PART A - SECTION II GENERAL CONDITIONS

Dated: 01/05/2010

GENERAL CONDITIONS

ARTICLE 1.0 - DEFINITIONS

1.1 Defined Terms:

Wherever used in the Contract Documents and printed with initial or all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

- 1.1.1 **Acceptance** By the OWNER of the Work as being fully complete in accordance with the Contract Documents subject to waiver of claims.
- 1.1.2 **Addenda** Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the Contract Documents.
- 1.1.3 **Agreement** The written instrument which is evidence of the agreement between OWNER and CONTRACTOR covering the work.
- 1.1.4 **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.
- 1.1.5 **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.
- 1.1.6 **Bid** The offer or proposal of a bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 1.1.7 **Bidder** The one who submits a Bid directly to Owner, as distinct from a sub-bidder who submits a bid directly to a Bidder.
- 1.1.8 **Bidding Documents** The Bidding Requirements and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).
- 1.1.9 **Bidding Requirements** The Advertisement or Invitation to Bid, Instructions to Bidders, Bid security form, if any, and the Bid form with any supplements
- 1.1.10 **Bonds** Performance and payment bonds and other instruments of security.
- 1.1.11 **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.
- 1.1.12 **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.
- 1.1.13 **Contract** Executed agreement between the OWNER and the successful bidder, covering the performance of the WORK and the compensation therefore. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 1.1.14 **Contract Documents** The definition of the Contract Documents shall be as set forth in the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by OWNER to CONTRACTOR are not Contract Documents.
- 1.1.15 **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 11.3 in the case of Unit Price Work).
- 1.1.16 **Contract Times** The number of days or the dates stated in the Agreement to complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.
- 1.1.17 **CONTRACTOR** The individual or entity with whom OWNER has entered into the Agreement.
- 1.1.18 **Cost of the Work** See paragraph 11.1.1 for definition.

- 1.1.19 **Drawings** That part of the Contract Documents prepared 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.
- 1.1.20 **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.
- 1.1.21 **ENGINEER** Director of Engineering, City of Concord.
- 1.1.22 **ENGINEER's Consultant** An individual or entity having a contract with ENGINEER to furnish services as ENGINEER, independent professional associate or consultant with respect to the Project.
- 1.1.23 **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
- 1.1.24 **General Requirements** Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 1.1.25 **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 in connection with the Work.
- 1.1.26 **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.
- 1.1.27 **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.
- 1.1.28 **Liens** Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 1.1.29 **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.
- 1.1.30 **Notice of Award-** The written notice by OWNER to the apparent successful bidder stating that upon timely compliance by the apparent successful bidder with the conditions precedent listed therein, OWNER will sign and deliver the Agreement.
- 1.1.31 **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.
- 1.1.32 **OWNER** Ĉity of Concord, North Carolina.
- 1.1.33 **Partial Utilization** Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
- 1.1.34 **PCB's** Polychlorinated biphenyls
- 1.1.35 **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.
- 1.1.36 **Project** The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents
- 1.1.37 **Project Manual** The bound documentary information prepared for bidding and construction 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.
- 1.1.38 **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.
- 1.1.39 **Resident Project Representative** The authorized representative of ENGINEER who may be assigned to the Site or any part thereof.

- 1.1.40 **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.
- 1.1.41 **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.
- 1.1.42 **Site** Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, including right-of-way and easements for access thereto, and such other lands furnished by OWNER which are designated for the use of CONTRACTOR.
- 1.1.43 **Specifications** That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- 1.1.44 **Subcontractor** An individual or entity having a direct contract with CONTRCTOR or with any other Subcontractor for the performance of a part of the Work at the Site.
- 1.1.45 **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.
- 1.1.46 **Supplementary Condition** That part of the Contract Documents which amends or supplements these General Conditions.
- 1.1.47 **Supplier** A manufacturer, fabricator, supplier, distributor, material man, 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 any Subcontractor.
- 1.1.48 **Underground Facilities** All underground pipeline, 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 of other control systems.
- 1.1.49 **Unit Price Work** Work to be paid for on the basis of unit prices.
- 1.1.50 **Work** The entire completed 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.
- 1.1.51 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.
- 1.1.51 **Written Amendment** A written statement modifying the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the non-engineering or non-technical rather than strictly construction-related aspects of the Contract Documents.
- 1.1.53 **Resident Observer** Shall have the same definition as "Resident Project Representative" when referred to in these documents or during the duration of the Project.
- 1.1.54 **Written Notice** The "Notice" as used herein shall mean and include all written notices, demands, instruction, claims, approvals, and disapprovals required to obtain compliance

with Contract requirements. Written notice shall be deemed to have been duly served if 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 to an authorized representative of such individual, firm or corporation, or if delivered at or sent by registered mail to the last business address known to him who gives the notice. Unless otherwise stated in writing, any notice to or demand upon the OWNER under this Contract shall be delivered to the OWNER through the ENGINEER.

1.2 Terminology

1.2.4 Intent of Certain Terms or Adjectives

1.2.1.1 Whenever in the Contract Documents the terms "as allowed", "as approved", or terms of like effect or import are used, or 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 action or determination will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed 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 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 section 9.9 or any other provision of the Contract Documents.

1.2.2 Day

1.2.2.1 The work "day" shall constitute a calendar day or 24 hours measured from midnight to the next midnight.

1.2.3 Defective

1.2.3.1 The word "defective", when modifying the work "Work", refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or 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 14.4 or 14.5).

1.2.4 Furnish, Install, Perform, Provide

- 1.2.4.1 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.
- 1.2.4.2 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.
- 1.2.4.3 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.

- 1.2.4.4 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.
- 1.2.5 Unless stated otherwise in the Contract Documents, words or phrases which have a well known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2.0 – PRELIMINARY MATTERS

- 2.1 Delivery of Bonds
 - 2.1.1 When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish.
- 2.2 Copies of Documents
 - 2.2.1 The CONTRACTOR will be furnished without charge up to **five** sets of specifications and full size drawings. Additional sets of drawings and specifications requested by the CONTRACTOR will be furnished at the cost of reproduction, plus handling.
- 2.3 Commencement of Contract Times: Notice to Proceed
 - 2.3.1 The Contract Time will commence to run on the day indicated in the Notice to Proceed.
- 2.4 Starting the Work
 - 2.4.1 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.
- 2.5 Before Starting Construction
 - 2.5.1 CONTRACTOR's Review of Contract Documents: 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 may discover and shall obtain a written interpretation or clarification from ENGINEER before proceeding with any Work affected thereby; however, 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 knew or reasonably should have known thereof.
 - 2.5.2 Preliminary Schedules: Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to ENGINEER for its timely review:
 - 2.5.2.1 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;
 - 2.5.2.2 a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing, and processing such submittal; and
 - 2.5.2.3 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.

2.5.3 Evidence of Insurance: The CONTACTOR shall submit three copies of his insurance certificate with submittal of his executed Contract Documents. The CONTRACTOR may use the "Accord Form" for the Certificate of Insurance, but the form shall be modified to state that the described insurance policies shall not be canceled without 30 days prior written notice to the OWNER and the ENGINEER by registered mail. CONTRACTOR shall review "Accord Form" before forwarding to the ENGINEER.

2.6 Pre-Construction Conference

2.6.1. Before any Work at the Site is started, a conference attended by 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 2.5.2, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.7 Initial Acceptance of Schedules

- 2.7.1 Unless otherwise provided in the Contract Documents, at least ten 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 2.5.2. CONTRACTOR shall have an additional ten 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.
 - 2.7.1.1. The progress schedule will be acceptable to ENGINEER if it provides an orderly progression of the Work to completion within any specified Milestones and 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 therefore.
 - 2.7.1.2 CONTRACTOR's schedule of Shop Drawing and Sample submittals will be acceptable to ENGINEER if it provides a workable arrangement for reviewing and processing the required submittals.
 - 2.7.1.3 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.

2.8 Award

2.8.1 The award of the Contract, if it is awarded, will be to the lowest responsive, responsible Bidder whose qualifications indicate the award will be in the best interest of the OWNER and whose Bid complies with all the prescribed requirements. Notice of Award will not be given until the OWNER has concluded such investigations as he deems necessary to establish the responsibility, qualifications, and financial ability of the Bidders to do the Work in accordance with the Contract Documents to the satisfaction of the OWNER within the time prescribed. The OWNER reserves the right to reject the Bid of any Bidder who does not pass such investigation to the OWNER'S satisfaction. In analyzing Bids, the OWNER may take into consideration alternates and unit prices, if requested by the Bid forms. If the Contract is awarded, the OWNER will give the successful Bidder a

ARTICLE 3.0 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 Intent

- 3.1.1 The Contract Documents are complementary; what is called for by one is as binding as if called for by all.
- 3.1.2 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 may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to OWNER.
- 3.1.3 Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided in Article 9.0.

