

DOCUMENT 00 11 14 - NOTICE TO BIDDERS

The **RICHLAND - LEXINGTON AIRPORT DISTRICT (RLAD)** will receive sealed proposals for the **Enterprise Parkway Reconstruction** project, at the Columbia Metropolitan Airport Terminal Building, CAE Administrative Office (East Ticketing), 3250 Airport Boulevard, Suite 10, West Columbia, SC, 29170, Attn: Mr. Frank Murray, Vice President of Planning and Engineering until **2:30 p.m. EST on Tuesday, February 13, 2024** at which time and place bids will be publicly opened and read aloud. An official clock will be established in the above location. Bids received after stated time will not be accepted.

PREBID CONFERENCE

A non-mandatory Prebid Conference will be conducted via an online meeting utilizing Microsoft Teams and in person at the Carolina Room in the Columbia Metropolitan Airport Terminal Building, 3250 Airport Boulevard, West Columbia, South Carolina, 29170 at 2:00 PM EST, Tuesday, January 30, 2024. The Carolina Room is located adjacent to Baggage Claim on the Lower Level of the Terminal. Parking is available in the Terminal Parking Garage and validation will be provided. A roll call will be taken at the meeting and posted with the meeting minutes. A tour of the project site will be conducted after this Conference. Questions about the meaning or intent of the project shall be addressed to the Office of the Architect/Engineer and be made in writing.

Link for online Prebid Conference:

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 238 652 092 750

Passcode: gQKWs5

Join with a video conferencing device

110841503@t.plcm.vc

Video Conference ID: 119 839 133 4

Or call in (audio only)

[+1 920-455-8872,354892234#](#) United States, Green Bay

Phone Conference ID: 354 892 234#

SCOPE OF WORK

The overall scope of this project includes the reconstruction of Enterprise Parkway from SC-602 to Old Dunbar utilizing reclaimed aggregate base with cement stabilization and 3" of asphalt surfacing. The project includes 27,000 SY of asphalt removal, 4,600 tons of asphalt for surface and intermediate courses, pavement markings, erosion control and crack cleaning and sealing.

BIDDING DOCUMENTS

Complete sets may be ordered and purchased directly from Quest CDN at the web address listed below. Cost of the Documents will be determined by actual reproduction and shipping costs. No partial sets will be issued. Complete Plans, Specifications, and Contract Documents are also available for inspection in the offices of the Airport and of the Architect/Engineer. Technical questions shall be directed to the office of the Architect/Engineer in writing. Questions and associated answers will be transmitted to all plan holders. Plans will be available on or about January 15, 2024. The last date for questions will be February 2, 2024.

Office of the Architect/Engineer: Foth Infrastructure & Environment, LLC
101 Trade Zone Drive, Ste 16A
West Columbia, SC 29170
Phone: 803-250-4888
Attn: Dave Carpenter
Dave.Carpenter@foth.com

Office of the Airport: Columbia Metropolitan Airport
3250 Airport Boulevard, Suite 10
West Columbia, SC 29170
Attn: Frank Murray, CM
Vice President of Planning and Engineering

Each Bid shall be accompanied by bid security in the form of a Bid Bond, cashier's check, or certified check made payable to Richland - Lexington Airport District, equal to 5% of the total bid. Contract Security in the form of 100% Performance and Payment Bonds will be required of the successful bidder. All bonds shall be from a surety company authorized to transact business in the State of South Carolina.

No bid may be withdrawn after closing time for the receipt of bids for a period of forty five (45) days. All bids shall be submitted on the Bid Form supplied with the Bid Documents. All forms and requirements listed in the Bid Form shall be responded to in a complete manner. Failure to do so may result in the rejection of the Bid.

Bidders are required to be properly licensed in the State of South Carolina at the time of submission of the Bid. The Bidder shall supply its South Carolina Contractor's License Number on the Bid Form and on the outside of the sealed envelope containing the Bid. Additional requirements for bid submission are specified in the Instructions to Bidders.

The Richland - Lexington Airport District reserves the right to waive any informalities or irregularities in or to reject any or all Bids and to award or refrain from awarding the Contract for the work, whichever is deemed to be in the Authority's best interest.

The Richland - Lexington Airport District

DOCUMENT 00 21 13 - INSTRUCTIONS TO BIDDERS

1. DEFINED TERMS

- 1.1 Terms used in these INSTRUCTIONS TO BIDDERS are defined in the General Conditions and the Supplementary Conditions of the Contract for Construction and shall have the intent and meaning assigned them therein. Terms defined in the General Conditions being redefined by modification in the Supplementary Conditions shall have the intent and meaning assigned them in the Supplementary Conditions.
- 1.2 The term “Successful Bidder” means the lowest, qualified, responsible, responsive BIDDER to whom OWNER (on the basis of OWNER’s evaluation as hereinafter provided) makes an award.
- 1.3 The term “Bidding Documents” means the Bidding Requirements, Contract Forms, Bid Forms, Conditions of the Contract, Specifications, Drawings, and Addenda issued by the OWNER for the purpose of obtaining a BID on the Work.

2. BIDDING DOCUMENTS

- 2.1 Complete sets of Bidding Documents shall be used in preparing BIDS; neither OWNER nor ARCHITECT/ENGINEER assume any responsibility for errors or misinterpretations resulting from use of incomplete sets of Bidding Documents.
- 2.2 OWNER and ARCHITECT/ENGINEER, in making copies of the Bidding Documents available on the above terms, do so only for the purpose of obtaining BIDS on the Work and do not confer a license or grant for any other use.

3. QUALIFICATIONS OF BIDDERS

- 3.1 To demonstrate qualifications to perform the Work, each BIDDERS shall submit, as part of his BID on the prescribed form, evidence of, among other things, financial capacity and previous experience. Each BID shall contain evidence of the BIDDER’s qualification to do business in the State of South Carolina. Conditional or qualified BIDS will not be accepted. In addition, a pertinent provision of Paragraph 16 of this Section determines additional requirements for qualifications of BIDDERS.
- 3.2 Each BIDDER shall furnish with his BID a list of items that he will perform with his own forces and the estimated total cost of these items.
- 3.3 BIDDERS are required to be properly licensed in the State of South Carolina at the time of submission of the BID. The BIDDER shall supply its South Carolina Contractor’s License Number on the Bid Form and on the outside of the sealed envelope containing the BID. Additional requirements for BID submission are specified in Paragraph 12 of these Instructions to Bidders.

4. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- 4.1 Before submitting a BID, each BIDDER shall (a) examine the Bidding Documents thoroughly; (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress or performance of the Work; (c) familiarize himself of federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work; (d) study and carefully correlate BIDDER’s observations with the Drawings and Specifications; and (e) notify ARCHITECT/ENGINEER of conflicts, errors, or discrepancies.

- 4.2 Before submitting his BID each BIDDER may, at his own expense and assuming all risks, make additional investigations and tests as the BIDDER may deem necessary to determine his BID for performance of the Work in accordance with the time, price and other terms and conditions of the Contract Documents. On request in advance, OWNER will provide each BIDDER access to the site to conduct such explorations and tests as each BIDDER deems necessary for submission of a BID. BIDDER shall fill all holes, cleanup, and restore the site to its former condition upon completion of such explorations.
- 4.3 The lands upon which the Work is to be performed, rights-of-way for access thereto, and other lands designated for use by the CONTRACTOR in performing the Work are identified in the Contract Documents.
- 4.4 The submission of a BID will constitute an incontrovertible representation by the BIDDER that he has complied with every requirement of this Article 4 and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

5. ADDENDA AND INTERPRETATIONS

- 5.1 Questions about the meaning or intent of the Contract Documents shall be submitted to the ARCHITECT/ENGINEER in writing. Replies, when considered necessary by the ARCHITECT/ENGINEER, will be issued by Addenda, mailed or delivered to all parties recorded by the ARCHITECT/ENGINEER as having received the Bidding Documents. Failure of any BIDDER to receive such Addendum or interpretation shall not relieve BIDDER from any obligation under this BID as submitted.

BIDDERS shall address inquiries to the Airport's Program Manager:

Foth Infrastructure & Environment
101 Trade Zone Drive, Suite 16A
West Columbia, SC 29170
Phone: 803-250-4888
Attn: Dave Carpenter
Email: Dave.Carpenter@foth.com

Include in all correspondence reference to the Project name.

Questions and substitution requests will be received up until 7 days prior to the Bid Date. Questions and requests received after this date will not be answered. No Addendum will be issued later than 5 days prior to receipt of BIDS, unless such Addendum includes a postponement of the Bid Date.

- 5.2 Only a written interpretation or correction by Addendum shall be binding. No BIDDER may rely upon any interpretation or correction given by any other manner.
- 5.3 BIDDER shall ascertain that BIDDER has received all Addenda issued and shall acknowledge receipt of all Addenda on the spaces provided in the Bid Form.

6. BID SECURITY

- 6.1 Each BID shall be accompanied by Bid Security made payable to OWNER, in an amount of five (5) percent of the BID price, in the form of a Bid Bond prepared on the Form of Bid Bond included in the BID, duly executed by the BIDDER as principal and issued by a surety licensed to operate in the State of South Carolina and meeting the requirements of the General Provisions and the Supplementary Conditions thereto. The Surety shall have at a minimum an "A" rating of performance as stated in the most current publication of "Best's Key Rating Guide, Property Liability".

6.2 Attorneys-in-fact who sign the Bid Bonds or Contract Bonds shall file with each bond a certified and effectively dated copy of their power-of-attorney.

6.3 The Bid Security of the successful BIDDER will be retained until such BIDDER has executed the Agreement and furnished the required Contract Security and Insurance Certificates, whereupon it will be returned; if the successful BIDDER fails to execute and deliver the Agreement and furnish the required Contract Security and Insurance Certificates within ten (10) days of NOTICE OF AWARD, OWNER may annul the NOTICE OF AWARD and the Bid Security of the BIDDER will be forfeited to OWNER as liquidated damages for such withdrawal, failure, or refusal. The Bid Security of any BIDDER whom the OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the earlier of the seventh day after the "effective day of the Agreement" by OWNER to CONTRACTOR and the required Contract Security and Insurance Certificates are furnished, or ninety-one (91) days after the Bid Opening. Bid Security of other BIDDERS may be released within seven (7) days of the Bid Opening.

7. CONTRACT TIME

7.1 The total Contract Time shall be as stated in the Owner Contractor Agreement and Supplementary Conditions.

8. LIQUIDATED DAMAGES

8.1 Provisions for Liquidated Damages are set forth in the Owner Contractor Agreement and Supplementary Conditions.

9. SUBSTITUTE OR "OR EQUAL" MATERIALS AND EQUIPMENT

9.1 The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance, and quality to be met by any proposed substitution.

No substitutions will be considered prior to receipt of BIDS unless written request for approval has been received by the ARCHITECT/ENGINEER to later than the deadline for receipt of questions noted in Paragraph 5. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment, or other portions of the Work including changes in the work of other contracts that incorporation of the proposed substitution would require shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The decision of approval or disapproval of a proposed substitution may be final.

If the ARCHITECT/ENGINEER approves a proposed substitution, prior to receipt of BIDS, such approval will be set forth in an Addendum. BIDDERS shall not rely upon approvals made in any other manner.

No substitution requests will be entertained nor will substitutions be approved after award of the Contract unless specifically provided for in the Contract Documents. All substitution requests shall be received by the ARCHITECT/ENGINEER no later than the deadline noted in Paragraph 5.

9.2 Substitutions and Product Options: BIDDERS are directed to read the statements contained under Section 01 25 00, for substitutions or product options, which specify the conditions under which the material, devices, or equipment to be furnished by the CONTRACTOR are equal to those designated.

10. SUBCONTRACTORS, ETC.

- 10.1 All BIDDERS shall submit as part of their BID on the prescribed schedules a list of all subcontractors and other persons and organizations (including those who are to furnish principle items of material and equipment) proposed for those portions of the Work as to which such identification is required. If requested by OWNER, the low BIDDER shall submit an experience statement with pertinent information as to similar projects and other evidence of qualification for each subcontractor, other person or organization. If OWNER, after due investigation, has reasonable objection to any proposed subcontractor, other person or organization, the OWNER may before giving the NOTICE OF AWARD require the apparent Successful BIDDER to submit an acceptable substitute without an increase in Bid Price.

If the apparent Successful BIDDER declines to make any such substitution, the Contract shall not be awarded to such BIDDER, but his declining to make any such substitution will not constitute grounds for sacrificing his Bid Security. Any subcontractor, other person, or organization so listed and to whom the OWNER does not make written objection prior to giving the NOTICE OF AWARD will be deemed acceptable to OWNER.

- 10.2 No CONTRACTOR shall be required to employ any subcontractor, other person, or organization against whom he has reasonable objection.

11. BID FORM AND SCHEDULES

- 11.1 One bound copy of the Bid Form and Schedules is included herein.

