

9.08 *Inspections, Tests, and Approvals*

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

9.09 *Limitations on Owner's Responsibilities*

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

9.10 *Undisclosed Hazardous Environmental Condition*

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

9.11 *Evidence of Financial Arrangements*

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

9.12 *Safety Programs*

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

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

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

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during

or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

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

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

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

10.08 *Limitations on Engineer's Authority and Responsibilities*

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

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 Compliance with Safety Program

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

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.
 - 2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an

adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

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

11.02 *Owner-Authorized Changes in the Work*

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

11.03 *Unauthorized Changes in the Work*

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

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on

the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.04.C.2.a and 11.04.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under

the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 3. *Binding Decision:* Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders covering:
1. 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;
 2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
 4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

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

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim

submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

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

13.01 Cost of the Work

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable

thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes

other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

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

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

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

D. *Contractor's Fee:* When the Work as a whole 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, Change Proposal, Claim, set-off, or other 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 11.04.C.

E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, 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.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

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

13.03 *Unit Price Work*

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 - 2. there is no corresponding adjustment with respect to any other item of Work; and
 - 3. Contractor believes that it 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 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

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

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

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

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to

cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

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

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

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

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 *Owner May Correct Defective Work*

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, 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, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will

include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

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

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
- C. *Review of Applications:*
1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

- a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
- a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- D. *Payment Becomes Due:*
- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.
- E. *Reductions in Payment by Owner:*
- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. the Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - l. there are other items entitling Owner to a set off against the amount recommended.
 - 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount

remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

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

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

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

15.06 *Final Payment*

- A. *Application for Payment:*
 - 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of

inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

B. *Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. 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 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

D. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation,

including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the 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 Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. 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 repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

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

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

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

16.02 *Owner May Terminate for Cause*

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

and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate For Convenience*

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

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 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 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 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 are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for

expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

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

ARTICLE 18 – MISCELLANEOUS

18.01 *Giving Notice*

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

18.02 *Computation of Times*

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

18.03 *Cumulative Remedies*

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

18.04 *Limitation of Damages*

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

18.05 *No Waiver*

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

18.06 *Survival of Obligations*

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

18.07 *Controlling Law*

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

18.08 *Headings*

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

STANDARD
SUPPLEMENTARY CONDITIONS*

These Supplementary Conditions amend or supplement the General Conditions of the Construction Contract and other provisions of the Contract Documents as follows. All provisions which are not so amended or supplemented remain in full force and effect.

G.C. – 1.02.D

Delete the definition of "Defective," on Page 5 of the General Conditions, in its entirety, and insert the following:

"Defective - An adjective which when modifying the word "Work" refers to Work that is unsatisfactory, faulty or deficient, or 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 which has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05 , and the Work is damaged through no fault of the Contractor after Owner has assumed said responsibility)."

G.C. –1.01.28

Delete the definition of "Owner," on Page 3 of the General Conditions, in its entirety, and insert the following:

"Owner - i.e., City of Lakeland, Tennessee, a municipal corporation."

G.C. – 2.01

All bonds, including Bid Bond, Performance Bond, and Labor and Material Payment Bond, shall be submitted on the forms provided for such purpose by Owner.

G.C. - 2.02

Delete the first sentence of paragraph 2.02 of the General Conditions, and insert the following:

"Owner shall furnish Contractor two (2) sets of the Contract Documents."

* For Use with EJCDC C-700 (2013 Edition) Standard General Conditions Of The Construction Contract.

G.C. - 2.05.A

Add the following to paragraph 2.05.A of the General Conditions:

"This schedule shall be a bar chart, CPM, or PERT Schedule. This schedule shall be updated as required because of actual progress, or as requested by Owner."

G.C. - 3.02.A.1

Add the following to paragraph 3.02.A.1 of the General Conditions:

"In the event of any conflict between the provisions of the Contract Documents and any such referenced provisions, the language of the Contract Documents will take precedence over that of any standard specification, manual, or code."

G.C. - 4.03.A

Delete the following to paragraph 4.03.A of the General Conditions, in its entirety, and insert the following:

"Contractor shall provide construction surveying services to establish horizontal and vertical control and set appropriate bench marks for Contractor's use during construction. The Contractor shall be responsible for any additional surveying required for the construction of the project.

The Contractor shall protect all existing survey monuments, brass caps, property corner markers, right-of-way monuments, and reference points from damage during his operations. If it is necessary to remove any of these to accomplish the Work, the Contractor shall hire a Surveyor licensed to practice in the State of Tennessee to reference and reset such monuments.

All costs required by this Supplementary Condition shall be merged with the other bid items and the Contractor will not receive any additional compensation."

G.C. - 5.03.A

Add the following after paragraph 5.03.A.3 of the General Conditions:

"5.03.A.4 Copies of these reports and drawings that are not included with Bidding Documents may be examined at the Engineer's office during regular business hours. These reports and drawings are not part of the Contract Documents, but the technical data contained therein upon which Contractor is entitled to rely, as provided in Paragraph 5.03.B of the General Conditions, are incorporated therein by reference."

6.03.C Comprehensive General Liability (IF USING ISO NEW SIMPLIFIED CGL OCCURRENCE FORM)

CONTRACTOR:

A.	General Aggregate:	\$2,000,000
B.	Products-Completed Operations Aggregate:	\$2,000,000
C.	Personal and Advertising Injury:	\$2,000,000
D.	Each Occurrence:	\$2,000,000
E.	Fire Damage (any one fire):	1,000,000
F.	Medical Expense (any one person):	\$5,000

6.03.D Automobile Liability:

A.	Bodily Injury:	\$1,000,000 each person \$1,000,000 per accident
B.	Property Damage:	\$1,000,000 each occurrence

Independent CONTRACTORS: \$1,000,000

6.03.E Coverage General Contractor Only:

A.	Umbrella/Excess Policy	Amount: \$2,000,000
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G.C. 6.03.I

Add the following after paragraph 6.03.I.5 of the General Conditions:

6. Contractor shall require all subs to carry at least \$500,000 limits in ALL areas described above and provide proof of insurance if required by the Owner.
7. All policies must contain a minimum 30-day notice of cancellation to the Owner.
8. All policies referenced herein shall name the Owner, its agents and executive officers as additional insured.
9. All insurance shall be maintained continuously during the life of the Contract including warranty period, but the Contractor's liabilities under this Contract shall not be deemed limited in any way by the insurance coverage required.

10. The comprehensive general liability insurance shall include completed operations insurance.
11. All of the policies of insurance so required to be purchased and maintained (or the certificates or other evidence thereof) shall contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least thirty (30) days prior written notice has been given to Owner and Engineer by certified mail.
12. All such insurance shall remain in effect until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work. In addition, Contractor shall maintain such completed operations insurance for at least two (2) years after final payment and furnish owner with evidence of continuation of such insurance upon final payment and one (1) year thereafter. The Owner shall be named as an additional insured on the Contractor's general liability, automobile liability, and umbrella liability policies with respect to Contractor's and its Subcontractor's work under the Agreement. The insurance coverage described herein shall in no way limit or relieve Contractor from indemnifying and holding Owner harmless with respect to claims. Nothing herein shall be construed as a waiver of any immunities, defenses or tort liability limits that the City may have under the Tennessee Governmental Tort Liability Act or other applicable law.
13. Prior to commencement of work, Contractor shall procure and at all times thereafter maintain with an insurer acceptable to the Owner the above referenced minimum insurance protecting the Contractor and Owner against liability from damages because of injuries, including death, suffered by persons, including employees of the Owner, and liability from damages to property arising from or growing out of the Contractor's negligent operations in connection with the performance of this contract.