3.2 Reference Standards

- 3.2.1 Standards, Specifications, and Codes.
 - 3.2.1.1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, whether such reference be specific or by implication, shall mean the standard, specification, manual, or code 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.
 - 3.2.1.2 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, nor shall any such provision or instruction be effective to assign to OWNER, ENGINEER, or any of ENGINEER's Consultants, agents, or employees 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.

3.3 Reporting and Resolving Discrepancies

3.3.1 Reporting Discrepancies

3.3.1.1 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 any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, CONTRACTOR shall report it to ENGINEER in writing at once. CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as required by paragraph 6.16.1) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.4; provided, however, that CONTRACTOR shall not be liable to OWNER or ENGINEER for failure to report any such

conflict, error, ambiguity, or discrepancy unless CONTRACTOR knew or reasonably should have know thereof.

3.3.2 Resolving Discrepancies

- 3.3.2.1 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:
 - 3.3.2.1.1 the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents)

3.4 Amending and Supplementing Contract Documents

- 3.4.1 The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways: (i) a Written Amendment; (ii) a Change Order; or (iii) a Work Change Directive.
- 3.4.2 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: (i) a Field Order; (ii) ENGINEER's approval of a Shop Drawing or Sample; or (iii) ENGINEER's written interpretation or clarification.

3.5 Reuse of Documents

3.5.1 CONTRACTOR and any Subcontractor or supplier or other individual or entity performing or furnishing any of the Work under a direct or indirect contract with OWNER: (i) shall not have or acquire any title in 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 ENGINEER's Consultant, including electronic media editions; and (ii) shall not reuse any of 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 adoption by ENGINEER. This prohibition will survive final payment, completion, and acceptance of the Work, or termination or completion of the Contract. Nothing herein shall preclude CONTRACTOR from retaining copies of the Contract Documents for record purposes.

ARTICLE 4.0 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

4.1 Availability of Lands

4.1.1 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, CONTRACTOR may make a Claim therefore as provided in paragraph 10.5.

4.1.2 CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 Subsurface and Physical Conditions

- 4.2.1 Any testing, reports or drawings which are available or have been relied upon for this project are identified or included in the Special Provisions.
- 4.2.2 Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the technical data. Except for such reliance on such technical data, CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:
 - 4.2.21 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
 - 4.2.2.2 other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 4.2.2.3 any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinion, or information.

4.3 Differing Subsurface or Physical Conditions

- 4.3.1 Notice: If CONTRACTOR believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
 - 4.3.1.1 is of such a nature as to establish that any "technical data" on which CONTRACTOR is entitled to rely as provided in paragraph 4.2 is materially inaccurate; or
 - 4.3.1.2 is of such a nature as to require a change in the Contract Documents; or
 - 4.3.1.3 differs materially from that shown or indicated in the Contract Documents; or
 - 4.3.1.4 is of an unusual nature, and differs materially from condition 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 6.16.1), 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.

4.3.2 ENGINEER's Review: After receipt of written notice as required by paragraph 4.3.1, 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.

4.3.3 Possible Price and Times Adjustments

4.3.3.1 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:
- 4.3.3.1.1 such condition must meet anyone or more of the categories described in paragraph 4.3.1; and
- 4.3.3.1.2 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 9.8 and 11.3.
- 4.3.3.2 CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - 4.3.3.2.1 CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
 - 4.3.3.2.2 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
 - 4.3.3.2.3 CONTRACTOR failed to give the written notice within the time and as required by paragraph 4.3.1.
- 4.3.3.3 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 therefore as provided in paragraph 10.5. However, OWNER, ENGINEER, and ENGINEER's consultants 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.

4.4 Underground Facilities

- 4.4.1 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.
 - 4.4.1.1 OWNER and ENGINEER shall not be responsible for the accuracy or completeness of any such information or data; and
 - 4.4.1.2 the cost of all of the following will be included in the Contract Price, and CONTRACTOR shall have full responsibility for:
 - 4.4.1.2.1 reviewing and checking all such information and data.
 - 4.4.1.2.2 locating all Underground Facilities shown or indicated in the Contract Documents.
 - 4.4.1.2.3 coordination of the Work with the OWNERs of such Underground Facilities, including OWNER, during construction and
 - 4.4.1.2.4 the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

4.4.2 Not Shown or Indicated

4.4.2.1 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 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 6.16.1), 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.

4.4.2.2 If ÉNGINEER 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 therefore as provided in paragraph 10.5.

4.5 Reference Points

4.5.1 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.

4.6 Hazardous Environmental Condition at Site

- 4.6.1 Reports and Drawings: Reference is made to these General Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the site, if any, that have been utilized by the ENGINEER in the preparation of the Contract Documents.
- 4.6.2 Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the technical data contained in such reports and drawings, but such reports and drawings are not Contract Documents. Except for such reliance on such "technical data", CONTRACTOR may not rely upon or make any Claim against OWNER, ENGINEER or any of ENGINEER's Consultants with respect to:
 - 4.6.2.1 the completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto; or
 - 4.6.2.2 other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 - 4.6.2.3 any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.
- 4.6.3 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.
- 4.6.4 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); 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.
- 4.6.5 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 to CONTRACTOR written notice: (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 therefore as provided in paragraph 10.5.
- 4.6.6 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 therefore as provided in paragraph 10.5. OWNER may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.0.
- 4.6.7 To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, Engineer's Consultants, and the officers, directors, partners, employees, agents, other 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 of 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 4.6.6 shall obligate CONTRACTOR to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
 - 4.6.7.1 The provisions of paragraphs 4.2, 4.3, and 4.4 are not intended to apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5.0 – BONDS AND INSURANCE

- 5.1 Performance and Payment Bonds
 - 5.1.1 Concurrent with execution of the Agreement and within ten days of the Notice of Award, the successful CONTRACTOR shall procure, execute, and deliver to the OWNER and maintain, at his own cost and expense, the following bonds, in the forms attached, of a

surety company approved by the state in which the Work is being performed as a Surety:

- 5.1.1.1 Performance Bond in an amount not less than 100% of the total amount payable to the CONTRACTOR by the terms of the Contract as security for the faithful performance of the Work. Bond must be valid until one year after the date of issuance of the Certificate of Substantial Completion.
- 5.1.1.2 Payment Bond in an amount not less than 100% of the total amount payable to the CONTRACTOR by the terms of the Contract as security for the payment of all persons performing labor and furnishing material in connection with the Work. Bond must be valid until one year after the date of issuance of the Certificate of Substantial Completion.
- 5.1.2 All Bonds signed by an agent must be accompanied by a certified copy of the authority to act. Bonds shall be executed by such sureties as are named in the current 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 Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department.
- 5.1.3 If the Surety on any Bond furnished by the CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business in the state in which the Work is being performed is revoked, the CONTRACTOR shall, within ten days thereafter, substitute another Bond or Surety, both of which shall be acceptable to the OWNER.

5.2 Insurance Requirements

5.2.1 Wherever in this Article the terms "The Insured" and "OWNER" occur with respect to coverage in a policy, it shall mean the OWNER and its agent and agencies, all municipalities where Work is being performed under the Contract, the ENGINEER, and any other parties specifically designated herein, who shall be named as insured in each policy issued. The insurance policies required herein shall not contain any Third Party Beneficiary Exclusion.

The CONTRACTOR shall not commence Work under the Contract until he has obtained all insurance required under this Article and such insurance has been approved by the OWNER, nor shall the CONTRACTOR allow any Subcontractor to commence Work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved.

Provision of some types of insurance by a Subcontractor may be waived, at the option of the OWNER, where it is deemed that adequate coverage is provided by the CONTRACTOR's insurance. Subcontractors must, in all cases, provide Workmen's Compensation and Employer's Liability Insurance and Motor Vehicle Liability Insurance.

One copy of each such insurance policy and certificates indicating each type of coverage mentioned, and the correlation between the insurance furnished and that required, shall be filed with each of The Insured.