- 11.2 Bid Forms and Schedules shall be completed in ink or by typewriter. Each BID shall be submitted on the prescribed form. All blank spaces and Bid Prices shall be filled in. The Bid Price shall be stated in words and numerals or as indicated in the Bid Forms. In the event of a discrepancy between amount stated, the amount stated in words shall govern.

- 11.3 The firm, corporation, or individual name of the BIDDER shall be signed in ink in the space provided for the signatures on the Bid Form. BIDS by corporation shall be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal shall be affixed and attested by the secretary or assistant secretary of the corporation. The corporate address and state of incorporation shall be shown in the space provided.

- 11.4 BIDS by partnerships shall be executed in the partnership name and signed by a partner authorized to bind the partnership, whose title shall appear under the signature and the official address of the partnership shall be shown below the signature.

BIDS by limited partnerships or limited liability companies shall be executed in the partnership/company name and signed by the full-time chief manager of the limited partnership or the equivalent officer of the limited liability company.

- 11.5 BIDS by individuals shall be signed by the individual owner and the terms “doing business” or “sole owner” shall appear under the signature.

- 11.6 The BIDDER shall state in his BID the name and address of each person or corporation interested therein.

- 11.7 The numbers of all Addenda and the date each was received shall be filled in on the Bid Form.

- 11.8 The address to which communications regarding the BID are to be directed shall be shown on the Bid Form.

- 11.9 Affidavits: Each BIDDER is required to duly execute the BIDDER's and Non-Collusion Affidavits, and the Bidder Certification Regarding Debarment at the end of the BID.
- 11.10 All names shall be typed or printed below the signature.
- 11.11 The only markings by the BIDDER which will be considered by the OWNER in evaluating the BID are those on the Bid Form itself. No markings or notes on the exterior of the envelope or other extraneous marks will be considered as a part of the BID.

12. SUBMISSION OF BIDS

- 12.1 BIDS shall be submitted at the time and place indicated in the Notice to Bidders. Each BID shall be marked and addressed as required in the Notice to Bidders and shall be accompanied by the Bid Security and other required documents.
- 12.2 Submit the Bid Form in duplicate. Do not submit the Project Manual or Drawings with the BID.
- 12.3 The following original, signed documents shall be included within the sealed envelope:
 - The Bid Form in duplicate
 - All Bid Form attachments
 - Bid Bond or other Bid Security allowed by these documents.
- 12.4 The BID envelope shall contain the following information on the outside of the sealed envelope:
 - BID FOR ENTERPRISE PARKWAY – PLATT SPRINGS TRAFFIC SIGNALIZATION**
 - Bidder's Name and Address.**
 - Bidder's Contractor License Number, Expiration Date, and Classification.**

- 12.3 If the BID is sent through the mail the sealed envelope shall be enclosed in a separate envelope with the following notation and to this address:
 - BID ENCLOSED - BID FOR ENTERPRISE PARKWAY – PLATT SPRINGS TRAFFIC SIGNALIZATION**
 - Columbia Metropolitan Airport
 - 3250 Airport Boulevard, Suite 10
 - West Columbia, SC 29170
 - Attn: Frank Murray, CM
 - Director of Planning & Facilities, Administration

It is the Bidders responsibility to ensure delivery of the BID by the date and time indicated in the Notice to Bidders regardless of the method of delivery.

MODIFICATIONS AND WITHDRAWAL OF BIDS

- 13.1 BIDS may be modified or withdrawn by an appropriate document duly executed (in the manner that a BID must be executed) and delivered to the place where BIDS are to be submitted at any time prior to the opening of BIDS.
- 13.2 If within twenty-four (24) hours after the time BIDS are opened, any BIDDER files a duly signed written notice with the OWNER and promptly thereafter demonstrates to the reasonable satisfaction of the OWNER that there was a material and substantial mistake in the preparation of his BID, that BIDDER may withdraw his BID and the Bid Security will be returned. Thereafter, that BIDDER will be disqualified from further bidding on the Work.

14. OPENING OF BIDS

- 14.1 BIDS will be opened and read aloud publicly. An abstract of the amounts of the Base Bids and any major Alternates will be made available after award is made by OWNER.

15. BIDS TO REMAIN OPEN SUBJECT TO ACCEPTANCE

- 15.1 All BIDS shall remain open for forty five (45) days after the day of the opening, but OWNER may, in his sole discretion, release any BID and return the Bid Security prior to that Date.

16. AWARD OF CONTRACT

- 16.1 OWNER reserves the right to reject any and all BIDS, to waive any and all informalities not involving price, time, or changes in the Work, and to negotiate contract terms with the successful BIDDER, and the right to disregard all nonconforming, nonresponsive, unbalanced, or conditional BIDS. Also, OWNER reserves the right to reject the BID of any BIDDER if OWNER believes that it would not be in the best interest of the Project to make an award to that BIDDER, whether because the BID is not responsive or the BIDDER is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by the OWENR. Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

- 16.1.1 The following are examples of factors which, among others, will determine the responsiveness of BIDS:

- a. The completeness and regularity of Bid Form;
- b. A Bid Form without excisions or special conditions;
- c. A Bid Form having no alternative bids for any items unless requested in the Specifications;
- d. A Bid Form with no obviously unbalanced Unit Prices;
- e. Submission of a properly executed Bid Bond;
- f. Submission of complete documentation for compliance with Federal Procurement and Contracting provisions, as described further in this and other Sections.

- 16.2 In evaluation of BIDS, OWNER shall consider qualifications of the BIDDERS and whether or not the BIDS comply with the prescribed requirements in the Bid Forms.

- 16.3 OWNER may consider the qualifications and experience of subcontractors, other persons or organizations (including those who are to furnish the principal items of materials and equipment) proposed for those portions of the Work as to which the identity of subcontractors and other persons and organizations shall be submitted as provided in the General Conditions. OWNER will consider DBE participation and whether or not BIDDER made an effort to meet specified DBE goals.

- 16.4 OWNER may conduct such investigations as he deems necessary to assist in the evaluation of any BID and to establish the responsibility and qualifications of BIDDER and other persons and organizations to do the Work in accordance with the Contract Documents to OWNER's satisfaction within the prescribed time.

- 16.4.1 Responsibility shall be based on whether the BIDDER:

- a. Maintains a permanent place of business;
- b. Has adequate equipment and staff to do the Work properly and within the time limit that is established;
- c. Has adequate financial status to meet his obligations contingent to doing the Work; and
- d. Otherwise demonstrates that he is clearly capable, both financially and in terms of past experience, to carry out the Work of the Contract in a competent and timely fashion.

- 16.5 OWNER reserves the right to reject the BID of any BIDDER who does not pass any evaluation to OWNER's satisfaction.
- 16.6 If a Contract is to be awarded, it will be awarded to the lowest responsive and responsible BIDDER whose evaluation by OWNER indicates to OWNER that the award will be in the best interests of the Project. The OWNER has the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low BIDDER on the basis of the sum of the Base Bid and Alternates accepted.

Whichever BID scenario the OWNER elects to award, if any at all, will be awarded to the lowest responsive and responsible BIDDER, depending upon the availability of funds as well as BIDDER meeting BIDDER's and contractual requirements, as set forth in these Contract Documents.

- 16.6.1 In the event that the lowest responsive and responsible BID exceeds the OWNER'S budget for construction and the OWNER desires to negotiate a price reduction in the Project, the Contract Bidder shall advise the ARCHITECT/ENGINEER (in writing) of his primary list of subcontractors and/or materials suppliers as used in his BID, and shall first confine his negotiations to these included on the list. In case of failure to satisfactorily conclude such negotiations, the Contract Bidder then shall submit to the ARCHITECT/ENGINEER, for approval, the names of a minimum of two additional bidders for each trade with whom he wishes to negotiate.
- 16.7 If a Contract is to be awarded, OWNER will give the successful BIDDER a NOTICE OF AWARD within ninety (90) days after the day of Bid Opening.
- 16.8 After BIDS are opened all communications between the BIDDER and the OWNER or his representatives upon which the BIDDER intends to rely shall be in writing. No oral statements by the OWNER or its representatives will modify or waive any of the requirements of these Instructions or other Contract Documents.

17. BONDS, CONTRACT SECURITY, AND INSURANCE

- 17.1 Article 11 of the General Conditions and Supplementary Conditions set forth OWNER's requirements as to Bonds and Insurance. For this Project, Performance and Payment Bonds, AIA Documents A310 and A312, each in the amount of 100% of the Contract amount, will be required. When the successful BIDDER delivers the executed Agreement to OWNER it shall be accompanied by the required Contract Security and Insurance Certificates.
- 17.2 All Bonds (Bid, Payment, and Performance) which are signed or countersigned by the Surety Company's proper resident agent, authorized to do business in the State of South Carolina, as attorney-in-fact, shall be accompanied by an original sealed, authenticated, and currently dated power of attorney.

18. SIGNING OF AGREEMENT

- 18.1 When OWNER gives a NOTICE OF AWARD to the successful BIDDER, it will be accompanied by required number of unsigned counterparts of the Agreement and all other required Contract Documents. Within fifteen (15) days following the effective date of "Award" CONTRACTOR shall sign and deliver all executed counterparts of the Agreement to the OWNER with all other Contract Documents including Insurance Certificates and executed Bonds attached thereto. ARCHITECT/ENGINEER will identify those portions of the Contract Documents not fully signed by the OWNER and CONTRACTOR and such identification shall be binding on all parties.

19. SPECIAL REQUIREMENTS

- 19.1 Laws and Regulations: The BIDDER's attention is directed to the fact that applicable state laws, municipal ordinances and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though therein written out in full.
- 19.2 State Licenses: The successful BIDDER will be required to obtain necessary licenses or permits to conduct the Work within their contract as may be prescribed by the State of South Carolina.
- 19.3 Permits, Fees, and Taxes: Costs of building and utility permits and fees for inspections required by all City, County, and/or State Authorities; all Local, State, and Federal taxes; and, all other fees and taxes for which the CONTRACTOR is liable due to the work on this Project shall be included in the CONTRACTOR'S lump sum BID.

20. PREBID CONFERENCE

- 20.1 A non-mandatory Prebid Conference will be held at the time and date specified in the Notice to Bidders. Attendance by General Contractors at the Prebid Conference is not required to bid on the Project. Representatives of OWNER and ARCHITECT/ENGINEER will be present to discuss the Project. The ARCHITECT/ENGINEER will transmit to all prospective BIDDERS of record any such Addenda as ARCHITECT/ENGINEER considers necessary in response to questions arising at the Conference.

21. SALES TAX

- 21.1 All BIDS and Unit Prices shall include all sales taxes and other applicable taxes and fees.

22. FUNDING

- 22.1 The OWNER may adjust Project scope to match available Funds. If sufficient Funds are not available OWNER will reject all BIDS and return Bid Security to all BIDDERS as specified in the Instructions to Bidders.

23. SPECIAL INSTRUCTIONS

- 24.1 Indemnification: The CONTRACTOR shall be solely responsible for all liabilities, suits, actions, and claims of every character whatsoever incurred or brought forth on account of any injuries, damage, or loss incurred or brought sustained by any person or persons or to any property, real or personal, whether on adjacent to the job site or not, arising out of or in any way connected with the matters and things set forth in these Specifications, other of the Contract Documents, whether due to the negligence of the CONTRACTOR, conditions of the premises, or other causes. The CONTRACTOR covenants agrees to indemnify and save harmless the OWNER from all liabilities charges, expenses, and cost on account of or by reason of any such injuries, damages, liabilities, claims, suits, or losses, however occurring, including any costs incurred in defending against the same. To further assure, the performance of the covenant, the CONTRACTOR shall procure and constantly maintain in force, at its expense, the liability insurance required.
- 24.2 Superintendent: The CONTRACTOR shall have a superintendent or representative on site at all times while Work is being performed. He will represent the CONTRACTOR and all communications given to him shall be binding as if given to the CONTRACTOR. He will have the authority to make decisions and coordinate and manage activities on behalf of the CONTRACTOR.

24.3 Preservation of Property: The CONTRACTOR shall carry out his Work with such care and by the proper methods to prevent damage to the property adjacent to the Work or within streets, easement locations to the extent the OWNER may have right herein, or other property of the owners or of others, whether adjacent to the work site or not, the removal, relocation, or destruction of which is not called for by the provisions of the Contract Documents; it being a condition of the execution of the Contract that the Work be performed in such manner that the property of others and other property of the OWNER shall not be damaged in any way. The word PROPERTY, as used, is intended to include among other types of property, public street improvements, storm and sanitary sewers, water lines and appurtenances, or other structures. Should any property be damaged or destroyed, the CONTRACTOR at his own expense shall promptly, or within reasonable time, repair or make such restoration as is practical and acceptable to the owner of the damaged or destroyed property. In case of failure on the part of the CONTRACTOR to repair or restore such property, or make good such damage or injury, the ARCHITECT/ENGINEER may within forty-eight (48) hours notice, proceed to repair, rebuild, or otherwise restore such property as may be necessary, and the cost thereof will be deducted from any monies due or which may become due the CONTRACTOR under this Contract agreement. The CONTRACTOR shall, at all times in performance of the Work, employ approved methods and exercise reasonable care and skill so as to avoid delay, damage, injury, or destruction of existing public service installations and structures; and shall at all times in the performance of the Work avoid interference with, or interruption of, public utilities services, and shall cooperate fully with the owners thereof to the end.