G.C. -6.04.A

Delete paragraph 6.04.A of the General Conditions in its entirety and insert the following:

"6.04.A Owner shall be responsible for purchasing and maintaining Owner's own liability insurance as it desires, and, at Owner's option, it may purchase and maintain such insurance as will protect Owner against claims which may arise from its operations under the Contract Documents."

G.C. -6.05.A

Delete paragraph 6.05.A of the General Conditions in its entirety and insert the following:

"6.05.A Contractor shall purchase and maintain property insurance upon the Work at the site in the amount of the full replacement cost thereof. This insurance shall:"

G.C. - 6.05.A.1

Delete paragraph 6.05.A.1 of the General Conditions in their entirety and insert the following:

"6.05.A.1 Owner shall not be responsible for purchasing and maintaining any property insurance to protect the interests of Contractor, Subcontractors, or others in the Work. Risk of loss will be borne by Contractor, Subcontractor, or others suffering any such loss and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense."

G.C. – 6.06.A through 6.06.D

Delete paragraphs 6.06.A through 6.06.D of the General Conditions in their entirety.

G.C. -6.07.A through 6.07.B

Delete paragraph 6.07.A and 6.07B of the General Conditions in its entirety and insert the following:

"6.07.A Any insured loss under the policies of insurance required by Paragraphs 6.05 will be adjusted with Contractor and Owner and the proceeds made payable to Contractor and Owner."

"6.07.B Such proceeds shall be held by Owner and Owner shall serve as trustee for the insureds, as their interests may appear. Owner shall distribute the proceeds in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the monies so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment."

G.C. - 7.04.C

Delete the first sentence of paragraph 7.04.C of the General Conditions and insert the following:

"The Contractor shall supply the Engineer with three (3) copies of all information and supporting data on each proposal or submittal made pursuant to Paragraphs 7.04.A.2 and 7.04.B, not less than ten (10) days prior to the bid opening date. If approved, the Engineer will approve such request in writing by Addendum."

G.C. – 7.12.C

Add the following to paragraph 7.12.C of the General Conditions:

"It is the Owner's policy to provide contractors performing work at/on Owner-owned facilities with a list of hazardous chemicals on site, and labeled containers of which are reasonably anticipated to be contained in unlabeled pipes, confined space, or other areas of hazardous chemical exposures, together with related Material Safety Data Sheets. It is the responsibility of the Contractor to properly

and adequately train their employees with respect to hazards presented by such chemicals and remedial measures to be taken in case of exposure."

G.C. - 9.06.A

Delete paragraph 9.06.A of the General Conditions in its entirety.

G.C. - 10.08.B through 10.08.C

Add the following to the end of both paragraphs 10.08.B and 10.08.C of the General Conditions:

"...except to the extent such is in conflict with the Contract Documents or applicable law, known to Engineer, and not disclosed to Owner upon discovery by Engineer."

G.C. - 10.08.D through 10.08.E

Delete paragraph 10.08.D through 10.08.E of the General Conditions in its entirety.

G.C. - 13.01.B.1

Add the following to the end of paragraph 13.01.A.1 of the General Conditions to read as follows:

"The expenses of performing Work after regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner and which are incurred consistent with provisions of Tennessee Statutes."

G.C. - 13.01.B.5.c

Delete paragraph 13.01.B.5.c of the General Conditions in its entirety and insert the following:

"13.01.B.5.c Equipment. For any machinery or special equipment (other than small tools) including fuel and lubricants, plus transportation costs, the use of which has been authorized by the Engineer, the Contractor shall receive payment in accordance with the latest approved edition of the Equipment Rental Rates and Construction Sign Rate Schedule of the Tennessee State Transportation Commission. In the event that any of the equipment to be used is not shown in said schedule, the rental rate for such equipment shall be agreed upon in writing before the Work is started.

13.01.B.5.c.1 Rental of equipment will be measured by time in hours of actual working time and necessary travel time within the limits of the Project. If special equipment ordered by the Engineer is to be used in connection with additional work, travel time to the Project will be measured for payment.

13.01.B.5.c.2 Payment will be made based on the number of hours as outlined above, the sum of which will have no percentage added thereto.

13.01.B.5.c.3 Standby time will be paid only on equipment ordered brought to the Project and/or ordered held on the Project by the Engineer. Equipment already on the Project to complete regular contract items will not be considered for payment for standby time.

13.01.B.5.c.4 No formal rate determination schedule will be required as stated in the "Equipment Rental Rates and Sign Rate Schedule;" however, the Contractor shall submit to the Engineer at the Pre-construction conference his proposed base and service rates schedule for each type, model, and size of equipment to be used on this Project. These rates must be approved by the Engineer and accepted by the Contractor before payment to the Contractor for utilization of these rental items is made.

13.01.B.5.c.5 Should there be no specific bid item for mobilization, mobilization for equipment, normally on the Project, that is involved in additional work shall be considered incidental to the payment provisions for mobilization made in the original Agreement."

G.C. – 13.03.E

Delete paragraph 13.03.E of the General Conditions in its entirety and insert the following:

"13.03.E Adjustments in unit prices for increased or decreased quantities of major pay items will be governed as follows:

- 13.03.E.1 If the quantity of any major pay item of Work required to complete the project varies from the original contract quantity by 25% or less, payment will be made at the contract unit price.
- 13.03.E.2 Should the original contract quantity of any major pay item of Work be increased or decreased by more than 25%, either party to the Agreement may demand in writing within fifteen (15) days that a Change Order be negotiated with an adjustment of contract unit prices satisfactory to both parties.

Where the original contract quantity of a major pay item is increased, the adjusted contract price will apply only to that portion of the pay item which is in excess of 125% of the original contract quantity. The adjusted contract unit price for the quantity of the major pay item which is in excess of 125% of the original contract quantity will be negotiated on the basis of the actual cost of the entire item, complete, in place, plus a negotiated allowance for profit and applicable overhead costs.

In the case where a major pay item is decreased by more than 25% from the original contract quantity, the adjusted contract unit price will apply to the quantity measured and accepted for payment. At the request of the

Contractor, adjustment of the contract unit price for the quantity of a pay item which is less than 75% of the original contract quantity will be considered, insofar as it justifies an increase in the pro rata share of the fixed expense chargeable to such pay item because of the decreased quantity of the item. However, total payment for the pay item shall not exceed that amount which would be paid for 75% of the original contract quantity for the pay item at the original contract unit price.