All policies relating to this Contract shall be so written that each of The Insured shall be notified by the carrier of cancellation or change at least 30 days prior to the effective date of such cancellation or change. Renewal certificates covering the renewal of all policies expiring during the life of the Contract shall be filed with each of The Insured not less than 30 days before the expiration of such policies.

Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and furnished. The insurance shall provide protection from claims set forth herein which may arise out of or result from Contractor's performance and furnishing of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed or furnished by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform or furnish any of the Work, or by anyone for whose acts any of them may be liable:

- a. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
- b. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
- c. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
- d. claims for damages insured by personal injury liability coverage which are sustained:

 (1) by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or (2) by any other person for any other reason;
- e. 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 there from; and
- f. 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.

5.3 General Insurance Requirements

- 5.3.1 The insurance required to be purchased and maintained by Contractor shall
 - a. include at least the specific coverages and be written for not less than the limits of liability specified herein or required by Laws or Regulations, whichever is greater;
 - b. include completed operations insurance;
 - c. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.12, 6.16, and 6.31 through 6.33 of the General Conditions;
 - d. 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 Engineer;
 - e. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work;

- f. with respect to completed operations insurance, and any other insurance coverage written on a claims-made basis, remain in effect for at least 2 years after final payment (and Contractor shall furnish Owner and Engineer evidence satisfactory to Owner of continuation of such insurance at final payment and one year thereafter);
- g. contain a cross liability or severability of interest clause or endorsement. Insurance covering the specified additional insured shall be primary insurance, and all other insurance carried by the additional insured shall be excess insurance; and
- h. with respect to workers' compensation and employers' liability, comprehensive automobile liability, commercial general liability, and umbrella liability insurance, Contractor shall require its insurance carriers to waive all rights of subrogation against Owner, Engineer, and their respective officers, directors, partners, employees, and agents.
- 5.3.2 Workers' Compensation and Employers' Liability Insurance. This insurance shall protect Contractor against all claims under applicable state workers' compensation laws. Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a workers' compensation law. This policy shall include an "all states" or "other states" endorsement. The liability limits shall be not less than:

Workers' compensation Statutory

Employers' liability \$1,000,000 each occurrence

5.3.3 <u>Comprehensive Automobile Liability Insurance</u>. This insurance shall be occurrence type written in comprehensive form and shall protect Contractor, and Owner, and Engineer as additional insured, against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, either on or off the project site whether they are owned, non-owned, or hired.

The liability limits shall be not less than:

Bodily injury and \$1,000,000 combined single property damage limit for each occurrence

5.3.4 <u>Commercial General Liability Insurance</u>. This insurance shall be occurrence type written in comprehensive form and shall protect Contractor, and Owner, and Engineer as additional insured, against claims arising from injuries, sickness, disease, or death of any person or damage to property arising out of performance of the Work. The policy shall also include personal injury liability coverage, contractual liability coverage, completed operations and products liability coverage, and coverage for blasting, explosion, collapse of buildings, and damage to underground property.

The liability limits shall be not less than:

Bodily injury and \$1,000,000 combined single property damage limit for each occurrence \$1,000,000 general aggregate

5.3.5 <u>Umbrella Liability Insurance</u>. This insurance shall protect Contractor, and Owner, and Engineer as additional insured, against claims in excess of the limits provided under workers' compensation and employers' liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall be not less than:

Bodily injury and \$4,000,000 combined single property damage limit for each occurrence \$4,000,000 general aggregate

5.3.6 Owner's Protective Liability Insurance. This insurance shall be issued in the name of Owner and shall protect and defend Owner against claims arising as a result of the operations of Contractor or Contractor's Subcontractors.
The liability limits shall be not less than:

Bodily injury and \$1,000,000 combined single property damage limit for each occurrence \$1,000,000 general aggregate

- 5.37 <u>Property Insurance</u>. Contractor shall purchase and maintain property insurance coverage for the Work at the site in the amount of the full replacement cost thereof. This insurance shall:
 - a. include the interests of Owner, Contractor, Subcontractors, Engineer, and Engineer's Consultants, each of whom is deemed to have an insurable interest and shall be listed as a named 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 or damage to the Work, temporary buildings, false-work, Work in transit including ocean transit, and Work in storage at the project site or at another location acceptable to Owner, and shall insure against at least the following perils: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and damage caused by frost and freezing;
 - c. cover, in an amount not less than \$100,000, the Owner-furnished equipment and materials to be erected or installed by Contractor;
 - d. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects); and
 - e. 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 insured.

If Owner requests in writing that other special insurance be included in the property insurance provided by Contractor, Contractor shall, if possible, include such insurance, and the cost thereof will be charged to Owner by appropriate Change Order or Written Amendment. Prior to

commencement of the Work at the site, Contractor shall in writing advise Owner whether or not such other special insurance has been procured by Contractor.

5.4 Other Insurance Requirements

- 5.4.1 If any of the property and casualty insurance requirements are not complied with at their renewal dates, payments to the CONTRACTOR will be withheld until these requirements have been met, or at the option of the OWNER, the OWNER may pay the renewal premiums and withhold such payments from any monies due to the CONTRACTOR.
- 5.4.2 In the event that claims in excess of the insured amounts provided herein are filed by reason of any operations under the Contract, the amount of excess of such claims, or any portion thereof, may be withheld from payment due or to become due the CONTRACTOR until such time as the CONTRACTOR shall furnish such additional security covering such claims as may be determined by the OWNER.
- 5.4.3 All policies and certificates of insurance of the CONTRACTOR shall contain the following clauses:
 - 5.4.3.1 insurers shall have no right of recovery or subrogation against the OWNER and its agents and agencies and the ENGINEER, it being the intention of the parties that the insurance policies so effected shall protect both parties and be primary coverage for any and all losses covered by the above-described insurance.
 - 5.4.3.2 the clause "other insurance provisions" in a policy in which the OWNER and its agents and agencies and the ENGINEER is named as an insured, shall not apply to these parties.
 - 5.4.3.3 the insurance companies issuing the policy or policies shall have no recourse against the OWNER and its agents and agencies and the ENGINEER, for the payment of any premiums or for assessments under any form of policy.
 - 5.4.3.4 any and all deductibles in the above-described insurance policies shall be assumed by and be for the amount of, and at the sole risk of the CONTRACTOR.

ARTICLE 6.0 - CONTRACTOR'S RESPONSIBILITIES

6.1 Supervision and Superintendence

- 6.1.1 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, but 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. CONTRACTOR shall be responsible to see that the complete Work complies accurately with the Contract Documents.
- 6.1.2 At all times during the progress of the Work, CONTRACTOR shall assign a competent resident superintendent thereto who shall not be replaced without written notice to OWNER and ENGINEER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the Site and shall have authority to act on behalf of CONTRACTOR. All communications given to or received from the superintendent shall be binding on CONTRACTOR.

6.2 Labor; Working Hours

- 6.2.1 CONTRACTOR shall provide competent, suitably qualified personnel to survey, layout, and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the Site.
- 6.2.2 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, and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday, or any legal holiday without OWNER's written consent (which will not be unreasonably withheld) given after prior written notice to ENGINEER.

6.3 Services, Materials, and Equipment

- 6.3.1 Unless otherwise specified in the General Requirements, 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.
- 6.3.2 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 warranties and guarantees specifically called for 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. 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.

6.4 Progress Schedule

- 6.4.1 CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.7 as it may be adjusted from time to time as provided below.
 - 6.4.1.1 CONTRACTOR shall submit to ENGINEER for acceptance (to the extent indicated in paragraph 2.7) proposed adjustments in the progress schedule that will not result in changing the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.
 - 6.4.1.2 Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of Article 12.0. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.0.

6.5 Substitutes and "Or-Equals"

6.5.1 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 equipment or material or equipment of other Suppliers may be submitted to ENGINEER for review under the circumstances

described below.

- 6.5.1.1 "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 6.5.1.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - 6.5.1.1.1 in the exercise of reasonable judgment ENGINEER determines that:
 (i) it is at least equal in quality, durability, appearance, strength, and design characteristics; (ii) it will reliably perform at least equally well the function imposed by the design concept of the completed Project as a functioning whole, and;
 - 6.5.1.1.2 CONTRACTOR certifies that: (i) there is no increase in cost to the OWNER; and (ii) it will conform substantially, even with deviations, to the detailed requirements of the item named in the Contract Documents.

