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the Narrative Guide to the EJCDC Construction Documents (EJCDC C-001, 2007 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (EJCDC C-800, 2007 Edition).

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. 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 which is evidence of the agreement between Owner and Contractor covering the Work.
 - 3. Application for Payment—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 - 4. *Asbestos*—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
 - 5. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 - 6. *Bidder*—The individual or entity who submits a Bid directly to Owner.
 - 7. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).
 - 8. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.
 - 9. *Change Order*—A document recommended by Engineer 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, issued on or after the Effective Date of the Agreement.
 - 10. *Claim*—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
 - 11. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

- 12. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 13. *Contract Price*—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
- 14. *Contract Times*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
- 15. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.
- 16. Cost of the Work—See Paragraph 11.01 for definition.
- 17. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- 18. *Effective Date of the Agreement*—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *Engineer*—The individual or entity named as such in the Agreement.
- 20. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
- 21. General Requirements—Sections of Division 1 of the Specifications.
- 22. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.
- 23. *Hazardous Waste*—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 24. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 25. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 26. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

- 27. *Notice of Award*—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
- 28. *Notice to Proceed*—A written notice given 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 under the Contract Documents.
- 29. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
- 30. *PCBs*—Polychlorinated biphenyls.
- 31. *Petroleum*—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 33. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- 34. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 35. *Radioactive Material*—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 36. Resident Project Representative—The authorized representative of Engineer who may be assigned to the Site or any part thereof.
- 37. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 38. Schedule of Submittals—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 39. *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.

- 40. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- 41. *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 for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
- 42. *Specifications*—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
- 43. *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 at the Site.
- 44. 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 thereof.
- 45. Successful Bidder—The Bidder submitting a responsive Bid to whom Owner makes an award.
- 46. *Supplementary Conditions*—That part of the Contract Documents which amends or supplements these General Conditions.
- 47. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, 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 Subcontractor.
- 48. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 49. *Unit Price Work*—Work to be paid for on the basis of unit prices.
- 50. 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, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 51. Work Change Directive—A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an

addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives:*

1. 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 Paragraph 9.09 or any other provision of the Contract Documents.

C. Day:

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective*:

- 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. 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 14.04 or 14.05).

E. Furnish, Install, Perform, Provide:

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean 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, shall mean 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, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.
- F. 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 Bonds and Evidence of Insurance
 - A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
 - B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

- A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.
- 2.03 Commencement of Contract Times; Notice to Proceed
 - A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement 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 Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

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

2.05 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), 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 Documents;
 - 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.

2.06 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 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, 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 instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.07 Initial 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 for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall 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 component parts of the Work.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is required by one 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. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to Owner.
- C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 Reference Standards

- A. Standards, Specifications, Codes, Laws, and Regulations
 - 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement 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, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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 Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies:

- 1. Contractor's Review of Contract Documents Before Starting Work: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor discovers, or has actual knowledge of, and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
- 2. Contractor's Review of Contract Documents During Performance of Work: If, 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) any standard, specification, manual, or code, or (c) 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 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
- 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 Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - a. the provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents); 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 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
 - 1. A Field Order;
 - 2. Engineer's approval of a Shop Drawing or Sample (subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

3.05 Reuse of Documents

- A. Contractor and any Subcontractor or Supplier 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 editions; or
 - 2. 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.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 Electronic Data

- A. Unless otherwise stated in the Supplementary Conditions, the data furnished by Owner or Engineer to Contractor, or by Contractor to Owner or Engineer, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

A. Owner shall furnish the Site. Owner shall notify Contractor 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. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the

Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

- 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 the Work is to be performed 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.

4.02 Subsurface and Physical Conditions

- A. Reports and Drawings: The Supplementary Conditions identify:
 - 1. those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and
 - 2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "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:
 - 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. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 Differing Subsurface or Physical Conditions

- A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:
 - 1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
 - 2. is of such a nature as to require a change in the Contract Documents; or

- 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 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

- B. *Engineer's Review*: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.
- C. Possible Price and Times Adjustments:
 - 1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition 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 meet any one or more of the categories described in Paragraph 4.03.A; and
 - 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 Paragraphs 9.07 and 11.03.
 - 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - a. Contractor knew of the existence of such conditions at the time Contractor made a final 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
 - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
 - 3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or 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) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

- A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and
 - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all such information and data;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents;
 - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction; and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated:

- 1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, 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 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- 2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price

or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 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.

4.06 Hazardous Environmental Condition at Site

- A. Reports and Drawings: The Supplementary Conditions identify those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "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:
 - 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. 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 any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by

Paragraph 6.16.A); and (iii) 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 4.06.E.

- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. 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, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.
- F. 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. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.
- G. 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 or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. 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 a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 – BONDS AND INSURANCE

5.01 Performance, Payment, and Other Bonds

- A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.
- B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds 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 shall show that it is effective on the date the agent or attorney-in-fact signed each bond.
- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 Certificates of Insurance

A. Contractor shall deliver to Owner, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

- B. Owner shall deliver to Contractor, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.
- C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.
- E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 Contractor's Insurance

- A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed 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:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
 - claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
 - 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
 - 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
 - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
 - b. by any other person for any other reason;
 - 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
 - 6. claims 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.
- B. The policies of insurance required by this Paragraph 5.04 shall:

- 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
- 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
- 3. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
- 4. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
- 5. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
- 6. include completed operations coverage:
 - a. Such insurance shall remain in effect for two years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 Owner's Liability Insurance

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

- 1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee;
- 2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions.
- 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
- 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
- 5. allow for partial utilization of the Work by Owner;
- 6. include testing and startup; and
- 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such equipment breakdown insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property

- insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under this Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 *Waiver of Rights*

- A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Contractor waive all rights against each other and their 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 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 Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (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. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.
- B. 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:
 - 1. loss 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 perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery

against Contractor, Subcontractors, or Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 Receipt and Application of Insurance Proceeds

- A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the loss payees, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.
- B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, 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. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 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. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

6.02 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 at all times maintain good discipline and order at the Site.
- B. 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 shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 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.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall 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 shall 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.

6.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 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 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 Substitutes and "Or-Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description 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 or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.
 - 1. "Or-Equal" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it 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; and
 - 3) it has a proven record of performance and availability of responsive service.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items:

- a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
- c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented by the General Requirements, and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design,
 - b) be similar in substance to that specified, and
 - c) be suited to the same use as that specified;

2) will state:

- a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time,
- b) 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
- c) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

- a) all variations of the proposed substitute item from that specified, and
- b) available engineering, sales, maintenance, repair, and replacement services; and

- 4) shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.
- C. *Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by a Change Order in the case of a substitute and an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.
- D. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- E. *Engineer's Cost Reimbursement*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. 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.
- F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.
- 6.06 Concerning Subcontractors, Suppliers, and Others
 - A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
 - B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or

other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (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 any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 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 a particular 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 shall be disclosed by Owner 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.

6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. 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 opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 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. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear 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. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *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.

6.11 *Use of Site and Other Areas*

A. Limitation on Use of Site and Other Areas:

- Contractor shall confine construction equipment, the storage of materials and equipment, and
 the operations of workers to the Site and other areas permitted by Laws and Regulations, and
 shall not unreasonably encumber the Site and other areas with construction equipment or
 other materials or equipment. Contractor shall assume full responsibility for any damage to
 any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas
 resulting from the performance of the Work.
- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- 3. 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 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 by or based upon Contractor's performance of the Work.
- B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall 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 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 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 property to stresses or pressures that will endanger it.

6.12 Record Documents

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

6.13 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. 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, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. 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. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.

- D. 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.
- E. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.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 (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).
- F. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 Hazard Communication Programs

A. Contractor shall be responsible for coordinating any exchange of 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.

6.16 *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 threatened 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 thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 Shop Drawings and Samples

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings:

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will 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 6.17.D.

2. Samples:

- a. Submit number of Samples specified in the Specifications.
- b. 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 6.17.D.
- B. 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. Submittal Procedures:

- 1. Before submitting each Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop

Drawings or Sample submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review:

- Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. 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, conform to the information given in 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 (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.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's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures:

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.

6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 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 and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

- 1. abuse, modification, or improper 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.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 - 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 or the issuance of a notice of acceptability by Engineer;
 - 6. any inspection, test, or approval by others; or
 - 7. any correction of defective Work by Owner.

6.20 *Indemnification*

- A. 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 performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury 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 6.20.A shall 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.
- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 Delegation of Professional Design Services

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 – OTHER WORK AT THE SITE

7.01 Related Work at Site

- A. Owner may perform other work related to the Project at the Site with Owner's employees, or through other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
 - 1. written notice thereof will be given to Contractor prior to starting any such other work; and
 - 2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. 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. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.
- C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, 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.

7.02 Coordination

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
 - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
 - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 Legal Relationships

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

ARTICLE 8 – OWNER'S RESPONSIBILITIES

- 8.01 Communications to Contractor
 - A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.
- 8.02 Replacement of Engineer
 - A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.
- 8.03 Furnish Data
 - A. Owner shall promptly furnish the data required of Owner under the Contract Documents.
- 8.04 Pay When Due
 - A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.
- 8.05 Lands and Easements; Reports and Tests
 - A. Owner's duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site.
- 8.06 *Insurance*
 - A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 5.
- 8.07 *Change Orders*
 - A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

- 8.08 Inspections, Tests, and Approvals
 - A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.
- 8.09 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.
- 8.10 Undisclosed Hazardous Environmental Condition
 - A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.
- 8.11 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 Documents.
- 8.12 *Compliance with Safety Program*
 - 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 pursuant to Paragraph 6.13.D.

ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION

- 9.01 *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 Documents.
- 9.02 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 9.09. 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.

9.03 Project Representative

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 Authorized Variations in Work

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which 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. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 Rejecting Defective Work

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 Shop Drawings, Change Orders and Payments

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.
- D. In connection with Engineer's authority as to Applications for Payment, see Article 14.
- 9.07 Determinations for Unit Price Work
 - A. 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, subject to the provisions of Paragraph 10.05.
- 9.08 Decisions on Requirements of Contract Documents and Acceptability of Work
 - A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question.
 - B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believes that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.
 - C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.
 - D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.
- 9.09 Limitations on Engineer's Authority and Responsibilities
 - A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents 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 shall 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 Paragraph 14.07.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 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.10 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 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 by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *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 as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.D.

10.03 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
 - 1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
 - changes in the 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; and
 - 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *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.

10.05 *Claims*

- A. *Engineer's Decision Required*: All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Times shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The

- opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).
- C. *Engineer's Action*: Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
 - 1. deny the Claim in whole or in part;
 - 2. approve the Claim; or
 - 3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.
- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 Cost of the Work

- A. Costs Included: The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 11.01.B, and shall 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. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on

Saturday, Sunday, or legal holidays, shall 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 shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall 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, who 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 shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
- 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including 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, and hand tools not owned by the workers, 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.
 - c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the 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 property insurance established in accordance with Paragraph 5.06.D), 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 shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall 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 telegrams, long distance telephone calls, telephone 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 Contractor is required by the Contract Documents to purchase and maintain.
- B. Costs Excluded: The term Cost of the Work shall not include any of the following items:
 - 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, 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 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
 - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 - 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 - 4. 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.
 - 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A.
- C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 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:

1. Contractor agrees that:

- a. 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
- b. 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 on account of any of the foregoing will be valid.

C. Contingency Allowance:

- 1. Contractor agrees that a 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 on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 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. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.
- 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. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for 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, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. Contractor's Fee: The Contractor's fee for overhead and profit shall 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 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five 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 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
- d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 Delays

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, 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 the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the

control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

- D. Owner, Engineer, and their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall not be liable to Contractor for any claims, costs, losses, or 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) sustained by Contractor on or in connection with any other project or anticipated project.
- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. Defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will 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 therewith as applicable.

13.03 Tests and Inspections

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
 - 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
 - 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in Paragraph 13.04.C; and
 - 3. as otherwise specifically provided in the Contract Documents.

- 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 and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.
- E. 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.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 Uncovering Work

- A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.
- B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, 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, furnishing all necessary labor, material, and equipment.
- C. If it is found that the uncovered Work is defective, Contractor shall pay 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 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 Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
- D. 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, or both, 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, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 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, 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 shall 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.

13.06 Correction or Removal of Defective Work

- A. Promptly after receipt of written notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay 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 correction or removal (including but not limited to all costs of repair or replacement of work of others).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 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 terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. repair such defective land or areas; or
 - 2. correct such defective Work; or
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If 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. 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 correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. 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.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, 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.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay 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) 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 pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 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 rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct, or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 13.09, 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, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, 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 (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) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. 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 13.09.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. *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. 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 shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the

Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications:

- 1. Engineer will, within 10 days after receipt of each Application for Payment, 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 9.07, 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 Documents; 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, or

- b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
- c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
- d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, 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 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
 - d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due:

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment:

- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
 - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
 - 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;
 - c. there are other items entitling Owner to a set-off against the amount recommended; or

- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action 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, when Contractor remedies the reasons for such action.
- 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1 and subject to interest as provided in the Agreement.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 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 (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- 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 tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the tentative certificate to Owner, notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will, within said 14 days, execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities

pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. 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 tentative list.

14.05 Partial Utilization

- 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. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and 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 14.04.A through D for that part of the Work.
 - 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and 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 14.04 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 5.10 regarding property insurance.

14.06 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 is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

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, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.6;
 - b. consent of the surety, if any, to final payment;
 - c. a list of all Claims against Owner that Contractor believes are unsettled; and
 - d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) 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.

B. Engineer's Review of Application and Acceptance:

1. 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 Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. 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. Payment Becomes Due:

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 Final Completion Delayed

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

- A. The making and acceptance of final payment will constitute:
 - a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
 - a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

15.01 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 notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 Owner May Terminate for Cause

A. The occurrence of any one or more of the following events will 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 established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
- 2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
- 3. Contractor's repeated disregard of the authority of Engineer; or
- 4. Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:
 - 1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion);
 - 2. 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
 - 3. complete the Work as Owner may deem expedient.
- C. If Owner proceeds as provided in Paragraph 15.02.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 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) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed 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.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. 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. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B and 15.02.C.