- 13.03.E.3 If neither party demands in writing, an adjustment of unit prices for major pay items of Work, within fifteen (15) days of proposed quantity adjustment, then the contract unit prices will govern.
- 13.03.E.4 No contract unit price adjustment as provided for herein will be made for any major pay item of Work for which the total amount of the adjustment is less than \$1,000.00.
- 13.03.E.5 For the purpose of this Supplementary Condition, major pay items are defined as any contract pay items having an original amount bid in excess of 5% of the total original Contract Price."

G.C. - 14.02.C

Add the following to paragraph 14.02.C of the General Conditions:

"The Contractor shall be responsible for payment of all costs associated with pressure– leakage testing, material testing, asphalt and concrete mix designs, and for direct payment to the testing laboratory for all retests due to failing test results. These retesting costs must be paid before Final Payment."

G.C. - 14.07.A

Amend the first sentence of paragraph 14.07.A of the General Conditions to read as follows:

"If within one (1) year after the date of Final Payment, or such longer period of time as may be prescribed by Laws or Regulations..."

G.C. - 15.01.B.1

Amend the first sentence of paragraph 15.01.B.1 of the General Conditions to read as follows:

"By the date established for each progress payment (but not more often than once a month), Contractor shall prepare and submit to Engineer for review, an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents."

G.C. - 15.01.C.2.d

Add the following to paragraph 15.01.C.2.d of the General Conditions:

“In fulfilling his or her obligations under Tennessee Statute, Owner's representative may rely upon the recommendations of Engineer.”

G.C. - 15.01.C.2.e

Add the following to paragraph 15.01.C.2.e of the General Conditions:

“Owner shall make the progress payment as defined in the Agreement, provided the Application is in order and is approved.”

G.C. - 15.05.A

Add the following after paragraph 15.05.A of the General Conditions:

"15.05.A.1 Correction of Work Before Final Payment. The Contractor shall promptly remove from the premises all materials condemned by the Owner as failing to conform to the Agreement, whether incorporated in the Work or not, and where materials and/or Work have been condemned by the Owner, the Contractor shall promptly replace and re-execute his Work in accordance with the Contract Documents and without expense to the Owner, and shall bear the expense of all retests and making good all Work of other contractors destroyed or damaged by such removal or replacement or re-execution of the Work. Correction of any such condemned Work shall be a condition precedent to any further payment under the Agreement.

15.05.A.2 Deductions for Uncorrected Work. If the Owner deems it inexpedient to correct Work which has been damaged or which has not been done in accordance with the Contract Documents, the difference in value, together with a fair allowance for damage, as determined by the Owner, shall be deducted from the sum agreed to be paid the Contractor for the performance of the Contract."

G.C. - 15.06.A.3

Amend the last sentence of paragraph 15.06.A.3 of the General Conditions to read as follows:

"If any Subcontractor or Supplier fails to furnish a release or receipt in full, and to the extent permissible pursuant to Tennessee Statutes. Contractor may furnish a Bond or other collateral satisfactory to Owner to indemnify Owner against any Lien."

G.C. - 15.06.D.1

Delete paragraph 15.06.D.1 of the General Conditions in its entirety and insert the following:

"15.06.D.1 The Owner shall not be required to make Final Payment to the Contractor until such time as the provisions of Tennessee Statute Sections 66-11-205, have been fulfilled, the retained percentage will be paid within fifteen (15) days of the expiration thereof.

15.06.D.2 Should any liens or claims be filed, retainage equal to the amount of the lien or claim will be held until a satisfactory agreement is reached between the Owner, Contractor, and Contractor's surety.

15.06.D.3 All warranties and guarantees from the Contractor, Subcontractors, Suppliers, etc., shall be delivered to the Owner and be of acceptable form and content as determined by the Owner before Final Payment is made."

G.C. - 15.07.A. through 15.07.B

Amend paragraph 15.07.A of the General Conditions to read as follows:

"A waiver of all claims by Owner against Contractor, except claims arising from unsettled claims for labor and materials, from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it will not constitute a waiver by Owner of any rights in respect of Contractor's continuing obligations under the Contract Documents; and,"

Amend paragraph 15.07.B of the General Conditions to read as follows:

"A waiver of all claims by Contractor against Owner other than those previously made known to Owner in writing and still unsettled."

G.S. - 16.02.D

Delete paragraph 16.02.D in its entirety.

G.C. - 16.02.E

Add the following immediately after paragraph 16.02.E of the General Conditions:

"16.02.E.1 Should an act of God result in substantial damage to all or a portion of the Work, or should the Owner's convenience necessitate termination in the sole discretion of the Owner, the Owner shall have the option of terminating the Agreement. If the Owner exercises the option to terminate, a Notice of Termination so providing will be issued. Such Notice of Termination may provide for the Contractor to perform any Work deemed by the OWNER as necessary to put the project in satisfactory condition for the termination of all Work. Payment to the Contractor shall be made in accordance with the

Agreement. Upon the issuance of Notice of Termination, the Contractor shall be relieved of further responsibilities for damage to the Work (excluding materials not already incorporated into the Work) and will not be required to perform any further Work other than that specified in the Notice of Termination.

- 16.02.E.2 When the Owner determines that the Work specified in the Notice of Termination has been completed, the Owner shall accept the Project, and immediately upon such acceptance, the Contractor will not be required to perform any further Work thereon, and shall be relieved of his responsibility for injuries to persons or property.
- 16.02.E.3 After acceptance of the Work, pursuant to the General Conditions, the Contractor will be paid for the Work done prior to termination. The Owner will determine the value of the partially completed Work as follows: The Contractor will be paid for all Work to date. This amount shall be computed by determining the percentage of Work completed prior to termination and multiplying that percentage against the Total Contract Price. The amount to be paid shall not exceed the amounts previously paid or due. The Contractor shall not be entitled to his anticipated profits for the Work which would have been performed, but for termination.
- 16.02.E.4 If, prior to such termination, the Contractor has placed an order for materials specially manufactured for the Project, which materials are not suitable for use in other projects of the Owner or sale to others in the ordinary course of the vendor's business, the Contractor will be paid the actual cost of the materials to the Contractor or the cancellation charges, if any, assessed by the vendor. The determination of whether the order shall be completed or canceled shall be made by the Owner. Any materials approved for payment by the Owner and Contractor shall become the property of the Owner and the actual cost of any further handling will be paid for by the Owner.
- 16.02.E.4 No payment will be made for materials which have been damaged and are not acceptable for incorporation in the Work in accordance with the requirements of the Agreement. The Contractor shall reimburse the OWNER for any amounts previously paid by the Owner for such unacceptable material, and agrees that the Owner may deduct the amount of such previous payment made by the Owner for any monies due or which may become due the Contractor. If the Owner has paid for acceptable materials not incorporated into the Work under the General Conditions, the Owner will have the option of taking title to all or any portion of such materials, or of receiving reimbursement from the Contractor for any amounts previously paid to the Contractor. The Contractor agrees to pay to the Owner upon demand any amounts previously paid for such materials, and agrees that the Owner may

deduct the amount of such previous payments from any monies due or which become due the Contractor.