6.5.1.2 Substitute Items

- 6.5.1.2.1. 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 6.5.1.1, it will be considered a proposed substitute item
- 6.5.1.2.2 CONTRACTOR shall submit sufficient information as provided below to allow ENGINEER to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute. Such information on items of material or equipment will not be accepted by ENGINEER from anyone other than CONTRACTOR.
- 6.5.1.2.3 The procedure for review by ENGINEER will be as set forth in paragraph 6.5.1.2.4, as supplemented in the General Requirements and as ENGINEER may decide is appropriate under the circumstances.
- 6.5.1.2.4 CONTRACTOR shall first 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 shall certify that the proposed substitute item will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified, and be suited to the same use as that specified. The application will state the extent, if any, to which the use of the proposed substitute item will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not use of a 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 work on the Project) to adapt the design to the proposed substitute item and whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute item from that specified will be identified in the application, and available engineering, sales, maintenance, repair, and replacement services will be indicated. The application will also 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, all of which will be considered by ENGINEER in evaluating the proposed substitute item. ENGINEER may require CONTRACTOR to furnish additional data about the proposed substitute item.

- 6.5.2 Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is shown or indicated in and 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 procedure for review by ENGINEER will be similar to that provided in subparagraph 6.5.1.2.
- 6.5.3 ENGINEER's Evaluation: ENGINEER will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.5.1 and 6.5.2. 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 either a Change Order for a substitute or an approved Shop Drawing for an "or equal". ENGINEER will advise CONTRACTOR in writing of any negative determination.
- 6.5.4 Special Guarantee: OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
- 6.5.5 CONTRACTOR's Expense: CONTRACTOR shall provide all data in support of any proposed substitute for "or-equal" at CONTRACTOR's expense.
- 6.6 Concerning Subcontractors, Suppliers, and Others
 - 6.6.1 CONTRACTOR shall not employ any Subcontractor, Supplier, or other individual or entity, 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.
 - 6.6.2 Within ten days after Notice of Award has been issued, the CONTRACTOR shall furnish to the ENGINEER a list of subcontractors, suppliers, or other persons or organizations who will participate in the Work or furnish principal items of materials and equipment to be utilized in the Work. The list shall include the subcontractors, suppliers, or other persons or organizations indicated on the Bid Form. Within ten days after receipt of the list but prior to the Effective Date of the Agreement, the ENGINEER shall notify the CONTRACTOR in writing if the ENGINEER (or OWNER) has reasonable objection to any subcontractor, suppliers, or other person or organization on the list. Failure by the ENGINEER to object to anyone on the list within the specified time shall constitute acceptance of the subcontractor, supplier, or other person or organization. Acceptance of a subcontractor, supplier, other person or organization named shall not constitute a waiver of the requirements of the contract specifications or the right of the OWNER or ENGINEER to reject defective work. If the ENGINEER (or OWNER) has a reasonable objection as described above, the CONTRACTOR may either (1) submit an acceptable substitute without an increase in his Bid price, or (2) withdraw his Bid without forfeiting his Bid security.

- 6.6.3 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 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 shall it create any obligation on the part of OWNER or ENGINEER to payor 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. OWNER or ENGINEER may furnish to any such Subcontractor, Supplier, or other individual or entity to the extent practicable, information about amounts paid to CONTRACTOR on account of Work performed for CONTRACTOR by a particular Subcontractor, Supplier, or other individual or entity.
- 6.6.4 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.
- 6.6.5 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.
- 6.6.6 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.
- 6.6.7 All Work performed for CONTRACTOR by a Subcontractor shall be pursuant to an appropriate agreement between the CONTRACTOR and Subcontractor. The Subcontractor shall not commence Work until the CONTRACTOR has obtained all insurance as required by Article 5.0, inclusive.
- 6.6.8 The CONTRACTOR shall not subcontract more than 50 percent of the Contract price without prior written approval of the OWNER.

6.7 Patent Fees and Royalties

CONTRACTOR shall pay all license fees and royalties and assume all costs incident to 6.7.1 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. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees or agents, and other consultants 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.

6.8 Permits

6.8.1 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. CONTRACTOR shall pay all charges of utility OWNERs for connection to the Work.

6.9 Laws and Regulations

- 6.9.1 CONTRACTOR shall give all notices and 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.
- 6.9.2 If CONTRACTOR observes that the Specifications or Drawings are at variance with any Laws or Regulations, he shall give ENGINEER prompt written notice thereof. If CONTRACTOR performs any Work knowing it to be contrary to such Laws or Regulations, and without such notice to ENGINEER, he shall bear all costs arising there from. The CONTRACTOR shall, at all times, observe and comply with and shall cause all his agents and employees and all his Subcontractors to observe and comply with all such existing Laws or Regulations, and shall protect and indemnify the OWNER and the ENGINEER and the municipalities in which Work is being performed, and their officers and agents against any claim or liability arising from or based on the violation of any such Law or Regulation, whether by himself or his employees or any of his Subcontractors.
- 6.9.3 Changes in Laws or Regulations not adopted or in effect 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 may 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 therefore as provided in paragraph 10.5.

6.10 Taxes

6.10.1 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. A listing of sales tax paid for the period shall be submitted with each Progress Payment

6.11 Use of Site and Other Areas

- 6.11.1 Limitation on Use of Site and Other Areas
 - 6.11.1.1 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 the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
 - 6.11.1.2 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.
- 6.11.1.3 To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultant, and the officers, directors, partners, employees, agents, and other consultants 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 ENGINEER's, 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
- 6.11.2 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.
- 6.11.3 Cleaning: Prior to Substantial Completion of the Work CONTRACTOR shall clean the Site 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 material and shall restore to original condition all property not designated for alteration by the Contract Documents.
- 6.11.4 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

6.12.1 CONTRACTOR shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Written Amendments, 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. CONTRACTOR is advised that failure to furnish the ENGINEER with accurate and detailed record drawings shall be reason for withholding final payment.

6.13 Safety and Protection

- 6.13.1 CONTRACTOR shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - 6.13.1.1 all persons on the Site or who may be affected by the Work;
 - 6.13.1.2 all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 6.13.1.3 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.

6.13.2 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. All damage, injury, or loss to any property referred to in paragraph 6.13.1.2 or 6.13.1.3 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 ENGINEER's Consultant, 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). 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 14.7.2 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

6.14.1 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

6.15.1 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

6.16.1 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

6.17.1 CONTRACTOR shall submit Shop Drawings to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. CONTRACTOR shall submit four copies of all shop drawings plus the number required for use by the ENGINEER. The 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 6.17.5.
- 6.17.2 CONTRACTOR shall also submit Samples to ENGINEER for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers, and the use for which intended and otherwise as ENGINEER may require to enable ENGINEER to review the submittal for the limited purposes required by paragraph 6.17.5. CONTRACTOR shall submit three samples plus the number required to be returned to the CONTRACTOR for each sample required.
- 6.17.3 Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submittals acceptable to ENGINEER as required by paragraph 2.7, 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

6.17.4 Submittal Procedures

- 6.17.4.1 Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:
 - 6.17.4.1.1 all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - 6.17.4.1.2 all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
 - 6.17.4.1.3 all information relative to means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto; and
 - 6.17.4.1.4 CONTRACTOR shall also have 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:
 - 6.17.4.1.5 each Shop Drawing submitted to the ENGINEER must be accompanied by a transmittal which references the applicable section(s) of the specifications. In addition, each Shop Drawing shall be numbered in the order of submittal sequence. All submittals called for in the specifications shall be submitted in the number of copies as indicated in the Contract Documents.
- 6.17.4.2 Each submittal shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.
- 6.17.4.3 At the time of each submittal, CONTRACTOR shall give ENGINEER specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to ENGINEER for review and approval of each such variation.

6.17.5 ENGINEER's Review

6.17.5.1 ENGINEER will timely review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample 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.
- 6.17.5.2 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.
- 6.17.5.3 ENGINEER's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of each submittal as required by paragraph 6.17.4.3 and ENGINEER, has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.17.4.1.

6.17.6 Resubmittal Procedures

- 6.17.6.1 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 revision other than the corrections called for by ENGINEER on previous submittals.
- 6.18 Continuing the Work
 - 6.18.1 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 15.4 or as OWNER and CONTRACTOR may otherwise agree in writing.
- 6.19 CONTRACTOR's General Warranty and Guarantee
 - 6.19.1 CONTRACTOR warrants and guarantees to OWNER, ENGINEER, and ENGINEER's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:
 - 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
 - 6.19.1.2 normal wear and tear under normal usage.
 - 6.19.2 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:
 - 6.19.2.1 observations by ENGINEER;

recommendation by ENGINEER or payment by OWNER of any progress or final payment;
the issuance of a certificate of Substantial Completion by ENGINEER or any payment related thereto by OWNER;
use or occupancy of the Work or any part thereof by OWNER;
any acceptance by OWNER or any failure to do so;
any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by ENGINEER;
any inspection, test, or approval by others; or

6.20 Indemnification

6.19.2.8

6.20.1 To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, ENGINEER, ENGINEER's Consultants, and the officers, directors, partners, employees, agents, and other 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 ENGINEER's, architects, attorneys, and other professionals and all court of 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:

any correction of defective Work by OWNER.