25. SPECIAL NOTICE

25.1 The information and requirements included as Instructions to Bidders are neither inclusive nor exclusive of the full requirements of the Project and the BIDDER or CONTRACTOR shall make no claim for lack of notice because information or requirements are stated elsewhere in the Contract Documents but are not repeated herein.

END OF INSTRUCTIONS TO BIDDERS

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DOCUMENT 00 41 00 - BID FORM

(Failure to furnish all requested data will be cause for considering Bidder nonresponsive and may render this Bid invalid on that basis.)

BID FOR: **Columbia Metropolitan Airport
Enterprise Parkway – Platt Springs Traffic Signalization**

SUBMITTED TO: Richland - Lexington Airport District

SUBMITTED BY:

Bidder's Name

Mailing Address

Street Address (if different)

City, State, and Zip Code

Phone/Fax

Contact Person

Email Address

General Contractor's SC License Number

1. The undersigned, hereinafter called Bidder, in compliance with the "Notice to Bidders," accepting all the terms and conditions of the "Instructions To Bidders," proposes and agrees, if awarded the Contract, to enter into an Agreement with the Owner in the form of Agreement included in the Contract Documents, to furnish all materials, equipment, machinery, tools, apparatus, means of transportation, and labor necessary to complete the work to be performed under this Contract, in full and complete accordance with the shown, noted, described and reasonably intended requirements of the Contract Documents, to the full and entire satisfaction of the Owner, for the amounts contained in the Bid Schedules.
2. This Bid will remain open for forty five (45) days after the day of Bid opening. If awarded a contract, Bidder will sign the Agreement and submit the Contract Security, and other documents required by the Contract Documents within ten (10) days after the date indicated in Owner's Notice of Award. If contract is to be awarded, Notice of Award will occur within ninety (90) days of bid opening.

3. In submitting this Bid, Bidder represents that:
 - a. Bidder has become thoroughly familiar with the terms and conditions of the proposed Contract Documents accepting the same as sufficient to indicate understanding of all the conditions and requirements under the Contract which will be executed for the Work.
 - b. Bidder has examined the site and locality where the Work is to be performed, the legal requirements (federal, state, and local laws, ordinances, rules, and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as Bidder deems necessary.
 - c. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm, or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.
 - d. No member of the District or other officers or employees of the Owner is interested directly or indirectly in the Bid, or in any portion of the Bid, nor in the Contract, or any part of the Contract, which may be awarded the undersigned on the basis of such Bid.
4. Contract Time: Bidder agrees that:
 - a. The Work will be Substantially Completed within **45 Calendar days** from written Notice to Proceed.
 - b. Bidder shall commence work with an adequate force and equipment at the time stated in the Notice to Proceed, and complete all work by the date stipulated in said Notice including working overtime or on Saturdays, Sundays, or legal holidays except as specifically allowed by the Contract Documents and approved by the Owner.
5. Execution of Contract: Bidder agrees that in case of failure on his part to execute the said Contract and Bonds within 10 days after the date indicated in the "Notice of Award," the check or Bid Bond accompanying this Bid, and the money payable thereon, shall be paid to the Owner as liquidated damages for such failure; otherwise, the Bid Bond or check accompanying this Bid will be returned to the undersigned.
6. The terms used in this Bid, which are defined in the General Provisions of the Construction Contract as a part of the Contract Documents, have the meanings assigned to them in the General Provisions

7. Bid:

Item	Section	ITEM DESCRIPTION	QTY	Unit	Unit Price	Extended Cost
1	1031000	MOBILIZATION	1	LS		
2	1050800	CONSTRUCTION STAKES, LINES & GRADES	1	LS		
3	1071000	TRAFFIC CONTROL	1	LS		
4	2011000	CLEARING & GRUBBING WITHIN RIGHT OF WAY	1	LS		
5	2021005	REM.&DISP.OF EXIST.CATCH BASIN	2	EA		
6	2024100	REM. & DISP. OF EXIST. CURB	380	LF		
7	2025000	REM. & DISP.OF EXIST. ASPHALT PAVEMENT	92	SY		
8	2031000	UNCLASSIFIED EXCAVATION	600	CY		
9	2081001	FINE GRADING	594	SY		
10	3050103	GRADED AGGREGATE BASE COURSE (3.5" UNIFORM)	107	SY		
11	3100310	HOT MIX ASPHALT AGGREGATE BASE COURSE-TYPE A	145	TON		
12	4011004	LIQUID ASPHALT BINDER PG64-22	9	TON		
13	4011008	LIQUID ASPHALT BINDER PG76-22	8	TON		
14	4013990	MILLING EXISTING ASPHALT PAVEMENT VARIABLE	378	SY		
15	4030340	HOT MIX ASPHALT SURFACE COURSE TYPE 1C (3.75")	127	TON		
16	6271007	6" WH.BRKNLINE THERMO -90 MIL.	120	LF		
17	6271010	4" WH.SLD LNE PVT EL TH-90 MIL.	71	LF		
18	6271012	6" WH. SLD LNE PVT EL TH-90 MIL.	332	LF		
19	6041025	24" WH.SLDLNES THERMO-125 MIL.	133	LF		
20	6271030	WHITE SINGLE ARROWS (LEFT, STRAIGHT, RIGHT) THERMO. -125 MIL.	4	EA		
21	6271035	WHITE WORD MESSAGE "ONLY" THERMO-125 MIL.	2	EA		
22	6280051	WHITE BIKE LANE SYMBOL - PREF.THERMO - 90 MIL.	1	EA		
23	6319505	REMOVAL OF PAVEMENT MARKINGS	110	LF		
24		TRAFFIC SIGNAL	1	LS		
25	7141113	18" RC PIPE CUL.-CLASS III	76	LF		
26	7191625	CATCH BASIN (TYPE 17)	1	EA		
27	7191650	CATCH BASIN (TYPE 18)	1	EA		
28	7192260	48" X 48" SHALLOW JUNCTION BOX	1	EA		
29	7192285	72" X 72" SHALLOW JUNCTION BOX	1	EA		
30	7203210	CONCRETE CURB AND GUTTER(2'-0") - VERTICAL FACE	382	LF		
31	8101000	SEEDING (MULCHED)	7	MSY		
32	8103000	TEMPORARY SEEDING	7	MSY		
33	8109900	MOWING	7	MSY		
34	8151101	TURF REINFORCEMENT MATTING (TRM) TYPE 1	7	MSY		
35	8153000	SILT FENCE	345	LF		
36	8152004	INLET STRUCTURE FILTER - TYPE F (WEIGHT)	33	LF		
37	8152006	INLET STRUCTURE FILTER - TYPE F (NON-WEIGHT)	26	LF		
38	8156200	CLEANING INLET STRUCTURE FILTERS	3	EA		

(state amount in words)

Dollars \$

(state amount in figures)

8. Bidder hereby acknowledges receipt of the following Addenda (if any):

Addendum No.	Date
_____	_____
_____	_____
_____	_____
_____	_____

1. Bid Documentation: The following document is attached to and made a part of this Bid. These documents are required to be submitted with the Bid Form:

- a. Attachment A - Required Bid Bond or Bid Security in the form of cash, cashier's check, certified check or surety payable to the order of the Richland - Lexington Airport District.
- b. Attachment B - Bidder Qualification Questionnaire.
- c. Attachment C - Performance of Work by Subcontractors.
- d. Attachment D - Performance of Work by Contractor.

The Bidder shall state on the line below, if a corporation, the name of State in which incorporated and the date of said corporation.

Signed this _____ day of _____, 2023.

Contractor

By:

(Signature of Individual, Partner, or
Officer signing the Bid)

(SEAL)

S.C. License Number

ATTEST:

NOTE: If the Contractor is a Corporation, Secretary shall attest seal. Seal is required if Bidder is a Corporation.
If the Contractor is a Partnership, all partners shall execute the Bid (add spaces as required).

END OF DOCUMENT 00 41 00

DOCUMENT 00 41 00
ATTACHMENT A - BID BOND

(this document to be submitted with the bid form)

Date of Bond: _____

Name and address of
Principal (Bidder): _____

Name and address of
Surety: _____

Name and address of
Obligee (Owner):
Richland - Lexington Airport District
3250 Airport Boulevard
West Columbia, South Carolina 29170

Amount of Bond: _____

Project: **Enterprise Parkway – Platt Springs Traffic Signalization**

KNOW ALL MEN BY THESE PRESENTS, that we, the Principal above named and the Surety above named, which is duly licensed under the laws of South Carolina to execute bid bonds, are held and firmly bound unto the Obligee above named in the penal sum of five percent (5%) of the amount bid in the bid above described in lawful money of the United States of America for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, assigns and successors, jointly and severally, firmly by these presents.

The conditions of the above obligation is such that whereas the Principal has submitted to Richland - Lexington Airport District certain Bid, attached hereto and hereby made a part hereof to enter into a Contract in writing for the construction of the Enterprise Parkway – Platt Springs Traffic Signalization Project.

NOW THEREFORE,

- a) If said Bid shall be rejected, or in the alternate,
- b) If said Bid shall be accepted and the Principal shall execute and deliver a Contract in the Form of Agreement attached hereto (properly completed in accordance with said Bid) and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that obligations of said Surety and its Bonds shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____(L.S.)
Principal

Surety

By: _____

(SEAL)

- 1) Date of Bond shall be same date as Bid.
- 2) Bond shall be signed or countersigned by Surety's proper Agent. Date of Power-of-Attorney shall be same date as date of Bond.
- 3) If a Partnership, all partners shall execute Bond.

END OF ATTACHMENT A

DOCUMENT 00 41 00
ATTACHMENT B - BIDDER QUALIFICATION QUESTIONNAIRE

(this document to be submitted with the bid form)

Submitted by: _____
Name of Bidder

General Contractor's License No.: _____

- () An Individual
- () A Partnership
- () A Corporation

Federal Identification No.: _____

Principal Office Address: _____

1. How many years has your organization been in business as a Contractor under your present name? _____

2. How many years experience in construction work has your organization had as a General Contractor? _____

As a subcontractor? _____

3. List below the requested information concerning projects your organization has completed in the last five (5) years for the type of work required in this Project. (Use additional sheets if necessary)

Project Title	Contract Amount	Required Completion Date	Actual Completion Date	Name/Address/Telephone of Owner

4. Have you ever failed to complete any work awarded to you? If so, where and why?

5. Has any officer or partner of your organization ever been an officer or partner of some other organization that failed to complete a construction contract? If so, state name of individual, name of other organization, and reason therefore.

6. Has any officer or partner of your organization ever failed to complete a construction contract handled in his/her own name? If so, state name of individual, name of owner, and reason therefore.

7. Give below any information that would indicate the size and capacity of your organization, including number of employees, equipment owned by your organization, etc., which are available for utilization on this Contract.

8. What is your bonding capacity? _____

9. What amount of your bonding capacity has been used as of the date of this Bid?

10. How many applications for Performance and Payment Bonds have you made in the last three (3) years? _____

11. How many of these applications were not approved? _____

12. Have any claims been filed against your surety bond company in the last five (5) years? If so, describe the nature of the claims and give the names of surety companies, dates of each claim, identifying numbers of each claim, amounts of each claim, and the status of each claim. (Use additional sheets if necessary.)

13. Has your company been in disputes or litigations in the last five (5) years over construction projects which are completed or still pending for completion? If so, describe the nature of the disputes or litigations and state the Owner's name, address, telephone number and the amount of the disputes or litigations. (Use additional sheets if necessary.)

I, the undersigned, do hereby declare that the foregoing statements are true and correct, all as of the date set hereinafter forth, and that those examining this document have my permission to contact any or all of those parties listed in this questionnaire. Incorrect or misleading statements in this questionnaire shall be grounds for a determination of non-responsibility with respect to such contractor.

(Signature of Bidder)

(Type or Print Name of Organization)

(Type or Print Address)

END OF ATTACHMENT B

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DOCUMENT 00 41 00
ATTACHMENT C - PERFORMANCE OF WORK BY SUBCONTRACTORS

(this document to be submitted with the bid form)

The Bidder hereby states that he proposes, if awarded the Contract, to use the following subcontractors on this Project. List below all general items of Work to be performed by subcontractors. (i.e., excavation, demolition, drainage, etc.) The Bidder shall obtain prior written permission of the Owner should he choose to add or substitute other subcontractor(s) not shown herein.