G.C.- 16.02.G

Add the following paragraphs immediately after paragraph 16.02.G of the General Conditions:

“16.02.G Contractor's Responsibility on Receipt of Notice of Termination.

Upon receipt of Notice of Termination from the Owner, whether for default, convenience of the Owner, or otherwise, the Contractor shall:

1. Stop all Work under the Agreement on the date of, and to the extent specified in, the Notice of Termination.
2. Place no further orders or subcontracts for materials, equipment, or services except as may be necessary for completion of such portions of the Work specified in the Notice of Termination.
3. Cancel or terminate all orders of subcontracts to the extent that they relate to the performance of Work specified in the Notice of Termination; and,
4. Comply with all other requirements of the Owner as may be specified in the Notice of Termination.

16.02.H Subcontract Provision.

The Contractor shall insert in all subcontracts a provision that the Subcontractor shall stop all Work on the date of, or to the extent specified in, a Notice of Termination from the Owner and shall require the Subcontractors to insert the same provision in their subcontracts.

16.02.I Duty to Notify Subcontractors.

The Contractor shall immediately, upon receipt, communicate any Notice of Termination issued by the Owner to all affected Subcontractors."

SECTION 01010

SUMMARY OF WORK

A. Project Identification:

Fiscal Year 2019 Street Patching

B. Project Summary:

This project includes the placement of asphalt in areas where street repairs are being conducted. The City of Lakeland will perform all excavation and backfill. The Contractor will be responsible for removal of aggregate from the area to be patched, the application of tack oil, and the placement of three inches (3") of asphaltic concrete material (surface coat asphalt) over the aggregate base.

All construction material shall be removed and properly disposed of in accordance with State and local regulations within the time limits of the project.

A general description of the work includes the following; however, this is not an exhaustive list.

- Furnish and install three inches (3") of Mix No.1 as per specifications specified herein, surface course asphaltic concrete pavement over street patch. Material and placement shall be in accordance with the specifications contained herein.
- Edges of cuts shall be tacked prior to placement of asphalt.
- Existing aggregate base course must be excavated to accommodate 3 inches of compacted hot mix asphalt.
- Repairs must be completed and ready for inspection by City representative within 10 calendar days of initial request.
- Furnish and install traffic control while work is being performed. This includes, but is not limited to, Flaggers, Type II Barricades, 28" Cones, 36" Barrels/Drums, and Night-time Flashers. City of Lakeland traffic control devices shall not be used by the Contractor.

C. Particular project requirements.

1. Apply for, obtain, and pay for permits when required to perform the work.
2. Field-verify dimensions indicated on drawings (when applicable) before fabricating or ordering materials. Do not scale drawings.

3. Notify Owner of existing conditions differing from those indicated on the drawings. Verify the existence and location of underground utilities along the route of proposed work. Omission from, or inclusion of, locations on the drawings, is not to be considered as the nonexistence of, or the definite location of, existing underground utilities. Do not remove or alter existing utilities without prior written approval.
4. The Contract Documents are intended to provide the basis for proper completion of the work suitable for the intended use of the Owner. Anything not expressly set forth but which is reasonably implied or necessary for proper performance of the project shall be included.
5. The Provisions are written in the imperative mode. Except where specifically intended otherwise, the subject of all imperative statements is the Contractor. For example, "furnish..." means "Contractor shall furnish..."

END OF SECTION

SECTION 01100

GENERAL CONSTRUCTION REQUIREMENTS

PART 1 - Description.

To establish uniform requirements for construction of water distribution facilities, sanitary sewerage collection facilities, storm sewer collection systems, streets, and associated appurtenances which will enable the construction to be performed in accordance with Local, State, and Federal laws.

1.01 Definitions.

A. For the purposes of these specifications, the words and phrases set out in the following articles shall have the meanings as follows:

1. "City" means the governing body of the city of Lakeland, TN.
2. "Contractor" means the individual, partnership, firm, or corporation contracting with the developer or the City which will be performing the work, or which will be performing the construction activities.
3. "Developer" means partnership, firm, or corporation developing property where construction will be performed.
4. "Engineer" means the consultant or City Engineer.
5. "Owner" means the individual, partnership, firm or corporation being the owner of record of property where construction will be performed.
6. "Underground facility" means any item of personal or public property buried or placed below ground for use in connection with the storage or conveyance of electronic, water, sewage, telephonic or telegraphic communications, cable television, electric energy, oil, gas, hazardous liquids, or other substances and including, but not limited to pipes, sewers, water, storm water, conduits, cables, valves, lines, wires, manholes, and attachments.

B. The following abbreviations shall have the designated meanings:

1. "APWA" means the American Public Works Association.
2. "ASTM" means the American Society for Testing and Materials.
3. "AWWA" means the American Water Works Association.

4. "AASHTO" means the American Association of State Highway & Transportation Officials.
- C. Reference to a specific specification, i.e., AWWA C900, means the latest Edition of that specification.

PART 3 Execution

3.01 Scheduling and Construction Progress.

- A. Prior to the start of any work, the Contractor shall submit in writing to the Engineer for review, a progress schedule that shall be followed as closely as possible. Progress scheduling using critical path method is approved and encouraged. Once work has started on a street, it must be pursued continuously until all work on that street is finished.
 1. The Contractor shall schedule a preconstruction conference prior to the start of work. Persons attending shall include representatives of the Contractor, subcontractors, owner, developer, Engineer, and affected utilities.
- B. Each successive phase of work will follow the preceding phase as closely as possible so that the time any one street is under construction is kept to a minimum.
- C. In the event that the work is not being accomplished expeditiously or in accordance with the time period set forth in the progress schedule, or if the work on an excavation has ceased or is abandoned without due cause, the Engineer may give written notice to the Contractor and/or the surety company for the project.

3.02 Notification of Landowners, Residents, and Businesses

- A. At least one (1) week prior to beginning construction operations Contractor shall notify in writing, all those directly affected by the Work, including the Fire, Ambulance, Police Departments, and the Engineer's Office. The notification shall include the following as a minimum:
 1. Name, address, telephone number, and contact person for Developer, Developer's Contractor, Owner, and Engineer.
 2. A brief description of the proposed Work.
 3. Name and telephone number of Contractor's person to contact in emergency.
 4. A map showing the Work area, the traffic control plan, and the planned access to be provided to the affected properties. The map should also show the property or business owners' access during construction, and access in case of an emergency for fire, ambulance, police, or other emergency service agency vehicles.

5. A schedule for start up and completion of the Work. Schedules shall be updated as needed as the work progresses.
6. Contractor shall notify property owner and occupant 24 hours in advance of any disruption of service or access.

3.03 Available Maintenance Personnel

The Contractor shall have personnel available to maintain the Work as required, 24 hours per day every day. Accordingly, the Contractor shall furnish the City, the Owner, the Engineer, and the Shelby County Sheriff's Office with the names, addresses, and telephone numbers of local employees or representatives who will be available to maintain the Contractor's work during non-working periods, evenings, nights, weekends, and holidays.