- 6.20.1.1 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 there from; and
- is caused in whole or in part 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, regardless of whether or not caused in part by any negligence or omission of an individual or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such individual or entity.
- 6.20.2 In any and all claims against OWNER or ENGINEER or any of their respective consultants, agents, officers, directors, partners, or employees 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 6.20.1 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.
- 6.20.3 Nothing in the Contract Documents shall create or give to third parties any claim or right of action against the CONTRACTOR, the OWNER or the ENGINEER beyond such as may legally exist irrespective of the Contract.

6.21 Operation and Maintenance Manuals

6.21.1 CONTRACTOR shall submit two copies of Operation and Maintenance Manuals for all equipment for review. Upon receipt of approval, six complete sets must be provided. No equipment may be placed into service until the approved manuals are received by the ENGINEER. Instruction manuals shall list all of the equipment specified in this and other sections of the Specifications and shall include equipment serial numbers, design data,

operating instructions, maintenance instructions, lubrication instructions, piping, wiring and control diagrams, assembly drawings showing location of parts, part numbers and spare parts list.

ARTICLE 7.0 - OTHER WORK

7.1 Related Work at Site

- 7.1.1 OWNER may perform other work related to the Project at the Site by OWNER's employees, or let other direct contracts therefore, or have other work performance by utility owner. If such other work is not noted in the Contract Documents, then:
 - 7.1.1.1 written notice thereof will be given to CONTRACTOR prior to starting any such other work; and
 - 7.1.1.2 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 therefore as provided in paragraph 10.5.
- CONTRACTOR shall afford each other CONTRACTOR who is a party to such a direct 7.1.2 contract and each utility owner (and OWNER, if OWNER is performing the other work with OWNER's employees) proper and safe access to the Site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, 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 their work and will only cut or alter their work with the written consent of ENGINEER and the others whose work will be affected. The duties and responsibility 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.
- 7.1.3 If the proper execution or results of any part of CONTRACTOR's Work depends upon work performed by others under this Article 7.0, 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.

7.2 Coordination

- 7.2.1 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:
 - 7.2.1.1 the individual or entity who will have authority and responsibility for coordination of the activities between the various CONTRACTORs will be identified;
 - 7.2.1.2 the specific matters to be covered by such authority and responsibility will be itemized; and
 - 7.2.1.3 the extent of such authority and responsibilities will be provided.
- 7.2.2 OWNER shall have sole authority and responsibility for such coordination.

ARTICLE 8.0 - OWNER'S RESPONSIBILITIES

- 8.1 Communications to CONTRACTOR
 - 8.1.1 Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through ENGINEER. .
- 8.2 Replacement of ENGINEER
 - 8.2.1 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.
- 8.3 Furnish Data
 - 8.3.1 OWNER shall promptly furnish the data required of OWNER under the Contract Documents.
- 8.4 Pay Promptly When Due
 - 8.4.1 OWNER shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.2.3. and 14.7.3.
- 8.5 Lands and Easements; Reports and Tests
 - 8.5.1 OWNER's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.5. Paragraph 4.2 refers to OWNER identifying and making available to CONTRACTOR copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by ENGINEER in preparing the Contract Documents.
- 8.6 Insurance
 - 8.6.1 OWNER's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.0.
- 8.7 Change Orders
 - 8.7.1 OWNER is obligated to execute Change Orders as indicated in paragraph 10.3.
- 8.8 Inspections, Tests, and Approvals
 - 8.8.1 OWNER's responsibility in respect to certain inspections, tests, and approvals is set forth in paragraph 13.3.2.
- 8.9 Limitations on OWNER's Responsibilities
 - 8.9.1 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
 - 8.10.1 OWNER's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in paragraph 4.6.
- 8.11 Evidence of Financial Arrangements
 - 8.11.1 If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the contract Documents, OWNER's responsibility in respect thereof will be as set forth in these General Conditions.

ARTICLE 9.0 - ENGINEER'S STATUS DURING CONSTRUCTION

- 9.1 OWNER's Representative
 - 9.1.1 ENGINEER will be OWNER's representative during the construction period and his instructions shall be carried into effect promptly and efficiently.
- 9.2 Project Representative
 - 9.2.1 ENGINEER will furnish a Resident Project Representative to assist ENGINEER in providing more extensive observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in section 9.9.
- 9.3 Clarifications and Interpretations
 - 9.3.1 The ENGINEER will furnish a Resident Project Representative (and assistants) to assist the ENGINEER in observing the performance of the Work. The Resident Project Representative will serve as the ENGINEER's liaison with the CONTRACTOR, working principally through the CONTRACTOR's superintendent to assist him in understanding the intent of the Contract Documents.
 - 9.3.2 The Resident Project Representative shall conduct on-site observations of the Work in progress to confirm that the Work is proceeding in accordance with the Contract Documents. He will verify that tests, equipment and systems start-ups and operating and maintenance instructions are conducted as required by the Contract Documents. He will have the authority to disapprove or reject defective Work in accordance with Article 13.0.
 - 9.3.3 Except upon written instruction of the ENGINEER, the Resident Project Representative:
 - 9.3.3.1 Shall not authorize any deviation from the Contract Documents or approve any substitute materials or equipment.
 - 9.3.3.2 Shall not exceed limitation of ENGINEER's authority as set forth in the Contract Documents.
 - 9.3.3.3 Shall not undertake any of the responsibilities of CONTRACTOR, Subcontractors, or CONTRACTOR's superintendent, or expedite the Work.
 - 9.3.3.4 Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract.

9.3.3.5 shall not advise on or issue directions as to safety precautions and programs in connection with the Work.

9.4 Authorized Variations in Work

9.4.1 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 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, as a result of a Field Order, a Claim may be made therefore as provided in paragraph 10.5.

9.5 Rejecting Defective Work

9.5.1 ENGINEER will have authority to disapprove or 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 Works provided in paragraph 13.4, whether or not the Work is fabricated, installed, or completed.

9.6 Shop Drawings, Change Orders and Payments

- 9.6.1 In connection with ENGINEER's authority as to Shop Drawings and Samples, see paragraph 6.17.
- 9.6.2 In connection with ENGINEER's authority as to Change Orders, see Articles 10.0, 11.0, and 12.0
- 9.6.3 In connection with ENGINEER's authorities to Applications for Payment, see Article 14.0.

9.7 Determinations for Unit Price Work

9.7.1 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 10.5.

9.8 Decisions on Requirements of Contract Documents and Acceptability of Work

9.8.1 ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work there under. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and Claims seeking changes in the Contract Price or Contract

- Times will be referred to ENGINEER in writing, in accordance with the provisions of paragraph 10.5, with a request for a formal decision.
- 9.8.2 The rendering of a decision by ENGINEER pursuant to this paragraph 9.8 with respect to any such Claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.7) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such Claim, dispute, or other matter.

9.9 Limitations on ENGINEER's Authority and Responsibilities

- 9.9.1 Neither ENGINEER's authority or responsibility under this Article 9.0 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.
- 9.9.2 ENGINEER will not supervise, direct, contract, 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.
- 9.9.3 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.
- 9.9.4 ENGINEER's review of the final Application for Payment and accompanying documentation and all maintenance and operating instruction, schedules, guarantees, Bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by paragraph 14.7.1 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
- 9.9.5 The limitations upon authority and responsibility set forth in this section 9.9 shall also apply to ENGINEER's Consultants, Resident Project Representative, and assistants.

10.1 Authorized Changes in the Work

- 10.1.1 Without invalidating the Agreement 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 Written Amendment, 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).
- 10.1.2 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 therefore as provided in paragraph 10.5.

10.2 Unauthorized Change in the Work

10.2.1 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 3.4, except in the case of an emergency as provided in paragraph 6.16 or in the case of uncovering Work as provided in paragraph 13.4.2.