15.03 Owner May Terminate For Convenience

- A. Upon seven 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):
 - 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;
 - 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;
 - 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) incurred in settlement of terminated contracts with Subcontractors,
 Suppliers, and others; and
 - 4. reasonable expenses directly attributable to termination.
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven 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 15.03.
- 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, seven 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 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 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 16 – DISPUTE RESOLUTION

16.01 *Methods and Procedures*

- A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.
- B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.
- C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:
 - 1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions; or
 - 2. agrees with the other party to submit the Claim to another dispute resolution process; or
 - 3. gives written notice to the other party of the intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 – MISCELLANEOUS

17.01 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended; or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents 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.

17.03 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 Documents. 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.

17.04 Survival of Obligations

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

17.05 Controlling Law

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

17.06 Headings

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

SUPPLEMENTAL GENERAL CONDITIONS

1. INSURANCE

- 1.1. Failure of Owner to demand such certificates or other evidence of full compliance with these requirements or failure of Owner to identify a deficiency from evidence provided shall not be construed as a waiver of Contractor's obligations to maintain such compliance.
- 1.2. By requiring such insurance and limits herein, Owner does not represent that coverage and limits will necessarily be adequate to protect Contractor, and such coverage and limits shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.
- 1.3. Contractor's Liability Insurance
 - 1.3.a. As required under Article 5, Section 5.04 of the General Conditions, Contractor shall purchase and maintain insurance coverage of the types required. In conformance with State Law, policy limits for General Liability, Automobile Liability, and Property Damage shall be not less than \$1,000,000 aggregate.
- 1.4. Worker's Compensation Insurance
 - 1.4.a. Contractor and each subcontractor must submit evidence of coverage per Mississippi State Law.
- 1.5. Property Insurance
 - 1.5.a. The Owner hereby gives notice to the Contractor that the property insurance specified under Article 5, Section 5.06 of the General Conditions will NOT be purchased and maintained by the Owner.
- 1.6. DELETE Paragraph 5.06.A in its entirety and INSERT the following in its place:
 - A. Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof.
 - 1. This insurance shall:
 - a. include the interests of Owner, Contractor, Subcontractors, Engineer and any other individuals or entities identified herein, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured:
 - b. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, falsework, and materials and equipment in transit and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

- c. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
- d. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
- e. allow for partial utilization of the Work by Owner;
- f. include testing and startup; and
- g. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- 2. Contractor shall be responsible for any deductible or self-insured retention.
- Marine Insurance
 - a. If work is to be performed over, near, or around marine environments, Contractor's insurance coverage shall include coverage against risks to his own employees in a marine environment, and coverage against injury or damage to persons and property caused by Contractor in a marine environment (\$1,000,000 aggregate limit).
- 4. The policies of insurance required to be purchased and maintained by Contractor in accordance with this Paragraph shall comply with the requirements of paragraph 5.06C of the General Conditions.
- 1.7. The Owner and Engineer shall be listed as additional insured on all policies.
- 1.8. A Certificate of Insurance with the appropriate modifications required for acceptance is provided as Figure 5.03.C

PRODUCER CERT	IFICATE OF			ANCE SUED AS A MATTER (DATE (MM/DD/YYYY) OF INFORMATION
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		2		PROPERTY DAMAGE (Per accident)	\$
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ESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES	3 / EXCLUSIONS ADDED BY ENDO	RSEMENT / SPECIAL PROVI	SIONS		
Engineer and Owner are hereb	y listed as additional	insured.			
CERTIFICATE HOLDER		CANCELLAT	ION		
		DATE THEREOF, 1	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT.		
		AUTHORIZED REF	PRESENTATIVE		
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2. STORED MATERIALS

2.1. In the General Conditions, Article 14, Section 14.02, add the following paragraph 14.02.A.4 related to payment of stored materials:

"No payment for stored materials will be allowed on this project."

3. CONTRACTOR'S GENERAL WARRANTY AND GUARANTEE

3.1. In the General Conditions, Article 6, Section 6.19. Add the following new paragraph immediately after paragraph 6.19.C.7:
"6.19.C.8 Unless additional warranties are included in the technical specifications, the contractor shall guarantee the Work for a period of one-year following Final Payment."