3.04 Utility Locates

- A. It is the responsibility of the Contractor to obtain locates for buried facilities within the project area prior to the start of work as necessary and as required by law. The Contractor is responsible for any damage to buried utilities or damage or injury to persons or property resulting from Contractor's work in the vicinity of the utilities.
- B. It is the responsibility of the Contractor to provide advance notice to all utility notification centers serving that area. The Contractor shall request the notification center to provide the nature, location, and elevation of the utility at each location and at whatever interval is necessary for the work. If the utility company cannot or will not provide the information, the Contractor shall obtain the information by whatever means are necessary. For each location that the utility is exposed, the Contractor shall locate the utility by tying it both horizontally and vertically by coordinates, to the datum established by the City.
- C. At all utility crossings the Contractor shall locate the utility at a minimum of one point directly over the proposed line or appurtenance. When existing utilities that parallel the proposed line or appurtenance are exposed by excavation, the Contractor shall locate the utility by tying it both horizontally and vertically to the datum and include the information on the record drawings. At a minimum, the utility shall be tied horizontally and vertically at 300-foot (90 m) intervals.
- D. If during the field location of the utilities, additional unforeseen utilities are discovered, the Contractor shall immediately notify the Engineer and proceed in accordance with approval of the Engineer. The utility must be located by the Contractor as specified above and include the information on the record drawings.
- E. The Contractor must protect all existing utilities and improvements, public or private, located on the right-of-way, and other work areas, during the entire period of his work. Special care must be taken in backfilling and compacting under and around

such improvements. Any breakage or damage to underground facilities caused by trenching, backfilling, resurfacing, or any other activity associated with the work shall be the responsibility of the Contractor.

- F. Whenever utility mains or services are crossed, the utility owner shall be notified and the crossing shall be constructed in accordance with the utility owner's requirements.
- G. Before the Contractor begins his grading operations, he shall confer with the owners of any underground or overhead utilities which may be in or in close proximity to the grading areas, and shall arrange for the necessary disconnection of these utilities in accordance with the regulations of the utility companies concerned. The Contractor shall take such measures as the Engineer may direct in protecting these utilities properly throughout the period his grading operations are in progress. The party or parties owning or operating overhead or underground utilities shall perform the actual work of moving, repairing, reconditioning, or revising the utilities, except as otherwise specified in this Section. Whenever and wherever such operations are undertaken by the owners of utilities, the Contractor shall cooperate to the extent that ample protection of their work will be provided so that the entire work as contemplated may be expedited to the best interests of all concerned, as judged by the Engineer.
- H. Protect and safeguard existing service lines and utilities structures, the locations of which have been made known to the Contractor by the owners of the utilities or by others, prior to excavation or construction of fills or embankments, from damage during grading operations. Any damage to such lines or structures shall be repaired at the Contractor's expense. The above provisions are applicable to all service lines or utilities structures, all or any portion of which protrude above the original ground or street surfaces, or lie beneath such surfaces in any grading area or any other area upon which the Contractor has encroached.

3.05 Protection of Existing Buildings and Structures

For collapse of adjacent buildings, sidewalks, structures, and underground or above ground utilities, the Contractor shall repair damage done to the owner's property or any other property, on or off the premises, by reason of his operations. The Contractor shall adequately brace walls during backfilling and compacting operations.

3.06 Construction Stakes – Alignment and Grades

- A. All work shall be constructed in accordance with lines and grades shown on the drawings and as designated by the Engineer. These lines and grades may be modified by the Engineer as provided in the General Conditions.
- B. The Contractor shall provide experienced personnel, materials, and equipment necessary to complete all survey, layout, and measurement work. The Contractor shall keep the Engineer informed a reasonable time in advance, of the times and places he wishes to do work so that initial control points may be designated.

3.07 Restoration of Street Surface, Street Signs, Curbs, Driveways, Sidewalks, Irrigation and Landscaping

- A. Wherever existing improvements are removed, damaged or otherwise disturbed by Contractor's activities, Contractor shall replace or repair the improvements to conditions equal to or better than the condition prior to the start of work. Any crushed rock, sod, or natural vegetation disturbed by the Contractor shall be replaced, rebuilt or restored to conditions equal to or better than the condition prior to the start of work.

3.08 Temporary Utilities, Public Access and Safety

- A. Contractor shall provide temporary water and sewer service to properties when permanent facilities will be out of service for eight (8) hours or longer, or when other circumstances make it necessary. Where service cannot be interrupted, such as sewer mains, Contractor shall provide plant and equipment to pump around the sections which are out of service.
- B. Where the Engineer deems necessary, the Contractor shall provide access wherever possible to public and private property to prevent serious inconvenience to pedestrian and vehicular traffic. This shall not be construed to require the Contractor to provide such access at the times and locations where it will interfere with his construction progress. The Contractor shall furnish, place, and maintain sufficient flags, flares, barricades, signs, etc., along the location of his work in accordance with the Federal Highway Administration, "Manual on Uniform Traffic Control Devices." Flag persons shall be utilized if necessary to maintain safe traffic flow.

3.09 Erosion and Sediment Control

- A. Erosion and sediment control shall be performed in accordance with rules and regulations adopted by the City of Lakeland and the Tennessee Department of Environment and Conservation.

3.10 City Permits

- A. All necessary permits shall be obtained prior to the beginning of any construction project. Those permits may include: City of Lakeland/TDEC Permit to Construct, Street Cut Permits, Traffic Control Permits, Bonds, and Erosion and Sediment Control Permit, as well as any other appropriate permits required for the project by the City.

3.11 Punchlist and Final Closeout

- A. Initial City Punchlist

1. The Contractor, Owner, Engineer, and City personnel will conduct an initial walkthrough and develop a list of deficiencies that will be presented to the Contractor by the Engineer.
2. The Contractor, Owner, and Engineer will conduct a walkthrough identifying items to be corrected. A final punch list will be developed by the Contractor and Engineer. The punch list will contain dates for completion of the various identified items.
3. All items on the list will be completed to the satisfaction of the City prior to acceptance of the project and start of the one-year warranty period.

3.12 Submittals

The Contractor shall submit for approval by the Engineer a minimum of five (5) copies of data required by specific sections of this specification.

3.13 Workmanship and Cleanup

- A. All debris and rubbish caused by the operations of the Contractor shall be removed, and the areas occupied during his operations shall be left in a neat and presentable condition satisfactory to the Engineer. Construction cleanup and all backfill operations shall immediately follow installation of underground facilities. Cleanup shall be completed to allow local traffic on the street and access to driveways, parking lots, etc. During construction, all existing gutters, storm drains, runoff channels, etc. shall be kept clean of dirt, rubble, or debris which would impede the flow of storm sewer.
- B. Excess, unsuitable, and waste materials from the project (including that from trench excavation, pavement removal, curbwalk removal, and grading operations), shall be suitably disposed of, offsite, by Contractor.
- C. Excess material resulting from parkway and shoulder finishing and other final operations shall not be permitted to accumulate on the pavement surface and shall be removed concurrently with the finishing operations. Care shall be taken to prevent the entrance of this material into drainage structures or other waterways during the construction period. It shall be the responsibility of the Contractor to properly dispose of all excess material.