10.3 Execution of Change Orders

- 10.3.1 OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by ENGINEER (or Written Amendments) covering:
 - 10.3.1.1 changes in the Work which are: (i) ordered by OWNER pursuant to paragraph 10.1.1, (ii) required because of acceptance of defective Work under paragraph 13.8.1 or OWNER's correction of defective Work under paragraph 13.9, or (iii) agreed to by the parties;
 - 10.3.1.2 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
 - 10.3.1.3 changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by ENGINEER pursuant to paragraph 10.5; 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 6.18.1.

10.4 Notification to Surety

10.4.1 If notice 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) is required by the provisions of any Bond to be given to a surety, 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.

10.5 Claims and Disputes

- 10.5.1 Notice: Written notice stating the general nature of each Claim, dispute, or other matter shall be delivered by the claimant to ENGINEER promptly (but in no event later than 30 days) after the start of the event giving rise thereto. Notice of the amount or extent of the Claim, dispute, or other matter with supporting data shall be delivered to the ENGINEER 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, dispute, or other matter). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.1.2. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.2.2. 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).
- 10.5.2 ENGINEER's Decision: ENGINEER will render a formal decision in writing within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing

party, if any. ENGINEER's written decision on such Claim, dispute, or other matter will be final and binding upon OWNER and CONTRACTOR unless:

- an appeal from ENGINEER's decision is taken within the time limits and in accordance with the dispute resolution procedures set forth in Article 16.0; or
- if no such dispute resolution procedures have been set forth in Article 16, a written notice of intention to appeal from ENGINEER's written decision is delivered by OWNER or CONTRACTOR to the other and to ENGINEER within 30 days after the date of such decision, and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction within 60 days after the date of such decision or within 60 days after Substantial Completion, which ever is later (unless otherwise agreed in writing by OWNER and CONTRACTOR), to exercise such rights or remedies as the appealing party may have with respect to such Claim, dispute, or other matter in accordance with applicable Laws and Regulations.
- 10.5.3 If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.5.2, a decision denying the claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any.
- 10.5.4 No Claim for an adjustment in Contract Price or Contract Times (or Milestones) will be valid if not submitted in accordance with this paragraph 10.5.

ARTICLE 11.0 - COST OF THE WORK; UNIT PRICE WORK

11.1 Cost of the Work

- 11.1.1 Costs Included: The term Cost of the Work means the sum of all costs 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 the amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in paragraph 11.1.2.
 - 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 at the Site. 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, worker' 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.
 - 11.1.1.2 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.
- 11.1.1.3 Payments made by CONTRACTOR to Subcontractors for Work performed by Subcontractors and all subcontracts shall be subject to the provisions of the Contract Documents.
- 11.1.1.4 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.
- 11.1.1.5 Supplemental costs including the following:
 - 11.1.5.1 the proportion of necessary transportation, travel, and subsistence expenses of CONTRACTORS's employees incurred in discharge of duties connected with the Work.
 - 11.1.5.2 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 OWNER, 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 the CONTRACTOR.
 - 11.1.5.3 rentals of all construction equipment and machinery, whether rented from CONTRACTOR or others, shall be negotiated between the ENGINEER and the CONTRACTOR. These rates shall include all fuel, lubricants, insurance, etc. Equipment rental charges shall not exceed the prorated monthly rental rates listed in the current edition of the "Compilation of Rental Rates for Construction Equipment," as published by the Associated Equipment Distributors. Charges per hour shall be determined by dividing the monthly rates by 176. The rental of any such equipment and machinery shall close when the use thereof is no longer necessary for the Work.
 - 11.1.5.4 sales, consumer, use, and other similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.
 - 11.1.1.5.5 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.
 - 11.1.1.5.6 losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance of otherwise, sustained by CONTRACTOR in connection with the performance of the Work (except losses and damages with the deductible amounts of property insurance established in accordance with paragraph 5.6.4), provided such losses and damages have resulted from causes other than the negligence of CONTRACTOR, and 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.
 - 11.1.1.5.7 the cost of utilities, fuel, and sanitary facilities at the Site.
 - 11.1.1.5.8 minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expressage, and similar petty cash items in connection with the Work.

- 11.1.1.5.9 when the Cost of the Work is used to determine the value of a Change Order or of a Claim, the cost of premiums for additional Bonds and insurance required because of the changes in the Work or caused by the event giving rise to the Claim.
- 11.1.5.10 when all the Work is performed on the basis of cost-plus, the costs of premiums for all Bonds and insurance CONTRACTOR is required by the Contract Documents to purchase and maintain.
- 11.1.2 Costs Excluded: The term Cost of the Work shall not include any of the following items:
 - 11.1.2.1 Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnerships and sole proprietorships), general managers, engineers, architects, estimators, attorney, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed 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 11.1.1.1 or specifically covered by paragraph 11.1.1.4, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.
 - 11.1.2.2 Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the Site.
 - 11.1.2.3 Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
 - 11.1.2.4 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.
 - Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.1.1 and 11.1.2.
- 11.1.3 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 12.1.3.
- 11.1.4 Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to paragraphs 11.1.1 and 11.1.2, 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.

11.3 Unit Price Work

11.3.1 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. 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 9.8.

- 11.3.2 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.
- 11.3.3 OWNER or CONTRACTOR may make a Claim for an adjustment in the Contract Price in accordance with paragraph 10.5 if:
 - 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
 - 11.3.3.2 there is no corresponding adjustment with respect any other item of Work; and
 - 11.3.3.3 if 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 12.0 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

- 12.1 Change of Contract Price
 - 12.1.1 The Contract Price may only be changed by a Changed Order or by a Written Amendment. 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 provisions of paragraph 10.5.
 - 12.1.2 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:
 - where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit price to the quantities of the items involved (subject to the provisions of paragraph 11.2); or
 - 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 12.1.3.2); or
 - where the Work involved is not covered by unit price contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 12.1.2.2, on the basis of the Cost of the Work (determined as provided in paragraph 11.1) plus a CONTRACTOR's fee for overhead and profit (determined a provided in paragraph 12.1.3).
 - 12.1.3 CONTRACTOR's Fee; The CONTRACTOR's fee for overhead and profit shall be determined as follows:
 - 12.1.3.1 a mutually acceptable fixed fee; or
 - 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:
 - 12.1.3.2.1 for costs incurred under paragraphs 11.1.1.1 and 11.1.1.2, the CONTRACTOR's fee shall be 15 percent;
 - 12.1.3.2.2 for costs incurred under paragraph 11.1.1.3, the CONTRACTOR's fee shall be five percent;
 - 12.1.3.2.3 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 paragraph 12.1.3.2. 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 11.1.1.1 and a11.1.1.2 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;

- 12.1.3.2.4 no fee shall be payable on the basis of costs itemized under paragraphs 11.1.1.4, 11.1.1.5, and 11.1.2;
- 12.1.3.2.5 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
- 12.1.3.2.6 when both additions and credit 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 12.1.3.2.1 through 12.1.3.2.5, inclusive.

12.2 Change of Contract Times

- 12.2.1 The Contract Times (or Milestones) may only be changed by a Change Order or by a Written Amendment. Any Claim for an adjustment in the Contract Times (or Milestones) 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 10.5.
- 12.2.2 Any adjustment of the Contract Times (or Milestones) covered by a Change Order or of any Claim for an adjustment in the Contract Times (or Milestones) will be determined in accordance with the provisions of this Article 12.0.

12.3 Delays Beyond CONTRACTOR's Control

12.3.1 Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a Claim is made therefore as provided in paragraph 12.2.1. 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 CONTRACTOR's performing work as contemplated by Article 7.0, fires, floods, epidemics, abnormal weather conditions, or acts of God.

12.4 Delays Within CONTRACTOR's Control

12.4.1 The Contract Times (or Milestones) will not be extended due to 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.

12.5 Delays Beyond OWNER's and CONTRACTORS's Control

12.5.1 Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal

to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay.

12.6 Delay Damages

- 12.6.1 In no event shall OWNER or ENGINEER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from:
 - 12.6.1.1 delays caused by or within the control of CONTRACTOR; or
 - delays beyond the control of both OWNER and CONTRACTOR including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, or acts or neglect by utility OWNER's or other CONTRACTOR's performing other work as contemplated by Article 7.0.
- 12.6.2 Nothing in this paragraph 12.6 bars a change in Contract Price pursuant to this Article 12.0 to compensate CONTRACTOR due to delay, interference, or disruption directly attributable to actions or in actions of OWNER or anyone for whom OWNER is responsible.