4. SUBSTANTIAL COMPLETION

4.1. In the General Conditions, Substantial Completion, Article 14, Section 14.04.
Delete the following and any reference thereto:
 "(except for items specifically listed by CONTRACTOR as incomplete)"
 "(with a revised tentative list of items to be completed or corrected)"

5. **DEFINITIONS**

5.1. In the General Conditions, Article 1 Definitions, Paragraph 1.01.A.45. Change to read as follows:

"Substantial Completion – The entire Work included in the project and as specified on the bid form has progressed to the point where, in the opinion of ENGINEER as evidenced by ENGINEER's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the entire Work, including restoration items, can be utilized for the purposes for which it is intended and no pay items on the bid form remain to be completed. The term "substantially complete" as applied to all of the Work refers to Substantial Completion thereof."

5.2. In the General Conditions, Article 1 Definitions, Paragraph 1.01.A.51. Change to read as follows:

"Work – The entire construction, including restoration, 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, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents."

6. PARTIAL UTILIZATION

6.1. In the General Conditions, Article 14 Partial Utilization, Section 14.05: Replace the first paragraph with the following: "Use by OWNER at OWNER's option of any completed part of the Work 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, may be accomplished prior to Substantial Completion of all of the Work."

6.2. In the General Conditions, Article 14 Partial Utilization, delete Paragraphs 14.05.A.1-3 in their entirety.

7. REPORTING AND RESOLVING DISCREPANCIES

7.1. In the General Conditions, Article 3, Section 3.03, Paragraph 3.03.B. Add the following new language at the end of this section:

"3.03.B.1.c Whenever the Contract Documents contain contradictions or discrepancies among themselves or with other standards or requirements, the most stringent means or methods, as determined by the Engineer, shall be applied."

8. SUBSURFACE AND PHYSICAL CONDITIONS

8.1. In the General Conditions, Article 4, Section 4.02, amend paragraph 4.02.A.1 to read as follows:

"No reports or explorations or tests of subsurface conditions at or contiguous to the Site are known to the Engineer or Owner."

9. REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT

9.1. In the General Conditions, Article 14, Section 14.02, amend paragraph 14.02.C.1 to read as follows:

"Thirty days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02D) become due, and when due will be paid by Owner to Contractor."

10. ENUMERATION OF PLANS, SPECIFICATIONS AND ADDENDA

10.1. Following are the Plans, Specifications and Addenda which form a part of this contract:

SPECIFICATIONS

Advertisement	Page 1 to 1, incl.
Information for Bidders	Pages 1 to 6, incl.
General Requirements	Pages 1 to 3, incl.
Standard Requirements	Pages 1 to 2, incl.
Section 1: Emergency Construction Services	Pages 1 to 2, incl.
Section 2: Minor Construction Services	Pages 1 to 2, incl.
Example Construction Projects for Evaluation	Pages 1 to 1, incl.
Bid Proposal	Pages 1 to 5, incl.
Non-Collusion Affidavit/Debarment Certification	Pages 1 to 1, incl.
Bid Bond	Pages 1 to 2, incl.
Contract	Pages 1 to 7, incl.
General Conditions	Pages 1 to 62, incl.
Supplemental General Conditions	Pages 1 to 5, incl.
Special Conditions	Pages 1 to 7, incl.

SPECIAL CONDITIONS

1. EXISTING UTILITIES

- 1.1. Where known, the approximate locations of existing utility lines adjacent to the work are shown in the Drawings according to the best information available. The project has been designed to minimize conflicts with existing utilities. However, the Engineer cannot and does not warrant that the existing utilities shown on the Drawings are complete and accurate.
- 1.2. The Contractor will be required to coordinate with the various utility owners to obtain field location of utility lines in the project area and must allow a reasonable time to accomplish unforeseen needed adjustments which may prove necessary as the construction progresses.
- 1.3. Damage caused by the Contractor to City-owned water and sewer facilities which are currently in service shall be repaired by the Contractor at his expense, subject to the inspection and approval of the Superintendent of the Public Works Department.
- 1.4. Power, telephone, fiber optics, gas, TV cable and other facilities in the project area are owned by private utility companies. The Contractor will be required to coordinate with the various utility owners to obtain field location of utility lines in the project area in advance of construction, and must allow a reasonable time to accomplish unforeseen needed adjustments. Contractor is responsible for repairs or costs incurred by others for repair of any utility lines damaged by Contractor.
- 1.5. Contractor shall properly locate and expose all underground facilities in advance of construction and determine if any conflicts exist with the alignment or grade of the proposed facility. Contractor shall notify Engineer of all potential conflicts prior to construction.
- 1.6. Contractor shall be familiar with the policy adopted by Mississippi Power Company regarding the assessment of fees to contractors for safety related services, including, but not limited to loaning line trucks to hold poles during excavation in proximity to poles and sending crews to cover power lines with specially designed rubber blankets or hoses. Any such costs incurred shall be the responsibility of the Contractor, at no additional compensation by the Owner. Contractor shall not commence work in the vicinity of poles, lines or other electrical equipment until mutually satisfactory arrangements have been made with Mississippi Power Company.
- 1.7. For the Contractor's reference, the following is a list of utility owners which may have facilities in the project area:

 AT&T
 228-863-7149

 Bell South
 800-227-6477

 Cable One
 228-864-1506

 City of Long Beach Public Works
 228-863-0440

 Mississippi Power Company
 228-864-1211

 Reliant Energy Entex
 228-896-7500

 Mississippi One Call System
 800-227-6477

1.8. Per Mississippi law, contractor shall call the Mississippi One Call system at least 48 hours prior to any excavation, and complete the work within the required amount of time after the issuance of a locate number. Locate numbers must be renewed if the work is not complete within the required time.