Subcontractors	Items of Work	Dollar Amount
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____
_____	_____	\$ _____

Estimated Total Cost of Items that Bidder states will be performed by Subcontractor(s) is:
_____ Dollars and No Cents

Signature of Bidder Title

END OF ATTACHMENT C

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DOCUMENT 00 41 00
ATTACHMENT D - PERFORMANCE OF WORK BY CONTRACTOR

(this document to be submitted with the bid form)

The Bidder hereby states that he proposes, "if awarded the Contract, to perform the following Work on this Project with my own work force". List below all general items of Work to be performed by the Contractor. (i.e., excavation, demolition, drainage, etc.)

Items of Work	Dollar Amount
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____

Estimated Total Cost of Items that Bidder states will be performed by own work force:

_____ Dollars and No Cents

Signature of Bidder

Title

END OF ATTACHMENT D

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DOCUMENT 00 52 13 - AGREEMENT FORM

The Standard Form of Agreement between Owner and Contractor, where the basis of payment is a stipulated sum, AIA Document A101 - 2017 Standard Form of Agreement Between Owner and Contractor where the Basis of Payment is a Stipulated Sum, forms the basis of the Contract between the Owner and Contractor is hereby made a part of this Project Manual and shall apply to all concerned to same extent as if bound herein.

END OF DOCUMENT 00 52 13

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DOCUMENT 00 61 13 - PERFORMANCE AND PAYMENT BOND FORMS

The Performance Bond and Payment Bond for construction shall be written on AIA Document A312 - 2010 Edition, for 100% of the Contract Amount are required and shall form part of the Contract.

END OF DOCUMENT 00 61 13

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DOCUMENT 00 72 13 - GENERAL CONDITIONS

The General Conditions of the Contract for Construction shall be AIA Document A201 - 2017 Edition, Articles 1 through 15.

This document is incorporated by reference, and as modified by Document 00 73 00 - Supplementary Conditions

END OF DOCUMENT 00 72 13

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DOCUMENT 00 73 00 - SUPPLEMENTARY CONDITIONS

The following conditions modify, change, delete, or add to the “General Conditions of the Contract for Construction”, AIA Document A201, 2017 Edition. Where any portion of the General Conditions is modified or deleted by these supplements, the unaltered provisions of that portion shall remain in effect. The AIA General Conditions and Supplementary Conditions are complementary and apply to all Work on this Project.

ARTICLE 1: GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

1.1.1 Add the following sentence to the end of Subparagraph 1.1.1:

“The Contract Documents executed or identified in accordance with Subparagraph 1.5.1 shall prevail in case of an inconsistency with subsequent version made through manipulable electronic operations involving computers.”

ARTICLE 2: OWNER

2.2.5 Delete Subparagraph in its entirety and substitute as follows:

“2.2.5 The Contractor will be furnished, free of charge, five (5) copies of the Contract Documents. Additional copies, if required, will be furnished at actual cost of reproduction and handling.”

ARTICLE 3: CONTRACTOR

3.5.3 Add Subparagraph in its entirety as follows:

“3.5.3 The Contractor and its surety guarantee all workmanship and materials for a minimum period of one year after the date of Substantial Completion of the Work, and if during the one year guarantee period defects in materials or faulty workmanship become evident, the Contractor shall, immediately upon notification by the Owner and without costs to the Owner, place the Work in satisfactory condition in every particular, correct all defects therein, and make good all damage to adjoining work, including structures and the equipment, furniture, and furnishings contained therein, and to site improvements. Additional warranty periods as required by the specifications shall apply.

3.7.1 Delete Subparagraph in its entirety and substitute as follows:

“3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for all permits and governmental fees, licenses, and inspections necessary for proper execution of the Contract and which are legally required when bids are received or negotiations conclude. The Contractor will pay all fees for water meters and water tap impact fees, sewer tap impact fees, electrical service to transformer pad(s), and natural gas to supply side of meter.”

ARTICLE 7: CHANGES IN THE WORK

7.1.1 Add Subparagraphs as follows:

“7.1.1.1 The Owner shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the Owner omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the Architect's/Engineer's order to omit or non-perform such contract item.

7.1.1.2 Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the Architect's/Engineer's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

7.1.1.3 In addition to reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the additional contract item prior to the date of the Architect's/Engineer's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature and amount of such costs."

7.1.4 Add Subparagraph as follows:

"7.1.4 In determining the cost to the Owner resulting from either an increase or a decrease in the Work, by either Change Order or Construction Change Directive, the allowances for overhead and profit combined, included in the total cost to the Owner, shall not exceed the percentages as follows:

- .1 For the Prime Contractor, for any Work performed by his own forces, 15% of the cost;
- .2 For the Prime Contractor, for Work performed by his Subcontractors, 7% of the amount due the Subcontractor;
- .3 For each Subcontractor involved, for work performed by his own forces, 15% of the cost;
- .4 For the Subcontractor, for Work performed by lower tier Subcontractors, 7% of the amount due the Subcontractor."

7.3.7 Delete Subparagraph 7.3.7 in its entirety and substitute as follows:

"7.3.7 Where an adjustment to the contract sum is required for which non basis of payment has been provided in the contract documents, previously issued change orders or supplemental agreements, and a change to the contract sum is required, the Contractor shall include an allowance for overhead and profit with an itemized accounting together with appropriate supporting data. Costs for the purpose of this Subparagraph 7.3.7 shall be limited to the following actual costs and allowances.

7.3.7.1 Labor: For all labor (skilled and unskilled) and foremen in direct charge of a specific force account item, the contractor shall receive the rate of wage (or scale) for every hour that such labor or foreman is actually engaged in the specified change order work. Such wage (or scale) shall be agreed upon in writing before beginning of the work.

The contractor shall receive the actual cost paid to, or in behalf of, workers by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.

7.3.7.2 No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

7.3.7.3 No payment will be made for additional work until the Contractor has furnished the Architect/Engineer with duplicate itemized statements of the cost of such additional work, detailed as follows:

Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman.

Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

Transportation of materials.

Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.

7.3.7.4 Statements shall be accompanied and supported by receipted invoice for all materials used and transportation charges. However, if materials used for additional work are not specifically purchased for such work but are taken from the Contractor stock, then, in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor."

ARTICLE 8: TIME

8.1.1 Delete and substitute the following:

"8.1.1 The contract time is the period of time allotted in the contract documents for substantial completion of the work. Work under this contract shall be substantially complete with 45 Calendar days from written Notice to Proceed (NTP)."

8.2 Add Subparagraph as follows:

"8.2.2.1 No Contractor or their subcontractors shall commence any actual construction prior to the date on which the Notice to Proceed is issued by the Owner."

8.3.3 Delete Paragraph and substitute the following Paragraph:

"8.3.3 Damages for Delay

8.3.3.1 No damages for delay will be allowed. It is understood and agreed that the Owner and Architect/Engineer shall not in any way be liable to the Contractor for delays of any kind whatsoever.

8.3.3.2 The Owner's or Architect's/Engineer's exercise of any of their rights under applicable provisions of the Owner/Architect Agreement or Owner/Contractor Agreement related to changes in the work, or requirement of correction or re-execution of any of the work, shall not be construed as active or intentional interference with the Contractor's performance of the Work under any circumstances. No other acts by the Owner or Architect/Engineer shall be considered exceptions of the Damages for Delay Section, unless motivated by bad faith.

8.3.3.3 If completion is delayed by an intentional act of the Owner or the Architect/Engineer, or by neglect by the Owner or the Architect/Engineer, or by strikes or work stoppages by organized labor, or by other exceptional conditions over which the Contractor reasonably has no control, the time of completion shall be extended by such period as the Architect/Engineer may deem reasonable, upon receipt and review of the Contractor's written request for extension. If Contractor is delayed by any acts of the Owner or of the Architect/Engineer and is granted an extension of time by the Owner, the Contractor shall comply with the extended schedule with no additional compensation from the Owner.

8.3.3.4 No extension shall be allowed unless a claim is presented in writing to the Architect/Engineer within fifteen (15) days after the commencement of such delay, or the claim is waived.

8.3.3.5 The Contractor is fully responsible for making up lost time of all delays, except to the extent that extensions of time are granted. Nothing in this section shall be construed to release the Contractor from his obligation to perform the Work within the Contract Time for the stipulated Contract Sum, except for delays for which extensions of time have been granted in writing. Nothing in this section shall be interpreted to relieve the Contractor from covering, at his own expense, any and all overtime or additional labor that may be necessary to correct delays for which no extension of time is granted."

8.4 Liquidated Damages: Add the following Paragraph:

"8.4.1 The Owner will suffer financial loss if the Project is not Substantially Complete on the date set forth in the Contract Documents. The Contractor, and his surety, shall be liable for and shall pay to the Owner the sum of One Thousand Dollars and No Cents (\$1,000.00) as fixed, agreed and liquidated damages for each calendar day of delay until the Work is Substantially Complete."

ARTICLE 9: PAYMENTS AND COMPLETION

See also Payment Procedures in Section 012900 of the Specifications.

9.2.1 Add new Subparagraph as follows:

"9.2.1 Anticipated Monthly Draw Plan: Along with the Initial Schedule of Values, and prior to submitting the first Application for Payment, the Contractor shall provide a bar chart type schedule, broken into monthly increments, showing the work to be done and the value of that work. This shall be adjusted and resubmitted monthly to match actual work progress. The Owner reserves the right to withhold payment if this procedure is not followed."

9.3.4 Add new Subparagraph as follows:

"9.3.4 All sums payable by the Owner shall be subject to retainage of five percent (5%)."

ARTICLE 11: INSURANCE AND BONDS

11.1.1 In the first sentence following the word “located,” insert the words “, and to which the Owner has no reasonable objection,”.

11.1.2 Add new Subparagraph as follows:

“11.1.2.1 Workman’s Compensation:

- a. State: Statutory
- b. Applicable Federal: Statutory
- c. Employer’s Liability: \$1,000,000

11.1.2.2 Comprehensive General Liability:

Bodily Injury and Property Damage: \$5,000,000
Combined Single Limit (Per Occurrence)

The Contractor’s General Liability insurance shall provide coverage for the following:
(1) premises - Operations, (2) Independent Contractors, (3) Products/Completed Operations Hazard, (4) Underground Hazard, (5) Broad Form Property Damage, (6) Where applicable, explosion and Collapse Hazard, and (7) Personal Injury.

11.1.2.3 Excess Liability Insurance:

Umbrella Form: \$1,000,000 (Per Occurrence)

11.1.2.4 Comprehensive Automobile Liability:

- (1) Bodily Injury and Property Damage:
\$1,000,000 Combined Single Limit (Per Occurrence)
- (2) The Contractor’s Comprehensive Automobile Liability Insurance shall provide coverage for Bodily Injury and Property Damage per occurrence for owned, hired and non-owned vehicles.
- (3) If privately owned vehicles (POV) are used in the Air Operations Area (AOA), the certificate of insurance shall state the employees’ POV is covered under this policy.

Richland - Lexington Airport District, its officials and staff; and the Architect/Engineer, its staff and consultants shall be named as additional insured with right of notice in the policy. The Contractor’s insurance provider shall edit the Certificate of Insurance standard cancellation clause from “..., the issuing company will endeavor to mail _____ days written notice to the certificate holder...” to “..., the issuing company will mail **30 days** written notice to the certificate holder...”.

The Contractor shall obtain in the name of the Owner, Owner’s Protective Liability Insurance which will have the same limits of coverage as that required above for the Contractor’s general liability coverage, including liability for acts of Subcontractors and Subordinate Contractors.

The Contractor shall purchase and maintain such Protective and Contractual Bodily Injury Liability Insurance and such Protective and Contractual Property Damage Liability Insurance as shall be required by any public bodies or utility companies whose property, facilities, or right-of-way may be affected by the Work to be done under this Contract.

The Contractor will provide such additional information in respect of insurance provided by him as the Owner may reasonably request. Failure by Owner to give any such notice of objection within the time provided shall constitute an acceptance of such insurance purchased by Contractor as complying with the Contract Documents.

Certificates in triplicate from the insurance carrier stating the limits of liability and expiration date shall be filed with Owner before operations are begun. Certificates shall not merely name the types of policy provided but shall specifically refer to this Contract and shall contain a separate express statement of compliance with each of the requirements as set forth in this Article. The certificates shall, in addition to the information relative to the insurance required, contain the following:

- a. Inception and expiration dates of insurance policy.
- b. Limits of liability provided (Public Liability and Property Damage).
- c. Coverage provided, including special hazards if required.
- d. Name of insurance company.
- e. Policy Number.
- f. Additional interests covered.
- g. Statement that the Explosion, Collapse, and Underground exclusions do not apply.
- h. Certificate shall reflect self-insured retention applicable to any contract of insurance.
- i. Excess liability certified contracts must state underlying insurance requirements.
- j. Project number and nature of work.
- k. Cancellation notice stipulation.