12.7 Abnormal Weather Conditions

12.7.1 Abnormal Weather Conditions for rain shall be derived from the most recent 20-year (minimum) average for the nearest NOAA weather reporting station. The mean number of days of precipitation per month of 0.10 inch or more shall establish the mean number of weather days for the period.

12.8 Liquidated Damages

12.8.1 The required completion time for the Project is as set forth in the Agreement. The CONTRACTOR is advised that the Contract times stated in the Bid Form are of the essence of the Contract. For each and every day in excess of each Contract time states in the Bid Form that the CONTRACTOR fails to complete the Work indicated, the CONTRACTOR shall pay to the OWNER the sum stated in the Bid Form as liquidated damages. The said amounts are fixed and agreed upon by and between the CONTRACTOR and the OWNER as an estimate of the actual damages which would be incurred by the OWNER.

ARTICLE 13.0 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.1 Notice of Defects

13.1.1 Prompt notice of all defective Work of which OWNER or ENGINEER has actual knowledge will be given to CONTRACTOR. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.0.

13.2 Access to Work

13.2.1 OWNER, ENGINEER, ENGINEER's Consultants, other representative and personnel of OWNER, independent testing laboratories, and governmental agencies with jurisdictional interest will have access to the Site and the Work at reasonable times for their observation inspecting, and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's Site safety procedures and programs so that they may comply therewith as applicable.

13.3 Tests and Inspections

- 13.3.1 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.
- 13.3.2 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:
 - 13.3.2.1 for inspections, tests, or approvals covered by paragraphs 13.3.3 and 13.3.4 below;
 - that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.4.2 shall be paid as provided in said paragraph 13.4.2; and
 - as otherwise specifically provided in the Contract Documents.
- 13.3.3 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to be specifically inspected, tested, or approved by some public body, CONTRACTOR shall assume full responsibility therefore, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval.
- 13.3.4 The OWNER reserves the right to independently perform at its own expense, laboratory tests on random samples of material or performance tests on equipment delivered to the site. These tests, if made, will be conducted in accordance with the appropriate referenced standards or specification requirements. The entire shipment represented by a given sample, samples or price of equipment may be rejected on the basis of the failure of samples or pieces of equipment to meet specified test requirements. All rejected materials or equipment shall be removed from the site, whether stored or installed in the Work, and the required replacement shall be made, all at no additional cost to the OWNER.
- 13.3.5 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, it must, if requested by ENGINEER, be uncovered for observation.
- 13.3.6 Uncovering Work as provided in paragraph 13.3.5 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.

13.4 Uncovering Work

- 13.4.1 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.
- 13.4.2 If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by other, 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. If it is found that such 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 therefore as provided in paragraph 10.5. If, however, such 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 Milestones), 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 therefore as provided in paragraph 10.05.

13.5 OWNER May Stop the Work

13.5.1 If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workmen or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, or if the Work interferes with the operation of the existing facility, the OWNER may order CONTRACTOR to stop, by a written order any Work, or any portion thereof, until the cause for such order has been eliminated.

13.6 Correction or Removal of Defective Work

13.6.1 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).

13.7 Correction Period

- 13.7.1 If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or 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 6.11.1 is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instruction: (i) repair such defective land or areas, or (ii) correct such defective Work or, if the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and (iii) satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting there from. If CONTRACTOR does not promptly comply with the terms of such 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, and 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.
- 13.7.2 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 or by Written Amendment.

- 13.7.3 Where defective Work (and damage to other Work resulting there from) has been corrected or removed and replaced under this paragraph 13.7, 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
- 13.7.4 CONTRACTOR's obligations under this paragraph 13.7 are in addition to any other obligation or warranty. The provisions of this paragraph 13.7 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.8 Acceptance of Defective Work

13.8.1 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 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 therefore as provided in paragraph 10.5. If the acceptance occurs after such recommendation, an appropriate amount will be paid by CONTRACTOR to OWNER.

13.9 OWNER May Correct Defective Work

- 13.9.1 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 13.6.1, 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 and remedy any such deficiency.
- 13.9.2 In exercising the rights and remedies under this paragraph, OWNER shall proceed expeditiously. In connection with such corrective and 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, incorporate in the Work all materials and equipment stored 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 CONTRACTOR's, and ENGINEER and ENGINEER's Consultants access to the Site to enable OWNER to exercise the rights and remedies under this paragraph.
- 13.9.3 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 13.9 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 therefore as provided in paragraph 10.5. 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.

13.9.4 CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) 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 13.9.

ARTICLE 14.0 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.1 Schedule of Values

- 14.1.1 The schedule of values established as provided in paragraph 2.5.2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to ENGINEER. Progress payments on account of Unit Price Work will be based on the number of units completed.
- 14.1.2 With the above submittal, the CONTRACTOR shall submit for the ENGINEER's approval, a complete breakdown of all lump sum items in the Proposal. This breakdown, modified where directed by the ENGINEER, will be used as a basis for preparing partial estimates and establishing progress payments.
- 14.1.3 A lump sum payment equal to three percent of the total bid price (to include all bonds, insurance, move-on expenses, etc.) will be allowed for 'mobilization' as a progress payment line item. Up to half of the cost for mobilization will be considered in the initial payment request provided that cost documentation suitable to the ENGINEER is furnished by the CONTRACTOR. Any outstanding balance of mobilization line item will be payable when the Project Work is ten percent complete as indicated by the approved progress payments.

14.2 Progress Payments

14.2.1 Applications for Payments

- 14.2.1.1 The effective ending date of all applications for Progress Payments shall be the 25th day of each month unless mutually agreed upon otherwise. All applications for Progress Payments will be computer-generated based on the Schedule of Values as provided in paragraph 14.1, and submitted in triplicate. The application will be generated each period by the CONTRACTOR.
- 14.2.1.2 Prior to final preparation of each Progress Payment, the CONTRACTOR and Resident Project Representative shall mutually measure and agree upon the quality of Work completed each period.
- 14.2.1.3 Partial payment for materials or equipment properly stored on-site will be made on the basis of the invoice cost of the materials or equipment provided a detailed list of the materials for which partial payment is requested and supporting copies of the invoices is attached to each Application for Progress Payment. As the work progresses, the value of materials not entered into construction will be reduced as materials or equipment are installed. At the completion of the Work, the value of stored materials not entered into construction must be zero.
- 14.2.1.4 The following paragraphs (i & ii) are for construction projects in North Carolina only:

- 14.2.1.4.1 Sales and Use Tax: With each application for Progress Payment, CONTRACTOR must furnish a certified and notarized statement setting forth the cost of the property purchased from each vendor and the amount of sales and/or use tax paid thereon. The statement shall show both the N.C. Sales Tax and the County Tax paid and shall list any payments made directly to the North Carolina Department of Revenue. Tax statements and certification shall be submitted on the forms provided in the Contract Documents. In the event the CONTRACTOR makes several purchases from the same vendor, such certified statement must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, and the sales and use taxes paid thereon. Such statement must include the cost of any tangible personal property withdrawn from the CONTRACTOR's warehouse stock and the amount of sales or use tax paid thereon by the CONTRACTOR. Similar certified statements by his subcontractors must be obtained by the prime CONTRACTOR and furnished with the Application for Progress Payment. If no tax has been paid during the pay request period, "NONE" shall be entered on the tax form.
- 14.2.1.4.2 Use tax may be due on construction equipment brought into North Carolina for use in the performance of contracts (NCGS §105-164.4 and 105-164.6). CONTRACTORS are also liable for payment of applicable privilege licenses (NCGS §105-54) and for payment of applicable franchise, corporate income and withholding taxes (NCGS §105-122, 105-123, 105-134, and 105-163.2).
- 14.2.1.5 Retainage: Retainage shall be as set forth in the Standard Contract Form or otherwise in the Contract Documents and shall be in compliance with the requirements of Laws and Regulations.