2. ABBREVIATIONS

Wherever the following abbreviations are used, with or without periods, in these specifications or other contract documents, they are to be construed the same as the respective expressions represented:

A.A.S.H.T.O. -American Association of State Highway and

Transportation Officials

A.C.I. -American Concrete Institute

ANSI - American National Standards Institute
A.S.A. - American Standards Association

A.S.T.M. -American Society for Testing and Materials

A.W.W.A.

-American Water Works Association
E.P.A.

-Environmental Protection Agency

Modified Procter Density -ASTM D1557, Modified AASHTO

M.D.O.T. -Mississippi State Highway Department

Standard Specifications, 2004 Edition

M.S.D.H.

-Mississippi State Department of Health
O.S.H.A.

-Occupational Safety & Health Administration

3. SUPERVISION & EMERGENCY RESPONSE

- 3.1. The Contractor shall designate an individual as Project Superintendent who is responsible for all construction operations of the entire project and is authorized to make minor field decisions and commitments on Contractor's behalf. He, or an authorized agent, shall be present at all times when the work is in progress. Readily accessible copies of both the contract documents and the latest approved working drawings shall be kept on the job site at all times.
- 3.2. The Contractor shall arrange for and pay all costs to ensure that one or more responsible individuals are available at all times to respond to emergencies within the project area such as water leaks, sewer leaks, needed road / driveway maintenance, or other issues. This individual or individuals shall be reachable 24 hours per day and 7 days per week by cell phone or pager, shall be authorized by Contractor to operate equipment and expend money to mitigate emergencies, and shall reside within ten miles of the project area.

4. CLEANING UP

- 4.1. The Contractor shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the work, and at the completion of the work he shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, construction equipment and machinery, and all surplus materials, and shall leave the site clean and ready for occupancy by Owner.
- 4.2. Contractor shall restore to their original condition those portions of the site not designated for alterations by the contract documents.
- 4.3. Contractor shall restore to their original condition all disturbed facilities, including various types of pavements, pavement markings, driveways, curbs, sidewalks, drainage facilities, fences, grassed areas, etc., in a prompt manner during the course of construction.

5. TRAFFIC CONTROL

5.1. Maintenance of traffic in the project area is the responsibility of Contractor.

6. PROTECTION OF AREAS

- 6.1. The Contractor shall keep his operations within those areas bounded by easement and/or property lines and designated for the construction of the project. All resources of the site shall be protected at all times and altered and removed only as designated in the Contract Documents.
- 6.2. Contractor will be responsible for the preservation of all public and private property and will use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work on the part of the contractor, such property will be restored by the contractor, at the contractor's expense, to a condition similar or equal to that existing before the damage was done, or contractor will make good the damage in other manner acceptable to the Engineer.

7. RESTORATION OF AREAS

- 7.1. Features and resources of the landscape, such as trees that have been damaged during construction of the project, shall be restored by the Contractor as nearly as good as the original, so that after project completion the appearance will be natural and not distracting.
- 7.2. The Contractor shall obliterate all signs of temporary work areas, access or haul roads, waste materials and do grading, seeding, etc. that is necessary to blend in with adjacent features. All such disturbed areas are to be restored at the very earliest time practical during construction.

8. CONSTRUCTION LAYOUT

- 8.1. Contractor shall be responsible for surveying and laying out the work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of the Owner. He shall report to the Engineer whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations. The Contractor shall replace and accurately relocate all reference points so lost, destroyed or moved.
- 8.2. The various Work Order scopes will indicate the required dimensions and elevations of the work. Contractor shall be solely responsible for the detailed horizontal and vertical stakeout of the work.

9. EROSION CONTROL

- 9.1. The Contractor shall, at all times, employ "Best Management Practices" (BMP's) for environmental protection while completing the work required by the contract documents.
- 9.2. The Contractor's work plan must cover his proposals for controlling and minimizing erosion and siltation damages during construction. Where appropriate, or required, certain temporary sediment control measures such as berms, dikes, drains, basins, etc. shall be provided and maintained until permanent facilities are provided. All temporary bridges or culverts must be removed when the work is completed. The extent of the area exposed by clearing, grubbing, or grading at any one time, shall be kept to a reasonable minimum.