No certificate will be accepted which exculpates the issuer or reduces any rights conferred on the Owner by the above certificates, nor will they be accepted unless the certificates bear a live signature of a direct representative of a company authorized to do business in South Carolina.

No certificate will be accepted unless the person signing the certificate certifies, in a separate letter, his exact relationship with the insurance carrier or carriers indicated in the certificate.

The Owner may, at his discretion, modify or waive any of the foregoing requirements.

No contract of insurance containing a "claims made" insuring agreement will be acceptable unless the Contractor offering such insurance to fulfill the requirements of this Contract agrees that each such contract is insurance shall be renewed for the entire existence of the Contractor, their successors or assigns; and that on termination of such coverage which is not replaced by similar contract with the required limits of liability, a "tail policy" will be purchased with limits not less than those required by this Contract.

11.1.4 Add new Subparagraph as follows:

“11.1.4.1 Furnish one copy of Certificates herein required for each copy of the Agreement; specifically set forth evidence of all coverage required by Subparagraphs 11.1.1 and 11.1.2. The form of the Certificate shall be AIA Document G705. Furnish to the Owner copies of any endorsements that are subsequently issued amending coverage or limits.”

11.3 Property Insurance

11.3.1 Delete Subparagraphs 11.3.1.2 and 11.3.1.3 in their entirety and substitute the following therefore:

“11.3.1.2 Property insurance shall have a \$3,000.00 “deductible” on any insured loss and that the amount of this deductible and any other losses not specifically covered under the Owner’s policy shall be borne by the prime Contractor and/or their subcontractors. This insurance does not cover any loss from theft or burglary, nor does it cover loss of any tools, equipment, scaffolding, staging, towers, forms, machinery, etc., owned or rented by mechanics, or the prime contractor or subcontractors, which are not intended to become a part of the project; but does cover damage to the building or contents because of theft or burglary.”

11.3.2 Delete boiler and machinery insurance Paragraph in its entirety.

11.4 Delete Subparagraph 11.4.1 in its entirety and substitute the following therefore:

“11.4.1 Performance and Labor and Material Payment Bonds will be required for 100% of the contract price, with a surety or sureties legally authorized to do business in the State of South Carolina.

Add Article 16 as follows:

“ARTICLE 16: ADDITIONAL CONDITIONS

16.1 Federal Provisions: Section 00 73 40 Required Bid and Contract Provisions from Participating Federal Agency provides additional Supplementary Conditions to the Contract for Construction.”

Texting When Driving: In accordance with Executive Order 13513, “Federal Leadership on Reducing Text Messaging While Driving” (10/1/2009) and DOT Order 3902.10 “Text Messaging While Driving” (12/30/2009), FAA encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant. The Contractor must promote policies and initiatives for employees and other work personnel that decrease crashes by distracted drivers, including policies to ban text messaging while driving. The Contractor must include these policies in each third party subcontract involved on this project.

END OF DOCUMENT 00 73 00

**DOCUMENT 00 73 40 - REQUIRED BID AND CONTRACT PROVISIONS FROM
PARTICIPATING FEDERAL AGENCY (U.S. DEPARTMENT OF TRANSPORTATION
AND THE FEDERAL AVIATION ADMINISTRATION)**

SUMMARY OF CONTENTS

PART I: CIVIL RIGHTS AND EQUAL OPPORTUNITY PROVISIONS
Civil Rights Act of 1964, Title VI.

A. CIVIL RIGHTS ACT OF 1964, TITLE VI CONTRACTOR CONTRACTUAL REQUIREMENTS

During the performance of this contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the “Contractor”) agrees as follows:

1. Compliance with Regulations.

The Contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, “DOT”) Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

2. Nondiscrimination.

The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment.

In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor’s obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

4. Information and Reports.

The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the SPONSOR or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance.

In the event of the Contractor’s noncompliance with the nondiscrimination provisions of this contract, the SPONSOR shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

- a. Withholding of payments to the Contractor under the contract until the Contractor complies, and/or
- b. Cancellation, termination, or suspension of the contract, in whole or in part.

6. Incorporation of Provisions.

The Contractor shall include the provisions of Paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the SPONSOR or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the SPONSOR to enter into such litigation to protect the interests of the SPONSOR and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

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SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. Section 01 60 00 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required in order to meet other Project requirements but may offer advantage to Contractor or Owner.

1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use CSI Form 13.1A.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
 - b. Coordination information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable Specification Section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.

- e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Architect's/Engineer's Action: If necessary, Architect/Engineer will request additional information or documentation for evaluation within ten days of receipt of a request for substitution. Architect/Engineer will notify Contractor of acceptance or rejection of proposed substitution within 20 days of receipt of request, or ten days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's/Engineer's Supplemental Instructions for minor changes in the Work.
 - b. Use product specified if Architect/Engineer does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.6 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 30 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Architect/Engineer will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect/Engineer will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. Substitution request is fully documented and properly submitted.
 - c. Requested substitution will not adversely affect Contractor's construction schedule.
 - d. Requested substitution is compatible with other portions of the Work.
 - e. Requested substitution has been coordinated with other portions of the Work.
 - f. Requested substitution provides specified warranty.
 - g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Not allowed.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 25 00

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SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
 - 1. Section 01 25 00 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

1.3 MINOR CHANGES IN THE WORK

- A. Architect/Engineer will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect/Engineer will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Architect/Engineer are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request or 20 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect/Engineer.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Section 01 25 00 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

1.5 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Changes Proposal Request, Architect/Engineer will issue a Change Order for signatures of Owner and Contractor on AIA Document G701 or Owner's Form.

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Architect/Engineer may issue a Construction Change Directive on AIA Document G714 or Owner's Form. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 26 00

SECTION 01 29 00 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - 1. Section 01 26 00 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Section 01 32 00 "Construction Progress Documentation" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 ANTICIPATED MONTHLY DRAW PLAN

- A. Along with the Initial Schedule of Values, and prior to submitting the first Application for Payment, the Contractor shall provide a bar chart type schedule, broken into monthly increments, showing the work to be done and the value of that work. This shall be adjusted and resubmitted monthly to match actual work progress. The Owner reserves the right to withhold payment if this procedure is not followed.

1.5 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with continuation sheets.
 - b. Submittal schedule.
 - c. Items required to be indicated as separate activities in Contractor's construction schedule.

2. Submit the schedule of values to Architect/Engineer at earliest possible date, but no later than 15 days before the date scheduled for submittal of initial Applications for Payment.
 3. Subschedules for Separate Elements of Work: Where the Contractor's construction schedule defines separate elements of the Work, provide subschedules showing values coordinated with each element.
- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Name of Architect/Engineer.
 - c. Architect's/Engineer's project number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 2. Arrange schedule of values consistent with format of AIA Document G703.
 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with Project Manual table of contents. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
 - a. Include separate line items under Contractor and principal subcontracts for other Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
 4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
 5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site. If required, include evidence of insurance.
 6. Provide separate line items in the schedule of values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
 7. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
 8. Each item in the schedule of values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the schedule of values or distributed as general overhead expense, at Contractor's option.
 9. Schedule Updating: Update and resubmit the schedule of values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.6 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments as certified by Architect/Engineer and paid for by Owner.
1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- B. Payment Application Times: Pay applications shall be received by the first day of each month and may include work from the first of the previous month through the last day of the previous month. No more than one payment application will be processed each month. The Owner will make payment to the Contractor no later than 30 days from receipt of Architect's/Engineer's approval of the Application for Payment.

- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
 - 1. Fill out and provide Subcontractors Report of South Carolina Sales and Use Tax Paid with each Application for Payment.

- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect/Engineer will return incomplete applications without action.
 - 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 - 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 - 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.

- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 - 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment, for stored materials.
 - 2. Provide supporting documentation that verifies amount requested, such as paid invoices. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 - 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.
 - c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.

- F. Transmittal: Submit four signed and notarized original copies of each Application for Payment to Architect/Engineer by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.
 - 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
 - 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 - 2. When an application shows completion of an item, submit conditional final or full waivers.
 - 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 - 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 - 5. Waiver Forms: Submit executed waivers of lien on forms, acceptable to Owner.

- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 - 1. List of subcontractors.

2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Schedule of unit prices.
 5. Submittal schedule (preliminary if not final).
 6. List of Contractor's staff assignments.
 7. List of Contractor's principal consultants.
 8. Copies of building permits.
 9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 10. Initial progress report.
 11. Certificates of insurance and insurance policies.
 12. Performance and payment bonds.
 13. Data needed to acquire Owner's insurance.
- I. Application for Payment at Substantial Completion: After Architect/Engineer issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 3. Updated final statement, accounting for final changes to the Contract Sum.
 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
 6. AIA Document G707, "Consent of Surety to Final Payment."
 7. Evidence that claims have been settled.
 8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 9. Final liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 29 00

SECTION 01 31 00 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General coordination procedures.
 - 2. Coordination drawings.
 - 3. Requests for Information (RFIs).
 - 4. Project meetings.
- B. Related Requirements:
 - 1. Section 01 32 00 "Construction Progress Documentation" for preparing and submitting Contractor's construction schedule.
 - 2. Section 01 73 00 "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - 3. Section 01 77 00 "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITIONS

- A. RFI: Request from Owner, Architect/Engineer, or Contractor seeking information required by or clarifications of the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. Subcontractor List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
 - 1. Name, address, and telephone number of entity performing subcontract or supplying products.
 - 2. Number and title of related Specification Section(s) covered by subcontract.
- B. Key Personnel Names: Within 10 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail addresses. Provide names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1. Post copies of list in project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.5 GENERAL COORDINATION PROCEDURES

- A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.
 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 2. Coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair.
 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 1. Preparation of Contractor's construction schedule.
 2. Preparation of the schedule of values.
 3. Installation and removal of temporary facilities and controls.
 4. Delivery and processing of submittals.
 5. Progress meetings.
 6. Preinstallation conferences.
 7. Project closeout activities.
 8. Startup and adjustment of systems.

1.6 COORDINATION DRAWINGS

- A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity.
 1. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:
 - a. Use applicable Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
 - b. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - c. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
 - d. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
 - e. Indicate required installation sequences.
 - f. Indicate dimensions shown on the Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance

requirements. Provide alternate sketches to Architect/Engineer indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

1.7 REQUESTS FOR INFORMATION (RFIs)

- A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI in the form specified.
1. Architect/Engineer will return RFIs submitted to Architect/Engineer by other entities controlled by Contractor with no response.
 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing information or interpretation and the following:
1. Project name.
 2. Project number.
 3. Date.
 4. Name of Contractor.
 5. Name of Architect/Engineer.
 6. RFI number, numbered sequentially.
 7. RFI subject.
 8. Specification Section number and title and related paragraphs, as appropriate.
 9. Drawing number and detail references, as appropriate.
 10. Field dimensions and conditions, as appropriate.
 11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 12. Contractor's signature.
 13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.
 - a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.
- C. RFI Forms: AIA Document G716.
1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's/Engineer's Action: Architect/Engineer's will review each RFI, determine action required, and respond. Allow ten working days for Architect's/Engineer's response for each RFI. RFIs received by Architect/Engineer after 1:00 p.m. will be considered as received the following working day.
1. The following Contractor-generated RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for approval of Contractor's means and methods.
 - d. Requests for coordination information already indicated in the Contract Documents.
 - e. Requests for adjustments in the Contract Time or the Contract Sum.
 - f. Requests for interpretation of Architect's/Engineer's actions on submittals.
 - g. Incomplete RFIs or inaccurately prepared RFIs.
 2. Architect's/Engineer's action may include a request for additional information, in which case Architect's/Engineer's time for response will date from time of receipt of additional information.
 3. Architect's/Engineer's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to

Section 01 26 00 "Contract Modification Procedures."

- a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect/Engineer in writing within 10 days of receipt of the RFI response.
- E. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Use CSI Log Form 13.2B. Include the following:
1. Project name.
 2. Name and address of Contractor.
 3. Name and address of Architect/Engineer.
 4. RFI number including RFIs that were returned without action or withdrawn.
 5. RFI description.
 6. Date the RFI was submitted.
 7. Date Architect's/Engineer's response was received.
- F. On receipt of Architect's/Engineer's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect/Engineer within seven days if Contractor disagrees with response.
1. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 2. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

1.8 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site unless otherwise indicated.
1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect/Engineer of scheduled meeting dates and times.
 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 3. Minutes: Entity responsible for conducting meeting will record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect/Engineer, within three days of the meeting.
- B. Preconstruction Conference: Schedule and conduct a preconstruction conference before starting construction, at a time convenient to Owner and Architect/Engineer, but no later than 15 days after execution of the Agreement.
1. Conduct the conference to review responsibilities and personnel assignments.
 2. Attendees: Authorized representatives of Owner, Architect/Engineer, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. Participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Critical work sequencing and long-lead items.
 - c. Designation of key personnel and their duties.
 - d. Lines of communications.
 - e. Procedures for processing field decisions and Change Orders.
 - f. Procedures for RFIs.
 - g. Procedures for testing and inspecting.
 - h. Procedures for processing Applications for Payment.
 - i. Distribution of the Contract Documents.
 - j. Submittal procedures.
 - k. Preparation of record documents.
 - l. Use of the premises.