14.2.2 Review of Applications:

- 14.2.2.1 ENGINEER will, within 10 days after receipt of each Application for Payment, either indicate in writing his approval of payment or return the Application to CONTRACTOR indicating in writing his reasons for refusing to approve payment. In the latter case, CONTRACTOR may make the necessary correction and resubmit the Application. Within 30 days of receiving the submittal of an approvable Application for Payment, the OWNER will make partial payment to the CONTRACTOR on the basis of a duly certified approved estimate of the Work performed during the preceding period by the CONTRACTOR.
- ENGINEER's recommendation of any payment requested in an Application for Payment will be based on ENGINEER's observations on the Site of the executed Work 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:
 - 14.2.2.2.1 the Work has progressed to the point indicated;
 - 14.2.2.2.2 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, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.8, and to any other qualifications stated in the recommendation); and
 - 14.2.2.2.3 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. By recommending any such payment ENGINEER will not thereby be deemed to have represented that: (i) inspections made to check the quality or the quantity of the Work as it 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 (ii) that 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;

- 14.2.2.4 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 to supervise, direct, or control the Work or for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for CONTRACTOR's failure to comply with Laws and Regulations applicable to CONTRACTOR's performance of the Work;
- 14.2.2.2.5 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 referred to in paragraph 14.2.2.2. ENGINEER may also refuse to recommend any such payment 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:

14.2.2.2.5.1	the Work is defective or completed Work has
1	the Work is defective, or completed Work has been damaged, requiring correction or
	replacement;
14.2.2.2.5.2	the Contract Price has been reduced by Written
17.2.2.2.3.2	•
	Amendment or Change Orders;
14.2.2.2.5.3	OWNER has been required to correct defective
	Work or complete Work in accordance with
	paragraph 13.9; or
14.2.2.2.5.4	ENGINEER has actual knowledge of the
	occurrence of any of the events enumerated in
	paragraph 15.2.1.
	paragraph 13.2.1.

14.2.3 Payment Becomes Due

14.2.3.1 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 14.2.4) become due, and when due will be paid by OWNER to CONTRACTOR

14.2.4 Reduction in Payment

- 14.2.4.1 OWNER may refuse to make payment of the full amount recommended by ENGINEER because:
 - 14.2.4.1.1 claims have been made against OWNER on account of CONTRACTOR's performance or furnishing of the Work;
 - 14.2.4.1.2 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;
- 14.2.4.1.3 There are other items entitling OWNER to a set-off against the amount recommended; or
- 14.2.4.1.4 OWNER has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.2.2.5.1 through 14.2.2.5.3 or paragraph 15.2.1.
- 14.2.4.2 If OWNER refuses to make payment of the full amount recommended by ENGINEER, OWNER must 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 corrects to OWNER's satisfaction the reasons for such action.
- 14.2.4.3 If it is subsequently determined that OWNER's refusal of payment was not justified; the amount wrongfully withheld shall be treated as an amount due as determined by paragraph 14.2.3.1.

14.3 CONTRACTOR's Warranty of Title

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

14.4 Substantial Completion:

- 14.4.1 CONTRACTOR may, in writing to OWNER and ENGINEER, certify that the entire Project is substantially complete and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and ENGINEER shall make an inspection of the Project to determine the status of completion. If ENGINEER and OWNER do not consider the Project substantially complete, ENGINEER will prepare and deliver to OWNER a tentative certificate of Substantial Completion and the responsibilities between OWNER and CONTRACTOR for maintenance, heat and utilities. There shall be attached to the certificate a tentative list of items to be completed or corrected before Substantial Completion, and the certificate shall fix the time within which such items shall be completed or corrected, said time to be within Contract Time.
- 14.4.2 OWNER shall have the right to exclude CONTRACTOR from the Site after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

14.5 Partial Utilization:

14.5.1 Prior to Substantial Completion of the Project, OWNER may request CONTRACTOR in writing to permit him to use a specified part of the Project which he believes he may use without significant interference with construction of the other parts of the Project. If CONTRACTOR agrees, he will certify to OWNER and ENGINEER that said part of the Project is substantially complete and request the ENGINEER to issue a certificate of Substantial completion for that part of the Project. Within a reasonable time thereafter, OWNER, CONTRACTOR, and ENGINEER shall make an inspection of that part of the Project to determine its status of completion. If ENGINEER and OWNER do not consider that it is substantially complete, ENGINEER will notify CONTRACTOR in writing giving his reasons therefore. If ENGINEER and OWNER consider that part of the Project to be substantially complete, ENGINEER will execute and deliver to OWNER and CONTRACTOR a certificate to that effect, fixing the date of Substantial Completion

as to that part of the Project, attaching thereto a tentative list of items to be completed or corrected before Substantial Completion of the entire Project and fixing the responsibility between OWNER and CONTRACTOR for maintenance, heat, and utilities as to that part of the Project. OWNER shall have the right to exclude CONTRACTOR from any part of the Project which ENGINEER has so certified to be substantially complete, but OWNER shall allow CONTRACTOR reasonable access to complete items on the tentative list.

14.5.2 The CONTRACTOR is specifically advised that payment in full for sections so completed and used by the OWNER will NOT be made until the entire Project has been completed. Partial payments for Work completed and the retainage will be handled on the basis of the ENTIRE Contract Amount as here specified. The CONTRACTOR shall account for this in his Bid and under no circumstances will occupancy and use of completed sections of the Work by the OWNER be considered as grounds for reducing the retainage withheld from the CONTRACTOR's partial payments, or for an increase in the Contract Price.

14.6 Final Inspection

14.6.1 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 measure as are necessary to complete such Work or remedy such deficiencies.

14.7 Final Payment

14.7.1 Application for Payment

- 14.7.1.1 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.
- 14.7.1.2 The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents; (ii) consent of the surety, if any, to final payment; and (iii) 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.
- 14.7.1.3 In lieu of the releases or waivers of Liens specified in paragraph 14.7.1.2 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 or OWNER's property might in any way be responsible have been paid or otherwise satisfied.

14.7.2 Review of Application and Acceptance

14.7.2.1 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 14.9. 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.

14.7.3 Payment Becomes Due

14.7.3.1 Thirty days after the presentation to OWNER of the Application for Payment and accompanying documentation, the amount recommended by ENGINEER will become due and, when due, will be paid by OWNER to CONTRACTOR.

14.8 Final Completion Delayed

14.8.1 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 and recommendation of ENGINEER, and without terminating the Agreement, 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 5.1, the written consent of the surety to the payment of the balance due for that portion of the Work fully complete 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.

ARTICLE 15.0 - SUSPENSION OF WORK AND TERMINATION

15.1 OWNER May Suspend Work

15.1.1 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 allowed 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 therefore as provided in paragraph 10.5.

15.2 OWNER May Terminate for Cause

15.2.1 The occurrence of any one or more of the following events will justify termination for cause:

- 15.2.1.1 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 2.7 as adjusted from time to time pursuant to paragraph 6.4);
- 15.2.1.2 CONTRACTOR's disregard of Laws or Regulations of any public body having jurisdiction;
- 15.2.1.3 CONTRACTOR's disregard of the authority of ENGINEER; or
- 15.2.1.4 CONTRACTOR's violation in any substantial way of any provisions of the Contract Documents.
- 15.2.2 If one or more of the events identified in paragraph 15.2.1 occur, OWNER may, after giving CONTRACTOR (and the surety, if any) seven days written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the Site, and take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case, CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. 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.

15.3 OWNER May Terminate For Convenience

- 15.3.1 Upon seven days written notice to CONTRACTOR, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Contract. In such case, CONTRACTOR shall be paid (without duplication of any items):
 - 15.3.1.1 for completed and acceptable Work executed in accordance with the contract Documents prior to the effective date of termination.
- 15.3.2 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.

15.4 CONTRACTOR May Stop Work or Terminate

15.4.1 If, through no act or fault of CONTRACTOR, the Work is suspended for more than 90 consecutive days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within 30 days after it is submitted, or 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 15.3. In lieu of terminating the Contract and without prejudice to any other right 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 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 15.4 are not intended to preclude CONTRACTOR from making a Claim under paragraph 10.5 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.

15.5 Assignment of Contract

15.5.1 CONTRACTOR shall not assign, transfer, convey or otherwise dispose of the Contract, or of his legal right, title, or interest in or to the same or to any part thereof, without the prior written consent of the OWNER. CONTRACTOR shall not assign by power of attorney or otherwise any monies due him and payable under this Contract without the prior written consent of the OWNER. Such consent, if given, will in no way relieve the CONTRACTOR from any of the obligations of this Contract. OWNER shall not be bound to abide by or observe the requirements of any such assignment.

ARTICLE 16.0 - DISPUTE RESOLUTION

16.1 Methods and Procedures

16.1.1 Dispute resolution methods and procedures, if any, shall be as set forth in these General Conditions, in the Standard Form Contract, or otherwise in the Contract Documents. If no method and procedure has been set forth, and subject to the provisions of paragraph 9.9 and 10.5, OWNER and CONTRACTOR may exercise such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any dispute.