10. DAMAGE TO TREES

- 10.1. Reasonable care shall be taken during construction to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back, where appropriate, to minimize damage. Trees which receive damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with a tree dressing.
- 10.2. All contractors hired to work on the above named project located in Long Beach, Mississippi shall complete their work as specified by the Engineer and the Owner, while making an unrestrained effort to preserve the health and integrity of all trees (significant and otherwise) on and adjacent to the construction site as illustrated in drawings and specifications produced by the Engineer.
- Construction of the project will involve with the removal of the existing utilities, (i.e., water mains) in the project area. Appropriate actions shall be employed while performing any excavation or trenching activities, to inflict minimal damage upon both exposed and unexposed tree root systems. As stated in the specifications, the Contractor shall install water mains by tunneling or boring underneath tree roots beneath the drip line, with no additional compensation other than to include this cost in the unit price for water and sewer main installation. Such potential damage may include, but not be limited to grubbing or raking of surface and sub-surface roots. Also, roots may be torn or fractured by these processes. Additionally, damage to low-lying or overhanging limbs may occur. It shall be required of the Contractor to afford existing and exposed roots a measure of protection by installing four inches of mulch and utilizing plywood mats while working in close proximity to same. Also low-lying or overhanging limbs shall be marked with high-visibility flagging or a bio-degradable paint to provide a measure of visibility.
- 10.4. In order to insure that damage remain at a minimum, it is highly recommended that all excavation be carried out with special attention given to trees on the site. When excavating, it is recommended that the blade or backhoe rake or grub only at the depth necessary to remove the existing surface and the hard sub-surface material as needed to achieve the desired depth of water or sewer main installation. It is also recommended that low weight equipment with rubber tires be utilized as opposed to tracked equipment so as to minimize compaction and damage to any exposed roots. In any areas where new water and sewer mains are to be installed beneath the drip line of any trees, the Contractor shall secure the services of a licensed arborist to trim the roots of the trees cleanly with the use of a stump grinder to a minimum depth of two feet below the original ground surface, or the Contractor shall bore or tunnel the pipe beneath the drip line.
- 10.5. In the event any tree damage has occurred. Steps will be taken by the Contractor(s) to remediate said damage as recommended by the Contractor's licensed arborist. Also, structural and other limbs within the canopy of the trees that may be damaged shall be pruned and repaired in a timely manner by a licensed arborist.
- 10.6. In the event that there is no alternative but to remove a substantial portion of a tree's root system, the tree will first be inspected by the Contractor's arborist, the Engineer and a representative of the City of Long Beach. It will then be determined if the tree should be removed or whether the tree has sufficient means to recover and prosper. If a tree is found to be salvageable, every attempt will be made to afford said tree with the needed materials to substantiate such recovery. A hardwood mulch shall be added to the site not to exceed four

- inches in depth. If it is determined that a tree has to be removed, as recommended by the arborist, the Contractor shall give the Engineer and the City of Long Beach a minimum notice of 14 working days to negotiate the removal of the tree with the affected landowner.
- 10.7. Trenching shall be performed to minimize impact on the tree's critical buttress roots (Structural root plate) of trees on the site. All measures shall be taken to employ alternative measures of passage. Tunneling and boring utilized by both manual and mechanical means will have the least impact on the site. Trees that have obviously incurred substantial damage to buttress roots prior to this project shall be noted and reported for evaluation and documentation. In any areas where excavating or trenching will be occurring beneath the drip line of any trees, such as locations proposed for the new water and sewer mains, the con-tractor shall secure the services of a licensed arborist for recommendations.
- 10.8. Any and all tree work shall be completed by a business or individual that is licensed by the State of Mississippi to engage in Tree Surgery, subject to the approval of the City of Long Beach. It is also highly recommended that this individual or business also carry a certification by the International Society of Arboriculture.
- 10.9. Should there be any questions as to how best proceed without compromising the integrity of any tree on this site the Contractor shall first notify his arborist, who shall then notify the Engineer. These specifications have been established as a guideline to be used by both the Engineer and its contractors to insure that a reasonable effort has been made by both to preserve the integrity of trees and green space within the construction site boundaries.
- 10.10. Failure, by any Contractor on the site to comply with all of the above specifications may result in a monetary or remedial penalty as set forth by the City of Long Beach.
- 10.11. All above mentioned work shall be coordinated with the City of Long Beach and/or their representatives.

11. CERTIFIED CHEMICALS

11.1. All chemical of whatever nature used during project construction or furnished for project operation must show EPA or USDA approval certification. Their use and disposal of all residues shall be in strict compliance with instructions.

12. SANITARY FACILITIES

12.1. Contractor shall provide a portable toilet facility (Port-O-Let or other) on each job site for the duration of the job and shall remove the facility upon completion of the project.