- m. Work restrictions.
 - n. Working hours.
 - o. Owner's occupancy requirements.
 - p. Responsibility for temporary facilities and controls.
 - q. Procedures for moisture and mold control.
 - r. Procedures for disruptions and shutdowns.
 - s. Construction waste management and recycling.
 - t. Parking availability.
 - u. Office, work, and storage areas.
 - v. Equipment deliveries and priorities.
 - w. First aid.
 - x. Security.
 - y. Progress cleaning.
4. Minutes: Entity responsible for conducting meeting will record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
- 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect/Engineer of scheduled meeting dates.
 - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. Contract Documents.
 - b. Options.
 - c. Related RFIs.
 - d. Related Change Orders.
 - e. Purchases.
 - f. Deliveries.
 - g. Submittals.
 - h. Review of mockups.
 - i. Possible conflicts.
 - j. Compatibility requirements.
 - k. Time schedules.
 - l. Weather limitations.
 - m. Manufacturer's written instructions.
 - n. Warranty requirements.
 - o. Compatibility of materials.
 - p. Acceptability of substrates.
 - q. Temporary facilities and controls.
 - r. Space and access limitations.
 - s. Regulations of authorities having jurisdiction.
 - t. Testing and inspecting requirements.
 - u. Installation procedures.
 - v. Coordination with other work.
 - w. Required performance results.
 - x. Protection of adjacent work.
 - y. Protection of construction and personnel.
 - 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to other parties requiring information.
 - 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

~~D. Project Closeout Conference: Schedule and conduct a project closeout conference, at a time~~

convenient to Owner and Architect, but no later than 90 days prior to the scheduled date of Substantial Completion.

1. Conduct the conference to review requirements and responsibilities related to Project closeout.
 2. Attendees: Authorized representatives of Owner, Architect/Engineer, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the meeting. Participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Discuss items of significance that could affect or delay Project closeout, including the following:
 - a. Preparation of record documents.
 - b. Procedures required prior to inspection for Substantial Completion and for final inspection for acceptance.
 - c. Submittal of written warranties.
 - d. Requirements for preparing operations and maintenance data.
 - e. Requirements for delivery of material samples, attic stock, and spare parts.
 - f. Requirements for demonstration and training.
 - g. Preparation of Contractor's punch list.
 - h. Procedures for processing Applications for Payment at Substantial Completion and for final payment.
 - i. Submittal procedures.
 - j. Coordination of separate contracts.
 - k. Owner's partial occupancy requirements.
 - l. Installation of Owner's furniture, fixtures, and equipment.
 - m. Responsibility for removing temporary facilities and controls.
 4. Minutes: Entity conducting meeting will record and distribute meeting minutes.
- E. Progress Meetings: Conduct progress meetings at biweekly intervals.
1. Coordinate dates of meetings with preparation of payment requests.
 2. Attendees: In addition to representatives of Owner, and Architect/Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the meeting shall be familiar with Project and authorized to conclude matters relating to the Work.
 3. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's construction schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Progress cleaning.
 - 10) Quality and work standards.
 - 11) Status of correction of deficient items.
 - 12) Field observations.
 - 13) Status of RFIs.

- 14) Status of proposal requests.
 - 15) Pending changes.
 - 16) Status of Change Orders.
 - 17) Pending claims and disputes.
 - 18) Documentation of information for payment requests.
4. Minutes: Entity responsible for conducting the meeting will record and distribute the meeting minutes to each party present and to parties requiring information.
- a. Schedule Updating: Revise Contractor's construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 31 00

SECTION 01 32 00 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's construction schedule.
 - 2. Construction schedule updating reports.
 - 3. Daily construction reports.
 - 4. Material location reports.
 - 5. Special reports.
- B. Related Requirements:
 - 1. Section 01 33 00 "Submittal Procedures" for submitting schedules and reports.
 - 2. Section 01 40 00 "Quality Requirements" for submitting a schedule of tests and inspections.

1.3 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. PDF electronic file.
- B. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - 1. Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.
- C. Construction Schedule Updating Reports: Submit with Applications for Payment.
- D. Daily Construction Reports: Submit at weekly intervals.
- E. Special Reports: Submit at time of unusual event.

1.4 QUALITY ASSURANCE

- A. Prescheduling Conference: Conduct conference at Project site to comply with requirements in Section 01 31 00 "Project Management and Coordination." Review methods and procedures related to the preliminary construction schedule and Contractor's construction schedule, including, but not limited to, the following:
 - 1. Review software limitations and content and format for reports.
 - 2. Verify availability of qualified personnel needed to develop and update schedule.

3. Discuss constraints, including work stages.
4. Review delivery dates for Owner-furnished products.
5. Review schedule for work of Owner's separate contracts.
6. Review submittal requirements and procedures.
7. Review time required for review of submittals and resubmittals.
8. Review requirements for tests and inspections by independent testing and inspecting agencies.
9. Review time required for Project closeout and Owner startup procedures.
10. Review and finalize list of construction activities to be included in schedule.
11. Review procedures for updating schedule.

1.5 COORDINATION

- A. Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 1. Secure time commitments for performing critical elements of the Work from entities involved.
 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of final completion.
 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each type of task as a separate numbered activity for each main element of the Work. Comply with the following:
 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 3. Submittal Review Time: Include review and resubmittal times indicated in Section 01 33 00 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
 4. Startup and Testing Time: Include no fewer than 15 days for startup and testing.
 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's/Engineer's administrative procedures necessary for certification of Substantial Completion.
 6. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.
 - a. Completion of electrical installation.
 - b. Substantial Completion.
- C. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.
- D. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:

1. Unresolved issues.
2. Unanswered Requests for Information.
3. Rejected or unreturned submittals.
4. Notations on returned submittals.
5. Pending modifications affecting the Work and Contract Time.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 30 days of date established for the Notice to Proceed. Base schedule on the startup construction schedule and additional information received since the start of Project.

2.3 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
1. List of subcontractors at Project site.
 2. Approximate count of personnel at Project site.
 3. Equipment at Project site.
 4. Accidents.
 5. Meetings and significant decisions.
 6. Unusual events (see special reports).
 7. Stoppages, delays, shortages, and losses.
 8. Emergency procedures.
 9. Orders and requests of authorities having jurisdiction.
 10. Change Orders received and implemented.
 11. Construction Change Directives received and implemented.
 12. Equipment or system tests and startups.
 13. Partial completions and occupancies.
 14. Substantial Completions authorized.
- B. General: Submit special reports directly to Owner within one day of an occurrence. Distribute copies of report to parties affected by the occurrence.
- C. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 3. As the Work progresses, indicate final completion percentage for each activity.

END OF SECTION 01 32 00

SECTION 01 32 33 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 1. Preconstruction photographs.

1.3 INFORMATIONAL SUBMITTALS

- A. Key Plan: Submit key plan of Project site with notation of vantage points marked for location and direction of each photograph. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.
- B. Digital Photographs: Submit CD, DVD, or flash drive with photos within 7 days of taking photograph.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 CONSTRUCTION PHOTOGRAPHS

- A. General: Take photographs using the maximum range of depth of field, and that are in focus, to clearly show the Work. Photographs with blurry or out-of-focus areas will not be accepted.
 1. Maintain key plan with each set of construction photographs that identifies each photographic location.
 2. Date and Time: Include date and time in file name for each image.
 3. Field Office Images: Maintain one set of images accessible at Project site, available at all times for reference. Identify images in the same manner as those submitted to Architect/Engineer.
- B. Preconstruction Photographs: Before commencement of demolition, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Architect/Engineer.
 1. Flag construction limits before taking construction photographs.
 2. Take a minimum of 40 photographs to show existing conditions adjacent to property before starting the Work.
 3. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's/Engineer's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's/Engineer's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."
- C. Portable Document Format (PDF): An open standard file format licensed by Adobe Systems used for representing documents in a device-independent and display resolution-independent fixed-layout document format.

1.4 ACTION SUBMITTALS

- A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect/Engineer and additional time for handling and reviewing submittals required by those corrections.
 - 1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 - 2. Initial Submittal: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 - 3. Final Submittal: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule to reflect changes in current status and timing for submittals.
 - 4. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal category: Action; informational

- d. Name of subcontractor.
- e. Description of the Work covered.
- f. Scheduled date for Architect's/Engineer's final release or approval.
- g. Scheduled date of fabrication.
- h. Scheduled dates for purchasing.
- i. Scheduled dates for installation.
- j. Activity or event number.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 - 1. Action Submittals: Submit three paper copies of each submittal unless otherwise indicated. Architect/Engineer will return two copies.
 - 2. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Architect/Engineer will not return copies.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Standard color charts.
 - c. Statement of compliance with specified referenced standards.
 - d. Testing by recognized testing agency.
 - e. Application of testing agency labels and seals.
 - f. Notation of coordination requirements.
 - 2. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams showing factory-installed wiring.
 - b. Operational range diagrams.
 - c. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time

2. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 3. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
- E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
 2. Manufacturer and product name, and model number if applicable.
 3. Number and name of room or space.
 4. Location within room or space.
- F. Coordination Drawing Submittals: Comply with requirements specified in Section 01 31 00 "Project Management and Coordination."
- G. Contractor's Construction Schedule: Comply with requirements specified in Section 01 32 00 "Construction Progress Documentation."
- H. Application for Payment and Schedule of Values: Comply with requirements specified in Section 01 29 00 "Payment Procedures."
- I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 01 40 00 "Quality Requirements."
- J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 77 00 "Closeout Procedures."
- K. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- L. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- M. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- N. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- O. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- P. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

- Q. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- R. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- S. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- T. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect/Engineer.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit six paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect/Engineer. Submittals received by the Architect/Engineer without review, approval and signature of the General Contractor will be returned for resubmittal without review.
- B. Project Closeout and Maintenance Material Submittals: See requirements in Section 01 77 00 "Closeout Procedures."
- C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S/ENGINEER'S ACTION

- A. Action Submittals: Architect/Engineer will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect/Engineer will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.
- B. Informational Submittals: Architect/Engineer will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect/Engineer will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect/Engineer.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Submittals not required by the Contract Documents may be returned by the Architect/Engineer without action.

END OF SECTION 01 33 00

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SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect/Engineer, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
 - 4. Specific test and inspection requirements are not specified in this Section, except required special inspections.
- C. Contractor is to cooperate with Owner's testing agency and is to allow them appropriate level of access to the work. Refer to Quality Control section of this specification.
- D. Related Requirements:
 - 1. See Division 02 through 33 for specific test and inspection requirements.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect/Engineer or Owner.
- C. Preconstruction Testing: Tests and inspections performed specifically for Project before products and materials are incorporated into the Work, to verify performance or compliance with specified criteria.
- D. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to

establish product performance and compliance with specified requirements.

- E. Source Quality-Control Testing: Tests and inspections that are performed at the source, e.g., plant, mill, factory, or shop.
- F. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- G. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- H. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Use of trade-specific terminology in referring to a trade or entity does not require that certain construction activities be performed by accredited or unionized individuals, or that requirements specified apply exclusively to specific trade(s).
- I. Experienced: When used with an entity or individual, "experienced" means having successfully completed a minimum of five previous projects similar in nature, size, and extent to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

- A. Referenced Standards: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer conflicting requirements that are different, but apparently equal, to Architect/Engineer for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect/Engineer for a decision before proceeding.

1.5 ACTION SUBMITTALS

- A. Shop Drawings: For integrated exterior mockups, provide plans, sections, and elevations, indicating materials and size of mockup construction.
 - 1. Indicate manufacturer and model number of individual components.
 - 2. Provide axonometric drawings for conditions difficult to illustrate in two dimensions.

1.6 INFORMATIONAL SUBMITTALS

- A. Contractor's Quality-Control Plan: For quality-assurance and quality-control activities and responsibilities.
- B. Qualification Data: For Contractor's quality-control personnel.
- C. Testing Agency Qualifications: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- D. Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1. Specification Section number and title.

2. Entity responsible for performing tests and inspections.
3. Description of test and inspection.
4. Identification of applicable standards.
5. Identification of test and inspection methods.
6. Number of tests and inspections required.
7. Time schedule or time span for tests and inspections.
8. Requirements for obtaining samples.
9. Unique characteristics of each quality-control service.