3.14 Design Mixes, Testing and Quality Assurance

- A. The testing requirements and cost responsibilities of design mixes, testing requirements, and quality assurance testing are listed in each specific section of these specifications.
- B. Unless specified by the contract documents, or addressed specifically within these

Standard Specifications, the Owner will be responsible for moisture/density/compaction testing only. If the initial moisture/density/compaction test fails to meet the minimum standards as established by these specifications, the Contractor shall pay for any and all additional tests until a moisture/density/compaction test meeting the minimum standards is obtained.

END OF SECTION

SECTION 01200

PROJECT COORDINATION

PART 1 – Description

1.01 Summary

- A. Contractor shall schedule a preconstruction conference (if required) to be held within twenty (20) days of the Notice of Award. Contractor's assigned supervisory personnel and subcontractors shall attend this conference. Contractor shall provide a work schedule at or prior to this meeting for review by all parties. A corrected schedule shall be provided within seven (7) days following the meetings.
- B. Conduct all construction activities between the hours of 7:00 a.m. and 6:00 p.m., Monday through Friday, except in cases of emergencies. No work will be allowed on Saturdays without the Owner's permission, and no work, except for emergencies, will be allowed on Sundays. Should the aggregate base material not be stable for paving operations, the paving contractor shall notify the city and move onto the next patch without incurring additional cost to the owner.
- C. Contractor shall obtain water for use during construction at his expense. If Contractor elects to obtain water from the public water utility, he will make all the arrangements, comply with their regulations, and pay all fees and charges.

1.02 Coordination With Public And Private Agencies

- A. If utility companies elect to repair or replace their lines in the project area, their crews will be permitted access to the area to accomplish their work.
- B. Contractor is responsible for locating and protecting existing underground improvements. Contact all utility companies for location of their facilities. To contact all utility companies call the local underground number at least 48 hours prior to excavation for field locates.
- C. Contractor shall have personnel available to maintain his work as required 24 hours per day every day. Contractor is responsible for housekeeping, dust and erosion control, and shall provide all equipment and personnel necessary to meet the requirements of this responsibility. Contractor shall provide Engineer with the name(s) and telephone number(s) of the person(s) designated to be available for after-hours contact. If this person cannot be contacted, Owner may use its equipment to correct problems. In this case, Contractor shall pay all costs incurred by Owner.

- D. Do not utilize private property for any purpose without written permission from the property owner.

1.03 Coordination With Owner And City Representative

- A. Construct all work in accordance with the lines and grades shown on the Drawings, and as designated by City Designee/Engineer (when applicable). City Designee may modify these lines and grades as provided in the General Conditions. Where the Contract Documents specify survey work to be provided by City Designee/Engineer, give a minimum of 24 hours notice.
- B. Owner shall employ and pay for the services for an independent testing agency to perform tests as required by the Contract Documents. Notify Engineer a minimum of 24 hours in advance to request testing. Contractor shall be responsible for cost of re-tests required if the results of the original tests do not meet the minimum requirements.
- C. Coordinate on-site staging areas, access and temporary facilities with Owner.
- D. For additional information, contact Emily Harrell PE, City Engineer at 867-2717.

1.04 Coordination of Construction

- A. Contractor is responsible for coordinating work of all trades by preparation of schedules and progress reports, coordination of drawings and other work as necessary.
- B. Schedule work to produce orderly, continuous progress and avoid delays due to lack of materials, subcontractor schedule, lack of available manpower, etc.
- F. Contractor is responsible for ensuring that installed and/or completed work is complete and satisfactory prior to enclosing or covering. Call for required inspections in a timely manner and do not cover work that requires inspection.

END OF SECTION

SECTION 01340

SUBMITTALS

PART 1 - Description

1.01 Summary

- A. Comply with Submittal format requirements as specified in the Contract Documents.
- B. Provide, in a timely manner, the number of copies and types of submittals listed in individual sections of the Contract Documents. If not specified elsewhere, provide the following as a minimum:
 - 1. Mix designs and certifications of compliance for Portland Cement Concrete, Cement Treated Base, Aggregate Base Course, Asphaltic paving material, and any other material or product used as part of this project as required in the Standard Specifications.
 - 2. Closeout submittals.
- C. Provide required resubmittals in the appropriate quantities if original submittals are not approved.
- D. Samples and shop drawings shall be prepared specifically for this project. Shop drawings shall include dimensions and details, including adjacent construction and related work. Note any special coordination required. Note any deviations from requirements of the Contract Documents. Submittal data shall be properly labeled indicating specific service for which material or equipment is to be used, section and article number of specifications, project name, Contractor, etc. Data of a general nature will not be accepted.
- E. Failure of Contractor to submit shop drawings in ample time for checking shall not entitle him to an extension of contract time.

END OF SECTION

SECTION 01650

MEASUREMENT AND PAYMENT PROCEDURES

PART 1 – Description.

All work completed under this Contract will be measured by the City Designee according to the bid items and to the construction drawings. Units of measurement and dimensions will be shown in these specifications.

1.01 Payment

- A. Submit pay requests to the City the third week of each month. Payments will be processed and issued the following week.
- B. Owner will make progress payments as defined in Article 5 of the Agreement, on the forms provided by the Engineer.
- C. If the Contractor elects to enter into a joint account agreement, two (2) pay requests and vouchers must be submitted. One pay request and voucher for the appropriate progress payment amount, the other for the retained amount.

1.02 Measurement of Quantities

Quantities shown on the bid schedule are estimated and are to be considered approximate. Actual constructed quantities will vary. The Contractor will be compensated only for those items and materials actually installed and approved as part of the project. No additional pay will be granted for items or materials not installed.

- A. Payment will be made for the work completed and stored materials less retained amounts in accordance with provisions of the contract documents.
- B. Payment amounts will be based on the scheduled values and mutually agreed upon percentage of completion for each item.

1.03 Bid Item Descriptions

The cost of all material and labor required to complete this project as specified and shown on the drawings, but not specifically included as a pay item, shall be included in the bid price of its related bid item. No extra pay shall be granted for items that are reasonably foreseen as necessary for the proper installation of an item.

PART 2 - Execution

2.01 Measurement and Payment of Bid Items

A. Furnish and Install 3-inch Surface Course Asphaltic Concrete Pavement

1. Measurement of this item shall be by the number of square yards (SY) of asphalt installed in place and approved. Measurements shall be made on the surface of the finished patch taken from the lines formed by the junction of new asphalt and old asphalt pavement. This item shall include tacking of the edges of the cut and pavement of the surface with new hot mix asphalt. New asphalt pavement shall have a compacted thickness of no less than three inches (3") of hot mix asphalt pavement. Base course removal and traffic control shall be considered incidental to furnishing and installing asphaltic concrete pavement and no separate payment will be made for any item or activity necessary to comply with these specifications. Payment shall be by the contract unit price per SQUARE YARD (SY) in place.

END OF SECTION

SECTION 01750

CONTRACT CLOSEOUT

PART I Description

1.01 Summary

- A. Provide prerequisites to substantial completion.
 - 1. Punch list.
 - 2. Supporting documentation.
 - 3. Warranties.
 - 4. Certifications.