13. SEPARATION BETWEEN SEWER & WATER LINES

- 13.1. Horizontal and Vertical Separation
 - 1. Water mains shall be laid at least 10 feet horizontally and 18 inches vertically from any existing or proposed sanitary sewer or manhole (including force mains). The distance shall be measured edge to edge. Water lines should always be installed above sewer lines and the bottom of the water line should be at least 18 inches from the top of the sewer line.

13.2. Special Conditions

I. Where local conditions prevent adequate horizontal and vertical separation, the appropriate reviewing agency may allow the water line to

- be laid closer to the sewer line if supported by adequate data from the design Engineer. Each situation will be reviewed on a case by case basis. In this situation, all three of the following conditions must be met:
- 2. If the 10 foot horizontal separation between water and sewer lines cannot be maintained then the water line should be ductile iron with water joints located at the maximum distance possible from sewer line joints. PVC pipe may be used if it is protected by a steel casing. Also the water and sewer lines must be in separate trenches with adequate space for maintenance. In some cases, special sewer line construction procedures may be required.
- 3. Where the 10 foot horizontal and 18 inch vertical separation cannot be maintained, condition 1. must be met and the sewer line shall be constructed according to water main standards.
- 4. Where water lines cross over sewer lines, the pipe segments should be centered to provide maximum spacing of joints of both water and sewer lines. A vertical separation of at least 18 inches should be maintained (water over sewer).

14. SAFETY

14.1. Contractor shall at all times provide for the safety of his own workers, Owner's and Engineer's operating personnel, and the public.

15. USE OF PUBLIC WATER SUPPLY

15.1. Contractor will be permitted to obtain without charge a reasonable amount of water from the existing city water mains for the purpose of filling, testing, and flushing of the new water mains being constructed under this contract. This use will be subject to regulation by the City of Long Beach Public Works Department (Department). Contractor shall notify Department personnel every time that water is to be withdrawn from the City water system, and shall not proceed until permission is granted. The work plan must include the measures which Contractor will use to absolutely prevent the backflow of water into existing city water mains.

16. PUBLIC NOTIFICATIONS

- 16.1. Except under Emergency Construction conditions, Contractor shall provide a minimum of 48 hours advance notification to the general public in the form of publication in the local newspaper and/or media for interruption of the normal flow of traffic, or interruption of service.
- 16.2. Contractor shall notify all local emergency services, including, police, fire and ambulance, in advance, and, also upon completion of any interruption of the normal flow of traffic.
- 16.3. Contractor shall deliver a written notice to each customer that may be affected by a planned interruption of service, at least one day prior to the interruption of service. The notice should at a minimum state the date and duration times of the interruption.
- 16.4. When a planned interruption of service takes longer than originally scheduled, the contractor shall notify each customer of the new time in which service will be restored. In the event of an accidental or unplanned interruption of service, the contractor shall notify each affected customer of the time in which service will be restored.

17. COORDINATION WITH OWNER

- 17.1. Contractor shall coordinate his operations with the Owner's Public Works Department and their operating contractor and shall keep Engineer fully advised of his schedule for interruption of service and shutdowns of the water or sewer systems. Contractor will not schedule work requiring the services of Owner's operating personnel for other than normal working hours (7:00 to 3:30 p.m., 5 days per week) except for valid reason, in which case Contractor shall reimburse Owner for overtime costs.
- 17.2. Contractor shall provide a minimum of 24 hours advance request to Owner for assistance of their personnel, where required for scheduled shutdowns of the water or sewer systems.

18. RECORD DRAWINGS

18.1. The Contractor shall coordinate with City upon completion of the Work Order to provide accurate, detailed "as built" information to the City.

19. REASONABLY IMPLIED PARTS OF THE WORK SHALL BE DONE THOUGH ABSENT FROM SPECIFICATIONS

19.1. Any part or item of the work which is reasonably implied or normally required to make the project satisfactorily operable and functional shall be performed by the Contractor. It is the intent of these specifications to provide the Owner with complete operable systems and facilities.

20. DISPOSAL OF DEBRIS AND UNUSABLE EQUIPMENT

20.1. The contractor shall be responsible for the disposal of unusable equipment, debris, including material generated as a result of manhole and sewer main cleaning, sewer pipes, manholes, etc., in an approved manner and location in accordance with the requirements of the Mississippi Department of Environmental Quality (MDEQ) Emergency Order No. 506205 dated 9-13-05 and to the satisfaction of the governing local, state and federal agencies. All sites must be approved by the Mississippi Department of Environmental Quality for the use intended. Upon completion of the work, the Contractor shall provide Engineer with documentation proving that all sand, debris, including sewer pipe and manholes removed as a part of this contract was satisfactorily disposed of at the approved site in accordance with all applicable local, state, and federal laws.