1.7 CONTRACTOR'S QUALITY-CONTROL PLAN

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice to Proceed, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for Project.
 1. Project quality-control manager may also serve as Project superintendent.
- C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- D. Testing and Inspection: In quality-control plan, include a comprehensive schedule of Work requiring testing or inspection, including the following:
 1. Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
 2. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."
 3. Owner-performed tests and inspections indicated in the Contract Documents.
- E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.
- F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect/Engineer has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.8 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 1. Date of issue.
 2. Project Name.
 3. Name, address, and telephone number of testing agency.
 4. Dates and locations of samples and tests or inspections.
 5. Names of individuals making tests and inspections.
 6. Description of the Work and test and inspection method.
 7. Identification of product and Specification Section.
 8. Complete test or inspection data

9. Test and inspection results and an interpretation of test results.
 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 12. Name and signature of laboratory inspector.
 13. Recommendations on retesting and reinspection.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of technical representative making report.
 2. Statement on condition of substrates and their acceptability for installation of product.
 3. Statement that products at Project site comply with requirements.
 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 6. Statement whether conditions, products, and installation will affect warranty.
 7. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:
1. Name, address, and telephone number of factory-authorized service representative making report.
 2. Statement that equipment complies with requirements.
 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 4. Statement whether conditions, products, and installation will affect warranty.
 5. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.9 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of ~~the system, assembly, or product that are similar in material, design, and extent to those~~

indicated for this Project.

- F. Specialists: Certain Specification Sections require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirements of authorities having jurisdiction shall supersede requirements for specialists.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- I. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- J. Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1. Contractor responsibilities include the following:
 - a. Provide test specimens representative of proposed products and construction.
 - b. Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.
 - c. Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
 - d. Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
 - e. Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
 - f. When testing is complete, remove test specimens, assemblies, and mockups; do not reuse products on Project.
 - 2. Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Architect/Engineer, with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - a. Structural Engineer of Record: Chao & Associates, Inc.
 - b. Mechanical Engineer of Record: MECA, Inc.
 - c. Electrical Engineer of Record: Ohmega Group Consulting, Inc.

1.10 QUALITY CONTROL

- A. Contractor Responsibilities: Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Perform additional quality-control activities required to verify that the Work complies with requirements, whether specified or not.

1. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 2. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.
 3. Notify testing agencies at least 48 hours in advance of time when Work that requires testing or inspecting will be performed.
 4. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 5. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 6. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- B. **Manufacturer's Field Services:** Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 01 33 00 "Submittal Procedures."
- C. **Manufacturer's Technical Services:** Where indicated, engage a manufacturer's technical representative to observe and inspect the Work. Manufacturer's technical representative's services include participation in preinstallation conferences, examination of substrates and conditions, verification of materials, observation of Installer activities, inspection of completed portions of the Work, and submittal of written reports.
- D. **Retesting/Reinspecting:** Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. **Testing Agency Responsibilities:** Cooperate with Architect/Engineer and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 1. Notify Architect/Engineer and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 2. Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 6. Do not perform any duties of Contractor.
- F. **Associated Services:** Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 1. Access to the Work.
 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 4. Facilities for storage and field curing of test samples.
 5. Delivery of samples to testing agencies.
 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 7. Security and protection for samples and for testing and inspecting equipment at Project

site.

- G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and quality control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples, and similar activities.
- H. Schedule of Tests and Inspections: Prepare a schedule of tests, inspections, and similar quality-control services required by the Contract Documents as a component of Contractor's quality-control plan. Coordinate and submit concurrently with Contractor's construction schedule. Update as the Work progresses.
 - 1. Distribution: Distribute schedule to Owner, Architect/Engineer, testing agencies, and each party involved in performance of portions of the Work where tests and inspections are required.
 - 2. Retesting and reinspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEST AND INSPECTION LOG

- A. Test and Inspection Log: Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
- B. Maintain log at Project site. Post changes and revisions as they occur. Provide access to test and inspection log for Architect's/Engineer's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections or matching existing substrates and finishes. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible. Comply with the Contract Document requirements for cutting and patching in Section 01 73 00 "Execution."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 40 00

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SECTION 01 42 00 - REFERENCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 DEFINITIONS

- A. General: Basic Contract definitions are included in the Conditions of the Contract.
- B. "Approved": When used to convey Architect's/Engineer's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's/Engineer's duties and responsibilities as stated in the Conditions of the Contract.
- C. "Directed": A command or instruction by Architect/Engineer. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."
- D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."
- E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.
- F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- G. "Install": Unload, temporarily store, unpack, assemble, erect, place, anchor, apply, work to dimension, finish, cure, protect, clean, and similar operations at Project site.
- H. "Provide": Furnish and install, complete and ready for the intended use.
- I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.3 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
- C. Copies of Standards: Each entity engaged in construction on Project should be familiar with

industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.4 ABBREVIATIONS AND ACRONYMS

- A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale's "Encyclopedia of Associations: National Organizations of the U.S." or in Columbia Books' "National Trade & Professional Associations of the United States."
- B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.
1. AABC - Associated Air Balance Council; www.aabc.com.
 2. AAMA - American Architectural Manufacturers Association; www.aamanet.org.
 3. AASHTO - American Association of State Highway and Transportation Officials; www.transportation.org.
 4. ABMA - American Bearing Manufacturers Association; www.americanbearings.org.
 5. ABMA - American Boiler Manufacturers Association; www.abma.com.
 6. ACI - American Concrete Institute; (Formerly: ACI International); www.abma.com.
 7. ACPA - American Concrete Pipe Association; www.concrete-pipe.org.
 8. AEIC - Association of Edison Illuminating Companies, Inc. (The); www.aeic.org.
 9. AF&PA - American Forest & Paper Association; www.afandpa.org.
 10. AGA - American Gas Association; www.aga.org.
 11. AHAM - Association of Home Appliance Manufacturers; www.aham.org.
 12. AHRI - Air-Conditioning, Heating, and Refrigeration Institute (The); www.ahrinet.org.
 13. AI - Asphalt Institute; www.asphaltinstitute.org.
 14. AIA - American Institute of Architects (The); www.aia.org.
 15. AISC - American Institute of Steel Construction; www.aisc.org.
 16. AISI - American Iron and Steel Institute; www.steel.org.
 17. AMCA - Air Movement and Control Association International, Inc.; www.amca.org.
 18. ANSI - American National Standards Institute; www.ansi.org.
 19. APA - APA - The Engineered Wood Association; www.apawood.org.
 20. APA - Architectural Precast Association; www.archprecast.org.
 21. ARI - Air-Conditioning & Refrigeration Institute; (See AHRI).
 22. ARI - American Refrigeration Institute; (See AHRI).
 23. ARMA - Asphalt Roofing Manufacturers Association; www.asphaltroofing.org.
 24. ASCE - American Society of Civil Engineers; www.asce.org.
 25. ASCE/SEI - American Society of Civil Engineers/Structural Engineering Institute; (See ASCE).
 26. ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers; www.ashrae.org.
 27. ASME - ASME International; (American Society of Mechanical Engineers); www.asme.org.
 28. ASSE - American Society of Safety Engineers (The); www.asse.org.
 29. ASSE - American Society of Sanitary Engineering; www.asse-plumbing.org.
 30. ASTM - ASTM International; www.astm.org.
 31. ATIS - Alliance for Telecommunications Industry Solutions; www.atis.org.
 32. AWEA - American Wind Energy Association; www.awea.org.
 33. AWI - Architectural Woodwork Institute; www.awinet.org.
 34. AWMAC - Architectural Woodwork Manufacturers Association of Canada; www.awmac.com.
 35. AWPA - American Wood Protection Association; www.awpa.com.
 36. AWS - American Welding Society; www.aws.org.

37. AWWA - American Water Works Association; www.awwa.org.
38. BHMA - Builders Hardware Manufacturers Association; www.buildershardware.com.
39. BIA - Brick Industry Association (The); www.gobrick.com.
40. BICSI - BICSI, Inc.; www.bicsi.org.
41. BIFMA - BIFMA International; (Business and Institutional Furniture Manufacturer's Association); www.bifma.org.
42. CDA - Copper Development Association; www.copper.org.
43. CEA - Canadian Electricity Association; www.electricity.ca.
44. CEA - Consumer Electronics Association; www.ce.org.
45. CFSEI - Cold-Formed Steel Engineers Institute; www.cfsei.org.
46. CGA - Compressed Gas Association; www.cganet.com.
47. CIMA - Cellulose Insulation Manufacturers Association; www.cellulose.org.
48. CISCA - Ceilings & Interior Systems Construction Association; www.cisca.org.
49. CISPI - Cast Iron Soil Pipe Institute; www.cispi.org.
50. CPA - Composite Panel Association; www.pbmdf.com.
51. CRI - Carpet and Rug Institute (The); www.carpet-rug.org.
52. CRRC - Cool Roof Rating Council; www.coolroofs.org.
53. CRSI - Concrete Reinforcing Steel Institute; www.crsi.org.
54. CSA - Canadian Standards Association; www.csa.ca.
55. CSA - CSA International; (Formerly: IAS - International Approval Services); www.csa-international.org.
56. CSI - Construction Specifications Institute (The); www.csinet.org.
57. CSSB - Cedar Shake & Shingle Bureau; www.cedarbureau.org.
58. CTI - Cooling Technology Institute; (Formerly: Cooling Tower Institute); www.cti.org.
59. CWC - Composite Wood Council; (See CPA).
60. DHI - Door and Hardware Institute; www.dhi.org.
61. ECA - Electronic Components Association; (See ECIA).
62. ECIA - Electronic Components Industry Association; www.eciaonline.org.
63. EIA - Electronic Industries Alliance; (See TIA).
64. EIMA - EIFS Industry Members Association; www.eima.com.
65. EJMA - Expansion Joint Manufacturers Association, Inc.; www.ejma.org.
66. ESD - ESD Association; (Electrostatic Discharge Association); www.esda.org.
67. FCI - Fluid Controls Institute; www.fluidcontrolsinstitute.org.
68. FM Approvals - FM Approvals LLC; www.fmglobal.com.
69. FM Global - FM Global; (Formerly: FMG - FM Global); www.fmglobal.com.
70. FSA - Fluid Sealing Association; www.fluidsealing.com.
71. FSC - Forest Stewardship Council U.S.; www.fscus.org.
72. GA - Gypsum Association; www.gypsum.org.
73. GANA - Glass Association of North America; www.glasswebsite.com.
74. GS - Green Seal; www.greenseal.org.
75. HI - Hydraulic Institute; www.pumps.org.
76. HI/GAMA - Hydronics Institute/Gas Appliance Manufacturers Association; (See AHRI).
77. HMMA - Hollow Metal Manufacturers Association; (See NAAMM).
78. HPVA - Hardwood Plywood & Veneer Association; www.hpva.org.
79. IAS - International Approval Services; (See CSA).
80. ICBO - International Conference of Building Officials; (See ICC).
81. ICC - International Code Council; www.iccsafe.org.
82. ICEA - Insulated Cable Engineers Association, Inc.; www.icea.net.
83. ICPA - International Cast Polymer Alliance; www.icpa-hq.org.
84. ICRI - International Concrete Repair Institute, Inc.; www.icri.org.
85. IEC - International Electrotechnical Commission; www.iec.ch.
86. IEEE - Institute of Electrical and Electronics Engineers, Inc. (The); www.ieee.org.
87. IES - Illuminating Engineering Society; (Formerly: Illuminating Engineering Society of North America); www.ies.org.
88. IESNA - Illuminating Engineering Society of North America; (See IES).
89. IEST - Institute of Environmental Sciences and Technology; www.iest.org.
90. IGMA - Insulating Glass Manufacturers Alliance; www.igmaonline.org.
91. Intertek - Intertek Group; (Formerly: ETL SEMCO; Intertek Testing Service NA);