- B. Provide prerequisites to final acceptance.
 - 1. Final payment request with supporting affidavits.
 - 2. Completed punch list.
 - 3. Submit record documents: One set of drawings and project manual with all changes noted in red and Project Manual changes flagged with page tabs.
 - 4. Final clean-up.
 - 5. Removal of temporary facilities.

END OF SECTION

SECTION 01810

SPECIAL PROVISIONS

PART 1 Description

1.01 SUMMARY

- A. These "Special Provisions" supplement, clarify, or modify provisions of Specifications as they apply to this project.
- B. Requirements of Special Provisions, General and Supplemental Conditions apply to work performed under all sections of this project.
- C. Work of this contract shall include all work required to construct the entire Project as shown on the drawings and defined by the Specifications and other contract documents, unless specific exceptions are stated therein.
- D. **DISCREPANCY BETWEEN SPECIAL PROVISIONS, SPECIFICATIONS, AND PLANS.** In the event of discrepancy between Special Provisions and other sections of the Specifications, the Special Provisions will take precedence over the Specifications, the General Conditions, and the Supplemental Conditions. The Specifications will take precedence over the Plans.

1.02 LABOR PRACTICES

EIGHT-HOUR WORK DAY

The Contractor's attention is directed to, Limitation on work hours; overtime; exceptions. a) No person shall require laborers, workmen, or mechanics to work more than eight hours in any one calendar day or forty hours in any one week upon any public works of the state, or any of its political subdivisions, except as hereafter authorized. An employee may agree to work more than eight hours per day or more than forty hours in any week provided the employee shall be paid at the rate of one and one-half times the regularly established hourly rate for all work in excess of forty hours in any one week.

1.03 CONSTRUCTION WATER

The Contractor is responsible for supplying water for construction purposes. If the Contractor wishes to use existing fire hydrants for water, he shall make the proper arrangements with the owner of the hydrant. The Contractor will be responsible for compliance with that owner's requirements as well as the payment of any fees for its use. Construction water is considered

incidental to this project and no separate payment will be made to the Contractor for this item. If the Contractor wishes to use water from a resident, he shall obtain written permission from that resident to do so.

1.04 SAFETY

In accordance with generally accepted construction practices, the Contractor will be solely and completely responsible for safety conditions at and adjacent to the job site, including the safety of all persons and property during the performance of the work. The Contractor shall comply with all federal, state, and local safety laws and regulations. This requirement shall apply continuously, and shall not be limited to normal working operations. The City Designee/Engineer's construction review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's safety measures, in, on, or near the construction site. This paragraph shall be applicable to the Contractor and all of the Contractor's subcontractors.

In addition, the Contractor shall provide barriers, fences, signs, lights, etc. as necessary to control access to the site.

1.05 DISPOSAL OF WASTE MATERIALS

Excess, unsuitable, and waste materials from this project (including that from trench excavation, pavement removal, piping removal, and grading operations), shall be disposed of, offsite, by Contractor. Such disposal shall be considered incidental, and shall not be a pay item.

1.06 CODES AND STANDARDS

All materials and the completed installation shall comply with applicable standards promulgated pursuant to the State of Tennessee and City of Lakeland.

1.07 OPEN EXCAVATIONS

The Contractor shall completely backfill all excavations before stopping work for the day. No excavation (fenced or unfenced) shall be left open overnight, over a weekend, nor any period in which no work at that location is underway. The cost of reopening or re-excavation due to this provision will be borne by the Contractor.

1.08 CLEANING AND FINISHING

After completion of all work all debris and foreign material will be removed by the contractor. The project area, including staging areas, shall be clean and functional. This will include the restoration of any disturbed landscaping in the work area.

1.09 TRAFFIC CONTROL

A traffic control plan is required for repairs in areas affecting traffic. The Contractor is responsible for furnishing a traffic control plan to the City Designee at least one week prior to the start of construction. Excavations which traverse a street shall be limited to one-half the width of the street at any one time, unless an emergency situation exists which requires the entire width of the street be excavated. The City Designee approval is required prior to traversing an entire street. The closure should not exceed forty-eight (48) hours and proper signage shall be installed detouring traffic and warning of construction.

END OF SECTION

SECTION 01551

TEMPORARY TRAFFIC CONTROLS

PART 1. Description

To establish uniform requirements for detours, signs and barricades, and traffic control plans associated with construction activities performed on or affecting City of Lakeland streets. The work in this article shall consist of furnishing, erecting, maintaining, relocating, and removing temporary traffic control devices at the locations specified on the drawings and as directed by the Engineer. All traffic control devices shall conform to the provision for construction signing as set forth in the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) latest edition.

PART 2 MATERIALS

2.01 Traffic Control Products

A. Sign Panels

1. Sign panels will be constructed of $\frac{3}{4}$ " plywood conforming to plywood sign panels and barricades of the standard specification for road and bridge construction; or 6061-T6 or 5052-H38 aluminum alloy sheeting conforming to ASTM B209.
2. Wood sign panels will be backed with metal backing angles; except that backing is not required for those sign panels 48" x 60" or smaller.
3. Aluminum sign panels will be 0.125" thick and backed with metal backing angles; except that those sign panels 48" x 60" or smaller may be:
 - i. 0.080" thick and backed with metal backing angles or 2 x 4 lumber; or,
 - ii. Unbacked, 0.125" thick.
4. Special signs which are unique to the project, i.e., signs not shown on the plans or included in part VI of the MUTCD, and signs shown on the plans which contain a message that is unique to the project, will be furnished by the contractor, as specified on the plans, and erected by the Contractor. Posts and hardware for fixed special sign installations, and all equipment for portable special sign installations will be furnished by the contractor. Post lengths will be specified by the Engineer. Upon removal, the special sign panels, posts, hardware, and portable installation equipment will remain the property of the Contractor.

- i. Special signs will be erected on fixed mountings unless portable mountings are authorized by the Engineer.
- B. Barrels will be plastic conforming to the MUTCD, with 6" wide reflective stripes.
- C. Temporary markings
 1. Temporary reflective pavement markings will be paint, preformed tape, or raised pavement markers, and will be suitable for use on either Portland cement concrete or asphalt pavements. Minimum acceptable standards are as follows:
 - i. Paint used for temporary markings will be commercially manufactured highway striping paint. The paint will be applied without dilution.
 - ii. All painted stripes will be 4" wide, and will be reflectorized by dropping or spraying glass beads onto the wet paint.
 - iii. The reflective beads will conform to AASHTO Specification M247, Type 1.
 2. Temporary reflective pavement striping tape will be 4" wide, pressure-sensitive tape manufactured for use as pavement striping.
 - i. Striping tape applied to finished pavement surfaces which will be returned to normal traffic use will be a removable type.
 - ii. Striping tape applied to temporary pavement surfaces which will be obliterated may be a non-removable type.
 - iii. Striping tape applied to the surface of intermediate lifts of asphalt pavement may be non-removable type, and may be let in place. If a removable type is used, it will be removed before placing the next lift.
 3. Temporary retro-reflective raised pavement markers manufactured by Astro Optics of Schaumburg, Illinois, Model No. TPM, or Stimsonite Products of Niles, Illinois, Model No. 66, or an approved equal will be acceptable.
 4. Temporary retro-reflective motorist guidance markers manufactured by Davidson Plastic Company of Ken, Washington, Model NO. TRPM, or TOM, or an approved equal will be acceptable.