- www.intertek.com.
92. ISA - International Society of Automation (The); (Formerly: Instrumentation, Systems, and Automation Society); www.isa.org.
 93. ISAS - Instrumentation, Systems, and Automation Society (The); (See ISA).
 94. ISFA - International Surface Fabricators Association; (Formerly: International Solid Surface Fabricators Association); www.isfanow.org.
 95. ISO - International Organization for Standardization; www.iso.org.
 96. ISSFA - International Solid Surface Fabricators Association; (See ISFA).
 97. ITU - International Telecommunication Union; www.itu.int/home.
 98. LPI - Lightning Protection Institute; www.lightning.org.
 99. MCA - Metal Construction Association; www.metalconstruction.org.
 100. MFMA - Metal Framing Manufacturers Association, Inc.; www.metalframingmfg.org.
 101. MHIA - Material Handling Industry of America; www.mhia.org.
 102. MMPA - Moulding & Millwork Producers Association; www.wmmpa.com.
 103. MPI - Master Painters Institute; www.paintinfo.com.
 104. MSS - Manufacturers Standardization Society of The Valve and Fittings Industry Inc.; www.mss-hq.org.
 105. NAAMM - National Association of Architectural Metal Manufacturers; www.naamm.org.
 106. NACE - NACE International; (National Association of Corrosion Engineers International); www.nace.org.
 107. NADCA - National Air Duct Cleaners Association; www.nadca.com.
 108. NAIMA - North American Insulation Manufacturers Association; www.naima.org.
 109. NBGQA - National Building Granite Quarries Association, Inc.; www.nbgqa.com.
 110. NBI - New Buildings Institute; www.newbuildings.org.
 111. NCAA - National Collegiate Athletic Association (The); www.ncaa.org.
 112. NCMA - National Concrete Masonry Association; www.ncma.org.
 113. NEBB - National Environmental Balancing Bureau; www.nebb.org.
 114. NECA - National Electrical Contractors Association; www.necanet.org.
 115. NeLMA - Northeastern Lumber Manufacturers Association; www.nelma.org.
 116. NEMA - National Electrical Manufacturers Association; www.nema.org.
 117. NETA - InterNational Electrical Testing Association; www.netaworld.org.
 118. NFHS - National Federation of State High School Associations; www.nfhs.org.
 119. NFPA - National Fire Protection Association; www.nfpa.org.
 120. NFPA - NFPA International; (See NFPA).
 121. NFRC - National Fenestration Rating Council; www.nfrc.org.
 122. NHLA - National Hardwood Lumber Association; www.nhla.com.
 123. NLGA - National Lumber Grades Authority; www.nlga.org.
 124. NOFMA - National Oak Flooring Manufacturers Association; (See NWFA).
 125. NOMMA - National Ornamental & Miscellaneous Metals Association; www.nomma.org.
 126. NRCA - National Roofing Contractors Association; www.nrca.net.
 127. NRMCA - National Ready Mixed Concrete Association; www.nrmca.org.
 128. NSF - NSF International; www.nsf.org.
 129. NSPE - National Society of Professional Engineers; www.nspe.org.
 130. NSSGA - National Stone, Sand & Gravel Association; www.nssga.org.
 131. NTMA - National Terrazzo & Mosaic Association, Inc. (The); www.ntma.com.
 132. NWFA - National Wood Flooring Association; www.nwfa.org.
 133. PCI - Precast/Prestressed Concrete Institute; www.pci.org.
 134. PDI - Plumbing & Drainage Institute; www.pdionline.org.
 135. PLASA - PLASA; (Formerly: ESTA - Entertainment Services and Technology Association); www.plasa.org.
 136. RCSC - Research Council on Structural Connections; www.boltcouncil.org.
 137. RFCI - Resilient Floor Covering Institute; www.rfci.com.
 138. RIS - Redwood Inspection Service; www.redwoodinspection.com.
 139. SAE - SAE International; www.sae.org.
 140. SCTE - Society of Cable Telecommunications Engineers; www.scte.org.
 141. SDI - Steel Deck Institute; www.sdi.org.
 142. SDI - Steel Door Institute; www.steeldoor.org.
 143. SEFA - Scientific Equipment and Furniture Association (The); www.sefalabs.com.

144. SEI/ASCE - Structural Engineering Institute/American Society of Civil Engineers; (See ASCE).
 145. SIA - Security Industry Association; www.siaonline.org.
 146. SJI - Steel Joist Institute; www.steeljoist.org.
 147. SMA - Screen Manufacturers Association; www.smainfo.org.
 148. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association; www.smacna.org.
 149. SMPTE - Society of Motion Picture and Television Engineers; www.smpte.org.
 150. SPFA - Spray Polyurethane Foam Alliance; www.sprayfoam.org.
 151. SPIB - Southern Pine Inspection Bureau; www.spib.org.
 152. SPRI - Single Ply Roofing Industry; www.spri.org.
 153. SRCC - Solar Rating & Certification Corporation; www.solar-rating.org.
 154. SSINA - Specialty Steel Industry of North America; www.ssina.com.
 155. SSPC - SSPC: The Society for Protective Coatings; www.sspc.org.
 156. STI - Steel Tank Institute; www.steeltank.com.
 157. SWI - Steel Window Institute; www.steelwindows.com.
 158. SWPA - Submersible Wastewater Pump Association; www.swpa.org.
 159. TCA - Tilt-Up Concrete Association; www.tilt-up.org.
 160. TCNA - Tile Council of North America, Inc.; www.tileusa.com.
 161. TEMA - Tubular Exchanger Manufacturers Association, Inc.; www.tema.org.
 162. TIA - Telecommunications Industry Association (The); (Formerly: TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance); www.tiaonline.org.
 163. TIA/EIA - Telecommunications Industry Association/Electronic Industries Alliance; (See TIA).
 164. TMS - The Masonry Society; www.masonrysociety.org.
 165. TPI - Truss Plate Institute; www.tpinst.org.
 166. UL - Underwriters Laboratories Inc.; www.ul.com.
 167. UNI - Uni-Bell PVC Pipe Association; www.uni-bell.org.
 168. USGBC - U.S. Green Building Council; www.usgbc.org.
 169. WCLIB - West Coast Lumber Inspection Bureau; www.wclib.org.
 170. WCMA - Window Covering Manufacturers Association; www.wcmanet.org.
 171. WDMA - Window & Door Manufacturers Association; www.wdma.com.
 172. WI - Woodwork Institute; www.wicnet.org.
 173. WSRCA - Western States Roofing Contractors Association; www.wsrca.com.
 174. WWPA - Western Wood Products Association; www.wwpa.org.
- C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. This information is believed to be accurate as of the date of the Contract Documents.
1. IAPMO - International Association of Plumbing and Mechanical Officials; www.iapmo.org.
 2. ICC - International Code Council; www.iccsafe.org.
 3. ICC-ES - ICC Evaluation Service, LLC; www.icc-es.org.
- D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Information is subject to change and is up to date as of the date of the Contract Documents.
1. COE - Army Corps of Engineers; www.usace.army.mil.
 2. CPSC - Consumer Product Safety Commission; www.cpsc.gov.
 3. DOC - Department of Commerce; National Institute of Standards and Technology; www.nist.gov.
 4. DOD - Department of Defense; www.quicksearch.dla.mil.
 5. DOE - Department of Energy; www.energy.gov.
 6. EPA - Environmental Protection Agency; www.epa.gov.
 7. FAA - Federal Aviation Administration; www.faa.gov.
 8. FG - Federal Government Publications; www.gpo.gov.
 9. GSA - General Services Administration; www.gsa.gov.

10. LBL - Lawrence Berkeley National Laboratory; Environmental Energy Technologies Division; www.eetd.lbl.gov.
11. OSHA - Occupational Safety & Health Administration; www.osha.gov.
12. USDA - Department of Agriculture; Agriculture Research Service; U.S. Salinity Laboratory; www.ars.usda.gov.
13. USDA - Department of Agriculture; Rural Utilities Service; www.usda.gov.
14. USDJ - Department of Justice; Office of Justice Programs; National Institute of Justice; www.ojp.usdoj.gov.

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list. This information is subject to change and is believed to be accurate as of the date of the Contract Documents.

1. CFR - Code of Federal Regulations; Available from Government Printing Office; www.gpo.gov/fdsys.
2. DOD - Department of Defense; Military Specifications and Standards; Available from DLA Document Services; www.quicksearch.dla.mil.
3. DSCC - Defense Supply Center Columbus; (See FS).
4. FED-STD - Federal Standard; (See FS).
5. FS - Federal Specification; Available from DLA Document Services; www.quicksearch.dla.mil.
 - a. Available from Defense Standardization Program; www.dsp.dla.mil.
 - b. Available from General Services Administration; www.gsa.gov.
 - c. Available from National Institute of Building Sciences/Whole Building Design Guide; www.wbdg.org/ccb.
6. MILSPEC - Military Specification and Standards; (See DOD).
7. USAB - United States Access Board; www.access-board.gov.
8. USATBCB - U.S. Architectural & Transportation Barriers Compliance Board; (See USAB).

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 42 00

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

1.3 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.
- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 2. Store materials in a manner that will not endanger Project structure.
 - 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 - 4. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 5. Protect stored products from damage and liquids from freezing.
 - 6. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 4. Where products are accompanied by the term "as selected," Architect/Engineer will make selection.
 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
 6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:
1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 3. Retain "Basis-of-Design Product" Subparagraph below if a single product is named in individual Specification Sections or is indicated on Drawings as the basis of design, and a list of manufacturers' names offering comparable products is included. A basis-of-design product specification is usually supplemented with salient characteristics of the applicable product.

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 60 00

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 1. Recycling nonhazardous demolition and construction waste.
 2. Disposing of nonhazardous demolition and construction waste.

1.3 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.

1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PLAN IMPLEMENTATION

- A. General: Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.
- B. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.

3.2 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 4. Store components off the ground and protect from the weather.
 - 5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.
 - 6. Metals: Separate metals by type.

3.3 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 3. Burning: Do not burn waste materials.
- B. Disposal: Remove waste materials from Owner's property and legally dispose of them.

END OF SECTION 01 74 19

SECTION 01 77 00 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 1. Substantial Completion procedures.
 2. Final completion procedures.
 3. Warranties.
 4. Final cleaning.
 5. Repair of the Work.
- B. Related Requirements:
 1. Section 01 32 33 "Photographic Documentation" for submitting final completion construction photographic documentation.
 2. Section 01 78 39 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.

1.3 CLOSEOUT SUBMITTALS

- A. Certificates of Release: From authorities having jurisdiction.
- B. Certificate of Insurance: For continuing coverage.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Schedule of Maintenance Material Items: For maintenance material submittal items specified in other Sections.

1.5 SUBSTANTIAL COMPLETION PROCEDURES

- A. Contractor's List of Incomplete Items: Prepare and submit a list of items to be completed and corrected (Contractor's punch list), indicating the value of each item on the list and reasons why the Work is incomplete.
- B. Submittals Prior to Substantial Completion: Complete the following a minimum of 7 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
 1. Certificates of Release: Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 2. Submit closeout submittals specified in other Division 01 Sections, including project ~~record documents, operation and maintenance manuals, final completion construction~~

CLOSEOUT PROCEDURES

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photographic documentation, damage or settlement surveys, property surveys, and similar final record information.

3. Submit maintenance material submittals including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect/Engineer. Label with manufacturer's name and model number where applicable.
- C. Procedures Prior to Substantial Completion: Complete the following a minimum of 7 days prior to requesting inspection for determining date of Substantial Completion. List items below that are incomplete at time of request.
1. Advise Owner of pending insurance changeover requirements.
 2. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 3. Complete final cleaning requirements, including touchup painting.
- D. Inspection: Submit a written request for inspection to determine Substantial Completion a minimum of 7 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect/Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect/Engineer will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect/Engineer, that must be completed or corrected before certificate will be issued.

1.6 FINAL COMPLETION PROCEDURES

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:
1. Submit a final Application for Payment according to Section 01 29 00 "Payment Procedures."
 2. Certified List of Incomplete Items: Submit certified copy of Architect's/Engineer's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect/Engineer. Certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Inspection: Submit a written request for final inspection to determine acceptance a minimum of 7 days prior to date the work will be completed and ready for final inspection and tests. On receipt of request, Architect/Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements.

1.7 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Organization of List: Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1.8 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect/Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated, or when delay in submittal of warranties might limit Owner's rights under warranty.
- B. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.

1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 4. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
1. Use cleaning products that comply with Green Seal's GS-37, or if GS-37 is not applicable, use products that comply with the California Code of Regulations maximum allowable VOC levels.

PART 3 - EXECUTION

3.1 FINAL CLEANING

- A. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:
 - a. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - b. Leave Project clean and ready for use.

END OF SECTION 01 77 00

SECTION 01 78 39 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
 - 4. Miscellaneous record submittals.
- B. Related Requirements:
 - 1. Section 01 77 00 "Closeout Procedures" for general closeout procedures.

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Initial Submittal: Submit PDF electronic files of scanned record prints and one of file prints.
 - 2. Final Submittal: Submit PDF electronic files of scanned record prints and three sets of prints.
- B. Record Product Data: Submit as part of operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
 - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding archive photographic documentation.
 - 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. ~~Revisions to routing of piping and conduits.~~

- d. Revisions to electrical circuitry.
 - e. Actual equipment locations.
 - f. Changes made by Change Order or Construction Change Directive.
 - g. Changes made following Architect's/Engineer's written orders.
 - h. Details not on the original Contract Drawings.
 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Format: Annotated PDF electronic file with comment function enabled.
 2. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Contractor.

2.2 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
1. Manufacturer's written instructions for installation.
 2. Note related Change Orders, record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as annotated PDF electronic file or scanned PDF electronic file(s) of marked-up paper copy of Product Data.
1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's/Engineer's reference during normal working hours.

END OF SECTION 01 78 39