SECTION 02741

ASPHALTIC CONCRETE PAVEMENT

PART 1 – Description

This work shall consist of an asphaltic concrete pavement constructed in one or more layers for surface course(s) and/or binder course(s). The binder course may also be used as a leveling or bushing course. Binder course shall consist of a hot mixture of aggregate and asphalt prepared in a hot bituminous mixing plant. The binder course shall be constructed on a prepared subgrade, subbase, or base conforming to the lines, grades, thicknesses, and cross-sections shown on the Plans or as directed by the Engineer. The surface course shall consist of an asphaltic concrete pavement composed of a mixture of coarse aggregate, fine aggregate, mineral filler, and asphalt cement, constructed on a prepared roadbed in conformity with the lines, grades, thicknesses, and cross-sections shown on the Plans or directed by the Owner.

PART 2 – Materials And Equipment

2.01 MATERIALS

- A. Asphalt Cement. Asphalt cement shall conform to the requirements of ASSHTO M 226, Table 2, for the grade specified. Unless otherwise directed, asphalt shall be Viscosity Grade AC-20, PG64-22, or PG 64-28. The type and grade of bituminous material may be changed one step by the Engineer during construction, at now change in unit price.
- B. Course Aggregate. Course aggregate (aggregate retained on the No. 4 sieve) shall be crushed stone meeting the quality requirements of ASTM D 692 with the following exceptions:
 - 1. Crushed limestone shall have a sodium sulfate soundness loss not exceeding 9 percent.
 - 2. For Mix No. 1, material retained on the No. 4 sieve shall have a maximum of 20 percent elongated pieces (length greater than five times the average thicknesses).
 - 3. For Mix No. 2, the aggregate shall contain no more than 5 percent soft or nondurable particles.
 - 4. For Mix No. 3, the aggregate shall contain no more than 5 percent soft or nondurable particles.
- C. Fine Aggregate. The fine aggregate shall consist of natural sand consisting of hard, clean, tough grains which will have a maximum loss of 12 percent when subjected to the sodium sulfate soundness test.
- D. Composition of Mixtures

1. Asphaltic Concrete Surface, Mix No. 1, shall be laid in one course to the thickness shown on the Plans.
2. Asphaltic Concrete Binder, Mix No. 2, shall be laid in one or more courses to the thicknesses shown on the Plans. Mix No. 2 may also be used as a leveling course or bushing course.
3. Asphaltic Concrete Binder, Mix No. 3 shall be laid in one or more courses to the thickness shown on the plans.
4. The composition of the mixes shall be as follows:

Sieve Size	Total Percent Passing by Weight		
	Mix No. 1	Mix No. 2	Mix No. 3
2"	100	100	100
1-1/2"	100	100	90 - 100
3/4"	100	100	65 - 90
3/8"	76 - 96	65 - 95	-----
No. 4	51 - 76	45 - 70	30 - 55
No. 8	36 - 60	25 - 50	20 - 45
No. 30	16 - 40	12 - 30	8 - 25
No. 100	3 - 12	2 - 12	2 - 12
No. 200	2 - 8	1 - 6	1 - 6

5. The proportions of the total mixture, in percent by weight, shall be as follows:

Courses	Combined Mineral Asphalt	Aggregate Cement
Mix No. 1, Surface	92.0 - 96.0	4.0 - 8.0
Mix No. 2, Binder	93.0 - 97.5	2.5 - 7.0
Mix No. 3, Binder	93.0 - 97.5	2.5 - 7.0

6. It is the intent of this Section of the Specifications that the above described mixes shall conform to the following mixtures specified in the Tennessee Department of Transportation Standard Specifications for Road and Bridge construction.

Mix No. 1 - Section 411, Asphaltic Concrete Surface (Hot Mix), Aggregate Grading E.

Mix No. 2 - Section 307, Bituminous Plant Mix Base (Hot Mix), Aggregate Grading C.

Mix No. 3 – Section 307, Bituminous Plant Mix Base (Hot Mix),
Aggregate Grading B.

7. For multiple layer construction, succeeding layers shall not be laid until the previous layer has cooled sufficiently to support the construction equipment
8. When Mix No. 1 is to be used as a surface for traffic lanes, the mineral aggregate shall be composed of not less than 50 percent nor more than 55 percent crushed limestone and not more than 50 percent nor less than 45 percent natural sand. When Mix No. 1 is used for surfacing of shoulders or other non-traffic lane construction, the mineral aggregate may be composed entirely of limestone, including screening and manufactured sand, but in no case shall the mineral aggregate for this construction consist of less than 50 percent limestone. The natural sand shall be so graded that not more than 5 percent will be retained on the No. 4 sieve.

2.02 EQUIPMENT

- A. All equipment necessary for the satisfactory performance of this construction shall be on the Project and approved of before work will be permitted to begin. The equipment shall meet the requirements of Specification Section 02710.

PART 3 – Execution

3.01 General

- A. The general construction requirements for surface and binder courses shall be as prescribed in the applicable portions of Specification Section 02710

3.02 Preparation Of Base Or Existing Surface

- A. The designated surface upon which asphalt concrete courses are to be placed shall meet the applicable requirements of Specification 02710 and be thoroughly cleaned of all dirt and other foreign or loose matter prior to the application of the Tack Coat or Prime Coat, as specified in TDOT Specification Sections 402 and 403.

3.03 Thickness And Surface Requirements

- A. Thickness shall be controlled during the spreading operations by frequent measurements taken of freshly spread mixture to establish a relationship between the un-compacted and compacted material. This thickness shall remain in conformity with that specified on the Plans. The surface of all courses shall meet the requirements specified under Specification Section 02710 and when tested in

accordance with the provisions of Specification Section 02710 the deviation of the surfaces from the testing edge of the straightedge shall not exceed 1/4 inch for Mix No. 1 or 3/8 inch for Mix No. 2 and Mix No. 3.

3.04 Manhole Adjustments

- A. Drainage and sanitary sewer manholes owned by the City shall be adjusted and set at final grade by the Contractor as necessary for compliance with the Plans. Adjustments of City owned manholes shall be as specified in Section 02530 or 02632 of these Specifications. Manholes, valve boxes, and other utility structures not owned by the City but within the right-of-way of the project shall be adjusted as necessary by the owner of such facilities. The Contractor shall be responsible for notifying other owners of any required adjustments and for the accomplishment of that work by the owner of such facilities according to the project schedule.

3.05 Traffic And Maintenance

- A. The Owner will determine when the surface course has sufficient compaction and has cured sufficiently to allow construction equipment, slow moving local traffic, or normal traffic to use the completed surface.

END OF SECTION